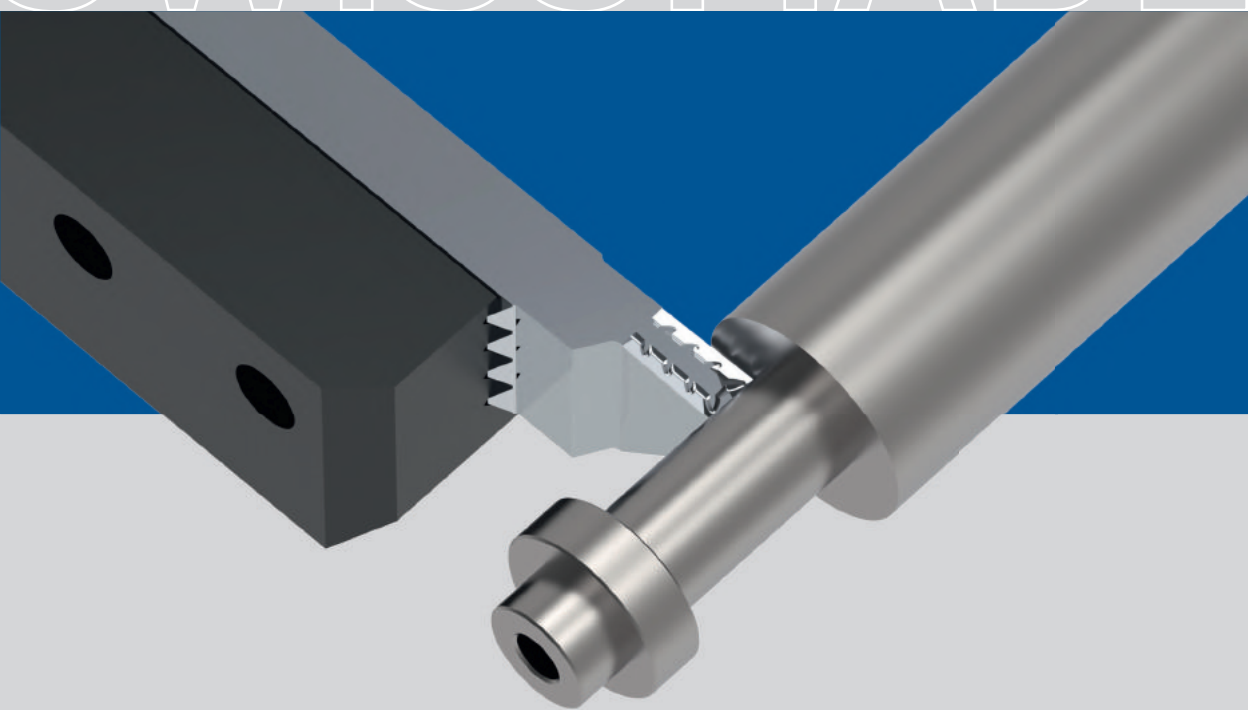


APPLITEC

SWISS TOOLING



SWISSMADE



EDITION 2022-2024

APPLITEC

**OUTILS DE HAUTES PERFORMANCES
POUR LE DÉCOLLETAGE
ET LA MICROMÉCANIQUE**

**HOCHLEISTUNGSWERKZEUGE
FÜR DREHAUTOMATEN
UND MIKROMECHANIK**

**HIGH PERFORMANCE TOOLING
FOR AUTOMATIC LATHES
AND MICROMECHANICS**



| | | | |
|---|---------------------|------------|-----------|
|  | TOP-LINE | | 1 |
|  | TOP-WATCH | | 2 |
|  | PRO-LINE | | 3 |
|  | ECO-LINE | | 4 |
|  | TRIO-LINE | | 5 |
|  | TURN-LINE | | 6 |
|  | ISO-LINE | | 7 |
|  | EVOCUT-LINE | | 8 |
|  | CUT-LINE | | 9 |
|  | IN-LINE | | 10 |
|  | SWITCH-LINE | new | 11 |
|  | MODU-LINE | | 12 |
|  | TOOLING-LINE | | 13 |
|  | MICRO-LINE | | 14 |
|  | CIRCO-LINE | | 15 |
|  | JET-LINE | new | 16 |
| | INDEX | | 17 |

APPLITEC

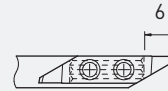


INFO

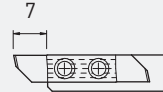
Nuances et paramètres de coupe
Sorten und Schnittwerte
Grades and machining data

> **1.02****710 / 720**

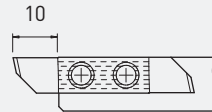
Pour machines à cames
Für kurvengesteuerte Maschinen
For cam driven machines

> **1.12****730 / 740**

Main series
Small type

> **1.24****750 / 760**

Main series
Large type

> **1.68****770 / 780****7050 / 7060****W750 / W760****POLYGONAL
INTERFACE****HSK****740Z / 760Z****TORNOS****SCHÜTTE**

Tronçonnage de grande capacité et ébauches larges pour
profilage + porte-outils spéciaux

Abstechen für grössere Durchmesser und breite Rohlinge
für Profilschleifen + Sonderwerkzeughalter

High capacity parting off and wide blanks for profiling +
special tool holders

> **1.132**

Pièces de rechange
Ersatzteile
Spare parts

> **1.166**

TOP-LINE

Codification des plaquettes TOP-Line série 700

WSP-Bezeichnungssystem für TOP-Line 700 Serie

Inserts designation key for TOP-Line 700 series

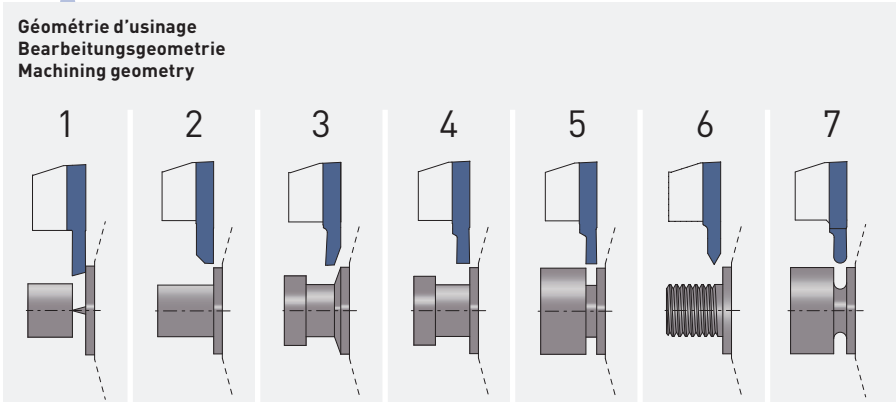


Dimension
Abmessung
Dimension

Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe / Brise-copeaux / Particularités
 Schneidgeometrie / Spanbrecher / Sondereigenschaften
 Cutting geometry / Chip breaker / Special features



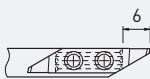
Gamme de produit
 Produktserie
 Product series

défini la compatibilité des plaquettes avec le porte-outil
 bestimmt die WSP und Halter Kompatibilität
 shows the inserts and holder compatibility

L = 1, 3, 5, 7 (chiffre impair / ungerade Zahl / uneven number)

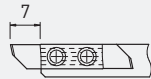
R = 2, 4, 6, 8 (chiffre pair / gerade Zahl / even number)

L 710 | R 720



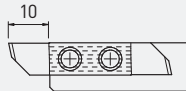
pour machines à cames
 für kurvengesteuerte Maschinen
 for cam driven machines

L 730 | R 740



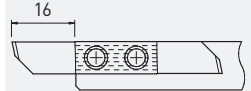
main series
 small type

L 750 | R 760



main series
 large type

L 770 | R 780



tronçonnage uniquement
 nur für abstechen
 only for parting off

Applitec série 700
 Applitec 700 Serie
 Applitec 700 series

Système de serrage à denture décalée avec 2 vis de fixation
 Spannsystem mit 2 Schrauben und verschobener Verzahnung
 Shifted teeth clamping system with 2 screws

L'outil de référence pour le décolletage

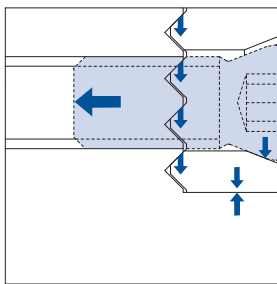
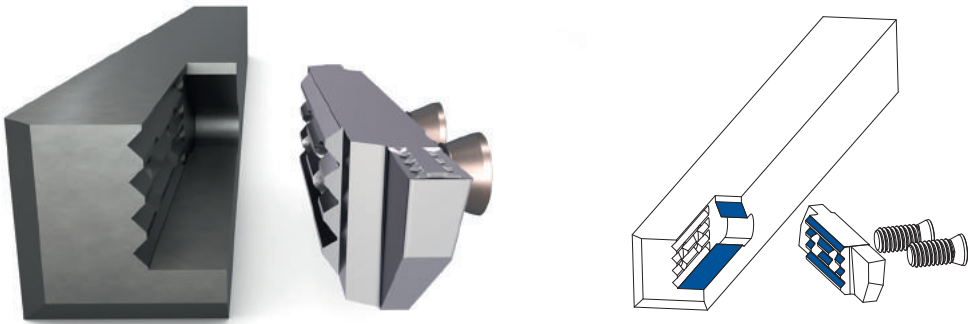
Hochwertiges Wendeplattensystem für Langdrehautomaten

Top class turning tool for automatic lathes

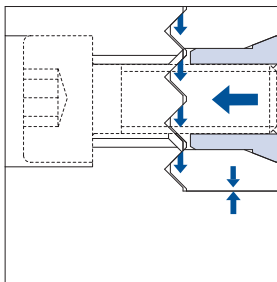
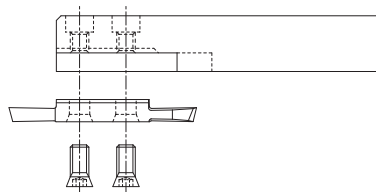
700 Series

100% rigid!

Système de serrage Applitec à denture décalée
 Applitec-Spannsystem mit verschobener Verzahnung
 Applitec clamping system with shifted teeth

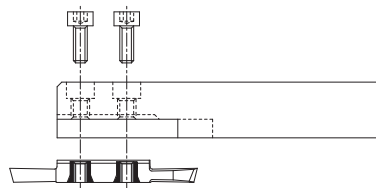


Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)



Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
 -B nach der Artikelreferenz hinzufügen
 add -B after the article number



Changement de la plaquette possible dans la machine, sans démontage du porte-outil
 WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
 The insert can be changed in the machine without removing the tool holder

700-ZX geometries

Très bonne maîtrise du copeau
pour matières difficiles

Sehr gute Spankontrolle für
schwierige Werkstoffe

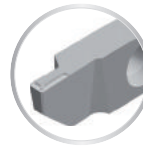
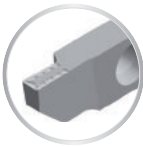
Very efficient chip control for
difficult materials



Multitude de géométries possibles

Mehrere mögliche Spangeometrien

Many different cutting geometries are possible



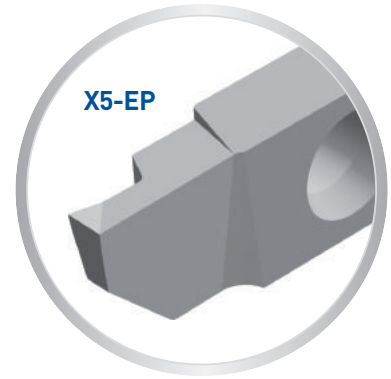
700-honed



Géométrie positive 5° avec arête de coupe renforcée (honnée)
Meilleure durée de vie dans l'usinage des matériaux abrasifs (aciers au carbone, aciers alliés)

Positive Geometrie 5° mit verstärkte Schneidkante (gehont)
Bessere Standzeit für die Bearbeitung von abrasive Materialien (Kohlenstoff Stahl, legierter Stahl)

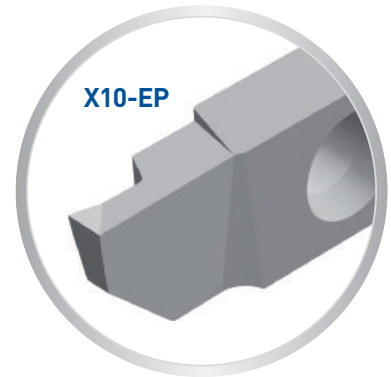
Positive geometry 5° with reinforced cutting edge (honed)
Better tool life for abrasive materials (carbon steel, alloy steel)










Géométrie positive 10° avec arête de coupe renforcée (honnée)
Meilleure durée de vie dans l'usinage des matériaux tenace (acier inox, inox martensitique)

Positive Geometrie 10° mit verstärkte Schneidkante (gehont)
Bessere Standzeit für die Bearbeitung von zähe Materialien (Rostfreier Stahl, martensitische Rostfreier Stahl)

Positive geometry 10° with reinforced cutting edge (honed)
Better tool life for tough materials (stainless steel, martensitic steel)



| Géométries de coupe Spanformgeometrien Cutting geometries | | Acier de décolletage Automatenstahl Free-cutting steel | Acier Stahl Steel | Acier inoxydable Rostfreistahl Stainless steel | Aluminium | Titane Titan Titanium | Laiton, bronze Messing, Bronze Brass, bronze | Cuivre Kupfer Copper | ★ | 1 ^{er} choix 1. Wahl 1 st choice |
|--|------|--|-------------------------|--|-------------|-----------------------------|--|----------------------------|---|--|
| | | | | | | | | | ☆ | Recommandé Empfohlen Recommended |
| | | | | | | | | | ☑ | Pour pièces fragiles de très petits diamètres Für empfindliche und sehr kleine Werkstücke For fragile and very small work pieces |
|  | 0° | ★ | ☑ | ☑ | ☑ | ☑ | ★ | ☑ | | Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding |
|  | X4° | ★ | ★ | ★ | ☑ | ☑ | | ☑ | | Réduit l'effort de coupe, réaffûtable Reduziert Schneidkräfte, nachschleifbar Decreases cutting force, allows regrinding |
|  | XF | ☆ | ★ | ★ | | | | ☆ | | Pour matières difficiles (pointe renforcée) Für schwierige Werkstoffe (verstärkte Spitze) For difficult materials (reinforced point) |
|  | X12° | | | ☆ | ★ | ★ | | ★ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control |
|  | X25° | | | ☆ | ★ | ☆ | | ☆ | | Pour matières collantes faisant de très longs copeaux Für klebrige Werkstoffe mit sehr langen Spänen For long chipping sticky materials |
|  | U | ☆ | ☆ | ☆ | | | | | | Pour resserrer le copeau, réaffûtage aisé Für Spanversmälnerung, einfaches Nachschleifen To narrow the chips, easy regrinding |
|  | ZU8 | ★ | ★ | ★ | ☆ <5% Si | ☆ | ☆ | | | Très bonne maîtrise du copeau (arête de coupe honée) Sehr gute Spankontrolle (gehonte Schneidkante) Very efficient chip control (honed edge) f min: 0.02 mm/U |

Conseils d'utilisation

Anwendungsempfehlungen














Application recommendations

Tournage

Drehen

Turning

700 Series

| Géométries de coupe Spannformgeometrien Cutting geometries | | Acier de décolletage Automatenstahl Free-cutting steel | Acier Stahl Steel | Acier inoxydable Rostfreistahl Stainless steel | Aluminium | Titane Titan Titanium | Laiton, bronze Messing, Bronze Brass, bronze | Cuivre Kupfer Copper | ★ | 1 ^{er} choix 1. Wahl 1 st choice |
|--|--------|--|-------------------------|--|-------------|-----------------------------|--|----------------------------|---|--|
| | | | | | | | | | ☆ | Recommandé Empfohlen Recommended |
| | | | | | | | | | ⊙ | Pour pièces fragiles de très petits diamètres Für empfindliche und sehr kleine Werkstücke For fragile and very small work pieces |
|  | 0° | ★ | ⊙ | ⊙ | ⊙ | ⊙ | ★ | ⊙ | | Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding |
|  | X | ★ | ★ | ★ | ★ | ★ | | ★ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control |
|  | X5-EP | ★ | ★ | ☆ | | | | | | Très bonne maîtrise du copeau (arête de coupe honée) Sehr gute Spankontrolle (gehonte Schneidkante) Very efficient chip control (honed edge) f min: 0.02 mm/U |
|  | X10-EP | ☆ | ☆ | ★ | ☆ | ☆ | | | | Très bonne maîtrise du copeau (arête de coupe honée) Sehr gute Spankontrolle (gehonte Schneidkante) Very efficient chip control (honed edge) f min: 0.02 mm/U |
|  | VX800 | ★ | ★ | ☆ | ☆ | ☆ | | ☆ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control |
|  | VX8° | ★ | ★ | ☆ | ☆ | ☆ | | ☆ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control |
|  | VUX | ☆ | ☆ | ★ | ☆ | ★ | | ☆ | | Roule-copeau bidirectionnel Bidirektionaler Spanroller Bi-directional chip-breaker |
|  | VX15° | ☆ | | ☆ | ★ | ★ | | ★ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control |
|  | VS | ☆ | | ☆ | ⊙ | ⊙ | | ⊙ | | Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation |
|  | ZX10 | ★ | ★ | ★ | ☆ <5% Si | ☆ | ☆ | | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U |
|  | ZX17 | | | ☆ | ★ <5% Si | ★ | | ★ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U |
|  | ZX25 | | | ☆ | ★ <5% Si | ★ | | ★ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U |
|  | ZXT | ★ | ★ | ★ | ☆ <5% Si | ☆ | ☆ | | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U |

TiAlN

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- excellente nuance universelle
- 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreier Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

TiAlX

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

TiN

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschnitten
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for the machining of low resistance materials which creates build-up edge
- very low friction ratio
- not suitable for titanium machining

LOX

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- nuance résistante à l'usure et à la température, destinée à l'usinage des matières suivantes: Inox, Titanes, alliages à base de Nickel, Chrome Cobalt, les matières avec une dureté supérieure à > 50HRC
- bonne alternative pour l'usinage des aciers de construction types ETG88, ETG100, 36SMnPb14

- verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox, Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50HRC
- gute Alternative für die Bearbeitung von Baustähle Typ ETG88, ETG100, 36SMnPb14

- wear and high temperature resistant grade. Recommended for following materials: inox, titanium, nickel alloys, materials harder than > 50HRC
- good alternative for machining of structural steels type ETG88, ETG100, 36SMnPb14

N (μK20)

non revêtu
unbeschichtet
uncoated

- supporte les coupes interrompues et autres conditions d'usinage défavorables

- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- suitable for interrupted cut and other unfavourable machining conditions

Nuances micro-grain à dureté élevée

Verschleissfeste Feinkornsorten

Wear resistant micro-grain grades

μK 10

HTA

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

HTAX

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faibles avances de petites pièces, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. For light machining of small parts with low cutting feed. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

HTiN

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for light machining of low resistance materials which creates build-up edge
- very low friction ratio
- not suitable for titanium machining

HAS

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1^{er} choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet

- grade for non-ferrous materials
- very low friction ratio
- first choice for aluminium up to 5% Si, copper and low alloyed titanium

HN (μK10)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | Tournage Drehen Turning | | | Tronçonnage Abstechen Parting off | | |
|---|-------------------------------|--|----------------------------|---|--|----------------------------|
| | VC | Prof. de passe Schnitttiefe Depth of cut | Avance Vorschub Feed | VC | Largeur de coupe Abstechbreite Cutting width | Avance Vorschub Feed |
| | (m/min) | (mm) | (mm/U) | (m/min) | (mm) | (mm/U) |
| Acier de décolletage Automatenstahl Free-cutting steel P | 120 - 200 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.15 0.05 - 0.25 | 80 - 150 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.08 0.03 - 0.15 |
| Acier Stahl < 600 N/mm ² P | 80 - 160 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.15 0.05 - 0.25 | 70 - 120 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.06 0.03 - 0.12 |
| Acier Stahl < 800 N/mm ² P | 60 - 120 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.10 0.05 - 0.20 | 60 - 100 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.05 0.03 - 0.10 |
| Acier Stahl > 800 N/mm ² P | 50 - 100 | 0.05 - 1.0 1.0 - 3.0 | 0.01 - 0.08 0.05 - 0.15 | 40 - 80 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.04 0.03 - 0.08 |
| Acier inoxydable Rostfreistahl Stainless steel M | 60 - 120 | 0.05 - 1.0 1.0 - 3.0 | 0.01 - 0.08 0.05 - 0.15 | 60 - 100 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.04 0.03 - 0.08 |
| Aluminium Si <12% N | 200 - 1000 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.40 | 180 - 400 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.10 0.03 - 0.20 |
| Aluminium Si >12% N | 180 - 800 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.40 | 150 - 300 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.10 0.03 - 0.20 |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze N | 100 - 500 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.35 | 100 - 300 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.10 0.03 - 0.20 |
| Titane Titan Titanium S | 30 - 70 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.08 0.05 - 0.15 | 30 - 50 | 0.50 - 1.50 1.50 - 3.50 | 0.01 - 0.03 0.03 - 0.06 |

Indications pour premier réglage
Hinweise für die erste Einrichtung
Indications for first setting

| Ébauche Schruppen Roughing | Finition Schlichten Finishing |
|---|---|
| <ul style="list-style-type: none"> • vitesse de coupe moyenne • avance élevée | <ul style="list-style-type: none"> • vitesse de coupe élevée • avance faible |
| <ul style="list-style-type: none"> • durchschnittliche Schnittgeschwindigkeit • hohe Schnittgeschwindigkeit | <ul style="list-style-type: none"> • hohe Schnittgeschwindigkeit • niedriger Vorschub |
| <ul style="list-style-type: none"> • average cutting speed • high cutting speed | <ul style="list-style-type: none"> • high cutting speed • low cutting feed |

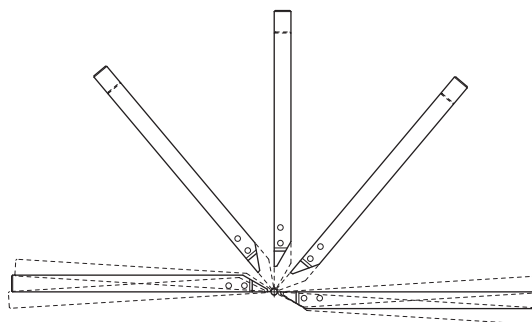
Remarques importantes
Wichtige Bemerkungen
Important remarks

- en raison des limites de la machine, il n'est souvent pas possible d'atteindre les vitesses de coupe préconisées
- les outils Applitec sont spécialement développés pour permettre de hautes performances, même dans des conditions de coupe défavorables
- des applications non préconisées dans le tableau ci-contre peuvent également s'avérer efficaces

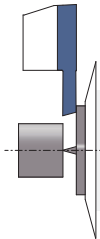
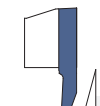
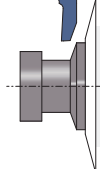
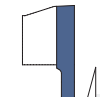
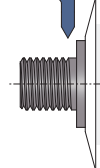
- wegen begrenzter Maschinenleistung ist es oft nicht möglich, die vorgeschlagenen Schnittgeschwindigkeiten zu erreichen
- Applitec Werkzeuge sind besonders dazu entwickelt, um sogar bei ungünstigen Schnittdaten leistungsfähig zu sein
- die in der nebenstehender Tabelle nicht erwähnten Anwendungsfälle können sich auch effizient erweisen

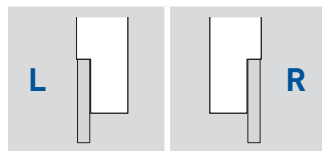
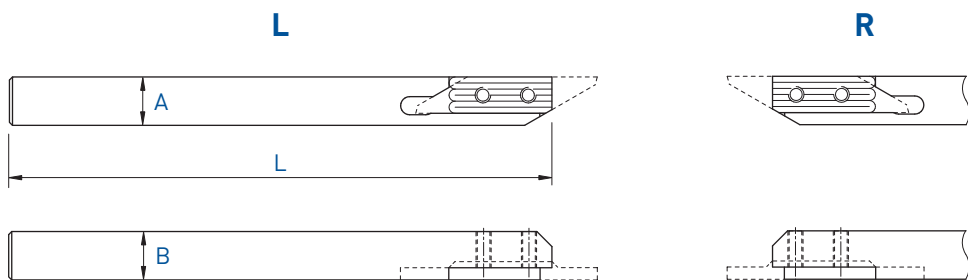
- in many cases, it is impossible to reach the recommended cutting speed, due to the machine limits
- Applitec tools are especially designed to be efficient even in bad cutting conditions
- applications not mentioned in the opposite table can also be efficient

| L | | R | |
|-------------|------|--------|------|
| Type | Page | Type | Page |
| 710 | 1.14 | 720 | 1.14 |
| 710-NOVIBRA | 1.15 | 721 | 1.16 |
| 711 | 1.16 | 721-EP | 1.23 |
| 711-EP | 1.23 | 722 | 1.17 |
| 712 | 1.17 | 723-30 | 1.18 |
| 713-30 | 1.18 | 723-45 | 1.19 |
| 713-45 | 1.19 | 723-60 | 1.20 |
| 713-60 | 1.20 | 724 | 1.21 |
| 714 | 1.21 | 726 | 1.22 |
| 716 | 1.22 | | |



Porte-outils et plaquettes pour machines à cames
 Halter und WSP für kurvengesteuerte Maschinen
 Tool holders and inserts for cam driven machines

| | | | |
|---|--|---|---------------|
| | | 710 / 720 Porte-outils Halter Holders | > 1.14 |
|  | 711 / 721 Tronçonnage Abstechen Parting off | | > 1.16 |
|  | | 712 / 722 Tournage avant Vorwärts drehen Front turning | > 1.17 |
|  | 713 / 723 Tournage arrière Rückwärts drehen Back turning | | > 1.18 |
|  | | 714 / 724 Fonçage-tournage Einstechen und drehen Grooving and turning | > 1.21 |
|  | 716 / 726 Filetage Gewinde drehen Threading | | > 1.22 |
| | | Plaquette ébauche WSP-Rohling Blank insert | > 1.23 |



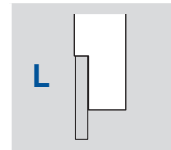
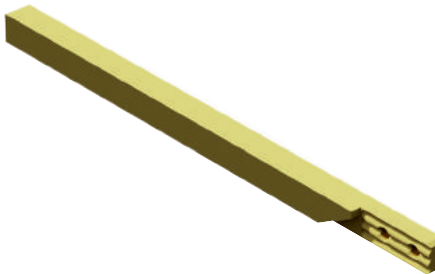
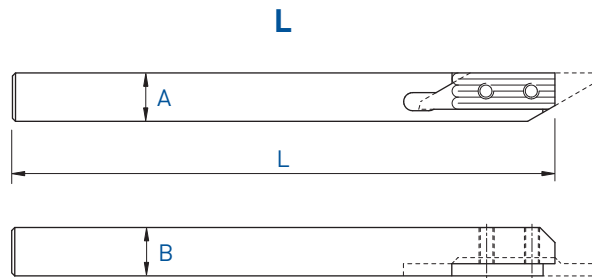
| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|------------------|---------------|
| 6 x 6 | 115 | A | 710-6 | - |
| 7 x 7 | 115 | A | 710-7 | 720-7 |
| 8 x 8 | 115 | A | 710-8 | 720-8 |
| 8 x 8 | 140 | A | 710-8-140 | - |
| 10 x 10 | 115 | A | 710-10 | 720-10 |
| 12 x 12 | 130 | A | 710-12 | 720-12 |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils en métal lourd anti-vibratoire
 Schwingungsdämpfende Schwermetallhalter
 Low vibration heavy metal holders

710-NOVIBRA

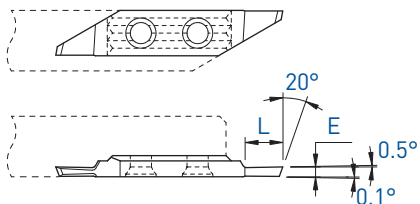


| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|-------|-----|------------------------------------|----------------------|
| 6 x 6 | 115 | A | 710-6-NOVIBRA |
| 7 x 7 | 115 | A | 710-7-NOVIBRA |
| 8 x 8 | 115 | A | 710-8-NOVIBRA |

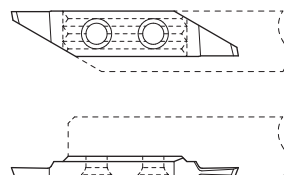


Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

L



R



L



R

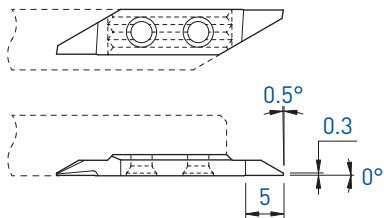


| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|---------|-------|-----|----------|-----|------|-----------|---------|-------|-----|----------|-----|------|-----------|
| 0.5 | 2 | 711-0.5 | ■ | ■ | ■ | ■ | □ | ■ | - | | | | | | |
| 0.8 | 3 | 711-0.8 | ■ | ■ | ■ | ■ | ■ | ■ | 721-0.8 | ■ | ■ | ■ | | | |
| 0.9 | 3 | 711-0.9 | ■ | ■ | ■ | ■ | □ | ■ | - | | | | | | |
| 1.0 | 4 | 711-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | 721-1.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.1 | 4 | 711-1.1 | ■ | ■ | ■ | ■ | ■ | ■ | - | | | | | | |
| 1.2 | 5 | 711-1.2 | ■ | ■ | ■ | ■ | ■ | ■ | 721-1.2 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.3 | 5 | 711-1.3 | ■ | ■ | ■ | ■ | □ | ■ | - | | | | | | |
| 1.4 | 5 | 711-1.4 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.5 | 6.5 | 711-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 721-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 6.5 | 711-1.8 | ■ | ■ | ■ | ■ | □ | ■ | 721-1.8 | ■ | ■ | ■ | | | |
| 2.0 | 6.5 | 711-2.0 | ■ | ■ | ■ | | | | 721-2.0 | ■ | ■ | ■ | | | |

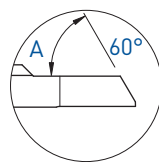
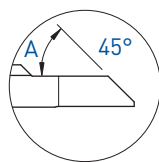
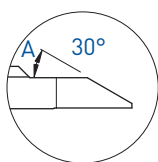
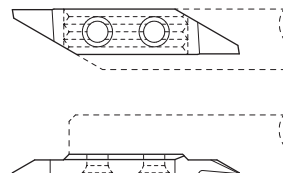
Tournage avant
Vorwärts drehen
Front turning

712 / 722

L



R



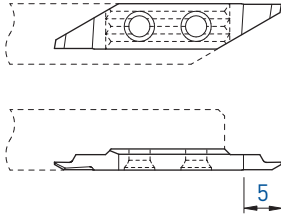
| | L | | | | | | R | | | | | | | |
|-----|---------|-------|-----|----------|-----|------|-----------|---------|-------|-----|----------|-----|------|-----------|
| A | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTIN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTIN | HN (µk10) |
| 30° | 712-30 | ■ | ■ | ■ | ■ | □ | ■ | 722-30 | ■ | ■ | ■ | ■ | □ | ■ |
| 45° | 712-45 | ■ | ■ | ■ | ■ | ■ | ■ | 722-45 | ■ | ■ | ■ | ■ | □ | ■ |
| 60° | 712-60 | ■ | ■ | ■ | ■ | □ | ■ | 722-60 | ■ | ■ | ■ | ■ | □ | ■ |

TOP-LINE

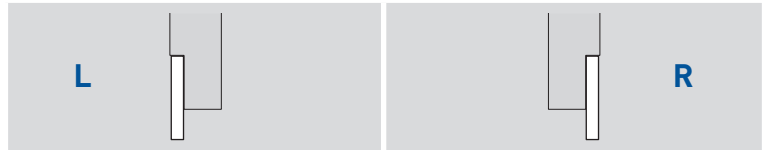
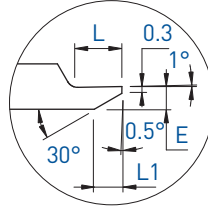
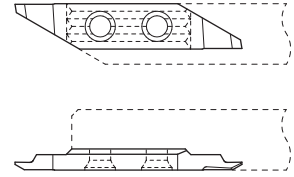
Tournage arrière
Rückwärts drehen
Back turning

713-30° / 723-30°

L



R



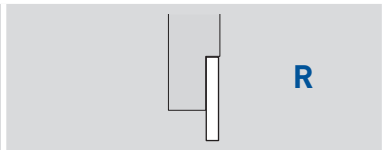
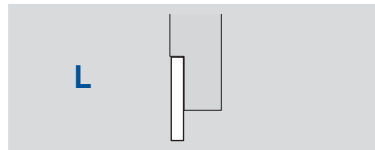
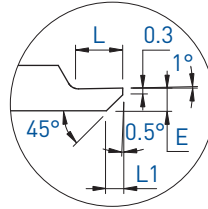
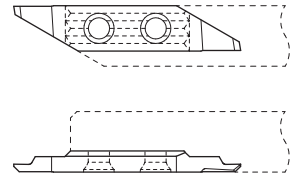
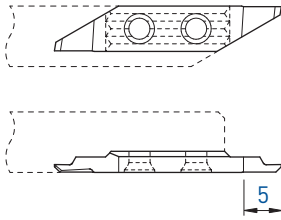
| E | L | L1 | Art. N° | L | | | R | | | | | | | | | |
|-----|-----|------|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| | | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 0.8 | 1.6 | 0.85 | 713-30-0.8 | ■ | ■ | ■ | | | | 723-30-0.8 | ■ | ■ | ■ | ■ | □ | ■ |
| 0.9 | 1.6 | 1.05 | 713-30-0.9 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.0 | 2.0 | 1.2 | 713-30-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 723-30-1.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.1 | 2.0 | 1.4 | 713-30-1.1 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.2 | 2.5 | 1.55 | 713-30-1.2 | ■ | ■ | ■ | | | | 723-30-1.2 | ■ | ■ | ■ | | | |
| 1.3 | 2.5 | 1.7 | 713-30-1.3 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.4 | 3.0 | 1.9 | 713-30-1.4 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.5 | 3.0 | 2.1 | 713-30-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 723-30-1.5 | ■ | ■ | ■ | ■ | | |
| 1.8 | 4.0 | 2.6 | 713-30-1.8 | ■ | ■ | ■ | | | | 723-30-1.8 | ■ | ■ | ■ | | | |
| 2.0 | 4.0 | 2.9 | 713-30-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | 723-30-2.0 | ■ | ■ | ■ | | | |

Tournage arrière
 Rückwärts drehen
 Back turning

713-45° / 723-45°

L

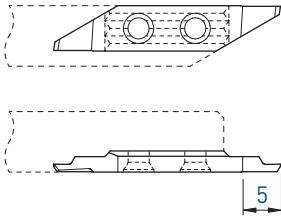
R



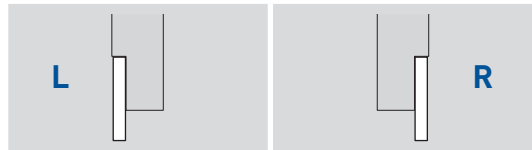
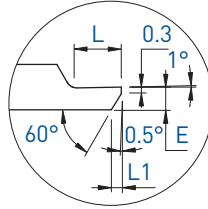
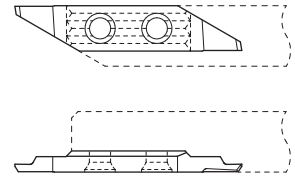
| E | L | L1 | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|-----|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 0.8 | 1.6 | 0.5 | 713-45-0.8 | ■ | ■ | ■ | ■ | □ | ■ | 723-45-0.8 | ■ | ■ | ■ | | | |
| 0.9 | 1.6 | 0.6 | 713-45-0.9 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.0 | 2.0 | 0.7 | 713-45-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 723-45-1.0 | ■ | □ | ■ | | | |
| 1.1 | 2.0 | 0.8 | 713-45-1.1 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.2 | 2.5 | 0.9 | 713-45-1.2 | ■ | ■ | ■ | | | | 723-45-1.2 | ■ | ■ | ■ | | | |
| 1.3 | 2.5 | 1.0 | 713-45-1.3 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.4 | 3.0 | 1.1 | 713-45-1.4 | ■ | ■ | ■ | | | | - | | | | | | |
| 1.5 | 3.0 | 1.2 | 713-45-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 723-45-1.5 | ■ | □ | ■ | | | |
| 1.8 | 4.0 | 1.5 | 713-45-1.8 | ■ | ■ | ■ | | | | 723-45-1.8 | ■ | □ | ■ | | | |
| 2.0 | 4.0 | 1.7 | 713-45-2.0 | ■ | ■ | ■ | | | | 723-45-2.0 | ■ | ■ | ■ | | | |

■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

L



R



| E | L | L1 | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) |
|-----|-----|------|------------|-------|-----|----------|------------|-------|-----|----------|
| 0.8 | 1.6 | 0.3 | 713-60-0.8 | ■ | ■ | ■ | 723-60-0.8 | ■ | ■ | ■ |
| 0.9 | 1.6 | 0.35 | 713-60-0.9 | ■ | ■ | ■ | - | | | |
| 1.0 | 2.0 | 0.4 | 713-60-1.0 | ■ | ■ | ■ | 723-60-1.0 | ■ | □ | ■ |
| 1.1 | 2.0 | 0.45 | 713-60-1.1 | ■ | ■ | ■ | - | | | |
| 1.2 | 2.5 | 0.5 | 713-60-1.2 | ■ | ■ | ■ | 723-60-1.2 | ■ | □ | ■ |
| 1.3 | 2.5 | 0.6 | 713-60-1.3 | ■ | ■ | ■ | - | | | |
| 1.4 | 3.0 | 0.65 | 713-60-1.4 | ■ | ■ | ■ | - | | | |
| 1.5 | 3.0 | 0.7 | 713-60-1.5 | ■ | ■ | ■ | 723-60-1.5 | ■ | ■ | ■ |
| 1.8 | 4.0 | 0.9 | 713-60-1.8 | ■ | ■ | ■ | 723-60-1.8 | ■ | □ | ■ |
| 2.0 | 4.0 | 1.0 | 713-60-2.0 | ■ | ■ | ■ | 723-60-2.0 | ■ | ■ | ■ |

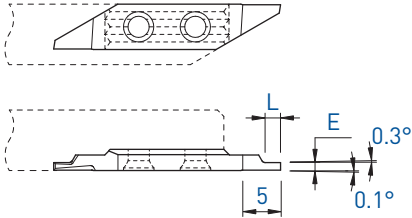
Fonçage-tournage

Einstecken und drehen

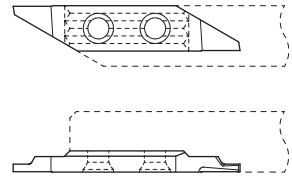
Grooving and turning

714 / 724

L



R



L



R



| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|---------|-------|-----|----------|-----|------|-----------|---------|-------|-----|----------|-----|------|-----------|
| 0.5 | 1.0 | 714-0.5 | ■ | ■ | ■ | | | | 724-0.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 0.6 | 1.0 | 714-0.6 | ■ | ■ | ■ | | | | 724-0.6 | ■ | ■ | ■ | | | |
| 0.7 | 1.5 | 714-0.7 | ■ | ■ | ■ | | | | 724-0.7 | ■ | ■ | ■ | | | |
| 0.8 | 1.5 | 714-0.8 | ■ | ■ | ■ | ■ | □ | ■ | 724-0.8 | ■ | ■ | ■ | | | |
| 0.9 | 2.0 | 714-0.9 | ■ | ■ | ■ | | | | 724-0.9 | ■ | □ | ■ | | | |
| 1.0 | 2.0 | 714-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | 724-1.0 | ■ | ■ | ■ | | | |
| 1.1 | 2.0 | 714-1.1 | ■ | ■ | ■ | | | | 724-1.1 | ■ | □ | ■ | | | |
| 1.2 | 2.5 | 714-1.2 | ■ | ■ | ■ | | | | 724-1.2 | ■ | □ | ■ | | | |
| 1.3 | 2.5 | 714-1.3 | ■ | ■ | ■ | | | | 724-1.3 | ■ | ■ | ■ | | | |
| 1.4 | 3.0 | 714-1.4 | ■ | ■ | ■ | | | | 724-1.4 | ■ | □ | ■ | | | |
| 1.5 | 3.0 | 714-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 724-1.5 | ■ | ■ | ■ | | | |

■ = disponible / verfügbar / available

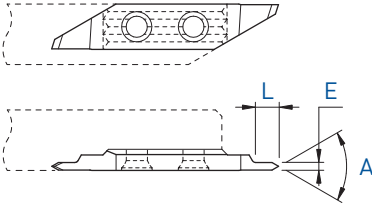
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

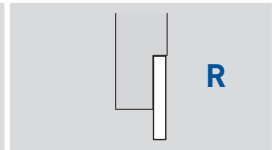
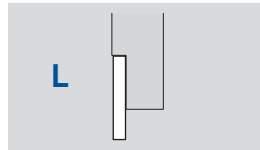
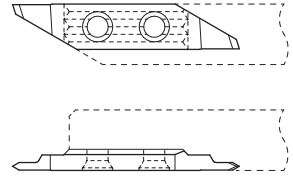
Filetage
Gewinde drehen
Threading

716 / 726

L



R



| A | E | L | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) |
|-----|-----|---|------------|-------|-----|----------|------------|-------|-----|----------|
| 60° | 1.0 | 3 | 716-60-1.0 | ■ | ■ | ■ | 726-60-1.0 | ■ | ■ | ■ |
| 60° | 1.5 | 4 | 716-60-1.5 | ■ | ■ | ■ | 726-60-1.5 | ■ | ■ | ■ |
| 55° | 1.0 | 3 | 716-55-1.0 | ■ | ■ | ■ | 726-55-1.0 | ■ | □ | ■ |
| 55° | 1.5 | 4 | 716-55-1.5 | ■ | ■ | ■ | 726-55-1.5 | ■ | □ | ■ |

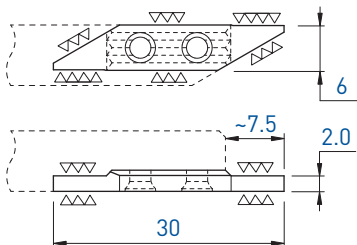
Plaquettes ébauches

WSP-Rohlinge

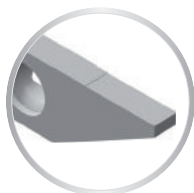
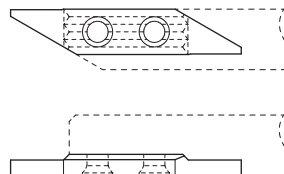
Blank inserts

711-EP / 721-EP

L

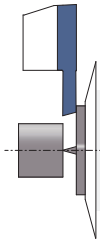
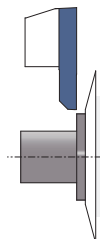
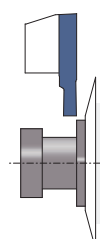
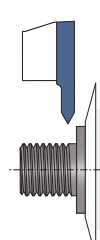


R

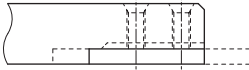
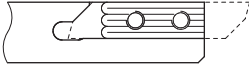


| L | | R | | | |
|---------|--------------------------|--------------------------|---------|--------------------------|--------------------------|
| Art. N° | TiAlN TiN N (µk20) | HTA HTiN HN (µk10) | Art. N° | TiAlN TiN N (µk20) | HTA HTiN HN (µk10) |
| 711-EP | ■ ■ ■ | ■ □ ■ | 721-EP | ■ □ ■ | □ □ ■ |

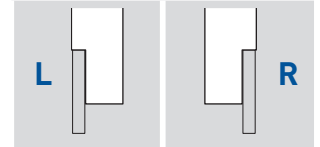
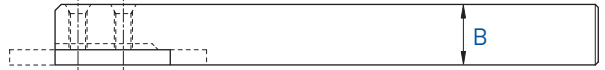
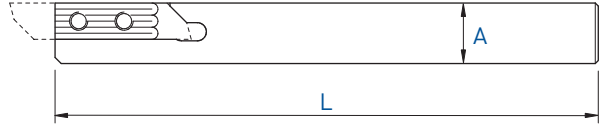
| L | | | R | | |
|------------|-------------|-----------|------------|-------------|-----------|
| Type | | Page | Type | | Page |
| 730 | 730 | 1.26 | 740 | 740 | 1.26 |
| | 730-JET | 1.27 | | 740/730-D | 1.31 |
| | 730-NOVIBRA | 1.30 | | 740-C | 1.28 |
| | 730RC | 1.29 | | 740-JET | 1.27 |
| 731 | 731 | 1.32 | | 740-NOVIBRA | 1.30 |
| | 731-E | 1.67 | 741 | 741 | 1.32 |
| | 731N | 1.38/1.45 | | 741-E | 1.67 |
| | 731R | 1.39 | | 741L | 1.39 |
| | 731RU | 1.44 | | 741LX12 | 1.42 |
| | 731RX12 | 1.42 | | 741LX25 | 1.43 |
| | 731RX25 | 1.43 | | 741LX4 | 1.40 |
| | 731RX4 | 1.40 | | 741LXF | 1.41 |
| | 731RXF | 1.41 | | 741N | 1.38/1.45 |
| | 731U | 1.37 | | 741U | 1.37 |
| | 731X12 | 1.35 | | 741X12 | 1.35 |
| | 731X25 | 1.36 | | 741X25 | 1.36 |
| | 731X4 | 1.33 | | 741X4 | 1.33 |
| | 731XF | 1.34 | | 741XF | 1.34 |
| 732 | 732 | 1.46 | 742 | 742 | 1.46 |
| | 732PX | 1.47 | | 742PX | 1.47 |
| | 732X | 1.48 | | 742X | 1.48 |
| 733 | 733 | 1.49 | 743 | 743 | 1.49 |
| | 733P | 1.55 | | 743P | 1.55 |
| | 733VX-15° | 1.53 | | 743VX-15° | 1.53 |
| | 733VX-8° | 1.51 | | 743VX-8° | 1.51 |
| | 733VX-805 | 1.52 | | 743VX-805 | 1.52 |
| | 733X | 1.50 | | 743X | 1.50 |
| | 733ZX | 1.54 | | 743ZX10 | 1.54 |
| 734 | 734 | 1.56 | 744 | 744 | 1.56 |
| | 734VS | 1.57 | | 744VS | 1.57 |
| | 734X | 1.58 | | 744X | 1.58 |
| | 734ZX | 1.59 | | 744ZX | 1.59 |
| 735 | 735 | 1.61 | | 744ZXT | 1.60 |
| | 735X-90 | 1.62 | 745 | 745 | 1.61 |
| 736 | 736 | 1.63 | | 745X-90 | 1.62 |
| | 736-A60° | 1.64 | 746 | 746 | 1.63 |
| | 736-M | 1.65 | | 746-A60° | 1.64 |
| 737 | 737 | 1.66 | | 746-M | 1.65 |
| | | | 747 | 747 | 1.66 |

| | | | |
|--|---|--|--------|
| | | 730 / 740 Porte-outils Halter Holders | > 1.26 |
|  | 731 / 741 Tronçonnage Abstechen Parting off | | > 1.32 |
| | | 741L / 731R Tronçonnage - coupe déportée Abstechen - versetztes Schneiden Parting off - cut off line | > 1.39 |
|  | 732 / 742 Tournage avant Vorwärts drehen Front turning | | > 1.46 |
| | | 733 / 743 Tournage arrière Rückwärts drehen Back turning | > 1.49 |
|  | 734 / 744 Fonçage-tournage Einstechen und drehen Grooving and turning | | > 1.56 |
| | | 735 / 745 Gorges Einstechen Grooving | > 1.61 |
|  | 736 / 746 Filetage Gewinde drehen Threading | | > 1.63 |
| | | 737 / 747 Plaquettes à rayon Radius Wendeplatten Radius inserts | > 1.66 |
| | Plaquettes ébauches WSP-Rohlinge Blank inserts | | > 1.67 |

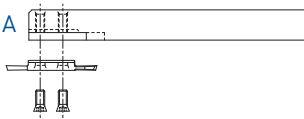
L



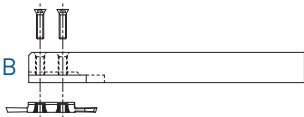
R



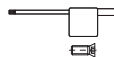
Serrage standard A
Standard Spannsystem A
Standard clamping system A



Serrage B
Spannsystem B
Clamping system B



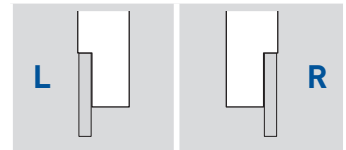
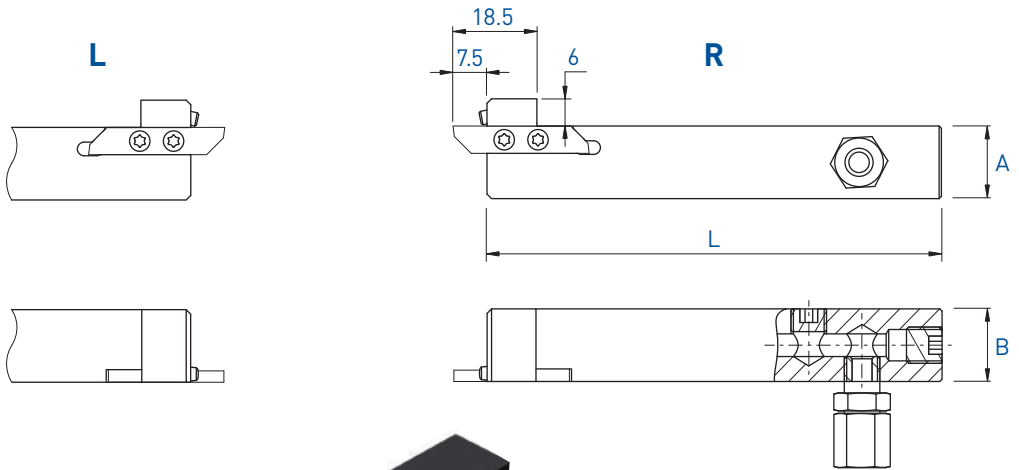
| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|-------------|-----|------------------------------------|-----------|-----------|
| 7 x 7 | 115 | A | 730-7 | 740-7 |
| 8 x 8 | 115 | A + B | 730-8 | 740-8 |
| 8 x 8 | 140 | A + B | 730-8-140 | - |
| 10 x 10 | 115 | A + B | 730-10 | 740-10 |
| 10 x 10 | 50 | A + B | 730-10-50 | 740-10-50 |
| 12 x 12 | 130 | A + B | 730-12 | 740-12 |
| 12 x 12 | 90 | A + B | 730-12-90 | 740-12-90 |
| 12.7 x 12.7 | 130 | A + B | 730-12.7 | 740-12.7 |
| 16 x 16 | 130 | A + B | 730-16 | 740-16 |
| 16 x 16 | 75 | A + B | 730-16-75 | 740-16-75 |
| 20 x 20 | 120 | A + B | 730-20 | 740-20 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

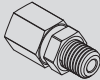



Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

730-JET / 740-JET



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|-------------|-----|------------------------------------|--------------|----------------------------|
| 8 x 10 | 100 | A + B | - | 740-0810-JET |
| 10 x 12 | 100 | A + B | 730-1012-JET | 740-1012-JET |
| 10 x 12 | 80 | A + B | - | 740-1012-80-JET new |
| 12 x 12 | 100 | A + B | 730-12-JET | 740-12-JET |
| 12.7 x 12.7 | 100 | A + B | 730-12.7-JET | 740-12.7-JET |
| 16 x 16 | 100 | A + B | 730-16-JET | 740-16-JET |
| 20 x 20 | 100 | A + B | 730-20-JET | 740-20-JET |

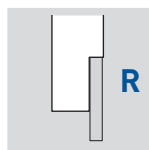
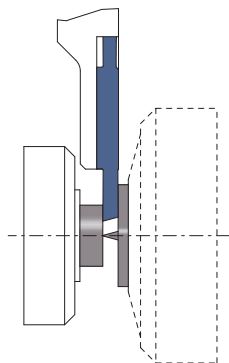
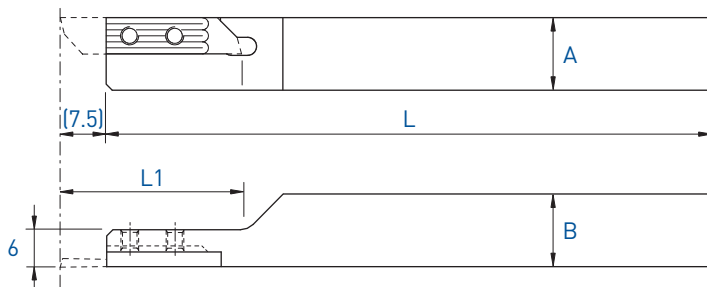


| Pièces de rechange Ersatzteile Spare parts |  |  | Buse Düse Nozzle  | Option  |
|--|---|---|---|---|
| | Art. N° | Art. N° | Art. N° | Art. N° |
| 740-0810-JET | J-M5-D5 | JB-M5 | - | JC-M5-D5 |
| 730-JET / 740-JET | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 | - |

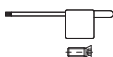
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.



R



| A x B | L | L1 | Serrage Spannsystem Clamping | Art. N° |
|---------|-----|----|------------------------------------|-----------------|
| 8 x 8 | 115 | 24 | A | 740-C-8 |
| 10 x 10 | 115 | 24 | A | 740-C-10 |
| 12 x 12 | 130 | 30 | A | 740-C-12 |
| 16 x 16 | 130 | 40 | A | 740-C-16 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils

Halter

Holders

Coupe à droite déportée

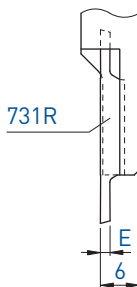
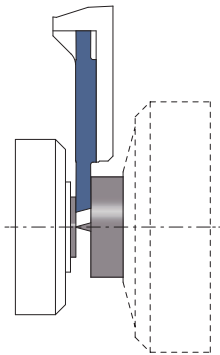
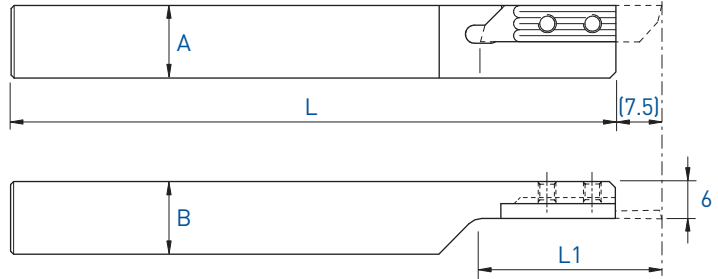
Versetztes Rechtsschneiden

Right cut off line

730RC

Utiliser des plaquettes type 731R
 WSP Typ 731R verwenden
 Use inserts type 731R

Voir pages 1.39 - 1.45
 Siehe Seiten 1.39 - 1.45
 See pages 1.39 - 1.45

**L (R)**

Coupe à droite déportée
 Versetztes Rechtsschneiden
 Right cut off line



| A x B | L | L1 | Art. N° |
|---------|-----|----|-----------------|
| 8 x 8 | 115 | 24 | 730RC-8 |
| 10 x 10 | 115 | 24 | 730RC-10 |
| 12 x 12 | 130 | 30 | 730RC-12 |
| 16 x 16 | 130 | 40 | 730RC-16 |

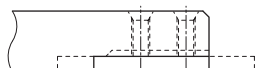
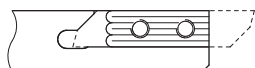


Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

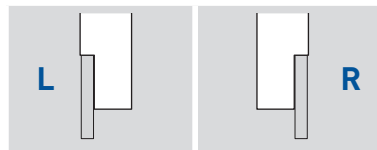
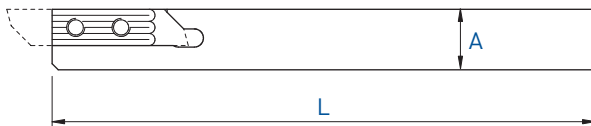
Porte-outils en métal lourd anti-vibratoire
 Schwingungsdämpfende Schwermetallhalter
 Low vibration heavy metal holders

730-NOVIBRA
740-NOVIBRA

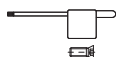
L



R



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|----------------------|-------------------------|
| 7 x 7 | 115 | A | 730-7-NOVIBRA | 740-7-NOVIBRA |
| 8 x 8 | 115 | A + B | 730-8-NOVIBRA | 740-8-NOVIBRA |
| 8 x 8 | 80 | A + B | - | 740-8-80-NOVIBRA |
| 10 x 10 | 115 | A + B | - | 740-10-NOVIBRA |
| 12 x 12 | 130 | A + B | - | 740-12-NOVIBRA |



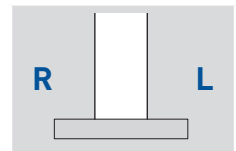
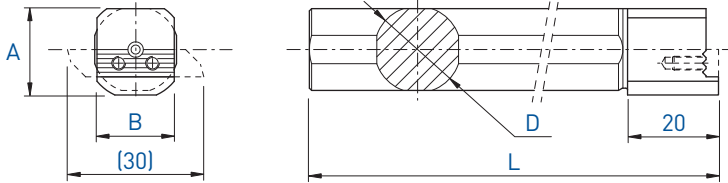
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils

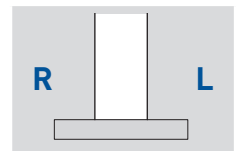
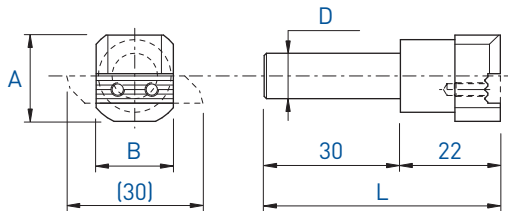
Halter

Holder

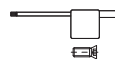
740 / 730-D



| A x B | L | D | Art. N° |
|-----------|-----|-------|------------------|
| 19 x 17 | 160 | 16 | 740/730-D16 |
| 19 x 17 | 160 | 19.05 | 740/730-D19.05 |
| 19 x 17 | 110 | 19.05 | 740/730-D19.05-S |
| 19.5 x 17 | 160 | 20 | 740/730-D20 |
| 20 x 17 | 110 | 22 | 740/730-D22 |
| 22 x 17 | 200 | 25 | 740/730-D25 |
| 22 x 17 | 200 | 25.4 | 740/730-D25.4 |



| A x B | L | D | Art. N° |
|---------|----|----|-------------|
| 19 x 17 | 52 | 10 | 740/730-D10 |

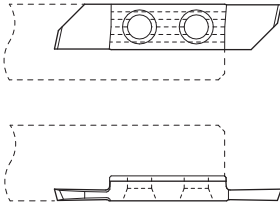


Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

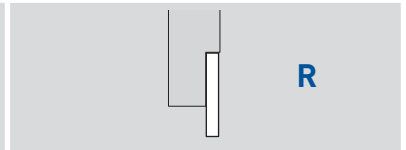
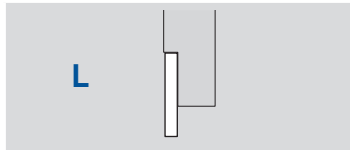
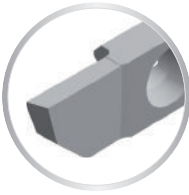
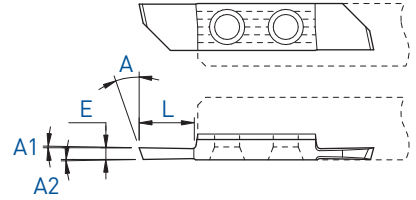
Tronçonnage
Abstechen
Parting off

731 / 741

L

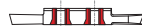


R



| E | A | A1 | A2 | L | Art. N° | L | | | R | | | | | | | | | | | |
|-----|-----|------|------|---|---------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|-----------|---|
| | | | | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) | |
| 0.6 | 18° | 2.5° | 0.5° | 3 | 731-0.6 | ■ | ■ | ■ | ■ | ■ | ■ | 741-0.6 | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 0.8 | 20° | 0.3° | 0.3° | 5 | 731-0.8 | ■ | ■ | ■ | ■ | □ | ■ | 741-0.8 | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 1.0 | 20° | 0.3° | 0.3° | 5 | 731-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | 741-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 1.2 | 20° | 0.3° | 0.3° | 5 | 731-1.2 | ■ | ■ | ■ | ■ | □ | ■ | 741-1.2 | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 1.5 | 20° | 0.3° | 0.3° | 7 | 731-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 741-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 1.8 | 20° | 0.3° | 0.3° | 7 | 731-1.8 | ■ | ■ | ■ | ■ | □ | ■ | 741-1.8 | ■ | ■ | ■ | ■ | ■ | □ | ■ | |
| 2.0 | 20° | 0.3° | 0.3° | 7 | 731-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 741-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 2.5 | 20° | 0.3° | 0.3° | 7 | 731-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | 741-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



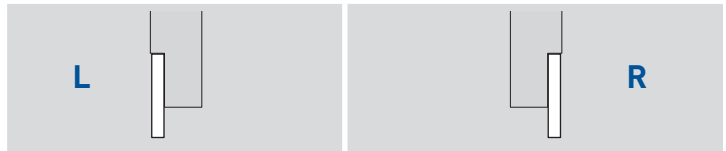
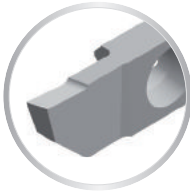
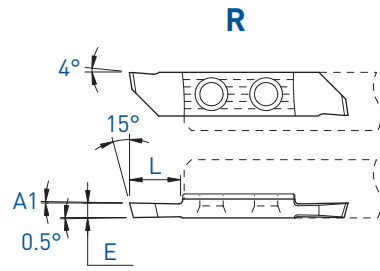
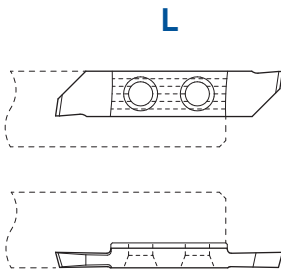
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage

Abstechen

Parting off

731X4 / 741X4



| E | A1 | L | Art. N° | L | | | R | | | | | | | | | |
|-----|------|---|-----------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|
| | | | | TiAlN | TiN | N [µk20] | HTA | HTiN | HN [µk10] | Art. N° | TiAlN | TiAlX | TiN | N [µk20] | HTA | HTiN |
| 0.6 | 2.5° | 3 | 731X4-0.6 | ■ | ■ | ■ | ■ | ■ | 741X4-0.6 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.8 | 0.5° | 4 | - | | | | | | 741X4-0.8 | | | | | ■ | ■ | |
| 1.0 | 0.5° | 5 | 731X4-1.0 | ■ | ■ | ■ | | | 741X4-1.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 0.5° | 7 | 731X4-1.5 | ■ | ■ | ■ | ■ | □ | 741X4-1.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 0.5° | 7 | 731X4-2.0 | ■ | ■ | ■ | | | 741X4-2.0 | ■ | ■ | ■ | ■ | | | |

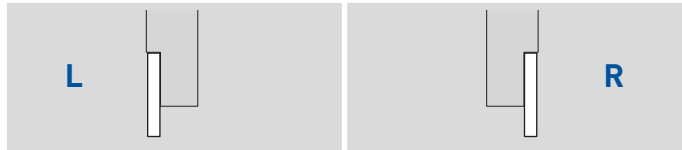
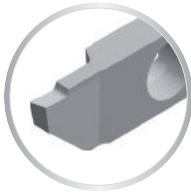
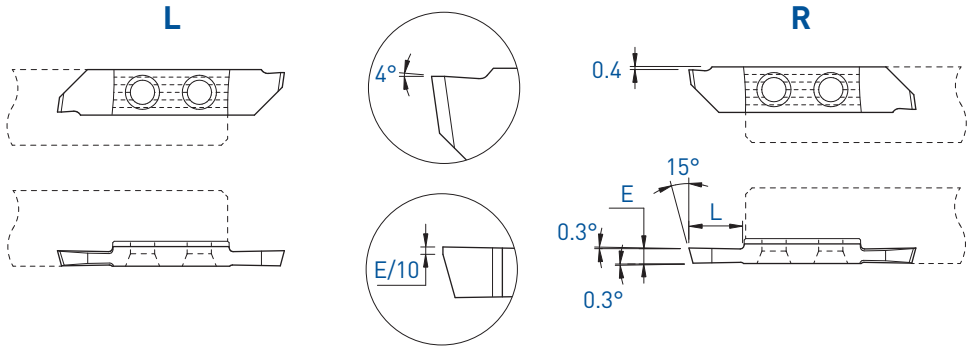
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

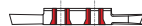
■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| E | L | Art. N° | TiAlN | | | HTA | | | Art. N° | TiAlN | | | HTA | | |
|-----|---|-----------|-------|----|---|-----|------|-----------|-----------|-------|----|---|-----|------|-----------|
| | | | Ti | Al | N | HTA | HTiN | HN (µk10) | | Ti | Al | N | HTA | HTiN | HN (µk10) |
| 1.2 | 5 | - | ■ | ■ | ■ | ■ | ■ | ■ | 741XF-1.2 | ■ | □ | ■ | ■ | ■ | ■ |
| 1.5 | 7 | 731XF-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 741XF-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 7 | 731XF-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | 741XF-2.0 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 7 | 731XF-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | 741XF-2.5 | ■ | ■ | ■ | ■ | ■ | ■ |

7XX-XX-B



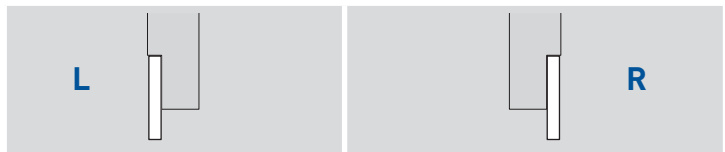
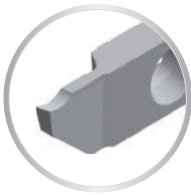
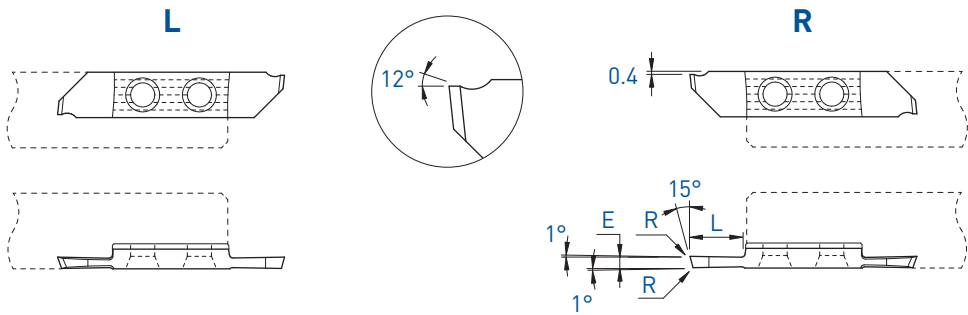
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage

Abstechen

Parting off

731X12 / 741X12



| | | | L | | | | R | | | | | | | | | | |
|-----|---|------|------------|-------|-----|----------|-----|------|-----------|------------|-------|-------|-----|----------|-----|------|-----------|
| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 0.5 | 3 | 0.03 | - | | | | | | | 741X12-0.5 | | | | | ■ | | ■ |
| 1.0 | 5 | 0.03 | 731X12-1.0 | ■ | ■ | ■ | | | | 741X12-1.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7 | 0.03 | 731X12-1.5 | ■ | ■ | ■ | | | | 741X12-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 7 | 0.03 | 731X12-2.0 | ■ | ■ | ■ | | | | 741X12-2.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



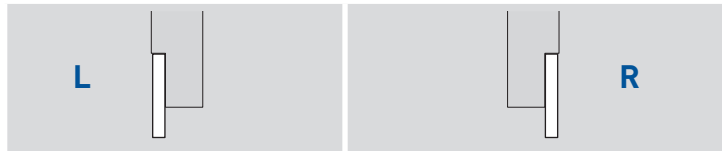
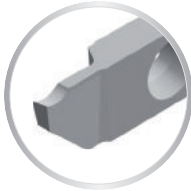
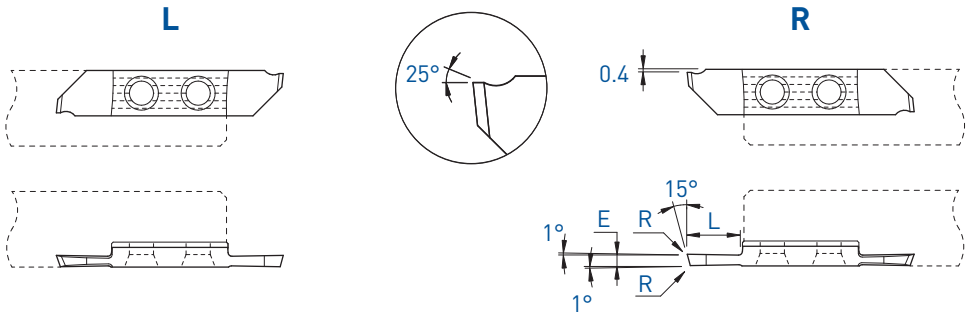
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

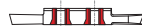
Tronçonnage
Abstechen
Parting off

731X25 / 741X25



| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------------|-------|-----|----------|-----|------|-----------|------------|-------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 731X25-1.0 | ■ | ■ | ■ | | | | 741X25-1.0 | ■ | | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7 | 731X25-1.5 | ■ | ■ | ■ | | | | 741X25-1.5 | ■ | | ■ | ■ | ■ | □ | ■ |
| 2.0 | 7 | 731X25-2.0 | ■ | ■ | ■ | | | | 741X25-2.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



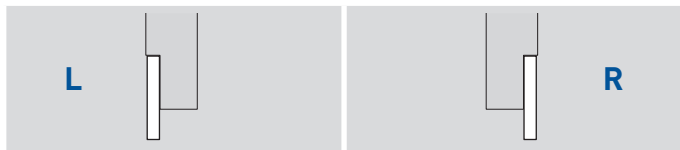
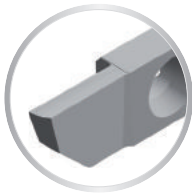
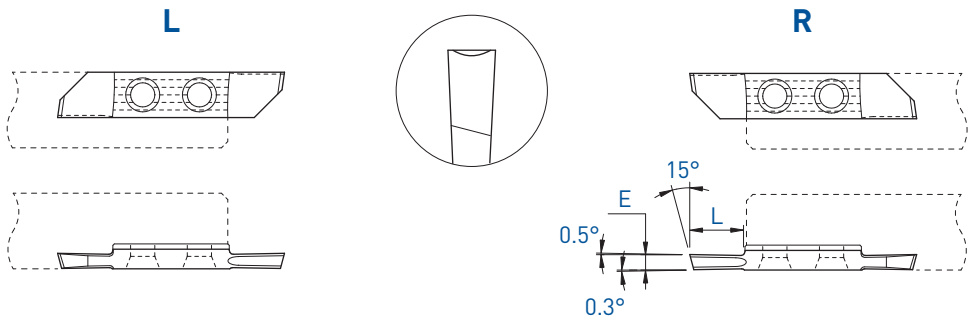
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage

Abstechen

Parting off

731U / 741U



| E | L | Art. N° | L | | | R | | | | | | | | | |
|-----|---|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| | | | TiAlN | TiN | N (µm20) | HTA | HTiN | HN (µm10) | Art. N° | TiAlN | TiN | N (µm20) | HTA | HTiN | HN (µm10) |
| 1.5 | 7 | 731U-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 741U-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 7 | 731U-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 741U-2.0 | ■ | ■ | ■ | ■ | □ | ■ |

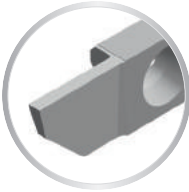
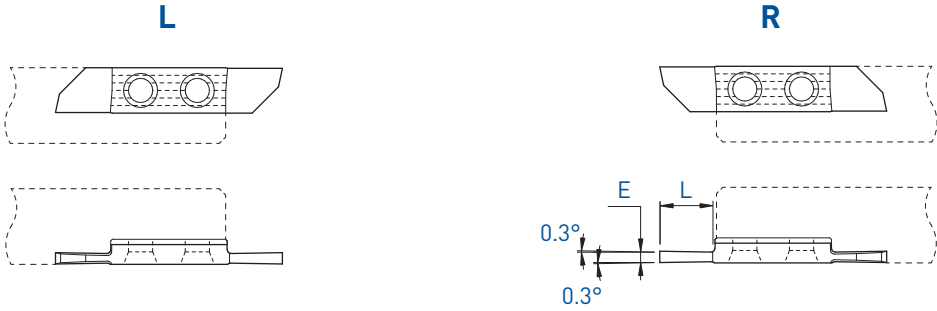
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

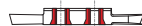
■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 731N-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 741N-1.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7 | 731N-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 741N-1.5 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



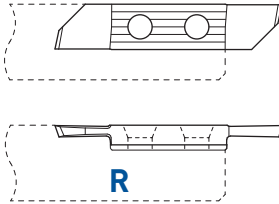
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

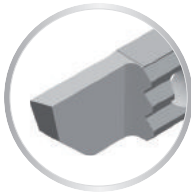
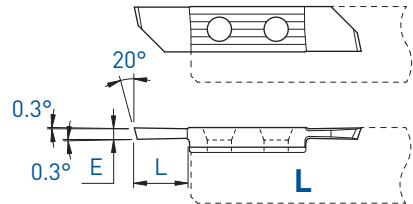
Coupe déportée
Versetztes Schneiden
Cut off line

741L / 731R

Cut L



Cut R



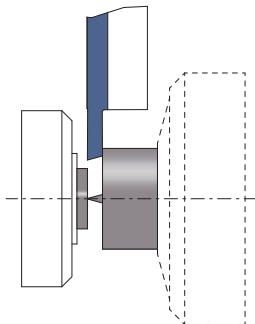
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 741L-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 731R-1.0 | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.2 | 5 | 741L-1.2 | ■ | ■ | ■ | ■ | □ | ■ | 731R-1.2 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7 | 741L-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 731R-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 7 | 741L-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 731R-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 7 | 741L-2.5 | ■ | ■ | ■ | | | | 731R-2.5 | ■ | ■ | ■ | | | |

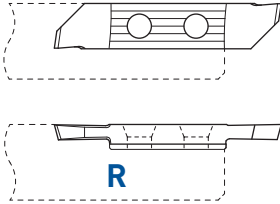


Tronçonnage
Abstechen
Parting off

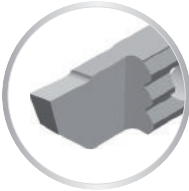
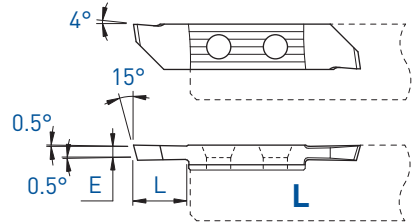
Coupe déportée
Versetztes Schneiden
Cut off line

741LX4 / 731RX4

Cut L



Cut R



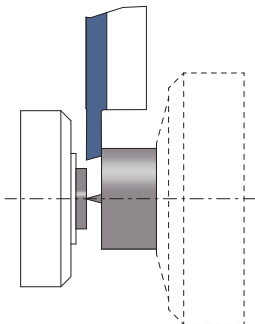
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

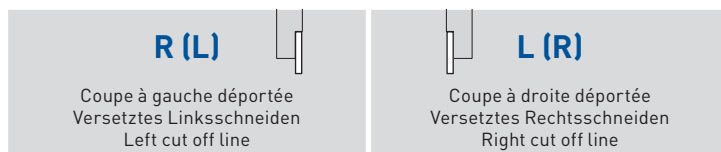
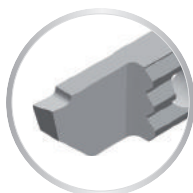
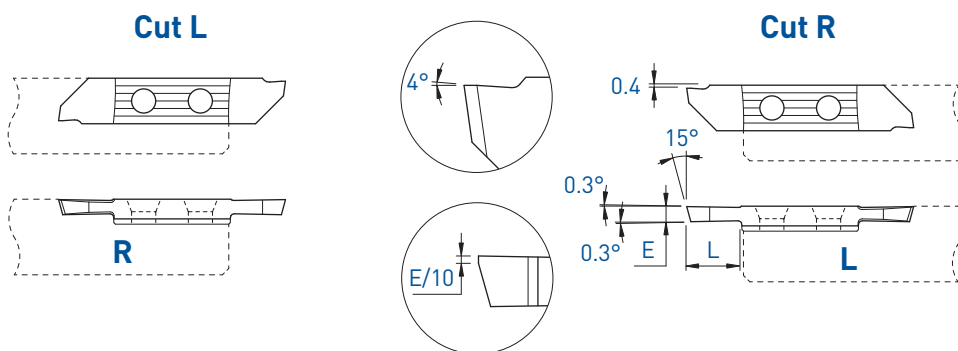
| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 1.5 | 5 | 741LX4-1.5 | ■ | ■ | ■ | | | | 731RX4-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |



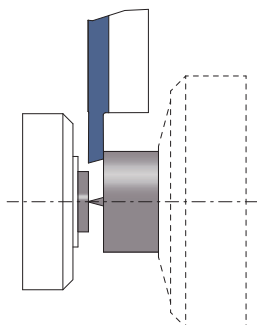
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

741LXF / 731RXF



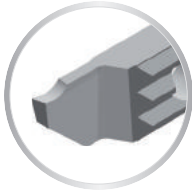
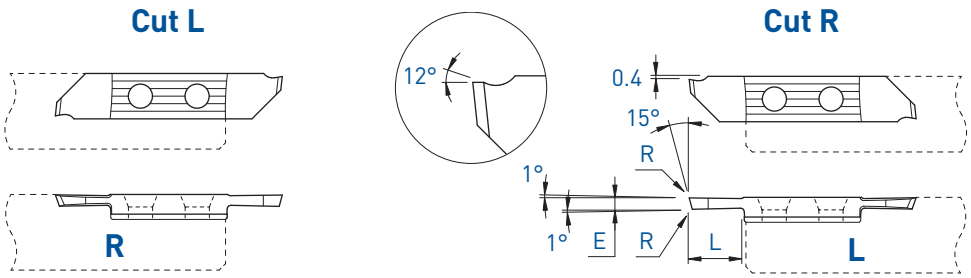
| E | L | Art. N° | R (L) | | | L (R) | | |
|-----|---|------------|-------|-----|----------|-------|-----|----------|
| | | | TiAlN | TiN | N (µk20) | TiAlN | TiN | N (µk20) |
| 1.5 | 7 | 741LXF-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 7 | 741LXF-2.0 | ■ | ■ | ■ | ■ | ■ | □ |
| 2.5 | 7 | 741LXF-2.5 | ■ | ■ | ■ | ■ | ■ | ■ |



Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

741LX12 / 731RX12



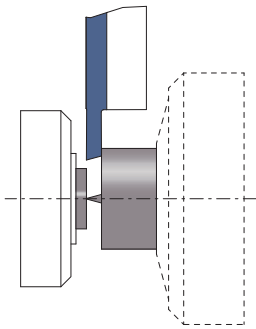
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

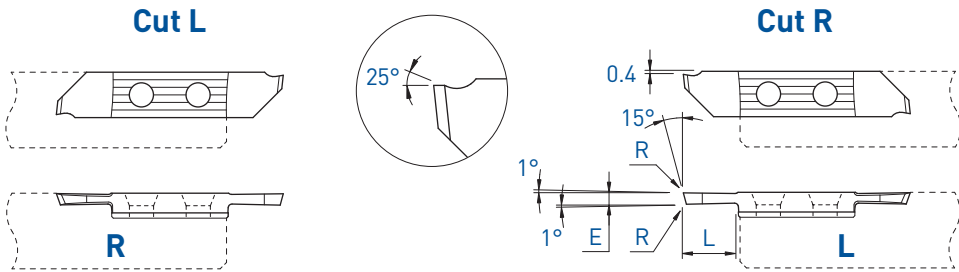
| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------|-------------|-------|-----|----------|-----|------|-----------|-------------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 0.03 | - | | | | | | | 731RX12-1.0 | ■ | □ | ■ | | | |
| 1.5 | 7 | 0.03 | 741LX12-1.5 | ■ | ■ | ■ | | | | 731RX12-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |



Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

741LX25 / 731RX25



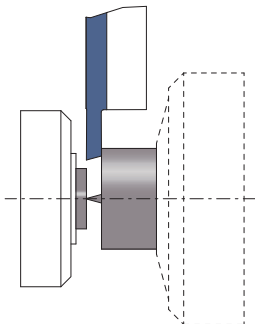
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) |
|-----|---|------|-------------|-------|-----|----------|-------------|-------|-----|----------|
| 1.5 | 7 | 0.03 | 741LX25-1.5 | ■ | ■ | ■ | 731RX25-1.5 | ■ | ■ | ■ |

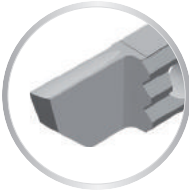
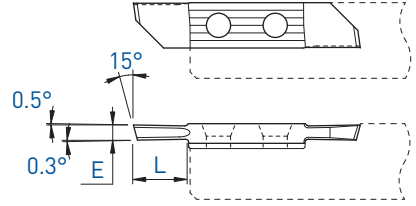
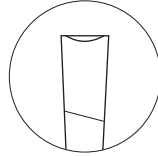


Tronçonnage
 Abstechen
 Parting off

Coupe déportée
 Versetztes Schneiden
 Cut off line

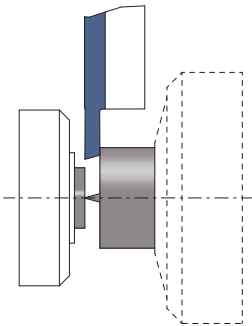
731RU

Cut R



L (R)
 Coupe à droite déportée
 Versetztes Rechtsschneiden
 Right cut off line

| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|-----------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 731RU-1.0 | ■ | □ | ■ | | | |
| 1.2 | 5 | 731RU-1.2 | ■ | □ | ■ | | | |
| 1.5 | 7 | 731RU-1.5 | ■ | □ | ■ | ■ | □ | ■ |
| 2.0 | 7 | 731RU-2.0 | ■ | □ | ■ | | | |

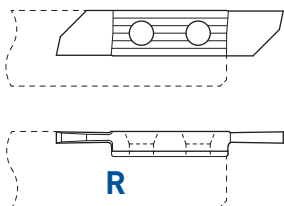


Tronçonnage
Abstechen
Parting off

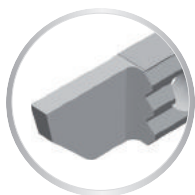
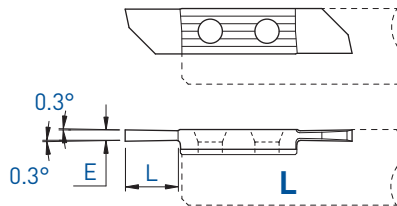
Coupe déportée
Versetztes Schneiden
Cut off line

741N / 731N

Cut L



Cut R



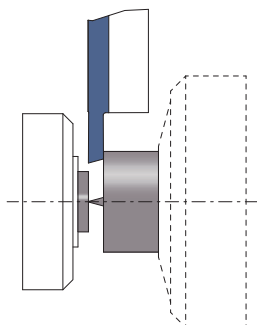
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

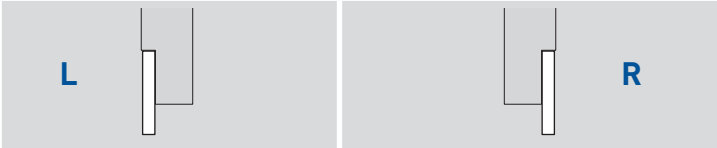
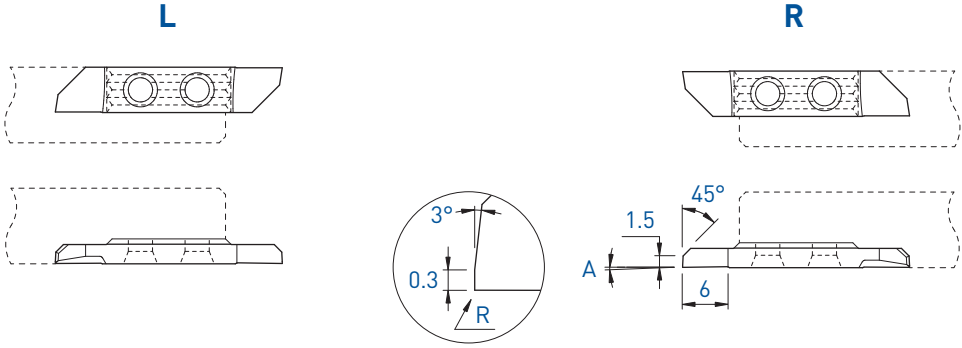
| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 741N-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 731N-1.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7 | 741N-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 731N-1.5 | ■ | ■ | ■ | ■ | □ | ■ |



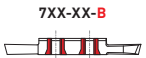
TOP-LINE

Tournage avant
Vorwärts drehen
Front turning

732 / 742



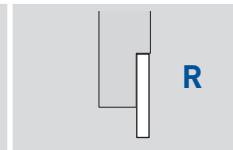
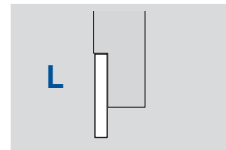
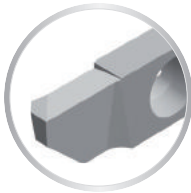
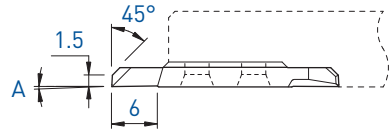
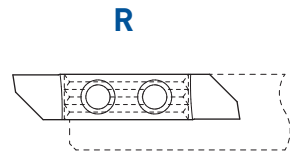
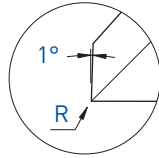
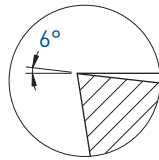
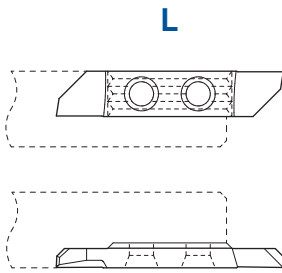
| A | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|----|---|---------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|-----------|
| 0° | 0 | 732 | ■ | ■ | ■ | ■ | ■ | ■ | 742 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2° | 0 | 732-2° | ■ | ■ | ■ | ■ | □ | ■ | 742-2° | ■ | ■ | ■ | ■ | ■ | ■ | ■ |



7XX-XX-B Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage avant
Vorwärts drehen
Front turning

732PX / 742PX



| A | R | L | | | R | | | | |
|----|---|---------|-------|-----|----------|---------|-------|-----|----------|
| | | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) |
| 0° | 0 | 732PX | ■ | ■ | ■ | 742PX | ■ | ■ | ■ |

7XX-XX-B



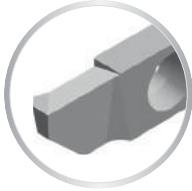
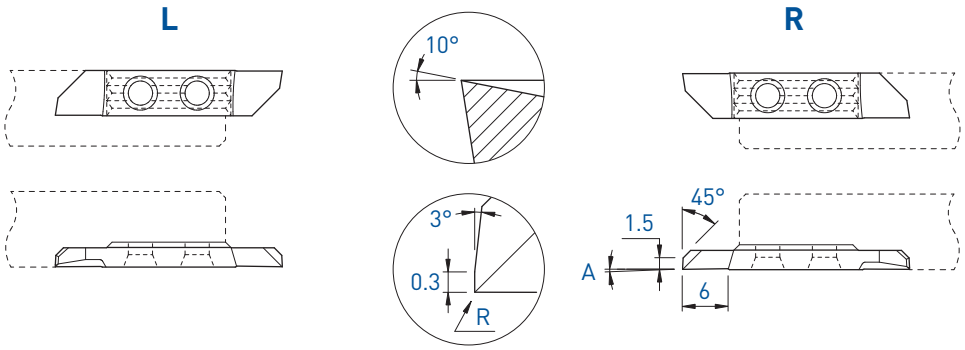
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Tournage avant
Vorwärts drehen
Front turning

732X / 742X



| A | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|----|---|---------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|-----------|
| 0° | 0 | 732X | ■ | ■ | ■ | ■ | ■ | ■ | 742X | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

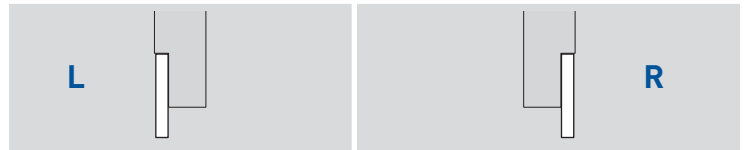
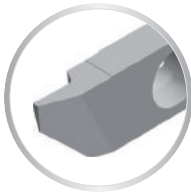
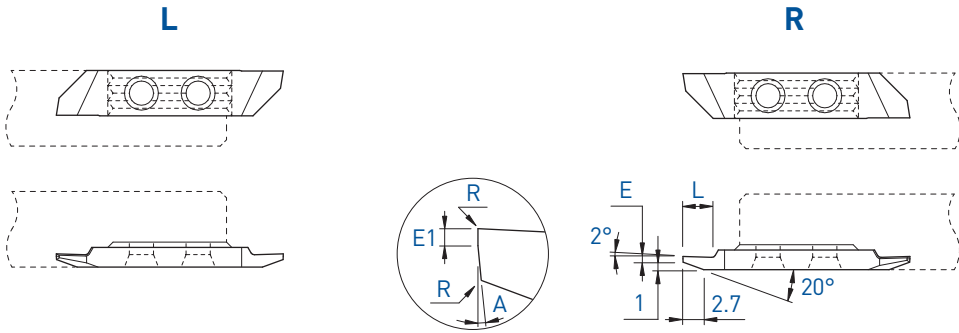
7XX-XX-B



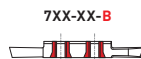
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage arrière
Rückwärts drehen
Back turning

733 / 743



| E | E1 | A | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|------|----|---|------|-------------|-------|-----|----------|-----|------|-----------|-------------|-------|-------|-----|----------|-----|------|-----------|
| 0.5 | 0.25 | 3° | 3 | 0 | 733-0.5 | ■ | ■ | ■ | ■ | □ | ■ | 743-0.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.5 | - | 2° | 3 | 0.08 | 733-0.5-R08 | ■ | ■ | ■ | ■ | □ | ■ | 743-0.5-R08 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 0.8 | 0.30 | 3° | 4 | 0 | 733-0.8 | ■ | ■ | ■ | ■ | □ | ■ | 743-0.8 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 0.40 | 3° | 4 | 0 | 733-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 743-1.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.2 | 0.50 | 3° | 5 | 0 | 733-1.2 | ■ | ■ | ■ | ■ | □ | ■ | 743-1.2 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 0.50 | 3° | 6 | 0 | 733-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 743-1.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |



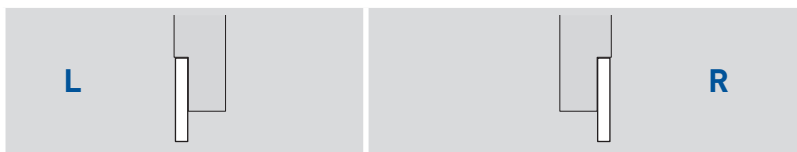
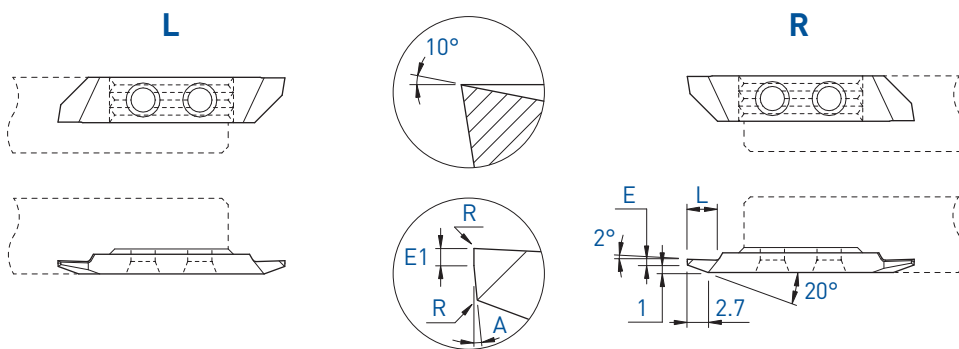
7XX-XX-B Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Tournage arrière
Rückwärts drehen
Back turning

733X / 743X



| E | E1 | A | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTAX <small>new</small> | HTiN | HN (µk10) |
|-----|------|----|---|------|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-------|-----|----------|-----|-------------------------|------|-----------|
| 0.5 | 0.25 | 3° | 3 | 0 | 733X-0.5 | ■ | ■ | ■ | ■ | □ | ■ | 743X-0.5 | ■ | ■ | ■ | ■ | ■ | □ | □ | ■ |
| 0.5 | - | 2° | 3 | 0.08 | 733X-0.5-R08 | ■ | ■ | ■ | | | | 743X-0.5-R08 | ■ | ■ | ■ | ■ | ■ | □ | □ | ■ |
| 0.8 | 0.30 | 3° | 4 | 0 | 733X-0.8 | ■ | ■ | ■ | | | | 743X-0.8 | ■ | | ■ | ■ | | | □ | ■ |
| 1.0 | 0.40 | 3° | 4 | 0 | 733X-1.0 | ■ | ■ | ■ | | | | 743X-1.0 | ■ | | ■ | ■ | | | □ | ■ |
| 1.2 | 0.50 | 3° | 5 | 0 | 733X-1.2 | ■ | ■ | ■ | | | | 743X-1.2 | ■ | | ■ | ■ | | | □ | ■ |
| 1.5 | 0.50 | 3° | 6 | 0 | 733X-1.5 | ■ | ■ | ■ | | | | 743X-1.5 | ■ | | ■ | ■ | | | □ | ■ |

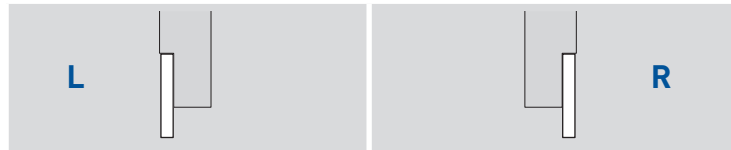
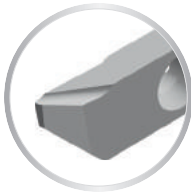
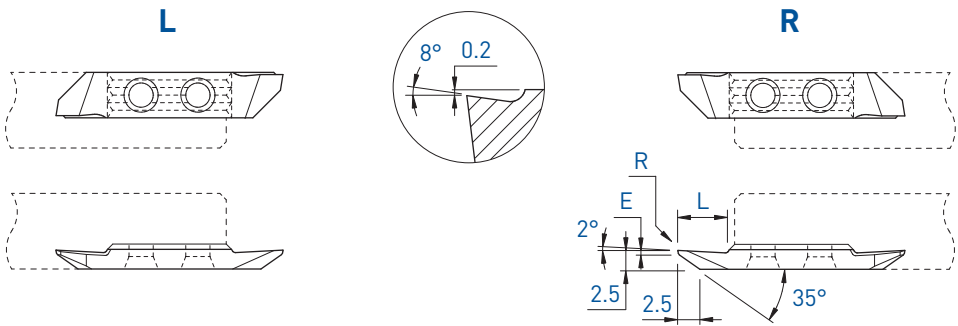
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

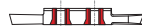
Tournage arrière
Rückwärts drehen
Back turning

733VX-8° / 743VX-8°



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|------|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-----|----------|-----|------|-----------|
| 1.0 | 6.5 | 0 | 733VX-8° | ■ | ■ | ■ | ■ | ■ | ■ | 743VX-8° | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 6.5 | 0.08 | 733VX-8°-R08 | ■ | ■ | ■ | ■ | □ | ■ | 743VX-8°-R08 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B

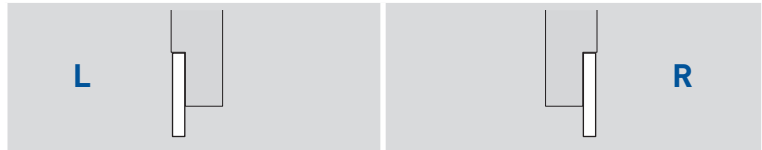
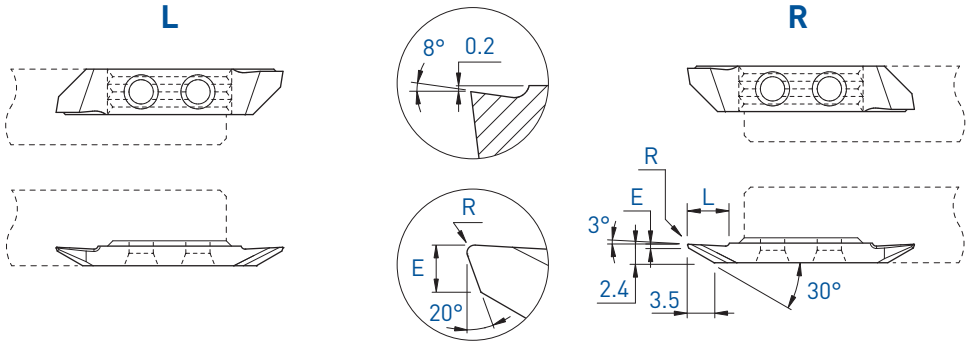


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Tournage arrière
 Rückwärts drehen
 Back turning

733VX-805 / 743VX-805



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------|---------------|-------|-----|----------|-----|------|-----------|---------------|-------|-----|----------|-----|------|-----------|
| 0.5 | 6 | 0.08 | 733VX-805-R08 | ■ | □ | ■ | ■ | □ | ■ | 743VX-805-R08 | ■ | ■ | ■ | ■ | □ | ■ |

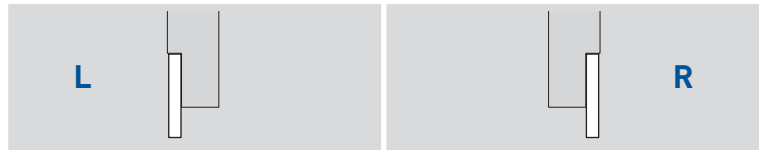
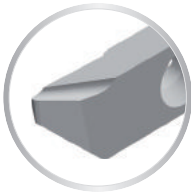
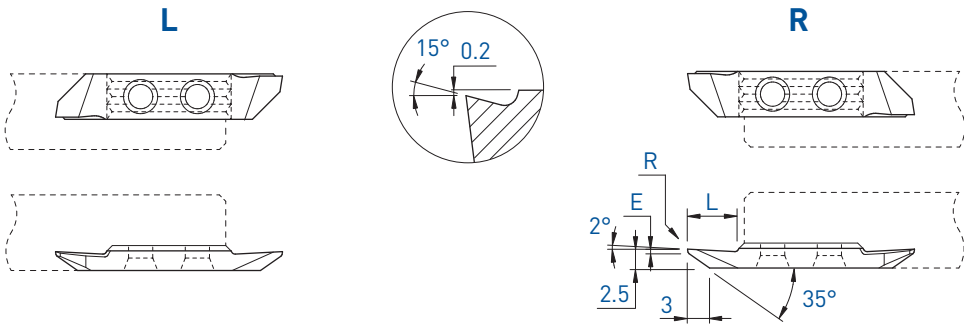
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

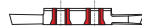
Tournage arrière
 Rückwärts drehen
 Back turning

733VX-15° / 743VX-15°



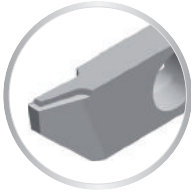
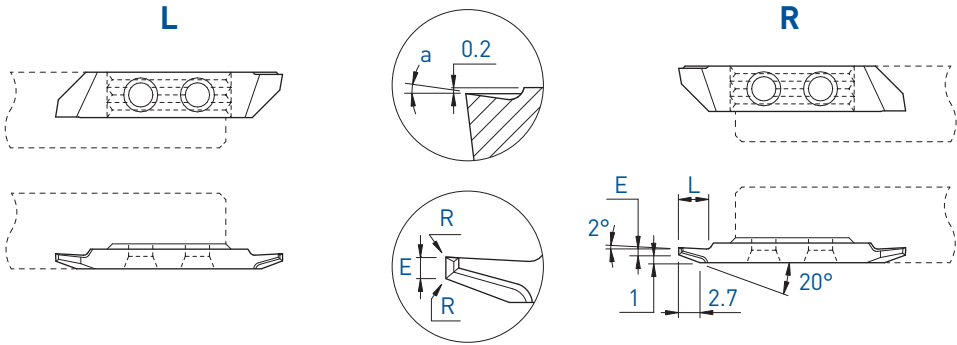
| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|------|---------------|-------|-----|----------|-----|------|-----------|---------------|-------|-----|----------|-----|------|-----------|
| 0.5 | 6.5 | 0 | 733VX-15° | ■ | ■ | ■ | ■ | □ | ■ | 743VX-15° | ■ | ■ | ■ | ■ | □ | ■ |
| 0.5 | 6.5 | 0.08 | 733VX-15°-R08 | ■ | ■ | ■ | | | | 743VX-15°-R08 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B

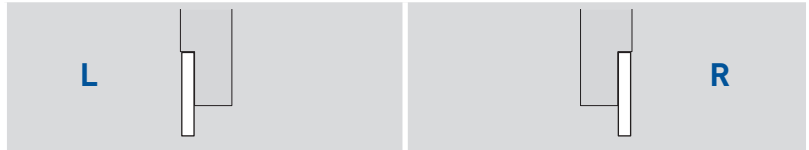


Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

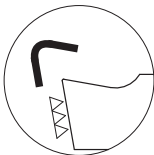
■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

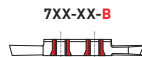


| a | E | L | R | L | | | | | | R | | | | | | |
|-----|-----|---|------|-----------------|-------|-----|----------|-----|------|-----------|---------|-----------------|-----|----------|-----|------|
| | | | | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN |
| 10° | 1.0 | 4 | 0.01 | 733ZX10-1.0 | ■ | □ | | | | | | 743ZX10-1.0 | ■ | □ | ■ | □ |
| | 1.0 | 4 | 0.08 | 733ZX10-1.0-R08 | ■ | □ | | | | | | 743ZX10-1.0-R08 | ■ | □ | ■ | □ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

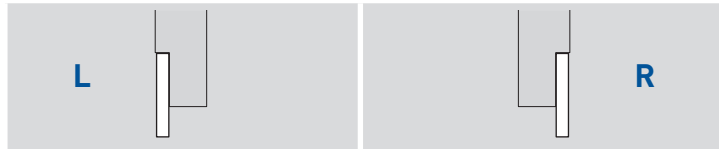
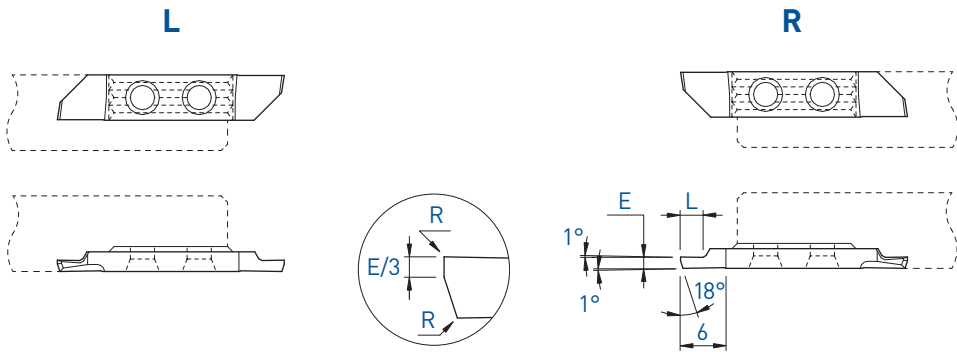
f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

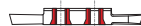
Tournage arrière / pré-coupe
 Rückwärts drehen / vorstechen
 Back turning / pre-parting off

733P / 743P



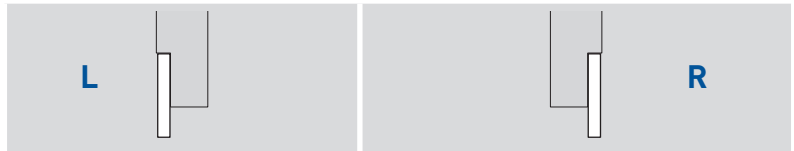
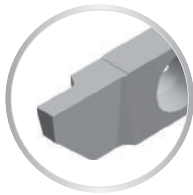
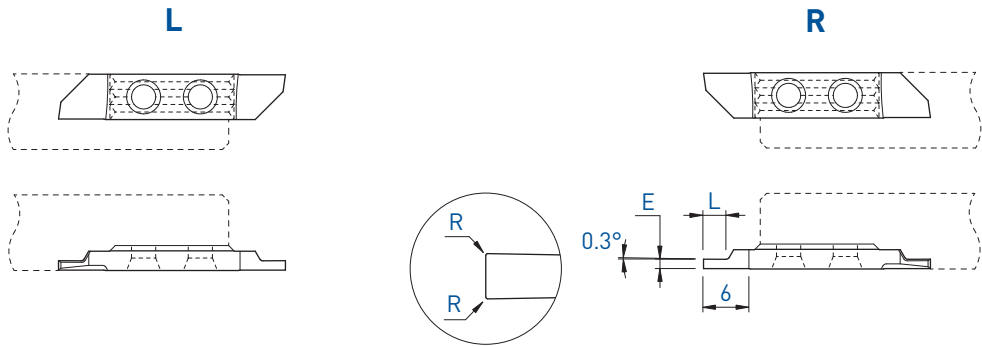
| E | L | R | Art. N° | L | | | R | | | | | | | | | | | | |
|-----|-----|---|----------|-------|-----|----------|-----|------|-----------|---------|-------|-----|----------|-----|------|-----------|---|---|---|
| | | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | | | |
| 0.8 | 2 | 0 | 733P-0.8 | ■ | ■ | ■ | | | | | | | 743P-0.8 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 2 | 0 | 733P-1.0 | ■ | ■ | ■ | | | | | | | 743P-1.0 | ■ | ■ | ■ | | | |
| 1.2 | 2.5 | 0 | 733P-1.2 | ■ | ■ | ■ | | | | | | | 743P-1.2 | ■ | ■ | ■ | | | |
| 1.5 | 3 | 0 | 733P-1.5 | ■ | ■ | ■ | | | | | | | 743P-1.5 | ■ | ■ | ■ | | | |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTAX | HTiN | HN (µk10) |
|------|-----|------|-------------|-------|-----|----------|-----|------|-----------|-------------|-------|-------|-----|----------|-----|------|------|-----------|
| 0.5 | 1.5 | 0 | 734-0.5 | ■ | ■ | ■ | ■ | □ | ■ | 744-0.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.6 | 1.8 | 0 | 734-0.6 | ■ | ■ | ■ | ■ | □ | ■ | 744-0.6 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 0.75 | 2 | 0 | 734-0.75 | ■ | ■ | ■ | ■ | ■ | ■ | 744-0.75 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.8 | 2 | 0 | 734-0.8 | ■ | ■ | ■ | ■ | □ | ■ | 744-0.8 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 0.8 | 2 | 0.08 | - | | | | | | | 744-0.8-R08 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 0.9 | 2.5 | 0 | - | | | | | | | 744-0.9 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 0.95 | 3 | 0 | 734-0.95 | ■ | ■ | ■ | ■ | ■ | ■ | 744-0.95 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 2.5 | 0 | 734-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | 744-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 2.5 | 0.08 | 734-1.0-R08 | ■ | ■ | ■ | ■ | ■ | ■ | 744-1.0-R08 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.2 | 3 | 0 | 734-1.2 | ■ | ■ | ■ | ■ | □ | ■ | 744-1.2 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.5 | 3 | 0 | 734-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 744-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.5 | 3 | 0.08 | 734-1.5-R08 | ■ | ■ | ■ | ■ | □ | ■ | 744-1.5-R08 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0.15 | - | | | | | | | 744-1.5-R15 | ■ | ■ | □ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0.20 | - | | | | | | | 744-1.5-R20 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 4 | 0 | 734-1.8 | ■ | ■ | ■ | ■ | □ | ■ | 744-1.8 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0 | 734-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 744-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0.08 | 734-2.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 744-2.0-R08 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0.15 | - | | | | | | | 744-2.0-R15 | ■ | ■ | □ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0.20 | - | | | | | | | 744-2.0-R20 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 6 | 0 | 734-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | 744-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



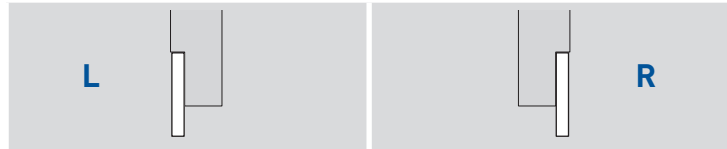
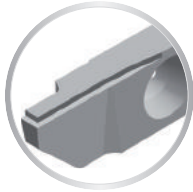
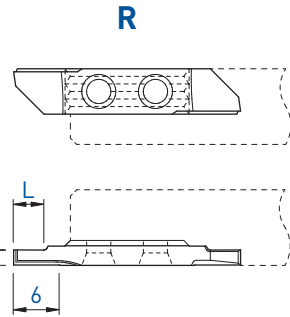
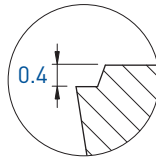
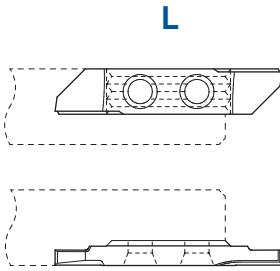
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage

Einstecken und drehen

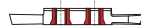
Grooving and turning

734VS / 744VS



| E | L | Art. N° | L | | | R | | | Art. N° | R | | | | | |
|-----|-----|-----------|-------|-----|----------|-----|------|-----------|-----------|-------|-----|----------|-----|------|-----------|
| | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 1.0 | 2 | 734VS-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 744VS-1.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.2 | 2.5 | 734VS-1.2 | ■ | ■ | ■ | ■ | □ | ■ | 744VS-1.2 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 734VS-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 744VS-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 4 | 734VS-1.8 | ■ | ■ | ■ | | | | 744VS-1.8 | ■ | ■ | ■ | | | |
| 2.0 | 4 | 734VS-2.0 | ■ | ■ | ■ | | | | 744VS-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 6 | 734VS-2.5 | ■ | ■ | ■ | | | | 744VS-2.5 | ■ | ■ | ■ | | | |

7XX-XX-B



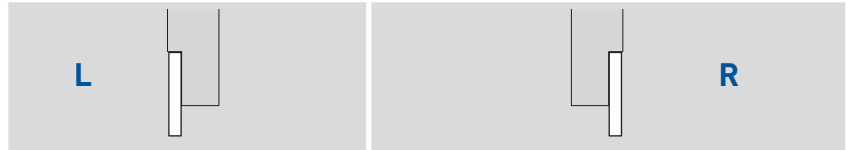
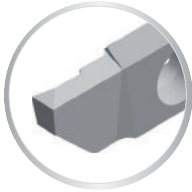
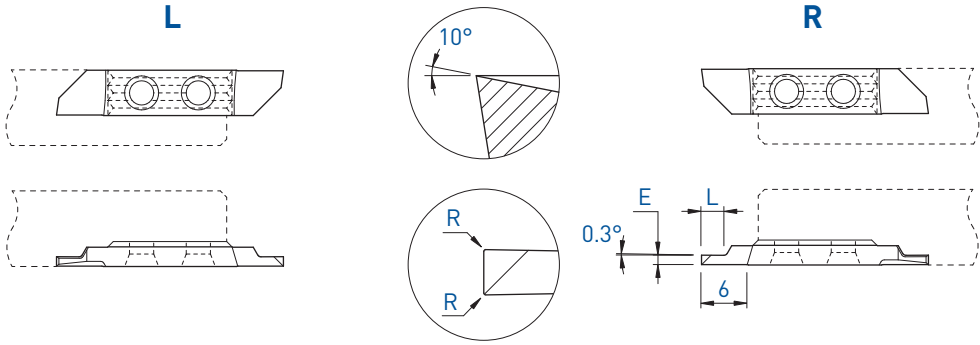
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Fonçage-tournage
Einstecken und drehen
Grooving and turning

734X / 744X



| | | | L | | | | | R | | | | | | | | | | | |
|-----|-----|------|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-------|-----|-----|----------|-----|------|------|-----------|
| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTIN | HN (µk10) | Art. N° | TiAlN | TiAlX | LoX | TiN | N (µk20) | HTA | HTAX | HTIN | HN (µk10) |
| 0.8 | 2 | 0 | 734X-0.8 | ■ | ■ | ■ | ■ | □ | ■ | 744X-0.8 | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 2.5 | 0 | 734X-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 744X-1.0 | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 2.5 | 0.08 | 734X-1.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 744X-1.0-R08 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.2 | 3 | 0 | 734X-1.2 | ■ | ■ | ■ | ■ | □ | ■ | 744X-1.2 | ■ | ■ | | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0 | 734X-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | 744X-1.5 | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.5 | 3 | 0.08 | 734X-1.5-R08 | ■ | ■ | ■ | ■ | □ | ■ | 744X-1.5-R08 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0.15 | - | | | | | | | 744X-1.5-R15 | ■ | ■ | ■ | □ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0.20 | - | | | | | | | 744X-1.5-R20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 4 | 0 | 734X-1.8 | ■ | ■ | ■ | | | | 744X-1.8 | ■ | ■ | | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0 | 734X-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 744X-2.0 | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0.08 | 734X-2.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 744X-2.0-R08 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0.15 | - | | | | | | | 744X-2.0-R15 | ■ | ■ | ■ | □ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0.20 | 734X-2.0-R20 | ■ | ■ | ■ | ■ | □ | ■ | 744X-2.0-R20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 6 | 0 | 734X-2.5 | ■ | ■ | ■ | ■ | □ | ■ | 744X-2.5 | ■ | ■ | | ■ | ■ | ■ | ■ | □ | ■ |

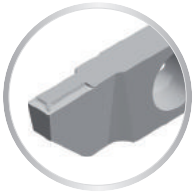
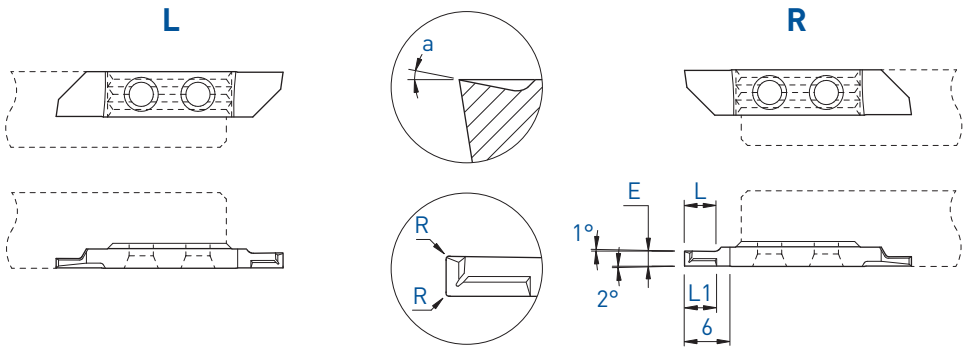
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage
Einstecken und drehen
Grooving and turning

734ZX / 744ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| a | E | L | L1 | R | Art. N° | TiAlN | | | | Art. N° | | | | | | | | |
|-----|-----|-----|----|------|-----------------|-------|-----|----------|-----|---------|------|-----------------|-------|-------|-----|----------|-----|-----|
| | | | | | | TiN | TiN | N (µk20) | HTA | HAS | HTiN | HN (µk10) | TiAlN | TiAlX | TiN | N (µk20) | HTA | HAS |
| 10° | 1.0 | 2.5 | 3 | 0.01 | 734ZX10-1.0 | ■ | ■ | | | | | 744ZX10-1.0 | ■ | ■ | ■ | ■ | | □ |
| | 1.5 | 4 | 4 | 0.01 | 734ZX10-1.5 | ■ | ■ | | | | | 744ZX10-1.5 | ■ | ■ | □ | ■ | | ■ |
| | 1.5 | 4 | 4 | 0.08 | 734ZX10-1.5-R08 | ■ | ■ | | | | | 744ZX10-1.5-R08 | ■ | ■ | ■ | ■ | | |
| | 2.0 | 4 | 4 | 0.01 | 734ZX10-2.0 | ■ | ■ | | | | | 744ZX10-2.0 | ■ | ■ | □ | ■ | | □ |
| | 2.0 | 4 | 4 | 0.08 | 734ZX10-2.0-R08 | ■ | ■ | | | | | 744ZX10-2.0-R08 | ■ | ■ | □ | ■ | | |
| | 2.5 | 6 | 4 | 0.01 | 734ZX10-2.5 | ■ | ■ | | | | | 744ZX10-2.5 | ■ | ■ | □ | ■ | | □ |
| | 2.5 | 6 | 4 | 0.08 | - | | | | | | | 744ZX10-2.5-R08 | ■ | ■ | □ | ■ | | |
| 17° | 1.0 | 2.5 | 3 | 0.01 | - | | | | | | | 744ZX17-1.0 | | | | ■ | ■ | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

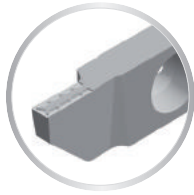
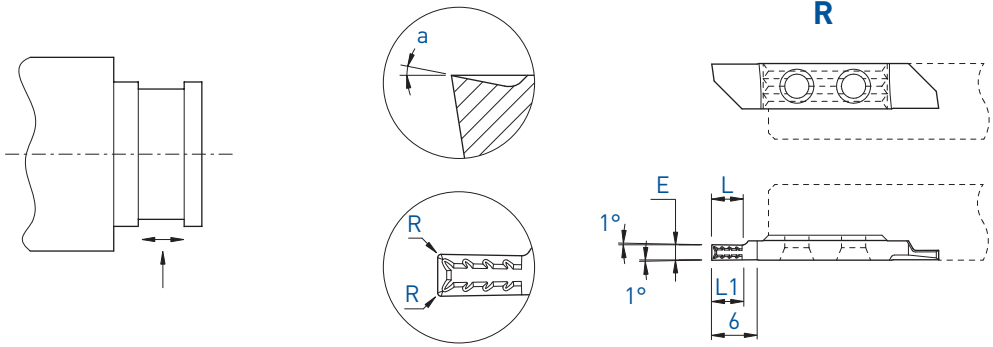
f min: 0.02 mm/U



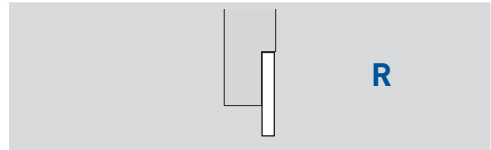
7XX-XX-B

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| a | E | L | L1 | R | Art. N° | TiAIN | TiAlX | LOX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|-----|-----|------|------------------|-------|-------|-----|-----|----------|-----|------|-----------|
| 10° | 1.0 | 2.5 | 2.5 | 0.01 | 744ZXT10-1.0 | ■ | ■ | ■ | ■ | | ■ | □ | |
| | 1.5 | 4 | 4 | 0.01 | 744ZXT10-1.5 | ■ | ■ | ■ | □ | | ■ | □ | |
| | 1.5 | 4 | 4 | 0.08 | 744ZXT10-1.5-R08 | ■ | ■ | ■ | ■ | | ■ | □ | |
| | 2.0 | 4 | 4 | 0.01 | 744ZXT10-2.0 | ■ | ■ | ■ | □ | | ■ | □ | |
| | 2.0 | 4 | 4 | 0.08 | 744ZXT10-2.0-R08 | ■ | ■ | ■ | □ | | ■ | □ | |
| | 2.5 | 5 | 5 | 0.01 | 744ZXT10-2.5 | ■ | ■ | ■ | □ | | ■ | □ | |
| | 2.5 | 5 | 5 | 0.08 | 744ZXT10-2.5-R08 | ■ | ■ | ■ | □ | | ■ | □ | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



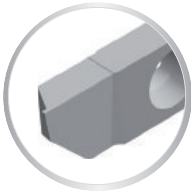
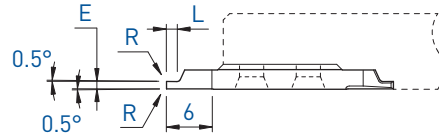
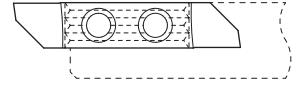
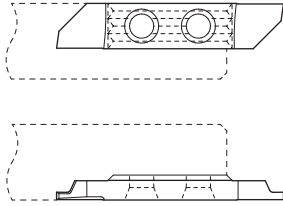
7XX-XX-B
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Gorges
Einstechen
Grooving

735 / 745

L

R



L



R



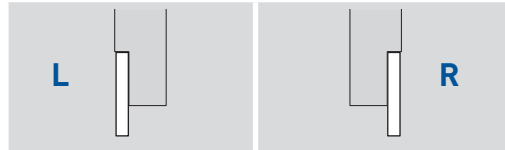
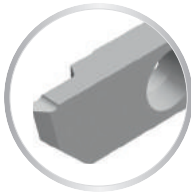
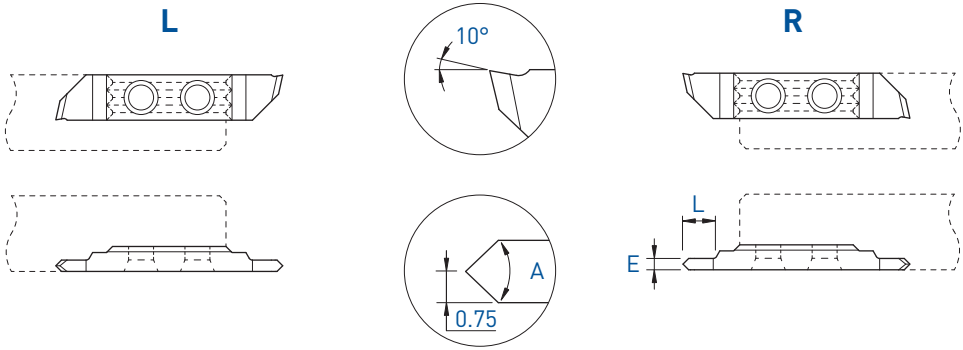
| E ± 0.01 | | | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-------------|-----|---|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| | L | R | | | | | | | | | | | | | | |
| 0.2 | 0.2 | 0 | 735-0202 | ■ | ■ | ■ | | | | 745-0202 | ■ | ■ | ■ | ■ | □ | ■ |
| 0.3 | 0.3 | 0 | 735-0303 | ■ | ■ | ■ | | | | 745-0303 | ■ | ■ | ■ | ■ | □ | ■ |
| 0.4 | 0.4 | 0 | 735-0404 | ■ | ■ | ■ | | | | 745-0404 | ■ | □ | ■ | ■ | □ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| A | E | L | Art. N° | TiAlN | TiN | N (μk20) | Art. N° | TiAlN | TiN | N (μk20) |
|-----|-----|---|-------------|-------|-----|----------|-------------|-------|-----|----------|
| 90° | 1.5 | 4 | 735X-90-1.5 | □ | □ | □ | 745X-90-1.5 | ■ | □ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

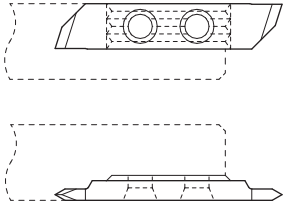
Filetage

Gewinde drehen

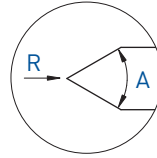
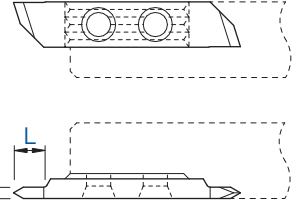
Threading

736 / 746

L



R



Profil partiel
Teilprofil
Partial profile

L



R



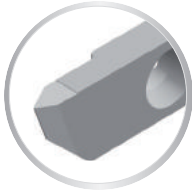
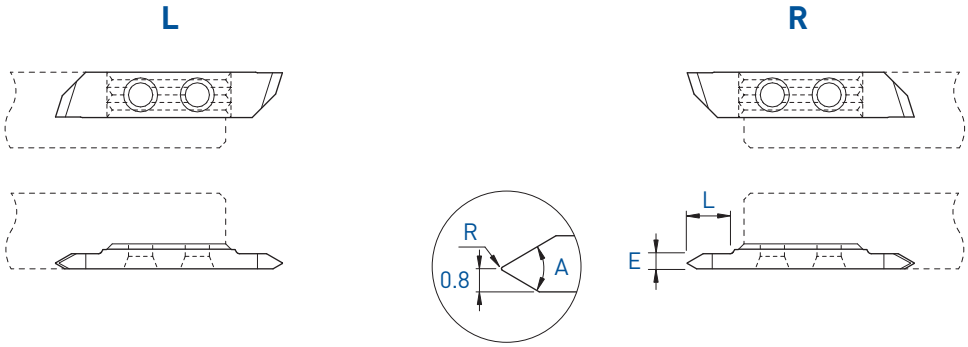
| A | E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|---|------|----------------|-------|-----|----------|-----|------|-----------|----------------|-------|-----|----------|-----|------|-----------|
| 60° | 1.5 | 4 | 0 | 736-60-1.5 | ■ | ■ | ■ | | | | 746-60-1.5 | ■ | ■ | ■ | | | |
| 60° | 1.5 | 4 | 0.02 | 736-60-1.5-R02 | ■ | ■ | ■ | | | | 746-60-1.5-R02 | ■ | ■ | ■ | | | □ |
| 60° | 2.0 | 6 | 0 | 736-60-2.0 | ■ | ■ | ■ | | | | 746-60-2.0 | ■ | ■ | ■ | | | |
| 60° | 2.0 | 6 | 0.02 | 736-60-2.0-R02 | ■ | ■ | ■ | | | | 746-60-2.0-R02 | ■ | ■ | ■ | | | |
| 55° | 1.5 | 4 | 0 | 736-55-1.5 | ■ | ■ | ■ | | | | 746-55-1.5 | ■ | ■ | ■ | | | |
| 55° | 1.5 | 4 | 0.02 | 736-55-1.5-R02 | ■ | ■ | ■ | | | | 746-55-1.5-R02 | ■ | ■ | ■ | | | |
| 55° | 2.0 | 6 | 0 | 736-55-2.0 | ■ | ■ | ■ | | | | 746-55-2.0 | ■ | ■ | ■ | | | |
| 55° | 2.0 | 6 | 0.02 | 736-55-2.0-R02 | ■ | ■ | ■ | | | | 746-55-2.0-R02 | ■ | ■ | ■ | | | |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

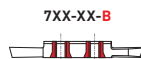


Profil partiel
Teilprofil
Partial profile



| A | E | L | R | Pas Steigung Pitch P | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|---|------|-------------------------------|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| 60° | 2.0 | 6 | 0.06 | 0.50-1.50 | 736-A60° | ■ | ■ | ■ | | | | 746-A60° | ■ | ■ | ■ | ■ | □ | ■ |

Plaquettes de filetage avec coupe positive 2°, voir page 1.126
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.126
Threading inserts with positive cut 2°, see page 1.126



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

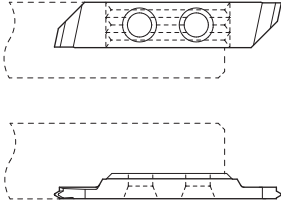
Filetage

Gewinde drehen

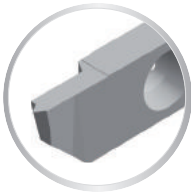
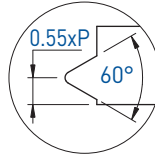
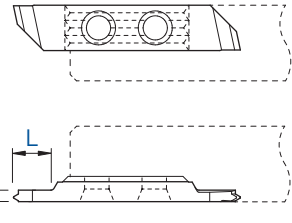
Threading

736-M / 746-M

L



R



Profil complet métrique
Metrisches Vollprofil
Metric full profile

L

R

| Pas Steigung Pitch P | E | L | L | | | R | | | | |
|-------------------------------|-----|-----|------------|-------|-----|----------|------------|-------|-----|----------|
| | | | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
| 0.25 | 1.0 | 3 | 736-M-0.25 | ■ | ■ | ■ | 746-M-0.25 | ■ | ■ | ■ |
| 0.30 | 1.0 | 3 | 736-M-0.30 | ■ | ■ | ■ | 746-M-0.30 | ■ | ■ | ■ |
| 0.35 | 1.0 | 3 | 736-M-0.35 | ■ | ■ | ■ | 746-M-0.35 | ■ | ■ | ■ |
| 0.40 | 1.0 | 3 | 736-M-0.40 | ■ | ■ | ■ | 746-M-0.40 | ■ | ■ | ■ |
| 0.45 | 1.0 | 3 | 736-M-0.45 | ■ | ■ | ■ | 746-M-0.45 | ■ | ■ | ■ |
| 0.50 | 1.0 | 3 | 736-M-0.50 | ■ | ■ | ■ | 746-M-0.50 | ■ | ■ | ■ |
| 0.60 | 1.0 | 3 | 736-M-0.60 | ■ | ■ | ■ | 746-M-0.60 | ■ | ■ | ■ |
| 0.70 | 1.0 | 3 | 736-M-0.70 | ■ | ■ | ■ | 746-M-0.70 | ■ | ■ | ■ |
| 0.75 | 1.0 | 3 | 736-M-0.75 | ■ | ■ | ■ | 746-M-0.75 | ■ | ■ | ■ |
| 0.80 | 1.5 | 4.5 | 736-M-0.80 | ■ | ■ | ■ | 746-M-0.80 | ■ | ■ | ■ |
| 1.00 | 1.5 | 4.5 | 736-M-1.00 | ■ | ■ | ■ | 746-M-1.00 | ■ | ■ | ■ |
| 1.25 | 1.5 | 4.5 | 736-M-1.25 | ■ | ■ | ■ | 746-M-1.25 | ■ | ■ | ■ |
| 1.50 | 2.0 | 6 | 736-M-1.50 | ■ | ■ | ■ | 746-M-1.50 | ■ | ■ | ■ |
| 1.75 | 2.0 | 6 | 736-M-1.75 | ■ | ■ | ■ | 746-M-1.75 | ■ | ■ | ■ |

Plaquettes de filetage avec coupe positive 2°, voir page 1.127
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.127
Threading inserts with positive cut 2°, see page 1.127

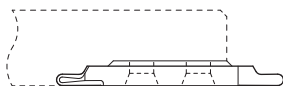
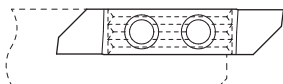
7XX-XX-B



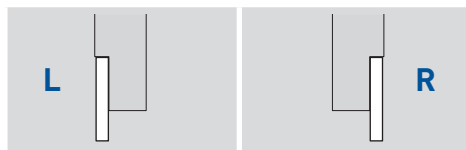
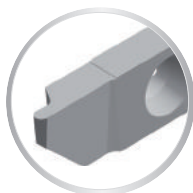
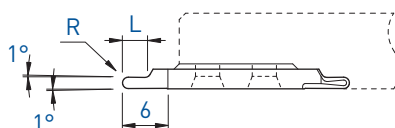
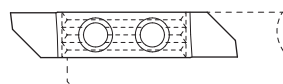
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

L



R



| R | L | Art. N° | L | | | R | | | |
|------|-----|-----------|-------|-----|----------|-----------|-----|----------|---|
| | | | TiAlN | TiN | N (μm20) | TiAlN | TiN | N (μm20) | |
| 0.25 | 1.5 | - | | | | 747-R0.25 | ■ | ■ | ■ |
| 0.40 | 2 | - | | | | 747-R0.4 | ■ | ■ | ■ |
| 0.50 | 2.5 | 737-R0.5 | ■ | ■ | ■ | 747-R0.5 | ■ | ■ | ■ |
| 0.60 | 2.5 | 737-R0.6 | ■ | ■ | ■ | 747-R0.6 | ■ | ■ | ■ |
| 0.75 | 3 | 737-R0.75 | ■ | ■ | ■ | 747-R0.75 | ■ | ■ | ■ |
| 0.80 | 3 | 737-R0.8 | ■ | ■ | ■ | 747-R0.8 | ■ | ■ | ■ |
| 1.00 | 4 | 737-R1.0 | ■ | ■ | ■ | 747-R1.0 | ■ | ■ | ■ |

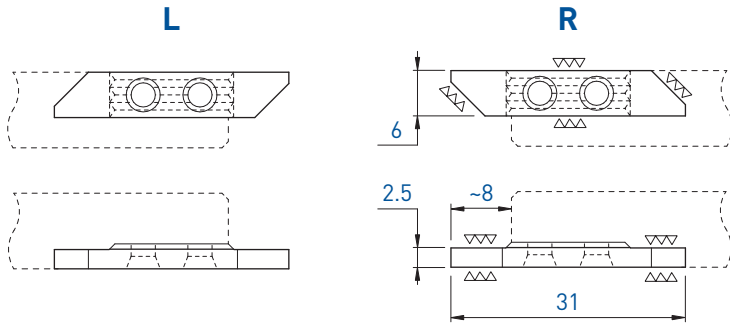
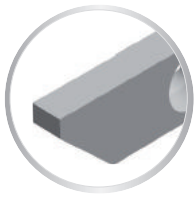
7XX-XX-B



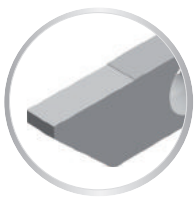
Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

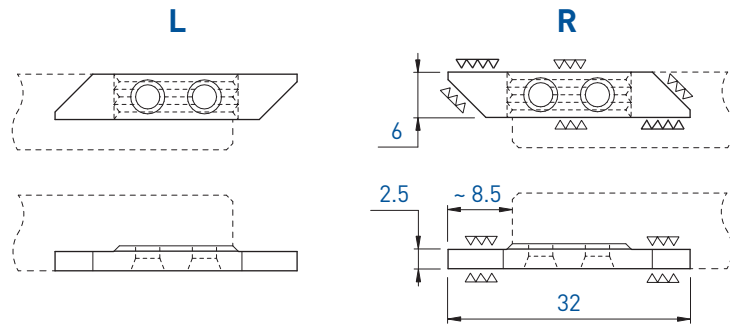
731-E / 741-E
731-EP / 741-EP



| L | | | R | | |
|---------|----------|-----------|---------|----------|-----------|
| Art. N° | N (µk20) | HN (µk10) | Art. N° | N (µk20) | HN (µk10) |
| 731-E | ■ | ■ | 741-E | ■ | ■ |



Face de coupe polie
Polierte Schneidfläche
Polished cutting face



| L | | | | | | R | | | | | | | |
|---------|-------|-----|----------|-----|------|-----------|---------|-------|-----|----------|-----|------|-----------|
| Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 731-EP | ■ | ■ | ■ | ■ | ■ | ■ | 741-EP | ■ | ■ | ■ | ■ | □ | ■ |

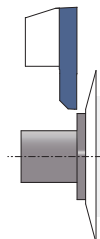
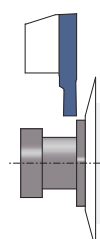
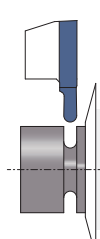
7XX-XX-B



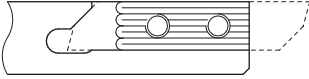
Sur demande pour serrage type B,
voir page 1.03
Wahlweise mit B-Spannsystem,
siehe Seite 1.03
On request for B clamping system,
see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

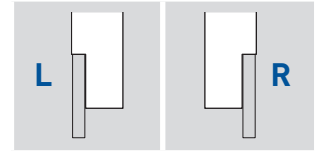
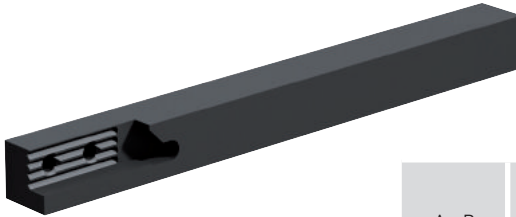
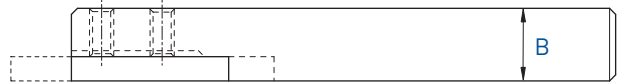
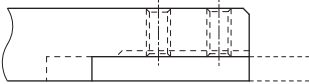
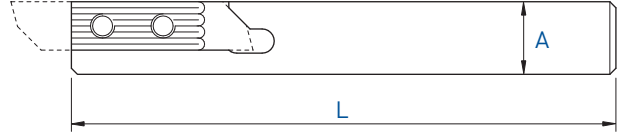
| L | | | R | | |
|------------|------------|-----------|-------------|------------|-----------|
| Type | | Page | Type | | Page |
| 750 | 750 | 1.70 | 760 | 760 | 1.70 |
| | 750-JET | 1.71 | | 760/750-D | 1.75/1.76 |
| | 750RC | 1.72 | | 760/750-AX | 1.77 |
| 751 | 751 | 1.78 | 760-JET | 1.71 | |
| | 751-E | 1.131 | 760LC | 1.73 | |
| | 751NXF | 1.87/1.97 | 760-NOVIBRA | 1.74 | |
| | 751R | 1.88 | 761 | 761 | 1.78 |
| | 751-R05 | 1.80 | | 761-E | 1.131 |
| | 751RAS | 1.99 | | 761L | 1.88 |
| | 751RD | 1.98 | | 761LD | 1.98 |
| | 751R-R05 | 1.90 | | 761L-R05 | 1.90 |
| | 751RS | 1.89 | | 761LS | 1.89 |
| | 751RU | 1.95 | | 761LX12 | 1.93 |
| | 751RZU | 1.96 | | 761LX25 | 1.94 |
| | 751RX12 | 1.93 | | 761LX4 | 1.91 |
| | 751RX25 | 1.94 | | 761LXF | 1.92 |
| | 751RX4 | 1.91 | | 761NXF | 1.87/1.97 |
| | 751RXF | 1.92 | | 761-R05 | 1.80 |
| | 751S | 1.79 | | 761S | 1.79 |
| | 751U | 1.85 | | 761U | 1.85 |
| | 751X12 | 1.83 | | 761ZU | 1.86 |
| | 751X25 | 1.84 | | 761X12 | 1.83 |
| | 751X4 | 1.81 | | 761X25 | 1.84 |
| 751XF | 1.82 | 761X4 | | 1.81 | |
| 752 | 752 | 1.100 | | 761XF | 1.82 |
| | 752PX | 1.101 | | 762 | 762 |
| | 752S | 1.106 | 762PX | | 1.101 |
| | 752X | 1.102 | 762S | | 1.105 |
| 753 | 753 | 1.107 | 762X | | 1.102 |
| | 753P | 1.116 | 762VX-800 | 1.103 | |
| | 753S | 1.106 | 762ZX | 1.104 | |
| | 753VX-15° | 1.113 | 763 | 763 | 1.107 |
| | 753VX-8° | 1.110 | | 763P | 1.116 |
| | 753VX-805 | 1.111 | | 763S | 1.106 |
| | 753X | 1.108 | | 763VUX | 1.114 |
| | 753XS | 1.109 | | 763VX-15° | 1.113 |
| | 753ZX10 | 1.115 | | 763VX-8° | 1.110 |
| | 754 | 754 | | 1.117 | 763VX-800 |
| 754VS | | 1.118 | | 763VX-805 | 1.111 |
| 754X | | 1.119 | | 763X | 1.108 |
| 754ZX | | 1.122 | | 763XS | 1.109 |
| 756 | 754ZXT | 1.124 | 763ZX10 | 1.115 | |
| | 756-55 | 1.125 | 764 | 764 | 1.117 |
| | 756-60 | 1.125 | | 764VS | 1.118 |
| | 756-AG60° | 1.126 | | 764X | 1.119 |
| | 756-G60° | 1.126 | | 764X5 | 1.120 |
| 756-M | 1.127 | 764X10 | | 1.121 | |
| 757 | 757 | 1.129 | 764ZX | 1.122 | |
| | 757ZX | 1.130 | 764ZXB | 1.123 | |
| | | | 764ZXT | 1.124 | |
| | | | 766 | 766 | 1.125 |
| | | | | 766-AG60° | 1.126 |
| | | | | 766-G60° | 1.126 |
| | | | | 766-M | 1.127 |
| | | | | 766ZX | 1.128 |
| | | | 767 | 767 | 1.129 |
| | | | | 767ZX | 1.130 |

| | | | |
|--|---|--|---------|
| | | 750 / 760 Porte-outils Halter Holders | > 1.70 |
|  | 751 / 761 Tronçonnage Abstechen Parting off | | > 1.78 |
| | | 761L / 751R Tronçonnage - coupe déportée Abstechen - versetztes Schneiden Parting off - cut off line | > 1.88 |
|  | 752 / 762 Tournage avant Vorwärts drehen Front turning | | > 1.100 |
| | | 753 / 763 Tournage arrière Rückwärts drehen Back turning | > 1.106 |
|  | 754 / 764 Fonçage-tournage Einstecken und drehen Grooving and turning | | > 1.117 |
| | | 756 / 766 Filetage Gewinde drehen Threading | > 1.125 |
|  | 757 / 767 Plaquettes à rayon Radius Wendeplatten Radius inserts | | > 1.129 |
| | | Plaquettes ébauches WSP-Rohlinge Blank inserts | > 1.131 |

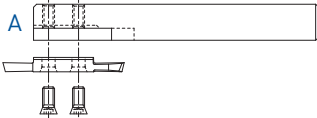
L



R

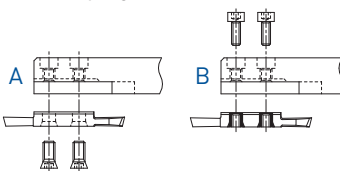


Serrage standard A
Standard Spannsystem A
Standard clamping system A



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|-------------|-----|------------------------------|--------------|--------------|
| 10 x 10 | 115 | A | 750-10 | 760-10 |
| 10 x 10 | 115 | A + B | 750-10-AB | 760-10-AB |
| 10 x 10 | 50 | A | 750-10-50 | 760-10-50 |
| 12 x 12 | 130 | A | 750-12 | 760-12 |
| 12 x 12 | 130 | A + B | 750-12-AB | 760-12-AB |
| 12 x 12 | 90 | A | 750-12-90 | 760-12-90 |
| 12 x 12 | 90 | A + B | 750-12-90-AB | 760-12-90-AB |
| 12.7 x 12.7 | 130 | A + B | 750-12.7 | 760-12.7 |
| 14 x 14 | 130 | A + B | 750-14 | 760-14 |
| 16 x 16 | 130 | A + B | 750-16 | 760-16 |
| 16 x 16 | 75 | A + B | 750-16-75 | 760-16-75 |
| 20 x 20 | 120 | A + B | 750-20 | 760-20 |
| 25 x 25 | 140 | A | 760/750-25 | |

Serrage A + B
Spannsystem A + B
Clamping system A + B



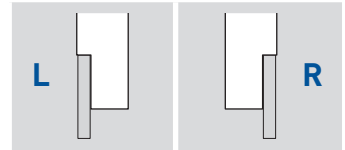
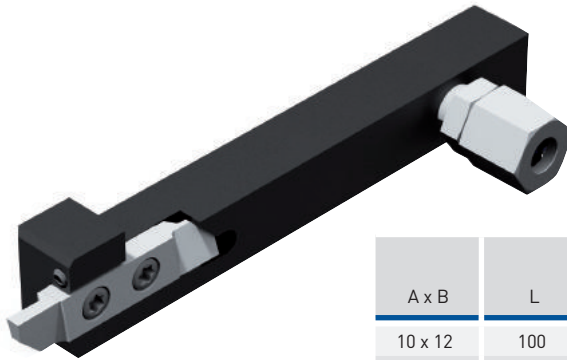
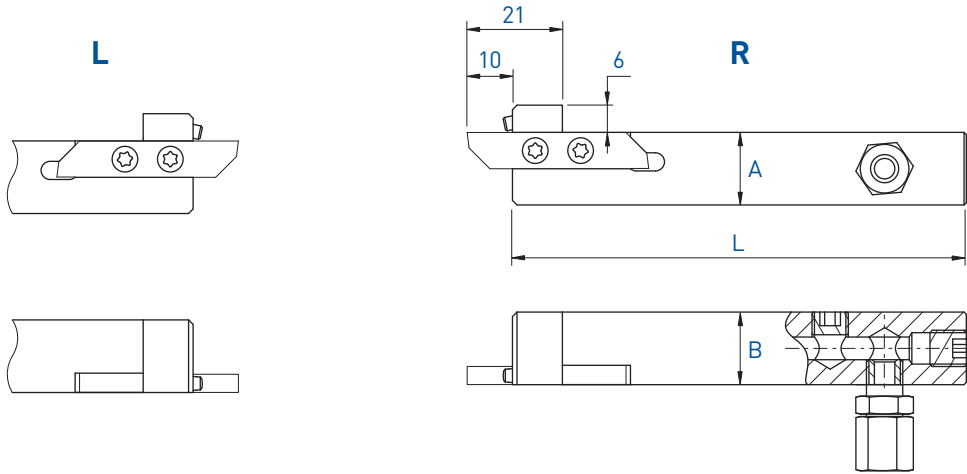
760/750-25
R + L



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

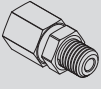


750-JET / 760-JET



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|-------------|-----|------------------------------------|--------------|----------------------------|
| 10 x 12 | 100 | A + B | 750-1012-JET | 760-1012-JET |
| 10 x 12 | 80 | A + B | - | 760-1012-80-JET new |
| 12 x 12 | 100 | A + B | 750-12-JET | 760-12-JET |
| 12.7 x 12.7 | 100 | A + B | 750-12.7-JET | 760-12.7-JET |
| 16 x 16 | 100 | A + B | 750-16-JET | 760-16-JET |
| 20 x 20 | 100 | A + B | 750-20-JET | 760-20-JET |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n)
 und Schlüssel geliefert.
 Screw(s) and key are included with each
 tool holder.

| Pièces de rechange Ersatzteile Spare parts |  |  | Buse Düse Nozzle  |
|--|---|---|---|
| | Art. N° | Art. N° | Art. N° |
| 750-JET / 760-JET | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 |

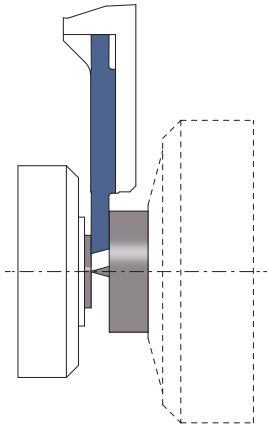
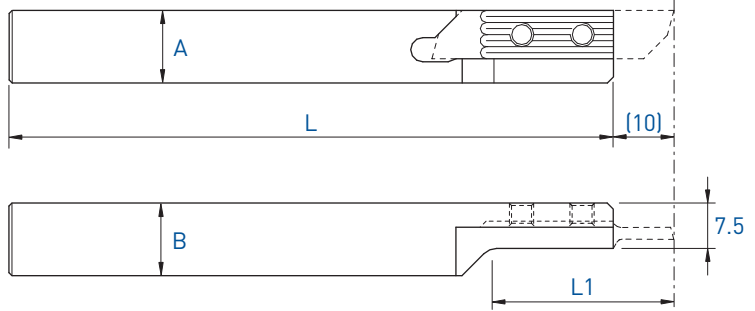
Porte-outils
Halter
Holder

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

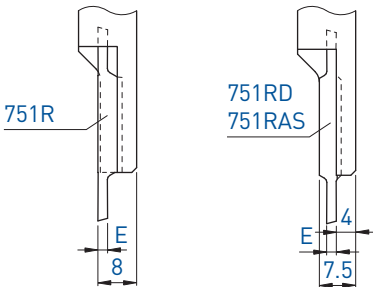
750RC

Utiliser des plaquettes type 751R
 WSP Typ 751R verwenden
 Use inserts type 751R

Voir pages 1.88 - 1.99
 Siehe Seiten 1.88 - 1.99
 See pages 1.88 - 1.99



| L (R) | | | |
|---|-----|----|-----------------|
| Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line | | | |
| A x B | L | L1 | Art. N° |
| 12 x 12 | 130 | 30 | 750RC-12 |
| 16 x 16 | 130 | 40 | 750RC-16 |



(p. 1.98 - 1.99)



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spanschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils

Halter

Holders

Coupe à gauche déportée

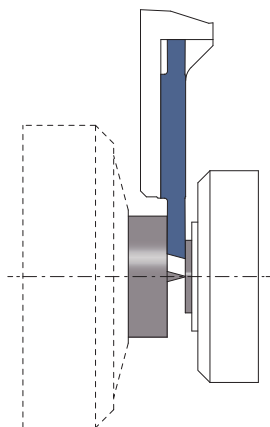
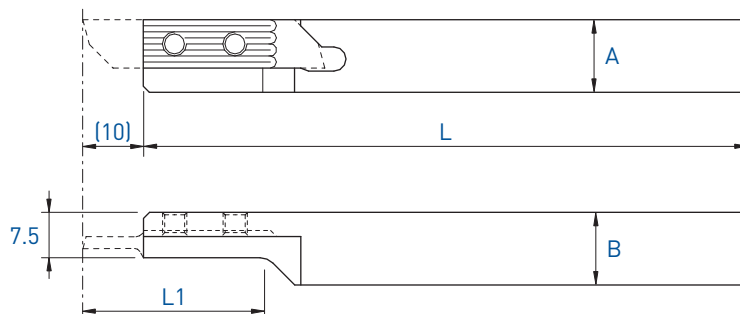
Versetztes Linksschneiden

Left cut off line

760LC

Utiliser des plaquettes type 761L
WSP Typ 761L verwenden
Use insets type 761L

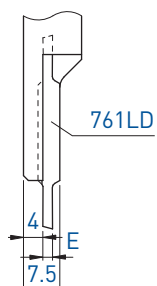
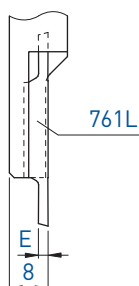
Voir pages 1.88 - 1.94 + 1.98
Siehe Seiten 1.88 - 1.94 + 1.98
See pages 1.88 - 1.94 + 1.98



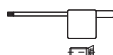
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

| A x B | L | L1 | Art. N° |
|---------|-----|----|----------|
| 16 x 16 | 130 | 40 | 760LC-16 |

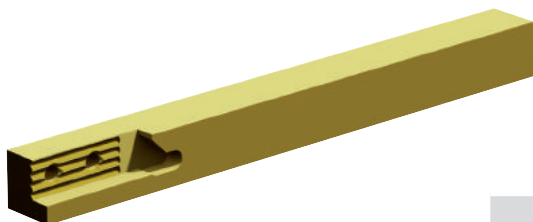
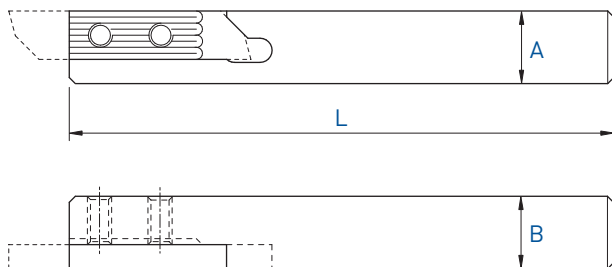


(p. 1.98)

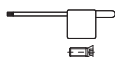


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

R



| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|---------|-----|------------------------------------|-----------------------|
| 10 x 10 | 115 | A | 760-10-NOVIBRA |
| 12 x 12 | 130 | A | 760-12-NOVIBRA |



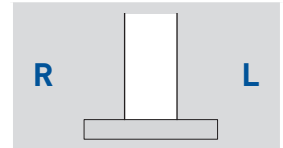
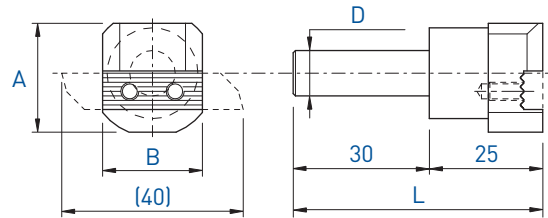
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils

Halter

Holders

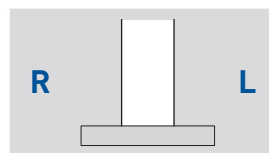
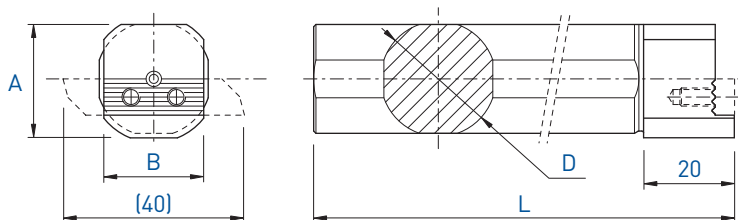
760 / 750-D10



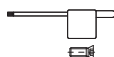
| A x B | L | D | Art. N° |
|---------|----|----|-------------|
| 24 x 22 | 55 | 10 | 760/750-D10 |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.



| A x B | L | D | Art. N° |
|---------|-----|-------|-------------------------|
| 25 x 22 | 160 | 16 | 760/750-D16 |
| 25 x 22 | 160 | 19.05 | 760/750-D19.05 |
| 25 x 22 | 110 | 19.05 | 760/750-D19.05-S |
| 25 x 22 | 160 | 20 | 760/750-D20 |
| 25 x 22 | 110 | 22 | 760/750-D22 |
| 25 x 22 | 200 | 25 | 760/750-D25 |
| 25 x 22 | 200 | 25.4 | 760/750-D25.4 |
| 25 x 22 | 125 | 25.4 | 760/750-D25.4-S |



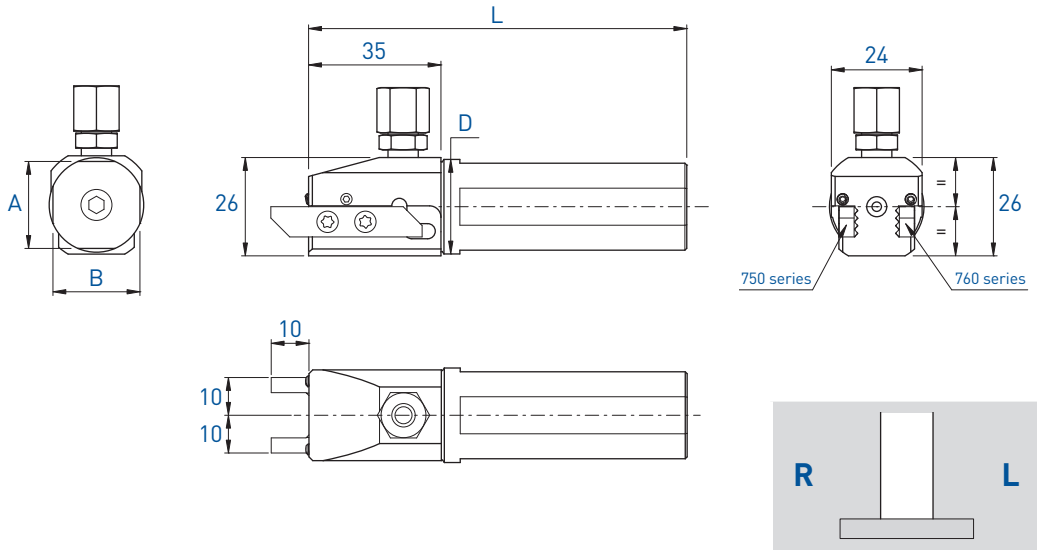
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils

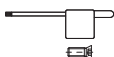
Halter

Holders

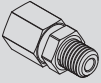


760 / 750-AX



| A x B | L | D | Art. N° |
|---------|-----|------|-----------------------------|
| 23 x 23 | 100 | 25 | 760/750-AX-D25-JET |
| 23 x 23 | 100 | 25.4 | 760/750-AX-D25.4-JET |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n)
 und Schlüssel geliefert.
 Screw(s) and key are included with each
 tool holder.

| Pièces de rechange Ersatzteile Spare parts |  |  | Buse Düse Nozzle  |
|--|---|---|---|
| | Art. N° | Art. N° | Art. N° |
| 760/750-AX | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 |

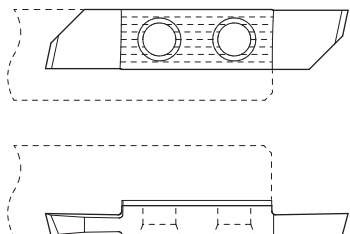
Tronçonnage

Abstechen

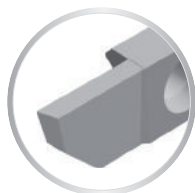
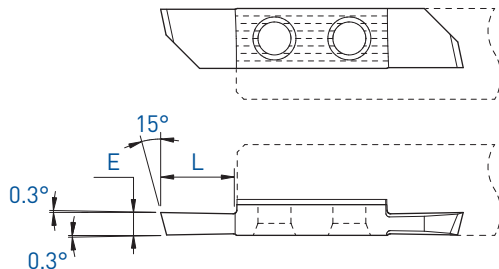
Parting off

751 / 761

L



R



L



R



| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|---------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 751-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 761-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.2 | 5 | 751-1.2 | ■ | ■ | ■ | | | | 761-1.2 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7.5 | 751-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 761-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.8 | 7.5 | 751-1.8 | ■ | ■ | ■ | | | | 761-1.8 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 751-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 761-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.2 | 10 | 751-2.2 | ■ | ■ | ■ | | | | 761-2.2 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 10 | 751-2.5 | ■ | ■ | ■ | ■ | □ | ■ | 761-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 3.0 | 10 | 751-3.0 | ■ | ■ | ■ | | | | 761-3.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B

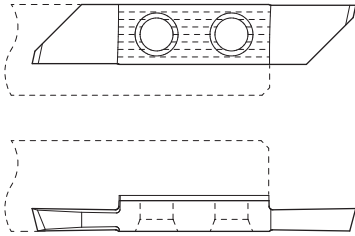


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

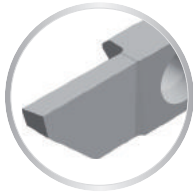
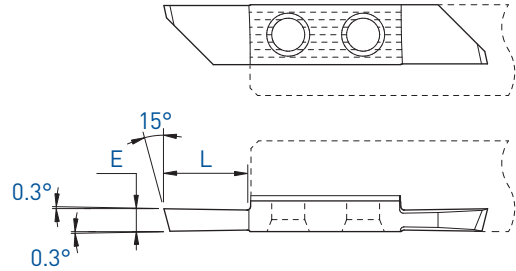
Tronçonnage
Abstechen
Parting off

751S / 761S

L



R



L



R



| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|------|----------|-------|-----|----------|-----|------|-----------|----------|-------|-------|-----|----------|-----|------|-----------|
| 2.0 | 11.5 | 751S-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 761S-2.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.2 | 11.5 | 751S-2.2 | ■ | ■ | ■ | | | | 761S-2.2 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 11.5 | 751S-2.5 | ■ | ■ | ■ | ■ | □ | ■ | 761S-2.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 11.5 | 751S-3.0 | ■ | ■ | ■ | | | | 761S-3.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

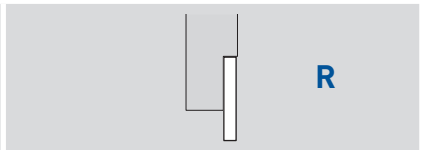
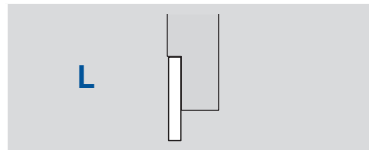
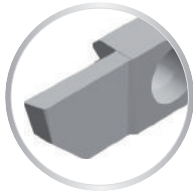
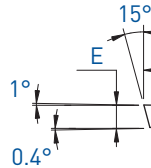
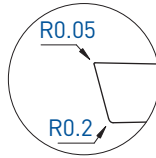
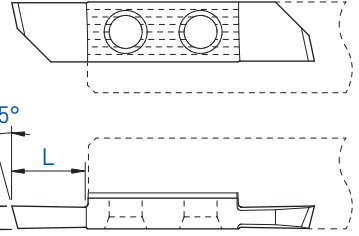
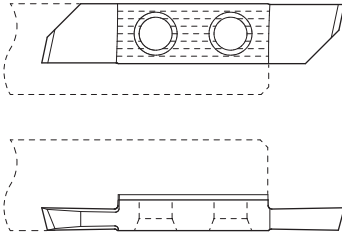
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

751-R05 / 761-R05

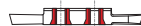
L

R



| E | L | Art. N° | L | | | R | | | HTA | HTiN | HN [µk10] | |
|-----|-----|-------------|-------|-----|----------|-------|-------|-----|-----|------|-----------|----------|
| | | | TiAlN | TiN | N [µk20] | TiAlN | TiAlX | TiN | | | | N [µk20] |
| 1.5 | 7.5 | 751-1.5-R05 | ■ | ■ | ■ | | | | | ■ | □ | ■ |
| 2.0 | 10 | 751-2.0-R05 | ■ | ■ | ■ | | | | | ■ | □ | ■ |
| 2.5 | 10 | 751-2.5-R05 | ■ | ■ | ■ | | | | | ■ | □ | ■ |

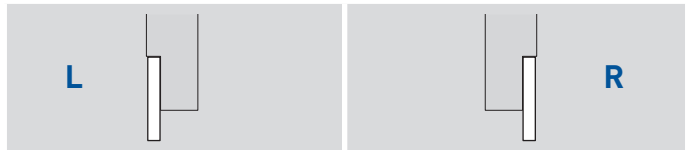
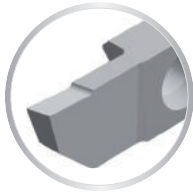
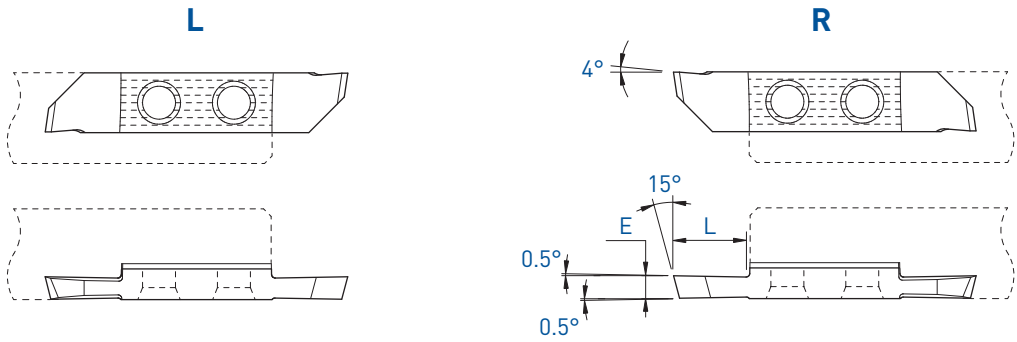
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

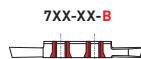
Tronçonnage
Abstechen
Parting off

751X4 / 761X4



| E | L | Art. N° | L | | | R | | | | | | | | | |
|-----|-----|-----------|-------|-----|----------|-----|------|-----------|-----------|-------|-----|----------|-----|------|-----------|
| | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 1.5 | 7.5 | - | | | | | | | 761X4-1.5 | ■ | ■ | ■ | | | |
| 2.0 | 10 | 751X4-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 761X4-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 10 | - | | | | | | | 761X4-2.5 | ■ | ■ | ■ | | | |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

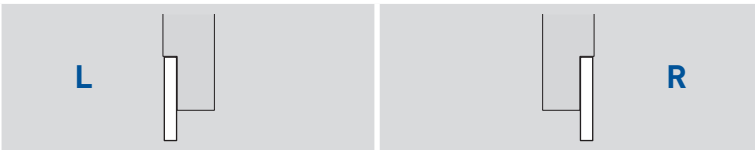
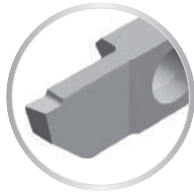
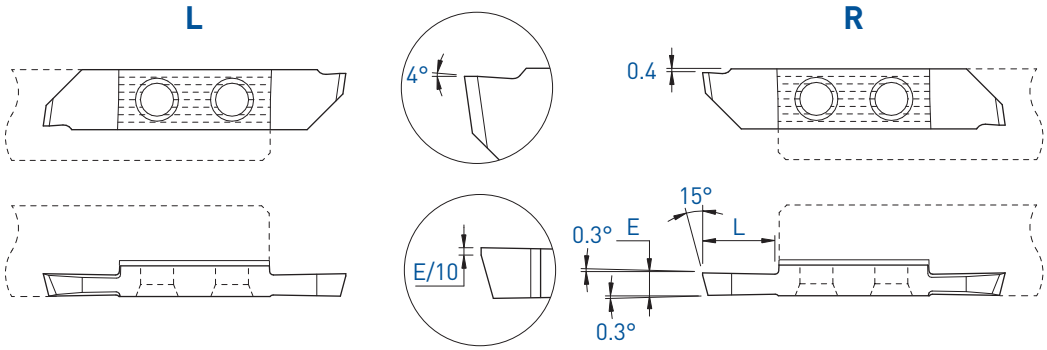


7XX-XX-B
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

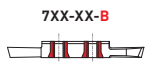
TOP-LINE

- Tronçonnage
- Abstechen
- Parting off

751XF / 761XF



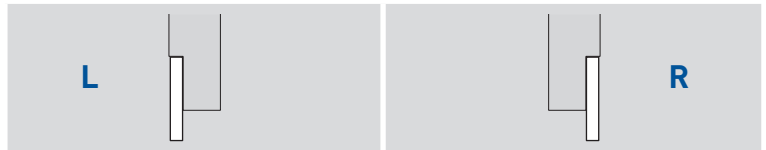
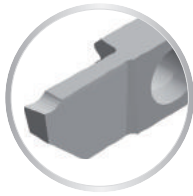
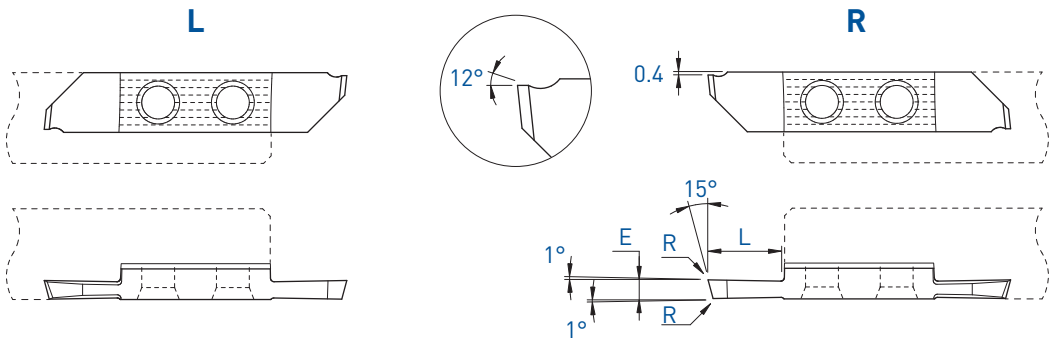
| E | L | Art. N° | L | | | R | | |
|-----|-----|-----------|-------|-----|----------|-----|------|-----------|
| | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 1.5 | 7.5 | 751XF-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 751XF-2.0 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.2 | 10 | 751XF-2.2 | ■ | ■ | ■ | | | |
| 2.5 | 10 | 751XF-2.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 10 | 751XF-3.0 | ■ | ■ | ■ | | | |



7XX-XX-B Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

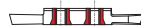
Tronçonnage
Abstechen
Parting off

751X12 / 761X12



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|------|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 1.5 | 7.5 | 0.03 | 751X12-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 761X12-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 0.03 | 751X12-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 761X12-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 10 | 0.03 | 751X12-2.5 | ■ | ■ | ■ | ■ | | | 761X12-2.5 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B

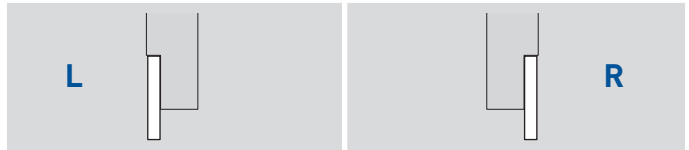
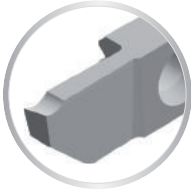
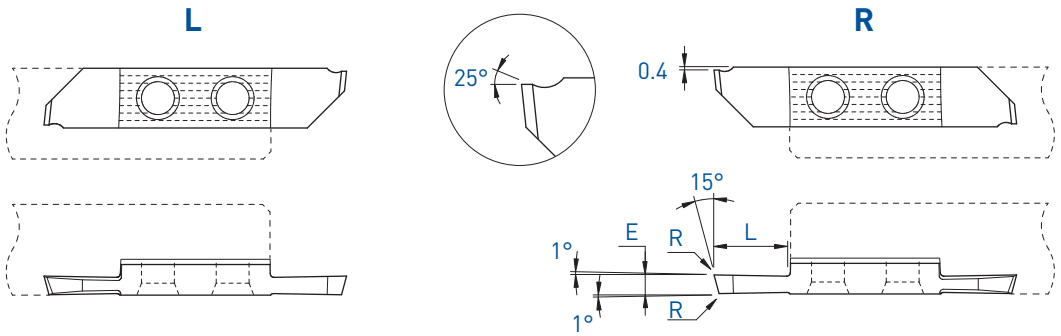


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

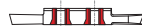
Tronçonnage
Abstechen
Parting off

751X25 / 761X25



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|------|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 1.5 | 7.5 | 0.03 | 751X25-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 761X25-1.5 | ■ | ■ | ■ | | | |
| 2.0 | 10 | 0.03 | 751X25-2.0 | ■ | ■ | ■ | | | | 761X25-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 10 | 0.03 | 751X25-2.5 | ■ | ■ | ■ | | | | 761X25-2.5 | ■ | ■ | ■ | ■ | □ | ■ |

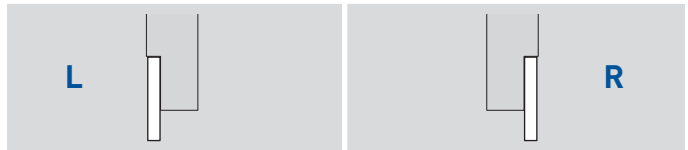
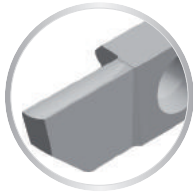
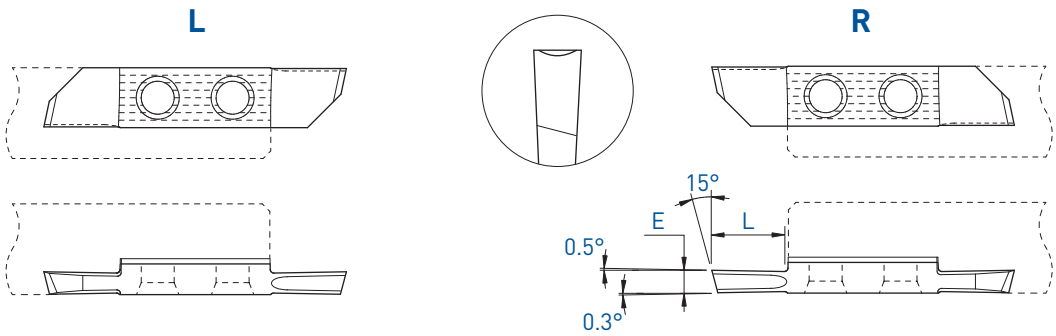
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

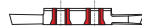
Tronçonnage
Abstechen
Parting off

751U / 761U



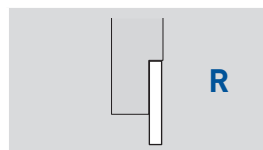
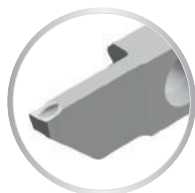
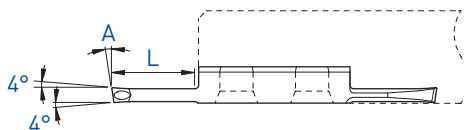
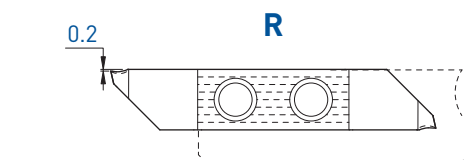
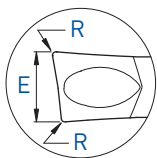
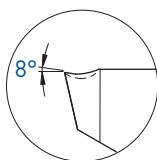
| E | L | Art. N° | L | | | R | | | | | | | | | |
|-----|-----|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 1.5 | 7.5 | - | | | | | | | 761U-1.5 | ■ | □ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 751U-2.0 | ■ | ■ | ■ | | | | 761U-2.0 | ■ | ■ | ■ | □ | □ | ■ |

7XX-XX-B

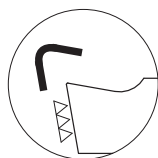


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| E | A | L | R | Art. N° | TiAlN N (µk20) |
|-----|----|----|------|-------------------|-------------------|
| 2.0 | 0° | 11 | 0.10 | 761ZU8-2.0-R10 | ■ |
| 2.0 | 8° | 11 | 0.10 | 761ZU8-2.0-8°-R10 | ■ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

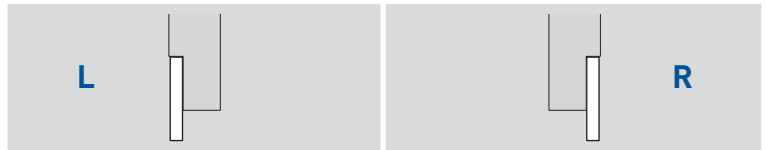
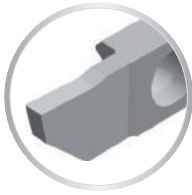
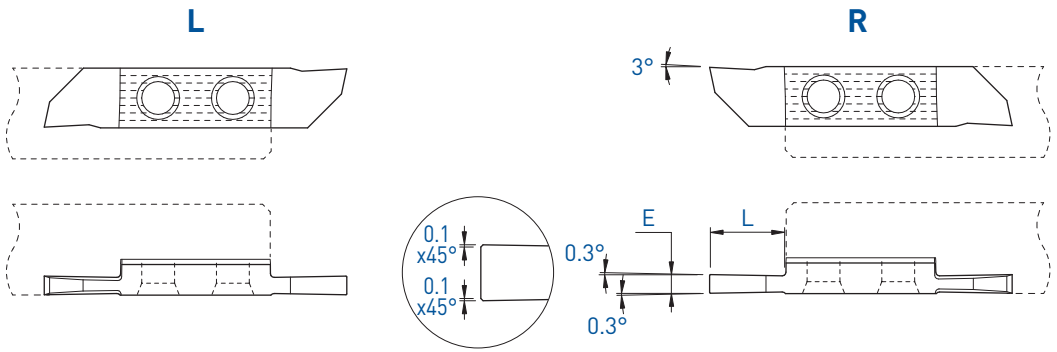
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

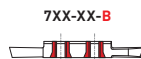
Tronçonnage
Abstechen
Parting off

751NXF / 761NXF



| E | L | Art. N° | L | | | R | | | Art. N° | R | | | | | |
|-----|----|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 2.0 | 10 | 751NXF-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 761NXF-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 10 | 751NXF-2.5 | ■ | ■ | ■ | | | | 761NXF-2.5 | ■ | ■ | ■ | | | |
| 3.0 | 10 | 751NXF-3.0 | ■ | ■ | ■ | | | | 761NXF-3.0 | ■ | ■ | ■ | | | |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



7XX-XX-B
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage

Abstechen

Parting off

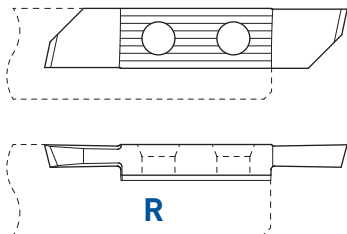
Coupe déportée

Versetztes Schneiden

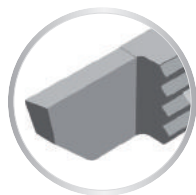
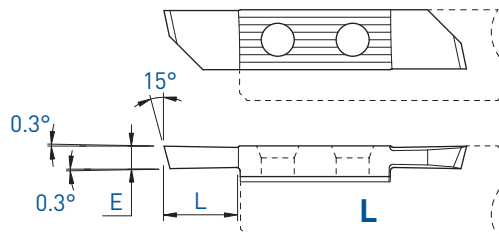
Cut off line

761L / 751R

Cut L



Cut R



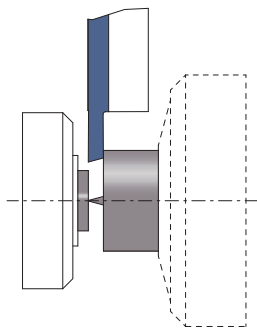
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

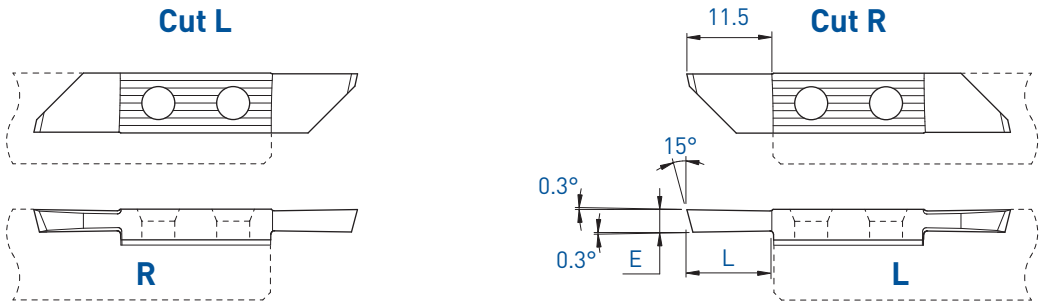
| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|----------|-------|-----|----------|-----|------|-----------|----------|-------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5 | 761L-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 751R-1.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 7.5 | 761L-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 751R-1.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 7.5 | 761L-1.8 | ■ | ■ | ■ | | | | 751R-1.8 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 761L-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 751R-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.2 | 10 | 761L-2.2 | ■ | ■ | ■ | | | | 751R-2.2 | ■ | ■ | ■ | ■ | | | |
| 2.5 | 10 | 761L-2.5 | ■ | ■ | ■ | ■ | □ | ■ | 751R-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 3.0 | 10 | 761L-3.0 | ■ | ■ | ■ | | | | 751R-3.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |



Tronçonnage
Abstechen
Parting off

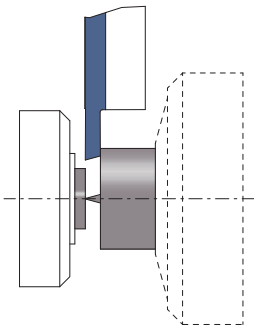
Coupe déportée
Versetztes Schneiden
Cut off line

761LS / 751RS



| R (L) | L (R) |
|---|---|
| Coupe à gauche déportée Versetztes Linksschneiden Left cut off line | Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line |

| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|------|-----------|-------|-----|----------|-----|------|-----------|-----------|-------|-------|-----|----------|-----|------|-----------|
| 1.0 | 5.5 | 761LS-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 751RS-1.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 8 | 761LS-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 751RS-1.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 11.5 | 761LS-2.0 | ■ | ■ | ■ | | | | 751RS-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.2 | 11.5 | 761LS-2.2 | ■ | ■ | ■ | | | | 751RS-2.2 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 11.5 | 761LS-2.5 | ■ | ■ | ■ | | | | 751RS-2.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 11.5 | 761LS-3.0 | ■ | ■ | ■ | | | | 751RS-3.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |



■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

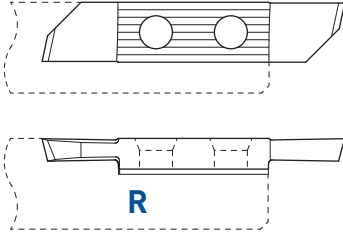
TOP-LINE

Tronçonnage
Abstechen
Parting off

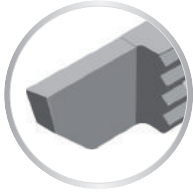
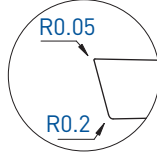
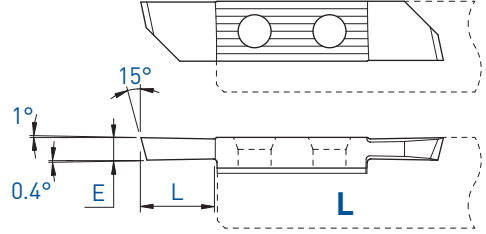
Coupe déportée
Versetztes Schneiden
Cut off line

761L-R05 / 751R-R05

Cut L



Cut R



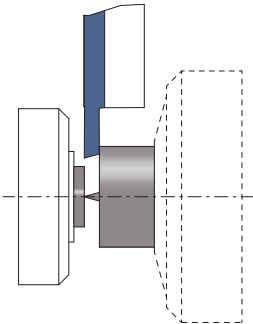
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-------|-----|----------|-----|------|-----------|
| 1.5 | 7.5 | 761L-1.5-R05 | ■ | ■ | ■ | | | | 751R-1.5-R05 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 761L-2.0-R05 | ■ | ■ | ■ | | | | 751R-2.0-R05 | ■ | ■ | ■ | ■ | | | |

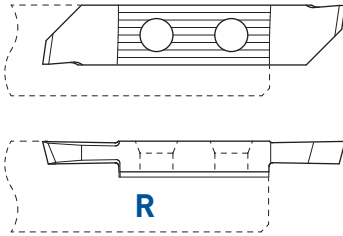


Tronçonnage
Abstechen
Parting off

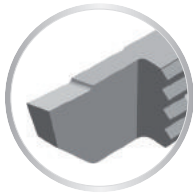
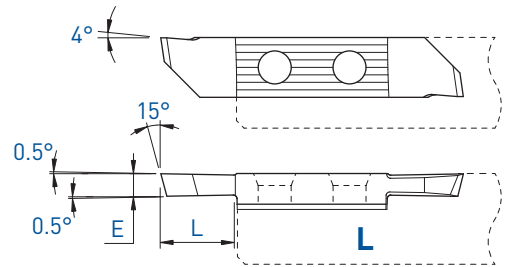
Coupe déportée
Versetztes Schneiden
Cut off line

761LX4 / 751RX4

Cut L



Cut R



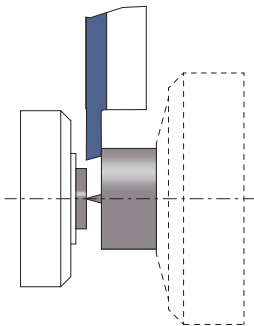
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

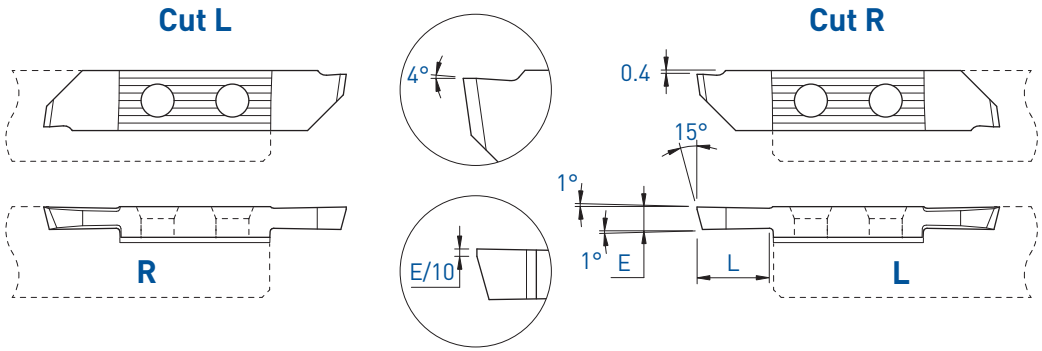
| E | L | Art. N° | TiAlN | TiN | N [µk20] | HTA | HTiN | HN [µk10] | Art. N° | TiAlN | TiN | N [µk20] | HTA | HTiN | HN [µk10] |
|-----|-----|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 1.5 | 7.5 | - | | | | | | | 751RX4-1.5 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 10 | 761LX4-2.0 | ■ | ■ | ■ | | | | 751RX4-2.0 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 10 | - | | | | | | | 751RX4-2.5 | ■ | ■ | ■ | | | |



Tronçonnage
Abstechen
Parting off

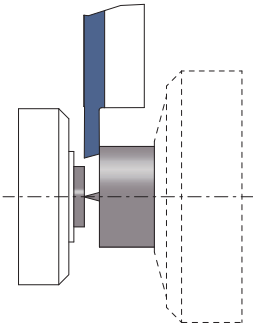
Coupe déportée
Versetztes Schneiden
Cut off line

761LXF / 751RXF



| R (L) | L (R) |
|---|---|
| Coupe à gauche déportée Versetztes Linksschneiden Left cut off line | Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line |

| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 1.5 | 7.5 | - | ■ | ■ | ■ | | | | 751RXF-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 10 | 761LXF-2.0 | ■ | ■ | ■ | | | | 751RXF-2.0 | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 10 | 761LXF-2.5 | ■ | ■ | ■ | | | | 751RXF-2.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 10 | 761LXF-3.0 | ■ | ■ | ■ | | | | 751RXF-3.0 | ■ | ■ | ■ | ■ | □ | ■ |

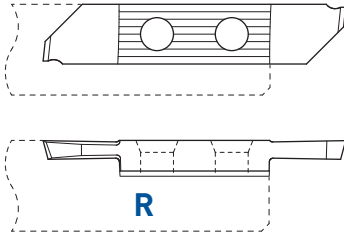


Tronçonnage
Abstechen
Parting off

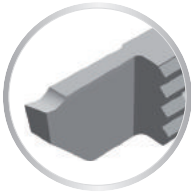
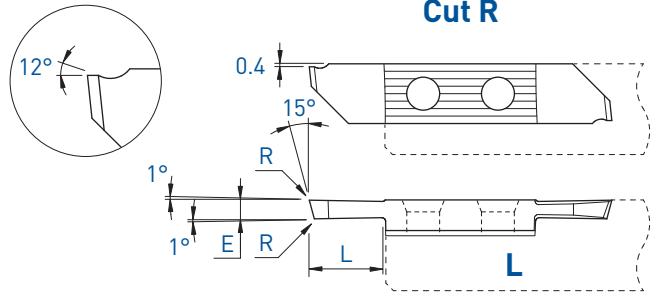
Coupe déportée
Versetztes Schneiden
Cut off line

761LX12 / 751RX12

Cut L



Cut R



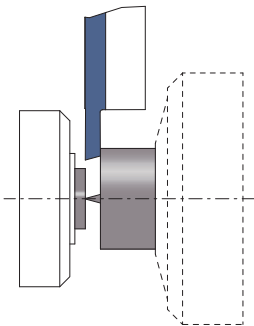
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | L | R | Art. N° | TiAlN | TiN | N [µk20] | HTA | HTiN | HN [µk10] | Art. N° | TiAlN | TiN | N [µk20] | HTA | HTiN | HN [µk10] |
|-----|-----|------|-------------|-------|-----|----------|-----|------|-----------|-------------|-------|-----|----------|-----|------|-----------|
| 1.5 | 7.5 | 0.03 | - | | | | | | | 751RX12-1.5 | ■ | ■ | ■ | | | |
| 2.0 | 10 | 0.03 | 761LX12-2.0 | ■ | ■ | ■ | | | | 751RX12-2.0 | ■ | ■ | ■ | ■ | ■ | ■ |

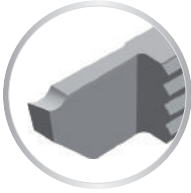
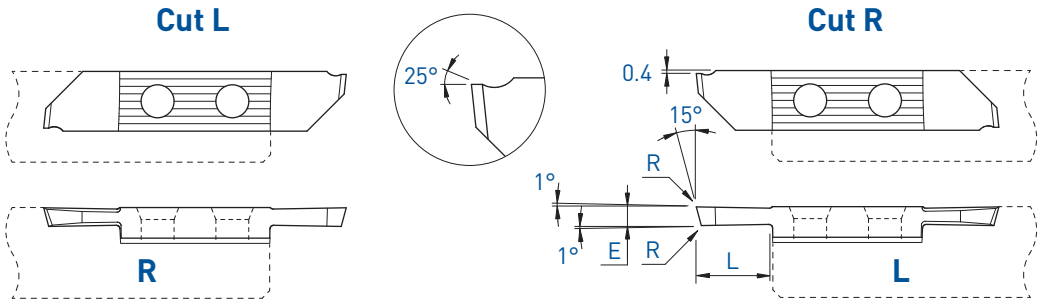


TOP-LINE

Tronçonnage
Abstechen
Parting off

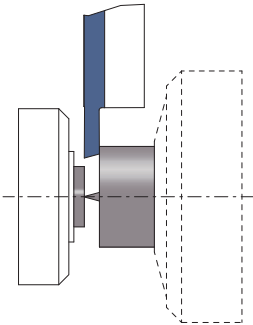
Coupe déportée
Versetztes Schneiden
Cut off line

761LX25 / 751RX25



| R (L) | L (R) |
|---|---|
| Coupe à gauche déportée Versetztes Linksschneiden Left cut off line | Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line |

| E | L | R | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
|-----|----|------|-------------|-------|-----|----------|-------------|-------|-----|----------|
| 2.0 | 10 | 0.03 | 761LX25-2.0 | ■ | ■ | ■ | 751RX25-2.0 | ■ | ■ | ■ |

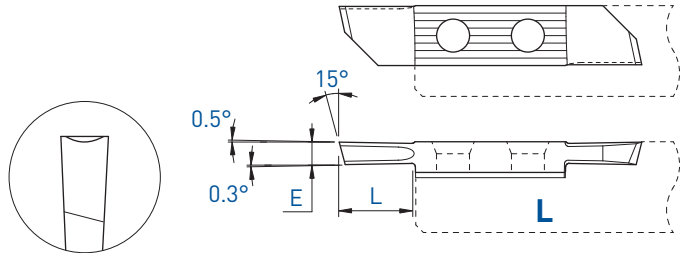


Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

751RU

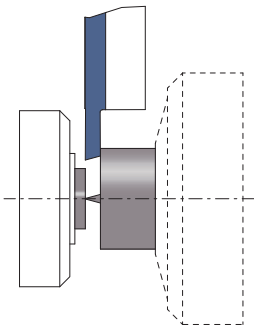
Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | L | Art. N° | TiAIN | TiN | N (µk20) |
|-----|-----|-----------|-------|-----|----------|
| 1.5 | 7.5 | 751RU-1.5 | ■ | ■ | ■ |
| 2.0 | 10 | 751RU-2.0 | ■ | ■ | ■ |



Tronçonnage

Abstechen

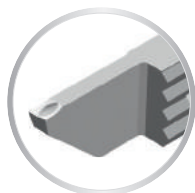
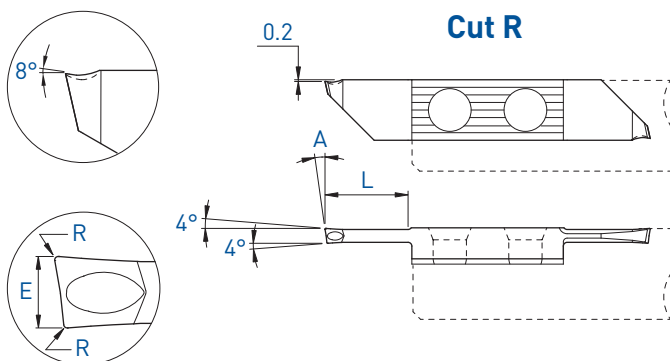
Parting off

Coupe déportée

Versetztes Schneiden

Cut off line

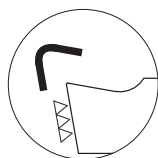
751RZU



R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

| E | A | L | R | Art. N° | TiAlN | TiN | N (µk20) |
|-----|----|------|------|--------------------|-------|-----|----------|
| 2.0 | 8° | 11.0 | 0.10 | 751RZU8-2.0-8°-R10 | ■ | | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

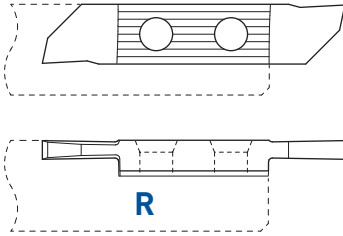
f min: 0.02 mm/U

Tronçonnage
Abstechen
Parting off

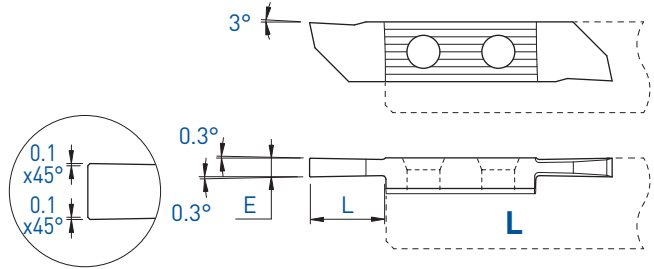
Coupe déportée
Versetztes Schneiden
Cut off line

761NXF / 751NXF

Cut L



Cut R



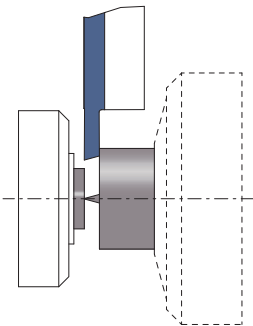
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|----|------------|-------|-----|----------|-----|------|-----------|------------|-------|-----|----------|-----|------|-----------|
| 2.0 | 10 | 761NXF-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 751NXF-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 10 | 761NXF-2.5 | ■ | ■ | ■ | | | | 751NXF-2.5 | ■ | ■ | ■ | | | |
| 3.0 | 10 | 761NXF-3.0 | ■ | ■ | ■ | | | | 751NXF-3.0 | ■ | ■ | ■ | | | |

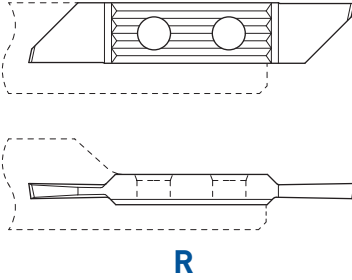


Tronçonnage
Abstechen
Parting off

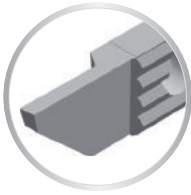
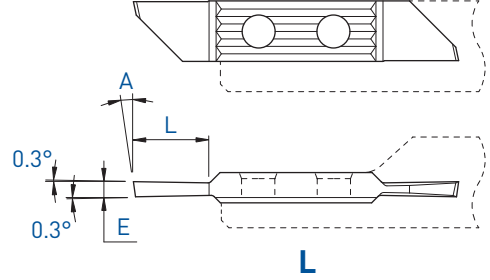
Coupe déportée
Versetztes Schneiden
Cut off line

761LD / 751RD

Cut L



Cut R



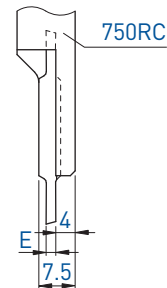
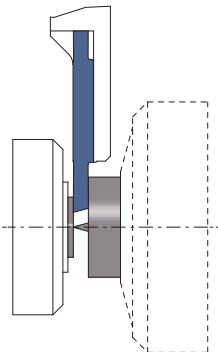
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | A | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|----|---------------|-------|-----|----------|-----|------|-----------|---------------|-------|-----|----------|-----|------|-----------|
| 1.0 | 8° | 5 | 761LD-1.0-8° | ■ | ■ | ■ | ■ | □ | ■ | 751RD-1.0-8° | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 15° | 5 | 761LD-1.0-15° | ■ | ■ | ■ | ■ | □ | ■ | 751RD-1.0-15° | ■ | ■ | ■ | ■ | □ | ■ |
| 1.2 | 8° | 5 | 761LD-1.2-8° | ■ | ■ | ■ | | | | 751RD-1.2-8° | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 8° | 8 | 761LD-1.5-8° | ■ | ■ | ■ | | | | 751RD-1.5-8° | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.5 | 15° | 8 | 761LD-1.5-15° | ■ | ■ | ■ | | | | 751RD-1.5-15° | ■ | ■ | ■ | ■ | □ | ■ |
| 1.6 | 8° | 8 | 761LD-1.6-8° | ■ | ■ | ■ | | | | 751RD-1.6-8° | ■ | ■ | ■ | | | |
| 1.8 | 8° | 10 | 761LD-1.8-8° | ■ | ■ | ■ | | | | 751RD-1.8-8° | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 8° | 10 | 761LD-2.0-8° | ■ | ■ | ■ | | | | 751RD-2.0-8° | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 15° | 10 | 761LD-2.0-15° | ■ | ■ | ■ | ■ | □ | ■ | 751RD-2.0-15° | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 8° | 10 | - | | | | | | | 751RD-2.5-8° | ■ | ■ | ■ | ■ | □ | ■ |

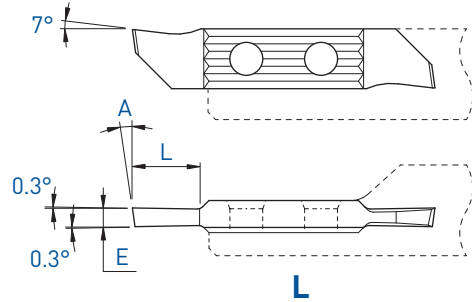


Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

751RAS

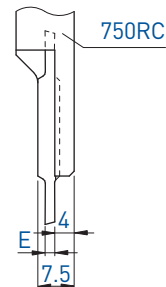
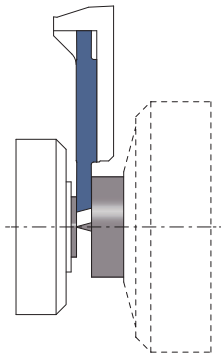
Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | A | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|-----|----------------|-------|-----|----------|-----|------|-----------|
| 1.6 | 8° | 7.5 | 751RAS-1.6-8° | ■ | ■ | ■ | | | |
| 1.6 | 15° | 7.5 | 751RAS-1.6-15° | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 8° | 9 | 751RAS-2.0-8° | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 15° | 9 | 751RAS-2.0-15° | ■ | ■ | ■ | | | |
| 2.5 | 8° | 9 | 751RAS-2.5-8° | ■ | ■ | ■ | | | |
| 2.5 | 15° | 9 | 751RAS-2.5-15° | ■ | ■ | ■ | | | |



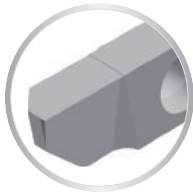
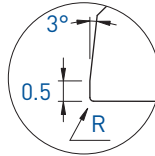
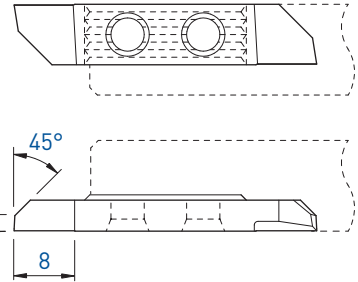
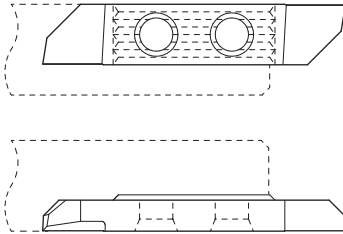
TOP-LINE

Tournage avant
Vorwärts drehen
Front turning

752 / 762

L

R



L

R

| A | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|----|------|---------|-------|-----|----------|-----|------|-----------|---------|-------|-----|----------|-----|------|-----------|
| 0° | 0 | 752 | ■ | ■ | ■ | ■ | □ | ■ | 762 | ■ | ■ | ■ | ■ | □ | ■ |
| 0° | 0.20 | - | | | | | | | 762-R20 | ■ | ■ | ■ | ■ | □ | ■ |
| 3° | 0 | 752-3° | ■ | ■ | ■ | ■ | □ | ■ | 762-3° | ■ | ■ | ■ | ■ | □ | ■ |

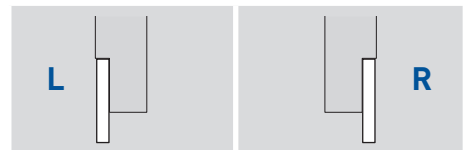
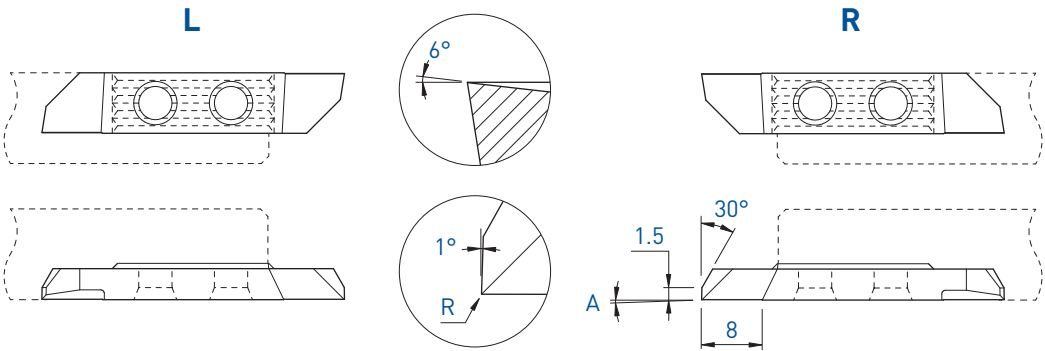
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage avant
Vorwärts drehen
Front turning

752PX / 762PX



| A | R | Art. N° | TiAlN | TiN | N [µk20] | Art. N° | TiAlN | TiN | N [µk20] |
|----|---|---------|-------|-----|----------|---------|-------|-----|----------|
| 0° | 0 | 752PX | ■ | ■ | ■ | 762PX | ■ | ■ | ■ |

7XX-XX-B



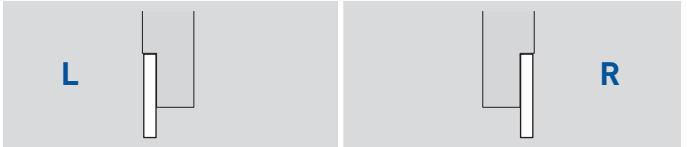
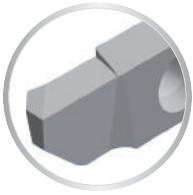
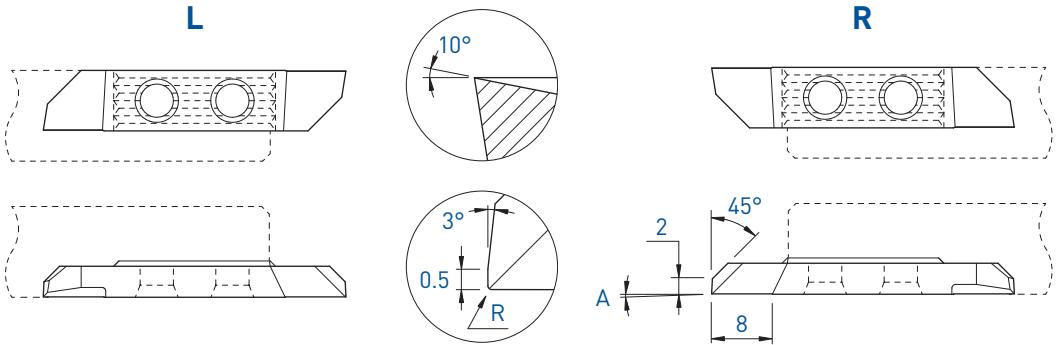
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Tournage avant
Vorwärts drehen
Front turning

752X / 762X



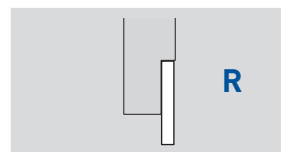
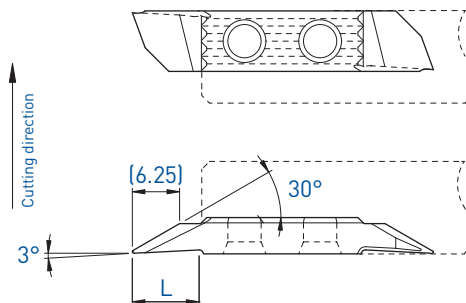
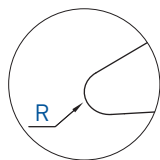
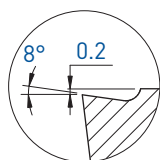
| A | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|----|------|----------|-------|-----|----------|-----|------|-----------|----------|-------|-----|----------|-----|------|-----------|
| 0° | 0 | 752X | ■ | ■ | ■ | ■ | ■ | ■ | 762X | ■ | ■ | ■ | ■ | ■ | ■ |
| 0° | 0.20 | 752X-R20 | ■ | ■ | ■ | | | | 762X-R20 | ■ | ■ | ■ | | | |

7XX-XX-B Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03



Tournage avant
 Vorwärts drehen
 Front turning

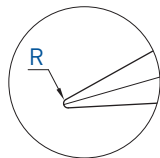
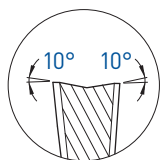
762VX-800



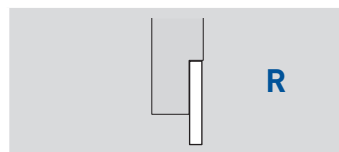
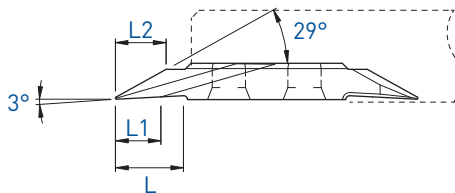
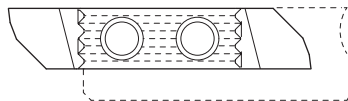
| L | R | Art. N° | HTA | HTiN | HN [µk10] |
|---|------|---------------|-----|------|-----------|
| 9 | 0.15 | 762VX-800-R15 | ■ | ■ | ■ |

Tournage avant
Vorwärts drehen
Front turning

762VUX



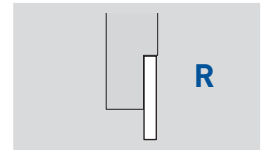
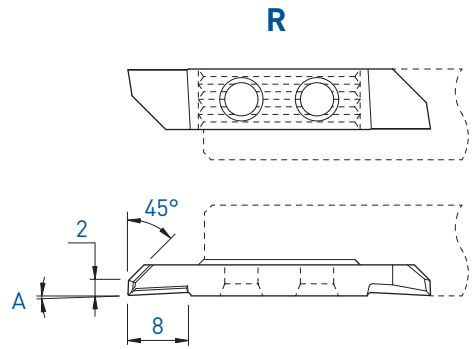
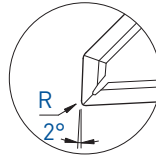
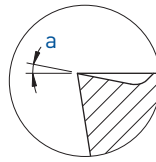
R



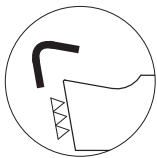
| L | L1 | L2 | R | Art. N° | TiAlN N [µk20] | HTA | HN [µk10] |
|---|----|-----|------|------------------|-------------------|-----|-----------|
| 9 | 6 | 6.9 | 0.08 | 762VUX10-29°-R08 | ■ | ■ | ■ |
| 9 | 6 | 6.7 | 0.15 | 762VUX10-29°-R15 | ■ | ■ | ■ |
| 9 | 6 | 6.1 | 0.35 | 762VUX10-29°-R35 | ■ | ■ | ■ |
| 9 | 6 | 4.9 | 0.75 | 762VUX10-29°-R75 | ■ | ■ | ■ |

Tournage avant
Vorwärts drehen
Front turning

762ZX



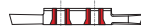
| a | A | R | Art. N° | TiAIN | TiN | N (µk20) |
|-----|----|------|--------------------|-------|-----|----------|
| 10° | 3° | 0.08 | 762ZX10-R08 | ■ | □ | |
| | 3° | 0.20 | 762ZX10-R20 | ■ | □ | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

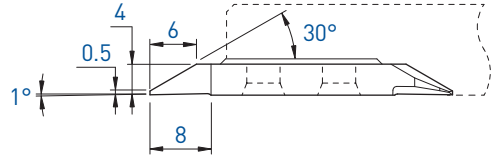
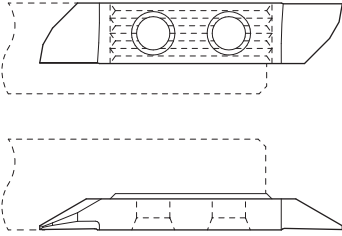
TOP-LINE

Tournage multifonction
 Mehrzweck Drehen
 Multifunction turning

752S / 762S
 753S / 763S

L

R

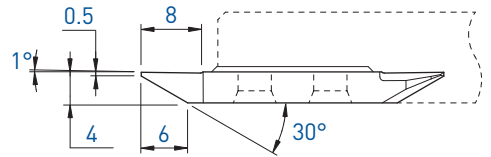
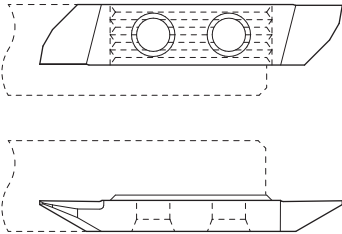


Tournage avant
 Vorwärts drehen
 Front turning

| L | | | | | | R | | | | | | | | |
|---------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|-----------|
| Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 752S05 | ■ | ■ | ■ | ■ | □ | ■ | 762S05 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

L

R



Tournage arrière
 Rückwärts drehen
 Back turning

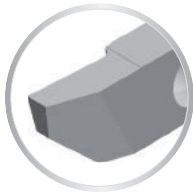
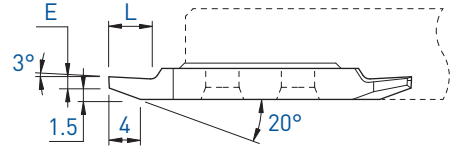
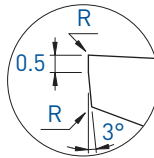
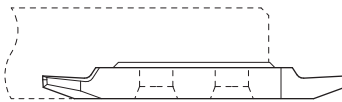
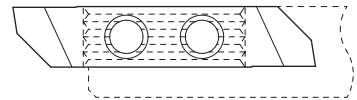
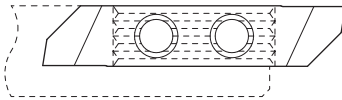
| L | | | | | | R | | | | | | | | |
|---------|-------|-----|----------|-----|------|-----------|---------|-------|-------|-----|----------|-----|------|-----------|
| Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 753S05 | ■ | ■ | ■ | ■ | ■ | ■ | 763S05 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

Tournage arrière
Rückwärts drehen
Back turning

753 / 763

L

R



L

R

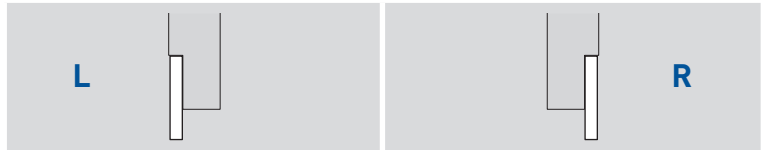
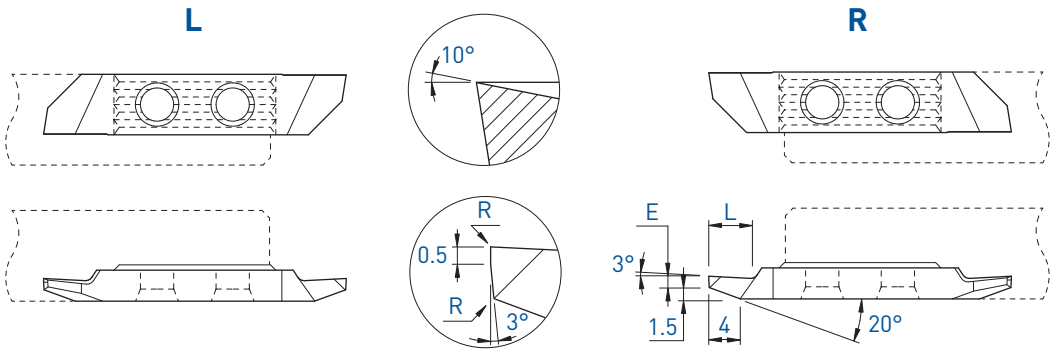
| E | L | R | Art. N° | TiAlN | | | HTA | | HN [µk(10)] | Art. N° | TiAlN | | | HTA | | HN [µk(10)] |
|-----|-----|------|-------------|-------|------------|---|------|---|-------------|-------------|-------|------------|------|-----|---|-------------|
| | | | | TiN | N [µk(20)] | | HTiN | | | | TiN | N [µk(20)] | HTiN | | | |
| 1.0 | 5 | 0 | 753-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 763-1.0 | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 5 | 0.08 | 753-1.0-R08 | ■ | ■ | ■ | | | | 763-1.0-R08 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 6 | 0 | 753-1.5 | ■ | ■ | ■ | | | | 763-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 7.5 | 0 | 753-2.0 | ■ | ■ | ■ | | | | 763-2.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 9 | 0 | 753-2.5 | ■ | ■ | ■ | | | | 763-2.5 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| E | L | R | Art. N° | L | | | R | | | | | | | | | |
|-----|-----|------|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-----|----------|-----|------|-----------|
| | | | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 1.0 | 5 | 0 | 753X-1.0 | ■ | ■ | ■ | | | | 763X-1.0 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 5 | 0.08 | 753X-1.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 763X-1.0-R08 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 5 | 0.20 | 753X-1.0-R20 | ■ | ■ | ■ | | | | 763X-1.0-R20 | ■ | ■ | ■ | | | |
| 1.5 | 6 | 0 | 753X-1.5 | ■ | ■ | ■ | | | | 763X-1.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 6 | 0.20 | 753X-1.5-R20 | ■ | ■ | ■ | | | | 763X-1.5-R20 | ■ | ■ | ■ | | | |
| 2.0 | 7.5 | 0 | 753X-2.0 | ■ | ■ | ■ | | | | 763X-2.0 | ■ | ■ | ■ | | | |
| 2.0 | 7.5 | 0.20 | 753X-2.0-R20 | ■ | ■ | ■ | | | | 763X-2.0-R20 | ■ | ■ | ■ | | | |
| 2.5 | 9 | 0 | 753X-2.5 | ■ | ■ | ■ | | | | 763X-2.5 | ■ | ■ | ■ | | | |
| 2.5 | 9 | 0.20 | 753X-2.5-R20 | ■ | ■ | ■ | | | | 763X-2.5-R20 | ■ | ■ | ■ | | | |

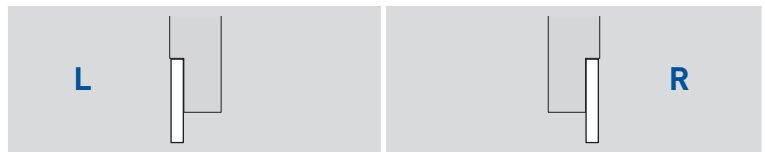
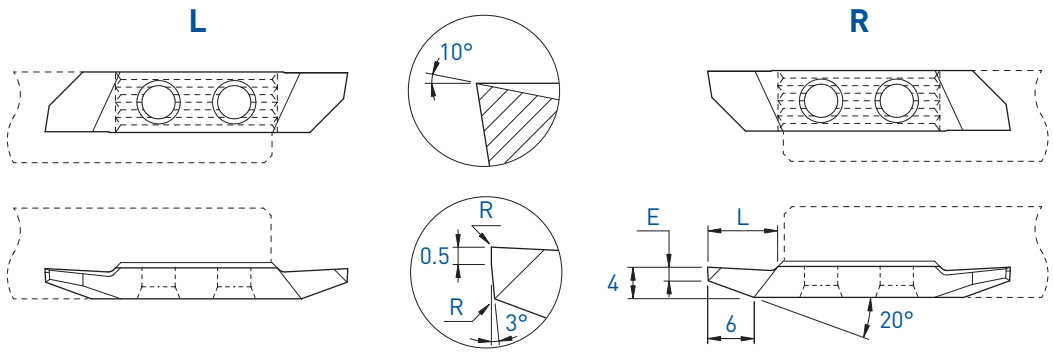
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

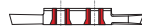
Tournage arrière
Rückwärts drehen
Back turning

753XS / 763XS



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------|---------------|-------|-----|----------|-----|------|-----------|---------------|-------|-----|----------|-----|------|-----------|
| 1.8 | 9 | 0 | 753XS-1.8 | ■ | ■ | ■ | | | | 763XS-1.8 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 9 | 0.20 | 753XS-1.8-R20 | ■ | ■ | ■ | | | | 763XS-1.8-R20 | ■ | ■ | ■ | | | |

7XX-XX-B



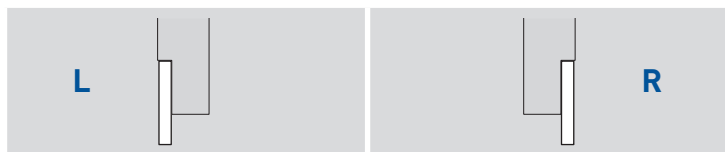
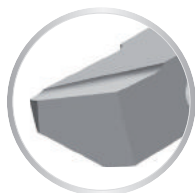
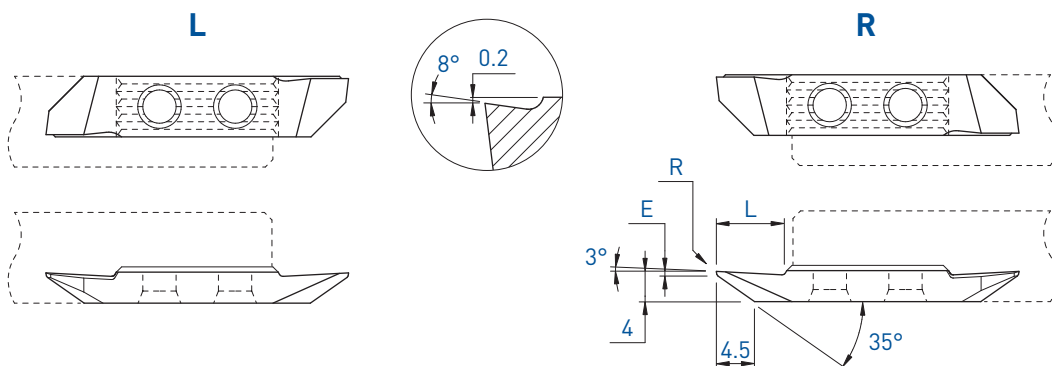
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Tournage arrière
Rückwärts drehen
Back turning

753VX-8° / 763VX-8°



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-----|----------|-----|------|-----------|
| 1.0 | 9 | 0 | 753VX-8° | ■ | ■ | ■ | | | | 763VX-8° | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 9 | 0.08 | 753VX-8°-R08 | ■ | ■ | ■ | | | | 763VX-8°-R08 | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 9 | 0.20 | - | | | | | | | 763VX-8°-R20 | ■ | ■ | ■ | | | |

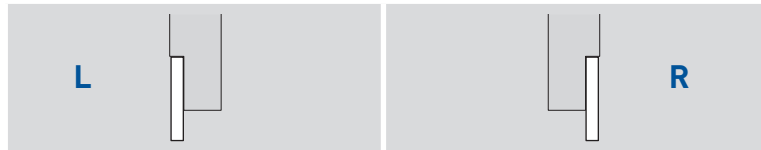
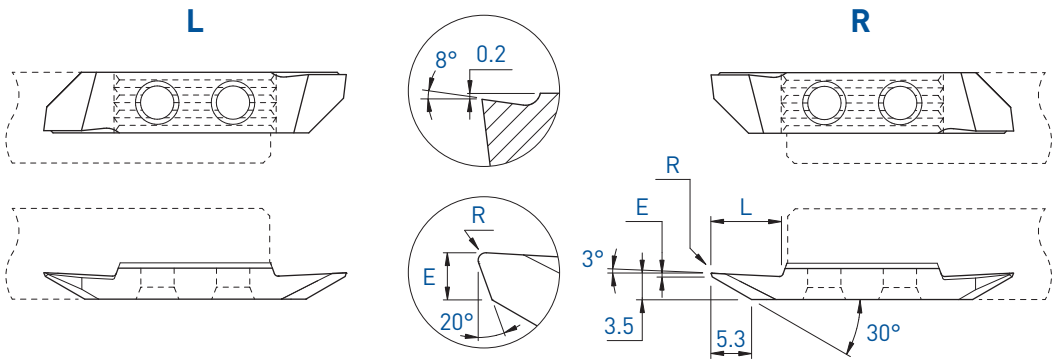
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

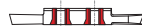
Tournage arrière
Rückwärts drehen
Back turning

753VX-805 / 763VX-805



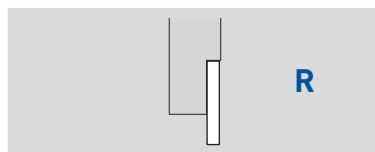
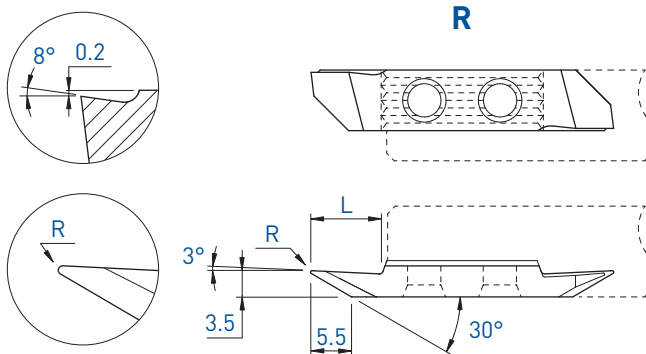
| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|---|------|---------------|-------|-----|----------|-----|------|-----------|---------------|-------|-----|----------|-----|------|-----------|
| 0.5 | 9 | 0.08 | 753VX-805-R08 | ■ | ■ | ■ | ■ | □ | ■ | 763VX-805-R08 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| L | R | Art. N° | TiAlN | TiN | N (μk20) | HTA | HTiN | HN (μk10) |
|---|------|---------------|-------|-----|----------|-----|------|-----------|
| 9 | 0.08 | 763VX-800-R08 | ■ | ■ | ■ | ■ | □ | ■ |
| 9 | 0.20 | 763VX-800-R20 | ■ | ■ | ■ | ■ | □ | ■ |

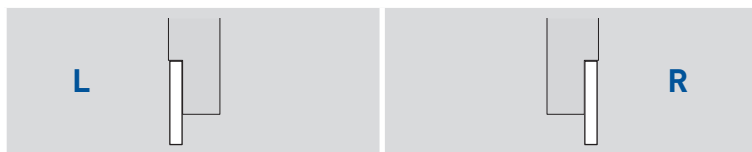
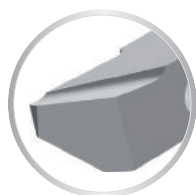
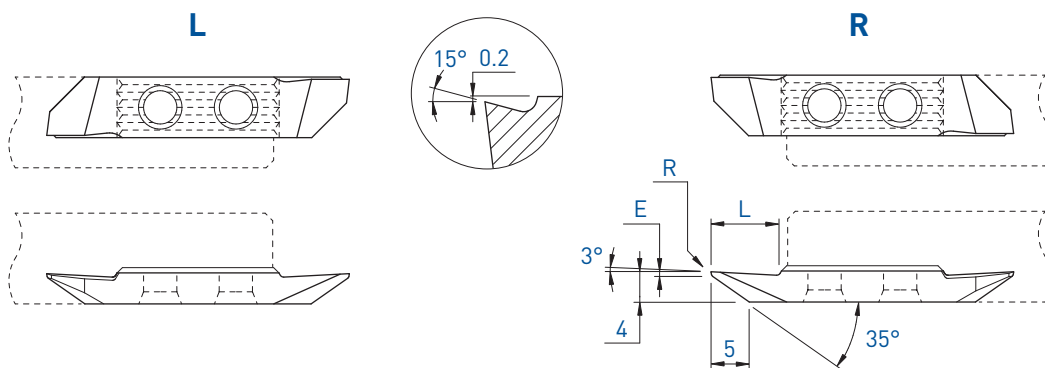
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

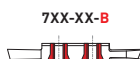
Tournage arrière
 Rückwärts drehen
 Back turning

753VX-15° / 763VX-15°

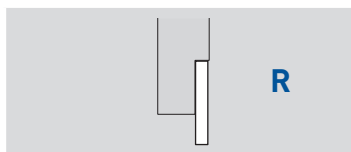
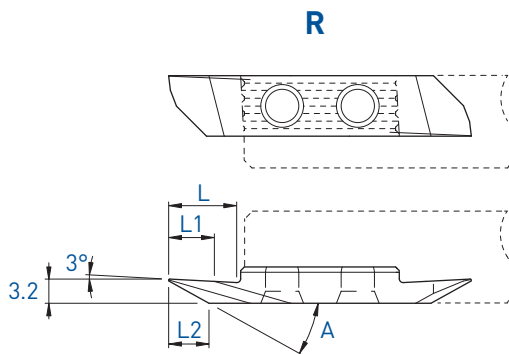
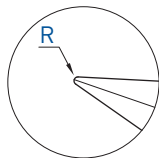
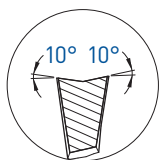


| | | | L | | | | R | | | | | | | | | |
|-----|---|------|---------------|-------|-----|----------|-----|------|-----------|---------------|-------|-----|----------|-----|------|-----------|
| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 0.6 | 9 | 0 | 753VX-15° | ■ | ■ | ■ | | | | 763VX-15° | ■ | ■ | ■ | ■ | □ | ■ |
| 0.6 | 9 | 0.08 | 753VX-15°-R08 | ■ | ■ | ■ | | | | 763VX-15°-R08 | ■ | ■ | ■ | ■ | □ | ■ |

■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



7XX-XX-B
 Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03



| L | L1 | L2 | A | R | Art. N° | TiAlN | N [μk20] | HTA | HN [μk10] |
|---|----|-----|----|------|------------------|-------|----------|-----|-----------|
| 9 | 6 | 5.5 | 29 | 0.08 | 763VUX10-29°-R08 | ■ | ■ | ■ | ■ |
| 9 | 6 | 5.3 | 29 | 0.15 | 763VUX10-29°-R15 | ■ | ■ | ■ | ■ |
| 9 | 6 | 4.7 | 29 | 0.35 | 763VUX10-29°-R35 | ■ | ■ | ■ | ■ |
| 9 | 6 | 3.6 | 29 | 0.75 | 763VUX10-29°-R75 | ■ | ■ | ■ | ■ |
| 9 | 6 | 4.2 | 35 | 0.15 | 763VUX10-35°-R15 | ■ | ■ | ■ | ■ |
| 9 | 6 | 3.8 | 35 | 0.35 | 763VUX10-35°-R35 | ■ | ■ | ■ | ■ |

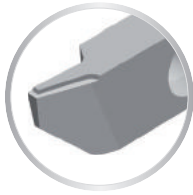
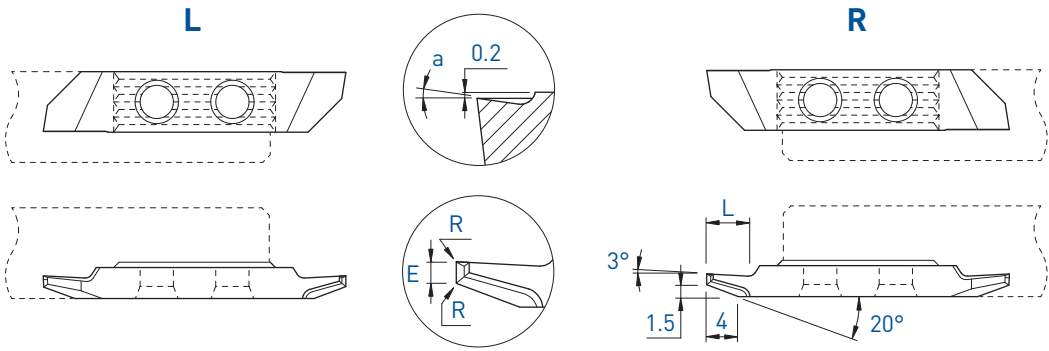
7XX-XX-B



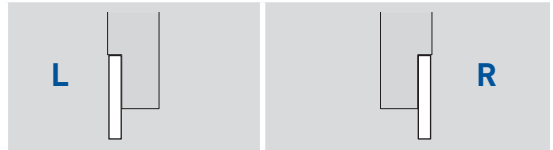
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage arrière
Rückwärts drehen
Back turning

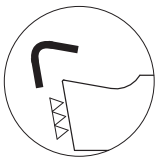
753ZX / 763ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| a | E | L | R | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
|-----|-----|---|------|-------------|-------|-----|----------|-----------------|-------|-----|----------|
| 10° | 1.0 | 5 | 0.01 | 753ZX10-1.0 | ■ | □ | | 763ZX10-1.0 | ■ | ■ | |
| | 1.0 | 5 | 0.08 | - | | | | 763ZX10-1.0-R08 | ■ | ■ | |
| | 1.0 | 5 | 0.20 | - | | | | 763ZX10-1.0-R20 | ■ | ■ | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



7XX-XX-B

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

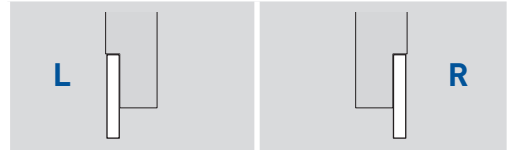
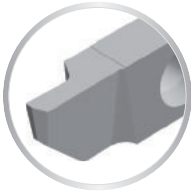
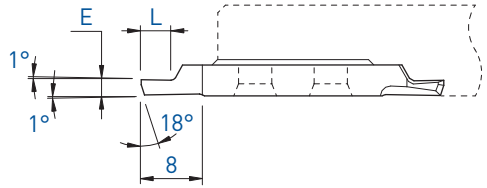
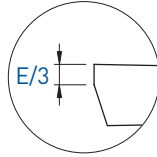
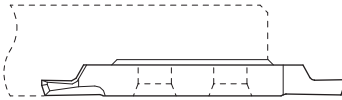
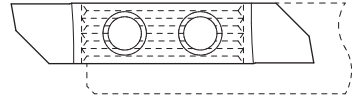
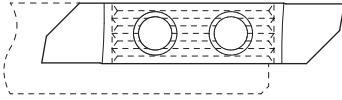
TOP-LINE

Tournage arrière / pré-coupe
 Rückwärts drehen / vorstechen
 Back turning / pre-parting off

753P / 763P

L

R



| E | L | Art. N° | TiAlN | | | Art. N° | TiN | | |
|-----|-----|----------|-------|-----|----------|----------|-------|-----|----------|
| | | | TiAlN | TiN | N (µk20) | | TiAlN | TiN | N (µk20) |
| 1.5 | 3 | 753P-1.5 | ■ | ■ | ■ | 763P-1.5 | ■ | ■ | ■ |
| 1.8 | 3.5 | 753P-1.8 | ■ | ■ | ■ | 763P-1.8 | ■ | ■ | ■ |
| 2.0 | 4 | 753P-2.0 | ■ | ■ | ■ | 763P-2.0 | ■ | ■ | ■ |
| 2.2 | 5 | 753P-2.2 | ■ | ■ | ■ | 763P-2.2 | ■ | ■ | ■ |
| 2.5 | 6 | 753P-2.5 | ■ | ■ | ■ | 763P-2.5 | ■ | ■ | ■ |
| 3.0 | 6 | 753P-3.0 | ■ | ■ | ■ | 763P-3.0 | ■ | ■ | ■ |

7XX-XX-B



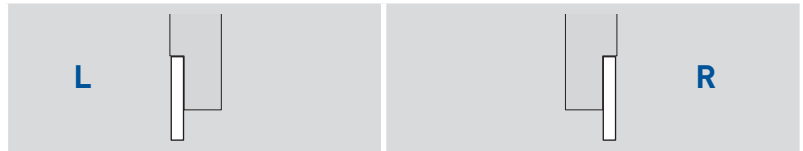
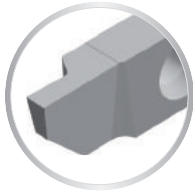
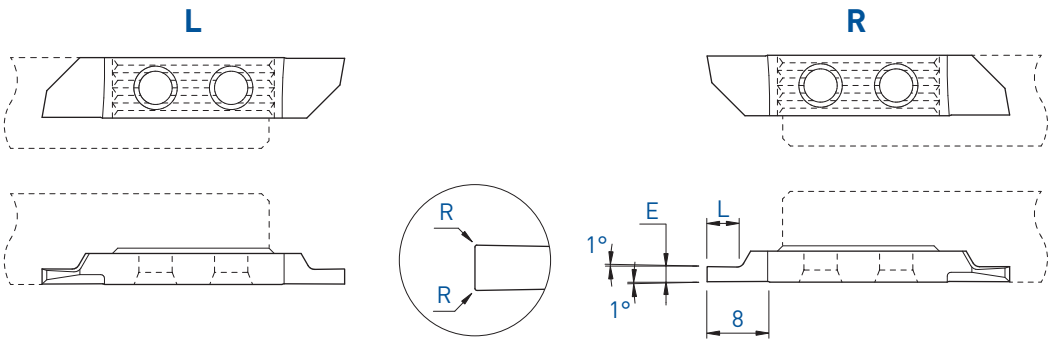
Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

Fonçage-tournage

Einstecken und drehen

Grooving and turning

754 / 764



| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|------|-----|------|-------------|-------|-----|----------|-----|------|-----------|-------------|-------|-------|-----|----------|-----|------|-----------|
| 0.5 | 1.5 | 0 | 754-0.5 | ■ | ■ | ■ | | | | 764-0.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.75 | 2 | 0 | 754-0.75 | ■ | ■ | ■ | | | | 764-0.75 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.8 | 2 | 0 | - | | | | | | | 764-0.8 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 0.95 | 3 | 0 | 754-0.95 | ■ | ■ | ■ | ■ | □ | ■ | 764-0.95 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 2.5 | 0 | 754-1.0 | ■ | ■ | ■ | ■ | □ | ■ | 764-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 2.5 | 0.08 | 754-1.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 764-1.0-R08 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.2 | 3 | 0 | 754-1.2 | ■ | ■ | ■ | ■ | | | 764-1.2 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0 | 754-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 764-1.5 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.5 | 3 | 0.08 | 754-1.5-R08 | ■ | ■ | ■ | ■ | □ | ■ | 764-1.5-R08 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.5 | 3 | 0.15 | - | | | | | | | 764-1.5-R15 | ■ | ■ | □ | ■ | ■ | ■ | ■ |
| 1.5 | 3 | 0.20 | - | | | | | | | 764-1.5-R20 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.8 | 4 | 0 | 754-1.8 | ■ | ■ | ■ | ■ | | | 764-1.8 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0 | 754-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 764-2.0 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0.08 | 754-2.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 764-2.0-R08 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.0 | 4 | 0.15 | - | | | | | | | 764-2.0-R15 | ■ | ■ | □ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0.20 | 754-2.0-R20 | ■ | ■ | ■ | ■ | | | 764-2.0-R20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 6 | 0 | 754-2.5 | ■ | ■ | ■ | ■ | | | 764-2.5 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 2.5 | 6 | 0.15 | - | | | | | | | 764-2.5-R15 | ■ | ■ | □ | ■ | ■ | ■ | ■ |
| 2.5 | 6 | 0.20 | - | | | | | | | 764-2.5-R20 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 6 | 0 | 754-3.0 | ■ | ■ | ■ | ■ | □ | ■ | 764-3.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 6 | 0.08 | 754-3.0-R08 | ■ | ■ | ■ | ■ | | | 764-3.0-R08 | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 6 | 0.15 | - | | | | | | | 764-3.0-R15 | ■ | ■ | □ | ■ | ■ | ■ | ■ |
| 3.0 | 6 | 0.20 | 754-3.0-R20 | ■ | ■ | ■ | ■ | □ | ■ | 764-3.0-R20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 4.0 | 8 | 0 | 754-4.0 | ■ | ■ | ■ | ■ | ■ | ■ | 764-4.0 | ■ | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



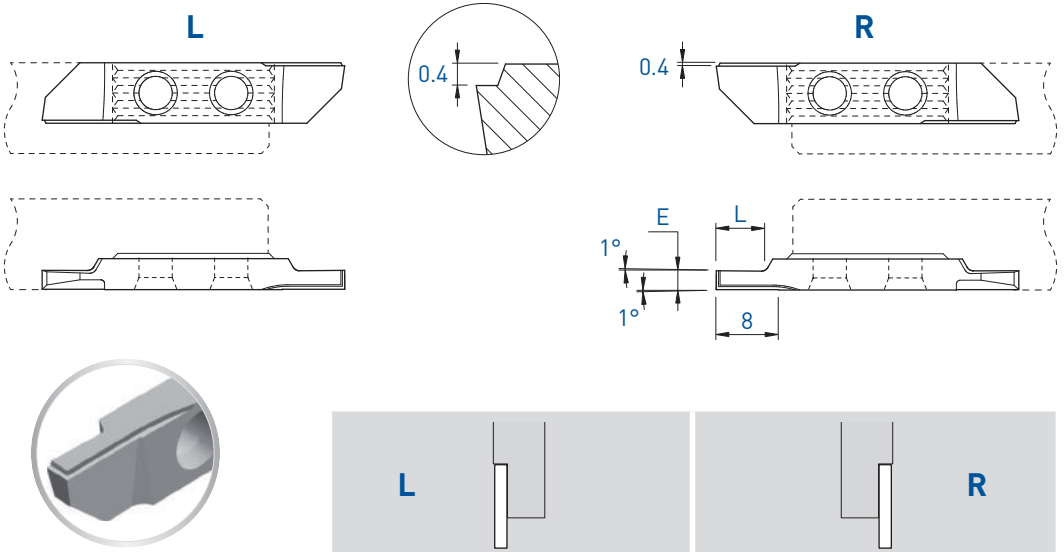
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Fonçage-tournage
Einstecken und drehen
Grooving and turning

754VS / 764VS



| | | L | | | | | | R | | | | | | | |
|-----|-----|-----------|-------|-----|----------|-----|------|-----------|-----------|-------|-----|----------|-----|------|-----------|
| E | L | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
| 1.0 | 2 | 754VS-1.0 | ■ | ■ | ■ | | | | 764VS-1.0 | ■ | ■ | ■ | | | |
| 1.2 | 2.5 | 754VS-1.2 | ■ | ■ | ■ | | □ | ■ | 764VS-1.2 | ■ | ■ | ■ | | | |
| 1.5 | 3 | 754VS-1.5 | ■ | ■ | ■ | | | | 764VS-1.5 | ■ | ■ | ■ | | | |
| 2.0 | 4 | 754VS-2.0 | ■ | ■ | ■ | | | | 764VS-2.0 | ■ | ■ | ■ | | | |
| 2.5 | 6 | 754VS-2.5 | ■ | ■ | ■ | | | | 764VS-2.5 | ■ | ■ | ■ | ■ | □ | ■ |
| 3.0 | 6 | 754VS-3.0 | ■ | ■ | ■ | | | | 764VS-3.0 | ■ | ■ | ■ | | | |

7XX-XX-B



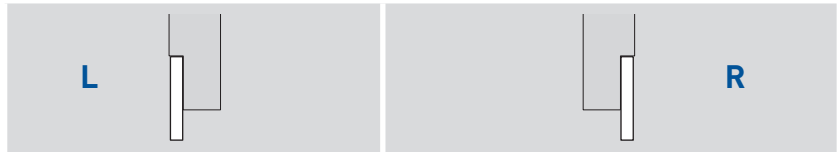
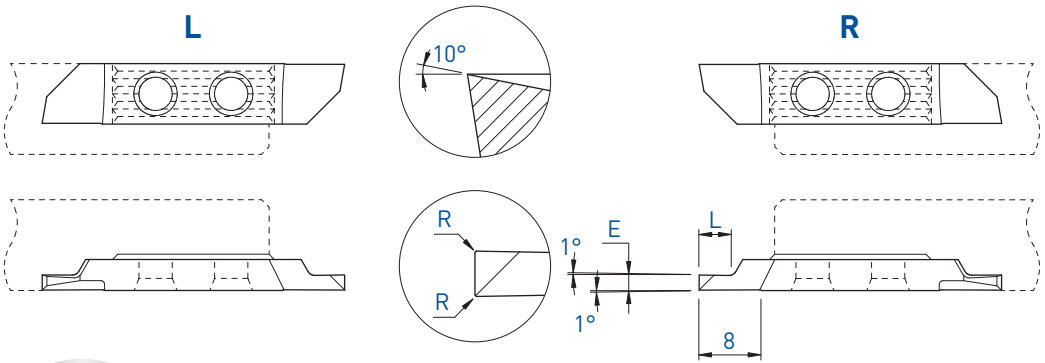
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage

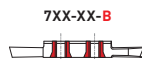
Einstecken und drehen

Grooving and turning

754X / 764X

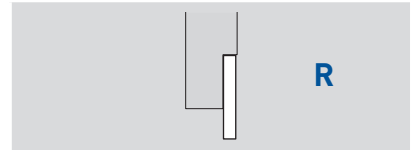
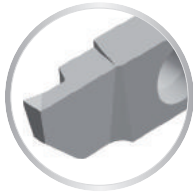
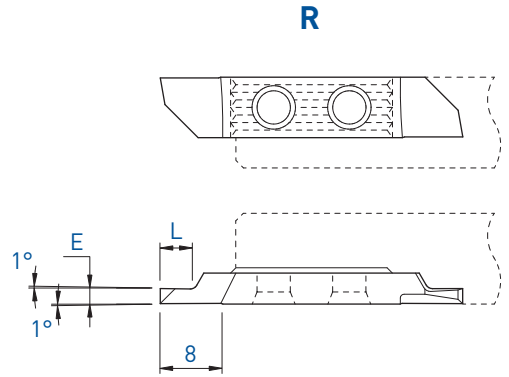
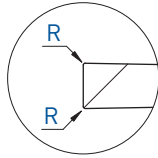
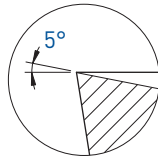


| E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiAlX | LoX | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|------|--------------|-------|-----|----------|-----|------|-----------|--------------|-------|-------|-----|-----|----------|-----|------|-----------|
| 1.0 | 2.5 | 0 | 754X-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | 764X-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 2.5 | 0.08 | 754X-1.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 764X-1.0-R08 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| 1.0 | 2.5 | 0.20 | - | | | | | | | 764X-1.0-R20 | ■ | ■ | ■ | ■ | ■ | | | |
| 1.2 | 3 | 0 | 754X-1.2 | ■ | ■ | ■ | | | | 764X-1.2 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 1.2 | 3 | 0.08 | - | | | | | | | 764X-1.2-R08 | ■ | ■ | ■ | ■ | ■ | | | |
| 1.5 | 3 | 0 | 754X-1.5 | ■ | ■ | ■ | ■ | □ | ■ | 764X-1.5 | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| 1.5 | 3 | 0.08 | 754X-1.5-R08 | ■ | ■ | ■ | ■ | □ | ■ | 764X-1.5-R08 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 1.5 | 3 | 0.15 | - | | | | | | | 764X-1.5-R15 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 1.5 | 3 | 0.20 | 754X-1.5-R20 | ■ | ■ | ■ | ■ | | | 764X-1.5-R20 | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| 1.8 | 4 | 0 | 754X-1.8 | ■ | ■ | ■ | | | | 764X-1.8 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 1.8 | 4 | 0.20 | - | | | | | | | 764X-1.8-R20 | ■ | ■ | ■ | ■ | ■ | | | |
| 2.0 | 4 | 0 | 754X-2.0 | ■ | ■ | ■ | ■ | □ | ■ | 764X-2.0 | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| 2.0 | 4 | 0.08 | 754X-2.0-R08 | ■ | ■ | ■ | ■ | □ | ■ | 764X-2.0-R08 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 2.0 | 4 | 0.15 | - | | | | | | | 764X-2.0-R15 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 2.0 | 4 | 0.20 | 754X-2.0-R20 | ■ | ■ | ■ | ■ | □ | ■ | 764X-2.0-R20 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 2.0 | 4 | 0.35 | - | | | | | | | 764X-2.0-R35 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 2.5 | 6 | 0 | 754X-2.5 | ■ | ■ | ■ | ■ | ■ | ■ | 764X-2.5 | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| 2.5 | 6 | 0.15 | - | | | | | | | 764X-2.5-R15 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 2.5 | 6 | 0.20 | 754X-2.5-R20 | ■ | ■ | ■ | ■ | □ | ■ | 764X-2.5-R20 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 2.5 | 6 | 0.35 | - | | | | | | | 764X-2.5-R35 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 3.0 | 6 | 0 | 754X-3.0 | ■ | ■ | ■ | | | | 764X-3.0 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 3.0 | 6 | 0.08 | 754X-3.0-R08 | ■ | ■ | ■ | | | | 764X-3.0-R08 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 3.0 | 6 | 0.15 | - | | | | | | | 764X-3.0-R15 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 3.0 | 6 | 0.20 | 754X-3.0-R20 | ■ | ■ | ■ | | | | 764X-3.0-R20 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 3.0 | 6 | 0.35 | - | | | | | | | 764X-3.0-R35 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |
| 4.0 | 8 | 0 | 754X-4.0 | ■ | ■ | ■ | | | | 764X-4.0 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 4.0 | 8 | 0.20 | 754X-4.0-R20 | ■ | ■ | ■ | | | | 764X-4.0-R20 | ■ | ■ | ■ | ■ | ■ | | □ | ■ |
| 4.0 | 8 | 0.35 | - | | | | | | | 764X-4.0-R35 | ■ | ■ | ■ | □ | ■ | | ■ | ■ |

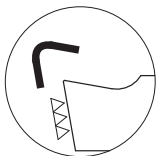


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



| E | L | R | Art. N° | TiAIN | TiAlX | LOX | TiN | N (µm20) |
|-----|---|------|------------------|-------|-------|-----|-----|----------|
| 1.5 | 3 | 0.08 | 764X5-1.5-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0.08 | 764X5-2.0-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 6 | 0.08 | 764X5-2.5-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 6 | 0.15 | 764X5-2.5-R15-EP | ■ | ■ | ■ | ■ | ■ |
| 3.0 | 6 | 0.08 | 764X5-3.0-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 3.0 | 6 | 0.15 | 764X5-3.0-R15-EP | ■ | ■ | ■ | ■ | ■ |
| 4.0 | 8 | 0.15 | 764X5-4.0-R15-EP | ■ | ■ | ■ | ■ | ■ |
| 4.0 | 8 | 0.35 | 764X5-4.0-R35-EP | ■ | ■ | ■ | ■ | ■ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge



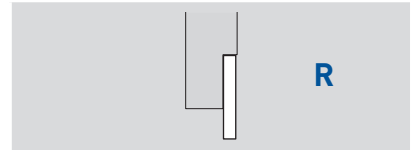
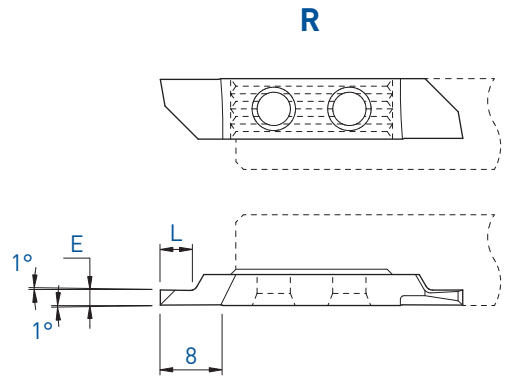
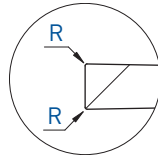
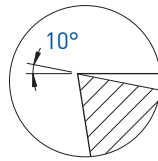
7XX-XX-B
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage

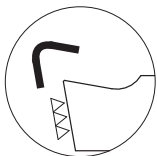
Einstecken und drehen

Grooving and turning

764X10-EP



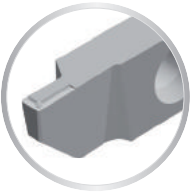
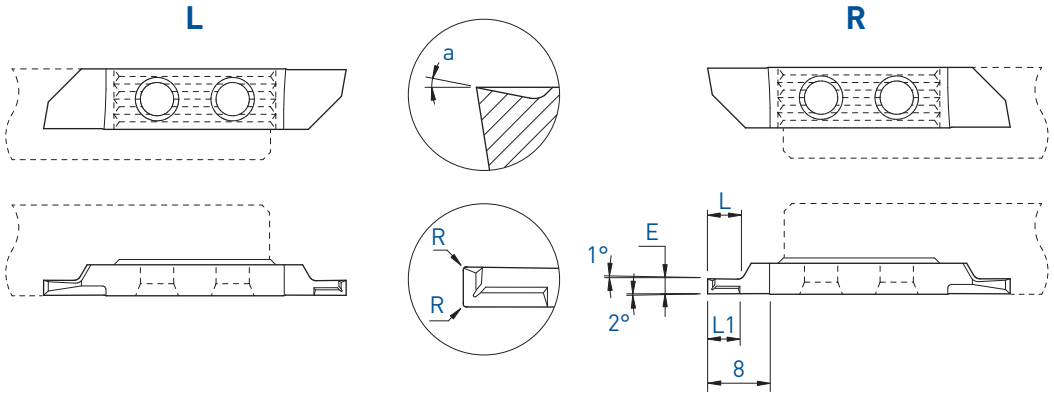
| E | L | R | Art. N° | TiAIN | TiAlX | LoX | TiN | N (µm20) |
|-----|---|------|-------------------|-------|-------|-----|-----|----------|
| 1.5 | 3 | 0.08 | 764X10-1.5-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 2.0 | 4 | 0.08 | 764X10-2.0-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 6 | 0.08 | 764X10-2.5-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 2.5 | 6 | 0.15 | 764X10-2.5-R15-EP | ■ | ■ | ■ | ■ | ■ |
| 3.0 | 6 | 0.08 | 764X10-3.0-R08-EP | ■ | ■ | ■ | ■ | ■ |
| 3.0 | 6 | 0.15 | 764X10-3.0-R15-EP | ■ | ■ | ■ | ■ | ■ |
| 4.0 | 8 | 0.15 | 764X10-4.0-R15-EP | ■ | ■ | ■ | ■ | ■ |
| 4.0 | 8 | 0.35 | 764X10-4.0-R35-EP | ■ | ■ | ■ | ■ | ■ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge



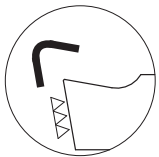
7XX-XX-B
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| a | E | L | L1 | R | Art. N° | L | | | | Art. N° | R | | | | | | |
|-----|-----|---|----|------|-----------------|-------|-----|----------|-----|-----------------|-----|------|-----------|-------|-------|-----|----------|
| | | | | | | TiAlN | TiN | N (µk20) | HTA | | HAS | HTiN | HN (µk10) | TiAlN | TiAlX | TiN | N (µk20) |
| 10° | 1.5 | 4 | 4 | 0.03 | 754ZX10-1.5-R03 | ■ | □ | | | 764ZX10-1.5-R03 | ■ | ■ | ■ | | | | |
| | 1.5 | 4 | 4 | 0.08 | 754ZX10-1.5-R08 | ■ | □ | | | 764ZX10-1.5-R08 | ■ | ■ | ■ | | | | |
| | 2.0 | 4 | 4 | 0.08 | 754ZX10-2.0-R08 | ■ | □ | | | 764ZX10-2.0-R08 | ■ | ■ | ■ | | | | |
| | 2.0 | 4 | 4 | 0.20 | - | | | | | 764ZX10-2.0-R20 | ■ | ■ | □ | | | | |
| | 2.5 | 5 | 5 | 0.08 | 754ZX10-2.5-R08 | ■ | ■ | | | 764ZX10-2.5-R08 | ■ | ■ | ■ | | | | |
| | 2.5 | 5 | 5 | 0.20 | - | | | | | 764ZX10-2.5-R20 | ■ | ■ | ■ | | | | |
| | 3.0 | 6 | 6 | 0.08 | 754ZX10-3.0-R08 | ■ | □ | | | 764ZX10-3.0-R08 | ■ | ■ | ■ | | | | |
| | 3.0 | 6 | 6 | 0.20 | - | | | | | 764ZX10-3.0-R20 | ■ | ■ | ■ | | | | |
| 25° | 4.0 | 6 | 6 | 0.20 | - | | | | | 764ZX10-4.0-R20 | ■ | ■ | □ | | | | |
| | 2.0 | 4 | 4 | 0.08 | - | | | | | 764ZX25-2.0-R08 | | | | ■ | ■ | □ | |
| | 2.0 | 4 | 4 | 0.20 | - | | | | | 764ZX25-2.0-R20 | | | | ■ | ■ | □ | |
| | 2.5 | 5 | 5 | 0.08 | - | | | | | 764ZX25-2.5-R08 | | | | ■ | ■ | □ | |
| | 2.5 | 5 | 5 | 0.20 | - | | | | | 764ZX25-2.5-R20 | | | | ■ | ■ | □ | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



7XX-XX-B

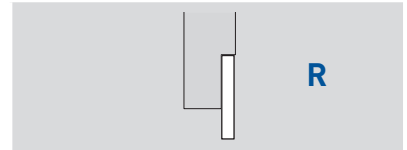
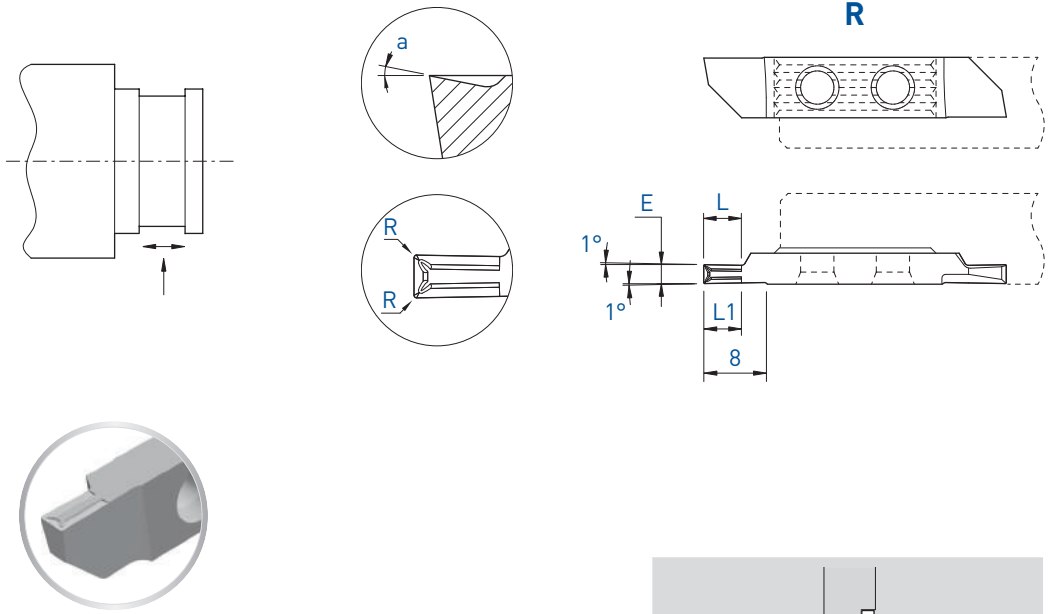
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage

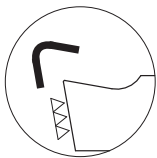
Einstechen und drehen

Grooving and turning

764ZXB



| a | E | L | L1 | R | Art. N° | TiAIN | TiAlX | LoX | TiN | N (µm20) |
|-----|-----|---|------|------------------|------------------|-------|-------|-----|-----|----------|
| 10° | 1.5 | 4 | 4 | 0.08 | 764ZXB10-1.5-R08 | ■ | ■ | ■ | □ | |
| | 2.0 | 4 | 4 | 0.08 | 764ZXB10-2.0-R08 | ■ | ■ | ■ | □ | |
| | 2.0 | 4 | 4 | 0.15 | 764ZXB10-2.0-R15 | ■ | ■ | ■ | □ | |
| | 2.0 | 4 | 4 | 0.35 | 764ZXB10-2.0-R35 | ■ | ■ | ■ | □ | |
| | 2.5 | 5 | 5 | 0.08 | 764ZXB10-2.5-R08 | ■ | ■ | ■ | □ | |
| | 2.5 | 5 | 5 | 0.15 | 764ZXB10-2.5-R15 | ■ | ■ | ■ | □ | |
| | 2.5 | 5 | 5 | 0.35 | 764ZXB10-2.5-R35 | ■ | ■ | ■ | □ | |
| | 3.0 | 6 | 6 | 0.08 | 764ZXB10-3.0-R08 | ■ | ■ | ■ | □ | |
| | 3.0 | 6 | 6 | 0.15 | 764ZXB10-3.0-R15 | ■ | ■ | ■ | □ | |
| 3.0 | 6 | 6 | 0.35 | 764ZXB10-3.0-R35 | ■ | ■ | ■ | □ | | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

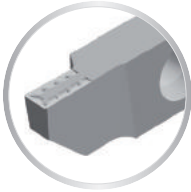
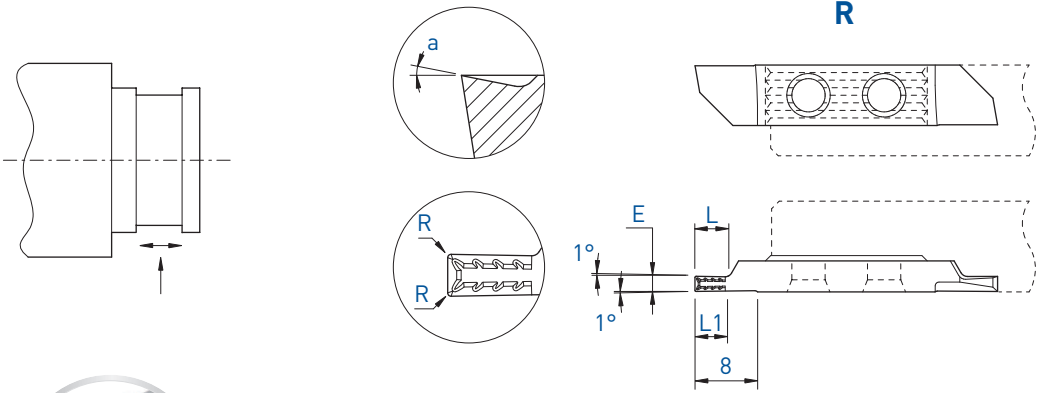
f min: 0.02 mm/U



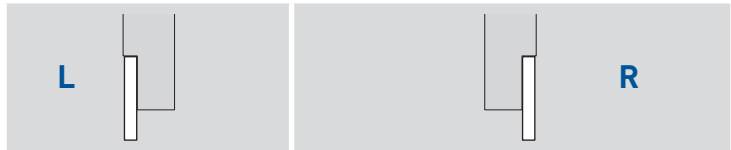
7XX-XX-B

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

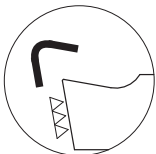
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| a | E | L | L1 | R | Art. N° | L | | | R | | | | HTA | HN (µk10) | |
|-----|-----|---|------|------|------------------|-------|-----|------------------|------------------|-------|-----|-----|-----|-----------|----------|
| | | | | | | TiAlN | TiN | N (µk20) | TiAlN | TiAlX | LOX | TiN | | | N (µk20) |
| 10° | 1.5 | 4 | 4 | 0.03 | - | | | | 764ZXT10-1.5-R03 | ■ | ■ | ■ | □ | | |
| | 1.5 | 4 | 4 | 0.08 | 754ZXT10-1.5-R08 | ■ | □ | | 764ZXT10-1.5-R08 | ■ | ■ | ■ | □ | | |
| | 1.5 | 4 | 4 | 0.20 | 754ZXT10-1.5-R20 | ■ | | | - | | | | | | |
| | 2.0 | 4 | 4 | 0.08 | 754ZXT10-2.0-R08 | ■ | □ | | 764ZXT10-2.0-R08 | ■ | ■ | ■ | □ | | |
| | 2.0 | 4 | 4 | 0.20 | 754ZXT10-2.0-R20 | ■ | | | 764ZXT10-2.0-R20 | ■ | ■ | ■ | □ | | |
| | 2.0 | 4 | 4 | 0.40 | - | | | | 764ZXT10-2.0-R40 | ■ | ■ | ■ | | | |
| | 2.5 | 5 | 5 | 0.08 | 754ZXT10-2.5-R08 | ■ | □ | | 764ZXT10-2.5-R08 | ■ | ■ | ■ | □ | | |
| | 2.5 | 5 | 5 | 0.20 | 754ZXT10-2.5-R20 | ■ | | | 764ZXT10-2.5-R20 | ■ | ■ | ■ | □ | | |
| | 2.5 | 5 | 5 | 0.40 | - | | | | 764ZXT10-2.5-R40 | ■ | ■ | ■ | | | |
| | 3.0 | 6 | 6 | 0.08 | 754ZXT10-3.0-R08 | ■ | □ | | 764ZXT10-3.0-R08 | ■ | ■ | ■ | □ | | |
| | 3.0 | 6 | 6 | 0.20 | - | | | | 764ZXT10-3.0-R20 | ■ | ■ | ■ | □ | ■ | |
| | 3.0 | 6 | 6 | 0.40 | - | | | | 764ZXT10-3.0-R40 | ■ | ■ | ■ | □ | | |
| | 4.0 | 8 | 8 | 0.20 | - | | | | 764ZXT10-4.0-R20 | ■ | ■ | ■ | □ | | |
| | 4.0 | 8 | 8 | 0.40 | - | | | | 764ZXT10-4.0-R40 | ■ | ■ | ■ | □ | | |
| 4.0 | 8 | 8 | 0.80 | - | | | | 764ZXT10-4.0-R80 | ■ | ■ | ■ | | | | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



7XX-XX-B

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Filetage

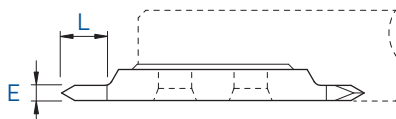
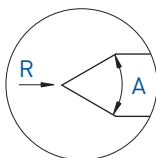
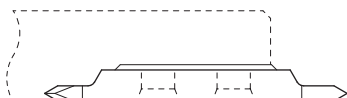
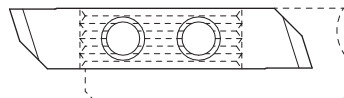
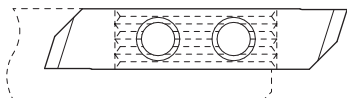
Gewinde drehen

Threading

756 / 766

L

R



L



R



| A | E | L | R | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) |
|-----|-----|---|------|----------------|-------|-----|----------|-----|------|-----------|----------------|-------|-----|----------|-----|------|-----------|
| 60° | 2.0 | 6 | - | 756-60-2.0 | ■ | ■ | ■ | | | | 766-60-2.0 | ■ | ■ | ■ | | | |
| 60° | 2.0 | 6 | 0.02 | 756-60-2.0-R02 | ■ | ■ | ■ | ■ | □ | ■ | 766-60-2.0-R02 | ■ | ■ | ■ | ■ | □ | ■ |
| 60° | 3.0 | 8 | - | 756-60-3.0 | ■ | ■ | ■ | | | | 766-60-3.0 | ■ | ■ | ■ | | | |
| 60° | 3.0 | 8 | 0.02 | 756-60-3.0-R02 | ■ | ■ | ■ | ■ | □ | ■ | 766-60-3.0-R02 | ■ | ■ | ■ | ■ | □ | ■ |
| 55° | 2.0 | 6 | - | 756-55-2.0 | ■ | ■ | ■ | | | | 766-55-2.0 | ■ | ■ | ■ | | | |
| 55° | 2.0 | 6 | 0.02 | 756-55-2.0-R02 | ■ | ■ | ■ | | | | 766-55-2.0-R02 | ■ | ■ | ■ | | | |
| 55° | 3.0 | 8 | - | 756-55-3.0 | ■ | ■ | ■ | | | | 766-55-3.0 | ■ | ■ | ■ | | | |
| 55° | 3.0 | 8 | 0.02 | 756-55-3.0-R02 | ■ | ■ | ■ | | | | 766-55-3.0-R02 | ■ | ■ | ■ | | | |

7XX-XX-B

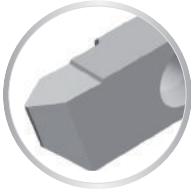
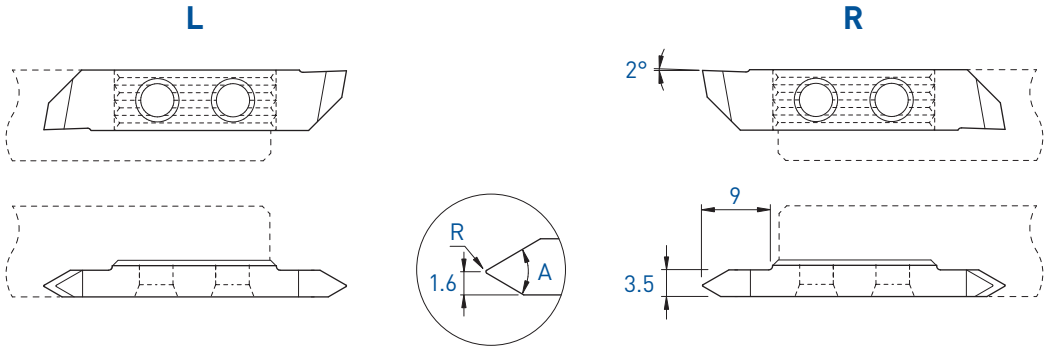


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

- Filetage
- Gewinde drehen
- Threading

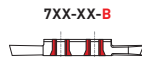
756-AG60° / 766-AG60°
756-G60° / 766-G60°



Profil partiel
Teilprofil
Partial profile



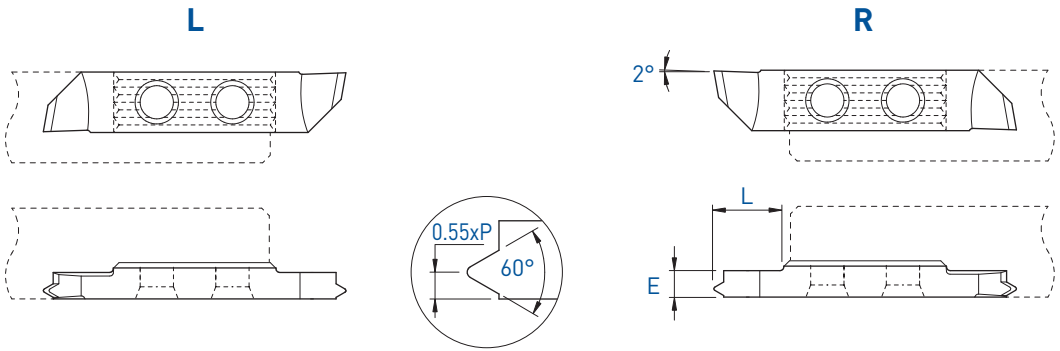
| A | R | Pas Steigung Pitch P | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
|-----|------|-------------------------------|-----------|-------|-----|----------|-----------|-------|-----|----------|
| 60° | 0.06 | 0.50-1.50 | 756-AG60° | ■ | ■ | ■ | 766-AG60° | ■ | ■ | ■ |
| 60° | 0.20 | 1.75-3.00 | 756-G60° | ■ | ■ | ■ | 766-G60° | ■ | ■ | ■ |



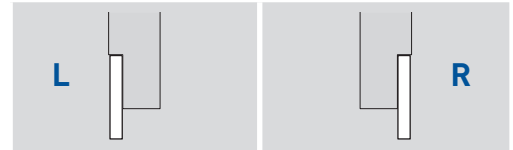
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Filetage
Gewinde drehen
Threading

756-M / 766-M



Profil complet métrique
Metrisches Vollprofil
Metric full profile



| E | L | Pas Steigung Pitch P | L | | | R | | | | |
|-----|---|-------------------------------|------------|-------|-----|----------|------------|-------|-----|----------|
| | | | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
| 2.5 | 8 | 0.80 | 756-M-0.80 | ■ | ■ | ■ | 766-M-0.80 | ■ | ■ | ■ |
| 2.5 | 8 | 1.00 | 756-M-1.00 | ■ | ■ | ■ | 766-M-1.00 | ■ | ■ | ■ |
| 2.5 | 8 | 1.25 | 756-M-1.25 | ■ | ■ | ■ | 766-M-1.25 | ■ | ■ | ■ |
| 3.5 | 9 | 1.50 | 756-M-1.50 | ■ | ■ | ■ | 766-M-1.50 | ■ | ■ | ■ |
| 3.5 | 9 | 1.75 | 756-M-1.75 | ■ | ■ | ■ | 766-M-1.75 | ■ | ■ | ■ |
| 3.5 | 9 | 2.00 | 756-M-2.00 | ■ | ■ | ■ | 766-M-2.00 | ■ | ■ | ■ |

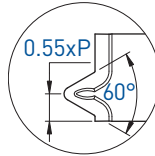
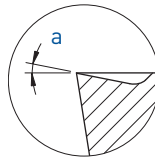
Pour de plus petits pas, voir page 1.65
Für kleinere Steigungen, siehe Seite 1.65
For smaller pitches, see page 1.65



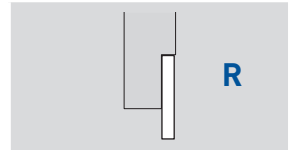
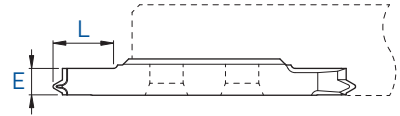
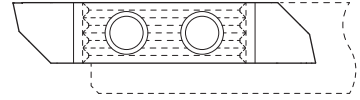
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

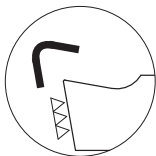
new



R



| a | E | L | P | Art. N° | TiAIN | LOX |
|-----|-----|---|------|-----------------------|-------|-----|
| 10° | 2.5 | 8 | 0.80 | 766ZX10-M-0.80 | ■ | □ |
| | 2.5 | 8 | 1.00 | 766ZX10-M-1.00 | ■ | □ |
| | 2.5 | 8 | 1.25 | 766ZX10-M-1.25 | ■ | □ |
| | 3.5 | 9 | 1.50 | 766ZX10-M-1.50 | ■ | □ |
| | 3.5 | 9 | 1.75 | 766ZX10-M-1.75 | ■ | □ |
| | 3.5 | 9 | 2.00 | 766ZX10-M-2.00 | ■ | □ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

7XX-XX-B

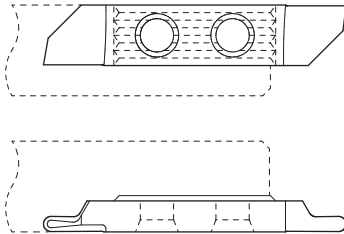


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

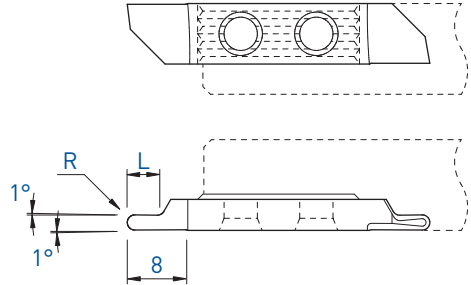
Plaquettes à rayon
 Radius Wendeplatten
 Radius inserts

757 / 767

L



R



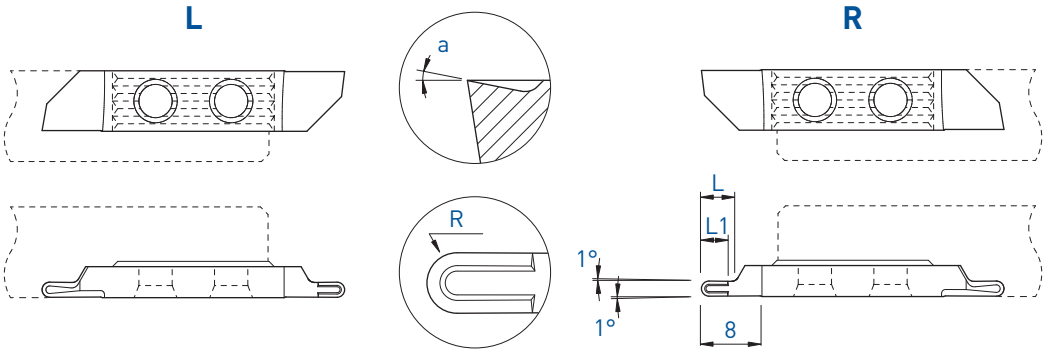
| R | L | Art. N° | TiAlN | | | Art. N° | TiN | | |
|-----|-----|----------|-------|----|---|----------|-----|----|---|
| | | | Ti | Al | N | | Ti | Al | N |
| 0.5 | 2.5 | 757-R0.5 | ■ | ■ | ■ | 767-R0.5 | ■ | ■ | ■ |
| 1.0 | 4 | 757-R1.0 | ■ | ■ | ■ | 767-R1.0 | ■ | ■ | ■ |
| 1.5 | 6 | 757-R1.5 | ■ | ■ | ■ | 767-R1.5 | ■ | ■ | ■ |
| 2.0 | 8 | 757-R2.0 | ■ | ■ | ■ | 767-R2.0 | ■ | ■ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Pour un meilleur contrôle des copeaux
 Für eine bessere Spankontrolle
 For a better chip-control

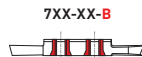


| a | R | L | L1 | Art. N° | L | | | Art. N° | R | | | |
|-----|-----|---|-----|--------------|-------|-----|----------|--------------|-------|-----|----------|-----|
| | | | | | TiAlN | TiN | N (µk20) | | TiAlN | TiN | N (µk20) | HTA |
| 10° | 1.0 | 4 | 3.5 | 757ZX10-R1.0 | ■ | □ | | 767ZX10-R1.0 | ■ | □ | | |
| | 1.5 | 6 | 4.0 | 757ZX10-R1.5 | ■ | □ | | 767ZX10-R1.5 | ■ | □ | | |
| | 2.0 | 8 | 4.5 | 757ZX10-R2.0 | ■ | □ | | 767ZX10-R2.0 | ■ | □ | ■ | |



Arête de coupe honée
 Gehonte Schneidkante
 Honed edge

f min: 0.02 mm/U

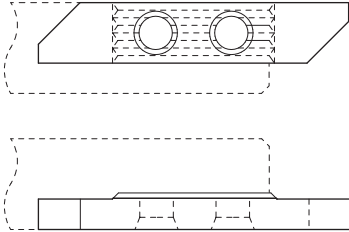


7XX-XX-B Sur demande pour serrage type B, voir page 1.03
 Wahlweise mit B-Spannsystem, siehe Seite 1.03
 On request for B clamping system, see page 1.03

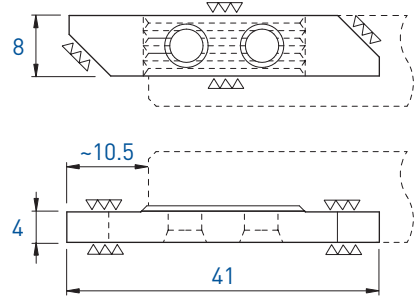
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

751-E / 761-E
751-EP / 761-EP

L



R



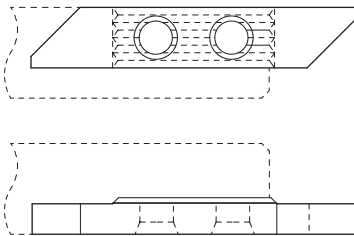
| L | | R | |
|---------|-----------------------|---------|-----------------------|
| Art. N° | N (µk20) HN (µk10) | Art. N° | N (µk20) HN (µk10) |
| 751-E | ■ ■ | 761-E | ■ ■ |

7XX-XX-B

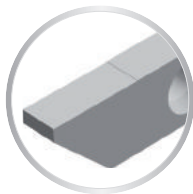
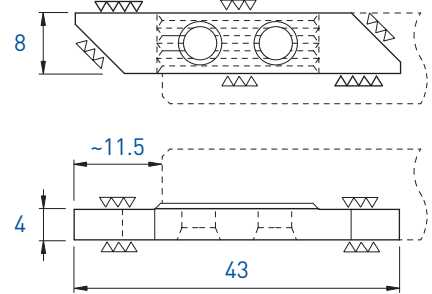
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03



L



R



| L | | | | | R | | | | |
|---------|-------|-----|----------|--------------------------|---------|-------|-----|----------|--------------------------|
| Art. N° | TiAlN | TiN | N (µk20) | HTA HTiN HN (µk10) | Art. N° | TiAlN | TiN | N (µk20) | HTA HTiN HN (µk10) |
| 751-EP | ■ | ■ | ■ | □ □ ■ | 761-EP | ■ | ■ | ■ | ■ □ ■ |

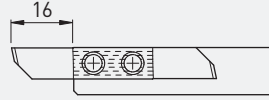
Face de coupe polie
Polierte Schneidfläche
Polished cutting face

770 / 780
7050 / 7060
W750 / W760

Porte-outils spécifiques
Spezifische Werkzeughalter
Specific tool holders

770 / 780

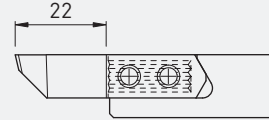
Tronçonnage de grande capacité
Abstechen für grössere Durchmesser
High capacity parting



> **1.133**

7050 / 7060

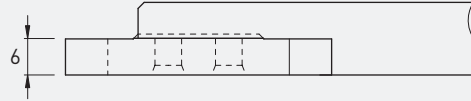
Tronçonnage de grande capacité
Abstechen für grössere Durchmesser
High capacity parting



> **1.143**

W750 / W760

Outils avec plaquettes ébauches larges pour profilage
Werkzeuge mit breiten WSP-Rohlingen für Profilschleifen
Tools with wide blank inserts for profiling



> **1.149**

Porte-outils spécifiques / Spezifische Werkzeughalter / Specific tool holders

POLYGONAL INTERFACE C3 / C4 / HSK

> **1.153**

740Z / 760Z

Porte-outils pour usinage déporté
Halter für versetzte Bearbeitung
Holders for shifted machining

> **1.156**

DECO 7/10 - EvoDECO 10

R

> **1.157**

DECO 7/10 - EvoDECO 10

L

> **1.159**

Tornos

DECO 13 - EvoDECO 16
DECO 20/26 - EvoDECO 20/32

> **1.161**

MultiSwiss 6x16

> **1.163**

AS14 / SAS16

> **1.164**

Schütte

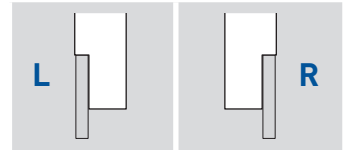
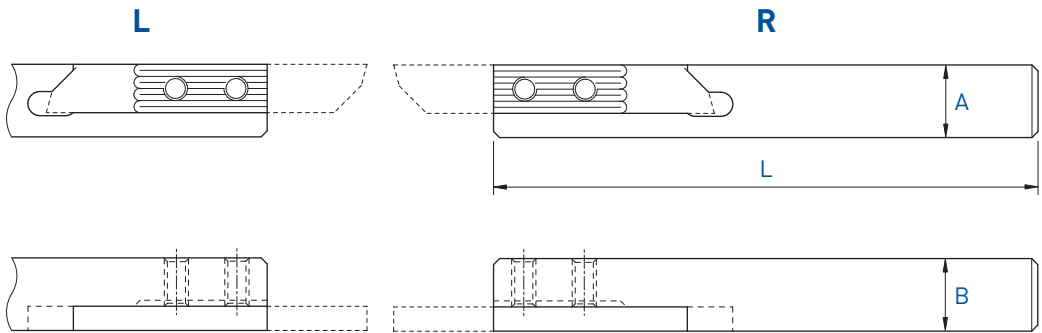
> **1.165**

Porte-outils

Halter

Holders

770 / 780



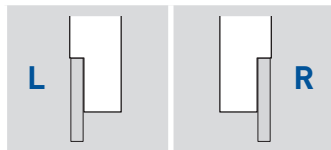
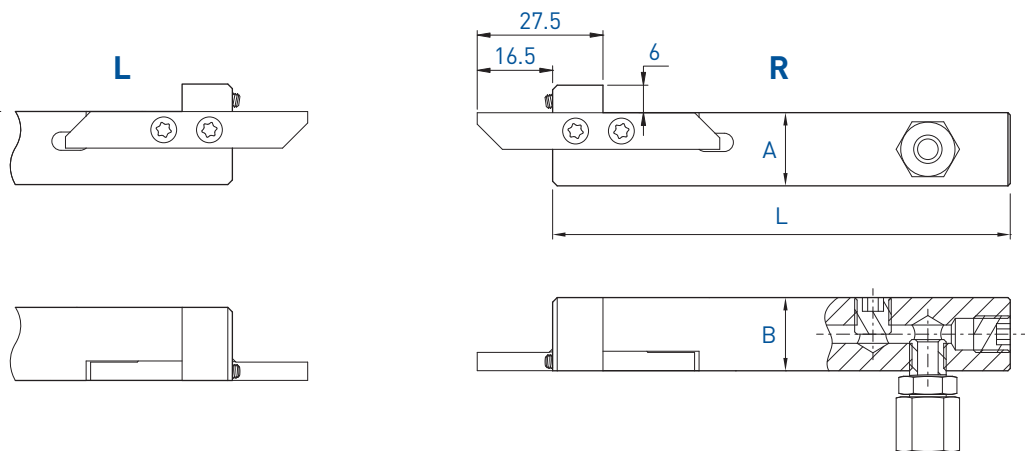
| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|-------------|-----|------------------------------------|------------------|------------------|
| 10 x 10 | 115 | A | 770-10 | 780-10 |
| 12 x 12 | 130 | A | 770-12 | 780-12 |
| 12 x 12 | 90 | A | 770-12-90 | 780-12-90 |
| 12.7 x 12.7 | 130 | A | 770-12.7 | 780-12.7 |
| 14 x 14 | 130 | A | 770-14 | 780-14 |
| 16 x 16 | 130 | A | 770-16 | 780-16 |
| 16 x 16 | 75 | A | 770-16-75 | 780-16-75 |
| 20 x 20 | 120 | A | 770-20 | 780-20 |
| 25 x 25 | 140 | A | 770-25 | 780-25 |



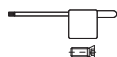
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

770-JET / 780-JET



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|------------|------------|
| 16 x 16 | 100 | A | 770-16-JET | 780-16-JET |



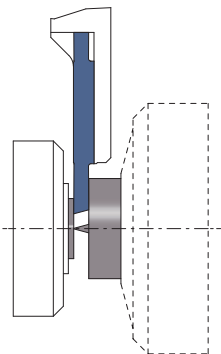
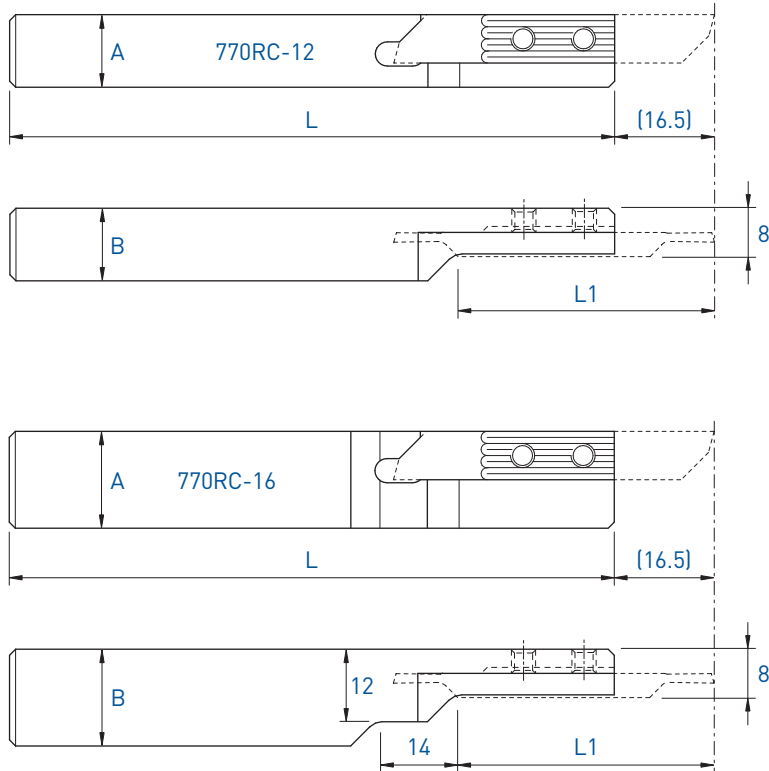
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n)
 und Schlüssel geliefert.
 Screw(s) and key are included with each
 tool holder.

| Pièces de rechange Ersatzteile Spare parts | Art. N° | Art. N° | Buse Düse Nozzle Art. N° |
|--|-----------|---------|-----------------------------------|
| 770-JET / 780-JET | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 |

Porte-outils
Halter
Holders


Coupe déportée
Versetzttes Schneiden
Cut off line

770RC



Utiliser des plaquettes type 771R
WSP Typ 771R verwenden
Use inserts type 771R

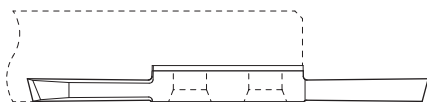
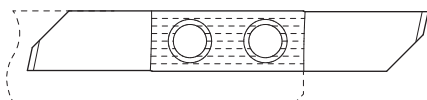
Voir pages 1.138 - 1.141
Siehe Seiten 1.138 - 1.141
See pages 1.138 - 1.141

|  L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line | | | | |
|---|-----|----|------------------------------------|-----------------|
| A x B | L | L1 | Serrage Spannsystem Clamping | Art. N° |
| 12 x 12 | 130 | 42 | A | 770RC-12 |
| 16 x 16 | 130 | 42 | A | 770RC-16 |

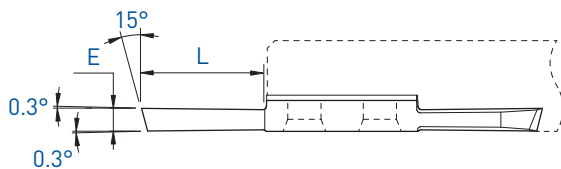
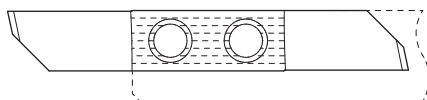


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

L



R



L



R



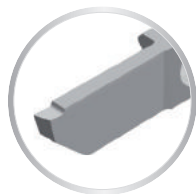
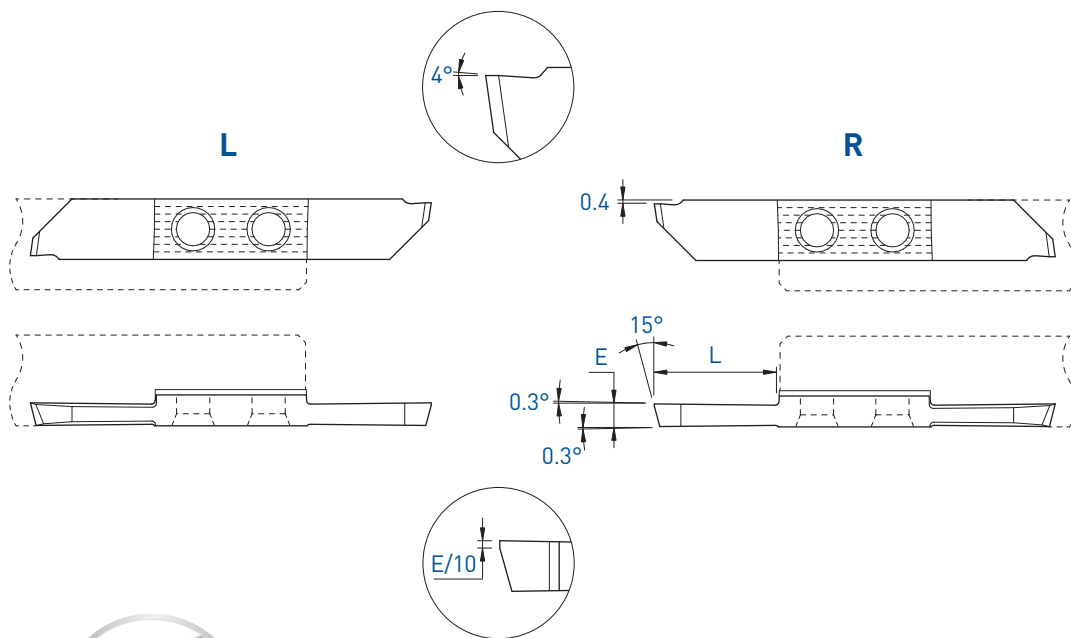
| E | L | Art. N° | L | | | Art. N° | R | | |
|-----|----|---------|-------|-----|----------|---------|-------|-----|----------|
| | | | TiAlN | TiN | N (µk20) | | TiAlN | TiN | N (µk20) |
| 1.5 | 16 | - | | | | 781-1.5 | ■ | ■ | ■ |
| 2.0 | 16 | 771-2.0 | ■ | ■ | ■ | 781-2.0 | ■ | ■ | ■ |
| 2.5 | 16 | 771-2.5 | ■ | ■ | ■ | 781-2.5 | ■ | ■ | ■ |
| 3.0 | 16 | 771-3.0 | ■ | ■ | ■ | 781-3.0 | ■ | ■ | ■ |
| 3.5 | 16 | 771-3.5 | ■ | ■ | ■ | 781-3.5 | ■ | ■ | ■ |

Tronçonnage

Abstechen

Parting off

771XF / 781XF



| E | L | L | | | R | | | | |
|-----|----|-----------|-------|-----|----------|-----------|-------|-----|----------|
| | | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) |
| 2.0 | 16 | - | | | | 781XF-2.0 | ■ | ■ | ■ |
| 2.5 | 16 | 771XF-2.5 | ■ | ■ | ■ | 781XF-2.5 | ■ | ■ | ■ |
| 3.0 | 16 | 771XF-3.0 | ■ | ■ | ■ | 781XF-3.0 | ■ | ■ | ■ |
| 3.5 | 16 | 771XF-3.5 | ■ | ■ | ■ | 781XF-3.5 | ■ | ■ | ■ |

Tronçonnage

Abstechen

Parting off

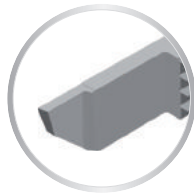
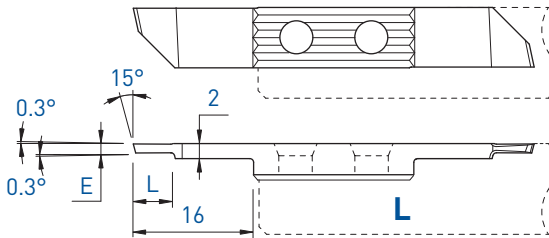
Coupe déportée

Versetztes Schneiden

Cut off line

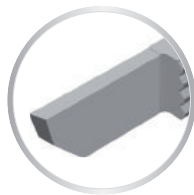
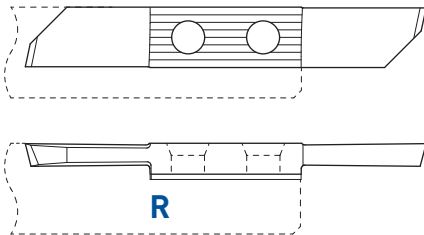
781L / 771R

Cut R

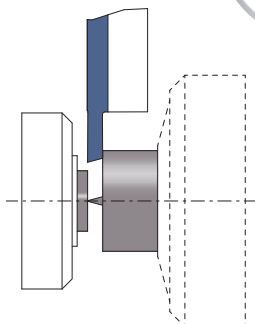
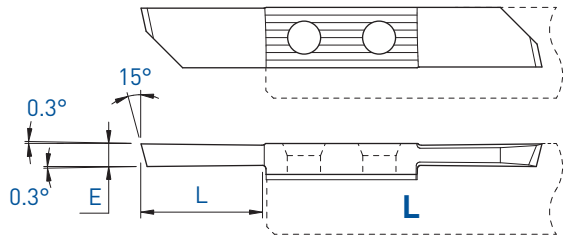


| L (R) | | | | | |
|---|-----|----------|-------|-----|----------|
| Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line | | | | | |
| E | L | Art. N° | TiAlN | TiN | N (µk20) |
| 1.0 | 5 | 771R-1.0 | ■ | ■ | ■ |
| 1.2 | 5 | 771R-1.2 | ■ | ■ | ■ |
| 1.5 | 8.5 | 771R-1.5 | ■ | ■ | ■ |

Cut L



Cut R



| R (L) | | | | | | L (R) | | | | | |
|---|----|----------|-------|-----|----------|---|-------|-----|----------|--|--|
| Coupe à gauche déportée Versetztes Linksschneiden Left cut off line | | | | | | Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line | | | | | |
| E | L | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) | | |
| 2.0 | 16 | 781L-2.0 | ■ | ■ | ■ | 771R-2.0 | ■ | ■ | ■ | | |
| 2.5 | 16 | 781L-2.5 | ■ | ■ | ■ | 771R-2.5 | ■ | ■ | ■ | | |
| 3.0 | 16 | 781L-3.0 | ■ | ■ | ■ | 771R-3.0 | ■ | ■ | ■ | | |
| 3.5 | 16 | 781L-3.5 | ■ | ■ | ■ | 771R-3.5 | ■ | ■ | ■ | | |

Tronçonnage

Abstechen

Parting off

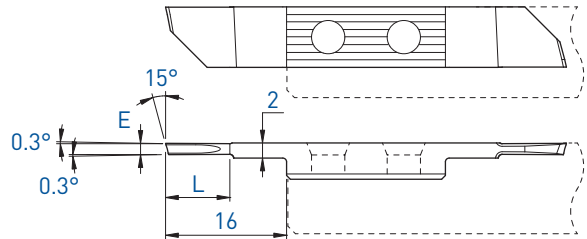
Coupe déportée

Versetztsschneiden

Cut off line

771RU

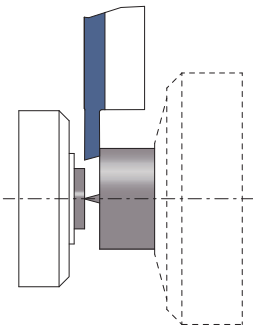
Cut R



L (R)

Coupe à droite déportée
Versetztsschneiden
Right cut off line

| E | L | Art. N° | TiAlN | TiN | N (µk20) |
|-----|-----|-----------|-------|-----|----------|
| 1.0 | 5 | 771RU-1.0 | ■ | □ | ■ |
| 1.5 | 8.5 | 771RU-1.5 | ■ | □ | ■ |



■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-LINE

Tronçonnage

Abstechen

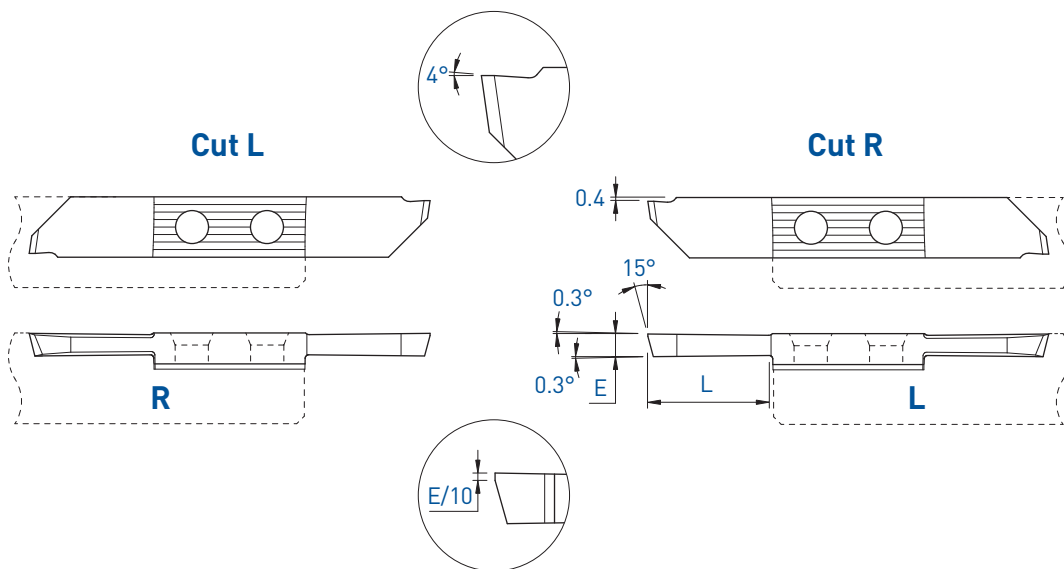
Parting off

Coupe déportée

Versetztes Schneiden

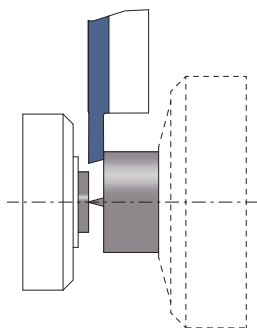
Cut off line

781LXF / 771RXF



| R (L) | | | | L (R) | | | |
|---|--|--|--|---|--|--|--|
| Coupe à gauche déportée Versetztes Linksschneiden Left cut off line | | | | Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line | | | |

| E | L | Art. N° | TiAlN | TiN | N (µk20) | Art. N° | TiAlN | TiN | N (µk20) |
|-----|----|------------|-------|-----|----------|------------|-------|-----|----------|
| 2.0 | 16 | - | | | | 771RXF-2.0 | ■ | ■ | ■ |
| 2.5 | 16 | 781LXF-2.5 | ■ | ■ | ■ | 771RXF-2.5 | ■ | ■ | ■ |
| 3.0 | 16 | 781LXF-3.0 | ■ | ■ | ■ | 771RXF-3.0 | ■ | ■ | ■ |
| 3.5 | 16 | 781LXF-3.5 | ■ | ■ | ■ | 771RXF-3.5 | ■ | ■ | ■ |



Tronçonnage

Abstechen

Parting off

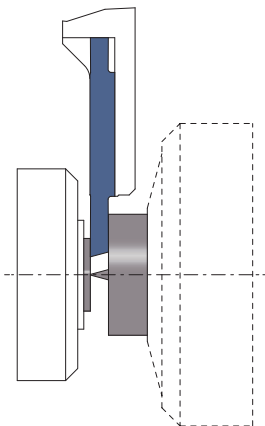
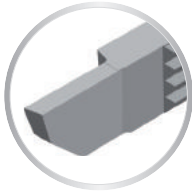
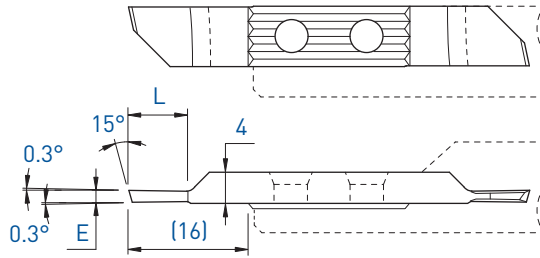
Coupe déportée

Versetzttes Schneiden

Cut off line

771RD

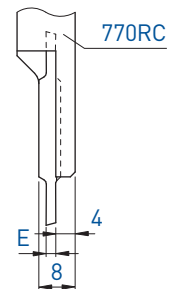
Cut R



L (R)

Coupe à droite déportée
Versetzttes Rechtsschneiden
Right cut off line

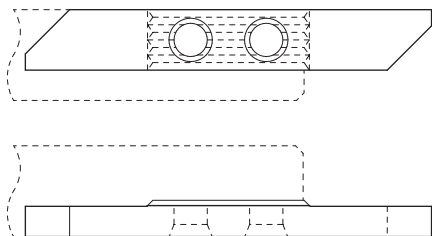
| E | L | Art. N° | TiAlN | TiN | N (µk20) |
|-----|-----|-----------|-------|-----|----------|
| 1.2 | 5 | 771RD-1.2 | ■ | ■ | ■ |
| 1.5 | 7.5 | 771RD-1.5 | ■ | ■ | ■ |
| 2.0 | 10 | 771RD-2.0 | ■ | ■ | ■ |



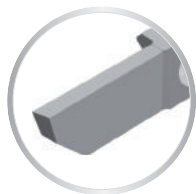
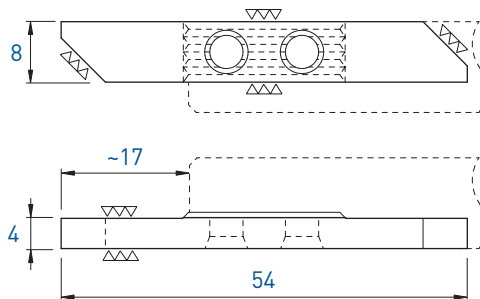
■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

L



R



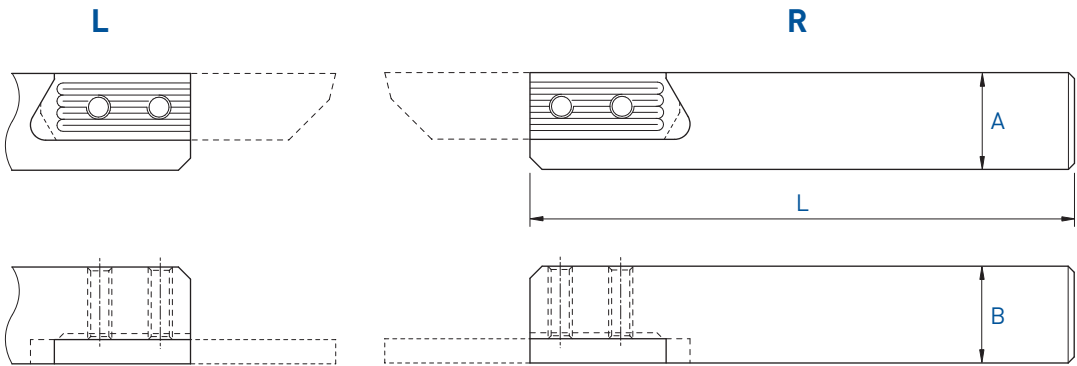
| L | | R | |
|----------|----------|----------|----------|
| Art. N° | N (µk20) | Art. N° | N (µk20) |
| 771-E | ■ | 781-E | ■ |

Porte-outils

Halter

Holders

7050 / 7060



| A x B | L | Serrage Spannsystem Clamping | | |
|---------|-----|------------------------------------|-------------------|-------------------|
| | | | Art. N° | Art. N° |
| 16 x 16 | 130 | A | 7050-16 | 7060-16 |
| 16 x 16 | 75 | A | 7050-16-75 | 7060-16-75 |
| 20 x 20 | 120 | A | 7050-20 | 7060-20 |
| 25 x 25 | 140 | A | 7050-25 | 7060-25 |



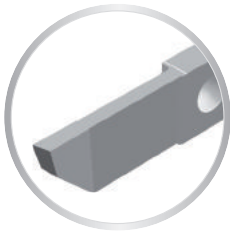
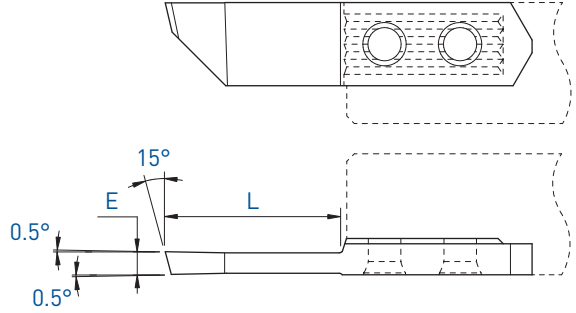
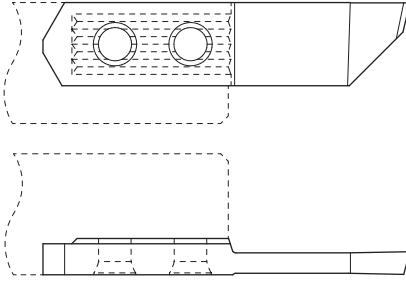
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

L

R



L

R

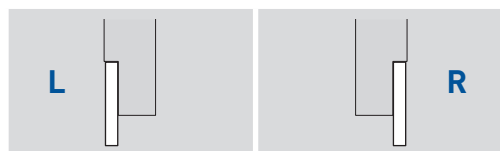
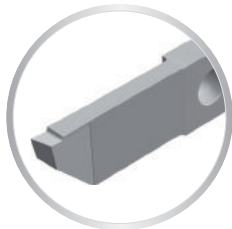
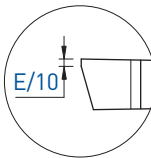
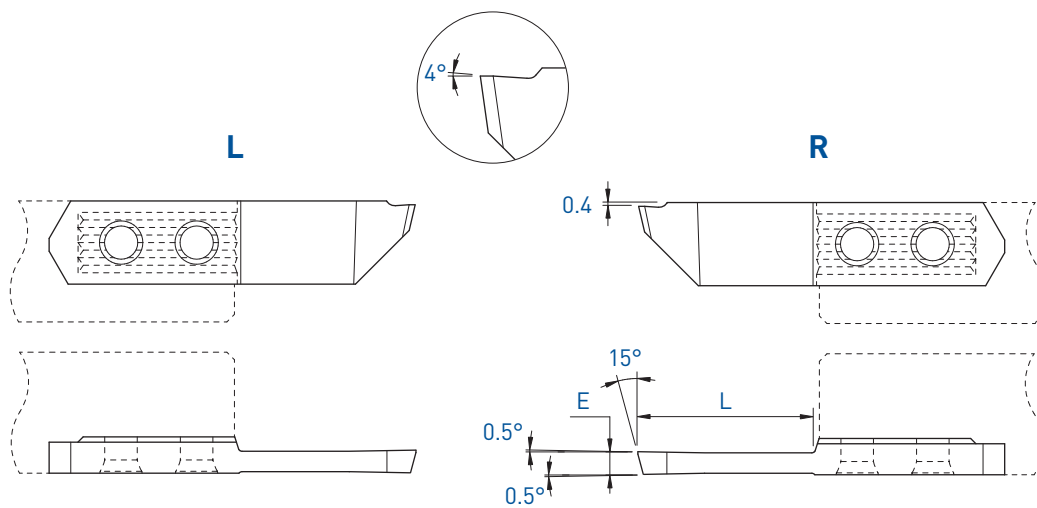
| E | L | L | | | R | | | | |
|-----|----|----------|-------|-----|----------|----------|-------|-----|----------|
| | | Art. N° | TiAlN | TiN | N [µk20] | Art. N° | TiAlN | TiN | N [µk20] |
| 2.5 | 22 | - | | | | 7061-2.5 | ■ | ■ | ■ |
| 3.0 | 22 | 7051-3.0 | ■ | ■ | ■ | 7061-3.0 | ■ | ■ | ■ |
| 3.5 | 22 | - | | | | 7061-3.5 | ■ | ■ | ■ |

Tronçonnage

Abstechen

Parting off

7051XF / 7061XF



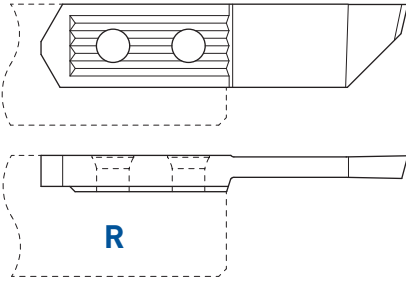
| E | L | Art. N° | TiAlN | TiN | N [µk20] | Art. N° | TiAlN | TiN | N [µk20] |
|-----|----|------------|-------|-----|----------|------------|-------|-----|----------|
| 3.0 | 22 | 7051XF-3.0 | ■ | ■ | ■ | 7061XF-3.0 | ■ | ■ | ■ |

Tronçonnage
Abstechen
Parting off

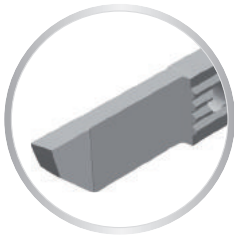
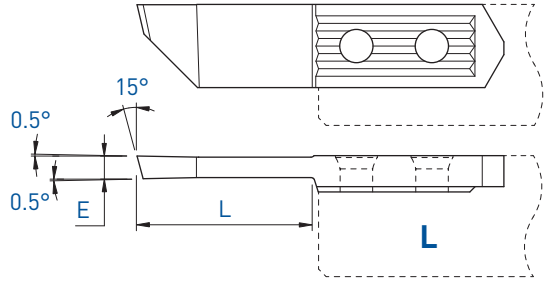
Coupe déportée
Versetztes Schneiden
Cut off line

7061L / 7051R

Cut L



Cut R



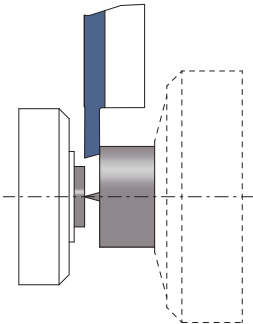
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

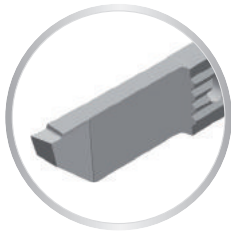
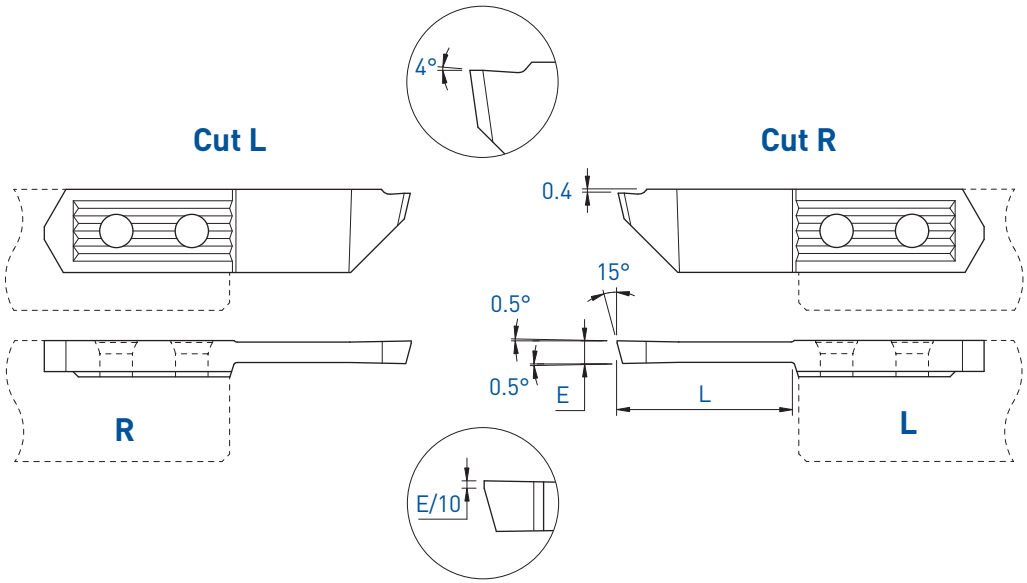
| E | L | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
|-----|----|-----------|-------|-----|----------|-----------|-------|-----|----------|
| 2.5 | 22 | - | | | | 7051R-2.5 | ■ | ■ | ■ |
| 3.0 | 22 | 7061L-3.0 | ■ | ■ | ■ | 7051R-3.0 | ■ | ■ | ■ |
| 3.5 | 22 | - | | | | 7051R-3.5 | ■ | ■ | ■ |



Tronçonnage
Abstechen
Parting off

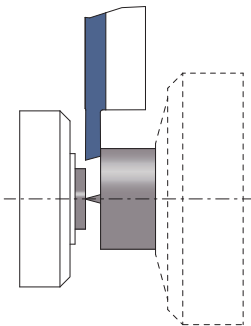
Coupe déportée
Versetztes Schneiden
Cut off line

7061LXF / 7051RXF



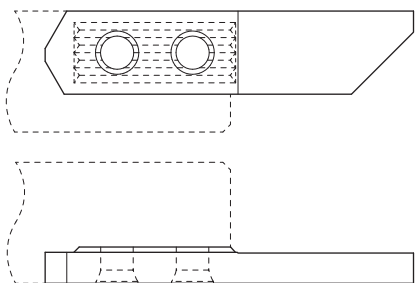
| R (L) | L (R) |
|---|---|
| Coupe à gauche déportée Versetztes Linksschneiden Left cut off line | Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line |

| E | L | Art. N° | TiAIN | TiN | N (µk20) | Art. N° | TiAIN | TiN | N (µk20) |
|-----|----|-------------|-------|-----|----------|-------------|-------|-----|----------|
| 3.0 | 22 | 7061LXF-3.0 | ■ | ■ | ■ | 7051RXF-3.0 | ■ | ■ | ■ |

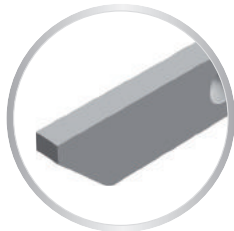
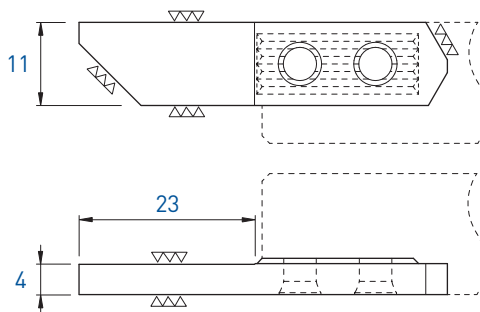


■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

L



R



| L | | R | |
|---------|----------|---------|----------|
| Art. N° | N (µk20) | Art. N° | N (µk20) |
| 7051-E | ■ | 7061-E | ■ |

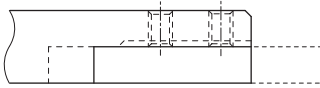
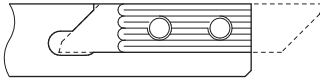
Porte-outils

Halter

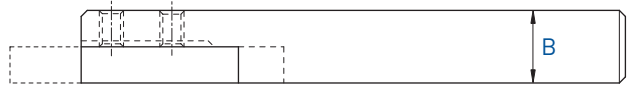
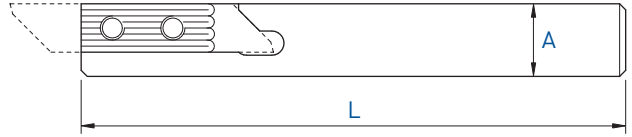
Holders

W750 / W760

L



R



L

R

| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|----------------|----------------|
| 12 x 12 | 130 | A | W750-12 | W760-12 |
| 16 x 16 | 130 | A | W750-16 | W760-16 |
| 20 x 20 | 120 | A | W750-20 | W760-20 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

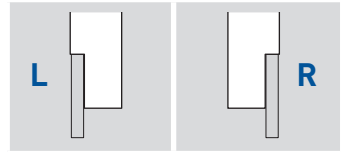
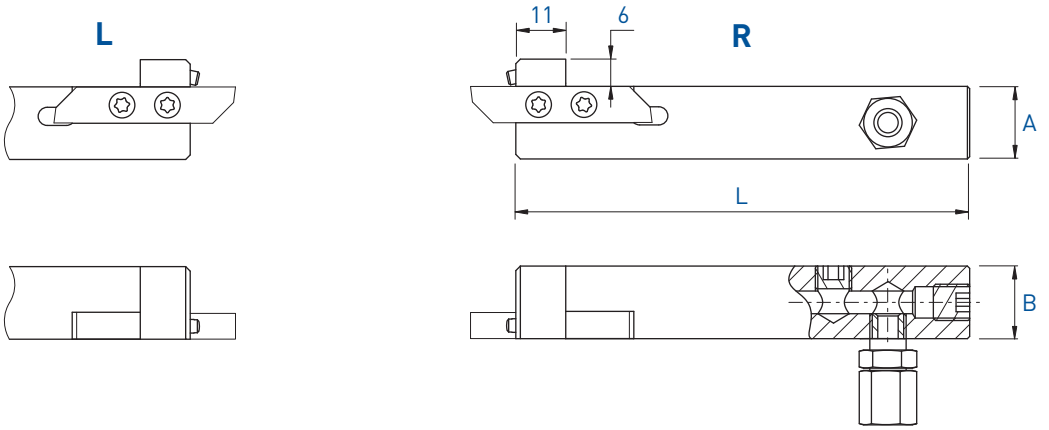
■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

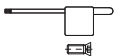
TOP-LINE

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

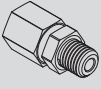


W750-JET / W760-JET



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|-------------|-------------|
| 16 x 16 | 100 | A | W750-16-JET | W760-16-JET |
| 20 x 20 | 100 | A | W750-20-JET | W760-20-JET |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n)
 und Schlüssel geliefert.
 Screw(s) and key are included with each
 tool holder.

| Pièces de rechange Ersatzteile Spare parts |  |  | Buse Düse Nozzle  |
|--|---|---|---|
| | Art. N° | Art. N° | Art. N° |
| W750-JET / W760-JET | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 |

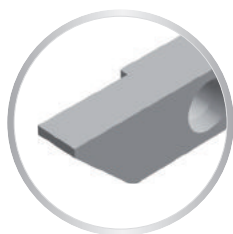
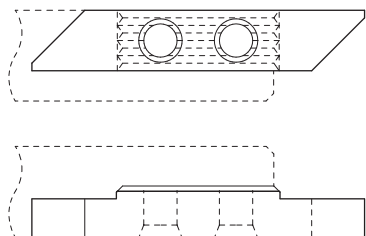
Plaquettes ébauches

WSP-Rohlinge

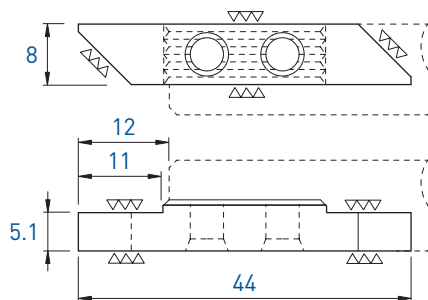
Blank inserts

W751-E5 / W761-E5
W751-EP5 / W761-EP5

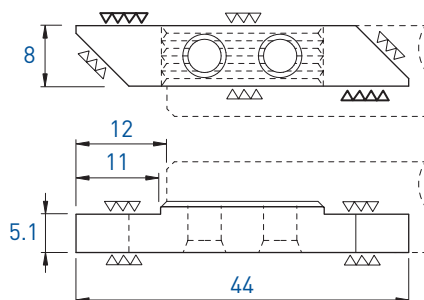
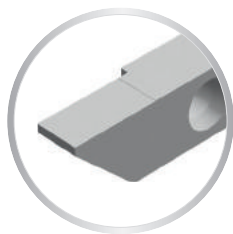
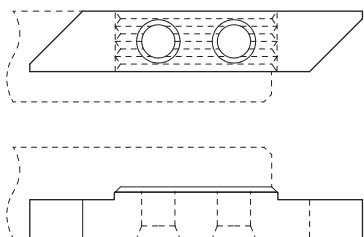
L



R



| | | | |
|---------|----------|---------|----------|
| L | | R | |
| Art. N° | N (µk20) | Art. N° | N (µk20) |
| W751-E5 | ■ | W761-E5 | ■ |

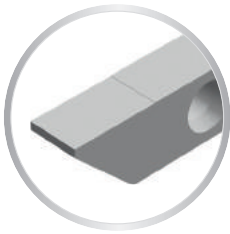
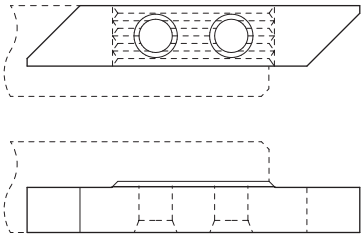
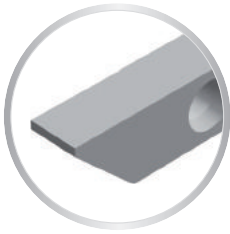
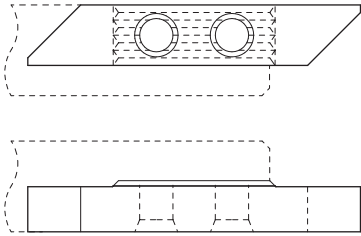


| | | | |
|----------|----------|----------|----------|
| L | | R | |
| Art. N° | N (µk20) | Art. N° | N (µk20) |
| W751-EP5 | ■ | W761-EP5 | ■ |

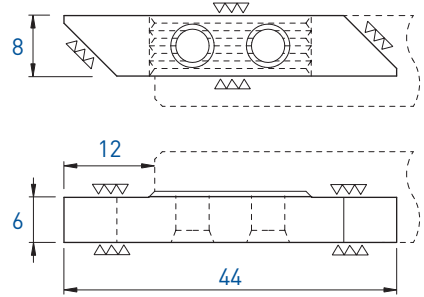
■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

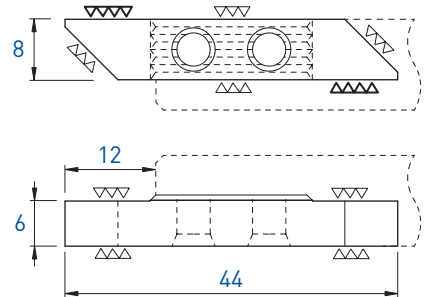
L



R



| | | | |
|---------|----------|---------|----------|
| L | | R | |
| Art. N° | N (µk20) | Art. N° | N (µk20) |
| W751-E6 | ■ | W761-E6 | ■ |

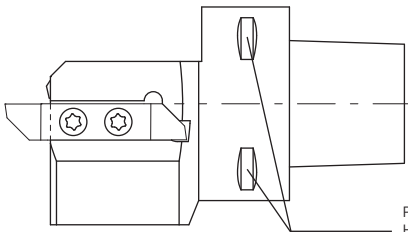
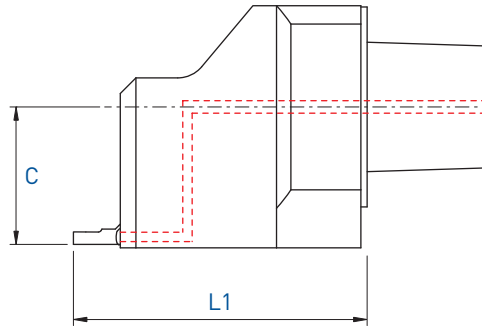
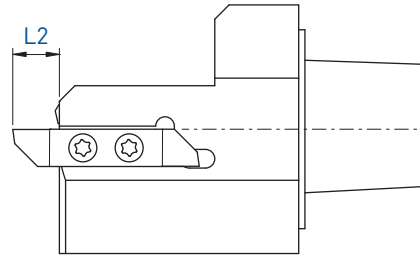
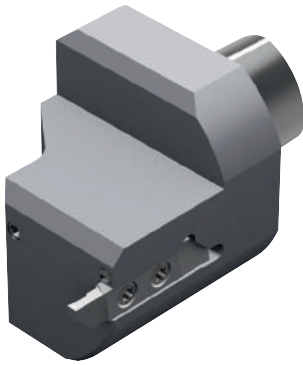


| | | | |
|----------|----------|----------|----------|
| L | | R | |
| Art. N° | N (µk20) | Art. N° | N (µk20) |
| W751-EP6 | ■ | W761-EP6 | ■ |

Interface polygonale PSC
 Polygonal Schnittstelle PSC
 Polygonal interface PSC

R

C3 / C4

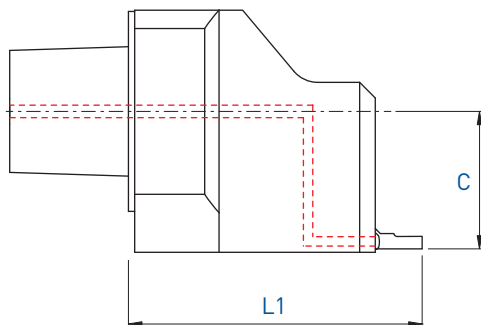
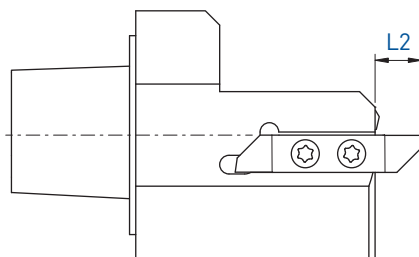


Porte-outils pour changeur automatique sur demande.
 Halter für Werkzeugwechsler auf Anfrage.
 Holders for tool changer on request.

| Type | Plaquettes type WSP Typ Insert type | Pages Seiten Pages | L1 | C | L2 | Art. N° | Buse Düse Nozzle |
|------|---|--------------------------|----|----|-----|---------------------|------------------------|
| | | | | | | | Art. N° |
| C3 | 740 | > 1.32 | 47 | 22 | 7.5 | C3-740-22047 | JJ-M3X6-D1.5 |
| C3 | 760 | > 1.78 | 47 | 22 | 10 | C3-760-22047 | JJ-M3X6-D1.5 |
| C4 | 760 | > 1.78 | 62 | 27 | 10 | C4-760-27062 | JJ-M3X6-D1.5 |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.



| Type | Plaquettes type WSP Typ Insert type | Pages Seiten Pages | L1 | C | L2 | Art. N° | Buse Düse Nozzle Art. N° |
|------|---|--------------------------|----|----|----|--------------|-----------------------------------|
| C4 | 750 | > 1.78 | 62 | 27 | 10 | C4-750-27062 | JJ-M3X6-D1.5 |



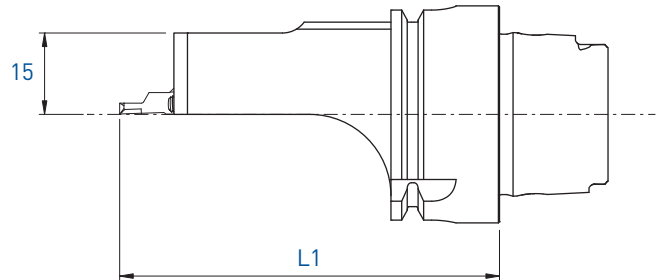
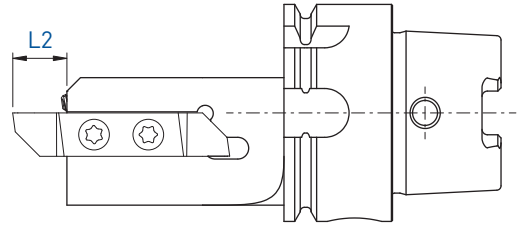
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils

Halter

Holders

HSK



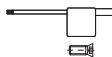
Utilisable sur toutes les machines avec broches HSK-T ou HSK-A

Auf allen Maschinen mit HSK-T oder HSK-A verwendbar

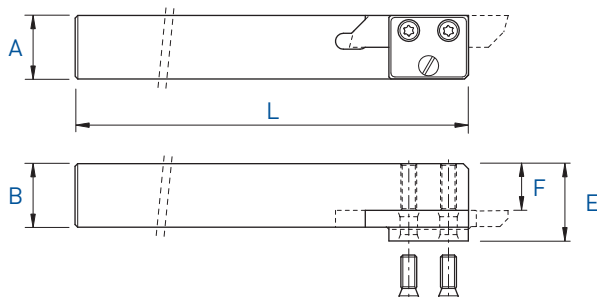
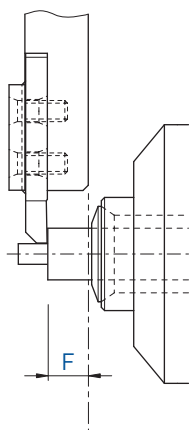
Applicable on all machines with HSK-T or HSK-A spindle

| Plaquettes type WSP Typ Insert type | Pages Seiten Pages | L1 | L2 | Art. N° | Buse Düse Nozzle |
|---|--------------------------|----|-----|--|------------------------|
| | | | | | Art. N° |
| 740 | > 1.32 | 65 | 7.5 | HSK-T40-740-0065-JET HSK-A40-S191-740-0065-JET* | JJ-M3X6-D1.5 |
| 760 | > 1.78 | 70 | 10 | HSK-T40-760-0070-JET HSK-A40-S191-760-0070-JET* | JJ-M3X6-D1.5 |

* pour machines Bumotec
für Bumotec Maschinen
for Bumotec machines



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

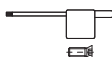


740 Series

| A x B | L | F | E | Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|---------|-----|------|------|----------------|--|--------------------------|
| 12 x 12 | 130 | 9.5 | 14.5 | 740Z-12 | 741 - 747 | > 1.32 |
| 16 x 16 | 130 | 13.5 | 18.5 | 740Z-16 | 741 - 747 | > 1.32 |

760 Series

| A x B | L | F | E | Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|---------|-----|----|----|----------------|--|--------------------------|
| 12 x 12 | 130 | 8 | 15 | 760Z-12 | 761 - 767 | > 1.78 |
| 16 x 16 | 130 | 12 | 19 | 760Z-16 | 761 - 767 | > 1.78 |



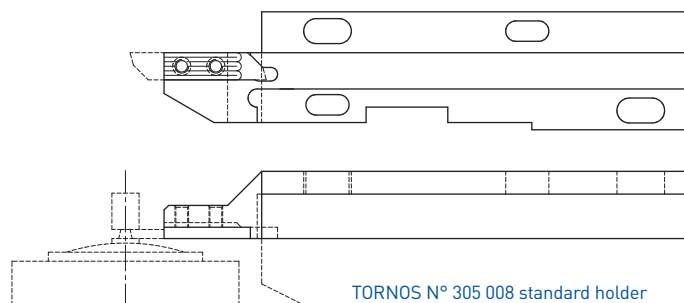
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos

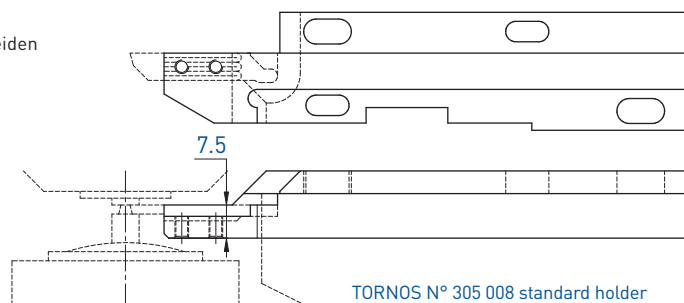
Halter für Tornos Maschine

Holders for Tornos machine

R

DECO 7/10
EvoDECO 10Coupe à droite
Rechtsschneiden
Right hand cut

| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|------------|--|--------------------------|
| 740-DECO10 | 741 - 747 | > 1.32 |

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-------------|--|--------------------------|
| 730R-DECO10 | 731R / 731N | 1.39 - 1.45 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos

Halter für Tornos Maschine

Holders for Tornos machine

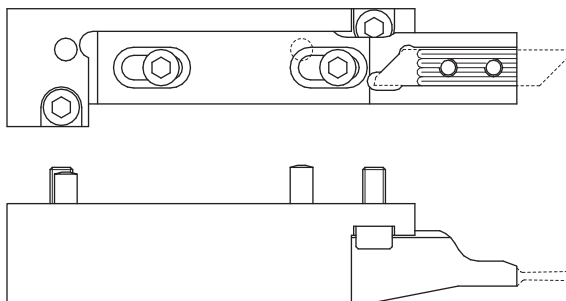
R

DECO 7/10
EvoDECO 10

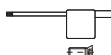
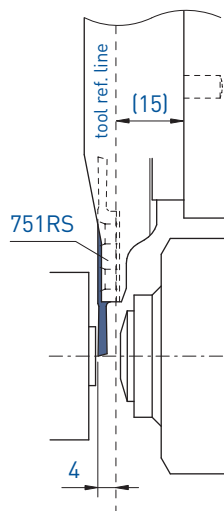
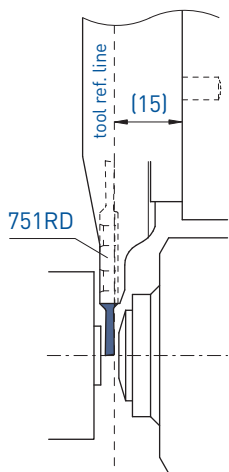
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Réglable en longueur
Längseinstellbar
Adjustable length



| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-------------|--|--------------------------|
| 750R-DECO10 | 751R / 751N | 1.88 - 1.99 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraubel(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos

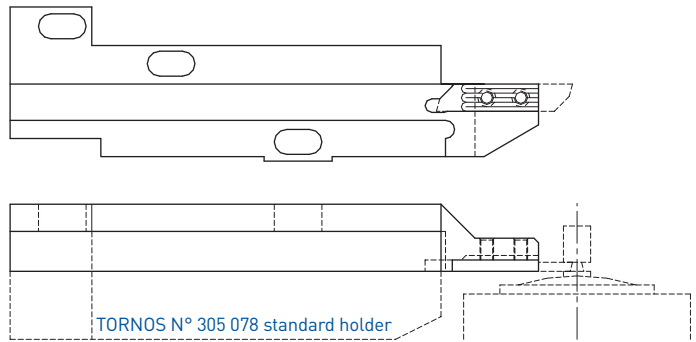
Halter für Tornos Maschine

Holder for Tornos machine

L

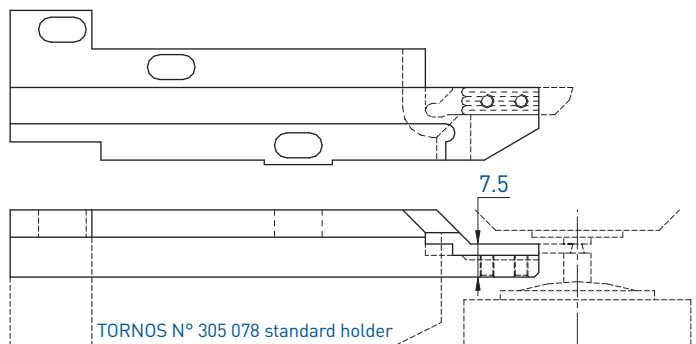
DECO 7/10
EvoDECO 10

Coupe à gauche
Linksschneiden
Left hand cut

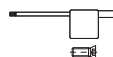


| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|------------|--|--------------------------|
| 730-DECO10 | 731 - 737 | > 1.32 |

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line



| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-------------|--|--------------------------|
| 740L-DECO10 | 741L / 741N | 1.39 - 1.45 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraub(en) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos

Halter für Tornos Maschine

Holders for Tornos machine

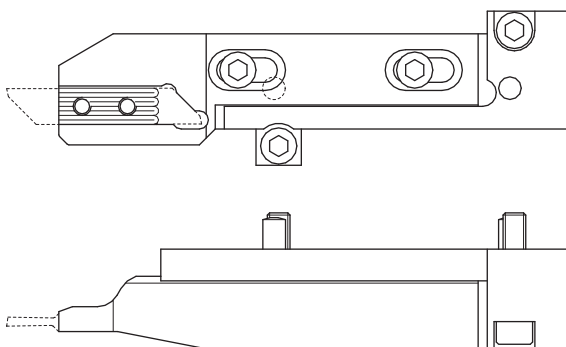
L

DECO 7/10
EvoDECO 10

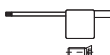
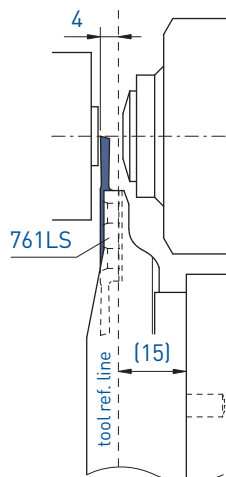
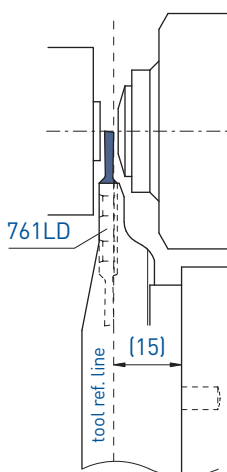
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Réglable en longueur
Längseinstellbar
Adjustable length



| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-------------|--|--------------------------|
| 760L-DECO10 | 761L / 761N | 1.88 - 1.98 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraubel(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

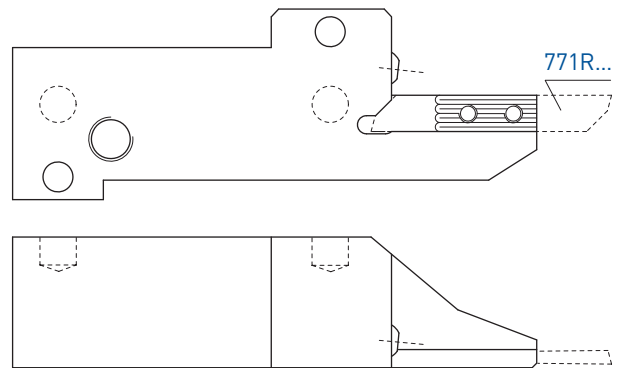
Porte-outils pour machine Tornos

Halter für Tornos Maschine

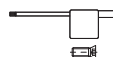
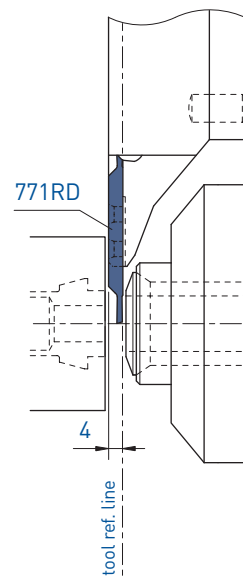
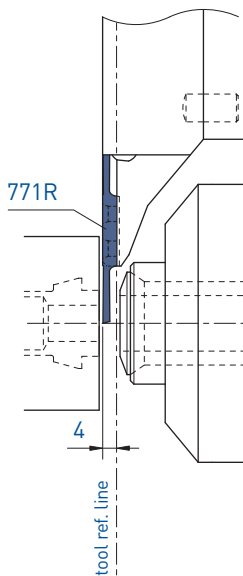
Holders for Tornos machine

DECO 13
EvoDECO 16

Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off

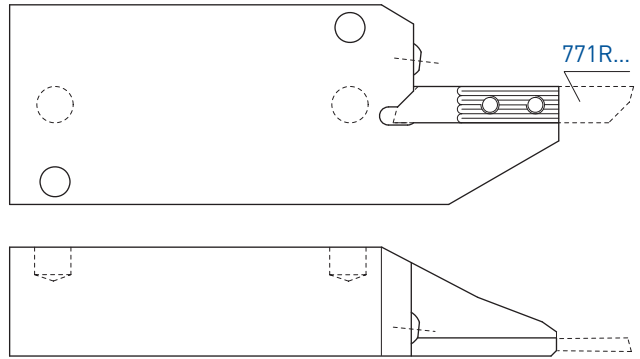


| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-------------|--|--------------------------|
| 770R-DECO13 | 771R | 1.138 - 1.141 |

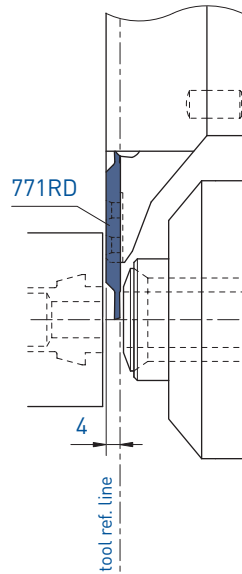
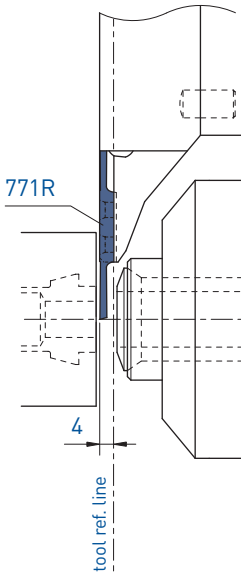


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Pour le tronçonnage de petites pièces
 Zum Abstechen von kleinen Werkstücken
 For small parts parting off



| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-------------|--|--------------------------|
| 770R-DECO20 | 771R | 1.138 - 1.141 |



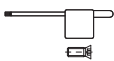
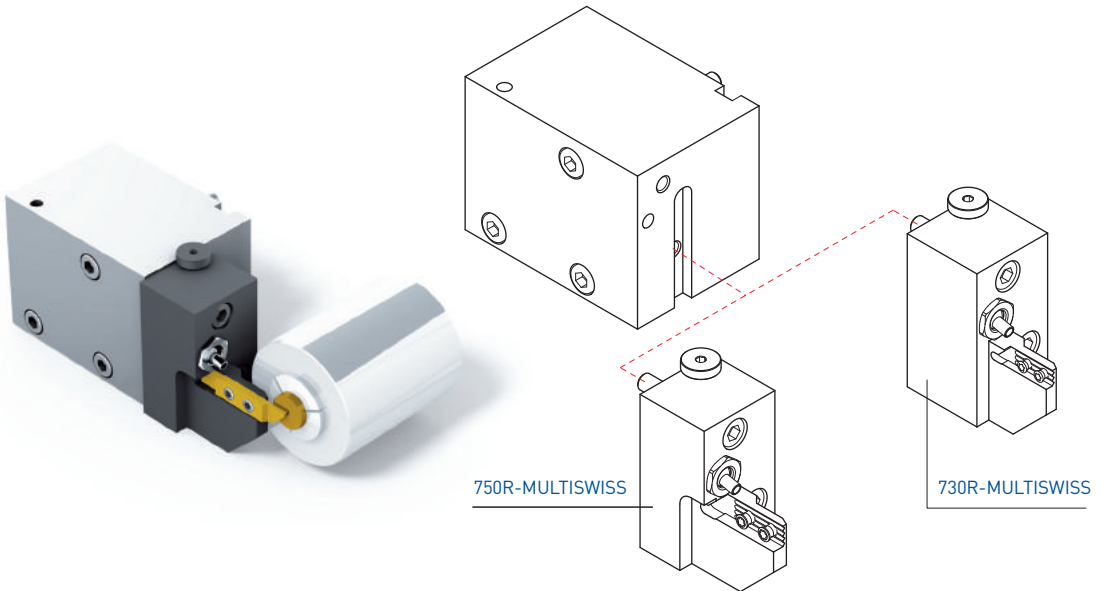
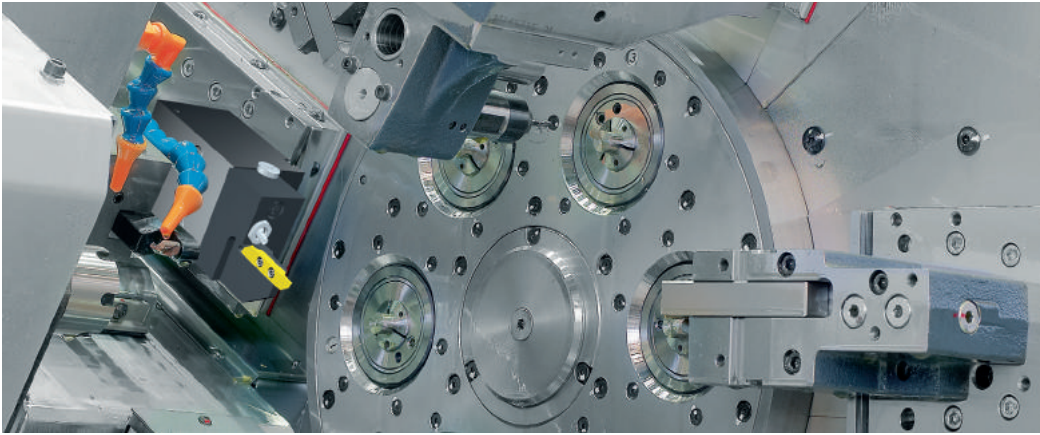
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spanschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos

Halter für Tornos Maschine

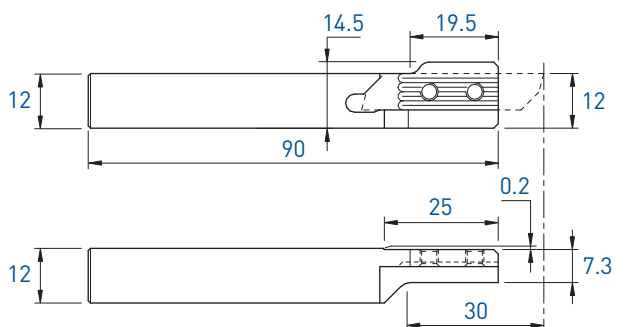
Holders for Tornos machine

MultiSwiss 6x16

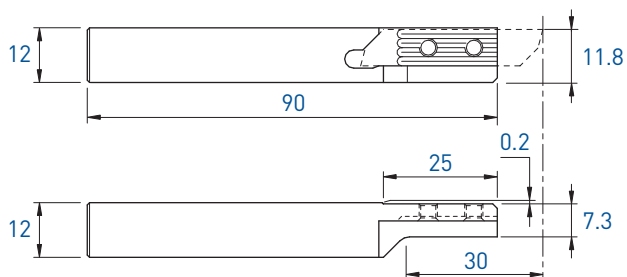


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

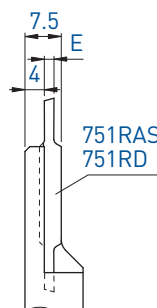
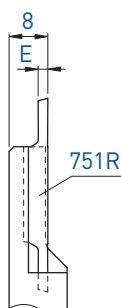
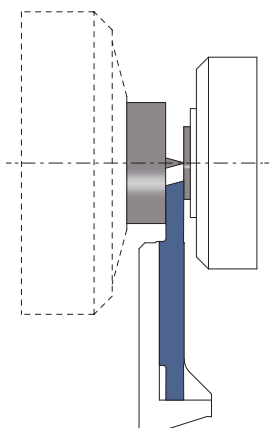
| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|------------------------|--|--------------------------|
| 730R-MULTISWISS | 731R / 731N | 1.39 - 1.45 |
| 750R-MULTISWISS | 751R / 751N | 1.88 - 1.99 |



| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-----------|--|--------------------------|
| 750RAS-12 | 751R | 1.88 - 1.96 |



| Art. N° | Plaquettes type WSP Typ Inserts type | Pages Seiten Pages |
|-----------------|--|--------------------------|
| 750RAS-12-H11.8 | 751R | 1.88 - 1.96 |



(p. 1.98 - 1.99)



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils

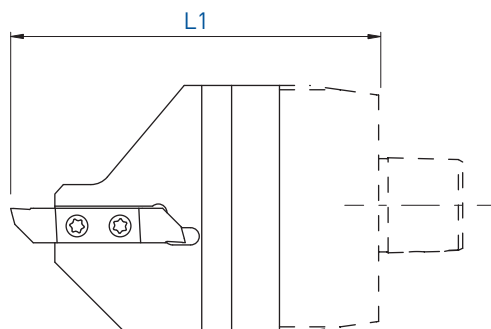
Halter

Holder

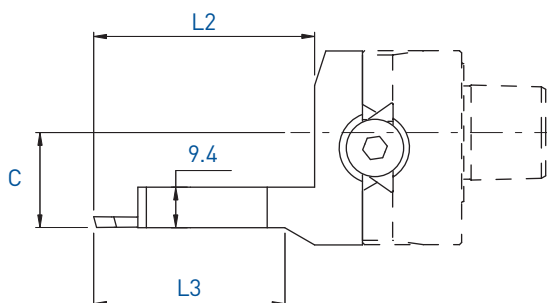
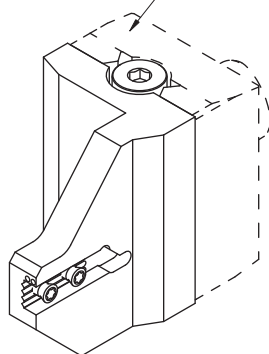
Schütze

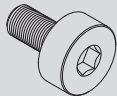
DT20

DT30



Compatibility Schütze




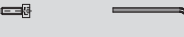


| Plaquettes type WSP Typ Inserts type | Pages Seiten Pages | L1 | C | L2 | L3 | Art. N° | Compatibility Schütze |  |
|--|--------------------------|----|------|----|----|--------------|--------------------------|---|
| | | | | | | | | Art. N° |
| 761-767 | > 1.78 | 86 | 22 | 51 | 44 | DT20-760-JET | C3-75870949 | V-M6X0.5-14-L18 |
| | | 83 | 27.5 | 48 | - | DT30-760-JET | C4-75836783 | |

Vis et clés de rechange

Ersatzschrauben und Schlüssel





Spare screws and keys

| | Porte-outils Halter Holders | Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)  | Serrage type B Spannsystem Typ B Clamping system type B  | | | |
|-------------|-------------------------------------|---|---|----------------------|-----------------|--|
| 710 | 710-6 / - NOVIBRA | V-M2.5X5.8-T8 | C-T8 | - | - | |
| | 710-7 / - NOVIBRA | V-M2.5X6.5-T8 | | | | |
| | 710-8 / - NOVIBRA | V-M2.5X7.8-T8 | | | | |
| | 710-10 - 710-12 | | | | | |
| 720 | 720-7 | V-M2.5X6.5-T8 | C-T8 | - | - | |
| | 720-8 - 720-12 | V-M2.5X7.8-T8 | | | | |
| 730 | 730-7 / - JET / -NOVIBRA | V-M3X7-T8 | C-T8 | - | - | |
| | 730-8 / -NOVIBRA | | | V-M2.5X7.8-T8 | C-T8 | |
| | 730-10 - 730-20 | | | | | |
| | 730-DECO10 | | | | | |
| | 730R-DECO10 | | | | | |
| 730RC | V-M3X5.5-T8 | | | | | |
| 740 | 740-7 / -JET / -NOVIBRA | V-M3X7-T8 | C-T8 | - | - | |
| | 740-8 / -NOVIBRA - | | | V-M2.5X7.8-T8 | C-T8 | |
| | 740-12 / -JET / -NOVIBRA | | | | | |
| | 740-16 - 740-20 | | | | | |
| | 740/730-D | | | | | |
| | 740-C | | | V-M3X5.5-T8 | | |
| | 740-DECO10 | | | V-M3X7-T8 | | |
| 740L-DECO10 | V-M3X9-T8 | | | | | |
| 740-Z | | | | | | |
| | Porte-outils Halter Holders | Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)  | Serrage type B Spannsystem Typ B Clamping system type B  | | | |
| 750 | 750-10 - 750-12 / -JET | V-M4X9-T15 | C-T15 | - | - | |
| | 750-10-AB | | | V-M3X10-BN21 | C-6P-2.0 | |
| | 750-12-AB | | | V-M3X8-BN11 | | |
| | 750-12.7 - 750-14 | | | V-M3X10-BN11 | C-6P-2.5 | |
| | 750-16 | | | V-M3X12-BN11 | | |
| | 750-20 | | | V-M3X16-BN11 | | |
| | 750RAS - 750-RC | | | V-M4X7.3-T15 | | |
| 750R-DECO10 | V-M4X5.6-T15 | | | | | |
| 760 | 760-10 - 760-12 / -JET / -NOVIBRA / | V-M4X9-T15 | C-T15 | - | - | |
| | 760/750 | | | V-M3X10-BN21 | C-6P-2.0 | |
| | 760-10-AB | | | V-M3X8-BN11 | | |
| | 760-12-AB | | | V-M3X10-BN11 | C-6P-2.5 | |
| | 760-12.7 - 760-14 | | | V-M3X12-BN11 | | |
| | 760-16 | | | V-M3X16-BN11 | | |
| | 760-20 | | | V-M4X7.3-T15 | | |
| | 760LC | | | V-M4X5.6-T15 | | |
| 760L-DECO10 | V-M4X12-T15 | | | | | |
| 760-Z | | | | | | |

Vis et clés de rechange




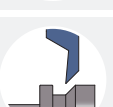

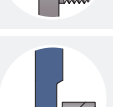

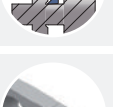
Ersatzschrauben und Schlüssel

Spare screws and keys

| | Porte-outils Halter Holders | Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) | | Serrage type B Spannsystem Typ B Clamping system type B | |
|-------------------|-----------------------------------|---|---|---|---|
| | |  |  |  |  |
| 770 | 770 / -JET | V-M4X9-T15 | C-T15 | - | - |
| | 770RC | V-M4X7.3-T15 | | | |
| 780 | 780 / -JET | V-M4X9-T15 | C-T15 | - | - |
| 7050 | 7050 | V-M4X9-T15 | C-T15 | - | - |
| 7060 | 7060 | V-M4X9-T15 | C-T15 | - | - |
| W | W750 / W760 / -JET | V-M4X11.5-T15 | C-T15 | - | - |
| C3 | C3-740 | V-M3X7-T8 | C-T8 | - | - |
| | C3-760 | V-M4X9-T15 | C-T15 | | |
| C4 | C4-750 | V-M4X9-T15 | C-T15 | - | - |
| | C4-760 | | | | |
| HSK | HSK-T40-740 | V-M3X7-T8 | C-T8 | - | - |
| | HSK-T40-760 | V-M4X9-T15 | C-T15 | | |
| MultiSwiss | 730R-MULTISWISS | V-M3X5.5-T8 | C-T8 | - | - |
| | 750R-MULTISWISS | V-M4X7.3-T15 | C-T15 | | |
| Schütte | DT20-760-JET | V-M4X9-T15 | C-T15 | - | - |
| | DT30-760-JET | | | | |

Nuances micro-grain à dureté élevée
 Verschleissfeste Feinkornsorten
 Wear resistant micro-grain grades > **2.02**

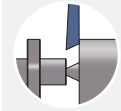
Pièces de rechange
 Ersatzteile
 Spare parts > **2.05**

| | pour machines à cames für kurvengesteuerte Maschinen for cam driven machines | | pour machines CNC für CNC-Maschinen for CNC driven machines | | |
|--|--|---------------|---|-----------------------------|---------------|
| | L | | L | R | |
|  | 710 710SF 710-NOVIBRA | > 2.06 | 730 730-NOVIBRA | 740 740SF 740-NOVIBRA | > 2.10 |
|  | 711SF | > 2.08 | | 741SF | > 2.13 |
|  | 712SF | > 2.08 | | 742SF | > 2.13 |
|  | 713SF | > 2.09 | | 743SF | > 2.15 |
|  | | | 736SF | 746SF | > 2.17 |
|  | | | | 748SF | > 2.18 |
|  | | | | 749SF | > 2.18 |
|  | 711-ESF | > 2.09 | 731-ESF | 741-ESF | > 2.19 |

Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line

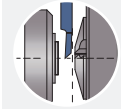
730RC
750RC

> **2.20**



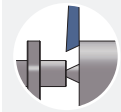
731R
751R

> **2.21**



770-SN-SF

> **2.22** **new**



771RVSF

> **2.24** **new**

Halter für SwissNano
Porte-outils pour Swissnano - MODU-Line
Holder for SwissNano

ML12

> **2.24**

Nuances micro-grain à dureté élevée

Verschleissfeste Feinkornsorten

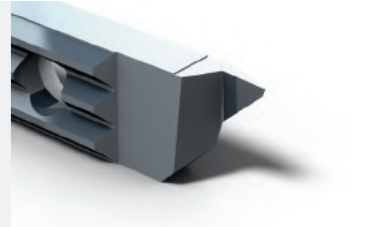
Wear resistant micro-grain grades

new

N (μ K20)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain tenace, résistante aux conditions défavorables, recommandée pour des opérations de coupe dans des matières ne nécessitant aucun revêtement
- zähe Feinkornsorte, in ungünstige Bearbeitungs-konditionen widerstandsfähig, für Schnittbearbeitung empfohlen, die keine Beschichtung erfordern
- tough micro-grain grade, suitable for unfavorable machining conditions, suitable for cutting in material that do not necessitate any tool coating

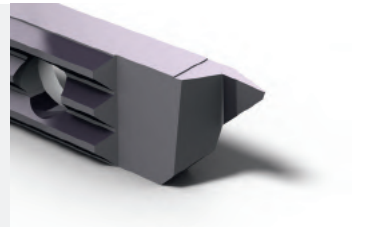


new

TAF

μ K20 + revêtement PVD
 μ K20 + PVD Beschichtung
 μ K20 + PVD coating

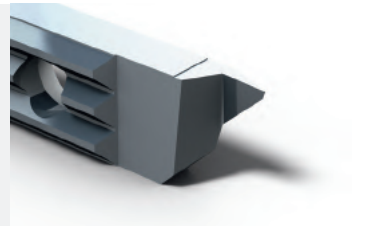
- nuance tenace résistante aux conditions défavorables, recommandée pour des opérations de coupes dans les aciers et aciers inoxydables.
- zähe widerstandsfähige Sorte in ungünstigen Bearbeitungskonditionen, für Schnittbearbeitung in Stahl und rostfreiem Stahl empfohlen
- tough grade, resistant to unfavorable machining conditions, suitable for cutting of steel and stainless steel



HN (μ K10)

non revêtu
unbeschichtet
uncoated

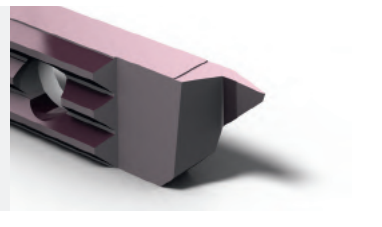
- nuance micro-grain, bonne résistance à l'usure, recommandée pour des opérations d'ébauche et de finition pour des matières ou usinages ne nécessitant aucun revêtement
- verschleissfeste Feinkornsorte, für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern
- wear resistant micro-grain carbide, recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating



HTC

μ K10 + revêtement PVD
 μ K10 + PVD Beschichtung
 μ K10 + PVD coating

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade, low friction ratio, recommended for roughing and finishing

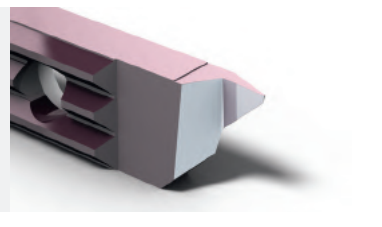


conseillée pour l'usinage de la matière 20AP
für Bearbeitung von 20AP geeignet
suitable for machining of 20AP material

HTC-RE

μ K10 + revêtement PVD
 μ K10 + PVD Beschichtung
 μ K10 + PVD coating

- nuance identique à HTC avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie HTC nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTC, after coating grounded clearance, recommended for finishing



conseillée pour l'usinage de la matière 20AP
für Bearbeitung von 20AP geeignet
suitable for machining of 20AP material

Nuances micro-grain à dureté élevée

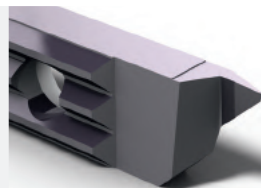
Verschleissfeste Feinkornsorten

Wear resistant micro-grain grades

HTAF

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance résistante à l'usure, recommandée pour des opérations d'ébauche et de finition
- verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade, recommended for roughing and finishing

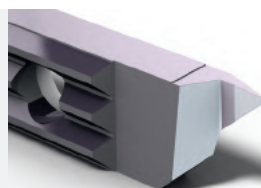


conseillée pour l'usinage des matières Finemac et inox 4c27a
für Bearbeitung von Finemac und 4c27a-Rostfreier Stahl geeignet
suitable for machining of Finemac and 4c27a stainless steel

HTAF-RE

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance identique à HTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie HTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTAF, after coating grounded clearance, recommended for finishing

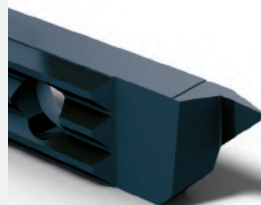


recommandée pour les matières Finemac et inox 4c27a
für Bearbeitung von Finemac und 4c27a-Rostfreier Stahl geeignet
suitable for machining of Finemac and 4c27a stainless steel

HTAXF

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

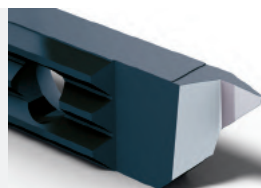
- nuance complémentaire, résistante à l'usure et à la température pour l'usinage ébauche et finition des matières inox 304, 316L, 317L, 904, Phynox Aciers alliés contenant: Chrome Nickel, Vanadium, molybdène...
- komplementäre Sorte, verschleissfest und temperaturbeständig. Für Schruppen und Schlichtbearbeitung von Materialien Innox 304, 316L, 317L, 904, Phynox Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...
- complementary grade, wear and temperature resistant for roughing and finishing of following materials: Innox 304, 316L, 317L, 904, Phynox Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...



HTAXF-RE

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

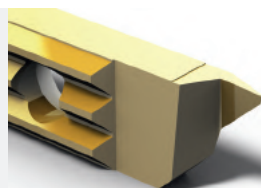
- nuance identique à HTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie HTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTAXF, after coating grounded clearance, recommended for finishing



HTiN

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade, low friction ratio, recommended for roughing and finishing



Nuances micro-grain à dureté élevée

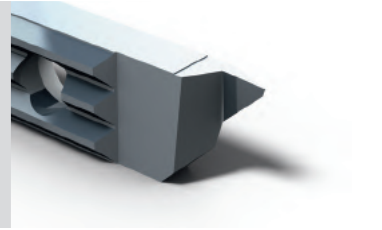
Verschleissfeste Feinkornsorten

Wear resistant micro-grain grades

XN (μ K01)

non revêtu
unbeschichtet
uncoated

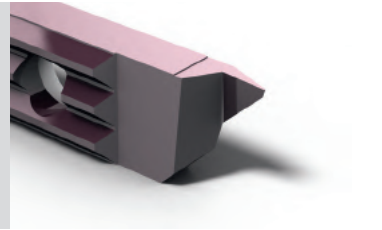
- nuance micro-grain très résistante à l'usure, recommandée pour des opérations d'ébauche et de finition pour des matières ou usinages nécessitant aucun revêtement
- sehr verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern
- wear resistant micro-grain carbide, recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating



XTC

μ K01 + revêtement PVD
 μ K01 + PVD Beschichtung
 μ K01 + PVD coating

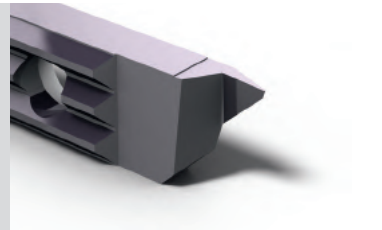
- nuance très résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations de finition
- sehr verschleissfeste Sorte, geringer Reibwert, für Schlichtbearbeitung empfohlen
- very wear resistant grade, low friction ratio, recommended for finishing



XTAF

μ K01 + revêtement PVD
 μ K01 + PVD Beschichtung
 μ K01 + PVD coating

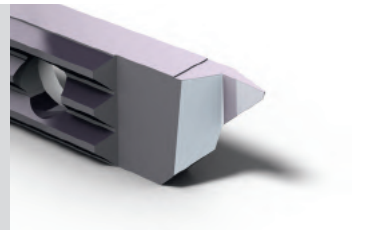
- nuance très résistante à l'usure, recommandée pour des opérations de finition, conseillée pour l'usinage des matières très abrasives
- sehr verschleissfeste Sorte, für Schlichtbearbeitung empfohlen, für die Bearbeitung von sehr abrasive Rohstoffe geeignet
- very wear resistant grade, recommended for finishing, suitable for machining of very abrasive materials



XTAF-RE

μ K01 + revêtement PVD
 μ K01 + PVD Beschichtung
 μ K01 + PVD coating

- nuance identique à XTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie XTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as XTAF, after coating grounded clearance, recommended for finishing



Nuances micro-grain à dureté élevée

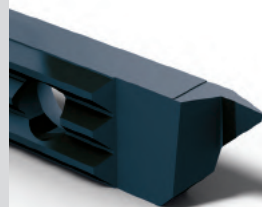
Verschleissfeste Feinkornsorten

Wear resistant micro-grain grades

XTAXF

μK01 + revêtement PVD
μK01 + PVD Beschichtung
μK01 + PVD coating

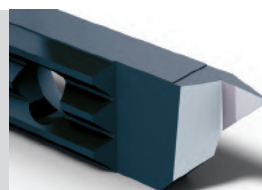
- nuance complémentaire très résistante à l'usure et à la température pour la finition des matières inox 304, 316L, 317L, 904, Phynox
Aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène...
- komplémentere Sorte, sehr verschleissfest und temperaturbeständig. Für Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox
Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...
- complementary grade, very wear and temperature resistant for finishing of following materials: Inox 304, 316L, 317L, 904, Phynox
Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...



XTAXF-RE

μK01 + revêtement PVD
μK01 + PVD Beschichtung
μK01 + PVD coating


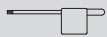


- nuance identique à XTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie XTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as XTAXF, after coating grounded clearance, recommended for finishing



Pièces de rechange

Ersatzteile

Spare parts

| | Porte-outils Halter Holders | Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) | | Serrage type B Spannsystem Typ B Clamping system type B | |
|------------|-----------------------------------|---|---|---|--|
| | |  |  |  |  |
| 710 | 710-6 / - NOVIBRA | V-M2.5X5.8-T8 | C-T8 | - | - |
| | 710-7 / - NOVIBRA / - SF | V-M2.5X6.5-T8 | | | |
| | 710-8 / - NOVIBRA / -SF | V-M2.5X7.8-T8 | | | |
| | 710-10 - 710-12 | | | | |
| 730 | 730-7 / - NOVIBRA | V-M3X7-T8 | C-T8 | - | - |
| | 730-8 / - NOVIBRA | | | V-M2.5X7.8-T8 | C-T8 |
| | 730-10 - 730-12 | | | - | - |
| | 730RC | | | V-M3X5.5-T8 | - |
| 740 | 740-7 / -NOVIBRA / -SF | V-M3X7-T8 | C-T8 | - | - |
| | 740-8 -12 / -SF / -NOVIBRA | | | V-M2.5X7.8-T8 | C-T8 |
| 750 | 750RC | V-M4X7.3-T15 | C-T15 | - | - |
| 770 | 770-SN-SF | V-M4X7.3-T15 | C-T15 | - | - |

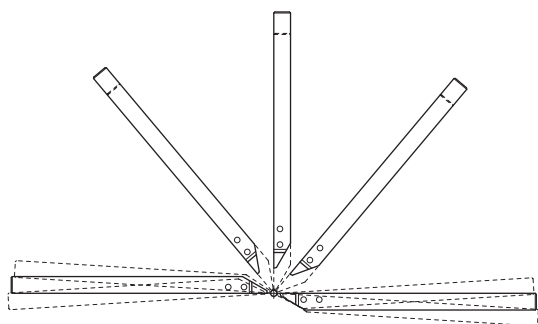
Porte-outils

Halter

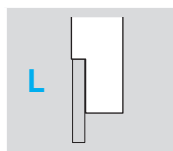
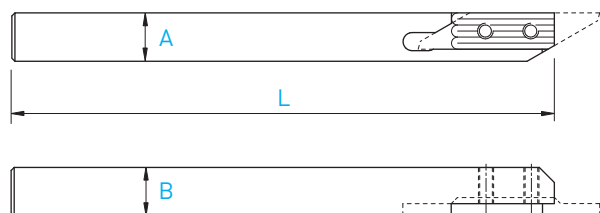
Holder

L

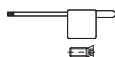
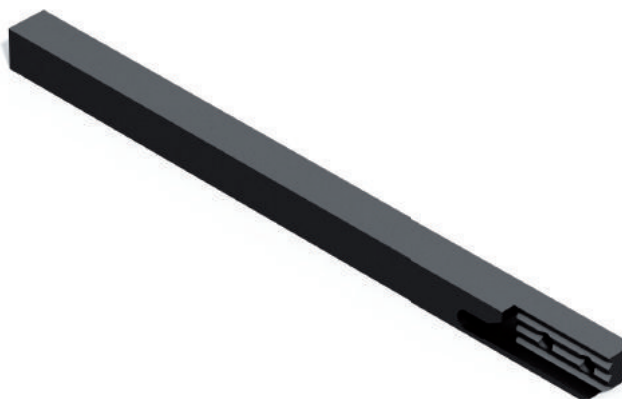
710



Porte-outils pour machines à cames à gauche
 Halter für linksdrehende kurvgesteuerte Maschinen
 Tool holders for left hand turning cam driven machines



| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|---------|-----|------------------------------------|------------------|
| 6 x 6 | 115 | A | 710-6 |
| 7 x 7 | 115 | A | 710-7 |
| 8 x 8 | 115 | A | 710-8 |
| 8 x 8 | 140 | A | 710-8-140 |
| 10 x 10 | 115 | A | 710-10 |
| 12 x 12 | 130 | A | 710-12 |



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spanschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

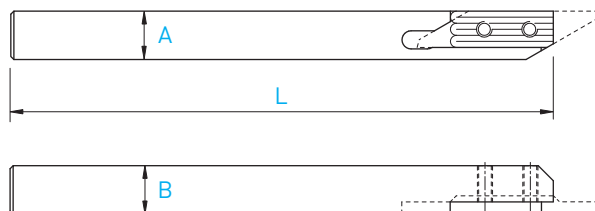
Porte-outils

Halter

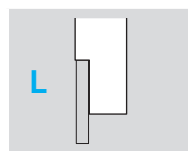
Holders

L

710-SF



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|-------|-----|------------------------------------|--------------|
| 7 x 7 | 140 | A | 710-7-140-SF |
| 8 x 8 | 140 | A | 710-8-140-SF |

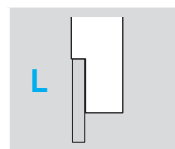
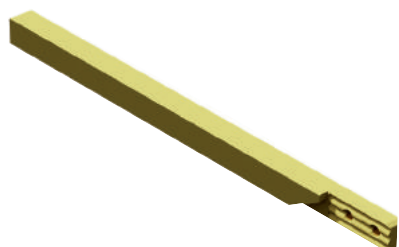
Porte-outils en métal lourd anti-vibratoire

Schwingungdämpfender Schwermetallhalter

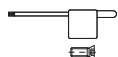
Low vibration heavy metal holders

L

710-NOVIBRA



| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|-------|-----|------------------------------------|---------------|
| 6 x 6 | 115 | A | 710-6-NOVIBRA |
| 7 x 7 | 115 | A | 710-7-NOVIBRA |
| 8 x 8 | 115 | A | 710-8-NOVIBRA |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

TOP-WATCH

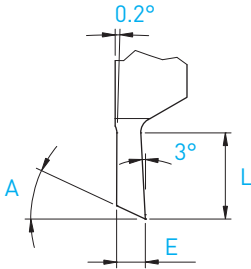
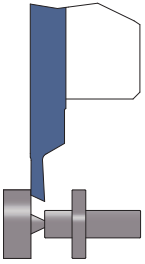
Plaquettes d'horlogerie pour machines à cames

Uhrenindustrie-WSP für kurvengesteuerte Maschinen

Watch industry inserts for cam driven machines

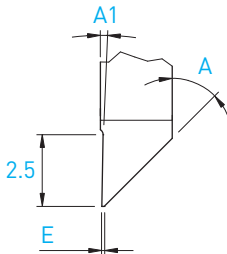
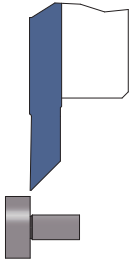
L

711SF / 712SF



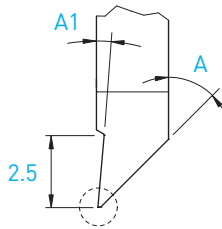
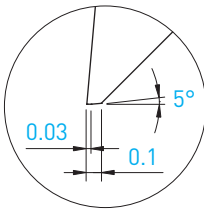
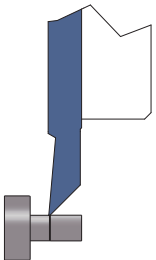
Tronçonnage
Abstechen
Parting off

| E | L | A | Art. N° | HTC | HTC-RE | HTAF | HTiN | HN (µK10) |
|-----|-----|-----|---------------|-----|--------|------|------|-----------|
| 0.8 | 3.0 | 25° | 711SF-0.8-25° | ■ | ■ | ■ | ■ | ■ |
| 1.0 | 3.0 | 25° | 711SF-1.0-25° | ■ | □ | ■ | □ | ■ |



Tournage avant ébauche / finition
Vorwärts drehen schruppen / schlichten
Front turning for roughing / finishing

| E | A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTiN | HN (µK10) |
|------|-----|----|---------------|-----|--------|------|------|-----------|
| 0.03 | 45° | 3° | 712SF-3/3-45° | ■ | □ | ■ | □ | ■ |
| 0.08 | 45° | 1° | 712SF-8/8-45° | ■ | ■ | ■ | □ | ■ |



Tournage avant finition (pivotage)
Vorwärts drehen schlichten
Front turning for finishing

| A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTiN | HN (µK10) |
|-----|----|------------|-----|--------|------|------|-----------|
| 45° | 3° | 712SF-10/3 | ■ | □ | ■ | ■ | ■ |

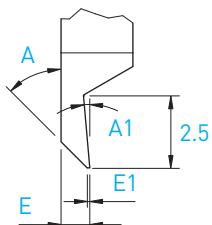
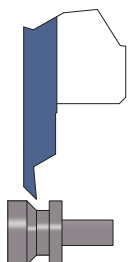
Plaquettes d'horlogerie pour machines à cames

Uhrenindustrie-WSP für kurvengesteuerte Maschinen

Watch industry inserts for cam driven machines

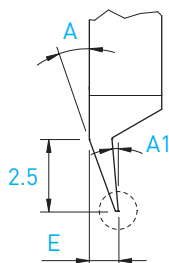
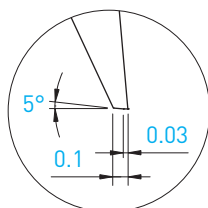
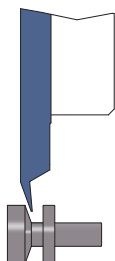
L

713SF



Tournage arrière ébauche / finition
Rückwärts drehen schrappen / schlichten
Back turning for roughing / finishing

| E1 | E | A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTiN | HN (µK10) |
|------|-----|-----|----|---------------------|-----|--------|------|------|-----------|
| 0.03 | 1.0 | 45° | 5° | 713SF-3/3-45°-1.0 | ■ | □ | □ | □ | ■ |
| 0.10 | 1.0 | 45° | 5° | 713SF-10/10-45°-1.0 | ■ | □ | ■ | □ | ■ |



Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

| E | A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTiN | HN (µK10) |
|-----|-----|----|------------|-----|--------|------|------|-----------|
| 1.0 | 20° | 5° | 713SF-10/3 | ■ | □ | ■ | ■ | ■ |

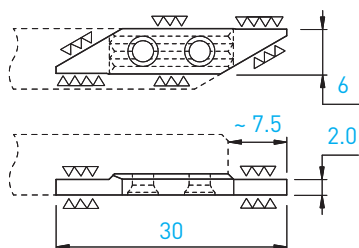
Plaquettes ébauches

WSP-Rohlinge

Blank inserts

L

711-ESF



| Art. N° | HTC | HTAF | HTiN | HN (µK10) | XN (µK01) | XTC | XTAF |
|---------|-----|------|------|-----------|-----------|-----|------|
| 711-ESF | ■ | ■ | □ | ■ | ■ | ■ | ■ |

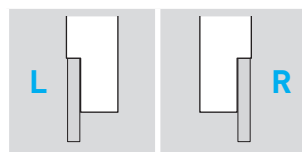
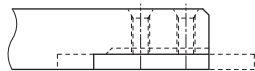
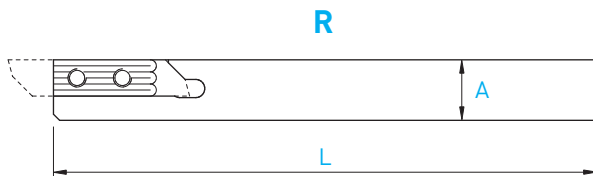
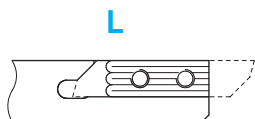
Porte-outils

Halter

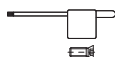
Holder

L/R

730 / 740



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|------------------|------------------|
| 7 x 7 | 115 | A | 730-7 | 740-7 |
| 8 x 8 | 115 | A + B | 730-8 | 740-8 |
| 8 x 8 | 140 | A + B | 730-8-140 | - |
| 10 x 10 | 115 | A + B | 730-10 | 740-10 |
| 12 x 12 | 130 | A + B | 730-12 | 740-12 |
| 12 x 12 | 90 | A + B | 730-12-90 | 740-12-90 |



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spanschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils

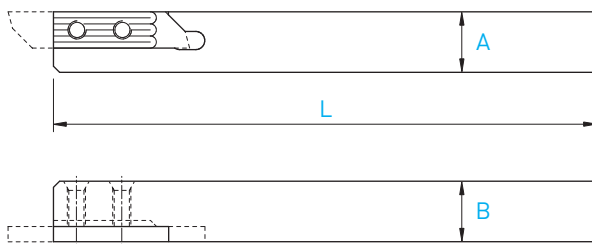
Halter

Holder

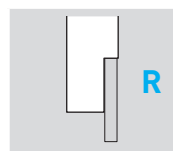
R

740-SF

R



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|---------|-----|------------------------------------|--------------|
| 7 x 7 | 90 | A | 740-7-90-SF |
| 8 x 8 | 115 | A + B | 740-8-SF |
| 8 x 8 | 90 | A + B | 740-8-90-SF |
| 10 x 10 | 115 | A + B | 740-10-SF |
| 10 x 10 | 90 | A + B | 740-10-90-SF |
| 12 x 12 | 130 | A + B | 740-12-SF |
| 12 x 12 | 90 | A + B | 740-12-90-SF |

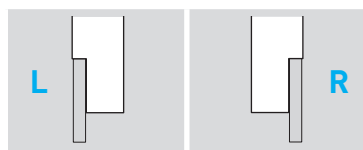
Porte-outils en métal lourd anti-vibratoire

Schwingungdämpfender Schwermetallhalter

Low vibration heavy metal holders

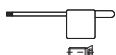
L/R

730 / 740-NOVIBRA



| A x B | L | Serrage Spannsystem Clamping | Art. N° | Art. N° |
|---------|-----|------------------------------------|---------------|------------------|
| 7 x 7 | 115 | A | 730-7-NOVIBRA | 740-7-NOVIBRA |
| 8 x 8 | 115 | A + B | 730-8-NOVIBRA | 740-8-NOVIBRA |
| 8 x 8 | 80 | A + B | - | 740-8-80-NOVIBRA |
| 10 x 10 | 115 | A + B | - | 740-10-NOVIBRA |
| 12 x 12 | 130 | A + B | - | 740-12-NOVIBRA |

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.



Porte-outils

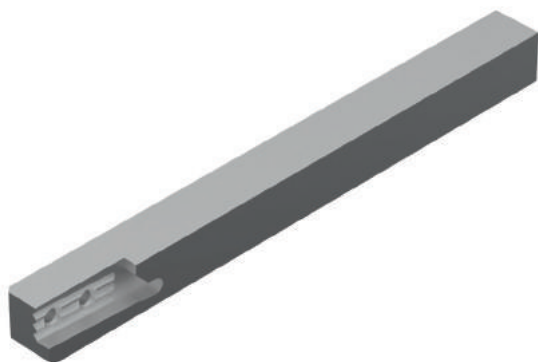
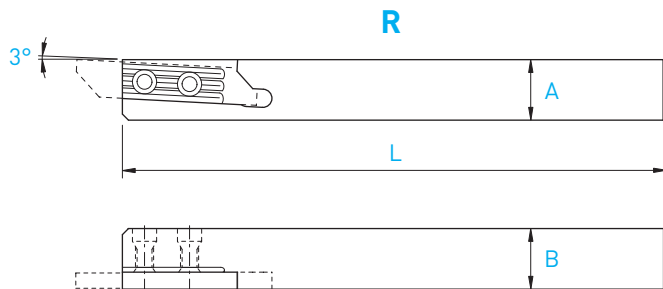
Halter

Holders

R

740X3-SF

new



| A x B | L | Serrage Spannsystem Clamping | Art. N° |
|---------|-----|------------------------------------|--------------------|
| 8 x 8 | 115 | A + B | 740X3-8-SF |
| 10 x 10 | 115 | A + B | 740X3-10-SF |
| 12 x 12 | 130 | A + B | 740X3-12-SF |

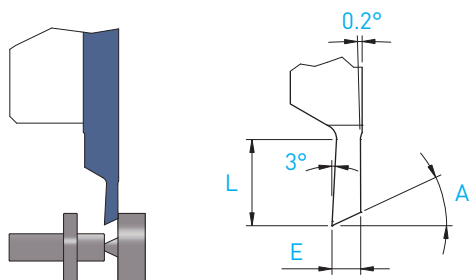
Plaquettes d'horlogerie pour machines CNC

Uhrenindustrie-WSP für CNC-Maschinen

Watch industry inserts for CNC machines

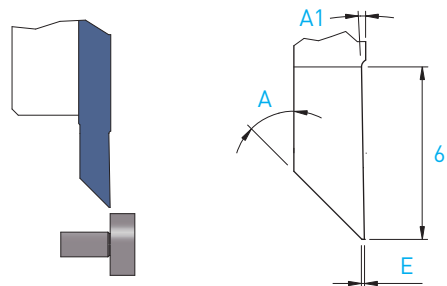
R

741SF / 742SF



Tronçonnage
Abstechen
Parting off

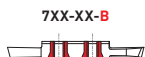
| E | L | A | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTAXF | HTAXF-RE | HTIN | HN (µK10) | XTAF | XTAXF | XTAXF-RE | XN (µK01) |
|-----|-----|-----|---------------|-----|--------|------|---------|-------|----------|------|-----------|------|-------|----------|-----------|
| 0.5 | 2.0 | 25° | 741SF-0.5-25° | ■ | □ | ■ | □ | ■ | □ | □ | ■ | ■ | ■ | ■ | □ |
| 0.8 | 3.0 | 25° | 741SF-0.8-25° | ■ | □ | ■ | □ | ■ | □ | □ | ■ | ■ | ■ | ■ | □ |
| 1.0 | 3.0 | 25° | 741SF-1.0-25° | ■ | □ | ■ | □ | ■ | □ | □ | ■ | ■ | ■ | ■ | □ |
| 1.2 | 6.0 | 22° | 741SF-1.2-22° | ■ | □ | ■ | □ | ■ | □ | □ | ■ | ■ | ■ | ■ | □ |



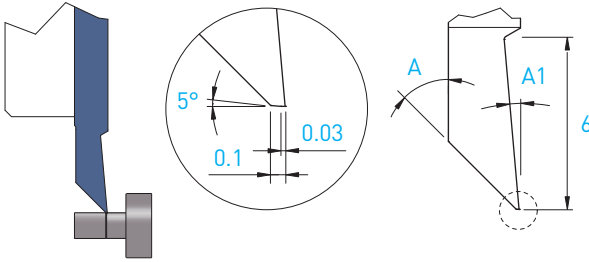
Tournage avant ébauche / finition
Vorwärts drehen schrappen / schlichten
Front turning for roughing / finishing

| E | A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTAXF | HTAXF-RE | HTIN | HN (µK10) | XTAF | XTAXF | XTAXF-RE | XN (µK01) |
|------|-----|----|---------------|-----|--------|------|---------|-------|----------|------|-----------|------|-------|----------|-----------|
| 0.03 | 45° | 3° | 742SF-3/3-45° | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ |
| 0.08 | 45° | 1° | 742SF-8/8-45° | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

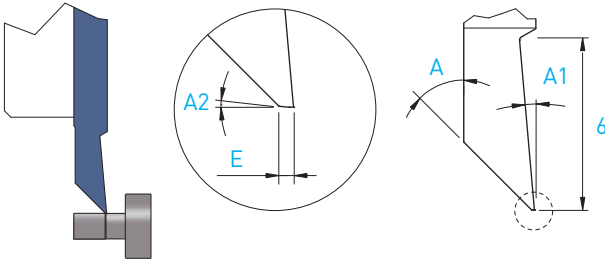


Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25



Tournage avant finition
 Vorwärts drehen schlichten
 Front turning for finishing

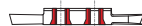
| A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTAXF | HTAXF-RE | HTIN | HN (μK10) | XTAF | XTAXF | XTAXF-RE | XN (μK01) |
|-----|----|------------|-----|--------|------|---------|-------|----------|------|-----------|------|-------|----------|-----------|
| 45° | 5° | 742SF-10/3 | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | □ | □ |



Tournage avant finition
 Vorwärts drehen schlichten
 Front turning for finishing

| E | A | A1 | A2 | Art. N° | HTAF-RE | XTAF-RE |
|------|-----|----|----|-------------------|---------|---------|
| 0.10 | 45° | 5° | 5° | 742SF-10/0-5°-45° | ■ | ■ |
| 0.15 | 30° | 3° | 2° | 742SF-15/0-2°-30° | ■ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
 Wahlweise für B-Spannsystem, siehe Seite 2.25
 On request for B clamping system, see page 2.25

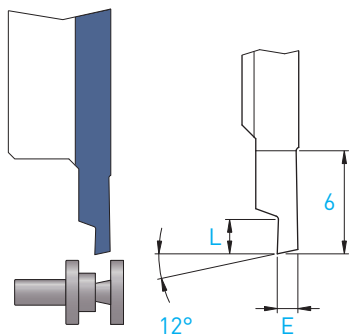
Plaquettes d'horlogerie pour machines CNC

Uhrenindustrie-WSP für CNC-Maschinen

Watch industry inserts for CNC machines

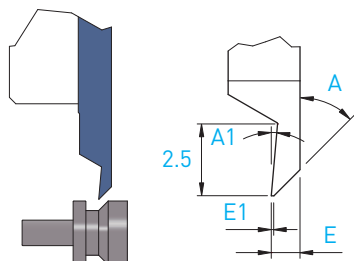
R

743SF



Tournage arrière ébauche
Rückwärts drehen schrappen
Back turning for roughing

| E | L | Art. N° | HTC | HTAF | HN (µK10) |
|-----|-----|-----------------|-----|------|-----------|
| 1.2 | 2.5 | 743SF-120/0-12° | ■ | ■ | ■ |
| 1.4 | 3.0 | 743SF-140/0-12° | ■ | ■ | ■ |
| 1.6 | 3.0 | 743SF-160/0-12° | ■ | ■ | ■ |
| 1.8 | 4.0 | 743SF-180/0-12° | ■ | ■ | ■ |



Tournage arrière ébauche/finition
Rückwärts drehen schrappen/schlichten
Back turning for roughing/finishing

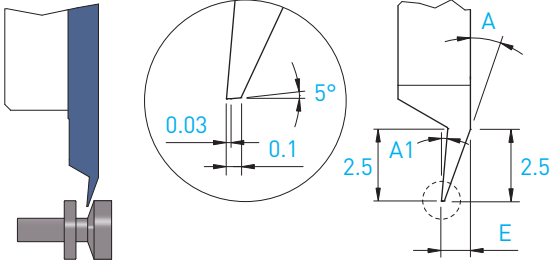
| E1 | E | A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTAXF | HTAXF-RE | HTiN | HN (µK10) | XTAF | XTAXF | XTAXF-RE | XN (µK01) |
|------|-----|-----|----|---------------------|-----|--------|------|---------|-------|----------|------|-----------|------|-------|----------|-----------|
| 0.03 | 1.0 | 45° | 5° | 743SF-3/3-45°-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ |
| 0.03 | 1.2 | 45° | 5° | 743SF-3/3-45°-1.2 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 1.0 | 45° | 5° | 743SF-10/10-45°-1.0 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ |
| 0.05 | 0.8 | 30° | 3° | 743SF-5/5-30°-0.8 | | | ■ | | | | | | | | | |
| 0.05 | 1.0 | 30° | 3° | 743SF-5/5-30°-1.0 | | | ■ | | | | | | | | | |

7XX-XX-B



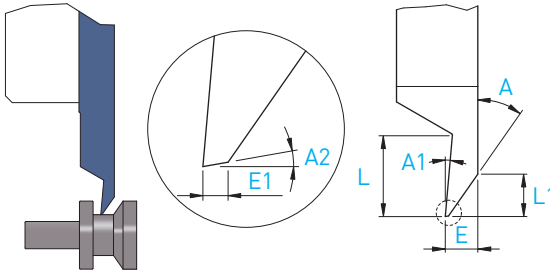
Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Tournage arrière finition
 Rückwärts drehen schlichten
 Back turning for finishing

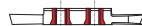
| E | A | A1 | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTAXF | HTAXF-RE | HTIN | HN (µK10) | XTAF | XTAXF | XTAXF-RE | XN (µK01) |
|-----|-----|----|------------|-----|--------|------|---------|-------|----------|------|-----------|------|-------|----------|-----------|
| 1.0 | 20° | 5° | 743SF-10/3 | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | ■ | ■ | □ | □ |



Tournage arrière finition
 Rückwärts drehen schlichten
 Back turning for finishing

| E1 | E | L1 | L | A | A1 | A2 | Art. N° | HTAF-RE | XTAF-RE |
|------|-----|-----|-----|-----|----|-----|------------------------|---------|---------|
| 0.08 | 1.0 | 1.6 | 2.5 | 30° | 5° | 2° | 743SF-8/0-2°-30°-1.0 | ■ | ■ |
| 0.15 | 1.2 | 1.8 | 4.0 | 30° | 3° | 2° | 743SF-15/0-2°-30°-1.2 | ■ | ■ |
| 0.10 | 1.0 | 1.3 | 2.5 | 35° | 5° | 10° | 743SF-10/0-10°-35°-1.0 | ■ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
 Wahlweise für B-Spannsystem, siehe Seite 2.25
 On request for B clamping system, see page 2.25

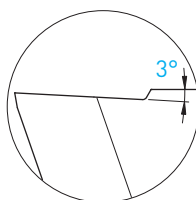
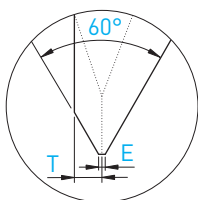
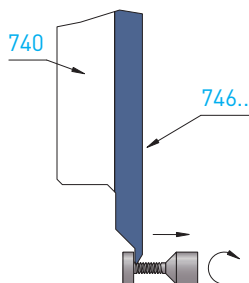
Filetage à profil partiel – norme NIHS

Gewinde drehen mit Teilprofil – Norm NIHS

Threading with partial profile – norm NIHS

R/L

746SF / 736SF

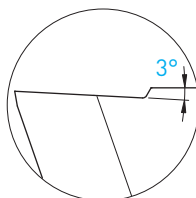
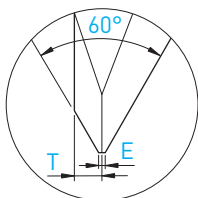
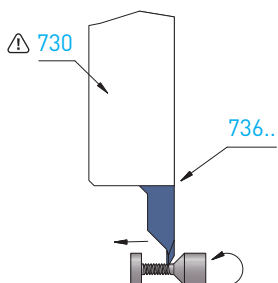


Filetage à droite
sens rotation machine M3

Rechtgewinde Drehrichtung
der Maschine M3

Right-hand thread rotating
machinery M3

| Filetage Gewinde drehen Threading | Pas Steigung Pitch P | T | E 0/-0.01 | Art. N° | HTAF HN (µK10) |
|---|-------------------------------|------|-----------|----------------------|-------------------|
| S0.50 | 0.125 | 0.07 | 0.015 | 746SFX3-A60-S0.50-AR | ■ ■ |
| S0.60 | 0.150 | 0.09 | 0.020 | 746SFX3-A60-S0.60-AR | ■ ■ |
| S0.70 | 0.175 | 0.10 | 0.020 | 746SFX3-A60-S0.70-AR | ■ ■ |
| S0.80 | 0.200 | 0.12 | 0.025 | 746SFX3-A60-S0.80-AR | ■ ■ |
| S0.90 | 0.225 | 0.13 | 0.030 | 746SFX3-A60-S0.90-AR | ■ ■ |
| S1.00 | 0.250 | 0.15 | 0.035 | 746SFX3-A60-S1.00-AR | ■ ■ |



Filetage à droite
sens rotation machine M4

Rechtgewinde Drehrichtung
der Maschine M4

Right-hand thread rotating
machinery M4

| Filetage Gewinde drehen Threading | Pas Steigung Pitch P | T | E 0/-0.01 | Art. N° | HTAF HN (µK10) |
|---|-------------------------------|------|-----------|----------------------|-------------------|
| S0.50 | 0.125 | 0.07 | 0.015 | 736SFX3-A60-S0.50-AR | ■ ■ |
| S0.60 | 0.150 | 0.09 | 0.020 | 736SFX3-A60-S0.60-AR | ■ ■ |
| S0.70 | 0.175 | 0.10 | 0.020 | 736SFX3-A60-S0.70-AR | ■ ■ |
| S0.80 | 0.200 | 0.12 | 0.025 | 736SFX3-A60-S0.80-AR | ■ ■ |
| S0.90 | 0.225 | 0.13 | 0.030 | 736SFX3-A60-S0.90-AR | ■ ■ |
| S1.00 | 0.250 | 0.15 | 0.035 | 736SFX3-A60-S1.00-AR | ■ ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TOP-WATCH

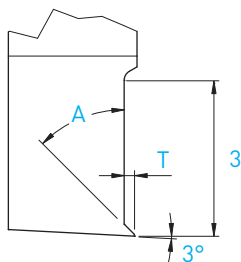
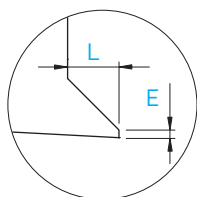
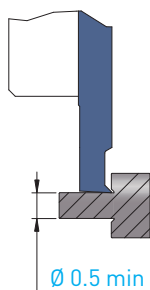
Plaquettes piqûre avant

Frontestich WSP

Front grooving inserts

R

748SF



| $E_{0/-0.01}$ | A | T | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTIN | HN ($\mu\text{K}10$) |
|---------------|-----|-----|--------------------|-----|--------|------|---------|------|------------------------|
| 0.03 | 45° | 0.2 | 748SF-E03-A45°-L20 | ■ | ■ | ■ | ■ | □ | ■ |
| 0.05 | 45° | 0.3 | 748SF-E05-A45°-L30 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.08 | 45° | 0.5 | 748SF-E08-A45°-L50 | ■ | ■ | ■ | ■ | □ | ■ |

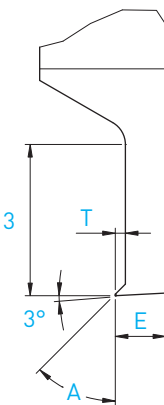
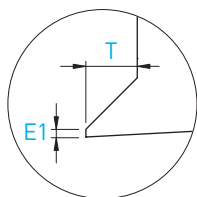
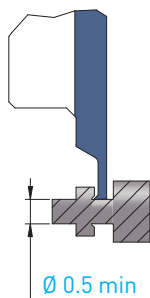
Plaquettes piqûre arrière

Rückestich WSP

Back grooving inserts

R

749SF



| $E1_{0/-0.01}$ | A | T | E | Art. N° | HTC | HTC-RE | HTAF | HTAF-RE | HTIN | HN ($\mu\text{K}10$) |
|----------------|-----|-----|-----|-------------------------|-----|--------|------|---------|------|------------------------|
| 0.03 | 45° | 0.2 | 1.0 | 749SF-E03-A45°-L20-B100 | ■ | ■ | ■ | ■ | □ | ■ |
| 0.05 | 45° | 0.3 | 1.0 | 749SF-E05-A45°-L30-B100 | ■ | □ | ■ | ■ | □ | ■ |
| 0.08 | 45° | 0.5 | 1.2 | 749SF-E08-A45°-L50-B120 | ■ | ■ | ■ | ■ | □ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

Plaquettes ébauches

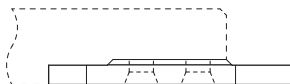
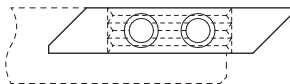
WSP-Rohlinge

Blank inserts

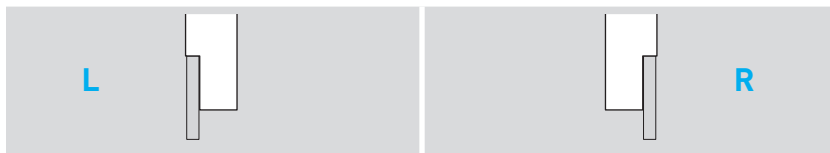
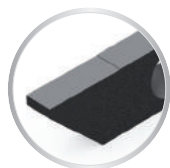
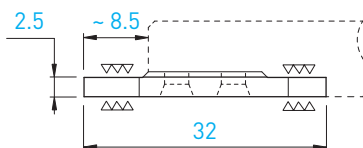
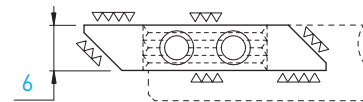
L/R

731-ESF / 741-ESF

L



R



| L | | | | R | | | | | | | | | | | | | |
|---------|-----|------|-------|------|-----------|-----|------|-----------|---------|-----|------|-------|------|-----------|-----|------|-----------|
| Art. N° | HTC | HTAF | HTAXF | HTIN | HN (μK10) | XTC | XTAF | XN (μK01) | Art. N° | HTC | HTAF | HTAXF | HTIN | HN (μK10) | XTC | XTAF | XN (μK01) |
| 731-ESF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 741-ESF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Porte-outils

Halter

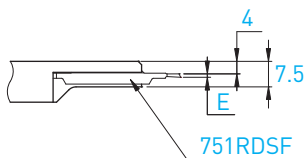
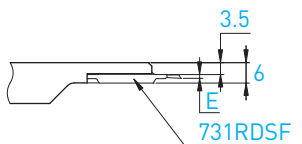
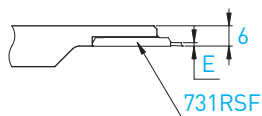
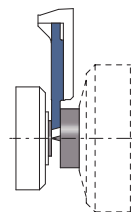
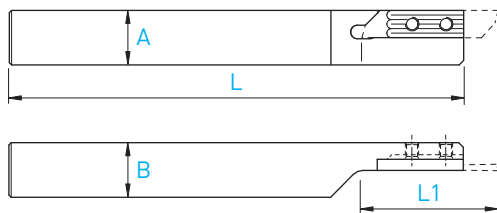
Holder

Coupe à droite déportée

Versetztes Rechtsschneiden

Right cut off line

730RC / 750RC



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



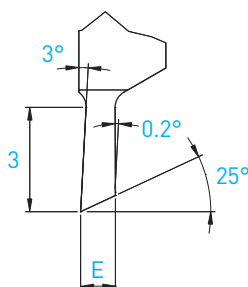
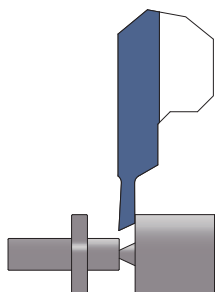
| A x B | L | L1 | Art. N° |
|---------|-----|----|-----------------|
| 8 x 8 | 115 | 24 | 730RC-8 |
| 10 x 10 | 115 | 24 | 730RC-10 |
| 12 x 12 | 130 | 30 | 730RC-12 |
| 16 x 16 | 130 | 40 | 730RC-16 |

| A x B | L | L1 | Art. N° |
|---------|-----|----|-----------------|
| 12 x 12 | 130 | 30 | 750RC-12 |
| 16 x 16 | 130 | 40 | 750RC-16 |

Tronçonnage
Abstechen
Parting off

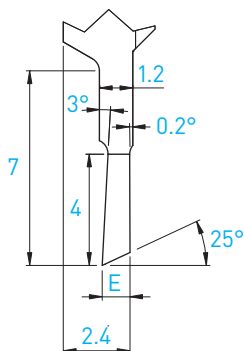
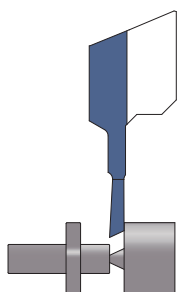
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

731R / 751R



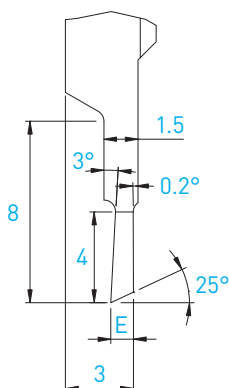
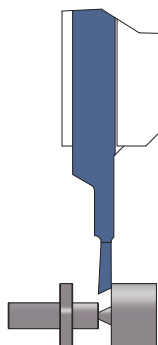
L (R)
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | Art. N° | HTAF | HTIN | HN (µK10) |
|-----|----------------|------|------|-----------|
| 1.0 | 731RSF-1.0-25° | ■ | ■ | ■ |



L (R)
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | Art. N° | HTAF | HTIN | HN (µK10) |
|-----|-----------------|------|------|-----------|
| 0.8 | 731RDSF-0.8-25° | ■ | ■ | ■ |
| 1.0 | 731RDSF-1.0-25° | ■ | □ | ■ |

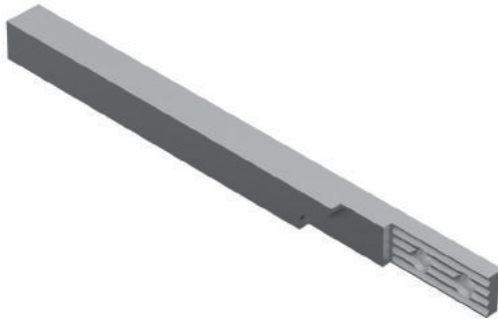
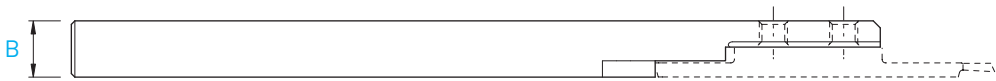
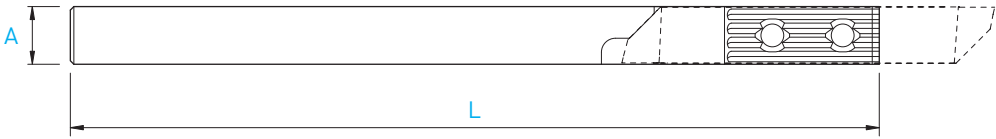


L (R)
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | Art. N° | HTAF | HTIN | HN (µK10) |
|-----|-----------------|------|------|-----------|
| 0.8 | 751RDSF-0.8-25° | ■ | ■ | ■ |
| 1.0 | 751RDSF-1.0-25° | ■ | □ | ■ |

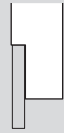
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

new

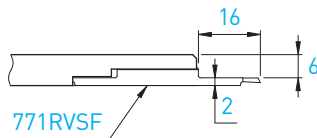
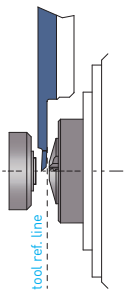


L (R)

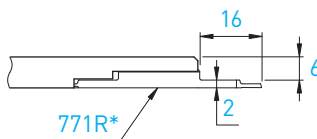
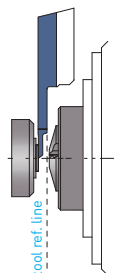
Coupe à droite déportée
Versetzttes Rechtsschneiden
Right cut off line



| A x B | L | Art. N° |
|---------|-----|------------------|
| 8.2 x 8 | 115 | 770-8.2X8-SN4-SF |



771RVSF



771R*

* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

Porte-outils

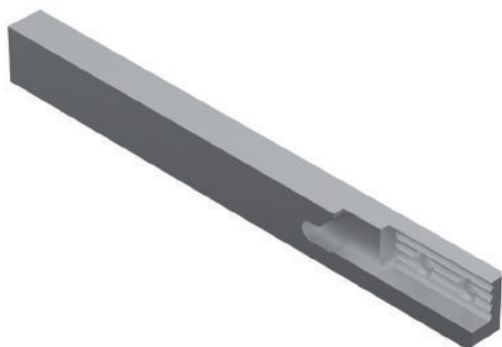
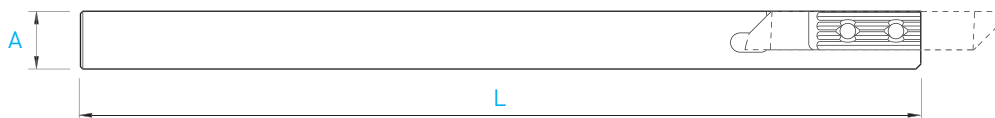
Halter

Holders

SwissNANO 7

770-SN7-SF

new

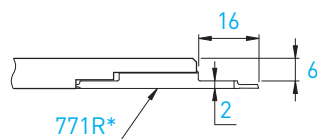
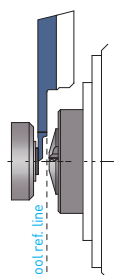
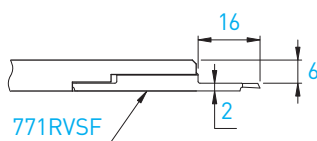
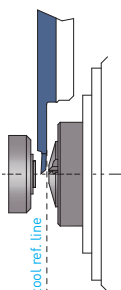


L (R)

Coupe à droite déportée
Versetzttes Rechtsschneiden
Right cut off line



| A x B | L | Art. N° |
|--------|-----|-----------------|
| 12 x 8 | 115 | 770-12X8-SN7-SF |



* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

TOP-WATCH

Plaquette

Wendepatte

Insert

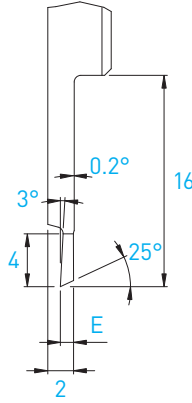
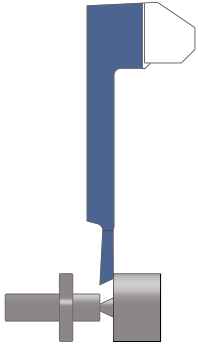
Coupe à gauche déportée

Versetztes Linksschneiden

Left cut off line

new

771RVSF



R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

| E | Art. N° | TAF | N (µK20) |
|-----|-----------------|-----|----------|
| 1.0 | 771RVSF-1.0-25° | ■ | ■ |
| 1.2 | 771RVSF-1.2-25° | ■ | ■ |
| 1.5 | 771RVSF-1.5-25° | ■ | ■ |

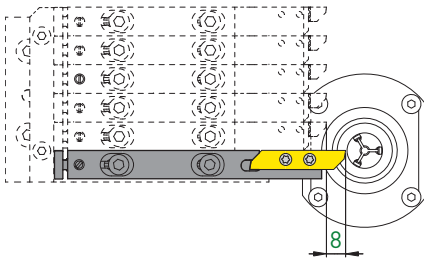
Porte-outils spéciaux de tronçonnage

Sonder Abstechwerkzeughalter

Special parting off tool holders

MODU-LINE

ML12



| Type de machine Maschinen-Typ Type of machine | Porte-outils Halter Holders | Art. N° | Plaquettes type WSP Typ Inserts type |
|---|-----------------------------------|-------------------------------|--|
| SwissNano | ML12 | ML12A-730RC-SWISS-NANO | 731RSF / 731RDSF |
| SwissNano | ML12 | ML12A-750RC-SWISS-NANO | 751RDSF |

Voir documentation MODU-Line
Siehe MODU-Line Dokumentation
See MODU-Line documentation

L'outil de référence pour le décolletage

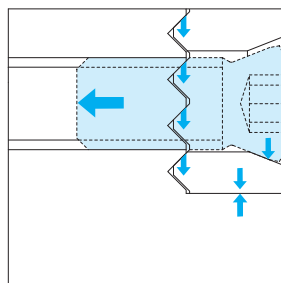
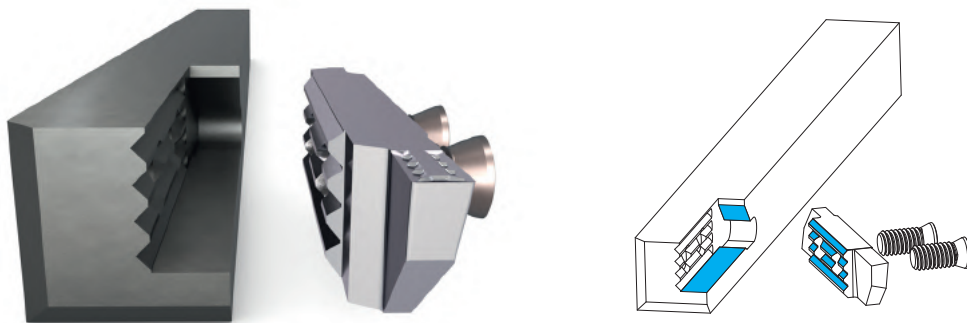
Hochwertiges Wendeplattensystem für Langdrehautomaten

Top class turning tool for automatic lathes

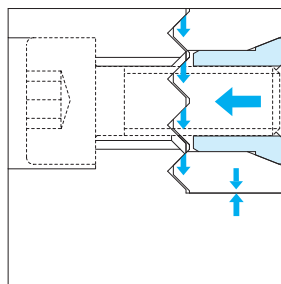
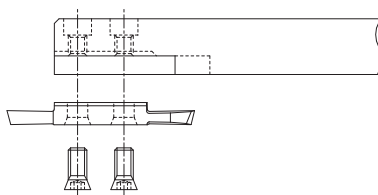
700 Series

100% rigid!

Système de serrage Applitec à denture décalée
 Applitec-Spannsystem mit verschobener Verzahnung
 Applitec clamping system with shifted teeth

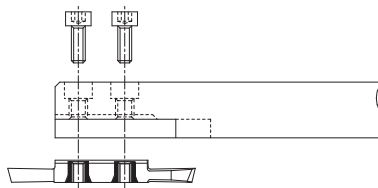


Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)



Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
 -B nach der Artikelreferenz hinzufügen
 add -B after the article number

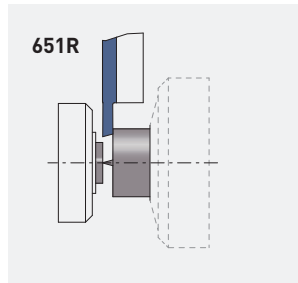
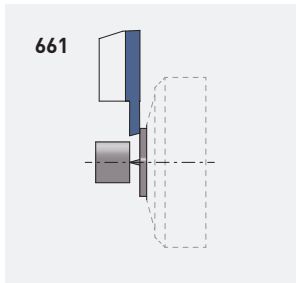
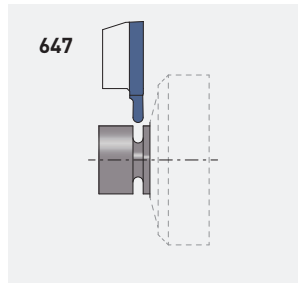
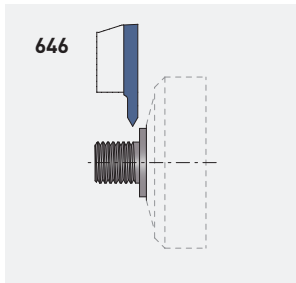
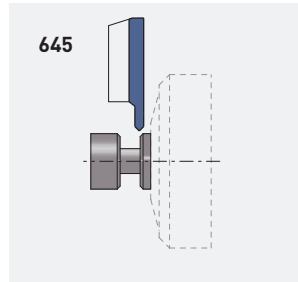
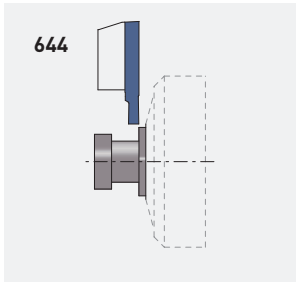
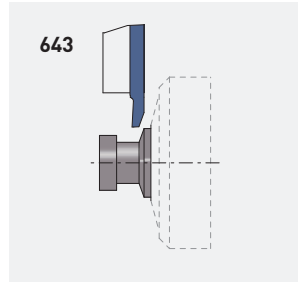
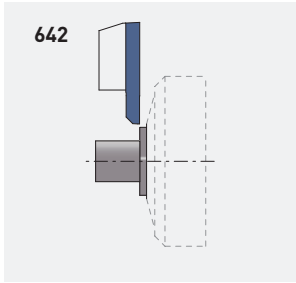


Changement de la plaquette possible dans la machine, sans démontage du porte-outil
 WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
 The insert can be changed in the machine without removing the tool holder

APPLITEC



| INFO | Codification Bezeichnungsschlüssel Designation key | Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data | Nuances Sorten Grades > 3.02 |
|--|--|--|--|
| SERIES 630 / 640 Tournage et gorge Drehen und Einstechen Turning and grooving | Porte-outils Halter Holders |  630 / 640 | > 3.06 |
| | Tournage avant Vorwärts drehen Front turning | 632 / 642 |  > 3.08 |
| | Tournage arrière Rückwärts drehen Back turning | 633 / 643 |  > 3.11 |
| | Fonçage-tournage Einstechen und drehen Grooving and turning | 634 / 644 |  > 3.19 |
| | Chanfreinage Anfasen Chamfering | 635 / 645 |  > 3.24 |
| | Filetage Gewinde drehen Threading | 636 / 646 |  > 3.26 |
| | Plaquettes à rayon Radius Wendepplatten Radius inserts | 637 / 647 |  > 3.28 |
| | Plaquettes ébauches WSP-Rohlinge Blank inserts | 631-EP / 641-EP |  > 3.30 |
| | SERIES 650 / 660 Tronçonnage Abstechen Parting off | Porte-outils Halter Holders |  650 / 660 |
| Tronçonnage Abstechen Parting off | | 651 / 661 |  > 3.34 |
| Tronçonnage - coupe déportée Abstechen - versetztes Schneiden Parting off - cut off line | | 651R |  > 3.39 |
| Plaquettes ébauches WSP-Rohlinge Blank inserts | | 651-EP / 661-EP |  > 3.44 |
| Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories | | | > 3.45 |



Codification des plaquettes PRO-Line série 600

WSP-Bezeichnungssystem für PRO-Line 600 Serie

Inserts designation key for PRO-Line 600 series

INFO



Dimension
Abmessung
Dimension

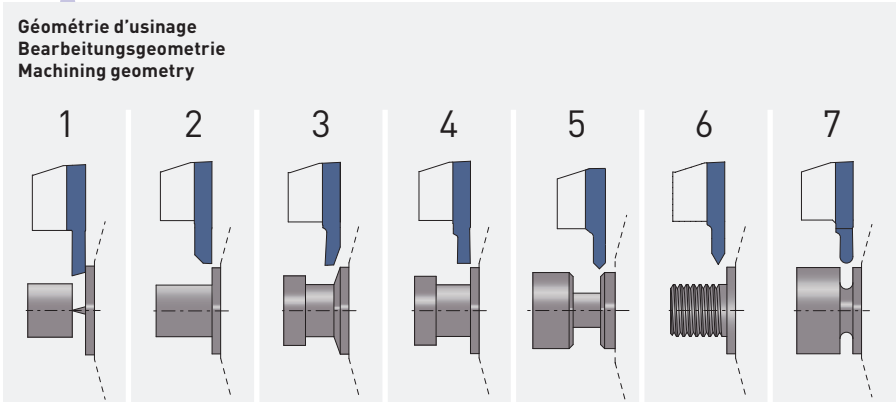
Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe
Schneidgeometrie
Cutting geometry

brise-copeau
Spanbrecher
chip breaker

particularités
Sondereigenschaften
special features



Gamme de produit définit la compatibilité des plaquettes avec le porte-outil
Produktserie bestimmt die WSP und Halter Kompatibilität
Product series shows the inserts and holder compatibility

L = 3, 5 (chiffre impair / ungerade Zahl / uneven number)

R = 4, 6 (chiffre pair / gerade Zahl / even number)

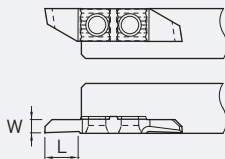
SERIES

Tournage et gorge

Drehen und Einstechen
Turning and grooving

W max = 3 mm
L max = 8 mm

L R
630 640

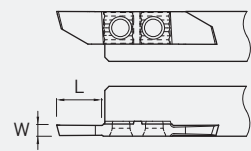


SERIES

Tronçonnage
Abstechen
Parting off

W max = 2.5 mm
L max = 11 mm

L R
650 660



Applitec série 600
Applitec 600 Serie
Applitec 600 series

Système de serrage à denture avec 2 vis de fixation
Spannsystem mit Verzahnung und 2 Schrauben
Teeth clamping system with 2 screws

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | Tournage Drehen Turning | | | Tronçonnage Abstechen Parting off | | |
|--|-------------------------------|--|----------------------------|---|--|----------------------------|
| | VC | 630/640 | | VC | 650/660 | |
| | | Prof. de passe Schnitttiefe Depth of cut | Avance Vorschub Feed | | Largeur de coupe Abstechbreite Cutting width | Avance Vorschub Feed |
| (m/min) | (mm) | (mm/U) | (m/min) | (mm) | (mm/U) | |
| Acier de décolletage Automatenstahl Free-cutting steel | P 120 - 200 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.15 0.05 - 0.25 | 80 - 150 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.08 0.03 - 0.15 |
| Acier Stahl < 600 N/mm ² Steel | P 80 - 160 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.15 0.05 - 0.25 | 70 - 120 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.06 0.03 - 0.12 |
| Acier Stahl < 800 N/mm ² Steel | P 60 - 120 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.10 0.05 - 0.20 | 60 - 100 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.05 0.03 - 0.10 |
| Acier Stahl > 800 N/mm ² Steel | P 50 - 100 | 0.05 - 1.0 1.0 - 3.0 | 0.01 - 0.08 0.05 - 0.15 | 40 - 80 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.04 0.03 - 0.08 |
| Acier inoxydable Rostfreistahl Stainless steel | M 60 - 120 | 0.05 - 1.0 1.0 - 3.0 | 0.01 - 0.08 0.05 - 0.15 | 60 - 100 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.04 0.03 - 0.08 |
| Aluminium Si <12% | N 200 - 1000 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.40 | 180 - 400 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.10 0.03 - 0.20 |
| Aluminium Si >12% | N 180 - 800 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.40 | 150 - 300 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.10 0.03 - 0.20 |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N 100 - 500 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.35 | 100 - 300 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.10 0.03 - 0.20 |
| Titane Titan Titanium | S 30 - 70 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.08 0.05 - 0.15 | 30 - 50 | 0.50 - 1.50 1.50 - 2.50 | 0.01 - 0.03 0.03 - 0.06 |

Nuances

Sorten

Grades

TiAlN

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- excellente nuance universelle
- 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

N (μK20)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain tenace
- supporte les coupes interrompues et autres conditions d'usinage défavorables

- zähe Feinkornsorte
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- tough micro-grain grade
- suitable for interrupted cut and other unfavorable machining conditions

HTA

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favorable machining conditions

HN (μK10)

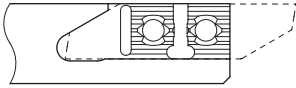
non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

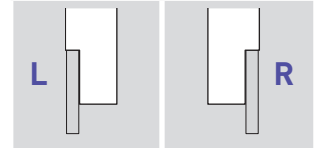
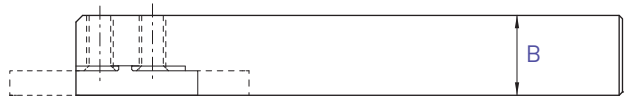
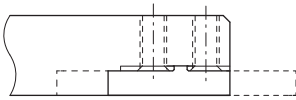
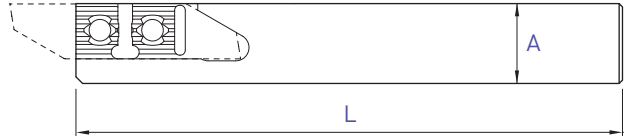
- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavorable machining conditions

L



R

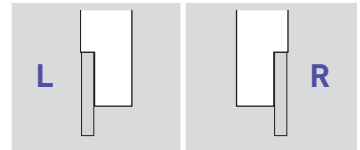
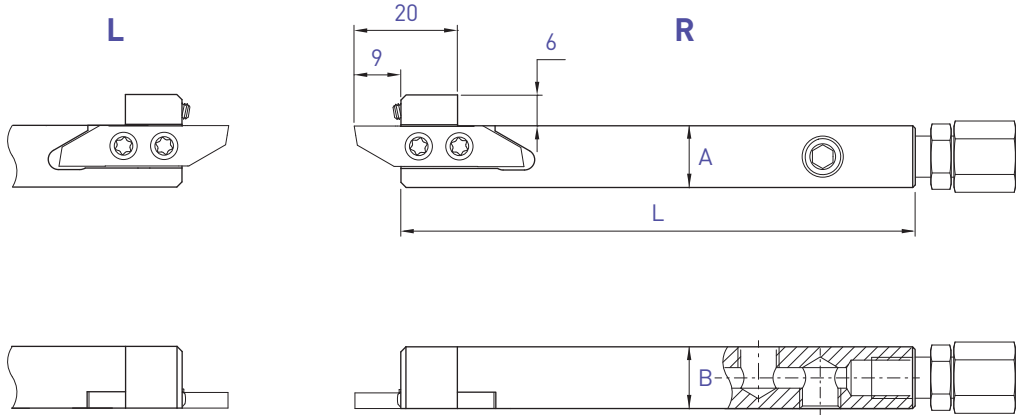


| A x B | L | Art. N° | Art. N° |
|-------------|-----|------------------|------------------|
| 8 x 8 | 115 | 630-8 | 640-8 |
| 10 x 10 | 115 | 630-10 | 640-10 |
| 10 x 10 | 50 | 630-10-50 | 640-10-50 |
| 12 x 12 | 130 | 630-12 | 640-12 |
| 12 x 12 | 90 | 630-12-90 | 640-12-90 |
| 12.7 x 12.7 | 130 | 630-12.7 | 640-12.7 |
| 16 x 16 | 130 | 630-16 | 640-16 |
| 16 x 16 | 75 | 630-16-75 | 640-16-75 |
| 20 x 20 | 120 | 630-20 | 640-20 |

Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

630-JET / 640-JET

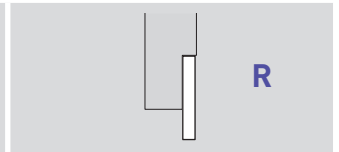
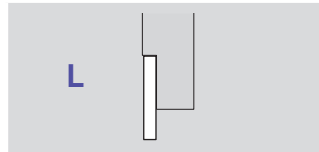
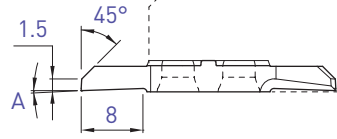
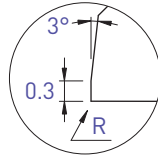
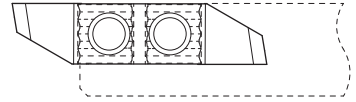
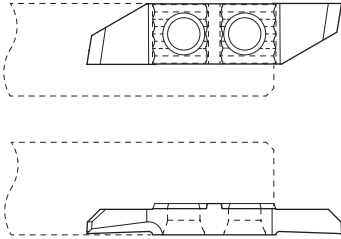


| A x B | L | Art. N° | Art. N° |
|-------------|-----|--------------|--------------|
| 10 x 12 | 100 | 630-1012-JET | 640-1012-JET |
| 12 x 12 | 100 | 630-12-JET | 640-12-JET |
| 12.7 x 12.7 | 100 | 630-12.7-JET | 640-12.7-JET |
| 16 x 16 | 100 | 630-16-JET | 640-16-JET |
| 20 x 20 | 100 | 630-20-JET | 640-20-JET |

Chaque support est livré avec vis, clé, raccord droit et buse d'arrosage Ø 1.5 mm.
 Jeder Halter wird mit Spannschraube(n), Schlüssel, gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert.
 Screw(s), key, straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder.

L

R



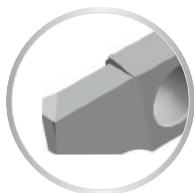
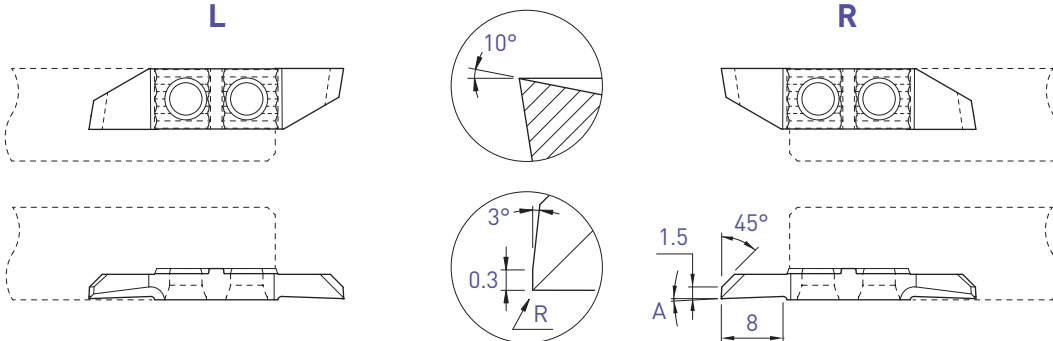
| A | R | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|----|------|---------|-------------------|------------------|------------|-------------------|------------------|
| 0° | 0 | 632 | ■ ■ | | 642 | ■ ■ | □ □ |
| 0° | 0.08 | - | | | 642-R08 | ■ ■ | □ □ |
| 0° | 0.15 | - | | | 642-R15 | ■ ■ | □ □ |
| 2° | 0 | 632-2° | ■ ■ | | 642-2° | ■ ■ | □ □ |
| 2° | 0.08 | - | | | 642-2°-R08 | ■ ■ | □ □ |
| 2° | 0.15 | - | | | 642-2°-R15 | ■ ■ | □ □ |

Tournage avant
Vorwärts drehen
Front turning

632X / 642X

L

R



| A | R | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|----|------|-----------|-------------------|------------------|---------------|-------------------|------------------|
| 0° | 0 | 632X10 | ■ ■ | | 642X10 | ■ ■ | □ □ |
| 0° | 0.08 | - | | | 642X10-R08 | ■ ■ | □ □ |
| 0° | 0.15 | - | | | 642X10-R15 | ■ ■ | □ □ |
| 2° | 0 | 632X10-2° | ■ ■ | | 642X10-2° | ■ ■ | □ □ |
| 2° | 0.08 | - | | | 642X10-2°-R08 | ■ ■ | □ □ |
| 2° | 0.15 | - | | | 642X10-2°-R15 | ■ ■ | □ □ |

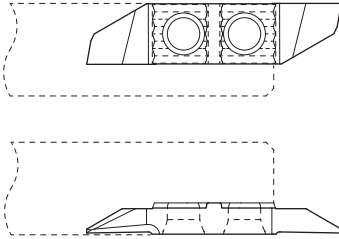
Tournage multifonction

Mehrweck drehen

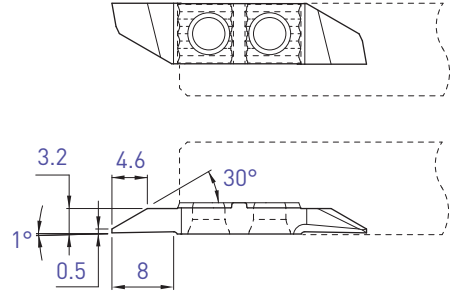
Multifunction turning

632S / 642S

L



R



Tournage avant
Vorwärts drehen
Front turning

| L | | | | R | | | |
|---------|-------------------|-----|-----------|---------|-------------------|-----|-----------|
| Art. N° | TiAlN N (µk20) | HTA | HN (µk10) | Art. N° | TiAlN N (µk20) | HTA | HN (µk10) |
| 632S05 | ■ ■ | | | 642S05 | ■ ■ | □ □ | |

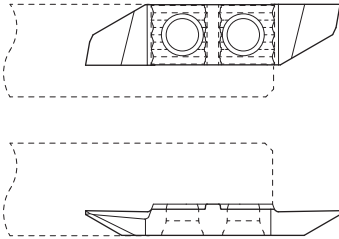
Tournage multifonction

Mehrweck drehen

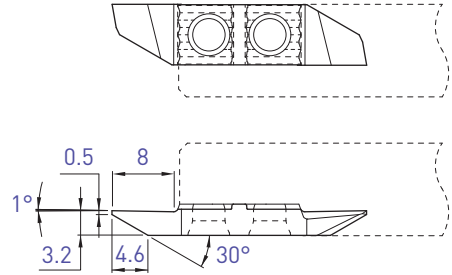
Multifunction turning

633S / 643S

L



R

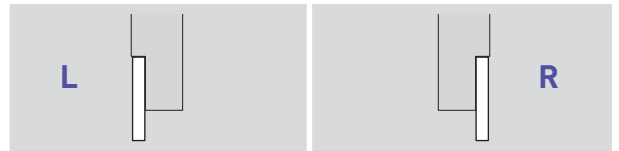
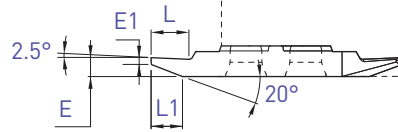
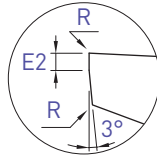
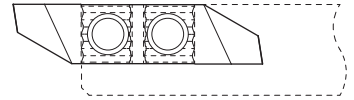
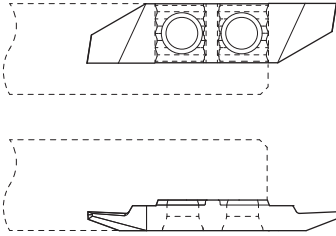


Tournage arrière
Rückwärts drehen
Back turning

| L | | | | R | | | |
|---------|-------------------|-----|-----------|---------|-------------------|-----|-----------|
| Art. N° | TiAlN N [µk20] | HTA | HN [µk10] | Art. N° | TiAlN N [µk20] | HTA | HN [µk10] |
| 633S05 | ■ ■ | | | 643S05 | ■ ■ | □ □ | |

L

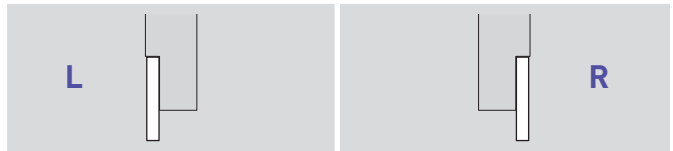
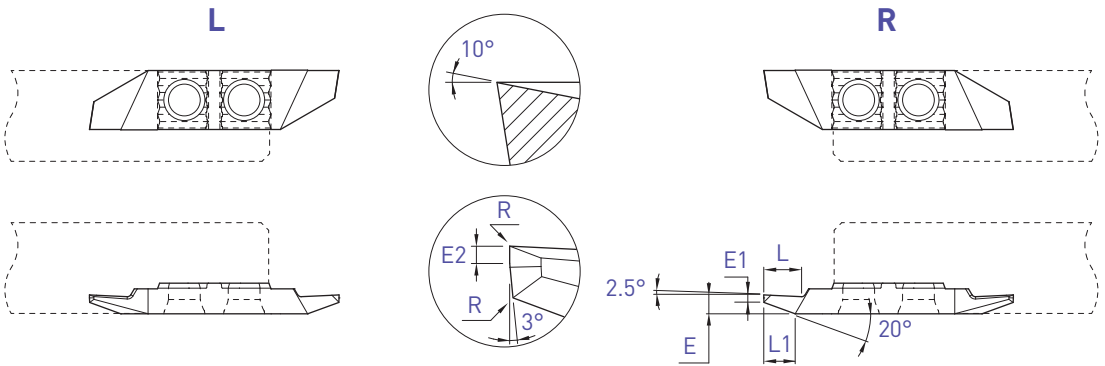
R



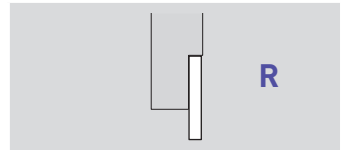
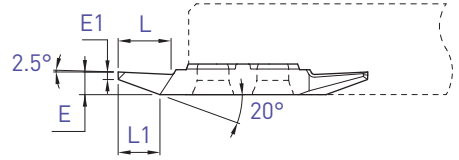
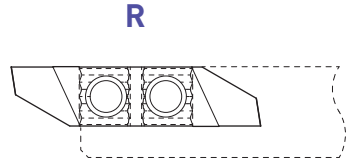
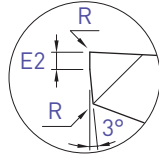
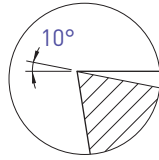
| E1 | E2 | L | L1 | E | R | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|-----|------|-----|-----|-----|------|---------|-------------------|------------------|-------------|-------------------|------------------|
| 0.5 | 0.25 | 3 | 2.8 | 1.5 | 0 | 633-0.5 | ■ ■ | | 643-0.5 | ■ ■ | □ □ |
| 0.5 | 0.25 | 3 | 2.8 | 1.5 | 0.08 | - | | | 643-0.5-R08 | ■ ■ | □ □ |
| 0.8 | 0.40 | 4.5 | 3.3 | 2.0 | 0 | - | | | 643-0.8 | ■ ■ | □ □ |
| 0.8 | 0.40 | 4.5 | 3.3 | 2.0 | 0.08 | - | | | 643-0.8-R08 | ■ ■ | □ □ |
| 1.0 | 0.40 | 5 | 4.2 | 2.5 | 0 | - | | | 643-1.0 | ■ ■ | □ □ |
| 1.0 | 0.40 | 5 | 4.2 | 2.5 | 0.08 | - | | | 643-1.0-R08 | ■ ■ | □ □ |
| 1.5 | 0.50 | 6 | 4.2 | 3.0 | 0 | - | | | 643-1.5 | ■ ■ | □ □ |
| 1.5 | 0.50 | 6 | 4.2 | 3.0 | 0.08 | - | | | 643-1.5-R08 | ■ ■ | □ □ |

Tournage arrière
 Rückwärts drehen
 Back turning

633X / 643X



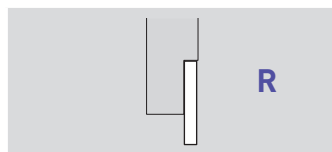
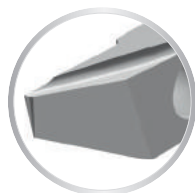
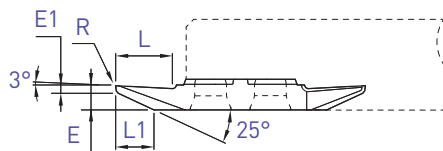
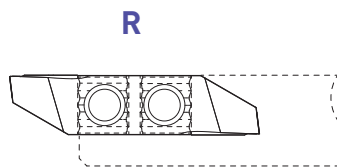
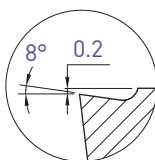
| E1 | E2 | L | L1 | E | R | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|-----|------|-----|-----|-----|------|------------|-------------------|------------------|----------------|-------------------|------------------|
| 0.5 | 0.25 | 3 | 2.8 | 1.5 | 0 | 633X10-0.5 | ■ ■ | | 643X10-0.5 | ■ ■ | □ □ |
| 0.5 | 0.25 | 3 | 2.8 | 1.5 | 0.08 | - | | | 643X10-0.5-R08 | ■ ■ | □ □ |
| 0.8 | 0.40 | 4.5 | 3.3 | 2.0 | 0 | - | | | 643X10-0.8 | ■ ■ | □ □ |
| 0.8 | 0.40 | 4.5 | 3.3 | 2.0 | 0.08 | - | | | 643X10-0.8-R08 | ■ ■ | □ □ |
| 1.0 | 0.40 | 5 | 4.2 | 2.5 | 0 | - | | | 643X10-1.0 | ■ ■ | □ □ |
| 1.0 | 0.40 | 5 | 4.2 | 2.5 | 0.08 | - | | | 643X10-1.0-R08 | ■ ■ | □ □ |
| 1.5 | 0.50 | 6 | 4.2 | 3.0 | 0 | - | | | 643X10-1.5 | ■ ■ | □ □ |
| 1.5 | 0.50 | 6 | 4.2 | 3.0 | 0.08 | - | | | 643X10-1.5-R08 | ■ ■ | □ □ |



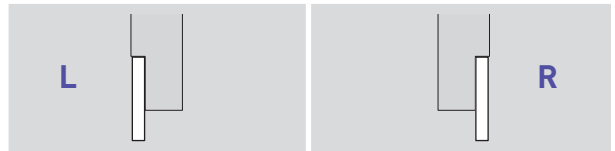
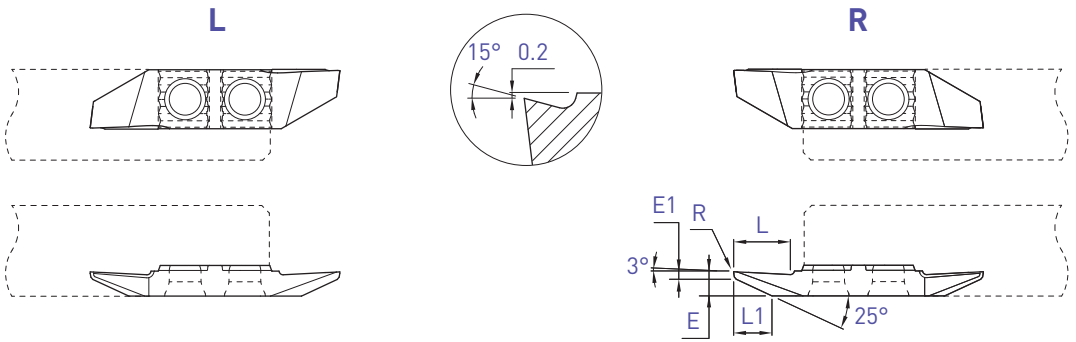
| E1 | E2 | L | L1 | E | R | Art. N° | TiAlN N [µk20] | HTA | HN [µk10] |
|-----|-----|---|-----|-----|------|-----------------|-------------------|-----|-----------|
| 1.0 | 0.4 | 7 | 5.5 | 3.0 | 0 | 643X10S-1.0 | ■ ■ | □ □ | |
| 1.0 | 0.4 | 7 | 5.5 | 3.0 | 0.08 | 643X10S-1.0-R08 | ■ ■ | □ □ | |

Tournage arrière
 Rückwärts drehen
 Back turning

643VX8



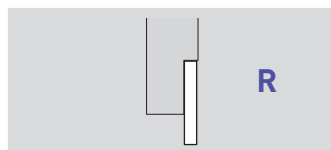
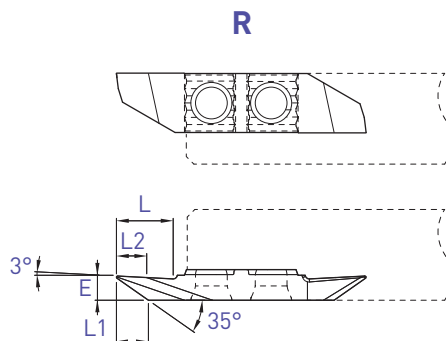
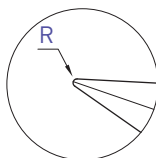
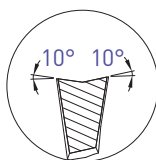
| E1 | L | L1 | E | R | Art. N° | TiAlN N [µk20] | HTA | HN [µk10] |
|-----|-----|-----|-----|------|------------|-------------------|-----|-----------|
| 1.0 | 7.5 | 5.0 | 3.2 | 0 | 643VX8 | ■ ■ | □ □ | |
| 1.0 | 7.5 | 5.0 | 3.2 | 0.08 | 643VX8-R08 | ■ ■ | □ □ | |



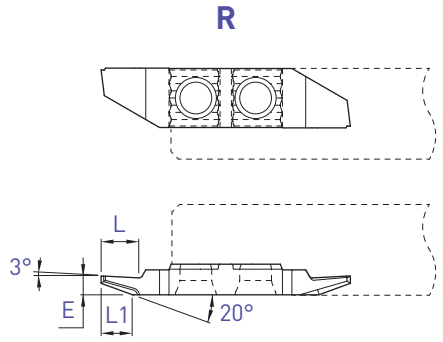
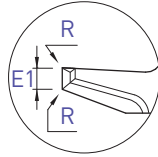
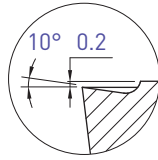
| E1 | L | L1 | E | R | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|-----|-----|-----|-----|------|----------------|-------------------|------------------|--------------------|-------------------|------------------|
| 0.6 | 7.5 | 5.2 | 3.2 | 0 | 633VX15 | ■ ■ | | 643VX15 | ■ ■ | □ □ |
| 0.6 | 7.5 | 5.2 | 3.2 | 0.08 | - | | | 643VX15-R08 | ■ ■ | □ □ |

Tournage arrière
 Rückwärts drehen
 Back turning

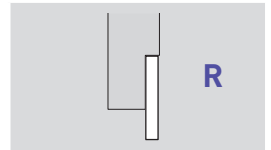
643VUX



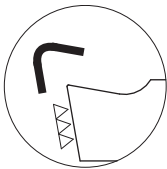
| L | L1 | L2 | E | R | Art. N° | Ti/AlN N [µk20] | HTA | HN [µk10] |
|-----|-----|-----|-----|------|--------------|--------------------|-----|-----------|
| 7.5 | 4.2 | 4.0 | 3.2 | 0.15 | 643VUX10-R15 | ■ ■ | □ □ | |
| 7.5 | 3.8 | 3.8 | 3.2 | 0.35 | 643VUX10-R35 | ■ ■ | □ □ | |



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



| E1 | L | L1 | E | R | Art. N° | TiAlN N (µk20) |
|-----|---|----|-----|------|-----------------|-------------------|
| 1.0 | 5 | 4 | 2.5 | 0.01 | 643ZX10-1.0 | ■ |
| 1.0 | 5 | 4 | 2.5 | 0.08 | 643ZX10-1.0-R08 | ■ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

Fonçage-tournage

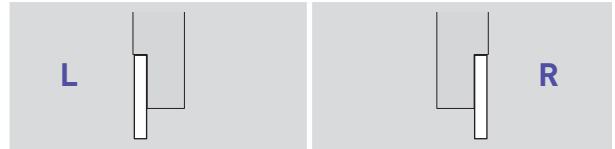
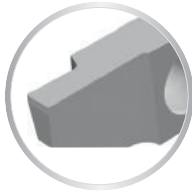
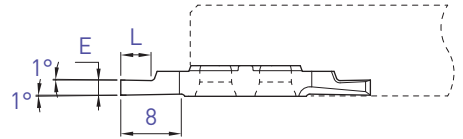
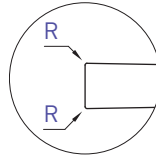
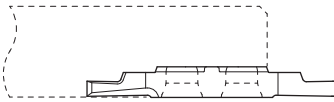
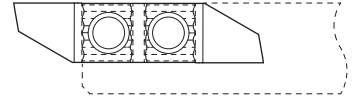
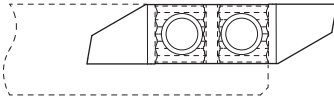
Einstecken und drehen

Grooving and turning

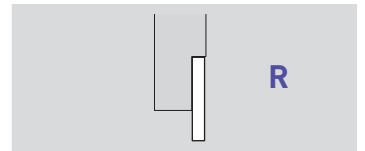
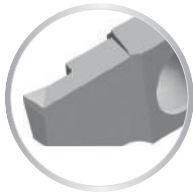
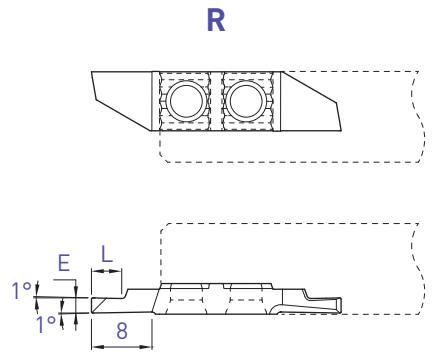
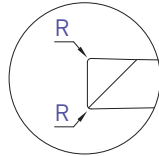
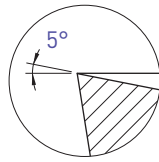
634 / 644

L

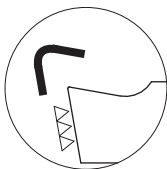
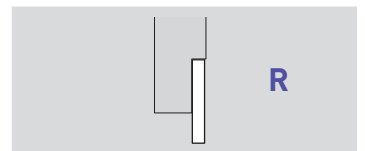
R



| E | L | R | Art. N° | TiAlN N (µk20) | HTA HN (µk10) | Art. N° | TiAlN N (µk20) | HTA HN (µk10) |
|------|-----|------|---------|-------------------|------------------|-------------|-------------------|------------------|
| 0.5 | 1.5 | 0 | 634-0.5 | ■ ■ | | 644-0.5 | ■ ■ | □ □ |
| 0.6 | 1.8 | 0 | - | | | 644-0.6 | ■ ■ | □ □ |
| 0.75 | 2 | 0 | - | | | 644-0.75 | ■ ■ | □ □ |
| 0.8 | 2 | 0 | 634-0.8 | ■ ■ | | 644-0.8 | ■ ■ | □ □ |
| 0.9 | 2.5 | 0 | - | | | 644-0.9 | ■ ■ | □ □ |
| 0.95 | 3 | 0 | - | | | 644-0.95 | ■ ■ | □ □ |
| 1.0 | 2.5 | 0 | 634-1.0 | ■ ■ | | 644-1.0 | ■ ■ | □ □ |
| 1.0 | 2.5 | 0.08 | - | | | 644-1.0-R08 | ■ ■ | □ □ |
| 1.2 | 3 | 0 | 634-1.2 | ■ ■ | | 644-1.2 | ■ ■ | □ □ |
| 1.2 | 3 | 0.08 | - | | | 644-1.2-R08 | ■ ■ | □ □ |
| 1.5 | 3 | 0 | 634-1.5 | ■ ■ | | 644-1.5 | ■ ■ | □ □ |
| 1.5 | 3 | 0.08 | - | | | 644-1.5-R08 | ■ ■ | □ □ |
| 1.5 | 3 | 0.15 | - | | | 644-1.5-R15 | ■ ■ | □ □ |
| 1.8 | 4 | 0 | - | | | 644-1.8 | ■ ■ | □ □ |
| 2.0 | 4 | 0 | 634-2.0 | ■ ■ | | 644-2.0 | ■ ■ | □ □ |
| 2.0 | 4 | 0.08 | - | | | 644-2.0-R08 | ■ ■ | □ □ |
| 2.0 | 4 | 0.15 | - | | | 644-2.0-R15 | ■ ■ | □ □ |
| 2.5 | 6 | 0 | 634-2.5 | ■ ■ | | 644-2.5 | ■ ■ | □ □ |
| 2.5 | 6 | 0.08 | - | | | 644-2.5-R08 | ■ ■ | □ □ |
| 2.5 | 6 | 0.15 | - | | | 644-2.5-R15 | ■ ■ | □ □ |
| 3 | 6 | 0 | 634-3.0 | ■ ■ | | 644-3.0 | ■ ■ | □ □ |
| 3 | 6 | 0.08 | - | | | 644-3.0-R08 | ■ ■ | □ □ |
| 3 | 6 | 0.15 | - | | | 644-3.0-R15 | ■ ■ | □ □ |



| E | L | R | Art. N° | TiAlN N (µk20) | HTA | HN (µk10) |
|-----|---|------|---------------|-------------------|-----|-----------|
| 1.5 | 3 | 0.08 | 644X5-1.5-R08 | ■ ■ | □ □ | |
| 2 | 4 | 0.08 | 644X5-2.0-R08 | ■ ■ | □ □ | |
| 2 | 4 | 0.15 | 644X5-2.0-R15 | ■ ■ | □ □ | |
| 2.5 | 6 | 0.08 | 644X5-2.5-R08 | ■ ■ | □ □ | |
| 2.5 | 6 | 0.15 | 644X5-2.5-R15 | ■ ■ | □ □ | |
| 3 | 6 | 0.08 | 644X5-3.0-R08 | ■ ■ | □ □ | |
| 3 | 6 | 0.15 | 644X5-3.0-R15 | ■ ■ | □ □ | |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

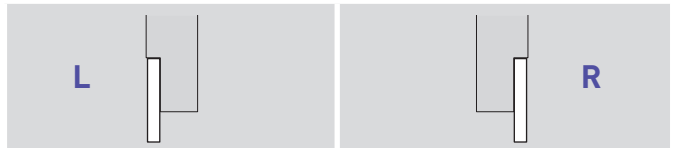
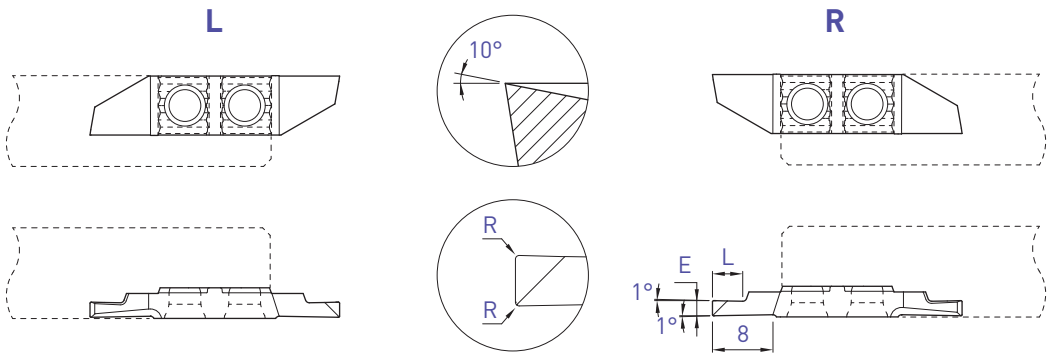
| E | L | R | Art. N° | TiAlN N (µk20) | HTA | HN (µk10) |
|-----|---|------|------------------|-------------------|-----|-----------|
| 1.5 | 3 | 0.08 | 644X5-1.5-R08-EP | ■ ■ | | |
| 2 | 4 | 0.08 | 644X5-2.0-R08-EP | ■ ■ | | |
| 2 | 4 | 0.15 | 644X5-2.0-R15-EP | ■ ■ | | |
| 2.5 | 6 | 0.08 | 644X5-2.5-R08-EP | ■ ■ | | |
| 2.5 | 6 | 0.15 | 644X5-2.5-R15-EP | ■ ■ | | |
| 3 | 6 | 0.08 | 644X5-3.0-R08-EP | ■ ■ | | |
| 3 | 6 | 0.15 | 644X5-3.0-R15-EP | ■ ■ | | |

Fonçage-tournage

Einstecken und drehen

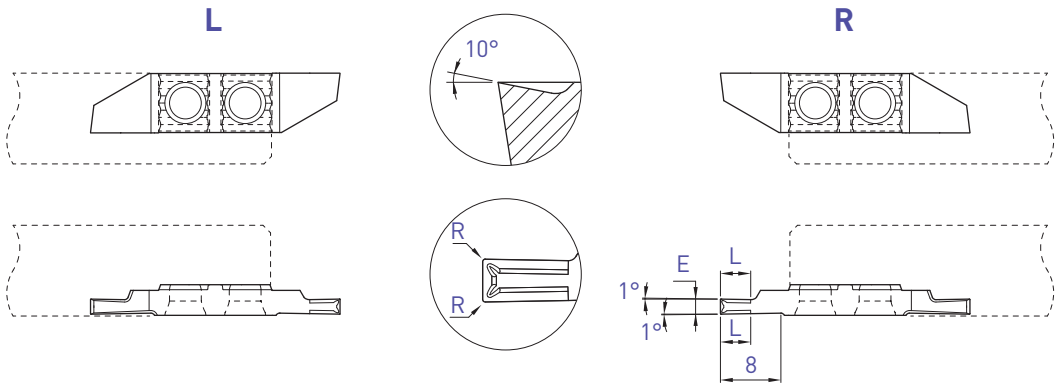
Grooving and turning

634X10 / 644X10

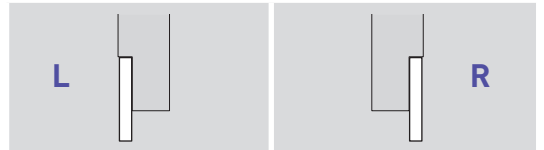


| E | L | R | Art. N° | TiAlN N (µk20) | HTA HN (µk10) | Art. N° | TiAlN N (µk20) | HTA HN (µk10) |
|-----|-----|------|----------------|-------------------|------------------|----------------|-------------------|------------------|
| 0.8 | 2 | 0 | 634X10-0.8 | ■ ■ | | 644X10-0.8 | ■ ■ □ □ | |
| 1.0 | 2.5 | 0 | 634X10-1.0 | ■ ■ | | 644X10-1.0 | ■ ■ □ □ | |
| 1.0 | 2.5 | 0.08 | 634X10-1.0-R08 | ■ ■ | | 644X10-1.0-R08 | ■ ■ □ □ | |
| 1.2 | 3 | 0 | - | | | 644X10-1.2 | ■ ■ □ □ | |
| 1.2 | 3 | 0.08 | - | | | 644X10-1.2-R08 | ■ ■ □ □ | |
| 1.5 | 3 | 0 | 634X10-1.5 | ■ ■ | | 644X10-1.5 | ■ ■ □ □ | |
| 1.5 | 3 | 0.08 | 634X10-1.5-R08 | ■ ■ | | 644X10-1.5-R08 | ■ ■ □ □ | |
| 1.5 | 3 | 0.15 | 634X10-1.5-R15 | ■ ■ | | 644X10-1.5-R15 | ■ ■ □ □ | |
| 1.8 | 4 | 0 | - | | | 644X10-1.8 | ■ ■ □ □ | |
| 2 | 4 | 0 | 634X10-2.0 | ■ ■ | | 644X10-2.0 | ■ ■ □ □ | |
| 2 | 4 | 0.08 | 634X10-2.0-R08 | ■ ■ | | 644X10-2.0-R08 | ■ ■ □ □ | |
| 2 | 4 | 0.15 | 634X10-2.0-R15 | ■ ■ | | 644X10-2.0-R15 | ■ ■ □ □ | |
| 2.5 | 6 | 0 | 634X10-2.5 | ■ ■ | | 644X10-2.5 | ■ ■ □ □ | |
| 2.5 | 6 | 0.08 | 634X10-2.5-R08 | ■ ■ | | 644X10-2.5-R08 | ■ ■ □ □ | |
| 2.5 | 6 | 0.15 | 634X10-2.5-R15 | ■ ■ | | 644X10-2.5-R15 | ■ ■ □ □ | |
| 3 | 6 | 0 | 634X10-3.0 | ■ ■ | | 644X10-3.0 | ■ ■ □ □ | |
| 3 | 6 | 0.08 | 634X10-3.0-R08 | ■ ■ | | 644X10-3.0-R08 | ■ ■ □ □ | |
| 3 | 6 | 0.15 | 634X10-3.0-R15 | ■ ■ | | 644X10-3.0-R15 | ■ ■ □ □ | |

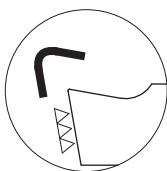
■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| E | L | R | Art. N° | TiAlN N (µk20) | Art. N° | TiAlN N (µk20) |
|-----|-----|------|------------------|-------------------|------------------|-------------------|
| 1.0 | 2.5 | 0.01 | 634ZXB10-1.0 | ■ | 644ZXB10-1.0 | ■ |
| 1.5 | 4 | 0.01 | 634ZXB10-1.5 | ■ | 644ZXB10-1.5 | ■ |
| 1.5 | 4 | 0.08 | 634ZXB10-1.5-R08 | ■ | 644ZXB10-1.5-R08 | ■ |
| 2.0 | 4 | 0.01 | 634ZXB10-2.0 | ■ | 644ZXB10-2.0 | ■ |
| 2.0 | 4 | 0.08 | 634ZXB10-2.0-R08 | ■ | 644ZXB10-2.0-R08 | ■ |
| 2.0 | 4 | 0.15 | 634ZXB10-2.0-R15 | ■ | 644ZXB10-2.0-R15 | ■ |
| 2.5 | 5 | 0.08 | 634ZXB10-2.5-R08 | ■ | 644ZXB10-2.5-R08 | ■ |
| 2.5 | 5 | 0.15 | 634ZXB10-2.5-R15 | ■ | 644ZXB10-2.5-R15 | ■ |
| 3.0 | 6 | 0.08 | 634ZXB10-3.0-R08 | ■ | 644ZXB10-3.0-R08 | ■ |
| 3.0 | 6 | 0.15 | 634ZXB10-3.0-R15 | ■ | 644ZXB10-3.0-R15 | ■ |
| 3.0 | 6 | 0.35 | 634ZXB10-3.0-R35 | ■ | 644ZXB10-3.0-R35 | ■ |



Arête de coupe honée
Gehonte Schneidkante
Honed edge

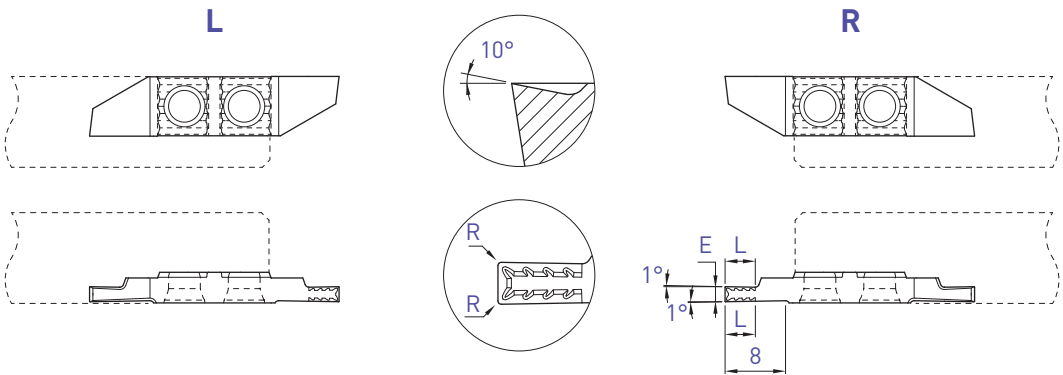
f min: 0.02 mm/U

Fonçage-tournage

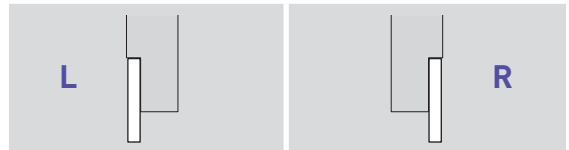
Einstecken und drehen

Grooving and turning

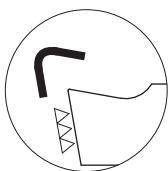
634ZXT / 644ZXT



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



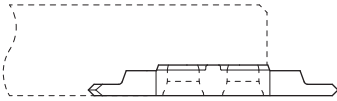
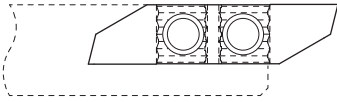
| E | L | R | Art. N° | TiAlN N (µm20) | Art. N° | TiAlN N (µm20) |
|-----|-----|------|------------------|-------------------|------------------|-------------------|
| 1.0 | 2.5 | 0.01 | 634ZXT10-1.0 | ■ | 644ZXT10-1.0 | ■ |
| 1.5 | 4 | 0.01 | 634ZXT10-1.5 | ■ | 644ZXT10-1.5 | ■ |
| 1.5 | 4 | 0.08 | 634ZXT10-1.5-R08 | ■ | 644ZXT10-1.5-R08 | ■ |
| 2.0 | 4 | 0.01 | 634ZXT10-2.0 | ■ | 644ZXT10-2.0 | ■ |
| 2.0 | 4 | 0.08 | 634ZXT10-2.0-R08 | ■ | 644ZXT10-2.0-R08 | ■ |
| 2.0 | 4 | 0.15 | 634ZXT10-2.0-R15 | ■ | 644ZXT10-2.0-R15 | ■ |
| 2.5 | 5 | 0.08 | 634ZXT10-2.5-R08 | ■ | 644ZXT10-2.5-R08 | ■ |
| 2.5 | 5 | 0.15 | 634ZXT10-2.5-R15 | ■ | 644ZXT10-2.5-R15 | ■ |
| 3.0 | 6 | 0.08 | 634ZXT10-3.0-R08 | ■ | 644ZXT10-3.0-R08 | ■ |
| 3.0 | 6 | 0.15 | 634ZXT10-3.0-R15 | ■ | 644ZXT10-3.0-R15 | ■ |
| 3.0 | 6 | 0.35 | - | | 644ZXT10-3.0-R35 | ■ |



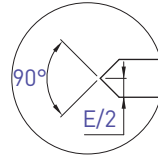
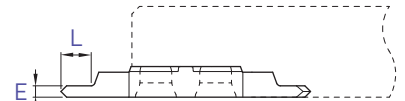
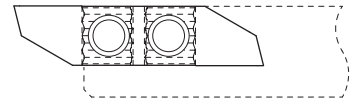
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

L



R



L

R

| E | L | Art. N° | TiAlN N (µk20) | Art. N° | TiAlN N (µk20) |
|-----|---|------------|-------------------|------------|-------------------|
| 1.5 | 4 | 635-90-1.5 | ■ ■ | 645-90-1.5 | ■ ■ |

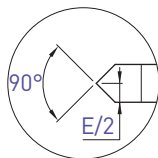
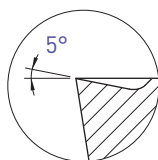
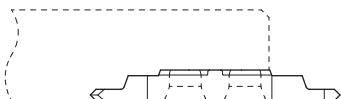
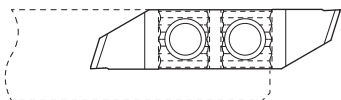
Chanfreinage

Anfasen

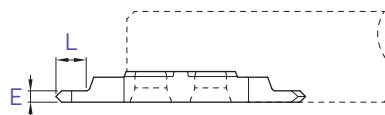
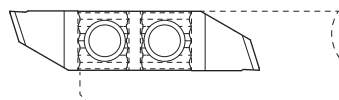
Chamfering

635X-90 / 645X-90

L



R



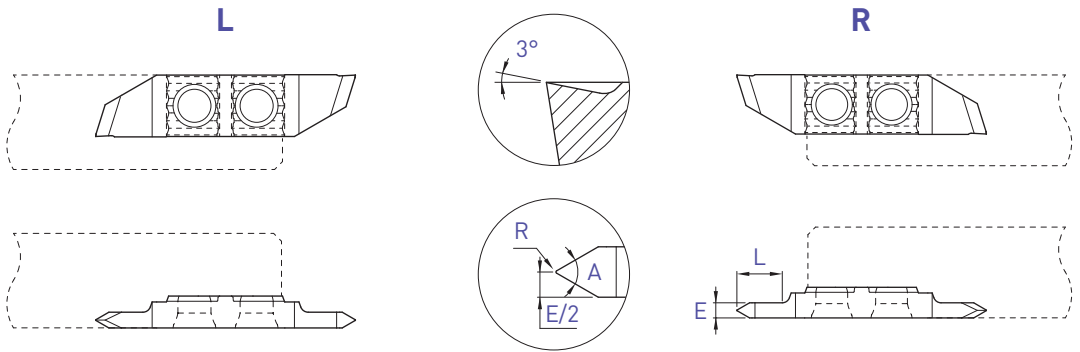
L



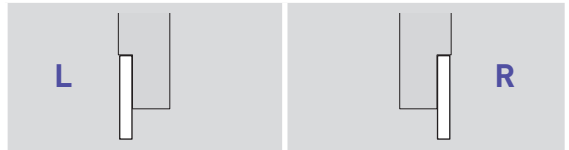
R



| E | L | Art. N° | TiAlN N (µk<20) | Art. N° | TiAlN N (µk<20) |
|-----|---|--------------|--------------------|--------------|--------------------|
| 1.5 | 4 | 635X5-90-1.5 | ■ ■ | 645X5-90-1.5 | ■ ■ |



Profil partiel
Teilprofil
Partial profile



| A | E | L | R | Art. N° | TiAlN N (µk20) | Art. N° | TiAlN N (µk20) |
|-----|-----|---|------|------------------|-------------------|------------------|-------------------|
| 55° | 1.5 | 4 | 0 | 636X3-55-1.5 | ■ ■ | 646X3-55-1.5 | ■ ■ |
| 55° | 2.0 | 6 | 0.03 | 636X3-55-2.0-R03 | ■ ■ | 646X3-55-2.0-R03 | ■ ■ |
| 60° | 1.5 | 4 | 0 | 636X3-60-1.5 | ■ ■ | 646X3-60-1.5 | ■ ■ |
| 60° | 2.0 | 6 | 0.03 | 636X3-60-2.0-R03 | ■ ■ | 646X3-60-2.0-R03 | ■ ■ |
| 60° | 2.0 | 6 | 0.06 | 636X3-60-2.0-R06 | ■ ■ | 646X3-60-2.0-R06 | ■ ■ |
| 60° | 3.0 | 8 | 0.06 | 636X3-60-3.0-R06 | ■ ■ | 646X3-60-3.0-R06 | ■ ■ |
| 60° | 3.0 | 8 | 0.12 | 636X3-60-3.0-R12 | ■ ■ | 646X3-60-3.0-R12 | ■ ■ |

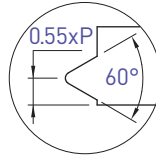
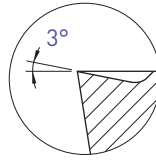
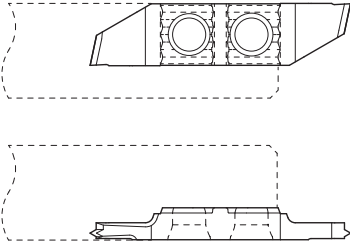
Filetage

Gewinde drehen

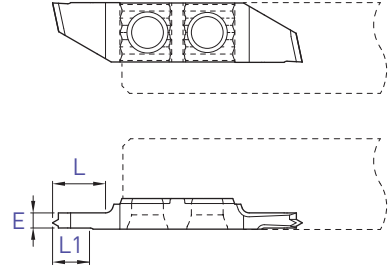
Threading

636X-M / 646X-M

L

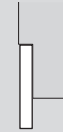


R



Profil complet métrique
Metrisches Vollprofil
Metric full profile

L



R



| E | L | L1 | Pas Steigung Pitch P | Art. N° | TiAlN N (µk20) | Art. N° | TiAlN N (µk20) |
|-----|---|----|-------------------------------|--------------|-------------------|--------------|-------------------|
| 1.0 | 3 | 3 | 0.25 | 636X3-M-0.25 | ■ ■ | 646X3-M-0.25 | ■ ■ |
| 1.0 | 3 | 3 | 0.30 | 636X3-M-0.30 | ■ ■ | 646X3-M-0.30 | ■ ■ |
| 1.0 | 3 | 3 | 0.35 | 636X3-M-0.35 | ■ ■ | 646X3-M-0.35 | ■ ■ |
| 1.0 | 3 | 3 | 0.40 | 636X3-M-0.40 | ■ ■ | 646X3-M-0.40 | ■ ■ |
| 1.0 | 3 | 3 | 0.45 | 636X3-M-0.45 | ■ ■ | 646X3-M-0.45 | ■ ■ |
| 1.0 | 3 | 3 | 0.50 | 636X3-M-0.50 | ■ ■ | 646X3-M-0.50 | ■ ■ |
| 1.5 | 5 | 5 | 0.60 | 636X3-M-0.60 | ■ ■ | 646X3-M-0.60 | ■ ■ |
| 1.5 | 5 | 5 | 0.70 | 636X3-M-0.70 | ■ ■ | 646X3-M-0.70 | ■ ■ |
| 1.5 | 5 | 5 | 0.75 | 636X3-M-0.75 | ■ ■ | 646X3-M-0.75 | ■ ■ |
| 1.5 | 5 | 5 | 0.80 | 636X3-M-0.80 | ■ ■ | 646X3-M-0.80 | ■ ■ |
| 2.0 | 7 | 5 | 1.00 | 636X3-M-1.00 | ■ ■ | 646X3-M-1.00 | ■ ■ |
| 2.0 | 7 | 5 | 1.25 | 636X3-M-1.25 | ■ ■ | 646X3-M-1.25 | ■ ■ |
| 2.0 | 7 | 5 | 1.50 | 636X3-M-1.50 | ■ ■ | 646X3-M-1.50 | ■ ■ |

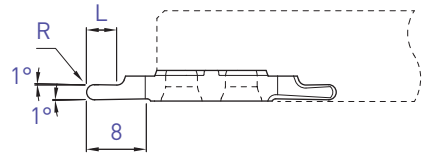
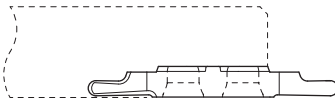
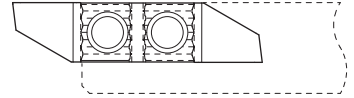
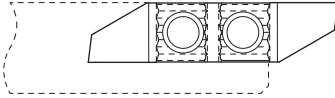
PRO-LINE

Plaquettes à rayon
 Radius Wendeplatten
 Radius inserts

637 / 647

L

R



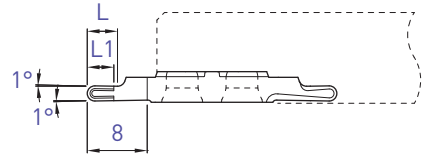
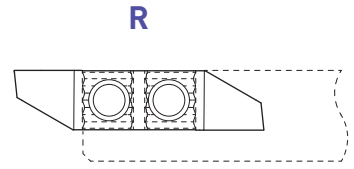
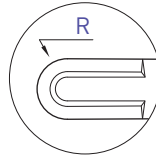
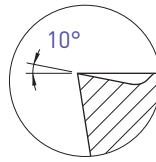
L

R

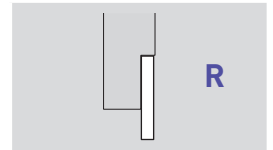
| R | L | Art. N° | TiAlN N (µk20) | HTA HN (µk10) | Art. N° | TiAlN N (µk20) | HTA HN (µk10) |
|------|-----|----------|-------------------|------------------|-----------|-------------------|------------------|
| 0.25 | 1.5 | - | | | 647-R0.25 | ■ ■ | |
| 0.4 | 2 | - | | | 647-R0.4 | ■ ■ | |
| 0.5 | 2.5 | 637-R0.5 | ■ ■ | | 647-R0.5 | ■ ■ □ □ | |
| 0.6 | 2.5 | - | | | 647-R0.6 | ■ ■ | |
| 0.75 | 3 | - | | | 647-R0.75 | ■ ■ | |
| 0.8 | 3 | - | | | 647-R0.8 | ■ ■ | |
| 1.0 | 4 | 637-R1.0 | ■ ■ | | 647-R1.0 | ■ ■ | |
| 1.5 | 6 | - | | | 647-R1.5 | ■ ■ | |

Plaquettes à rayon
 Radius Wendplatten
 Radius inserts

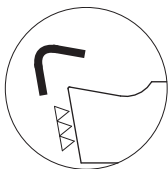
647ZX10



Pour un meilleur contrôle des copeaux
 Für eine bessere Spankontrolle
 For a better chip-control

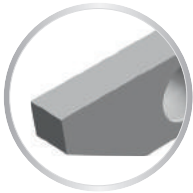
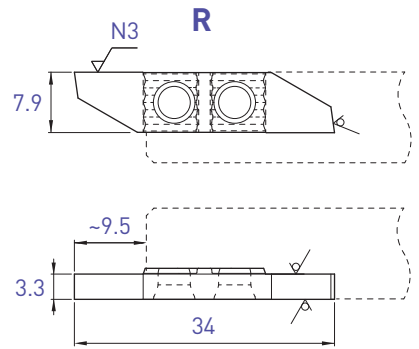
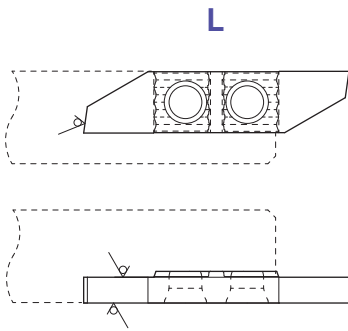


| R | L | L1 | Art. N° | TiAlN N (µk20) |
|-----|---|-----|--------------|-------------------|
| 1.0 | 4 | 3.5 | 647ZX10-R1.0 | ■ |
| 1.5 | 6 | 4 | 647ZX10-R1.5 | ■ |



Arête de coupe honée
 Gehonte Schneidkante
 Honed edge

f min: 0.02 mm/U



Face de coupe polie
 Polierte Schneidfläche
 Polished cutting face

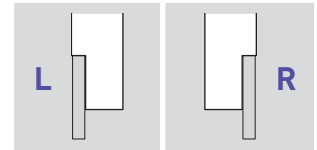
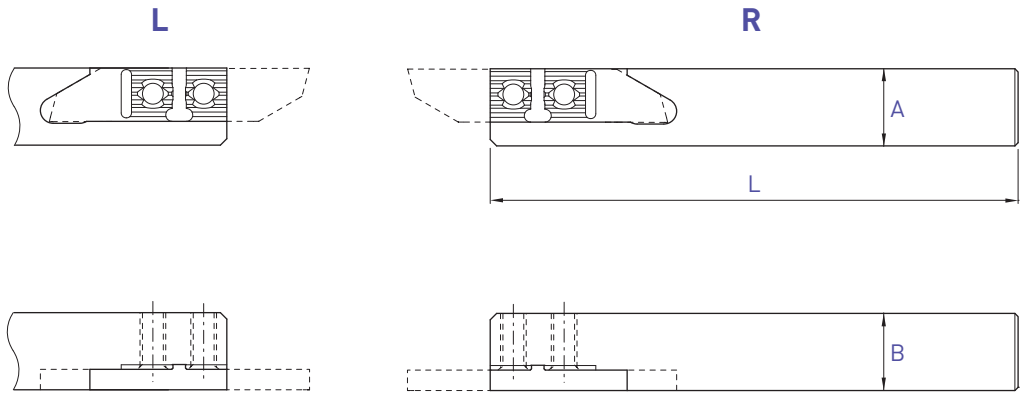
| L | | | | R | | | |
|---------|-------------------|-----|-----------|---------|-------------------|-----|-----------|
| Art. N° | TiAlN N (µk20) | HTA | HN (µk10) | Art. N° | TiAlN N (µk20) | HTA | HN (µk10) |
| 631-EP | ■ ■ | ■ ■ | ■ ■ | 641-EP | ■ ■ | ■ ■ | ■ ■ |

Porte-outils

Halter

Holder

650 / 660



| A x B | L | Art. N° | Art. N° |
|-------------|-----|-----------|-----------|
| 8 x 8 | 115 | 650-8 | 660-8 |
| 10 x 10 | 115 | 650-10 | 660-10 |
| 10 x 10 | 50 | 650-10-50 | 660-10-50 |
| 12 x 12 | 130 | 650-12 | 660-12 |
| 12 x 12 | 90 | 650-12-90 | 660-12-90 |
| 12.7 x 12.7 | 130 | 650-12.7 | 660-12.7 |
| 16 x 16 | 130 | 650-16 | 660-16 |
| 16 x 16 | 75 | 650-16-75 | 660-16-75 |
| 20 x 20 | 120 | 650-20 | 660-20 |

Chaque support est livré avec vis et clé.

Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.

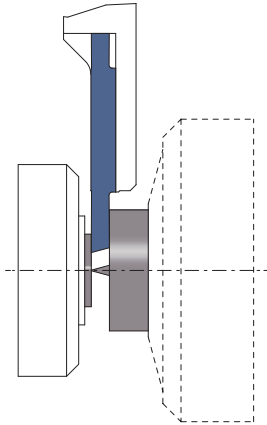
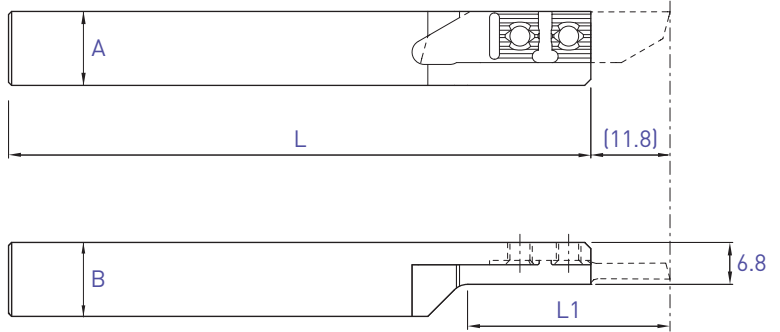
Screw(s) and key are included with each tool holder.


■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Utiliser des plaquettes type 651R
 WSP Typ 651R verwenden
 Use inserts type 651R

Voir dès page 3.39
 Siehe ab Seite 3.39
 See from page 3.39

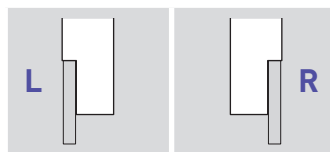
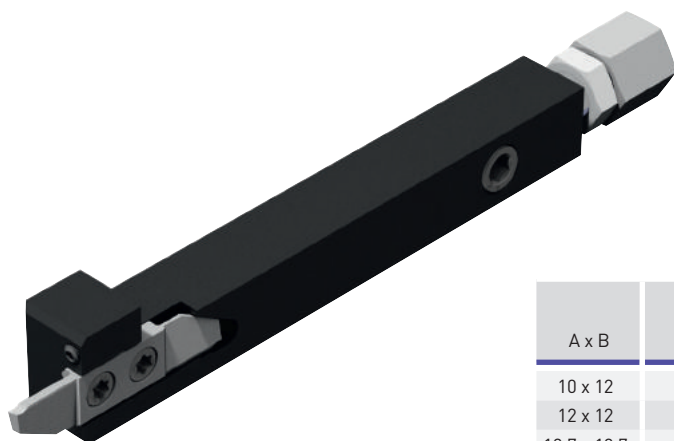
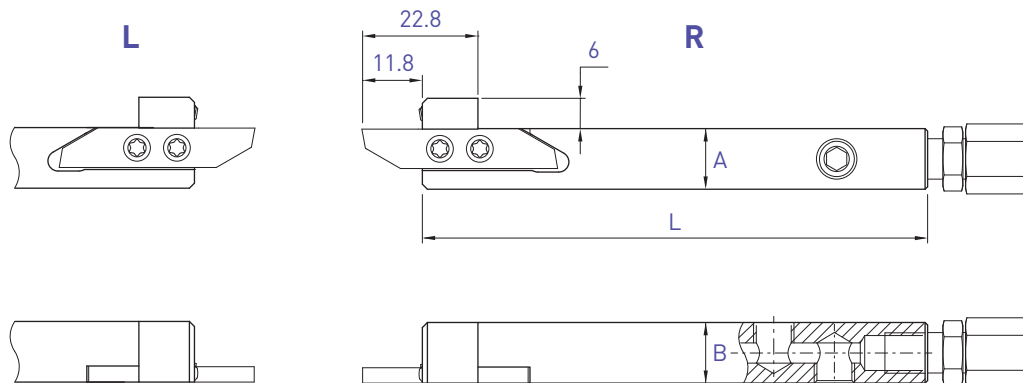


|  L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line | | | |
|---|-----|----|-----------------|
| A x B | L | L1 | Art. N° |
| 10 x 10 | 115 | 32 | 650RC-10 |
| 12 x 12 | 130 | 32 | 650RC-12 |
| 16 x 16 | 130 | 42 | 650RC-16 |

Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

650-JET / 660-JET



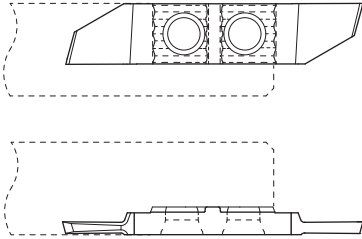
| A x B | L | Art. N° | Art. N° |
|-------------|-----|--------------|--------------|
| 10 x 12 | 100 | 650-1012-JET | 660-1012-JET |
| 12 x 12 | 100 | 650-12-JET | 660-12-JET |
| 12.7 x 12.7 | 100 | 650-12.7-JET | 660-12.7-JET |
| 16 x 16 | 100 | 650-16-JET | 660-16-JET |
| 20 x 20 | 100 | 650-20-JET | 660-20-JET |

Chaque support est livré avec vis, clé, raccord droit et buse d'arrosage Ø 1.5 mm.

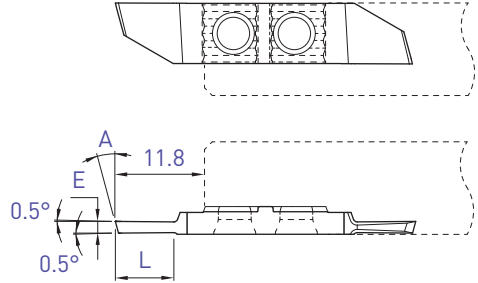
Jeder Halter wird mit Spannschraube(n), Schlüssel, gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert.

Screw(s), key, straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder.

L



R



L



R



| E | A | L | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|-----|-----|-----|-------------|-------------------|------------------|-------------|-------------------|------------------|
| 0.8 | 20° | 5 | 651-0.8-20° | ■ ■ | | 661-0.8-20° | ■ ■ | □ □ |
| 1.0 | 15° | 5 | - | | | 661-1.0-15° | ■ ■ | □ □ |
| 1.0 | 20° | 5 | 651-1.0-20° | ■ ■ | | 661-1.0-20° | ■ ■ | □ □ |
| 1.2 | 15° | 5 | - | | | 661-1.2-15° | ■ ■ | □ □ |
| 1.2 | 20° | 5 | 651-1.2-20° | ■ ■ | | 661-1.2-20° | ■ ■ | □ □ |
| 1.5 | 15° | 7.5 | 651-1.5-15° | ■ ■ | | 661-1.5-15° | ■ ■ | □ □ |
| 1.5 | 20° | 7.5 | - | | | 661-1.5-20° | ■ ■ | □ □ |
| 1.8 | 15° | 9 | 651-1.8-15° | ■ ■ | | 661-1.8-15° | ■ ■ | □ □ |
| 2.0 | 15° | 11 | 651-2.0-15° | ■ ■ | | 661-2.0-15° | ■ ■ | □ □ |
| 2.5 | 15° | 11 | 651-2.5-15° | ■ ■ | | 661-2.5-15° | ■ ■ | □ □ |

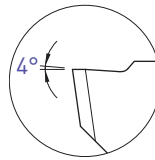
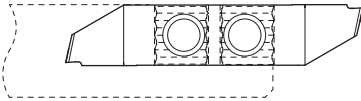
Tronçonnage

Abstechen

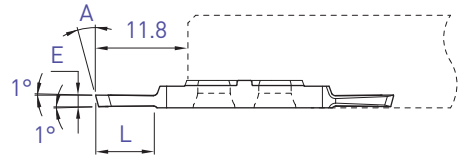
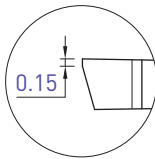
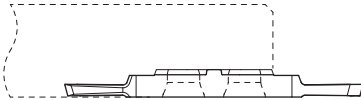
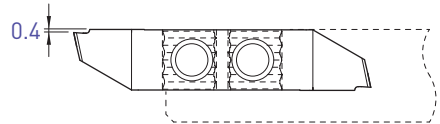
Parting off

651XF / 661XF

L



R



L



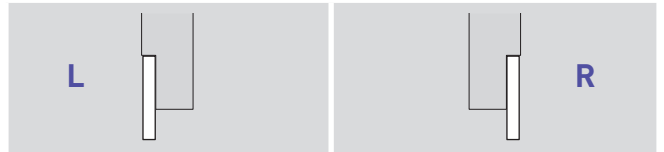
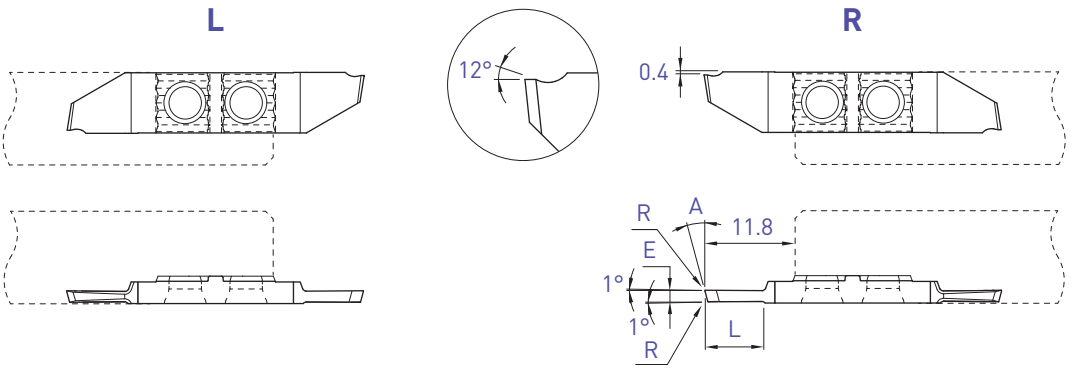
R



| E | A | L | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|-----|-----|-----|-----------|-------------------|------------------|-----------|-------------------|------------------|
| 1.5 | 15° | 7.5 | 651XF-1.5 | ■ ■ | | 661XF-1.5 | ■ ■ | □ □ |
| 2.0 | 15° | 11 | 651XF-2.0 | ■ ■ | | 661XF-2.0 | ■ ■ | □ □ |

Tronçonnage
Abstechen
Parting off

651X12 / 661X12



| E | A | L | R | Art. N° | TiAlN N [µk20] | HTA HN [µk10] | Art. N° | TiAlN N [µk20] | HTA HN [µk10] |
|-----|-----|-----|------|------------|-------------------|------------------|------------|-------------------|------------------|
| 1.0 | 15° | 5 | 0.03 | 651X12-1.0 | ■ ■ | | 661X12-1.0 | ■ ■ | □ □ |
| 1.5 | 15° | 7.5 | 0.03 | 651X12-1.5 | ■ ■ | | 661X12-1.5 | ■ ■ | □ □ |
| 2.0 | 15° | 11 | 0.03 | 651X12-2.0 | ■ ■ | | 661X12-2.0 | ■ ■ | □ □ |

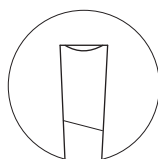
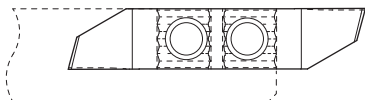
Tronçonnage

Abstechen

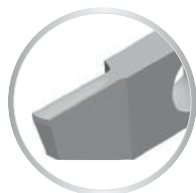
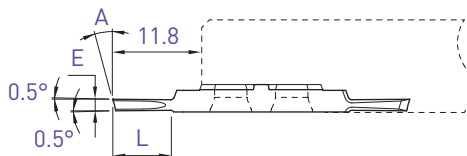
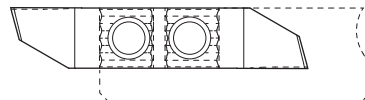
Parting off

651U / 661U

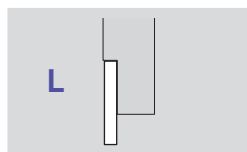
L



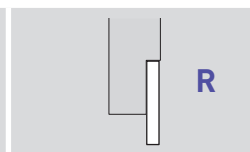
R



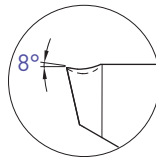
L



R

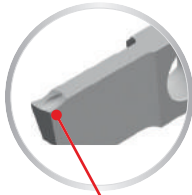
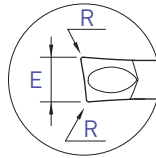
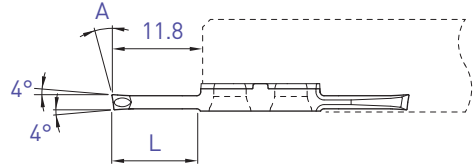


| E | A | L | Art. N° | TiAlN N (µm20) | Art. N° | TiAlN N (µm20) |
|-----|-----|-----|----------|-------------------|----------|-------------------|
| 1.5 | 15° | 7.5 | 651U-1.5 | ■ ■ | 661U-1.5 | ■ ■ |
| 2.0 | 15° | 11 | 651U-2.0 | ■ ■ | 661U-2.0 | ■ ■ |

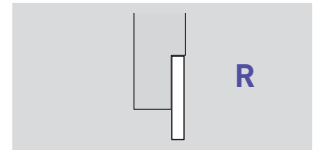
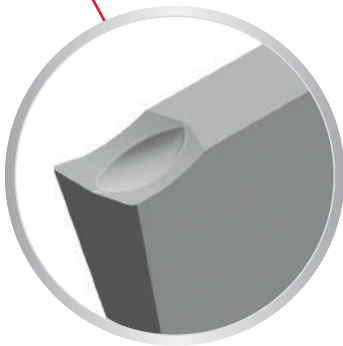


0.2

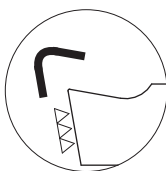
R



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



| E | A | L | R | Art. N° | TiAlN N (µk20) |
|-----|----|----|------|-------------------|-------------------|
| 2.0 | 8° | 11 | 0.10 | 661ZU8-2.0-8°-R10 | ■ |



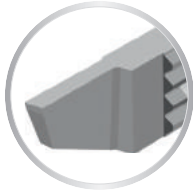
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

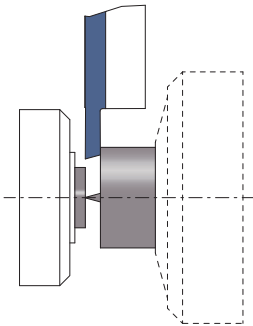
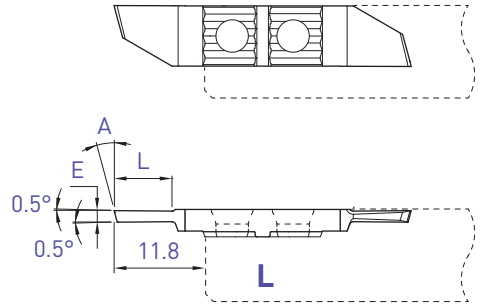
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetzttes Schneiden
Cut off line

651R



Cut R



L (R)

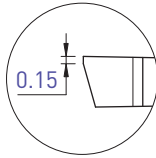
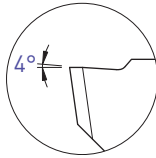
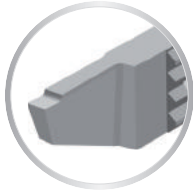
Coupe à droite déportée
Versetzttes Rechtsschneiden
Right cut off line

| E | A | L | Art. N° | Ti/AlN N (µk20) | HTA | HN (µk10) |
|-----|-----|-----|--------------|--------------------|-----|-----------|
| 1.0 | 15° | 5 | 651R-1.0-15° | ■ ■ | □ □ | |
| 1.2 | 15° | 5 | 651R-1.2-15° | ■ ■ | □ □ | |
| 1.5 | 15° | 7.5 | 651R-1.5-15° | ■ ■ | □ □ | |
| 2.0 | 15° | 11 | 651R-2.0-15° | ■ ■ | □ □ | |
| 2.5 | 15° | 11 | 651R-2.5-15° | ■ ■ | □ □ | |

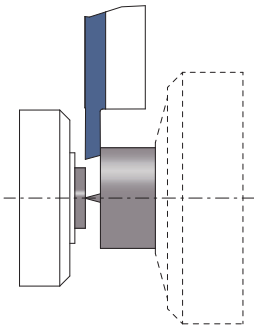
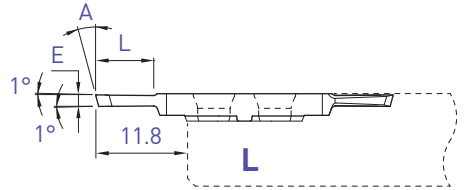
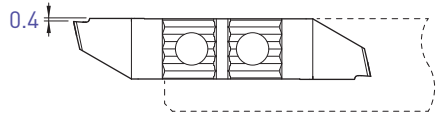
Tronçonnage
 Abstechen
 Parting off

Coupe déportée
 Versetztes Schneiden
 Cut off line

651RXF



Cut R



L (R)

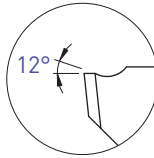
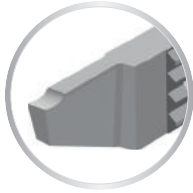
Coupe à droite déportée
 Versetztes Rechtsschneiden
 Right cut off line

| E | A | L | Art. N° | Ti/AIN N (µk20) | HTA | HN (µk10) |
|-----|-----|-----|------------|--------------------|-----|-----------|
| 1.5 | 15° | 7.5 | 651RXF-1.5 | ■ ■ | □ □ | |
| 2.0 | 15° | 11 | 651RXF-2.0 | ■ ■ | □ □ | |

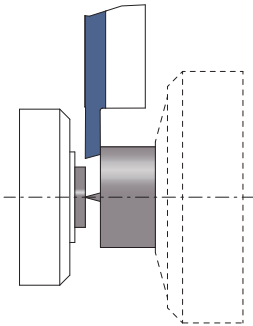
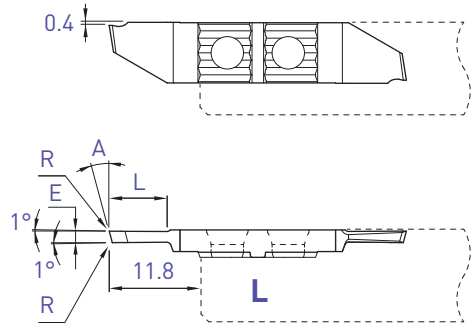
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

651RX12



Cut R



L (R)

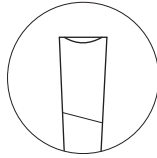
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | A | L | R | Art. N° | Ti/AIN N (µk20) | HTA | HN (µk10) |
|-----|-----|-----|------|-------------|--------------------|-----|-----------|
| 1.5 | 15° | 7.5 | 0.03 | 651RX12-1.5 | ■ ■ | □ □ | |
| 2.0 | 15° | 11 | 0.03 | 651RX12-2.0 | ■ ■ | □ □ | |

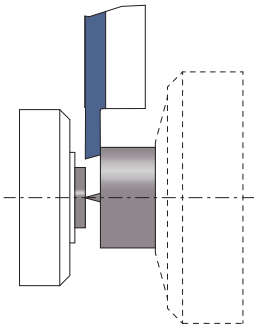
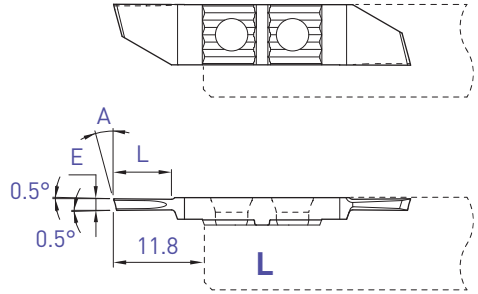
Tronçonnage
 Abstechen
 Parting off

Coupe déportée
 Versetztes Schneiden
 Cut off line

651RU



Cut R



L (R)

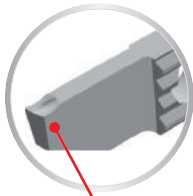
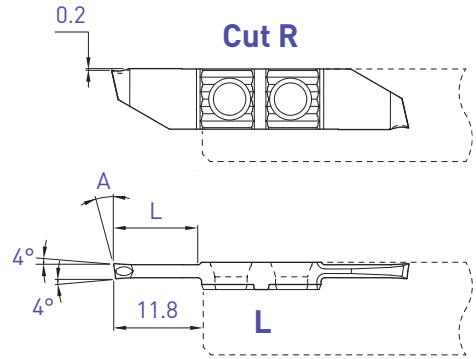
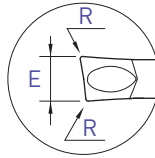
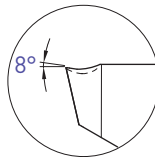
Coupe à droite déportée
 Versetztes Rechtsschneiden
 Right cut off line

| E | A | L | Art. N° | TiAlN N (µk20) |
|-----|-----|-----|-----------|-------------------|
| 1.5 | 15° | 7.5 | 651RU-1.5 | ■ ■ |
| 2.0 | 15° | 11 | 651RU-2.0 | ■ ■ |

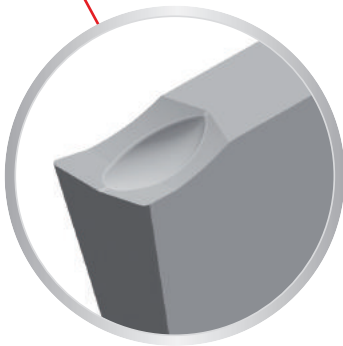
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

651RZU



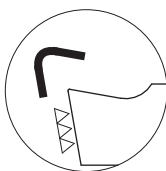
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



L (R)

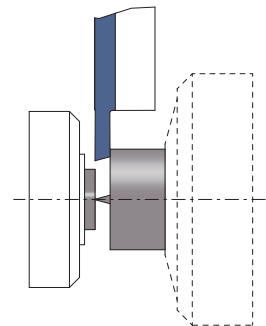
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

| E | A | L | R | Art. N° | TiAlN N (µm20) |
|-----|----|----|------|--------------------|-------------------|
| 2.0 | 8° | 11 | 0.10 | 651RZU8-2.0-8°-R10 | ■ |

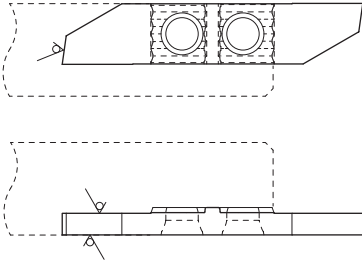


Arête de coupe honée
Gehonte Schneidkante
Honed edge

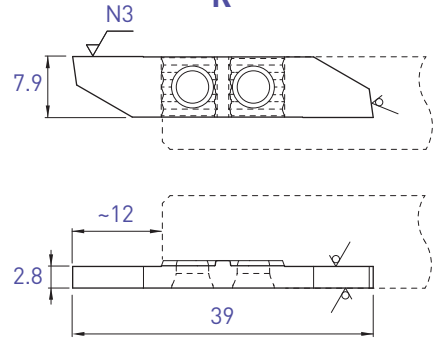
f min: 0.02 mm/U



L



R





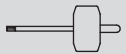
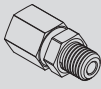


Face de coupe polie
 Polierte Schneidfläche
 Polished cutting face

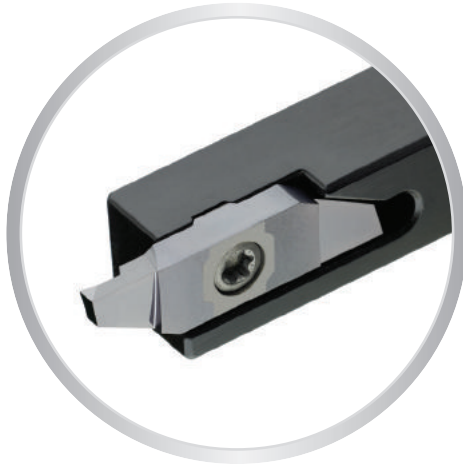
| L | | | | R | | | |
|----------|-------------------|-----|-----------|----------|-------------------|-----|-----------|
| Art. N° | TiAlN N (µk20) | HTA | HN (µk10) | Art. N° | TiAlN N (µk20) | HTA | HN (µk10) |
| 651-EP | ■ ■ | ■ ■ | | 661-EP | ■ ■ | ■ ■ | |

Pièces de rechange et accessoires

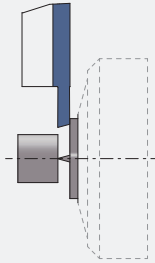
Ersatzteile und Zubehöre

Spare parts and accessories

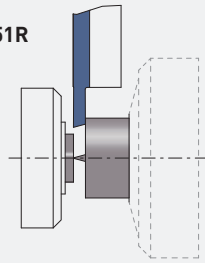
| Pièces de rechange Ersatzteile Spare parts | | | | | |  | |
|--|---|---|---|---|---|--|--|
| Porte-outils Halter Holders |  |  |  |  |  | Option Art. N° | Recommandation de serrage Drehmoment Empfehlung Clamping recommendation |
| 630 640 | | | - | - | - | | |
| 630-JET 640-JET | V-M4X9-T15 | | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 | | |
| 650 660 | | C-T15 | - | - | - | SET-NM-TX15 | 3 Nm |
| 650-RC | V-M4X6.5-T15 | | - | - | - | | |
| 650-JET 660-JET | V-M4X9-T15 | | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 | | |



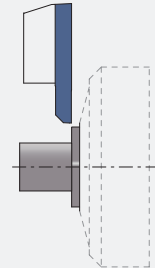
261



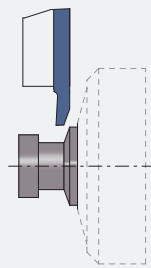
251R



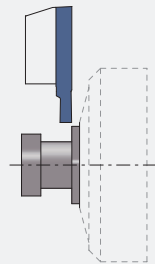
262



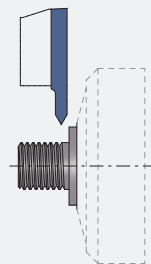
263



264



266

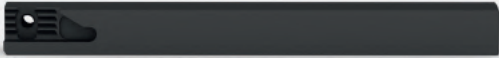


Nuances
Sorten
Grades > 4.02

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data > 4.03


Accessoires
Zubehör
Accessories

Porte-outils
Halter
Holders > 4.04




Tronçonnage
Abstechen
Parting off > 4.08

Type 251 / 261



Tournage avant
Vorwärts drehen
Front turning > 4.10

Type 252 / 262




Tournage arrière
Rückwärts drehen
Back turning > 4.11

Type 253 / 263




Fonçage-tournage
Einstechen und drehen
Grooving and turning > 4.14

Type 254 / 264




Filetage
Gewinde drehen
Threading > 4.16

Type 256 / 266



Plaquettes ébauches
WSP-Rohlinge
Blank inserts > 4.17

Type 251E / 261E



Usinage axial
Axiale Bearbeitung
Axial machining > 4.18 **new**



AP302

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- excellente nuance universelle
- 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

AP202

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

- nuance particulièrement adaptée aux faibles vitesses de coupe

- besonders geeignete Sorte für niedrige Schnittgeschwindigkeiten

- grade particularly suitable for low cutting speeds

N (μK20)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain tenace
- supporte les coupes interrompues et autres conditions d'usinage défavorables

- zähe Feinkornsorte
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- tough micro-grain grade
- suitable for interrupted cut and other unfavourable machining conditions

AH302

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleißfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

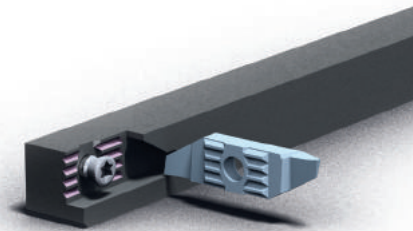
HN (μK10)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleißfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions



Rigid clamping system

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

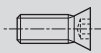


Standard machining data

| Matière Werkstoff Material | Tournage Drehen Turning | | Tronçonnage Abstechen Parting off | |
|--|-------------------------------|-------------|---|-------------|
| | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| Acier de décolletage Automatenstahl Free-cutting steel (P) | 120 - 200 | 0.01 - 0.20 | 80 - 150 | 0.01 - 0.15 |
| Acier Stahl < 600 N/mm ² (P) | 80 - 160 | 0.01 - 0.18 | 70 - 120 | 0.01 - 0.12 |
| Acier Stahl < 800 N/mm ² (P) | 60 - 120 | 0.01 - 0.15 | 60 - 100 | 0.01 - 0.10 |
| Acier Stahl > 800 N/mm ² (P) | 50 - 100 | 0.01 - 0.12 | 40 - 80 | 0.01 - 0.08 |
| Acier inoxydable Rostfreistahl Stainless steel (M) | 60 - 120 | 0.01 - 0.15 | 60 - 100 | 0.01 - 0.08 |
| Aluminium (N) | 180 - 800 | 0.01 - 0.30 | 150 - 300 | 0.01 - 0.20 |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N) | 100 - 500 | 0.01 - 0.30 | 100 - 300 | 0.01 - 0.20 |
| Titane Titan Titanium (S) | 30 - 70 | 0.01 - 0.12 | 30 - 50 | 0.01 - 0.06 |

Accessoires

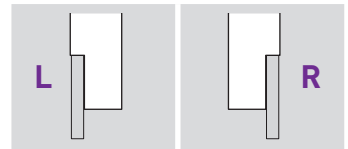
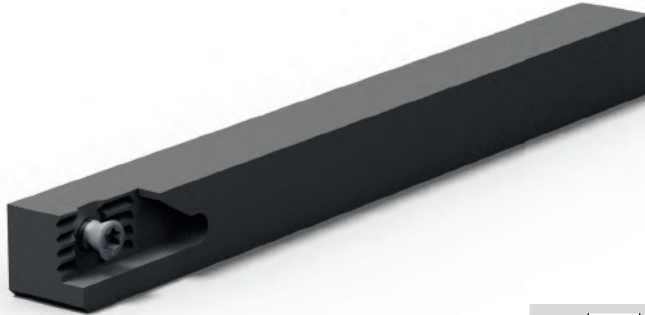
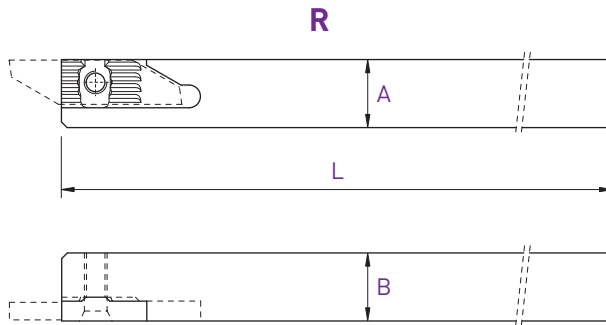
Zubehöre

Accessories

| Porte-outils Halter Holders |  |  |  |
|-----------------------------------|---|---|--|
| 250-8 / 260-8 | V-M3.5X7.3-T15 | C-T15 | SET-NM-TX15 |
| 250-... / 260-... | V-M4X9-T15 | | |
| 250RC / 260-C | V-M4X7.3-T15 | | |

Recommandation de serrage
Drehmoment Empfehlung
Clamping recommendation

3.0 Nm



| A x B | L | Art. N° | Art. N° |
|-------------|-----|-----------|-----------|
| 8 x 8 | 115 | 250-8 | 260-8 |
| 10 x 10 | 115 | 250-10 | 260-10 |
| 12 x 12 | 130 | 250-12 | 260-12 |
| 12 x 12 | 90 | 250-12-90 | 260-12-90 |
| 12.7 x 12.7 | 130 | 250-12.7 | 260-12.7 |
| 16 x 16 | 130 | 250-16 | 260-16 |
| 16 x 16 | 75 | 250-16-75 | 260-16-75 |
| 20 x 20 | 120 | 250-20 | 260-20 |

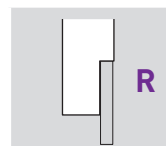
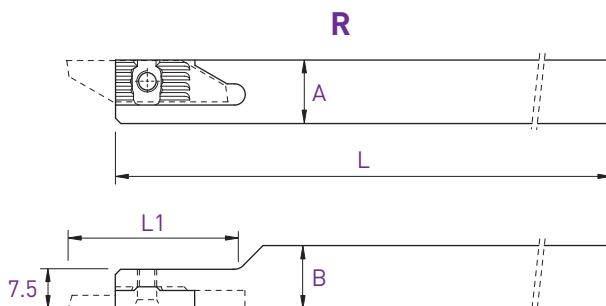
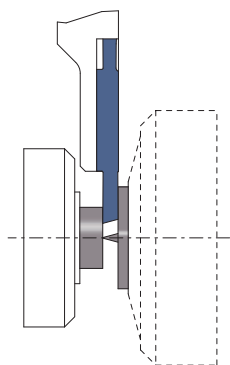
Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

Porte-outils

Halter

Holder

260-C



| A x B | L | L1 | Art. N° |
|---------|-----|----|----------|
| 12 x 12 | 130 | 30 | 260-C-12 |

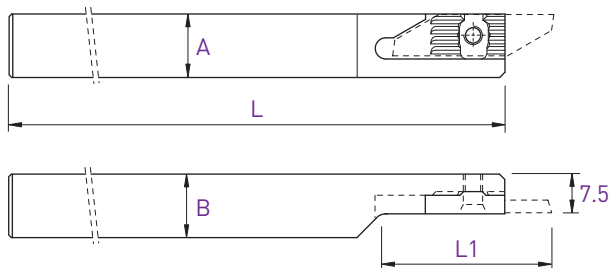
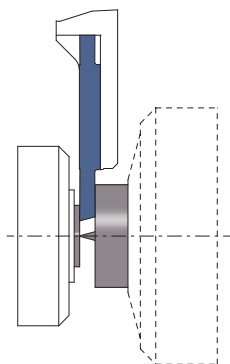
Porte-outils

Halter

Holder

Coupe à droite déportée
Versetzes Rechtsschneiden
Right cut off line

250RC



L (R)

Coupe à droite déportée
Versetzes Rechtsschneiden
Right cut off line



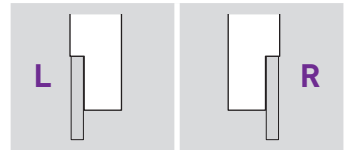
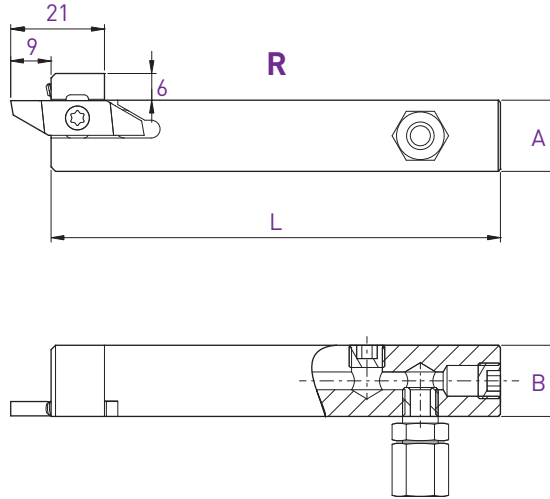
Utiliser des plaquettes type 251R
WSP Typ 251R verwenden
Use inserts type 251R

| A x B | L | L1 | Art. N° |
|---------|-----|----|----------|
| 12 x 12 | 130 | 30 | 250RC-12 |
| 16 x 16 | 130 | 40 | 250RC-16 |

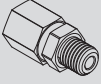


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

250-JET / 260-JET



| A x B | L | Art. N° | Art. N° |
|---------|-----|--------------|--------------|
| 10 x 12 | 100 | 250-1012-JET | 260-1012-JET |
| 12 x 12 | 100 | 250-12-JET | 260-12-JET |
| 16 x 16 | 100 | 250-16-JET | 260-16-JET |
| 20 x 20 | 100 | 250-20-JET | 260-20-JET |

| Pièces de rechange Ersatzteile Spare parts |  |  | Buse Düse Nozzle  |
|--|---|---|---|
| | Art. N° | Art. N° | Art. N° |
| 250-JET / 260-JET | J-M8X1-D6 | JB-M8X1 | JJ-M3X6-D1.5 |

Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

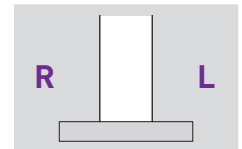
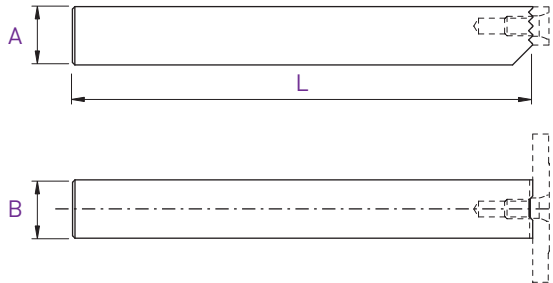
Porte-outils

Halter

Holder

260/250F

L/R



| A x B | L | Art. N° |
|---------|-----|---------------|
| 10 x 12 | 120 | 260/250F-1012 |
| 12 x 12 | 120 | 260/250F-1212 |

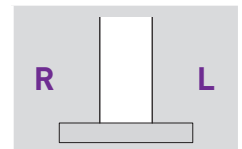
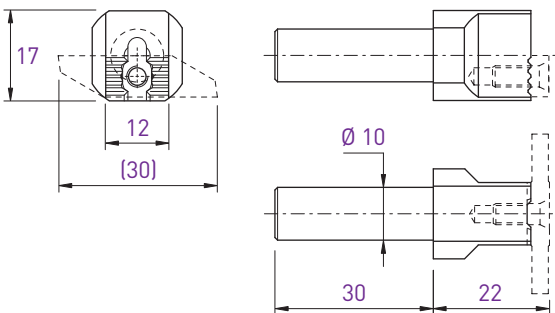
Porte-outils

Halter

Holder

260/250-D

L/R



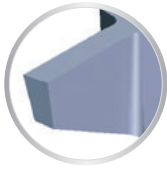
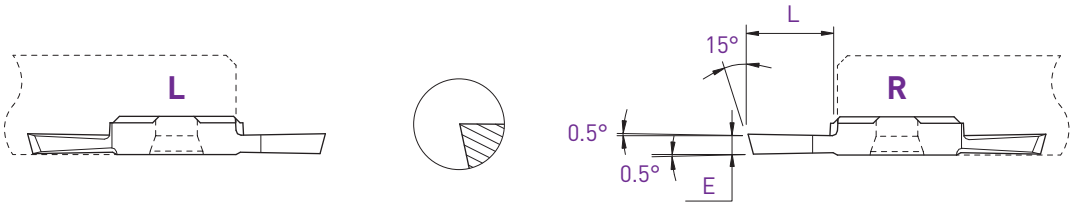
| Art. N° |
|-------------|
| 260/250-D10 |

Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

ECO-LINE

Tronçonnage
Abstechen
Parting off

251 / 261

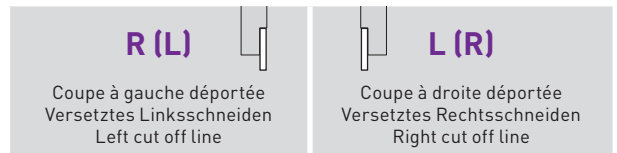
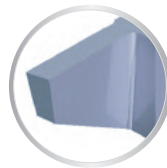
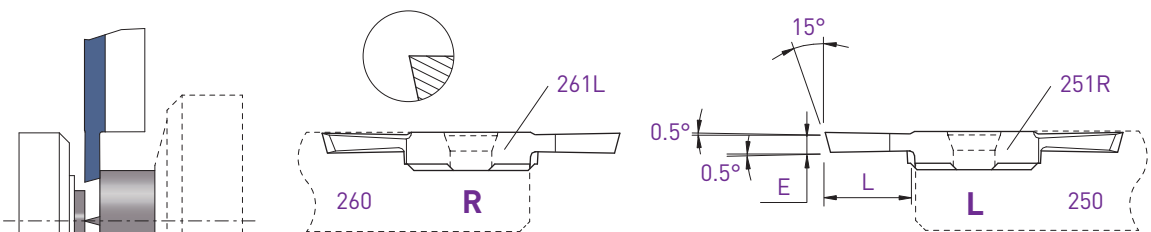


| E | L | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|-----|-----|---------|-------|-------|----------|---------|-------|-------|----------|
| 0.8 | 4 | 251-0.8 | ■ | □ | ■ | 261-0.8 | ■ | □ | ■ |
| 1.0 | 5 | 251-1.0 | ■ | □ | ■ | 261-1.0 | ■ | □ | ■ |
| 1.2 | 5 | 251-1.2 | ■ | □ | ■ | 261-1.2 | ■ | □ | ■ |
| 1.5 | 7 | 251-1.5 | ■ | □ | ■ | 261-1.5 | ■ | □ | ■ |
| 2.0 | 8.5 | 251-2.0 | ■ | □ | ■ | 261-2.0 | ■ | □ | ■ |
| 2.5 | 8.5 | 251-2.5 | ■ | □ | ■ | 261-2.5 | ■ | □ | ■ |

Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

261L / 251R



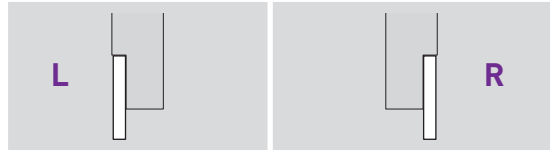
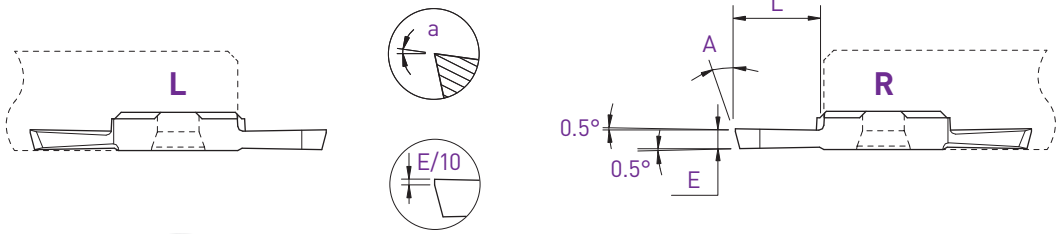
| E | L | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|-----|-----|----------|-------|-------|----------|----------|-------|-------|----------|
| 1.0 | 5 | - | | | | 251R-1.0 | ■ | □ | ■ |
| 1.5 | 7 | - | | | | 251R-1.5 | ■ | □ | ■ |
| 2.0 | 8.5 | 261L-2.0 | ■ | □ | ■ | 251R-2.0 | ■ | □ | ■ |

Tronçonnage

Abstechen

Parting off

251XF / 261XF



| a | E | L | A | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|----|-----|-----|-----|-----------|-------|-------|----------|----------------|-------|-------|----------|
| 4° | 1.0 | 4 | 15° | - | | | | 261XF-1.0 | ■ | | ■ |
| 6° | 1.0 | 4 | 8° | - | | | | 261XF6°-1.0-8° | ■ | | ■ |
| 4° | 1.5 | 7 | 15° | 251XF-1.5 | ■ | □ | ■ | 261XF-1.5 | ■ | □ | ■ |
| 4° | 2.0 | 8.5 | 15° | 251XF-2.0 | ■ | □ | ■ | 261XF-2.0 | ■ | □ | ■ |

Tronçonnage

Abstechen

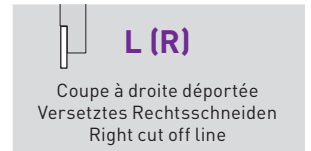
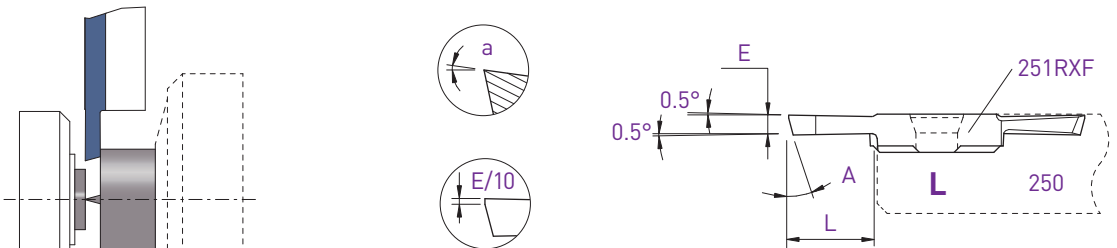
Parting off

Coupe déportée

Versetztes Schneiden

Cut off line

251RXF



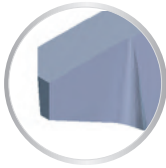
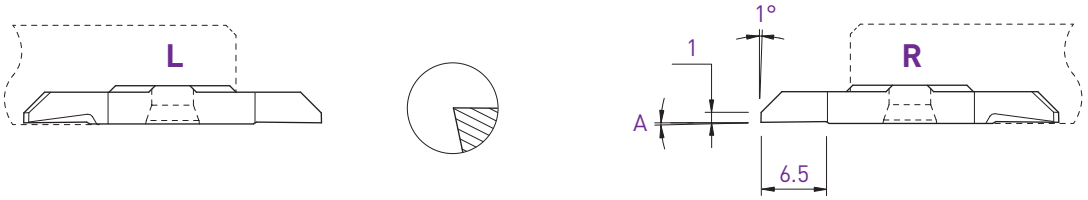
| a | E | L | A | Art. N° | AP302 | AP202 | N (µk20) |
|----|-----|-----|-----|-----------------|-------|-------|----------|
| 6° | 1.0 | 4 | 8° | 251RXF6°-1.0-8° | ■ | | ■ |
| 4° | 1.5 | 7 | 15° | 251RXF-1.5 | ■ | □ | ■ |
| 4° | 2.0 | 8.5 | 15° | 251RXF-2.0 | ■ | □ | ■ |

■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

ECO-LINE

Tournage avant
Vorwärts drehen
Front turning

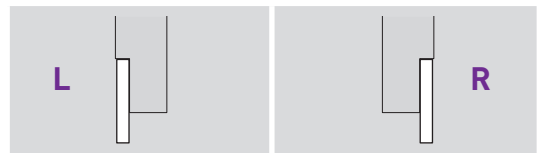
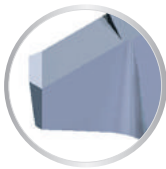
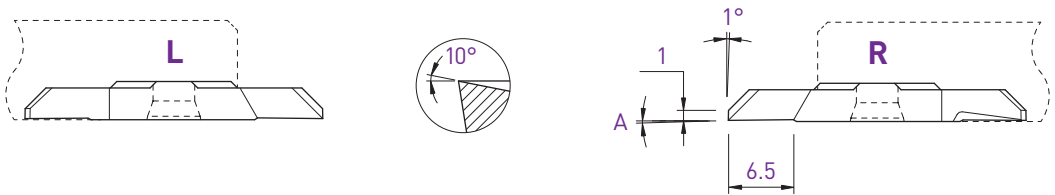
252 / 262



| A | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|----|---------|-------|-------|----------|---------|-------|-------|----------|
| 0° | 252 | ■ | □ | ■ | 262 | ■ | □ | ■ |
| 2° | 252-2° | ■ | □ | ■ | 262-2° | ■ | □ | ■ |

Tournage avant
Vorwärts drehen
Front turning

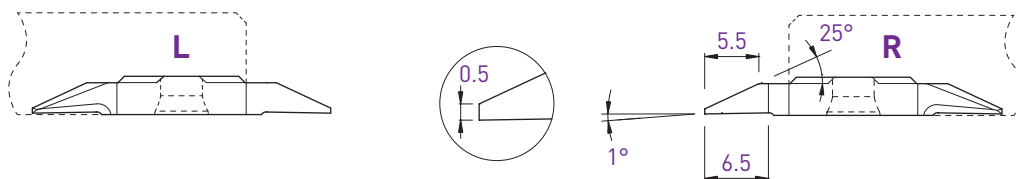
252X / 262X



| A | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|----|---------|-------|-------|----------|---------|-------|-------|----------|
| 0° | 252X | ■ | □ | ■ | 262X | ■ | □ | ■ |
| 2° | 252X-2° | ■ | □ | ■ | 262X-2° | ■ | □ | ■ |

Tournage avant
Vorwärts drehen
Front turning

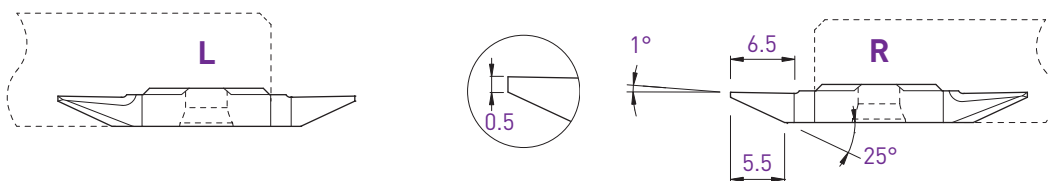
252S / 262S



| L | | | | R | | | |
|---------|-------|-------|----------|---------|-------|-------|----------|
| Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
| 252S05 | ■ | □ | ■ | 262S05 | ■ | □ | ■ |

Tournage arrière
Rückwärts drehen
Back turning

253S / 263S

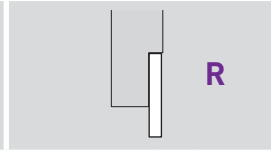
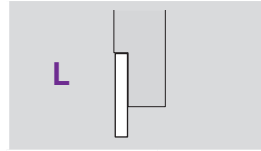
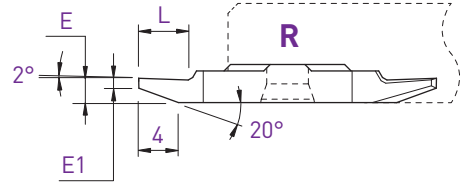
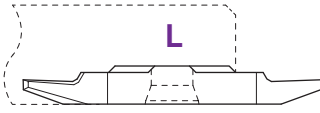


| L | | | | R | | | |
|---------|-------|-------|----------|---------|-------|-------|----------|
| Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
| 253S05 | ■ | □ | ■ | 263S05 | ■ | □ | ■ |

ECO-LINE

Tournage arrière
Rückwärts drehen
Back turning

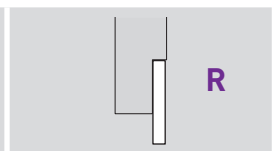
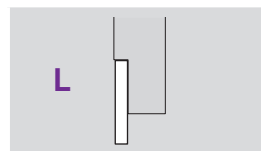
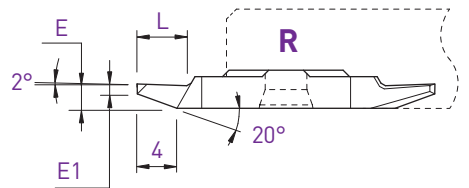
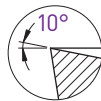
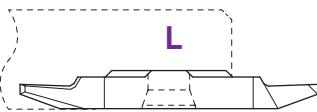
253 / 263



| E | E1 | L | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|-----|-----|---|---------|-------|-------|----------|---------|-------|-------|----------|
| 2.0 | 0.5 | 4 | 253-0.5 | ■ | □ | ■ | 263-0.5 | ■ | □ | ■ |
| 2.5 | 1.0 | 5 | 253-1.0 | ■ | □ | ■ | 263-1.0 | ■ | □ | ■ |

Tournage arrière
Rückwärts drehen
Back turning

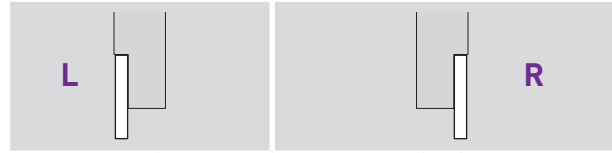
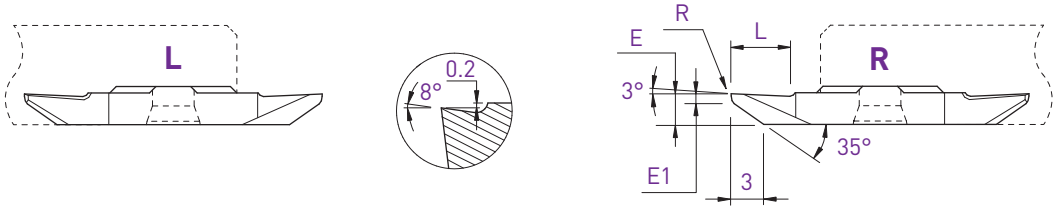
253X / 263X



| E | E1 | L | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) |
|-----|-----|---|----------|-------|-------|----------|----------|-------|-------|----------|
| 2.0 | 0.5 | 5 | 253X-0.5 | ■ | □ | ■ | 263X-0.5 | ■ | □ | ■ |
| 2.5 | 1.0 | 5 | 253X-1.0 | ■ | □ | ■ | 263X-1.0 | ■ | □ | ■ |

Tournage arrière
Rückwärts drehen
Back turning

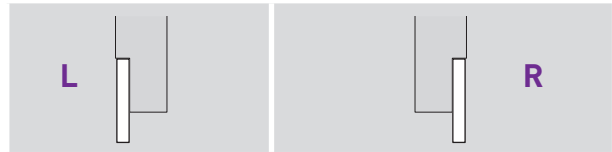
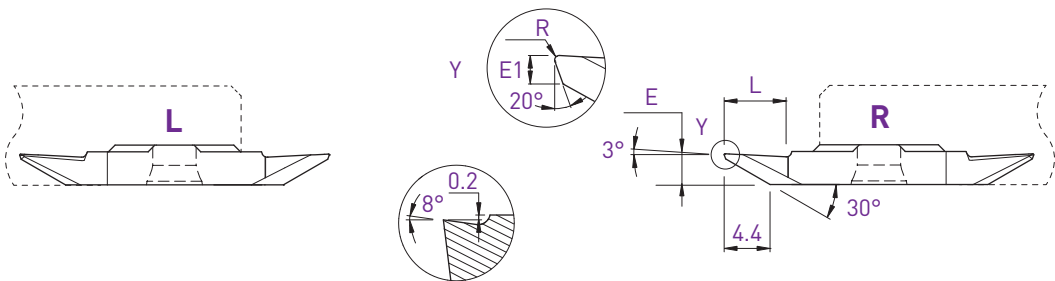
253VX-8° / 263VX-8°



| E | E1 | L | R | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) | AH302 | HN (µk10) |
|-----|-----|---|------|----------|-------|-------|----------|--------------|-------|-------|----------|-------|-----------|
| 3.1 | 1.0 | 6 | 0 | 253VX-8° | ■ | □ | ■ | 263VX-8° | ■ | □ | ■ | | |
| 3.1 | 1.0 | 6 | 0.08 | - | | | | 263VX-8°-R08 | ■ | □ | ■ | ■ | ■ |
| 3.1 | 1.0 | 6 | 0.20 | - | | | | 263VX-8°-R20 | ■ | □ | ■ | ■ | ■ |

Tournage arrière
Rückwärts drehen
Back turning

253VX-805 / 263VX-805



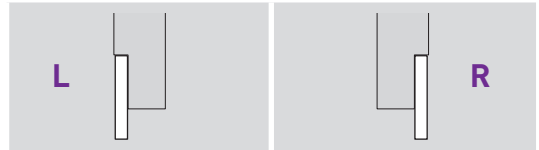
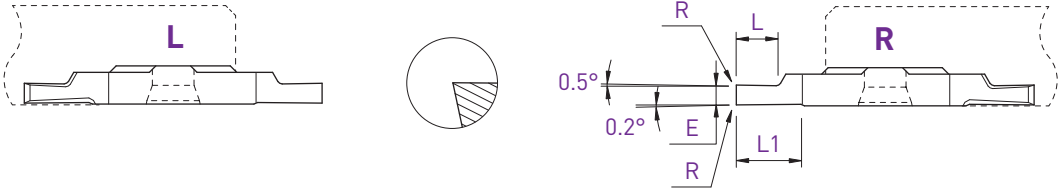
| E | E1 | L | R | Art. N° | AP302 | AP202 | N (µk20) | Art. N° | AP302 | AP202 | N (µk20) | AH302 | HN (µk10) |
|-----|-----|---|------|---------------|-------|-------|----------|---------------|-------|-------|----------|-------|-----------|
| 3.0 | 0.5 | 6 | 0.08 | 253VX-805-R08 | ■ | □ | ■ | 263VX-805-R08 | ■ | □ | ■ | ■ | ■ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

ECO-LINE

Fonçage-tournage
 Einstechen und drehen
 Grooving and turning

254 / 264



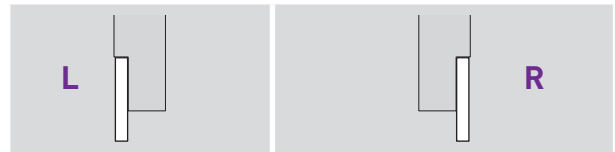
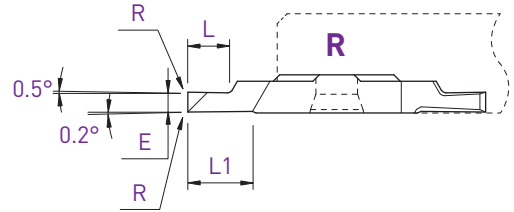
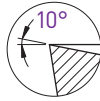
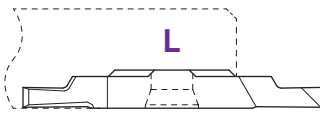
| E | L | L1 | R | Art. N° | AP302 | AP202 | N [µk20] | Art. N° | AP302 | AP202 | N [µk20] |
|-----|-----|-----|---|---------|-------|-------|----------|---------|-------|-------|----------|
| 0.8 | 2 | 4 | 0 | 254-0.8 | ■ | □ | ■ | 264-0.8 | ■ | □ | ■ |
| 1.0 | 2.5 | 4 | 0 | 254-1.0 | ■ | □ | ■ | 264-1.0 | ■ | □ | ■ |
| 1.2 | 3 | 4 | 0 | 254-1.2 | ■ | □ | ■ | 264-1.2 | ■ | □ | ■ |
| 1.5 | 3 | 4 | 0 | 254-1.5 | ■ | □ | ■ | 264-1.5 | ■ | □ | ■ |
| 1.8 | 4 | 6.5 | 0 | - | | | | 264-1.8 | ■ | □ | ■ |
| 2.0 | 4 | 6.5 | 0 | 254-2.0 | ■ | □ | ■ | 264-2.0 | ■ | □ | ■ |
| 2.5 | 6 | 6.5 | 0 | 254-2.5 | ■ | □ | ■ | 264-2.5 | ■ | □ | ■ |
| 3.0 | 6.5 | 6.5 | 0 | 254-3.0 | ■ | □ | ■ | 264-3.0 | ■ | □ | ■ |

Fonçage-tournage

Einstecken und drehen

Grooving and turning

254X / 264X

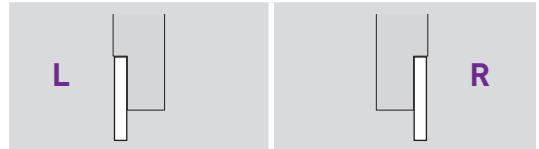
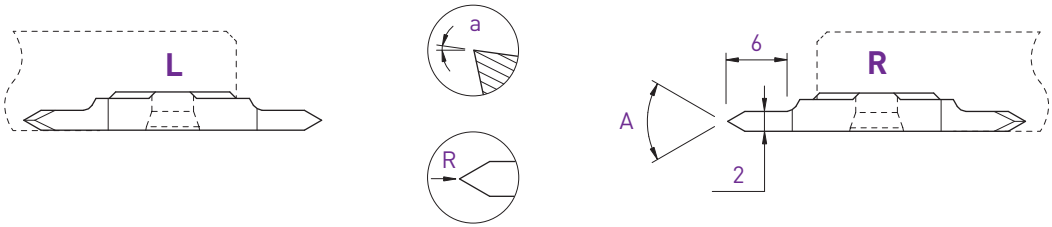


| E | L | L1 | R | Art. N° | AP302 | AP202 | N [µk20] | Art. N° | AP302 | AP202 | N [µk20] | AH302 | HN [µk10] |
|-----|-----|-----|------|----------|-------|-------|----------|--------------|-------|-------|----------|-------|-----------|
| 0.8 | 2 | 4 | 0 | 254X-0.8 | ■ | □ | ■ | 264X-0.8 | ■ | □ | ■ | | |
| 1.0 | 2.5 | 4 | 0 | 254X-1.0 | ■ | □ | ■ | 264X-1.0 | ■ | □ | ■ | | |
| 1.0 | 2.5 | 4 | 0.08 | - | | | | 264X-1.0-R08 | ■ | □ | ■ | ■ | ■ |
| 1.2 | 3 | 4 | 0 | 254X-1.2 | ■ | □ | ■ | 264X-1.2 | ■ | □ | ■ | | |
| 1.5 | 3 | 4 | 0 | 254X-1.5 | ■ | □ | ■ | 264X-1.5 | ■ | □ | ■ | | |
| 1.5 | 3 | 4 | 0.08 | - | | | | 264X-1.5-R08 | ■ | □ | ■ | ■ | ■ |
| 1.5 | 3 | 4 | 0.20 | - | | | | 264X-1.5-R20 | ■ | □ | ■ | ■ | ■ |
| 2.0 | 4 | 6.5 | 0 | 254X-2.0 | ■ | □ | ■ | 264X-2.0 | ■ | □ | ■ | | |
| 2.0 | 4 | 6.5 | 0.08 | - | | | | 264X-2.0-R08 | ■ | □ | ■ | ■ | ■ |
| 2.0 | 4 | 6.5 | 0.20 | - | | | | 264X-2.0-R20 | ■ | □ | ■ | ■ | ■ |
| 2.5 | 6 | 6.5 | 0 | 254X-2.5 | ■ | □ | ■ | 264X-2.5 | ■ | □ | ■ | | |
| 2.5 | 6.5 | 6.5 | 0.08 | - | | | | 264X-2.5-R08 | ■ | □ | ■ | ■ | ■ |
| 2.5 | 6.5 | 6.5 | 0.20 | - | | | | 264X-2.5-R20 | ■ | □ | ■ | ■ | ■ |
| 3.0 | 6.5 | 6.5 | 0 | 254X-3.0 | ■ | □ | ■ | 264X-3.0 | ■ | □ | ■ | | |
| 3.0 | 6.5 | 6.5 | 0.08 | - | | | | 264X-3.0-R08 | ■ | □ | ■ | ■ | ■ |
| 3.0 | 6.5 | 6.5 | 0.20 | - | | | | 264X-3.0-R20 | ■ | □ | ■ | ■ | ■ |

Filetage
Gewinde drehen
Threading

Partial profile 60°

256-60 / 266-60

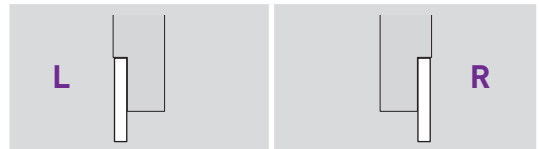
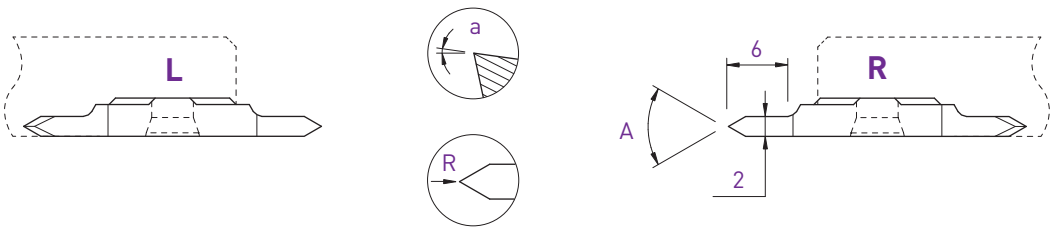


| A | R | a | Art. N° | AP302 | AP202 | N (μk20) | Art. N° | AP302 | AP202 | N (μk20) |
|-----|------|----|------------|-------|-------|----------|------------|-------|-------|----------|
| 60° | 0 | 0° | 256-60-2.0 | ■ | □ | ■ | 266-60-2.0 | ■ | □ | ■ |
| 60° | 0.06 | 3° | 256-AG60° | ■ | □ | ■ | 266-AG60° | ■ | □ | ■ |

Filetage
Gewinde drehen
Threading

Partial profile 55°

256-55 / 266-55



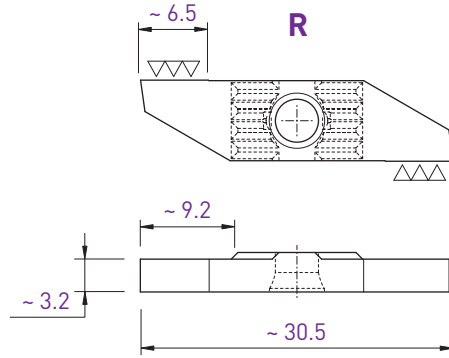
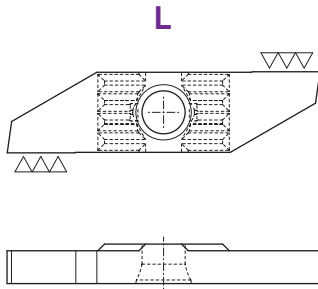
| A | R | a | Art. N° | AP302 | AP202 | N (μk20) | Art. N° | AP302 | AP202 | N (μk20) |
|-----|------|----|------------|-------|-------|----------|------------|-------|-------|----------|
| 55° | 0 | 0° | 256-55-2.0 | ■ | □ | ■ | 266-55-2.0 | ■ | □ | ■ |
| 55° | 0.06 | 3° | 256-AG55° | ■ | □ | ■ | 266-AG55° | ■ | □ | ■ |

Plaquettes ébauches

WSP-Rohlinge

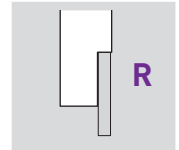
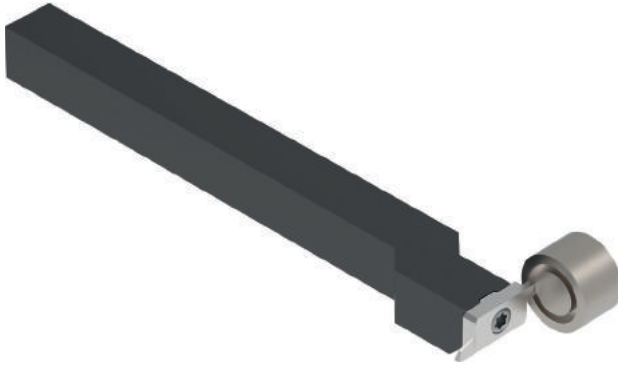
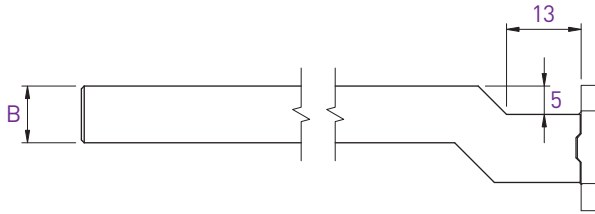
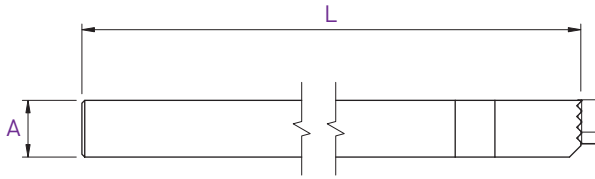
Blank inserts

251-E / 261-E

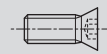
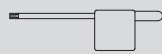


| L | | | | | R | | | | | | |
|---------|-------|-------|-----------|-------|------------|---------|-------|-------|-----------|-------|------------|
| Art. N° | AP302 | AP202 | N [µkt20] | AH302 | HN [µkt10] | Art. N° | AP302 | AP202 | N [µkt20] | AH302 | HN [µkt10] |
| 251-E | ■ | □ | ■ | ■ | ■ | 261-E | ■ | □ | ■ | ■ | ■ |

new



| A x B | L | Art. N° |
|-------|-----|-------------|
| 8x10 | 130 | 250RFG-0810 |
| 10x10 | 130 | 250RFG-1010 |
| 12x12 | 130 | 250RFG-1212 |
| 16x16 | 130 | 250RFG-1616 |

| | | |
|--|---|--|
| Pièces de rechange Ersatzteile Spare parts |  |  |
| | Art. N° | Art. N° |
| | V-M4X9-T15 | C-T15 |

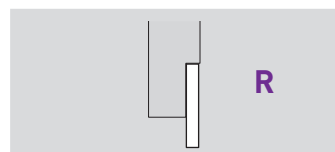
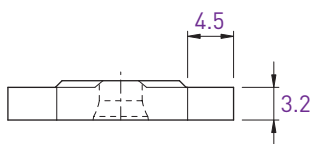
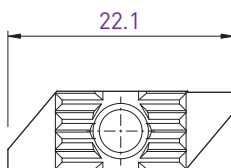
Plaquettes ébauches

WSP-Rohlinge

Blank inserts

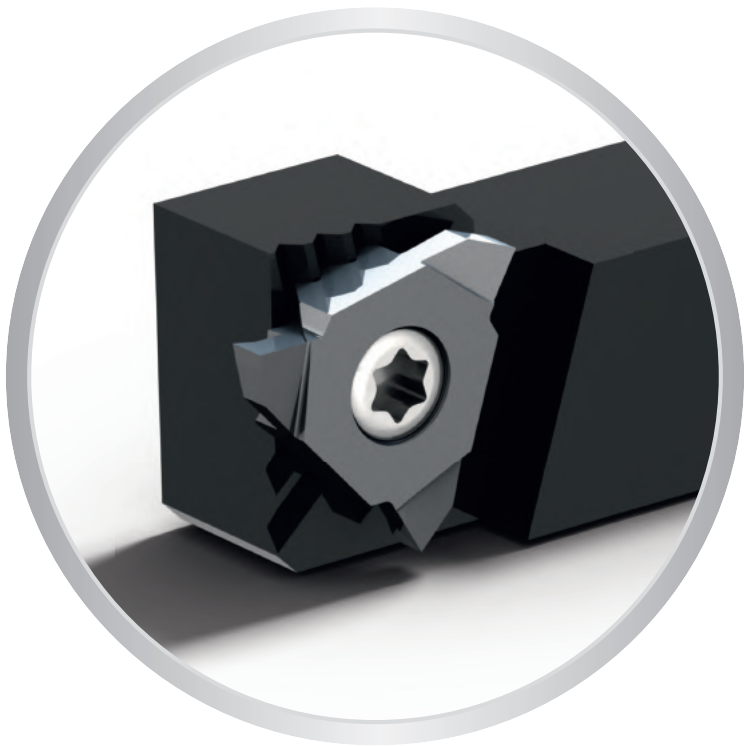
251RFG

new



| Art. N° | N (µm20) | AP302 |
|-----------|----------|-------|
| 251RFG-EP | ■ | ■ |

APPLITEC



Nuances
Sorten
Grades

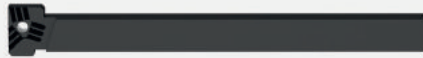
> 5.02

Conseils d'utilisation - Accessoires
Anwendungsempfehlungen - Zubehör
Application recommendations - Accessories



> 5.03

Porte-outils
Halter
Holders



> 5.04

GX

Gorge de précision
Präzisionseinstechen
High precision grooving

DIN6799
& DIN471



> 5.05

FT

Tournage finition
Schlicht drehen
Fine turning



> 5.06

GT

Fonçage-tournage
Einstechen und drehen
Grooving and turning



> 5.07

GTX

Fonçage-tournage avec coupe positive
Einstechen und drehen mit positivem Spanwinkel
Grooving and turning with positive cut



> 5.08

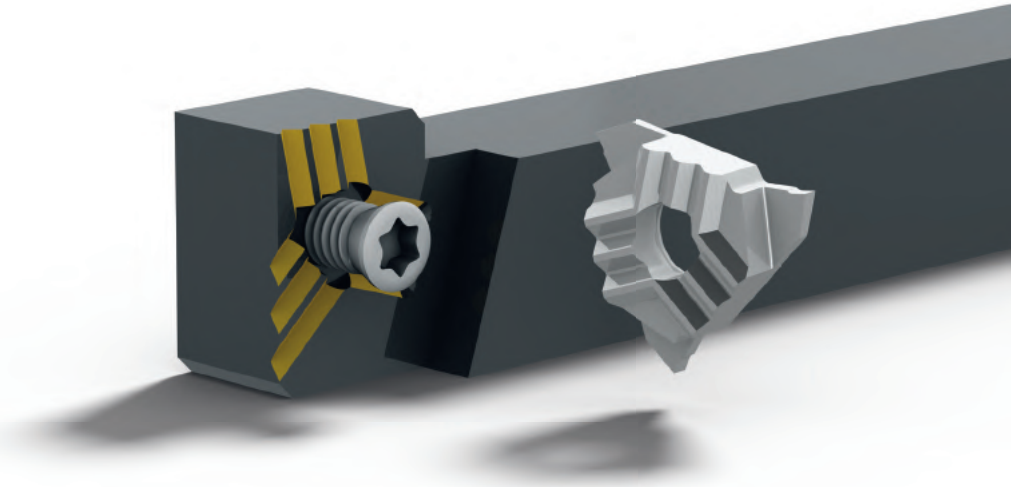
EP

Plaquettes ébauches
WSP-Rohlinge
Blank inserts



> 5.09

Rigid clamping system with the famous Applitec teeth clamping



Nuances micro-grain à dureté élevée

Verschleissfeste Feinkornsorten

Wear resistant micro-grain grades

HTA

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

HN (μK10)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du laiton, de l'aluminium et du titane faiblement allié

- sehr verschleissfeste Feinkornsorte
- für die Bearbeitung von Messing und niedrig legiertem Aluminium und Titan empfehlenswert

- very wear resistant micro-grain grade
- suitable for the machining of brass and low alloyed aluminium and titanium

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | Tournage Drehen Turning | | Foncer Einstechen Grooving | |
|--|-------------------------------|-------------|----------------------------------|-------------|
| | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| Acier de décolletage Automatenstahl Free-cutting steel | P 120 - 200 | 0.01 - 0.20 | 80 - 150 | 0.01 - 0.15 |
| Acier Stahl Steel < 600 N/mm ² | P 80 - 160 | 0.01 - 0.18 | 70 - 120 | 0.01 - 0.12 |
| Acier Stahl Steel < 800 N/mm ² | P 60 - 120 | 0.01 - 0.15 | 60 - 100 | 0.01 - 0.10 |
| Acier Stahl Steel > 800 N/mm ² | P 50 - 100 | 0.01 - 0.12 | 40 - 80 | 0.01 - 0.08 |
| Acier inoxydable Rostfreistahl Stainless steel | M 60 - 120 | 0.01 - 0.15 | 60 - 100 | 0.01 - 0.08 |
| Aluminium | N 180 - 800 | 0.01 - 0.30 | 150 - 300 | 0.01 - 0.20 |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N 100 - 500 | 0.01 - 0.30 | 100 - 300 | 0.01 - 0.20 |
| Titane Titan Titanium | S 30 - 70 | 0.01 - 0.12 | 30 - 50 | 0.01 - 0.06 |

Accessoires

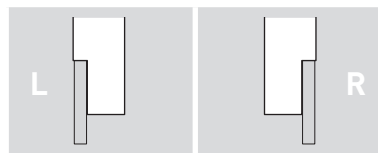
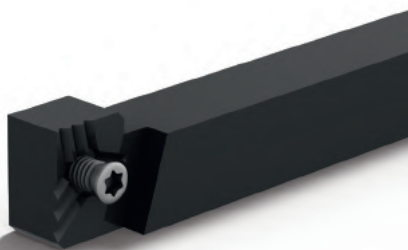
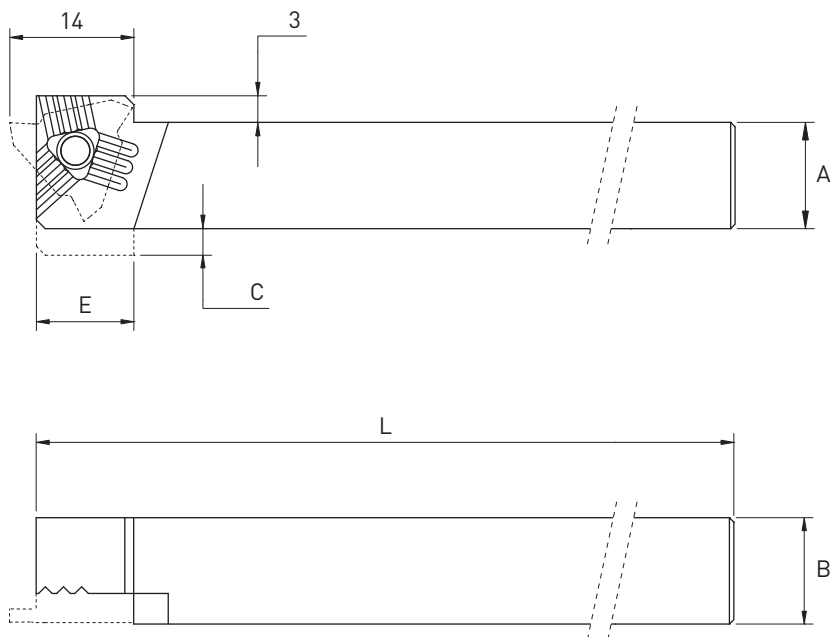
Zubehöre

Accessories

| | | | |
|-----------------------------------|---|---|--|
| Porte-outils Halter Holders |  |  |  |
| T216-H... | V-M4X9-T15 | C-T15 | SET-NM-TX15 |

Recommandation de serrage
Drehmoment Empfehlung
Clamping recommendation

3.0 Nm



Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n)
 und Schlüssel geliefert.
 Screw(s) and key are included with each
 tool holder.

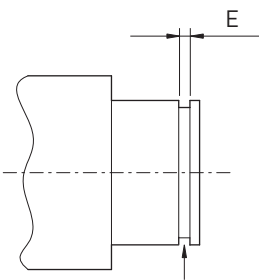
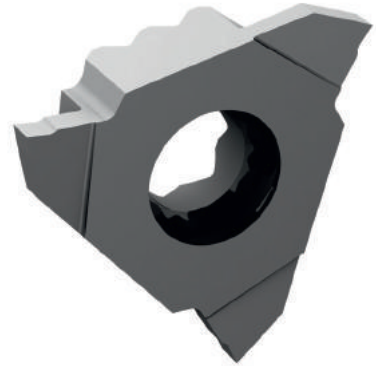
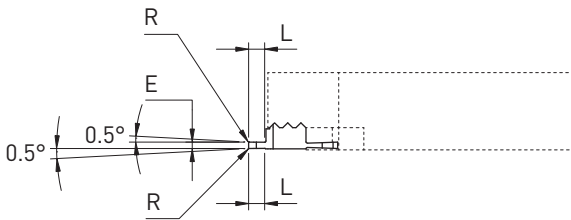
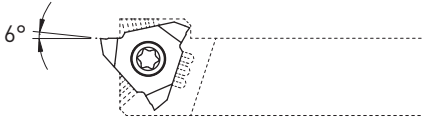
| AxB | C | E | L | Art. N° | Art. N° |
|-------|---|----|-----|----------------|----------------|
| 8x10 | 4 | 11 | 115 | T216-H0810L | T216-H0810R |
| 10x10 | 2 | 8 | 130 | T216-H1010L | T216-H1010R |
| 12x12 | - | - | 130 | T216-H1212L | T216-H1212R |
| 12x12 | - | - | 90 | T216-H1212L-90 | T216-H1212R-90 |
| 16x16 | - | - | 120 | T216-H1616L | T216-H1616R |
| 20x20 | - | - | 130 | T216-H2020L | T216-H2020R |

Plaquettes de gorge pour circlips

Einstechwendeplatte für Seegerring

Grooving inserts for retaining ring

GX



Selon DIN6799 et DIN471
Gemäss DIN6799 und DIN471
According to DIN6799 and DIN471

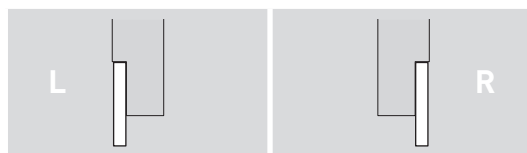
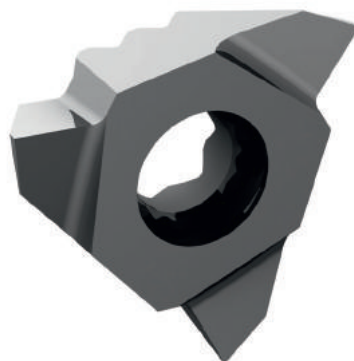
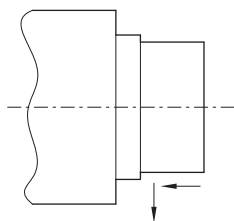
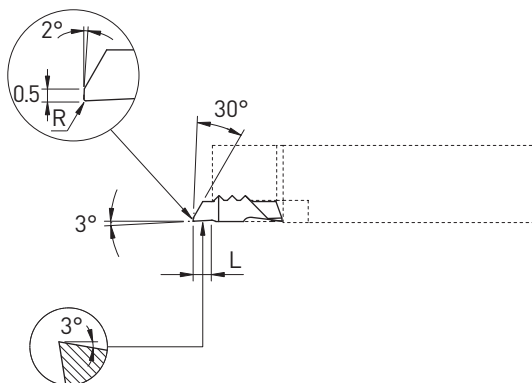
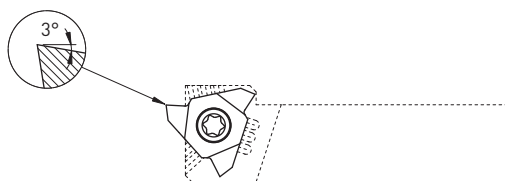
| E ±0.01 | L | R | L | | R | |
|---------|-----|------|-------------|-----------|-------------|-----------|
| | | | Art. N° | HTA HN | Art. N° | HTA HN |
| 0.26 | 0.8 | 0.03 | T216L-GX026 | ■ ■ | T216R-GX026 | ■ ■ |
| 0.36 | 0.8 | 0.03 | T216L-GX036 | ■ ■ | T216R-GX036 | ■ ■ |
| 0.46 | 0.8 | 0.03 | T216L-GX046 | ■ ■ | T216R-GX046 | ■ ■ |
| 0.50 | 1.5 | 0.03 | T216L-GX050 | ■ ■ | T216R-GX050 | ■ ■ |
| 0.57 | 1.5 | 0.03 | T216L-GX057 | ■ ■ | T216R-GX057 | ■ ■ |
| 0.67 | 1.5 | 0.03 | T216L-GX067 | ■ ■ | T216R-GX067 | ■ ■ |
| 0.77 | 2.0 | 0.03 | T216L-GX077 | ■ ■ | T216R-GX077 | ■ ■ |
| 0.87 | 2.0 | 0.03 | T216L-GX087 | ■ ■ | T216R-GX087 | ■ ■ |
| 0.97 | 2.5 | 0.03 | T216L-GX097 | ■ ■ | T216R-GX097 | ■ ■ |
| 1.00 | 2.5 | 0.03 | T216L-GX100 | ■ ■ | T216R-GX100 | ■ ■ |
| 1.10 | 2.5 | 0.03 | T216L-GX110 | ■ ■ | T216R-GX110 | ■ ■ |
| 1.20 | 2.5 | 0.03 | T216L-GX120 | ■ ■ | T216R-GX120 | ■ ■ |
| 1.30 | 2.5 | 0.03 | T216L-GX130 | ■ ■ | T216R-GX130 | ■ ■ |
| 1.50 | 2.5 | 0.03 | T216L-GX150 | ■ ■ | T216R-GX150 | ■ ■ |
| 1.60 | 2.5 | 0.03 | T216L-GX160 | ■ ■ | T216R-GX160 | ■ ■ |
| 1.85 | 2.5 | 0.03 | T216L-GX185 | ■ ■ | T216R-GX185 | ■ ■ |
| 2.00 | 2.5 | 0.03 | T216L-GX200 | ■ ■ | T216R-GX200 | ■ ■ |
| 2.50 | 2.5 | 0.03 | T216L-GX250 | ■ ■ | T216R-GX250 | ■ ■ |



TRIO-LINE

Tournage avant
Vorwärts drehen
Front turning

FT



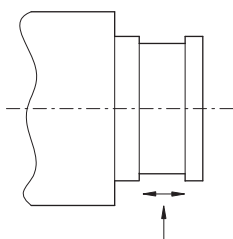
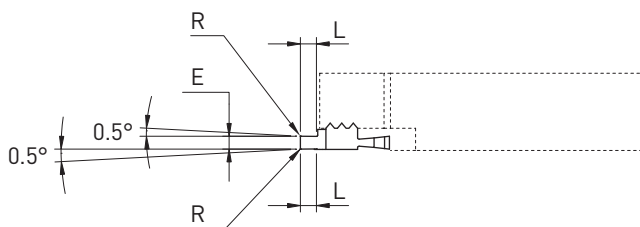
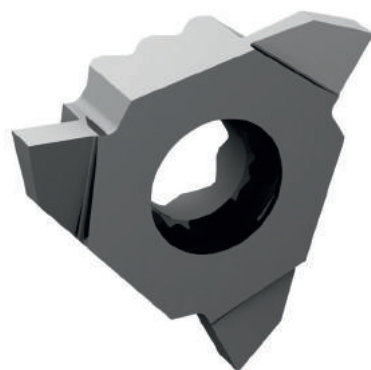
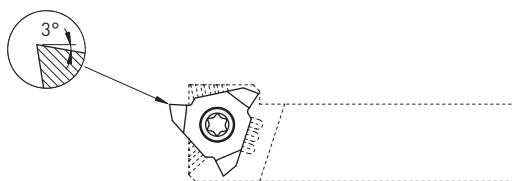
| L | R | Art. N° | HTA | | HN | | |
|-----|------|--------------|-----|----|--------------|-----|----|
| | | | HTA | HN | Art. N° | HTA | HN |
| 3.0 | 0.03 | T216L-FT | ■ | ■ | T216R-FT | ■ | ■ |
| 3.0 | 0.08 | T216L-FT-R08 | ■ | ■ | T216R-FT-R08 | ■ | ■ |

Fonçage-tournage

Einstecken und drehen

Grooving and turning

GT

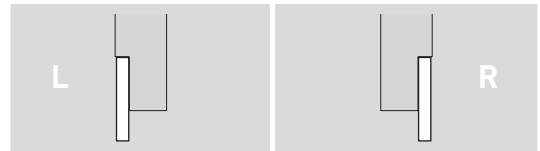
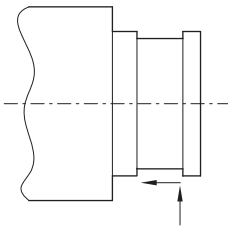
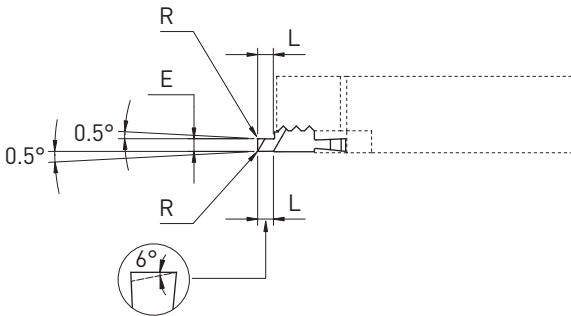
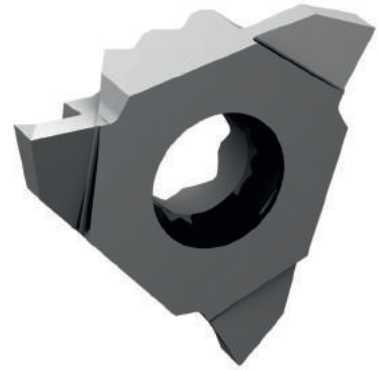
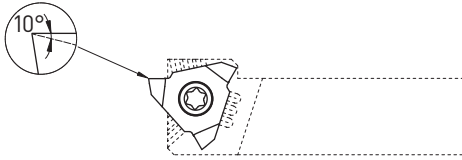


| E | L | R | Art. N° | HTA | | Art. N° | HN | |
|-----|-----|------|-----------------|-----|---|-----------------|----|---|
| | | | | ■ | ■ | | ■ | ■ |
| 0.5 | 1.5 | 0.03 | T216L-GT050 | ■ | ■ | T216R-GT050 | ■ | ■ |
| 1.0 | 2.5 | 0.03 | T216L-GT100 | ■ | ■ | T216R-GT100 | ■ | ■ |
| 1.0 | 2.5 | 0.08 | T216L-GT100-R08 | ■ | ■ | T216R-GT100-R08 | ■ | ■ |
| 1.5 | 2.5 | 0.03 | T216L-GT150 | ■ | ■ | T216R-GT150 | ■ | ■ |
| 1.5 | 2.5 | 0.08 | T216L-GT150-R08 | ■ | ■ | T216R-GT150-R08 | ■ | ■ |
| 1.5 | 2.5 | 0.15 | T216L-GT150-R15 | ■ | ■ | T216R-GT150-R15 | ■ | ■ |
| 2.0 | 2.5 | 0.03 | T216L-GT200 | ■ | ■ | T216R-GT200 | ■ | ■ |
| 2.0 | 2.5 | 0.08 | T216L-GT200-R08 | ■ | ■ | T216R-GT200-R08 | ■ | ■ |
| 2.0 | 2.5 | 0.15 | T216L-GT200-R15 | ■ | ■ | T216R-GT200-R15 | ■ | ■ |
| 2.5 | 2.5 | 0.15 | T216L-GT250-R15 | ■ | ■ | T216R-GT250-R15 | ■ | ■ |

TRIO-LINE

Fonçage-tournage
Einstecken und drehen
Grooving and turning

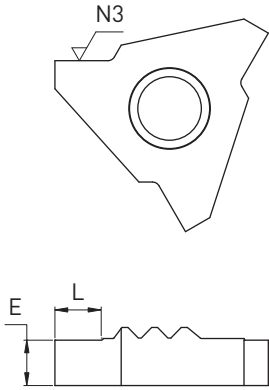
GTX



| E | L | R | L | | R | |
|-----|-----|------|------------------|-----------|------------------|-----------|
| | | | Art. N° | HTA HN | Art. N° | HTA HN |
| 1.0 | 2.5 | 0.03 | T216L-GTX100 | ■ ■ | T216R-GTX100 | ■ ■ |
| 1.0 | 2.5 | 0.08 | T216L-GTX100-R08 | ■ ■ | T216R-GTX100-R08 | ■ ■ |
| 1.5 | 2.5 | 0.03 | T216L-GTX150 | ■ ■ | T216R-GTX150 | ■ ■ |
| 1.5 | 2.5 | 0.08 | T216L-GTX150-R08 | ■ ■ | T216R-GTX150-R08 | ■ ■ |
| 1.5 | 2.5 | 0.15 | T216L-GTX150-R15 | ■ ■ | T216R-GTX150-R15 | ■ ■ |
| 2.0 | 2.5 | 0.03 | T216L-GTX200 | ■ ■ | T216R-GTX200 | ■ ■ |
| 2.0 | 2.5 | 0.08 | T216L-GTX200-R08 | ■ ■ | T216R-GTX200-R08 | ■ ■ |
| 2.0 | 2.5 | 0.15 | T216L-GTX200-R15 | ■ ■ | T216R-GTX200-R15 | ■ ■ |
| 2.5 | 2.5 | 0.15 | T216L-GTX250-R15 | ■ ■ | T216R-GTX250-R15 | ■ ■ |

- Plaquettes ébauches
- WSP-Rohlinge
- Blank inserts

EP

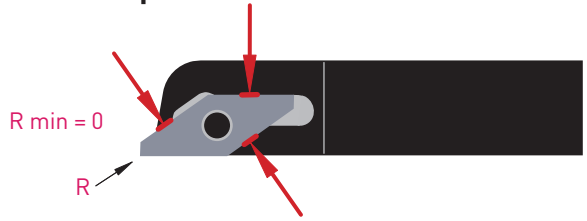


| | | L | | R | |
|----|---|----------|-----------|----------|-----------|
| E | L | Art. N° | HTA HN | Art. N° | HTA HN |
| ~3 | 3 | T216L-EP | ■ | T216R-EP | ■ |

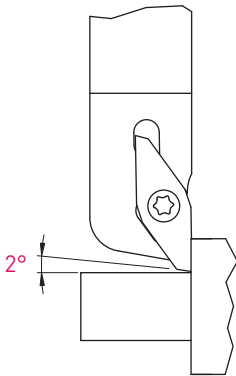


300 Series

3 contact points



rigid clamping system



“wiper effect”

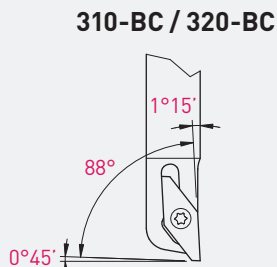
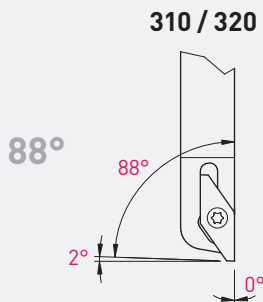
Pour un meilleur état de surface
Für eine bessere Oberflächengüte
For a better surface finish



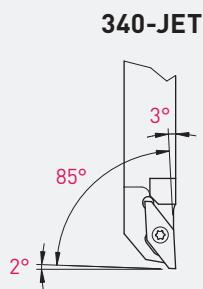
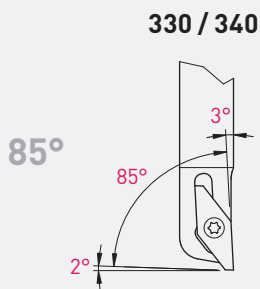
Conseils d'utilisation et paramètres de coupe indicatifs
 Anwendungsempfehlungen und empfohlene Schnittwerte
 Application recommendations and standard machining data

> 6.02

Tournage avant
 Vorwärts drehen
 Front turning



Tournage avant
 Vorwärts drehen
 Front turning










TURN-LINE

Conseils d'utilisation

Anwendungsempfehlungen

Application recommendations

| Géométries de coupe Spanformgeometrien Cutting geometry | | P | | M | | N | | S | | ★ | | | | | | | |
|--|--------|--|---|-------------------------|---|--|--|-----------|---|--|---|--|--|------------------------------|--|--|--|
| | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier Stahl Steel | | Acier inoxydable Rostfreistahl Stainless steel | | Aluminium | | Laiton, bronze Messing, Bronze Brass, bronze | | Cuivre Kupfer Copper | | Titane Titane Titanium | | 1 ^{er} choix 1. Wahl 1 st choice | |
| | | ★ | | ★ | | ★ | | ★ | | ★ | | ★ | | ★ | | Recommandé Empfohlen Recommended | |
| | | ★ | | ★ | | ★ | | ★ | | ★ | | ★ | | ★ | | Pour pièces fragiles de très petits diamètres Für empfindliche und sehr kleine Werkstücke For fragile and very small work pieces | |
|  | 3_7 | ★ | ★ | ★ | ★ | ★ | | | ★ | ★ | | Géométrie universelle, très bonne maîtrise du copeau Allgemeine Geometrie, sehr gute Spankontrolle All-round insert with efficient chip control | | | | | |
|  | 3_7-EN | ☆ | ★ | ☆ | | | | | | | | Arête renforcée (augmente l'effort de coupe) Verstärkte Schneidkante (Schneidkraftehöhung) Reinforced cutting edge (increases cutting force) f min: 0.02 mm/U | | | | | |
|  | 3_8 | ☑ | ☑ | ☑ | | | | ★ | | | | Géométrie plate classique Standard flache Geometrie Standard flat geometry | | | | | |
|  | 3_8VS | ☆ | | ☆ | | ☑ | | | | ☑ | ☑ | Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation | | | | | |
|  | 3_8VX | ★ | ★ | ★ | ★ | | | | ★ | ★ | | Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control | | | | | |
|  | 3_8X | ★ | ★ | ★ | ☆ | | | | | ☆ | ★ | Coupe positive traditionnelle Standard positive Geometrie Standard positive geometry | | | | | |
|  | 3_9 | ☆ | ☆ | ☆ | | | | ☆ | | | | Témoin plat sur la coupe pour réduire les vibrations Vibrationsreduzierung durch einer Flachfase und der Schneidkante Vibration reduction through flat ended cutting edge | | | | | |

Nuances micro-grain à dureté élevée

Verschleissfeste Feinkornsorten

Wear resistant micro-grain grades

| | | | |
|---|---|--|--|
| <p>P M N S</p> <h2>TiAlN</h2> <p>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</p> | <p>P M N <input type="checkbox"/>S</p> <h2>TiN</h2> <p>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</p> | <p>P M <input type="checkbox"/>N S</p> <h2>TiAlX</h2> <p>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</p> | <p>P <input type="checkbox"/>M N S</p> <h2>N (μK20)</h2> <p>non revêtu unbeschichtet uncoated</p> |
| <ul style="list-style-type: none"> excellente nuance universelle 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane très bonne résistance à la température | <ul style="list-style-type: none"> nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées très faible coefficient de frottement à éviter pour l'usinage du titane | <ul style="list-style-type: none"> nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ... | <ul style="list-style-type: none"> supporte les coupes interrompues et autres conditions d'usinage défavorables |
| <ul style="list-style-type: none"> beste Universalsorte für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet sehr gute Warmfestigkeit | <ul style="list-style-type: none"> Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden sehr geringer Reibwert für die Bearbeitung von Titan nicht geeignet | <ul style="list-style-type: none"> sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ... | <ul style="list-style-type: none"> für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet |
| <ul style="list-style-type: none"> best universal grade first choice for steel, stainless steel and titanium alloys machining very good heat resistance | <ul style="list-style-type: none"> grade for the machining of low resistance materials which causes edge build-up very low friction ratio not suitable for titanium machining | <ul style="list-style-type: none"> very wear and high temperature resistant grade. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ... | <ul style="list-style-type: none"> suitable for interrupted cut and other unfavourable machining conditions |

| | | | |
|--|---|---|---|
| <p>P M N S</p> <h2>HTA</h2> <p>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</p> | <p>P M N <input type="checkbox"/>S</p> <h2>HTiN</h2> <p>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</p> | <p>P M <input type="checkbox"/>N S</p> <h2>HTAX</h2> <p>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</p> | <p>P <input type="checkbox"/>M N S</p> <h2>HN (μK10)</h2> <p>non revêtu unbeschichtet uncoated</p> |
| <ul style="list-style-type: none"> nuance très résistante à l'usure pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane | <ul style="list-style-type: none"> nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées très faible coefficient de frottement à éviter pour l'usinage du titane | <ul style="list-style-type: none"> nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faible avance de petites pièces. Recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ... | <ul style="list-style-type: none"> nuance micro-grain très résistante à l'usure recommandé pour l'usinage du titane faiblement allié déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables |
| <ul style="list-style-type: none"> sehr verschleissfeste Sorte für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen | <ul style="list-style-type: none"> Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden sehr geringer Reibwert für die Bearbeitung von Titan nicht geeignet | <ul style="list-style-type: none"> sehr verschleissfeste und temperaturbeständige Sorte, für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ... | <ul style="list-style-type: none"> verschleissfeste Feinkornsorte für die Bearbeitung von niedrig legiertem Titan empfehlenswert für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet |
| <ul style="list-style-type: none"> very wear resistant grade for light machining of steel, stainless steel and titanium alloys under favourable machining conditions | <ul style="list-style-type: none"> grade for light machining of low resistance materials which causes edge build-up very low friction ratio not suitable for titanium machining | <ul style="list-style-type: none"> very wear and high temperature resistant grade, for light machining of small parts with low cutting feed. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ... | <ul style="list-style-type: none"> wear resistant micro-grain grade suitable for the machining of low alloyed titanium not suitable for interrupted cut and other unfavourable machining conditions |

TURN-LINE

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | Tournage Drehen Turning | | |
|---|-------------------------------|--|----------------------------|
| | VC | Prof. de passe Schnitttiefe Depth of cut | Avance Vorschub Feed |
| | (m/min) | (mm) | (mm/U) |
| Acier de décolletage Automatenstahl Free-cutting steel (P) | 120 - 200 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.15 0.05 - 0.25 |
| Acier Stahl Steel < 600 N/mm ² (P) | 80 - 160 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.15 0.05 - 0.25 |
| Acier Stahl Steel < 800 N/mm ² (P) | 60 - 120 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.10 0.05 - 0.20 |
| Acier Stahl Steel > 800 N/mm ² (P) | 50 - 100 | 0.05 - 1.0 1.0 - 3.0 | 0.01 - 0.08 0.05 - 0.15 |
| Acier inoxydable Rostfreistahl Stainless steel (M) | 60 - 120 | 0.05 - 1.0 1.0 - 3.0 | 0.01 - 0.08 0.05 - 0.15 |
| Aluminium Si <12% (N) | 200 - 1000 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.40 |
| Aluminium Si >12% (N) | 180 - 800 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.40 |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N) | 100 - 500 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.20 0.05 - 0.35 |
| Titane Titan Titanium (S) | 30 - 70 | 0.05 - 1.0 1.0 - 4.0 | 0.01 - 0.08 0.05 - 0.15 |

Indications pour premier réglage

Hinweise für die erste Einrichtung

Indications for first setting

| Ébauche Schruppen Roughing | Finition Schlichten Finishing |
|---|---|
| <ul style="list-style-type: none"> • vitesse de coupe moyenne • avance élevée | <ul style="list-style-type: none"> • vitesse de coupe élevée • avance faible |
| <ul style="list-style-type: none"> • durchschnittliche Schnittgeschwindigkeit • hohe Schnittgeschwindigkeit | <ul style="list-style-type: none"> • hohe Schnittgeschwindigkeit • niedriger Vorschub |
| <ul style="list-style-type: none"> • average cutting feed • high cutting feed | <ul style="list-style-type: none"> • high cutting feed • low cutting feed |

Remarques importantes
Wichtige Bemerkungen
Important remarks

- en raison des limites de la machine, il n'est souvent pas possible d'atteindre les vitesses de coupe préconisées
- les outils Applitec sont spécialement développés pour permettre de hautes performances, même dans des conditions de coupe défavorables
- des applications non préconisées dans le tableau ci-contre peuvent également s'avérer efficaces

- wegen begrenzter Maschinenleistung ist es oft nicht möglich, die vorgeschlagenen Schnittgeschwindigkeiten zu erreichen
- Applitec Werkzeuge sind besonders dazu entwickelt, um sogar bei ungünstigen Schnittdaten leistungsfähig zu sein
- die in der nebenstehender Tabelle nicht erwähnten Anwendungsfälle können sich auch effizient erweisen

- in many cases, it is impossible to reach the recommended cutting speed, due to the machine limits
- Applitec tools are especially designed to be efficient even in bad cutting conditions
- applications not mentioned in the opposite table can also be efficient

TURN-LINE

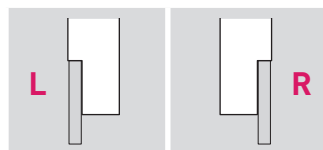
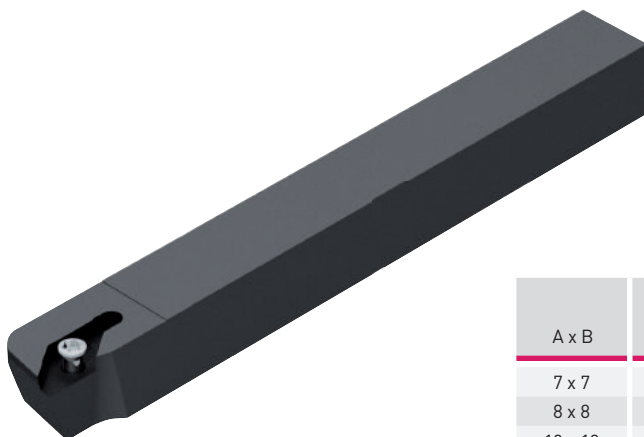
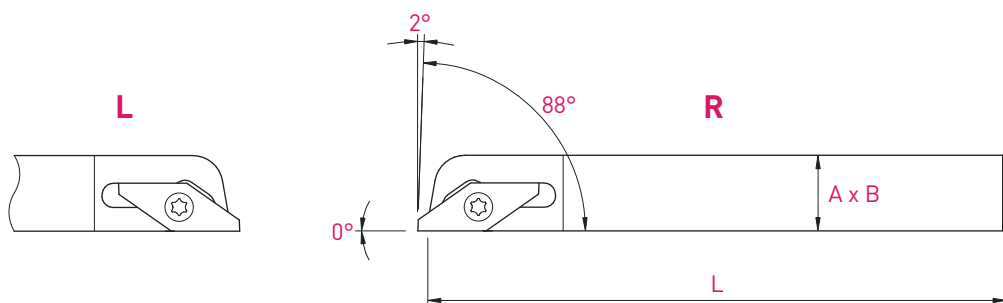
Porte-outils

Halter

Holder

88°

310 / 320



| A x B | L | Art. N° | Art. N° |
|-------------|-----|------------|------------|
| 7 x 7 | 115 | 310-7 | 320-7 |
| 8 x 8 | 115 | 310-8 | 320-8 |
| 10 x 10 | 115 | 310-10 | 320-10 |
| 10 x 10 | 140 | - | 320-10-140 |
| 12 x 12 | 115 | 310-12 | 320-12 |
| 12 x 12 | 90 | 310-12-90 | 320-12-90 |
| 12 x 12 | 140 | 310-12-140 | 320-12-140 |
| 12.7 x 12.7 | 140 | 310-12.7 | 320-12.7 |
| 16 x 16 | 100 | 310-16 | 320-16 |
| 16 x 16 | 140 | 310-16-140 | 320-16-140 |
| 20 x 20 | 120 | 310-20 | 320-20 |

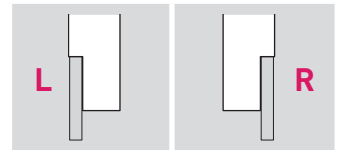
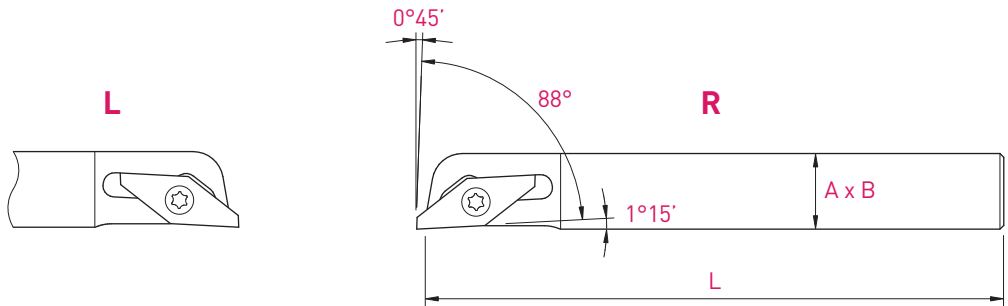
Porte-outils

Halter

Holder

88°

310-BC / 320-BC



| A x B | L | Art. N° | Art. N° |
|-------------|-----|---------------|---------------|
| 7 x 7 | 115 | 310-7-BC | 320-7-BC |
| 8 x 8 | 115 | 310-8-BC | 320-8-BC |
| 10 x 10 | 115 | 310-10-BC | 320-10-BC |
| 10 x 10 | 140 | - | 320-10-140-BC |
| 12 x 12 | 115 | 310-12-BC | 320-12-BC |
| 12 x 12 | 90 | 310-12-90-BC | 320-12-90-BC |
| 12 x 12 | 140 | 310-12-140-BC | 320-12-140-BC |
| 12.7 x 12.7 | 140 | 310-12.7-BC | 320-12.7-BC |
| 16 x 16 | 100 | 310-16-BC | 320-16-BC |
| 16 x 16 | 140 | 310-16-140-BC | 320-16-140-BC |
| 20 x 20 | 120 | 310-20-BC | 320-20-BC |

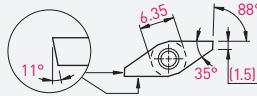
| Porte-outils Halter Holder | Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) |
|----------------------------------|--|
| 311 / 321 | V-M2.5X6.5-T8 |
| 312 - 316 | V-M2.5X7.8-T8 |
| 322 - 326 | C-T8 |

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

TURN-LINE

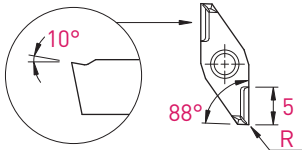
Tournage avant
Vorwärts drehen
Front turning

88°



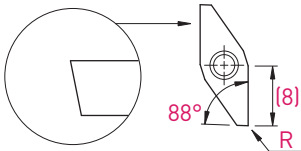
310 / 320

317 / 327



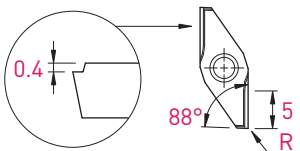
| R | Art. N° | L | | | | | | R | | | | | | |
|------|---------|-------|-----|----------|-----|------|-----------|---------|-----|----------|-----|------|-----------|---|
| | | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | TiAlN | TiN | N (µk20) | HTA | HTiN | HN (µk10) | |
| 0 | 317 | ■ | ■ | ■ | ■ | ■ | ■ | 327 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.03 | 317-R03 | ■ | ■ | ■ | ■ | ■ | ■ | 327-R03 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.08 | 317-R08 | ■ | ■ | ■ | ■ | ■ | ■ | 327-R08 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 317-R10 | ■ | ■ | ■ | ■ | ■ | ■ | 327-R10 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.20 | 317-R20 | ■ | ■ | ■ | ■ | ■ | ■ | 327-R20 | ■ | ■ | ■ | ■ | ■ | ■ |

318 / 328



| R | Art. N° | L | | | R | | | |
|------|---------|-----|------|-----------|---------|------|-----------|---|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) | |
| 0 | 318 | ■ | ■ | ■ | 328 | ■ | ■ | ■ |
| 0.05 | 318-R05 | ■ | ■ | ■ | 328-R05 | ■ | ■ | ■ |
| 0.10 | 318-R10 | ■ | ■ | ■ | 328-R10 | ■ | ■ | ■ |
| 0.20 | 318-R20 | ■ | ■ | ■ | 328-R20 | ■ | ■ | ■ |
| 0.40 | 318-R40 | ■ | ■ | ■ | 328-R40 | ■ | ■ | ■ |

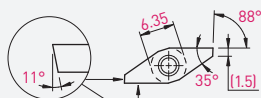
318VS / 328VS



| R | Art. N° | L | | | R | | | |
|------|-----------|-----|------|-----------|-----------|------|-----------|---|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) | |
| 0 | 318VS | ■ | ■ | ■ | 328VS | ■ | ■ | ■ |
| 0.10 | 318VS-R10 | ■ | ■ | ■ | 328VS-R10 | ■ | ■ | ■ |

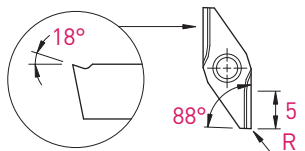
Tournage avant
Vorwärts drehen
Front turning

88°



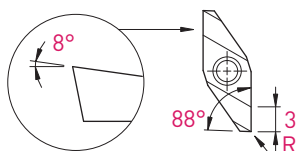
310 / 320

318VX / 328VX



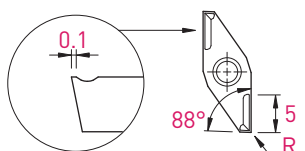
| R | Art. N° | L | | | R | | |
|------|-----------|-----|------|-----------|-----|------|-----------|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) |
| 0 | 318VX | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.05 | 318VX-R05 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 318VX-R10 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.20 | - | | | | ■ | ■ | ■ |
| 0.40 | - | | | | ■ | □ | ■ |

318X / 328X



| R | Art. N° | L | | | R | | |
|------|----------|-----|------|-----------|-----|------|-----------|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) |
| 0 | 318X | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 318X-R10 | ■ | ■ | ■ | ■ | ■ | ■ |

319 / 329



| R | Art. N° | L | | | R | | |
|------|---------|-----|------|-----------|-----|------|-----------|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) |
| 0 | 319 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 319-R10 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.20 | 319-R20 | ■ | ■ | ■ | ■ | ■ | ■ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

TURN-LINE

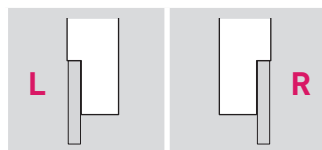
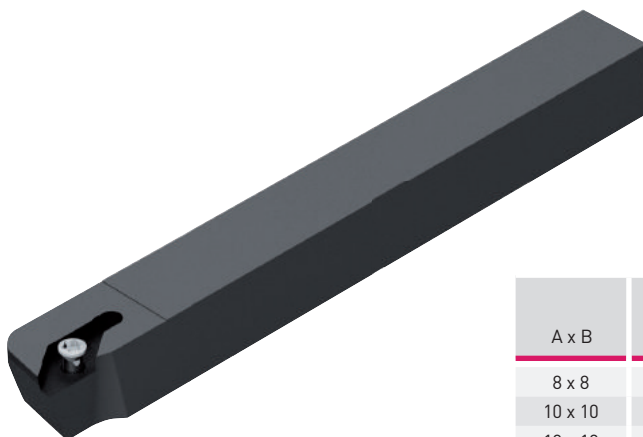
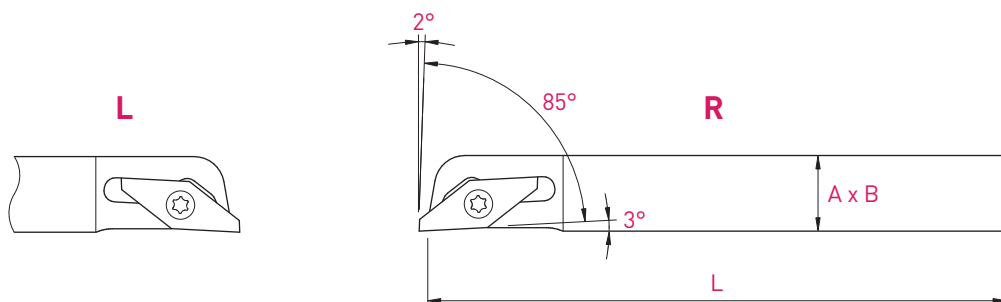
Porte-outils

Halter

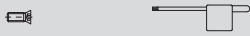
Holder

85°

330 / 340



| A x B | L | Art. N° | Art. N° |
|-------------|-----|------------|------------|
| 8 x 8 | 115 | 330-8 | 340-8 |
| 10 x 10 | 115 | 330-10 | 340-10 |
| 10 x 10 | 140 | - | 340-10-140 |
| 12 x 12 | 115 | 330-12 | 340-12 |
| 12 x 12 | 90 | 330-12-90 | 340-12-90 |
| 12 x 12 | 140 | 330-12-140 | 340-12-140 |
| 12.7 x 12.7 | 140 | 330-12.7 | 340-12.7 |
| 16 x 16 | 100 | 330-16 | 340-16 |
| 16 x 16 | 140 | 330-16-140 | 340-16-140 |
| 20 x 20 | 120 | 330-20 | 340-20 |

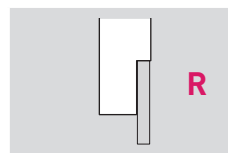
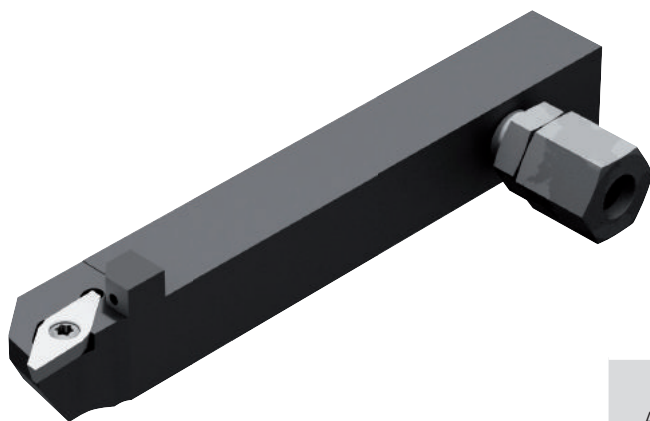
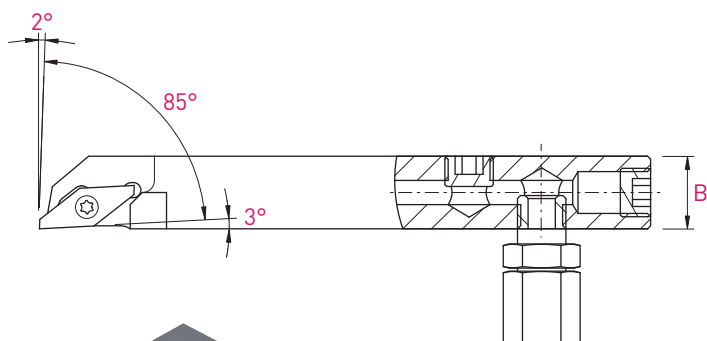
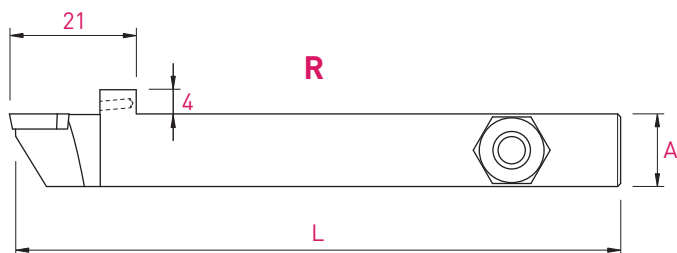
| | |
|----------------------------------|--|
| Porte-outils Halter Holder | Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)  |
| 332 - 336 342 - 346 | V-M2.5X7.8-T8 C-T8 |

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

85°

340-JET



| Pièces de rechange Ersatzteile Spare parts | Option | | |
|--|-----------|----------|---------|
| | Art. N° | Art. N° | Art. N° |
| 340-0810-JET | J-M5-D5 | JC-M5-D5 | JB-M5 |
| 340-JET | J-M8X1-D6 | - | JB-M8X1 |

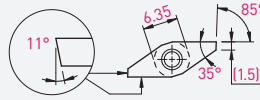
| A x B | L | Art. N° |
|-------------|-----|--------------|
| 8 x 10 | 100 | 340-0810-JET |
| 10 x 12 | 100 | 340-1012-JET |
| 12 x 12 | 100 | 340-12-JET |
| 12.7 x 12.7 | 100 | 340-12.7-JET |
| 16 x 16 | 100 | 340-16-JET |
| 20 x 20 | 100 | 340-20-JET |

Chaque support est livré avec vis et clé.
 Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
 Screw(s) and key are included with each tool holder.

TURN-LINE

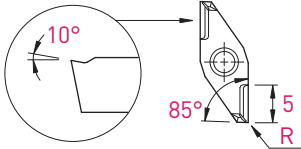
Tournage avant
Vorwärts drehen
Front turning

85°



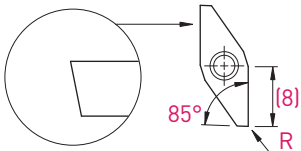
330 / 340

337 / 347



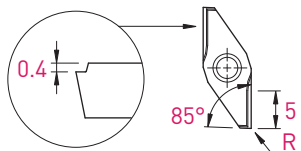
| R | Art. N° | L | | | | | | | R | | | | | | | | |
|------|------------|-------|-------|-----|----------|-----|-----|------|------------|-------|-------|-----|----------|-----|-----|------|-----------|
| | | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTX | HTiN | HN (µk10) | TiAlN | TiAlX | TiN | N (µk20) | HTA | HTX | HTiN | HN (µk10) |
| 0 | 337 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.03 | 337-R03 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347-R03 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.08 | 337-R08 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347-R08 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 337-R10 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347-R10 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.20 | 337-R20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347-R20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.35 | - | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347-R35 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0 | 337-EN | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 347-EN | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.03 | 337-EN-R03 | ■ | □ | ■ | ■ | ■ | ■ | ■ | 347-EN-R03 | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.08 | 337-EN-R08 | ■ | □ | ■ | ■ | ■ | ■ | ■ | 347-EN-R08 | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 337-EN-R10 | ■ | □ | ■ | ■ | ■ | ■ | ■ | 347-EN-R10 | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.20 | 337-EN-R20 | ■ | □ | ■ | ■ | ■ | ■ | ■ | 347-EN-R20 | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.35 | - | ■ | □ | ■ | ■ | ■ | ■ | ■ | 347-EN-R35 | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ |

338 / 348



| R | Art. N° | L | | | R | | | |
|------|---------|-----|------|-----------|---------|------|-----------|---|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) | |
| 0 | 338 | ■ | ■ | ■ | 348 | ■ | ■ | ■ |
| 0.05 | 338-R05 | ■ | ■ | ■ | 348-R05 | ■ | ■ | ■ |
| 0.10 | 338-R10 | ■ | ■ | ■ | 348-R10 | ■ | ■ | ■ |
| 0.20 | 338-R20 | ■ | ■ | ■ | 348-R20 | ■ | ■ | ■ |
| 0.40 | 338-R40 | ■ | ■ | ■ | 348-R40 | ■ | ■ | ■ |

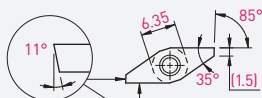
338VS / 348VS



| R | Art. N° | L | | | R | | | |
|------|-----------|-----|------|-----------|-----------|------|-----------|---|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) | |
| 0 | 338VS | ■ | ■ | ■ | 348VS | ■ | ■ | ■ |
| 0.10 | 338VS-R10 | ■ | ■ | ■ | 348VS-R10 | ■ | ■ | ■ |

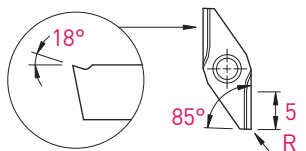
Tournage avant
Vorwärts drehen
Front turning

85°



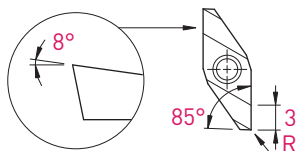
330 / 340

338VX / 348VX



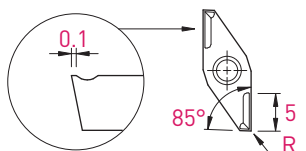
| R | Art. N° | L | | | R | | |
|------|-----------|-----|------|-----------|-----|------|-----------|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) |
| 0 | 338VX | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.05 | 338VX-R05 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 338VX-R10 | ■ | ■ | ■ | ■ | ■ | ■ |

338X / 348X



| R | Art. N° | L | | | R | | |
|------|----------|-----|------|-----------|-----|------|-----------|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) |
| 0 | 338X | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 338X-R10 | ■ | ■ | ■ | ■ | ■ | ■ |

339 / 349



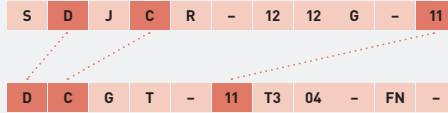
| R | Art. N° | L | | | R | | |
|------|---------|-----|------|-----------|-----|------|-----------|
| | | HTA | HTiN | HN (µk10) | HTA | HTiN | HN (µk10) |
| 0 | 339 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.10 | 339-R10 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.20 | 339-R20 | ■ | ■ | ■ | ■ | ■ | ■ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability



Index

Codification des outils ISO-Line
ISO-Line Bezeichnungssystem
ISO-Line designation system



> 7.02

Géométries de coupe
Spanformgeometrien
Cutting geometries



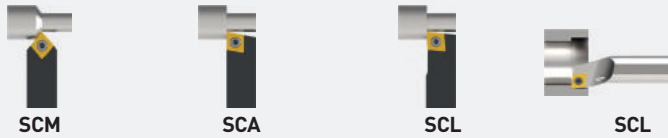
> 7.05

Nuances
Sorten
Grades



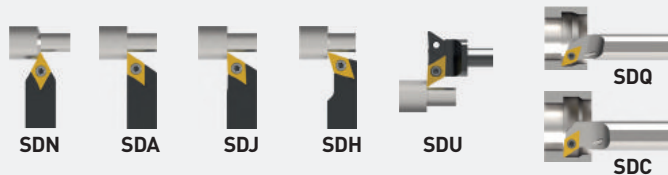
> 7.11

Porte-outils
et plaquettes 80°
Halter und
WSP 80°
Holders and
inserts 80°



> 7.13

Porte-outils
et plaquettes 55°
Halter und
WSP 55°
Holders and
inserts 55°



> 7.27

Porte-outils
et plaquettes 35°
Halter und
WSP 35°
Holders and
inserts 35°



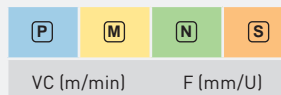
> 7.45

Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories



> 7.61

Paramètres de coupe
Schnittwerte
Machining data



> 7.62

ISO-LINE

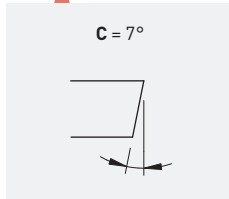
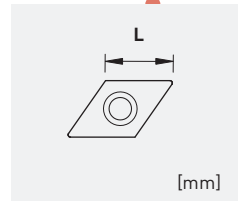
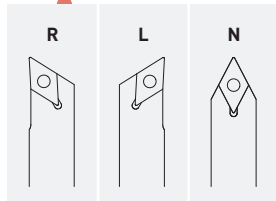
Codification des porte-outils ISO-Line

ISO-Line Bezeichnungssystem für Halter

ISO-Line designation system for holders

| | | | | | | | | | | |
|--|--|--|---|--|--|--|---|--|--|---|
| Méthode de serrage Klemmsystem Clamping system | Forme de la plaquette Plattenform Insert shape | Géométrie du porte-outil Halteform Holder geometry | Angle de dépointe de la plaquette WSP-Freiwinkel Insert clearance angle | Direction de coupe Schneidrichtung Cut direction | | Hauteur du porte-outil Halter Höhe Holder height | Largeur du porte-outil Halter-Breite Holder width | Longueur du porte-outil Halter-Länge Holder length | | Dimension de la plaquette (L) WSP-Größe (L) Insert size (L) |
|--|--|--|---|--|--|--|---|--|--|---|

S D J C R - 12 12 G - 11

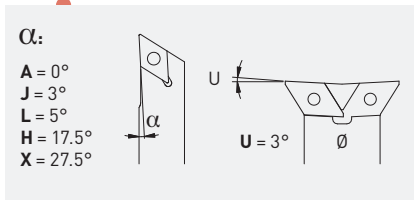


A x B (or Ø) [mm]

- 08 x 08
- 10 x 10
- 12 x 12
- 12.7 x 12.7 (1/2 in)
- 16 x 16
- 20 x 20
- Ø: D10 / D20 / D25.4 (Ø1 in)

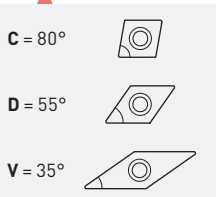
Length: [mm]

- F = 75
- G = 90
- J = 110
- X = Special



α:

- A = 0°
- J = 3°
- L = 5°
- H = 17.5°
- X = 27.5°



S = vis
Schraube
screw



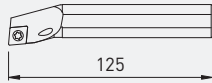
Compatibilité porte-outil - plaquette
WSP - Halter Kompatibilität
Holder - insert compatibility

| | | | | | | | | | | |
|---|---|---|---|---|----|----|----|---|----|----|
| S | D | J | C | R | - | 12 | 12 | G | - | 11 |
| D | C | G | T | - | 11 | T3 | 04 | - | FN | - |

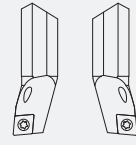
Codification des porte-outils ISO-Line
ISO-Line Bezeichnungssystem für Halter
ISO-Line designation system for holders

| | | | | | | | | | | |
|--|---|--|----------|--|--|---|---|--|----------|--|
| Méthode de serrage Klemmsystem Clamping system | Largeur du porte-outil Halter-Breite Holder width | Longueur du porte-outil Halter-Länge Holder length | | Méthode de serrage Klemmsystem Clamping system | Forme de la plaquette Plattenform Insert shape | Géométrie du porte-outil Halterform Holder geometry | Angle de dépointe de la plaquette WSP-Freiwinkel Insert clearance angle | Direction de coupe Schneidrichtung Cut direction | | Dimension de la plaquette (L) WSP Grösse (L) Insert size (L) |
| A | 12 | K | - | S | C | L | C | R | - | 06 |

**Longueur
Länge
Length**
 F = 80
 H = 100
 J = 110
 K = 125
 M = 150
 Q = 180



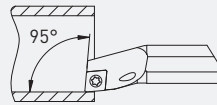
**Ø queue
Schaft Ø
Shank Ø**



C = 7°



L = 95°
Q = 107.5°
U = 93°



A = acier avec lubrification
 Stahl mit Kühlung
 Steel with coolant

E = carbure avec lubrification
 Hartmetall mit Kühlung
 Carbide with coolant

C = 80°



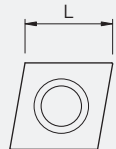
D = 55°



V = 35°



vis
S = Schraube
 screw



ISO-LINE

Codification des plaquettes ISO-Line

ISO-Line Bezeichnungssystem für WSP

ISO-Line designation system for inserts

| Forme de la plaquette Plattenform Insert shape | Angle de dépointe de la plaquette WSP-Freiwinkel Insert clearance angle | Classe de tolérance Toleranz Klasse Tolerance class | Brise-copeau Spanbrecher Chip breaker | | Dimension de la plaquette (L) WSP Größe (L) Insert size (L) | Épaisseur de la plaquette (E) WSP Dicke (E) Insert thickness (E) | Rayon de pointe de la plaquette WSP Eckenradius Insert corner radius | | Exécution d'arête et direction de coupe Schneidkante Ausführung und Schneidrichtung Edge type and cutting direction | | Géométrie de coupe Spanformgeometrie Cutting geometry | | | | | | | | | | | | | | | |
|--|---|---|---|----------|--|--|--|-----------------|--|-----------------|--|-----------------|--|-----------------|-------|-----------------|--|-----------------|-------|-----------------|--|--|---------|--|--|--|
| D | C | G | T | - | 11 | T3 | 04 | - | FN | - | X8 | | | | | | | | | | | | | | | |
| | | G = ±0.025 mm M = ±0.05 mm | T W | | L | E | R: 003 = 0.03 mm 005 = 0.05 mm 008 = 0.08 mm 01 = 0.1 mm 015 = 0.15 mm 02 = 0.2 mm 04 = 0.4 mm 08 = 0.8 mm | | FN | | cf.: Géométrie de coupe Spanformgeometrie Cutting geometry | | | | | | | | | | | | | | | |
| | C = 7° | | | | L Ø d [mm] | | | EN | | | | | | | | | | | | | | | | | | |
| | C = 80° | | | | <table border="1"><thead><tr><th>L</th><th>Ø d [mm]</th></tr></thead><tbody><tr><td>CC...06</td><td></td></tr><tr><td>DC...07</td><td>6.350</td></tr><tr><td>VC... 11</td><td></td></tr><tr><td>VC... 13</td><td>7.940</td></tr><tr><td>CC...09</td><td></td></tr><tr><td>DC... 11</td><td>9.525</td></tr><tr><td>VC... 16</td><td></td></tr></tbody></table> | L | Ø d [mm] | CC... 06 | | DC... 07 | 6.350 | VC... 11 | | VC... 13 | 7.940 | CC... 09 | | DC... 11 | 9.525 | VC... 16 | | | ENP | | | |
| L | Ø d [mm] | | | | | | | | | | | | | | | | | | | | | | | | | |
| CC... 06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DC... 07 | 6.350 | | | | | | | | | | | | | | | | | | | | | | | | | |
| VC... 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VC... 13 | 7.940 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CC... 09 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DC... 11 | 9.525 | | | | | | | | | | | | | | | | | | | | | | | | | |
| VC... 16 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | D = 55° | | | | | | | FL / FR | | | | | | | | | | | | | | | | | | |
| | V = 35° | | | | | | | ELP / ERP | | | | | | | | | | | | | | | | | | |



Géométries de coupe
Spanformgeometrien
Cutting geometries

G
tolerance class

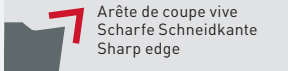
Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Finishing

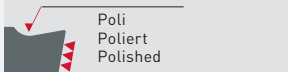
FN-X8

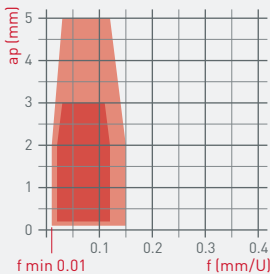
8°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished






ap (mm)

f (mm/U)



f min 0.01

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★ |
| N | ★★★ |
| S | ★★★ |

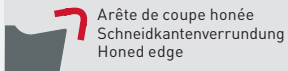
| | | |
|---|---|---|
| CCGT | DCGT | VCGT |
|  |  |  |
| p. 7.19 | p. 7.37 | p. 7.54 |

Semi-finishing

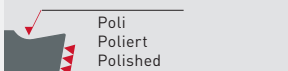
ENP-X8

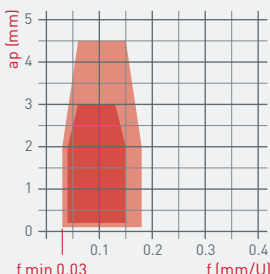
8°



Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished






ap (mm)

f (mm/U)



f min 0.03

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★ |
| N | ★★★ |
| S | ★★★ |

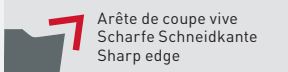
| | | |
|---|---|---|
| CCGT | DCGT | VCGT |
|  |  |  |
| p. 7.19 | p. 7.37 | p. 7.54 |

Finishing

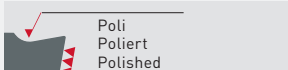
FN-X17

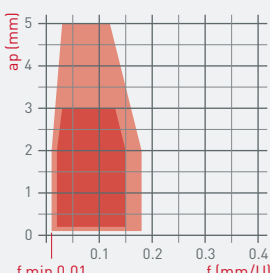
17°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished






ap (mm)

f (mm/U)



f min 0.01

| | |
|---|-------|
| P | ★★★ |
| M | ★★★★★ |
| N | ★★★★★ |
| S | ★★★★★ |

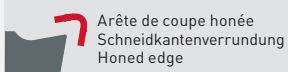
| | | |
|---|---|---|
| CCGT | DCGT | VCGT |
|  |  |  |
| p. 7.20 | p. 7.38 | p. 7.55 |

Semi-finishing

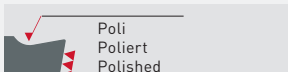
ENP-X17

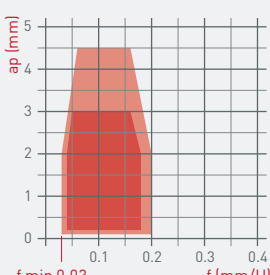
17°



Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished






ap (mm)

f (mm/U)

f min 0.03

| | |
|---|-------|
| P | ★★★ |
| M | ★★★★★ |
| N | ★★★ |
| S | ★★★★★ |

| | | |
|---|---|---|
| CCGT | DCGT | VCGT |
|  |  |  |
| p. 7.20 | p. 7.38 | p. 7.55 |

ISO-LINE


Géométries de coupe
Spanformgeometrien
Cutting geometries

G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

FN-X25

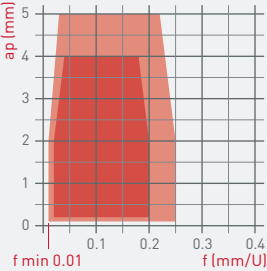
Finishing



25°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished




ap (mm)

f (mm/U)

f min 0.01

| | |
|---|-------|
| P | |
| M | ★★★ |
| N | ★★★★★ |
| S | ★★★★★ |


CCGT DCGT VCGT



p. 7.21 p. 7.39 p. 7.56

ENP-X25

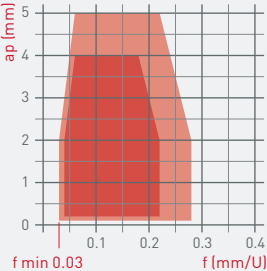
Semi-finishing



25°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished




ap (mm)

f (mm/U)

f min 0.03

| | |
|---|-------|
| P | |
| M | ★★★ |
| N | ★★★★★ |
| S | ★★★★★ |


CCGT DCGT VCGT



p. 7.21 p. 7.39 p. 7.56

ENP-X20

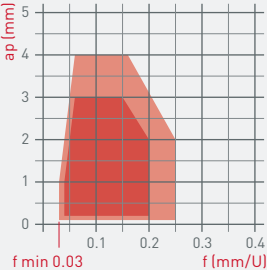
Semi-finishing



20°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished




ap (mm)

f (mm/U)

f min 0.03

| | |
|---|-------|
| P | |
| M | ★★★★★ |
| N | ★★★ |
| S | ★★★★★ |

CCGT DCGT VCGT



p. 7.22 p. 7.40 p. 7.57

Géométries de coupe
Spanformgeometrien
Cutting geometries

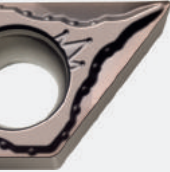

M
tolerance class

Plaquettes en métal dur
VHM-Wendepplatten
Carbide inserts

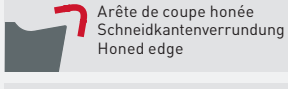
EN-XF3

Semi-finishing

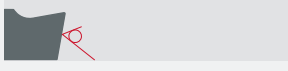
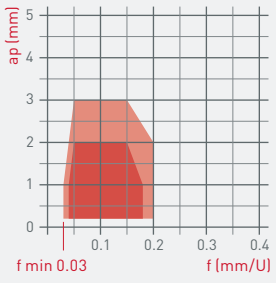
Finishing

12°



Arête de coupe honée
Schneidkantenverrundung
Honed edge




ap (mm)

f (mm/U)

f min 0.03

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | ★★★ |
| S | ★★★ |

CCMT DCMT VCMT







p. 7.23 p. 7.41 p. 7.58

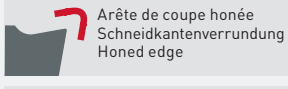
EN-XF2

Semi-finishing

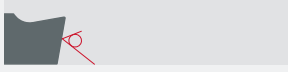
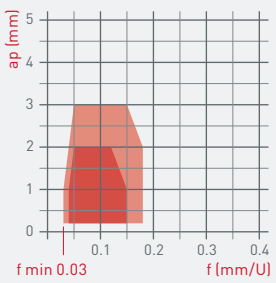
Finishing

6°



Arête de coupe honée
Schneidkantenverrundung
Honed edge




ap (mm)

f (mm/U)

f min 0.03

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★ |
| N | |
| S | ★★★ |

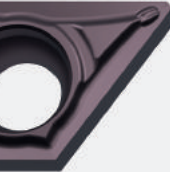

CCMT DCMT VCMT

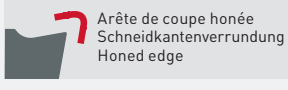
p. 7.23 p. 7.41 p. 7.58

EN-MF2

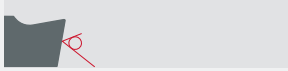
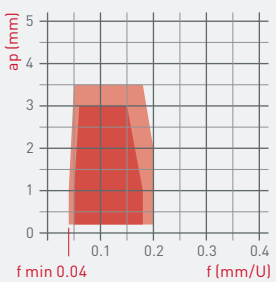
Semi-finishing

8°



Arête de coupe honée
Schneidkantenverrundung
Honed edge



ap (mm)

f (mm/U)

f min 0.04

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | ★★★ |
| S | ★★★ |

CCMT DCMT

p. 7.23 p. 7.41

ISO-LINE

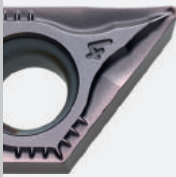
Géométries de coupe
Spanformgeometrien
Cutting geometries

M
tolerance class

Plaquettes en métal dur
VHM-Wendeplatten
Carbide inserts

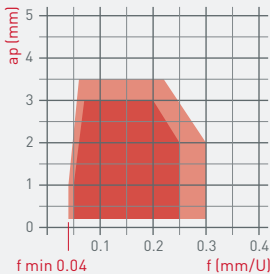
EN-MF

Semi-finishing



5°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



ap (mm)

f (mm/U)

f min 0.04

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★ |
| N | |
| S | |

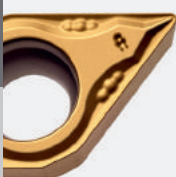
CCMT DCMT VCMT

p. 7.24 p. 7.42 p. 7.59

EN-HF3

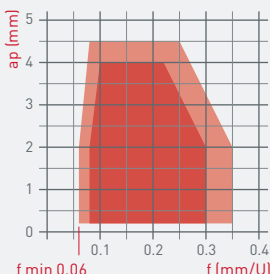
Roughing

Semi-finishing



10°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



ap (mm)

f (mm/U)

f min 0.06

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | |
| S | ★★★ |


CCMT DCMT

p. 7.24 p. 7.42

EN-HF

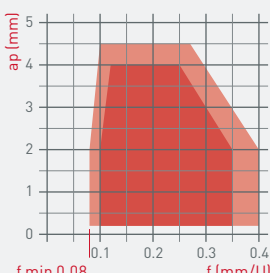
Roughing

Semi-finishing



12°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



ap (mm)

f (mm/U)

f min 0.08

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | |
| S | |

CCMT DCMT VCMT

p. 7.24 p. 7.42 p. 7.59


Géométries de coupe
Spanformgeometrien
Cutting geometries

G
tolerance class

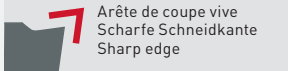
Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Super-finishing

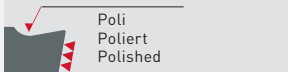
FL/FR-X10



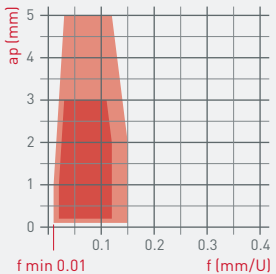
10°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished




ap (mm)

f min 0.01

f (mm/U)

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | ★★★★★ |
| S | ★★★★★ |


VCGT



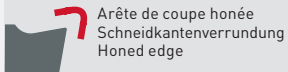
p. 752

Semi-finishing


ELP/ERP-X10



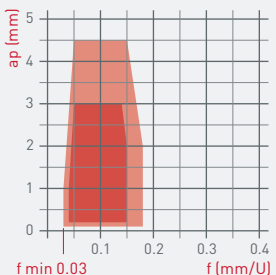
10°



Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished




ap (mm)

f min 0.03

f (mm/U)

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | ★★★ |
| S | ★★★ |


VCGT



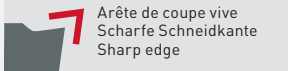
p. 752

Super-finishing


FN-K18



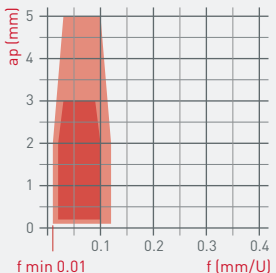
18°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished




ap (mm)

f min 0.01

f (mm/U)

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★★★ |
| N | ★★★★★ |
| S | ★★★★★ |

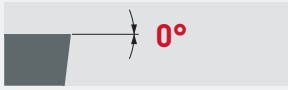
VCGT



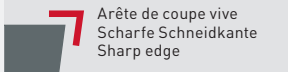
p. 753

Finishing


FN-0



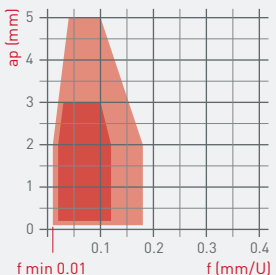
0°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished




ap (mm)

f min 0.01

f (mm/U)

| | |
|---|-----|
| P | ★★★ |
| M | |
| N | ★★★ |
| S | |


VCGW



p. 753

Finishing

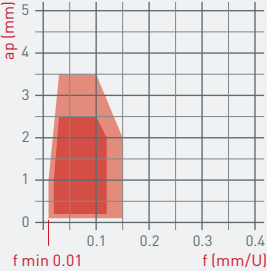
FN-X8 CERMET



8°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



ap (mm)

f (mm/U)

f min 0.01


| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★ |
| N | |
| S | |

CCGT DCGT VCGT

p. 7.25 p. 7.43 p. 7.60

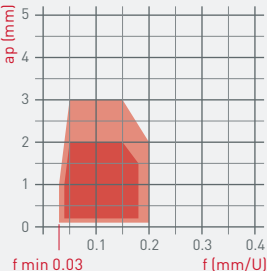
Semi-finishing

ENP-KX CERMET



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



ap (mm)

f (mm/U)

f min 0.03

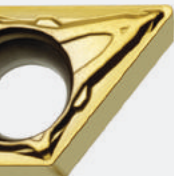
| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★ |
| N | |
| S | |

CCGT DCGT

p. 7.25 p. 7.43

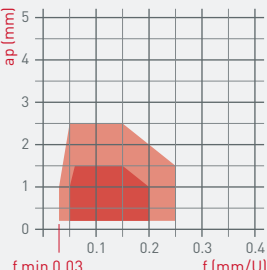
Semi-finishing

EN-KM CERMET



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



ap (mm)

f (mm/U)

f min 0.03

| | |
|---|-------|
| P | ★★★★★ |
| M | ★★★ |
| N | |
| S | |

CCMT DCMT

p. 7.26 p. 7.44

Nuances

Sorten

Grades

| Nuances Sorten Grades | Domaine d'application Anwendungsbereich Application area | Finishing / light machining | Semi-finishing / medium cut | Roughing / heavy machining | Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries | Résistance à l'usure Verschleißfestigkeit Wear resistance | Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance | Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance | Revêtement et couleur Beschichtung und Farbe Coating and colour | Recommandations spéciales Sonder-Empfehlungen Special recommendations |
|-----------------------------|--|-----------------------------|-----------------------------|----------------------------|--|---|--|--|---|---|
| Carbide + PVD | | | | | | | | | | |
| TiAlN | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | ■ | FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10 | ■■■■■□ | ■■■■■□ | ■■■■■□ | PVD | |
| HTA | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | | | FN-X8 FN-X17 FN-X25 L/R-X10 FN-K18 FN-0 | ■■■■■ | ■■■■■□ | ■■■■■□ | PVD | |
| TiN | ★★★★ ★★★★ ★★★★ ★★★★★ | ■ | ■ | ■ | FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10 | ■■■■□□ | ■■■■■□ | ■■■■□□ | PVD | High resistance to edge build up |
| HTiN | ★★★★ ★★★★ ★★★★★ | ■ | | | FN-K18 FN-0 | ■■■■■□ | ■■■■■□ | ■■■■□□ | PVD | High resistance to edge build up |
| TAC | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | ■ | EN-XF3 EN-XF2 EN-MF2 EN-HF | ■■■■■□ | ■■■■■□ | ■■■■■□ | PVD | |
| HTAC | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | | EN-XF3 EN-XF2 EN-MF2 | ■■■■■ | ■■■■■□ | ■■■■■□ | PVD | |
| TiX | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | | | ■ | EN-HF3 | ■■■■□□ | ■■■■■□ | ■■■■□□ | PVD | Easy wear out control with TiN top layer |
| HTiX | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | | ENP-X20 EN-HF3 | ■■■■■□ | ■■■■■□ | ■■■■□□ | PVD | Easy wear out control with TiN top layer |
| Tmax | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | | EN-MF EN-HF | ■■■■■□ | ■■■■■□ | ■■■■■□ | PVD | |
| ZTA | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | | ENP-X20 | ■■■■■□ | ■■■■■□ | ■■■■■□ | PVD | perfect for titanium alloys & superalloys |
| TiAlX | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | ■ | | X8 R-X10 X17 X25 | ■■■■■□ | ■■■■■□ | ■■■■■□ | PVD | perfect for titanium alloys & superalloys |
| HTAX | ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★ | ■ | | | X8 R-X10 X17 X25 | ■■■■■ | ■■■■■□ | ■■■■■□ | PVD | perfect for titanium alloys & superalloys |

ISO-LINE

Nuances

Sorten

Grades

| Nuances Sorten Grades | Domaine d'application Anwendungsbereich Application area | Finishing / light machining | Semi-finishing / medium cut | Roughing / heavy machining | Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries | Résistance à l'usure Verschleißfestigkeit Wear resistance | Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance | Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance | Revêtement et couleur Beschichtung und Farbe Coating and colour | Recommandations spéciales Sonder-Empfehlungen Special recommendations |
|-----------------------------|--|-----------------------------|-----------------------------|----------------------------|--|---|--|--|---|---|
| Carbide + CVD | | | | | | | | | | |
| Ti4 | ★★★★★ ★★★ | | ■ | ■ | EN-MF EN-HF3 EN-HF | ■■■■□ | ■■■■□ | ■■■■■ | CVD | |
| Ti5 | ★★★★★ ★★★ | | ■ | ■ | EN-MF2 EN-HF | ■■■■□ | ■■■■□ | ■■■■■ | CVD | Easy wear out control with TiN top layer |
| HTi5 | ★★★★★ ★★★ | | ■ | ■ | EN-XF2 EN-MF2 EN-HF | ■■■■■ | ■■■□□ | ■■■■■ | CVD | Easy wear out control with TiN top layer |
| Ti6 | ★★★ ★★★★★ ★★★★★ | | ■ | ■ | EN-HF3 | ■■■■□ | ■■■■□ | ■■■■■ | CVD | |
| Carbide uncoated | | | | | | | | | | |
| K10 | ★★★ ★★★ | | ■ | | FN-X8 FN-X17 FN-X25 ELP-X10/ERP-X10 FN-K18 FN-0 | ■■■□□ | ■■■□□ | ■■□□□ | uncoated | |
| K20 | ★★ ★★ | | ■ | | FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 ELP-X10/ERP-X10 | ■■□□□ | ■■■□□ | ■■□□□ | uncoated | |
| CERMET | | | | | | | | | | |
| CTA | ★★★★★ ★★★ | | ■ | | FN-X8 | ■■■■□ | ■■■■□ | ■■■■■ | CERMET +PVD | |
| CT7 | ★★★★★ ★★★ | | ■ | ■ | ENP-KX EN-KM | ■■■■□ | ■■■■□ | ■■■■■ | CERMET + PVD | Easy wear out control with TiN top layer |
| HCT7 | ★★★★★ ★★★ | | ■ | ■ | ENP-KX EN-KM | ■■■■■ | ■■■□□ | ■■■■■ | CERMET + PVD | Easy wear out control with TiN top layer |
| CN6 | ★★★★ | | ■ | | FN-X8 ENP-KX EN-KM | ■■□□□ | ■■■■□ | ■■■■□ | CERMET uncoated | |

Porte-outils

Halter

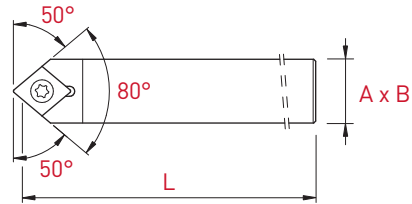
Holders

80°

SCM



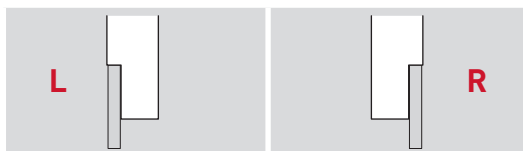
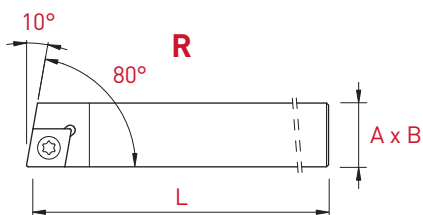
SCM



| Plaquettes WSP Inserts | A x B | L | Art. N° |
|------------------------------|-------------|-----|----------------|
| CC...-0602.. | 8 x 8 | 115 | SCMCN-0808X-06 |
| | 10 x 10 | 115 | SCMCN-1010X-06 |
| | 12 x 12 | 130 | SCMCN-1212X-06 |
| | 12 x 12 | 90 | SCMCN-1212G-06 |
| | 12.7 x 12.7 | 130 | SCMCN-12.7X-06 |
| | 16 x 16 | 130 | SCMCN-1616X-06 |
| | 16 x 16 | 75 | SCMCN-1616F-06 |
| CC...-09T3.. | 12 x 12 | 130 | SCMCN-1212X-09 |
| | 12 x 12 | 90 | SCMCN-1212G-09 |
| | 12.7 x 12.7 | 130 | SCMCN-12.7X-09 |
| | 16 x 16 | 130 | SCMCN-1616X-09 |
| | 16 x 16 | 75 | SCMCN-1616F-09 |
| | 20 x 20 | 120 | SCMCN-2020X-09 |



SCA



| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------|-------------|-----|----------------|----------------|
| CC..-0602.. | 8 x 8 | 115 | SCACL-0808X-06 | SCACR-0808X-06 |
| | 10 x 10 | 115 | SCACL-1010X-06 | SCACR-1010X-06 |
| | 12 x 12 | 130 | SCACL-1212X-06 | SCACR-1212X-06 |
| | 12 x 12 | 90 | SCACL-1212G-06 | SCACR-1212G-06 |
| | 12.7 x 12.7 | 130 | SCACL-12.7X-06 | SCACR-12.7X-06 |
| | 16 x 16 | 130 | SCACL-1616X-06 | SCACR-1616X-06 |
| | 16 x 16 | 75 | SCACL-1616F-06 | SCACR-1616F-06 |
| CC..-09T3.. | 12 x 12 | 130 | SCACL-1212X-09 | SCACR-1212X-09 |
| | 12 x 12 | 90 | SCACL-1212G-09 | SCACR-1212G-09 |
| | 12.7 x 12.7 | 130 | SCACL-12.7X-09 | SCACR-12.7X-09 |
| | 16 x 16 | 130 | SCACL-1616X-09 | SCACR-1616X-09 |
| | 16 x 16 | 75 | SCACL-1616F-09 | SCACR-1616F-09 |
| | 20 x 20 | 120 | SCACL-2020X-09 | SCACR-2020X-09 |

Porte-outils

Halter

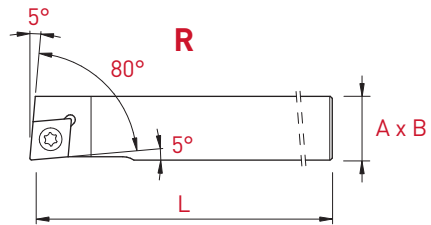
Holders

80°

SCL



SCL



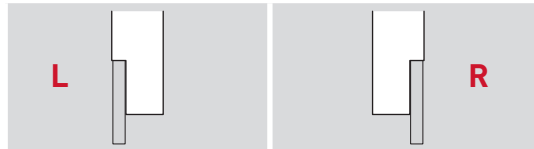
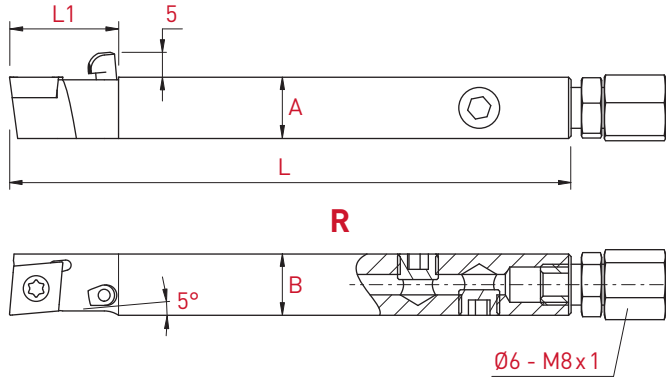
| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------------|-------------|-----|----------------|----------------|
| CC..-0602.. | 8 x 8 | 115 | SCLCL-0808X-06 | SCLCR-0808X-06 |
| | 10 x 10 | 115 | SCLCL-1010X-06 | SCLCR-1010X-06 |
| | 12 x 12 | 130 | SCLCL-1212X-06 | SCLCR-1212X-06 |
| | 12 x 12 | 90 | SCLCL-1212G-06 | SCLCR-1212G-06 |
| | 12.7 x 12.7 | 130 | SCLCL-12.7X-06 | SCLCR-12.7X-06 |
| | 16 x 16 | 130 | SCLCL-1616X-06 | SCLCR-1616X-06 |
| | 16 x 16 | 75 | SCLCL-1616F-06 | SCLCR-1616F-06 |
| CC..-09T3.. | 12 x 12 | 130 | SCLCL-1212X-09 | SCLCR-1212X-09 |
| | 12 x 12 | 90 | SCLCL-1212G-09 | SCLCR-1212G-09 |
| | 12.7 x 12.7 | 130 | SCLCL-12.7X-09 | SCLCR-12.7X-09 |
| | 16 x 16 | 130 | SCLCL-1616X-09 | SCLCR-1616X-09 |
| | 16 x 16 | 75 | SCLCL-1616F-09 | SCLCR-1616F-09 |
| | 20 x 20 | 120 | SCLCL-2020X-09 | SCLCR-2020X-09 |

ISO-LINE

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

80°

SCL-JET



| Plaquettes WSP Inserts | A x B | L | L1 | Art. N° | Art. N° |
|------------------------------|-------------|-----|----|--------------------|--------------------|
| CC...-0602.. | 10 x 10 | 110 | 21 | SCLCL-1010J-06-JET | SCLCR-1010J-06-JET |
| | 12 x 12 | 110 | 21 | SCLCL-1212J-06-JET | SCLCR-1212J-06-JET |
| | 12.7 x 12.7 | 110 | 21 | SCLCL-12.7J-06-JET | SCLCR-12.7J-06-JET |
| | 16 x 16 | 110 | 21 | SCLCL-1616J-06-JET | SCLCR-1616J-06-JET |
| CC...-09T3.. | 12 x 12 | 110 | 21 | SCLCL-1212J-09-JET | SCLCR-1212J-09-JET |
| | 12.7 x 12.7 | 110 | 21 | SCLCL-12.7J-09-JET | SCLCR-12.7J-09-JET |
| | 16 x 16 | 110 | 21 | SCLCL-1616J-09-JET | SCLCR-1616J-09-JET |
| | 20 x 20 | 110 | 21 | SCLCL-2020J-09-JET | SCLCR-2020J-09-JET |

Porte-outils intérieurs amincis

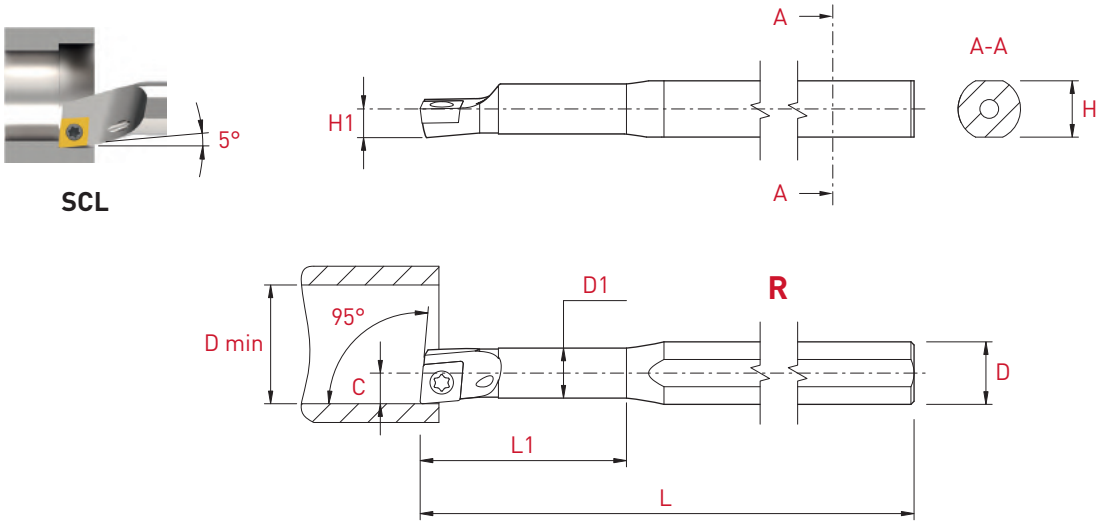
Verjüngte Innenhalter

Thinned internal holders

80°

A-SCLCR/L

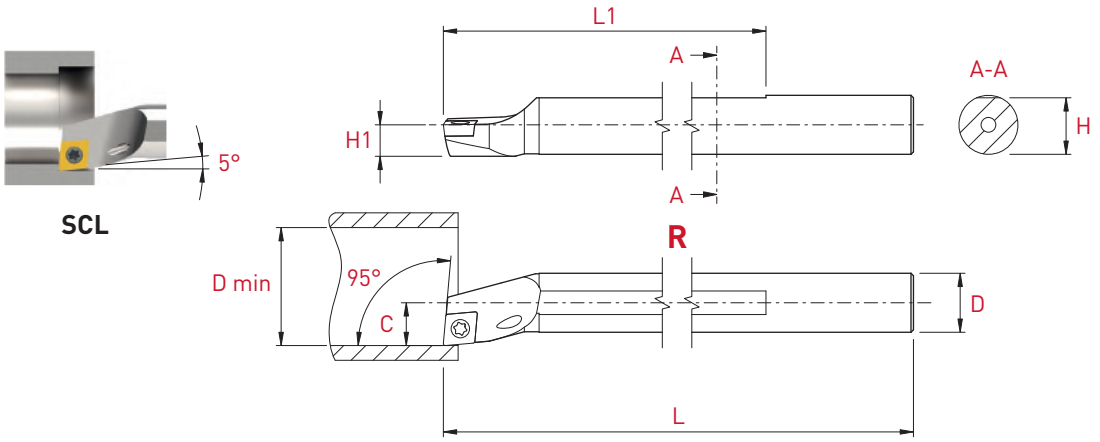
new



| | | Acier / Stahl / Steel | | | | | | | L | R |
|------------------------|----|-----------------------|----|---|----|-----|----|----|-----------------|-----------------|
| Plaquettes WSP Inserts | D | D min | D1 | C | H1 | L | L1 | H | Art. N° | Art. N° |
| CC...-0602.. | 8 | 8 | 6 | 4 | 4 | 100 | 25 | 7 | A0608H-SCLCL-06 | A0608H-SCLCR-06 |
| | 10 | 12 | 8 | 6 | 5 | 110 | 32 | 9 | A0810J-SCLCL-06 | A0810J-SCLCR-06 |
| | 12 | 14 | 10 | 7 | 6 | 125 | 38 | 11 | A1012K-SCLCL-06 | A1012K-SCLCR-06 |

| Pour barres d'alésage For boring bar Für Borstange | Pièces de rechange Ersatzteile Spare parts | |
|--|--|---------|
| | | |
| | Art. N° | Art. N° |
| A0608H_ / A0810J_ | V-M2.5X4.8-T8 | C-T8 |
| A1012K_ | V-M2.5X5.8-T8 | |

new



SCL

Acier / Stahl / Steel

L

R

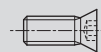
| Plaquettes WSP Inserts | D | D min | C | H1 | L | L1 | H | Art. N° | Art. N° |
|------------------------|------------|-------|----|----|-----|-----|------|---------------|---------------|
| | CC...-0602 | 8 | 11 | 5 | 4 | 80 | 74 | 7.5 | A08F-SCLCL-06 |
| 10 | | 13 | 7 | 5 | 100 | 85 | 9.5 | A10H-SCLCL-06 | A10H-SCLCR-06 |
| 12 | | 16 | 9 | 6 | 125 | 95 | 11.5 | A12K-SCLCL-06 | A12K-SCLCR-06 |
| CC...-09T3 | 16 | 20 | 11 | 8 | 150 | 117 | 15.5 | A16M-SCLCL-09 | A16M-SCLCR-09 |

Carbure de tungstène / Hartmetall / Solid carbide

| Plaquettes WSP Inserts | D | D min | C | H1 | L | L1 | H | Art. N° | Art. N° |
|------------------------|------------|-------|---|----|-----|-----|------|---------------|---------------|
| | CC...-0602 | 8 | 9 | 5 | 4 | 125 | - | 7.5 | E08K-SCLCL-06 |
| 10 | | 11 | 6 | 5 | 125 | - | 9.5 | E10K-SCLCL-06 | E10K-SCLCR 06 |
| 12 | | 13 | 8 | 6 | 150 | - | 11.5 | E12M-SCLCL 06 | E12M-SCLCR 06 |

Pour barres d'alésage
For boring bar
Für Borstange

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

Art. N°

A08F_ / E08K_

V-M2.5X4.8-T8

C-T8

A10H_ / E10H_

V-M2.5X5.8-T8

C-T8

A16M_

V-M3.5X7.2-T15-ISO

C-T15

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X8



CCGT
FN-X8

| R | Art. N° | PVD | | | non revêtu unbeschichtet uncoated | |
|------|--------------------|------------------|------------------|-------------|---|-----|
| | | TiAlN | HTA | TiN | K10 | K20 |
| | | P M N S | P M N S | P M N | | |
| 0.05 | CCGT-0602005-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.1 | CCGT-060201-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCGT-060202-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCGT-060204-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.05 | CCGT-09T3005-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.1 | CCGT-09T301-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCGT-09T302-FN-X8 | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCGT-09T304-FN-X8 | ■ | ■ | ■ | ■ | ■ |



CCGT
ENP-X8

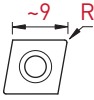
| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|---------------------|------------------|-------------|---|
| | | TiAlN | TiN | K20 |
| | | P M N S | P M N | |
| 0.05 | CCGT-0602005-ENP-X8 | ■ | ■ | ■ |
| 0.1 | CCGT-060201-ENP-X8 | ■ | ■ | ■ |
| 0.2 | CCGT-060202-ENP-X8 | ■ | ■ | ■ |
| 0.4 | CCGT-060204-ENP-X8 | ■ | ■ | ■ |
| 0.05 | CCGT-09T3005-ENP-X8 | ■ | ■ | ■ |
| 0.1 | CCGT-09T301-ENP-X8 | ■ | ■ | ■ |
| 0.2 | CCGT-09T302-ENP-X8 | ■ | ■ | ■ |
| 0.4 | CCGT-09T304-ENP-X8 | ■ | ■ | ■ |





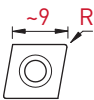
CCGT
FN-X17

| R | Art. N° | PVD | | | non revêtu unbeschichtet uncoated | |
|------|---------------------|------------------|------------------|-------------|---|-----|
| | | TiAlN | HTA | TiN | K10 | K20 |
| | | P M N S | P M N S | P M N | | |
| 0.05 | CCGT-0602005-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.1 | CCGT-060201-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCGT-060202-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCGT-060204-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.05 | CCGT-09T3005-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.1 | CCGT-09T301-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCGT-09T302-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCGT-09T304-FN-X17 | ■ | ■ | ■ | ■ | ■ |
| 0.8 | CCGT-09T308-FN-X17 | ■ | ■ | ■ | ■ | ■ |



CCGT
ENP-X17

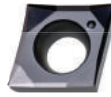
| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|----------------------|------------------|-------------|---|
| | | TiAlN | TiN | K20 |
| | | P M N S | P M N | |
| 0.05 | CCGT-0602005-ENP-X17 | ■ | ■ | ■ |
| 0.1 | CCGT-060201-ENP-X17 | ■ | ■ | ■ |
| 0.2 | CCGT-060202-ENP-X17 | ■ | ■ | ■ |
| 0.4 | CCGT-060204-ENP-X17 | ■ | ■ | ■ |
| 0.05 | CCGT-09T3005-ENP-X17 | ■ | ■ | ■ |
| 0.1 | CCGT-09T301-ENP-X17 | ■ | ■ | ■ |
| 0.2 | CCGT-09T302-ENP-X17 | ■ | ■ | ■ |
| 0.4 | CCGT-09T304-ENP-X17 | ■ | ■ | ■ |
| 0.8 | CCGT-09T308-ENP-X17 | ■ | ■ | ■ |



Plaquettes en métal dur
VHM-Wendepplatten
Solid carbide inserts

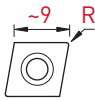
80°

CCGT-X25



CCGT
FN-X25

| R | Art. N° | PVD | | | non revêtu unbeschichtet uncoated | |
|------|---------------------|------------------|------------------|-------------|---|--------------------------|
| | | TiAlN | HTA | TiN | K10 | K20 |
| | | P M N S | P M N S | P M N | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | CCGT-0602005-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.1 | CCGT-060201-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCGT-060202-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCGT-060204-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.05 | CCGT-09T3005-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.1 | CCGT-09T301-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCGT-09T302-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCGT-09T304-FN-X25 | ■ | ■ | ■ | ■ | ■ |
| 0.8 | CCGT-09T308-FN-X25 | ■ | ■ | ■ | ■ | ■ |



CCGT
ENP-X25

| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|----------------------|------------------|-------------|--|
| | | TiAlN | TiN | K20 |
| | | P M N S | P M N | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 0.05 | CCGT-0602005-ENP-X25 | ■ | ■ | ■ |
| 0.1 | CCGT-060201-ENP-X25 | ■ | ■ | ■ |
| 0.2 | CCGT-060202-ENP-X25 | ■ | ■ | ■ |
| 0.4 | CCGT-060204-ENP-X25 | ■ | ■ | ■ |
| 0.05 | CCGT-09T3005-ENP-X25 | ■ | ■ | ■ |
| 0.1 | CCGT-09T301-ENP-X25 | ■ | ■ | ■ |
| 0.2 | CCGT-09T302-ENP-X25 | ■ | ■ | ■ |
| 0.4 | CCGT-09T304-ENP-X25 | ■ | ■ | ■ |
| 0.8 | CCGT-09T308-ENP-X25 | ■ | ■ | ■ |



Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

80°

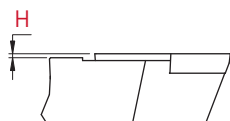
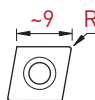
CCGT-X20



CCGT
ENP-X20

| PVD | |
|---------------------------------------|---------------------------------------|
| ZTA | HTiX |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> M | <input checked="" type="checkbox"/> M |
| <input checked="" type="checkbox"/> N | <input checked="" type="checkbox"/> N |
| <input checked="" type="checkbox"/> S | <input checked="" type="checkbox"/> S |

| R | H | Art. N° | ZTA | HTiX |
|-----|------|---------------------|-----|------|
| 0.1 | 0.2 | CCGT-060201-ENP-X20 | ■ | |
| 0.2 | 0.2 | CCGT-060202-ENP-X20 | ■ | ■ |
| 0.4 | 0.2 | CCGT-060204-ENP-X20 | ■ | ■ |
| 0.1 | 0.25 | CCGT-09T301-ENP-X20 | ■ | |
| 0.2 | 0.25 | CCGT-09T302-ENP-X20 | ■ | ■ |
| 0.4 | 0.25 | CCGT-09T304-ENP-X20 | ■ | ■ |
| 0.8 | 0.25 | CCGT-09T308-ENP-X20 | ■ | ■ |



Plaquettes en métal dur

VHM-Wendeplatten

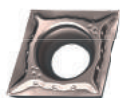
Solid carbide inserts

80°

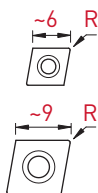
CCMT-XF3

CCMT-XF2

CCMT-MF2



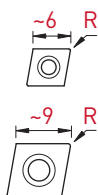
CCMT
EN-XF3



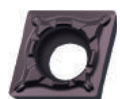
| R | Art. N° | PVD | |
|-----|--------------------|-----|------|
| | | TAC | HTAC |
| 0.2 | CCMT-060202-EN-XF3 | ■ | ■ |
| 0.4 | CCMT-060204-EN-XF3 | ■ | ■ |
| 0.2 | CCMT-09T302-EN-XF3 | ■ | ■ |
| 0.4 | CCMT-09T304-EN-XF3 | ■ | ■ |



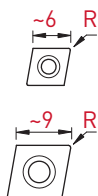
CCMT
EN-XF2



| R | Art. N° | PVD | | CVD |
|-----|--------------------|-----|------|------|
| | | TAC | HTAC | HTi5 |
| 0.2 | CCMT-060202-EN-XF2 | ■ | ■ | ■ |
| 0.4 | CCMT-060204-EN-XF2 | ■ | ■ | ■ |
| 0.2 | CCMT-09T302-EN-XF2 | ■ | ■ | ■ |
| 0.4 | CCMT-09T304-EN-XF2 | ■ | ■ | ■ |



CCMT
EN-MF2



| R | Art. N° | PVD | | CVD | |
|-----|--------------------|-----|------|-----|------|
| | | TAC | HTAC | Ti5 | HTi5 |
| 0.2 | CCMT-060202-EN-MF2 | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-060204-EN-MF2 | ■ | ■ | ■ | ■ |
| 0.2 | CCMT-09T302-EN-MF2 | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-09T304-EN-MF2 | ■ | ■ | ■ | ■ |
| 0.8 | CCMT-09T308-EN-MF2 | ■ | ■ | ■ | ■ |

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

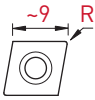
80°

CCMT-MF
CCMT-HF3
CCMT-HF



**CCMT
EN-MF**

| R | Art. N° | PVD | | CVD | |
|-----|-------------------|------|-----|-----|-----|
| | | Tmax | Ti4 | Ti4 | Ti4 |
| 0.2 | CCMT-060202-EN-MF | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-060204-EN-MF | ■ | ■ | ■ | ■ |
| 0.2 | CCMT-09T302-EN-MF | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-09T304-EN-MF | ■ | ■ | ■ | ■ |



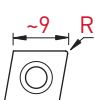
**CCMT
EN-HF3**

| R | Art. N° | PVD | | CVD | |
|-----|--------------------|-----|------|-----|-----|
| | | TiX | HTiX | Ti6 | Ti6 |
| 0.2 | CCMT-060202-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-060204-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.2 | CCMT-09T302-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-09T304-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.8 | CCMT-09T308-EN-HF3 | ■ | ■ | ■ | ■ |



**CCMT
EN-HF**

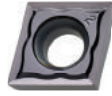
| R | Art. N° | PVD | | CVD | | |
|-----|-------------------|------|-----|-----|-----|------|
| | | Tmax | TAC | Ti4 | Ti5 | HTi5 |
| 0.2 | CCMT-060202-EN-HF | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-060204-EN-HF | ■ | ■ | ■ | ■ | ■ |
| 0.8 | CCMT-060208-EN-HF | ■ | ■ | ■ | ■ | ■ |
| 0.2 | CCMT-09T302-EN-HF | ■ | ■ | ■ | ■ | ■ |
| 0.4 | CCMT-09T304-EN-HF | ■ | ■ | ■ | ■ | ■ |
| 0.8 | CCMT-09T308-EN-HF | ■ | ■ | ■ | ■ | ■ |



Plaquettes CERMET
 CERMET-Wendeplatten
 CERMET inserts

80°

CCGT-X8
 CCGT-KX



CCGT
 FN-X8

| | | CERMET | |
|------|--------------------|--|---|
| | | PVD | non revêtu unbeschichtet uncoated |
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| R | Art. N° | CTA | CN6 |
| 0.05 | CCGT-0602005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | CCGT-060201-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | CCGT-060202-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.05 | CCGT-09T3005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | CCGT-09T301-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | CCGT-09T302-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | CCGT-09T304-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |



CCGT
 ENP-KX

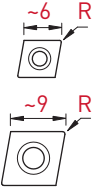
| | | CERMET | | |
|-----|--------------------|--|--|---|
| | | PVD | | non revêtu unbeschichtet uncoated |
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| R | Art. N° | CT7 | HCT7 | CN6 |
| 0.1 | CCGT-060201-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | CCGT-060202-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | CCGT-060204-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | CCGT-09T301-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | CCGT-09T302-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | CCGT-09T304-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |





CCMT
 EN-KM

| | | CERMET | | |
|-----|-------------------|--------|------|---|
| | | PVD | | non revêtu unbeschichtet uncoated |
| | | P | P | P |
| | | M | M | |
| | | | | |
| | | | | |
| | | CT7 | HCT7 | CN6 |
| R | Art. N° | | | |
| 0.2 | CCMT-060202-EN-KM | ■ | ■ | ■ |
| 0.4 | CCMT-060204-EN-KM | ■ | ■ | ■ |
| 0.2 | CCMT-09T302-EN-KM | ■ | ■ | ■ |
| 0.4 | CCMT-09T304-EN-KM | ■ | ■ | ■ |
| 0.8 | CCMT-09T308-EN-KM | ■ | ■ | ■ |



Porte-outils

Halter

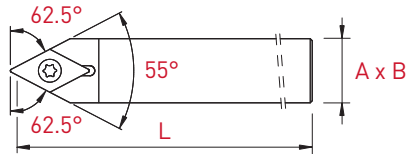
Holders

55°

SDN



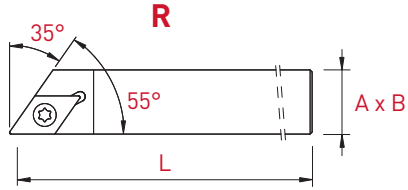
SDN



| Plaquettes WSP Inserts | A x B | L | Art. N° |
|------------------------------|-------------|-----|-----------------------|
| DC...-0702.. | 8 x 8 | 115 | SDNCN-0808X-07 |
| | 10 x 10 | 115 | SDNCN-1010X-07 |
| | 12 x 12 | 130 | SDNCN-1212X-07 |
| | 12 x 12 | 90 | SDNCN-1212G-07 |
| | 12.7 x 12.7 | 130 | SDNCN-12.7X-07 |
| | 16 x 16 | 130 | SDNCN-1616X-07 |
| DC...-11T3.. | 16 x 16 | 75 | SDNCN-1616F-07 |
| | 12 x 12 | 130 | SDNCN-1212X-11 |
| | 12 x 12 | 90 | SDNCN-1212G-11 |
| | 12.7 x 12.7 | 130 | SDNCN-12.7X-11 |
| | 16 x 16 | 130 | SDNCN-1616X-11 |
| | 16 x 16 | 75 | SDNCN-1616F-11 |
| | 20 x 20 | 120 | SDNCN-2020X-11 |



SDA



| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------------|-------------|-----|-----------------------|-----------------------|
| DC..-0702.. | 8 x 8 | 115 | SDACL-0808X-07 | SDACR-0808X-07 |
| | 10 x 10 | 115 | SDACL-1010X-07 | SDACR-1010X-07 |
| | 12 x 12 | 130 | SDACL-1212X-07 | SDACR-1212X-07 |
| | 12 x 12 | 90 | SDACL-1212G-07 | SDACR-1212G-07 |
| | 12.7 x 12.7 | 130 | SDACL-12.7X-07 | SDACR-12.7X-07 |
| | 16 x 16 | 130 | SDACL-1616X-07 | SDACR-1616X-07 |
| | 16 x 16 | 75 | SDACL-1616F-07 | SDACR-1616F-07 |
| DC..-11T3.. | 12 x 12 | 130 | SDACL-1212X-11 | SDACR-1212X-11 |
| | 12 x 12 | 90 | SDACL-1212G-11 | SDACR-1212G-11 |
| | 12.7 x 12.7 | 130 | SDACL-12.7X-11 | SDACR-12.7X-11 |
| | 16 x 16 | 130 | SDACL-1616X-11 | SDACR-1616X-11 |
| | 16 x 16 | 75 | SDACL-1616F-11 | SDACR-1616F-11 |
| | 20 x 20 | 120 | SDACL-2020X-11 | SDACR-2020X-11 |

Porte-outils

Halter

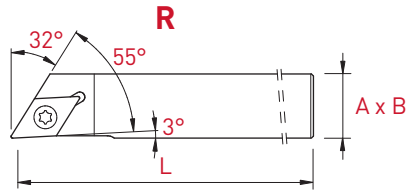
Holders

55°

SDJ



SDJ



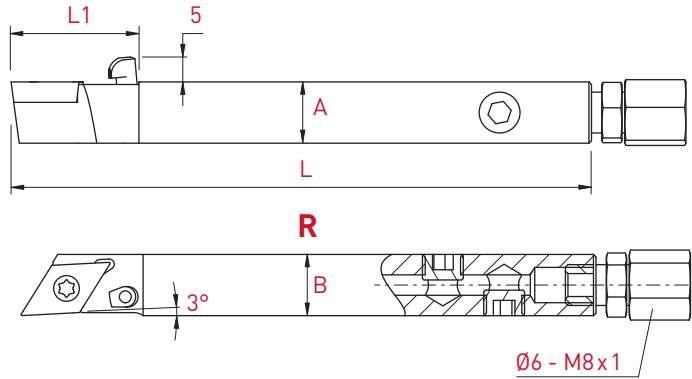
| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------------|-------------|-----|----------------|----------------|
| DC...-0702.. | 8 x 8 | 115 | SDJCL-0808X-07 | SDJCR-0808X-07 |
| | 10 x 10 | 115 | SDJCL-1010X-07 | SDJCR-1010X-07 |
| | 12 x 12 | 130 | SDJCL-1212X-07 | SDJCR-1212X-07 |
| | 12 x 12 | 90 | SDJCL-1212G-07 | SDJCR-1212G-07 |
| | 12.7 x 12.7 | 130 | SDJCL-12.7X-07 | SDJCR-12.7X-07 |
| | 16 x 16 | 130 | SDJCL-1616X-07 | SDJCR-1616X-07 |
| | 16 x 16 | 75 | SDJCL-1616F-07 | SDJCR-1616F-07 |
| | 20 x 20 | 120 | SDJCL-2020X-07 | SDJCR-2020X-07 |
| DC...-11T3.. | 12 x 12 | 130 | SDJCL-1212X-11 | SDJCR-1212X-11 |
| | 12 x 12 | 90 | SDJCL-1212G-11 | SDJCR-1212G-11 |
| | 12.7 x 12.7 | 130 | SDJCL-12.7X-11 | SDJCR-12.7X-11 |
| | 16 x 16 | 130 | SDJCL-1616X-11 | SDJCR-1616X-11 |
| | 16 x 16 | 75 | SDJCL-1616F-11 | SDJCR-1616F-11 |
| | 20 x 20 | 120 | SDJCL-2020X-11 | SDJCR-2020X-11 |

ISO-LINE

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

55°

SDJ-JET



| Plaquettes WSP Inserts | A x B | L | L1 | Art. N° | Art. N° |
|------------------------------|-------------|-----|----|--------------------|--------------------|
| DC...-0702.. | 10 x 10 | 110 | 20 | SDJCL-1010J-07-JET | SDJCR-1010J-07-JET |
| | 12 x 12 | 110 | 20 | SDJCL-1212J-07-JET | SDJCR-1212J-07-JET |
| | 12.7 x 12.7 | 110 | 20 | SDJCL-12.7J-07-JET | SDJCR-12.7J-07-JET |
| | 16 x 16 | 110 | 20 | SDJCL-1616J-07-JET | SDJCR-1616J-07-JET |
| | 20 x 20 | 110 | 20 | SDJCL-2020J-07-JET | SDJCR-2020J-07-JET |
| DC...-11T3.. | 12 x 12 | 110 | 23 | SDJCL-1212J-11-JET | SDJCR-1212J-11-JET |
| | 12.7 x 12.7 | 110 | 23 | SDJCL-12.7J-11-JET | SDJCR-12.7J-11-JET |
| | 16 x 16 | 110 | 23 | SDJCL-1616J-11-JET | SDJCR-1616J-11-JET |
| | 20 x 20 | 110 | 23 | SDJCL-2020J-11-JET | SDJCR-2020J-11-JET |

Porte-outils

Halter

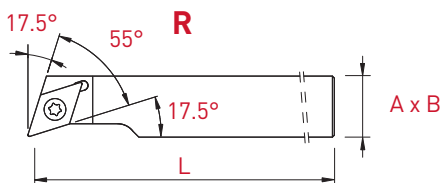
Holders

55°

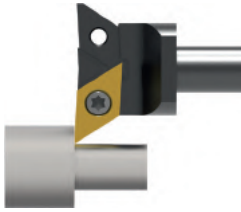
SDH



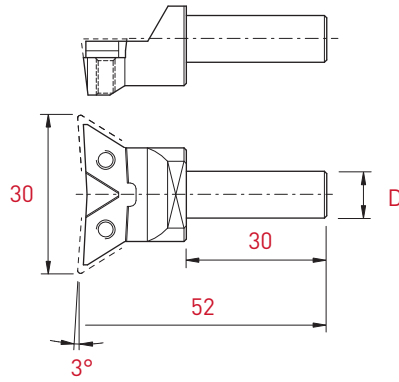
SDH



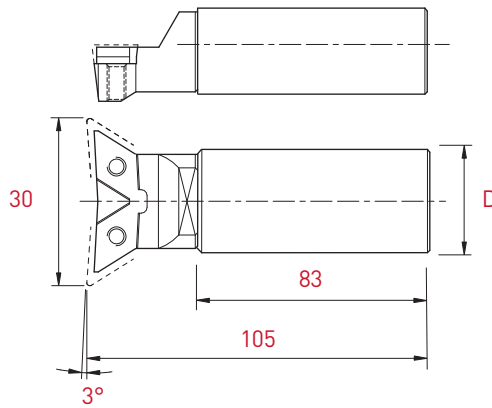
| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------------|-------------|-----|----------------|----------------|
| DC...-0702.. | 10 x 10 | 115 | SDHCL-1010X-07 | SDHCR-1010X-07 |
| | 12 x 12 | 130 | SDHCL-1212X-07 | SDHCR-1212X-07 |
| | 12 x 12 | 90 | SDHCL-1212G-07 | SDHCR-1212G-07 |
| | 12.7 x 12.7 | 130 | SDHCL-12.7X-07 | SDHCR-12.7X-07 |
| | 16 x 16 | 130 | SDHCL-1616X-07 | SDHCR-1616X-07 |
| | 16 x 16 | 75 | SDHCL-1616F-07 | SDHCR-1616F-07 |
| DC...-11T3.. | 16 x 16 | 130 | SDHCL-1616X-11 | SDHCR-1616X-11 |
| | 16 x 16 | 75 | SDHCL-1616F-11 | SDHCR-1616F-11 |
| | 20 x 20 | 120 | SDHCL-2020X-11 | SDHCR-2020X-11 |



SDU



| Plaquettes WSP Inserts | D | Art. N° |
|------------------------|----|---------------------|
| DC..-11T3.. | 10 | SDUC-D10X-11 |



| Plaquettes WSP Inserts | D | Art. N° |
|------------------------|------|-----------------------|
| DC..-11T3.. | 20 | SDUC-D20X-11 |
| | 25.4 | SDUC-D25.4X-11 |

Porte-outils intérieurs amincis

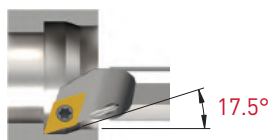
Verjüngte Innenhalter

Thinned internal holders

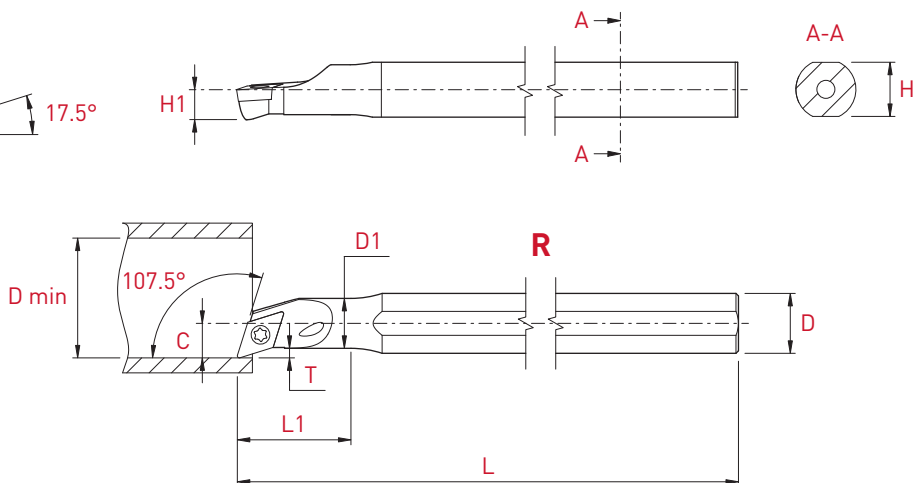
55°

A-SDQCR/L

new



SDQ



Acier / Stahl / Steel

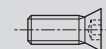
L

R

| Plaquettes WSP Inserts | D | D min | D1 | T | C | H1 | L | L1 | H | Art. N° | Art. N° |
|------------------------------|-----------|----------|--------------|---------|------------|--------|--------|------------|----------|---------|------------------------------------|
| | DC...0702 | 10 12 | 12.5 15.5 | 8 10 | 2.4 2.9 | 7 9 | 5 6 | 100 125 | 22 28 | 9 11 | A0810H-SDQCL-07 A1012K-SDQCL-07 |

Pour barres d'alésage
For boring bar
Für Borstange

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

Art. N°

A0810H_

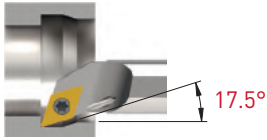
V-M2.5X4.8-T8

C-T8

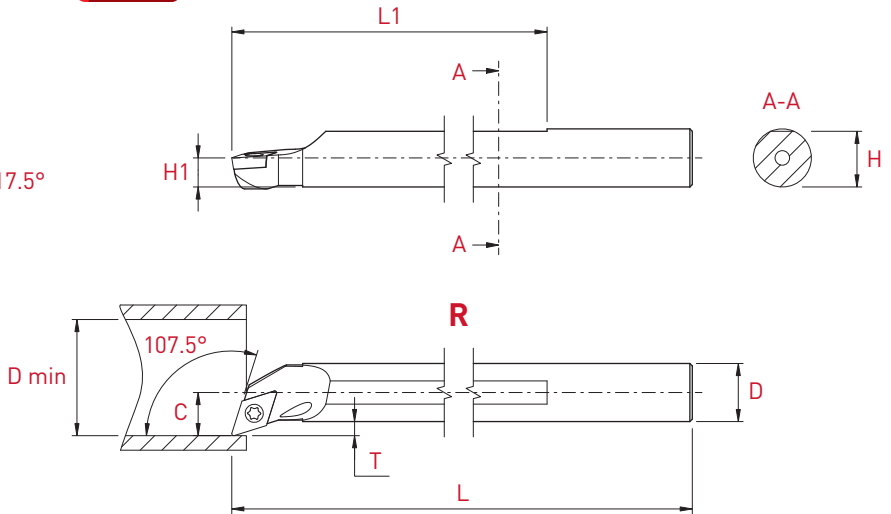
A1012K_

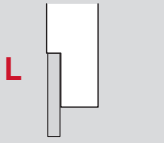
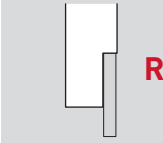
V-M2.5X5.8-T8

new



SDQ



| Acier / Stahl / Steel | | | | | | | | |  |  |
|------------------------------|----|-------|-----|----|-----|-----|-----|------|---|--|
| Plaquettes WSP Inserts | D | D min | T | C | H1 | L | L1 | H | Art. N° | Art. N° |
| DC...-0702 | 10 | 14 | 2.4 | 7 | 4.5 | 100 | 85 | 9 | A10H-SDQCL-07 | A10H-SDQCR-07 |
| | 12 | 17 | 2.9 | 9 | 6 | 125 | 95 | 11.5 | A12K-SDQCL-07 | A12K-SDQCR-07 |
| | 16 | 21 | 2.9 | 11 | 8 | 150 | 117 | 15.5 | A16M-SDQCL-07 | A16M-SDQCR-07 |

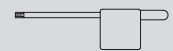
| Carbure de tungstène / Hartmetall / Solid carbide | | | | | | | | | | |
|---|----|-------|-----|-----|----|-----|----|------|---------------|---------------|
| | D | D min | T | C | H1 | L | L1 | H | Art. N° | Art. N° |
| DC...-0702 | 10 | 13 | 2.4 | 7.5 | 5 | 125 | - | 9.5 | E10K-SDQCL-07 | E10K-SDQCR-07 |
| | 12 | 17 | 2.9 | 9 | 6 | 150 | - | 11.5 | E12M-SDQCL-07 | E12M-SDQCR-07 |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

V-M2.5X5.8-T8



Art. N°

C-T8

Porte-outils intérieurs amincis

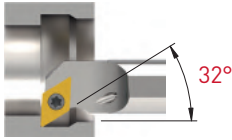
Verjüngte Innenhalter

Thinned internal holders

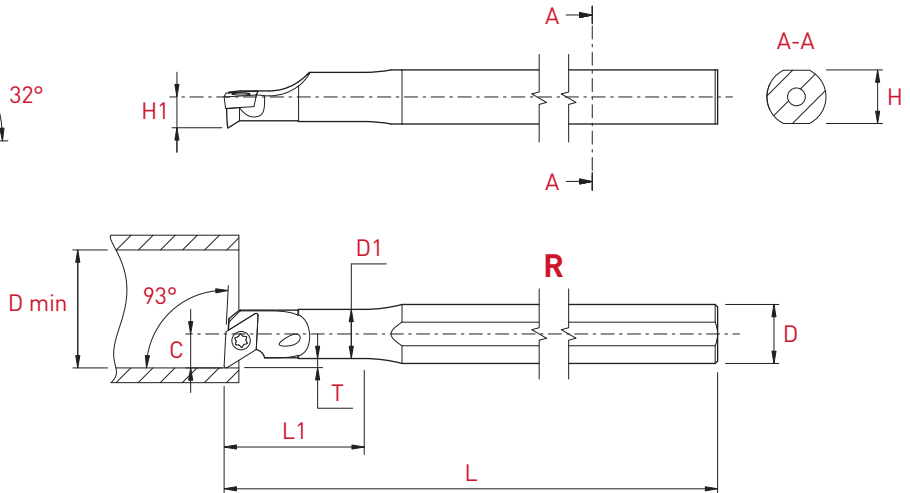
55°

A-SDUCR/L

new



SDU



Acier / Stahl / Steel

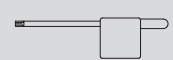
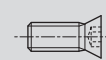
L

R

| Plaquettes WSP Inserts | D | D min | D1 | T | C | H1 | L | H | Art. N° | Art. N° |
|------------------------------|-----------|----------|--------------|--------|------------|--------|------------|----------|---------|------------------------------------|
| | DC...0702 | 10 12 | 12.5 15.5 | 7 9 | 1.9 2.9 | 5 6 | 100 125 | 22 28 | 9 11 | A0810H-SDUCL-07 A1012K-SDUCL-07 |

Pour barres d'alésage
For boring bar
Für Borstange

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

Art. N°

A0810H_

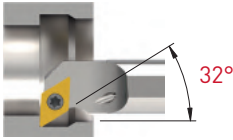
V-M2.5X4.8-T8

C-T8

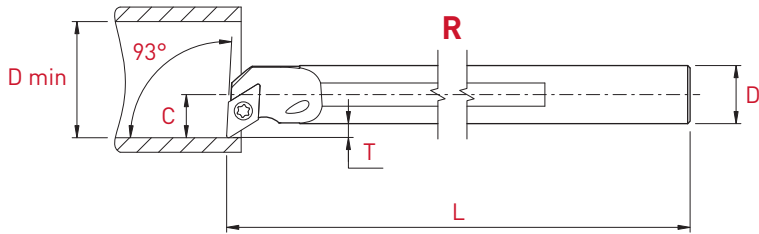
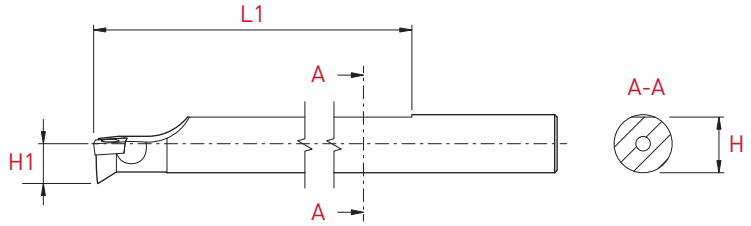
A1012K_

V-M2.5X5.8-T8

new



SDU



Acier / Stahl / Steel

L

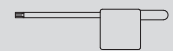
R

| Plaquettes WSP Inserts | Acier / Stahl / Steel | | | | | | | |   | |
|------------------------------|-----------------------|-------|-----|----|----|-----|-----|------|---|---------------|
| | D | D min | T | C | H1 | L | L1 | H | Art. N° | Art. N° |
| DC...-0702 | 10 | 14 | 1.9 | 7 | 5 | 100 | 85 | 9.5 | A10H-SDUCL-07 | A10H-SDUCR-07 |
| | 12 | 17 | 2.9 | 9 | 6 | 125 | 95 | 11.5 | A12K-SDUCL-07 | A12K-SDUCR-07 |
| | 16 | 21 | 2.9 | 11 | 8 | 150 | 117 | 15.5 | A16M-SDUCL-07 | A16M-SDUCR-07 |

Carbure de tungstène / Hartmetall / Solid carbide

| DC...-0702 | Carbure de tungstène / Hartmetall / Solid carbide | | | | | | | |   | |
|------------|---|-------|-----|---|----|-----|----|------|---|---------------|
| | D | D min | T | C | H1 | L | L1 | H | Art. N° | Art. N° |
| DC...-0702 | 10 | 14 | 1.9 | 7 | 5 | 125 | - | 9.5 | E10K-SDUCL-07 | E10K-SDUCR-07 |
| | 12 | 17 | 2.9 | 9 | 6 | 150 | - | 11.5 | E12M-SDUCL-07 | E12M-SDUCR-07 |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

Art. N°

V-M2.5X5.8-T8

C-T8

Plaquettes en métal dur

VHM-Wendepplatten

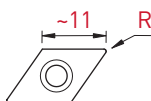
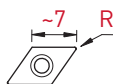
Solid carbide inserts

55°

DCGT-X8



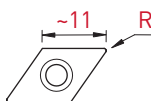
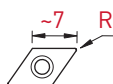
DCGT
FN-X8



| R | Art. N° | PVD | | | | | non revêtu unbeschichtet uncoated | |
|------|--------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------------------|
| | | TiAlN | HTA | TiAlX | HTAX | TiN | K10 | K20 |
| 0.05 | DCGT-0702005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-0702008-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-070201-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-0702015-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-070202-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-070204-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | DCGT-11T3005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-11T3008-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-11T301-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-11T3015-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-11T302-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-11T304-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



DCGT
ENP-X8

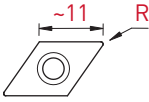
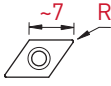


| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|---------------------|-------------------------------------|-------------------------------------|---|
| | | TiAlN | TiN | K20 |
| 0.05 | DCGT-0702005-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-0702008-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-070201-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-0702015-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-070202-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-070204-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | DCGT-11T3005-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-11T3008-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-11T301-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-11T3015-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-11T302-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-11T304-ENP-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |



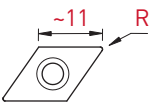
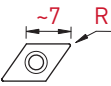
DCGT
FN-X17

| R | Art. N° | PVD | | | | | non revêtu unbeschichtet uncoated | |
|------|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------------------|
| | | TiAlN | HTA | TiAlX | HTAX | TiN | K10 | K20 |
| 0.05 | DCGT-0702005-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-0702008-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-070201-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-0702015-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-070202-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-070204-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | DCGT-11T3005-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-11T3008-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-11T301-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-11T3015-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-11T302-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-11T304-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.8 | DCGT-11T308-FN-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



DCGT
ENP-X17

| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|----------------------|-------------------------------------|-------------------------------------|---|
| | | TiAlN | TiN | K20 |
| 0.05 | DCGT-0702005-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-0702008-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-070201-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-0702015-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-070202-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-070204-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | DCGT-11T3005-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | DCGT-11T3008-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-11T301-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | DCGT-11T3015-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-11T302-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-11T304-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.8 | DCGT-11T308-ENP-X17 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |



Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

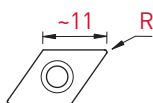
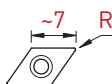
55°

DCGT-X25



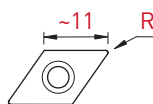
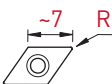
DCGT
FN-X25

| R | Art. N° | PVD | | | non revêtu unbeschichtet uncoated | |
|------|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------------------|
| | | TiAlN | HTA | TiN | K10 | K20 |
| 0.05 | DCGT-0702005-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-070201-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-070202-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-070204-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | DCGT-11T3005-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-11T301-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-11T302-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-11T304-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.8 | DCGT-11T308-FN-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



DCGT
ENP-X25

| R | Art. N° | PVD | | | non revêtu unbeschichtet uncoated |
|------|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|
| | | TiAlN | TiAlX | TiN | K20 |
| 0.05 | DCGT-0702005-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-070201-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-070202-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-070204-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | DCGT-11T3005-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | DCGT-11T301-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | DCGT-11T302-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | DCGT-11T304-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 0.8 | DCGT-11T308-ENP-X25 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

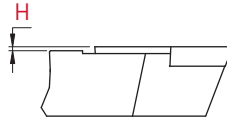
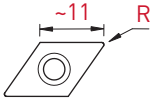
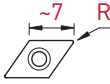




DCMT
ENP-X20

| PVD | |
|---------------------------------------|---------------------------------------|
| ZTA | HTiX |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> M | <input checked="" type="checkbox"/> M |
| <input checked="" type="checkbox"/> N | <input checked="" type="checkbox"/> N |
| <input checked="" type="checkbox"/> S | <input checked="" type="checkbox"/> S |

| R | H | Art. N° | ZTA | HTiX |
|-----|------|---------------------|-----|------|
| 0.1 | 0.2 | DCGT-070201-ENP-X20 | ■ | |
| 0.2 | 0.2 | DCGT-070202-ENP-X20 | ■ | ■ |
| 0.4 | 0.2 | DCGT-070204-ENP-X20 | ■ | ■ |
| 0.1 | 0.25 | DCGT-11T301-ENP-X20 | ■ | |
| 0.2 | 0.25 | DCGT-11T302-ENP-X20 | ■ | ■ |
| 0.4 | 0.25 | DCGT-11T304-ENP-X20 | ■ | ■ |
| 0.8 | 0.25 | DCGT-11T308-ENP-X20 | ■ | ■ |



Plaquettes en métal dur

VHM-Wendepplatten

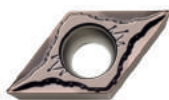
Solid carbide inserts

55°

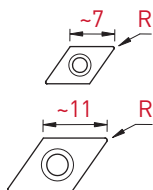
DCMT-XF3

DCMT-XF2

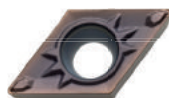
DCMT-MF2



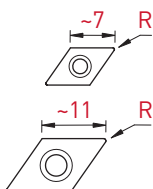
DCMT
EN-XF3



| R | Art. N° | PVD | |
|-----|--------------------|-------------------------------------|-------------------------------------|
| | | TAC | HTAC |
| 0.2 | DCMT-070202-EN-XF3 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCMT-070204-EN-XF3 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCMT-11T302-EN-XF3 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCMT-11T304-EN-XF3 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |



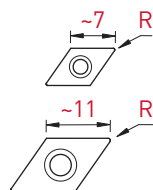
DCMT
EN-XF2



| R | Art. N° | PVD | | CVD |
|-----|--------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | TAC | HTAC | HT15 |
| 0.2 | DCMT-070202-EN-XF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCMT-070204-EN-XF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCMT-11T302-EN-XF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCMT-11T304-EN-XF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |



DCMT
EN-MF2



| R | Art. N° | PVD | | CVD | |
|-----|--------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | TAC | HTAC | Ti5 | HT15 |
| 0.2 | DCMT-070202-EN-MF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCMT-070204-EN-MF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCMT-11T302-EN-MF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCMT-11T304-EN-MF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.8 | DCMT-11T308-EN-MF2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

ISO-LINE

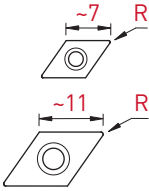
Plaquettes en métal dur
VHM-Wendplatten
Solid carbide inserts

55°

DCMT-MF
DCMT-HF3
DCMT-HF



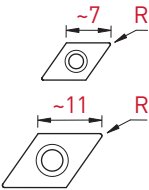
**DCMT
EN-MF**



| R | Art. N° | PVD | | CVD | |
|-----|-------------------|--|--|--|--|
| | | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M |
| | | Tmax | Ti4 | | |
| 0.2 | DCMT-070202-EN-MF | ■ | ■ | ■ | ■ |
| 0.4 | DCMT-070204-EN-MF | ■ | ■ | ■ | ■ |
| 0.2 | DCMT-11T302-EN-MF | ■ | ■ | ■ | ■ |
| 0.4 | DCMT-11T304-EN-MF | ■ | ■ | ■ | ■ |



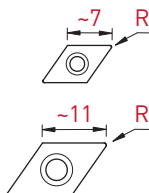
**DCMT
EN-HF3**



| R | Art. N° | PVD | | CVD | |
|-----|--------------------|--|--|--|--|
| | | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M |
| | | TiX | HTiX | Ti6 | |
| 0.2 | DCMT-070202-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.4 | DCMT-070204-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.2 | DCMT-11T302-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.4 | DCMT-11T304-EN-HF3 | ■ | ■ | ■ | ■ |
| 0.8 | DCMT-11T308-EN-HF3 | ■ | ■ | ■ | ■ |



**DCMT
EN-HF**

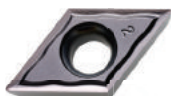


| R | Art. N° | PVD | | | CVD | | |
|-----|-------------------|--|--|--|--|--|--|
| | | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M | <input type="checkbox"/> P <input type="checkbox"/> M |
| | | Tmax | TAC | Ti4 | Ti5 | HTi5 | |
| 0.2 | DCMT-070202-EN-HF | ■ | ■ | ■ | ■ | ■ | |
| 0.4 | DCMT-070204-EN-HF | ■ | ■ | ■ | ■ | ■ | |
| 0.8 | DCMT-070208-EN-HF | ■ | ■ | ■ | ■ | ■ | |
| 0.2 | DCMT-11T302-EN-HF | ■ | ■ | ■ | ■ | ■ | |
| 0.4 | DCMT-11T304-EN-HF | ■ | ■ | ■ | ■ | ■ | |
| 0.8 | DCMT-11T308-EN-HF | ■ | ■ | ■ | ■ | ■ | |

Plaquettes CERMET
 CERMET-Wendeplatten
 CERMET inserts

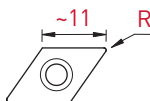
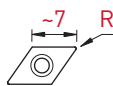
55°

DCGT-X8
 DCGT-KX



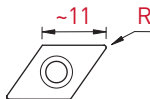
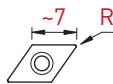
DCGT
 FN-X8

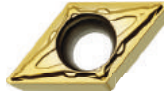
| | | CERMET | |
|------|--------------------|--|---|
| | | PVD | non revêtu unbeschichtet uncoated |
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| R | Art. N° | CTA | CN6 |
| 0.05 | DCGT-0702005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | DCGT-070201-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCGT-070202-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.05 | DCGT-11T3005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | DCGT-11T301-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCGT-11T302-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCGT-11T304-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |



DCGT
 ENP-KX

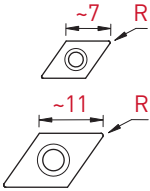
| | | CERMET | | |
|-----|--------------------|--|--|---|
| | | PVD | | non revêtu unbeschichtet uncoated |
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| R | Art. N° | CT7 | HCT7 | CN6 |
| 0.1 | DCGT-070201-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCGT-070202-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCGT-070204-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | DCGT-11T301-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | DCGT-11T302-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | DCGT-11T304-ENP-KX | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |





DCMT
 EN-KM

| | | CERMET | | |
|-----|-------------------|--------------------------|--------------------------|---|
| | | PVD | | non revêtu unbeschichtet uncoated |
| | | P | P | P |
| | | M | M | |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| R | Art. N° | CT7 | HCT7 | CN6 |
| 0.2 | DCMT-070202-EN-KM | ■ | ■ | ■ |
| 0.4 | DCMT-070204-EN-KM | ■ | ■ | ■ |
| 0.2 | DCMT-11T302-EN-KM | ■ | ■ | ■ |
| 0.4 | DCMT-11T304-EN-KM | ■ | ■ | ■ |
| 0.8 | DCMT-11T308-EN-KM | ■ | ■ | ■ |



Porte-outils

Halter

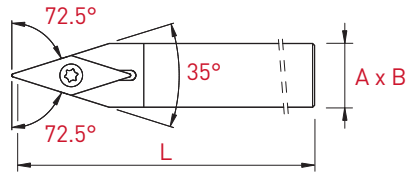
Holders

35°

SVV



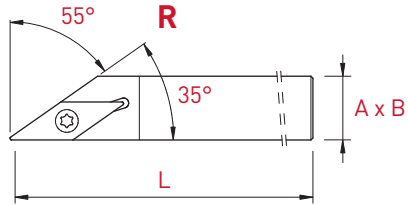
SVV



| Plaquettes WSP Inserts | A x B | L | Art. N° |
|------------------------------|-------------|-----|----------------|
| VC...1103.. | 8 x 8 | 115 | SVVCN-0808X-11 |
| | 10 x 10 | 115 | SVVCN-1010X-11 |
| | 12 x 12 | 130 | SVVCN-1212X-11 |
| | 12 x 12 | 90 | SVVCN-1212G-11 |
| | 12.7 x 12.7 | 130 | SVVCN-12.7X-11 |
| | 16 x 16 | 130 | SVVCN-1616X-11 |
| | 16 x 16 | 75 | SVVCN-1616F-11 |
| | 20 x 20 | 120 | SVVCN-2020X-11 |
| VC...1303.. | 8 x 10 | 115 | SVVCN-0810X-13 |
| | 10 x 10 | 115 | SVVCN-1010X-13 |
| | 12 x 12 | 130 | SVVCN-1212X-13 |
| | 12 x 12 | 90 | SVVCN-1212G-13 |
| | 12.7 x 12.7 | 130 | SVVCN-12.7X-13 |
| | 16 x 16 | 130 | SVVCN-1616X-13 |
| | 16 x 16 | 75 | SVVCN-1616F-13 |
| | 20 x 20 | 120 | SVVCN-2020X-13 |
| VC...1604.. | 12 x 12 | 130 | SVVCN-1212X-16 |
| | 12 x 12 | 90 | SVVCN-1212G-16 |
| | 12.7 x 12.7 | 130 | SVVCN-12.7X-16 |
| | 16 x 16 | 130 | SVVCN-1616X-16 |
| | 16 x 16 | 75 | SVVCN-1616F-16 |
| | 20 x 20 | 120 | SVVCN-2020X-16 |



SVA



| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------------|-------------|-----|----------------|----------------|
| VC...1103.. | 8 x 8 | 115 | SVACL-0808X-11 | SVACR-0808X-11 |
| | 10 x 10 | 115 | SVACL-1010X-11 | SVACR-1010X-11 |
| | 12 x 12 | 130 | SVACL-1212X-11 | SVACR-1212X-11 |
| | 12 x 12 | 90 | SVACL-1212G-11 | SVACR-1212G-11 |
| | 12.7 x 12.7 | 130 | SVACL-12.7X-11 | SVACR-12.7X-11 |
| | 16 x 16 | 130 | SVACL-1616X-11 | SVACR-1616X-11 |
| | 16 x 16 | 75 | SVACL-1616F-11 | SVACR-1616F-11 |
| | 20 x 20 | 120 | SVACL-2020X-11 | SVACR-2020X-11 |
| VC...1604.. | 12 x 12 | 130 | SVACL-1212X-16 | SVACR-1212X-16 |
| | 12 x 12 | 90 | SVACL-1212G-16 | SVACR-1212G-16 |
| | 12.7 x 12.7 | 130 | SVACL-12.7X-16 | SVACR-12.7X-16 |
| | 16 x 16 | 130 | SVACL-1616X-16 | SVACR-1616X-16 |
| | 16 x 16 | 75 | SVACL-1616F-16 | SVACR-1616F-16 |
| | 20 x 20 | 120 | SVACL-2020X-16 | SVACR-2020X-16 |

Porte-outils

Halter

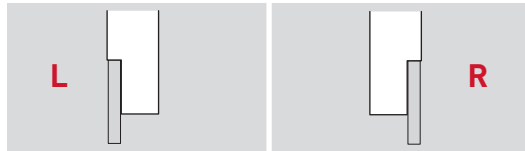
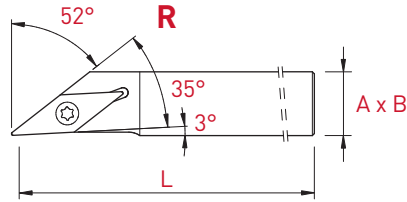
Holders

35°

SVJ



SVJ



| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------------|-------------|-----|----------------|----------------|
| VC...1103.. | 8 x 8 | 115 | SVJCL-0808X-11 | SVJCR-0808X-11 |
| | 10 x 10 | 115 | SVJCL-1010X-11 | SVJCR-1010X-11 |
| | 12 x 12 | 130 | SVJCL-1212X-11 | SVJCR-1212X-11 |
| | 12 x 12 | 90 | SVJCL-1212G-11 | SVJCR-1212G-11 |
| | 12.7 x 12.7 | 130 | SVJCL-12.7X-11 | SVJCR-12.7X-11 |
| | 16 x 16 | 130 | SVJCL-1616X-11 | SVJCR-1616X-11 |
| | 16 x 16 | 75 | SVJCL-1616F-11 | SVJCR-1616F-11 |
| | 20 x 20 | 120 | SVJCL-2020X-11 | SVJCR-2020X-11 |
| VC...1303.. | 8 x 10 | 115 | SVJCL-0810X-13 | SVJCR-0810X-13 |
| | 10 x 10 | 115 | SVJCL-1010X-13 | SVJCR-1010X-13 |
| | 12 x 12 | 130 | SVJCL-1212X-13 | SVJCR-1212X-13 |
| | 12 x 12 | 90 | SVJCL-1212G-13 | SVJCR-1212G-13 |
| | 12.7 x 12.7 | 130 | SVJCL-12.7X-13 | SVJCR-12.7X-13 |
| | 16 x 16 | 130 | SVJCL-1616X-13 | SVJCR-1616X-13 |
| | 16 x 16 | 75 | SVJCL-1616F-13 | SVJCR-1616F-13 |
| | 20 x 20 | 120 | SVJCL-2020X-13 | SVJCR-2020X-13 |
| VC...1604.. | 12 x 12 | 130 | SVJCL-1212X-16 | SVJCR-1212X-16 |
| | 12 x 12 | 90 | SVJCL-1212G-16 | SVJCR-1212G-16 |
| | 12.7 x 12.7 | 130 | SVJCL-12.7X-16 | SVJCR-12.7X-16 |
| | 16 x 16 | 130 | SVJCL-1616X-16 | SVJCR-1616X-16 |
| | 16 x 16 | 75 | SVJCL-1616F-16 | SVJCR-1616F-16 |
| | 20 x 20 | 120 | SVJCL-2020X-16 | SVJCR-2020X-16 |

ISO-LINE

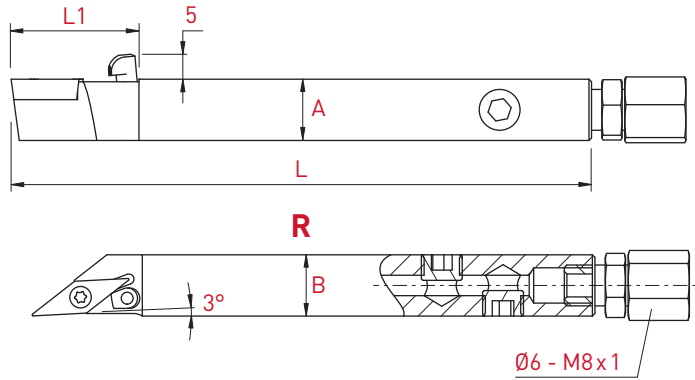
Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

35°

SVJ-JET



SVJ



| Plaquettes WSP Inserts | A x B | L | L1 | Art. N° | |
|------------------------------|-------------|-----|----|--------------------|--------------------|
| | | | | L | R |
| VC...-1103.. | 10 x 10 | 110 | 21 | SVJCL-1010J-11-JET | SVJCR-1010J-11-JET |
| | 12 x 12 | 110 | 21 | SVJCL-1212J-11-JET | SVJCR-1212J-11-JET |
| | 12.7 x 12.7 | 110 | 21 | SVJCL-12.7J-11-JET | SVJCR-12.7J-11-JET |
| | 16 x 16 | 110 | 21 | SVJCL-1616J-11-JET | SVJCR-1616J-11-JET |
| | 20 x 20 | 110 | 21 | SVJCL-2020J-11-JET | SVJCR-2020J-11-JET |
| VC...-1303.. | 10 x 10 | 110 | 26 | SVJCL-1010J-13-JET | SVJCR-1010J-13-JET |
| | 12 x 12 | 110 | 26 | SVJCL-1212J-13-JET | SVJCR-1212J-13-JET |
| | 12.7 x 12.7 | 110 | 26 | SVJCL-12.7J-13-JET | SVJCR-12.7J-13-JET |
| | 16 x 16 | 110 | 26 | SVJCL-1616J-13-JET | SVJCR-1616J-13-JET |
| | 20 x 20 | 110 | 26 | SVJCL-2020J-13-JET | SVJCR-2020J-13-JET |
| VC...-1604.. | 12 x 12 | 110 | 30 | SVJCL-1212J-16-JET | SVJCR-1212J-16-JET |
| | 12.7 x 12.7 | 110 | 30 | SVJCL-12.7J-16-JET | SVJCR-12.7J-16-JET |
| | 16 x 16 | 110 | 30 | SVJCL-1616J-16-JET | SVJCR-1616J-16-JET |
| | 20 x 20 | 110 | 30 | SVJCL-2020J-16-JET | SVJCR-2020J-16-JET |

Porte-outils

Halter

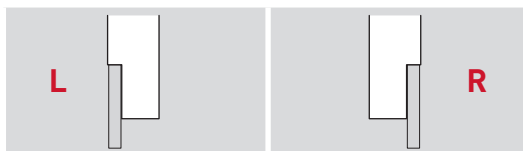
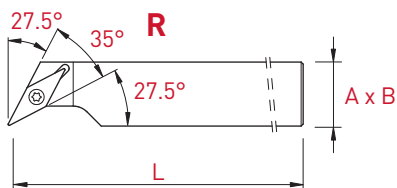
Holders

35°

SVX



SVX



| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------|---------|-----|----------------|----------------|
| VC...-1103.. | 16 x 16 | 130 | SVXCL-1616X-11 | SVXCR-1616X-11 |
| | 16 x 16 | 75 | SVXCL-1616F-11 | SVXCR-1616F-11 |
| | 20 x 20 | 120 | SVXCL-2020X-11 | SVXCR-2020X-11 |

Porte-outils

Halter

Holders

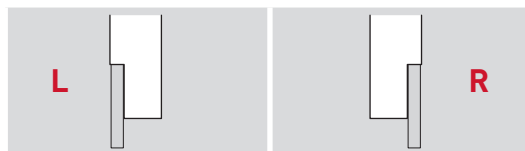
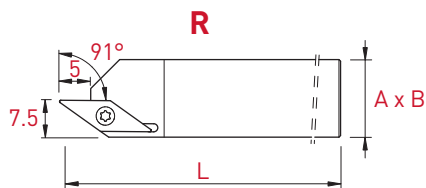
35°

SV-CL/R



SV-CL/R

tournage arrière
rückwärts drehen
back turning



| Plaquettes WSP Inserts | A x B | L | Art. N° | Art. N° |
|------------------------|-------------|-----|----------------|----------------|
| VCG...-1103.. | 12 x 12 | 130 | SV-CL-1212X-11 | SV-CR-1212X-11 |
| | 12 x 12 | 90 | SV-CL-1212G-11 | SV-CR-1212G-11 |
| | 12.7 x 12.7 | 130 | SV-CL-12.7X-11 | SV-CR-12.7X-11 |
| | 16 x 16 | 130 | SV-CL-1616X-11 | SV-CR-1616X-11 |
| | 16 x 16 | 75 | SV-CL-1616F-11 | SV-CR-1616F-11 |
| | 20 x 20 | 120 | SV-CL-2020X-11 | SV-CR-2020X-11 |

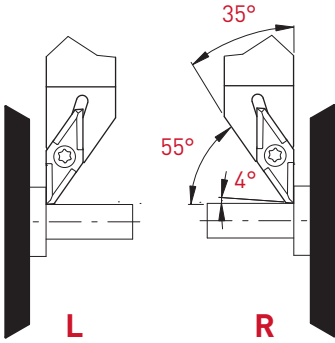
ISO-LINE

Porte-outils compatibles avec plaquettes VCGT ELP/ERP-FL/FR-X10°

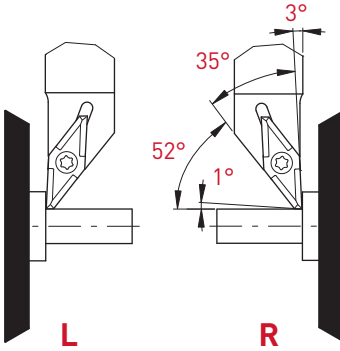
Passende Halter zu den Wendplatten VCGT ELP/ERP-FL/FR-X10°

Holder compatible with inserts VCGT ELP/ERP-FL/FR-X10°

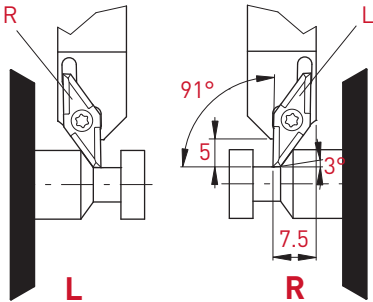
35°



| | Art. N° |
|---|--------------|
| R | SVACR-...-11 |
| L | SVACL-...-11 |



| | Art. N° |
|---|--------------|
| R | SVJCR-...-11 |
| L | SVJCL-...-11 |



| | Art. N° |
|---|--------------|
| R | SV-CR-...-11 |
| L | SV-CL-...-11 |

Porte-outils intérieurs

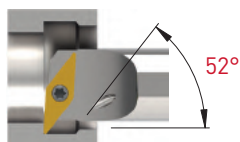
Innenhalter

Internal holders

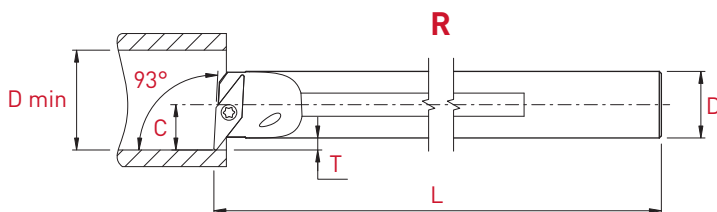
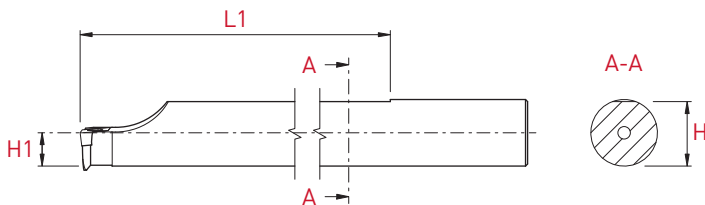
35°

A-SVUCR/L

new



SVU



Acier / Stahl / Steel

L

R

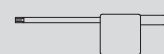
| Plaquettes WSP Inserts | D | Dmin | T | C | H1 | L | L1 | H | Art. N° | Art. N° |
|------------------------------|----|------|-----|----|----|-----|-----|------|---------------|---------------|
| VC..-1103 | 16 | 21 | 3.1 | 11 | 8 | 150 | 118 | 15.5 | A16M-SVUCL-11 | A16M-SVUCR-11 |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

V-M2.5X5.8-T8



Art. N°

C-T8

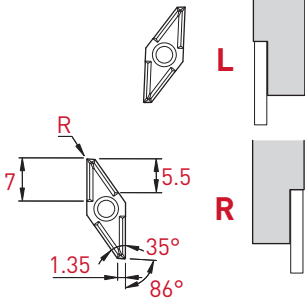
Plaquettes en métal dur
VHM-Wendepplatten
Solid carbide inserts

35°

VCGT-L/R-X10



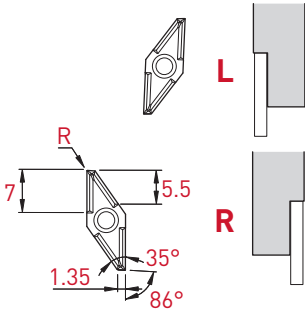
VCGT
FL / FR-X10



| R | Art. N° | PVD | | | | | non revêtu unbeschichtet uncoated | |
|------|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------------------|
| | | TiAlN | HTA | TiAlX | HTAX | TiN | K10 | K20 |
| 0.03 | VCGT-1103003-FL-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | VCGT-1103008-FL-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-110301-FL-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-110302-FL-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.03 | VCGT-1103003-FR-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | VCGT-1103008-FR-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-110301-FR-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-110302-FR-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



VCGT
ELP/ERP-X10



| R | Art. N° | PVD | | | | | non revêtu unbeschichtet uncoated | |
|------|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------------------|
| | | TiAlN | HTA | TiAlX | HTAX | TiN | K10 | K20 |
| 0.03 | VCGT-1103003-ELP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | VCGT-1103008-ELP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-110301-ELP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-110302-ELP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.03 | VCGT-1103003-ERP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | VCGT-1103008-ERP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-110301-ERP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-110302-ERP-X10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

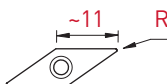
35°

VCGT-K18

VCGW-0



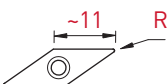
VCGT
FN-K18



| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|---------------------|-----|------|---|
| | | HTA | HTiN | K10 |
| 0.05 | VCGT-1103005-FN-K18 | ■ | ■ | ■ |
| 0.1 | VCGT-110301-FN-K18 | ■ | ■ | ■ |
| 0.2 | VCGT-110302-FN-K18 | ■ | ■ | ■ |
| 0.4 | VCGT-110304-FN-K18 | ■ | ■ | ■ |



VCGW
FN-0



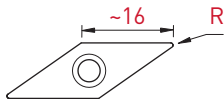
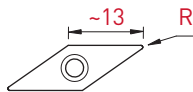
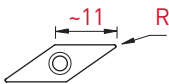
| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|-------------------|-----|------|---|
| | | HTA | HTiN | K10 |
| 0.05 | VCGW-1103005-FN-0 | ■ | ■ | ■ |
| 0.1 | VCGW-110301-FN-0 | ■ | ■ | ■ |
| 0.2 | VCGW-110302-FN-0 | ■ | ■ | ■ |
| 0.4 | VCGW-110304-FN-0 | ■ | ■ | ■ |



VCGT
FN-X8

| PVD | | | | | non revêtu unbeschichtet uncoated | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|--------------------------|
| P | M | N | S | P | M | N |
| TiAlN | HTA | TiAlX | HTAX | TiN | K10 | K20 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

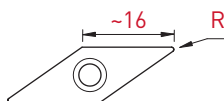
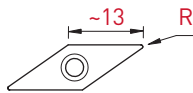
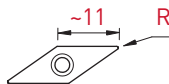
| R | Art. N° | TiAlN | HTA | TiAlX | HTAX | TiN | K10 | K20 |
|------|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 0.05 | VCGT-1103005-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | VCGT-1103008-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-110301-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | VCGT-1103015-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-110302-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | VCGT-110304-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | VCGT-1303005-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-130301-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-130302-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | VCGT-130304-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | VCGT-1604005-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-160401-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-160402-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | VCGT-160404-FN-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



VCGT
ENP-X8

| PVD | | non revêtu unbeschichtet uncoated |
|--------------------------|--------------------------|---|
| P | M | N |
| TiAlN | TiN | K20 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| R | Art. N° | TiAlN | TiN | K20 |
|------|---------------------|--------------------------|--------------------------|--------------------------|
| 0.05 | VCGT-1103005-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.08 | VCGT-1103008-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-110301-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.15 | VCGT-1103015-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-110302-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | VCGT-110304-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | VCGT-1303005-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-130301-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-130302-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | VCGT-130304-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.05 | VCGT-1604005-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.1 | VCGT-160401-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.2 | VCGT-160402-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0.4 | VCGT-160404-ENP-X8 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

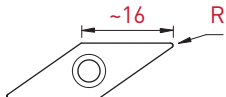
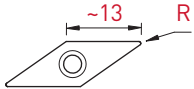
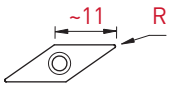
35°

VCGT-X17



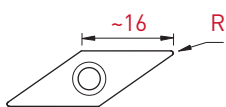
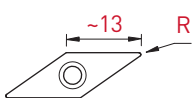
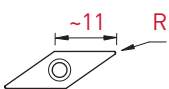
VCGT
FN-X17

| R | Art. N° | PVD | | | | non revêtu unbeschichtet uncoated | |
|------|---------------------|---------------------------|-------------------------|---------------------|--------------------|---|---------------|
| | | TiAlN P M N S | HTA P M N S | HTAX P M N | TiN P M N | K10 N S | K20 N S |
| | | | | new | | | |
| 0.05 | VCGT-1103005-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.08 | VCGT-1103008-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.1 | VCGT-110301-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.15 | VCGT-1103015-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.2 | VCGT-110302-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.4 | VCGT-110304-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.05 | VCGT-1303005-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.1 | VCGT-130301-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.2 | VCGT-130302-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.4 | VCGT-130304-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.05 | VCGT-1604005-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.1 | VCGT-160401-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.2 | VCGT-160402-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.4 | VCGT-160404-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |
| 0.8 | VCGT-160408-FN-X17 | ■ | ■ | ■ | ■ | ■ | ■ |



VCGT
ENP-X17

| R | Art. N° | PVD | | non revêtu unbeschichtet uncoated |
|------|----------------------|---------------------------|--------------------|---|
| | | TiAlN P M N S | TiN P M N | K20 N |
| 0.05 | VCGT-1103005-ENP-X17 | ■ | ■ | ■ |
| 0.08 | VCGT-1103008-ENP-X17 | ■ | ■ | ■ |
| 0.1 | VCGT-110301-ENP-X17 | ■ | ■ | ■ |
| 0.15 | VCGT-1103015-ENP-X17 | ■ | ■ | ■ |
| 0.2 | VCGT-110302-ENP-X17 | ■ | ■ | ■ |
| 0.4 | VCGT-110304-ENP-X17 | ■ | ■ | ■ |
| 0.05 | VCGT-1303005-ENP-X17 | ■ | ■ | ■ |
| 0.1 | VCGT-130301-ENP-X17 | ■ | ■ | ■ |
| 0.2 | VCGT-130302-ENP-X17 | ■ | ■ | ■ |
| 0.4 | VCGT-130304-ENP-X17 | ■ | ■ | ■ |
| 0.05 | VCGT-1604005-ENP-X17 | ■ | ■ | ■ |
| 0.1 | VCGT-160401-ENP-X17 | ■ | ■ | ■ |
| 0.2 | VCGT-160402-ENP-X17 | ■ | ■ | ■ |
| 0.4 | VCGT-160404-ENP-X17 | ■ | ■ | ■ |
| 0.8 | VCGT-160408-ENP-X17 | ■ | ■ | ■ |



Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

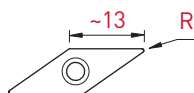
35°

VCGT-X20

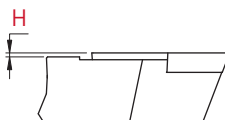


VCGT
ENP-X20

| PVD | |
|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> M | <input checked="" type="checkbox"/> M |
| <input checked="" type="checkbox"/> N | <input checked="" type="checkbox"/> N |
| <input checked="" type="checkbox"/> S | <input checked="" type="checkbox"/> S |
| ZTA | HTIX |



| R | H | Art. N° | ZTA | HTIX |
|-----|------|---------------------|-----|------|
| 0.2 | 0.25 | VCGT-130302-ENP-X20 | ■ | ■ |
| 0.4 | 0.25 | VCGT-130304-ENP-X20 | ■ | ■ |
| 0.8 | 0.25 | VCGT-130308-ENP-X20 | ■ | ■ |



ISO-LINE

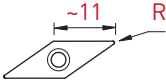
Plaquettes en métal dur
 VHM-Wendeplatten
 Solid carbide inserts

35°

VCMT-XF3
 VCMT-XF2



VCMT
 EN-XF3

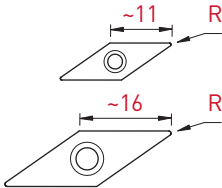


| R | Art. N° | PVD | |
|-----|--------------------|-----|------|
| | | TAC | HTAC |
| 0.2 | VCMT-110302-EN-XF3 | ■ | ■ |
| 0.4 | VCMT-110304-EN-XF3 | ■ | ■ |

| PVD | |
|-----|------|
| P | P |
| M | M |
| N | N |
| S | S |
| TAC | HTAC |



VCMT
 EN-XF2



| R | Art. N° | PVD | | CVD |
|-----|--------------------|-----|------|------|
| | | TAC | HTAC | HTi5 |
| 0.2 | VCMT-110302-EN-XF2 | ■ | ■ | ■ |
| 0.4 | VCMT-110304-EN-XF2 | ■ | ■ | ■ |
| 0.4 | VCMT-160404-EN-XF2 | ■ | ■ | ■ |

| PVD | | CVD |
|-----|------|------|
| P | P | P |
| M | M | M |
| N | N | |
| S | S | |
| TAC | HTAC | HTi5 |

Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

35°

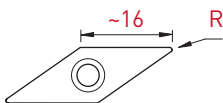
VCMT-MF

VCMT-HF



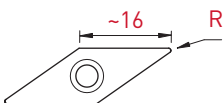
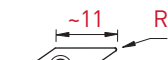
VCMT
EN-MF

| R | Art. N° | PVD | CVD |
|-----|-------------------|--|---|
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> Tmax | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> Ti4 |
| 0.2 | VCMT-110302-EN-MF | ■ | ■ |
| 0.4 | VCMT-110304-EN-MF | ■ | ■ |
| 0.4 | VCMT-160404-EN-MF | ■ | ■ |



VCMT
EN-HF

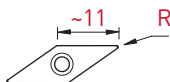
| R | Art. N° | PVD | CVD |
|-----|-------------------|--|---|
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> Tmax | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> Ti4 |
| 0.4 | VCMT-110304-EN-HF | ■ | ■ |
| 0.8 | VCMT-110308-EN-HF | ■ | ■ |
| 0.4 | VCMT-160404-EN-HF | ■ | ■ |
| 0.8 | VCMT-160408-EN-HF | ■ | ■ |





VCGT
FN-X8






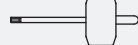
| | | CERMET | |
|------|--------------------|--|---|
| | | PVD | non revêtu unbeschichtet uncoated |
| | | <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> M <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> P <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| R | Art. N° | CTA | CN6 |
| 0.05 | VCGT-1103005-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.1 | VCGT-110301-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.2 | VCGT-110302-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 0.4 | VCGT-110304-FN-X8 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |









Pièces de rechange et accessoires

Ersatzteile und Zubehör

Spare parts and accessories

| Vis et clés de rechange Ersatzschrauben und Schlüssel Spare screws and keys | Porte-outils Halter Holders | Vis Schrauben Screw | Clé Schlüssel Key |  | |
|---|---|--|--|--|---------------------------------|
| | | | | Option | Serrage Drehmoment Torque |
| | Series SC...-06 Series SD...-07 Series SV...-11 | V-M2.5X7.8-T8  | C-T8  | SET-NM-TX8 | 1.3 Nm |
| | Series SV...-13 | V-M3X7.3-T8-ISO  | | | 2.0 Nm |
| | Series SC...-09 Series SD...-11 Series SV...-16 | V-M4X9-T15-ISO  | C-T15  | SET-NM-TX15 | 3.0 Nm |

| | | | | |
|--|--|---|---|---|
| Pièces de rechange JET Ersatzteile JET Spare parts JET | L Pour réf. For ref. Für Ref |  * |  * |  * |
| | | Art. N° | Art. N° | Art. N° |
| | S...L-10...-JET | JJL-4X12-D1.5 | | |
| | S...L-12...-JET S...L-12.7...-JET | JJL-4X14-D1.5 | J-M8X1-D6 | JB-M8X1 |
| | S...L-16...-JET S...L-20...-JET | JJL-4X17-D1.5 | | |
| | R Pour réf. For ref. Für Ref |  * |  * |  * |
| | | Art. N° | Art. N° | Art. N° |
| | S...R-10...-JET | JJR-4X12-D1.5 | | |
| | S...R-12...-JET S...R-12.7...-JET | JJR-4X14-D1.5 | J-M8X1-D6 | JB-M8X1 |
| | S...R-16...-JET S...R-20...-JET | JJR-4X17-D1.5 | | |

* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

| ISO-Line | Tough grade, for normal to difficult machining conditions | Wear resistant grade, for finishing and light machining | Acier Stahl Steel | | | | | | Inox Rostfreistahl Stainless steel | | | |
|----------|---|---|--|-----------|---|-----------|--|-----------|--|-----------|---|-----------|
| | | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier faiblement allié Leicht legierter Stahl Low alloyed steel | | Acier fortement allié Hochlegierter Stahl High alloyed steel | | Austénitique Austenitisch Austenitic | | Martensitique Martensitisch Martensitic | |
| | | | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| FN-X8 | TiAlN | HTA | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiAlX | HTAX | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiN | | 80-170 | 0.01-0.12 | 60-140 | 0.01-0.10 | | | 60-120 | 0.01-0.12 | 60-120 | 0.01-0.12 |
| | N | HN | | | | | | | | | | |
| ENP-X8 | TiAlN | HTA | 80-180 | 0.03-0.15 | 60-160 | 0.03-0.12 | 50-120 | 0.03-0.10 | 60-140 | 0.03-0.12 | 60-140 | 0.03-0.15 |
| | TiN | | 80-170 | 0.03-0.15 | 60-150 | 0.03-0.12 | | | 60-120 | 0.03-0.12 | 60-120 | 0.03-0.15 |
| | N | HN | | | | | | | | | | |
| FN-X17 | TiAlN | HTA | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | | | 60-140 | 0.01-0.15 | 60-140 | 0.01-0.15 |
| | TiAlX | HTAX | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiN | | 80-170 | 0.01-0.12 | | | | | 60-120 | 0.01-0.15 | 60-120 | 0.01-0.15 |
| | N | HN | | | | | | | | | | |
| ENP-X17 | TiAlN | HTA | 80-180 | 0.03-0.15 | 60-160 | 0.03-0.12 | 50-120 | 0.03-0.10 | 60-140 | 0.03-0.15 | 60-140 | 0.03-0.18 |
| | TiAlX | HTAX | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiN | | 80-170 | 0.03-0.15 | 60-150 | 0.03-0.12 | | | 60-120 | 0.01-0.15 | 60-120 | 0.03-0.18 |
| | N | HN | | | | | | | | | | |
| FN-X25 | TiAlN | HTA | | | | | | | 60-140 | 0.01-0.12 | | |
| | TiN | | | | | | | | 60-120 | 0.01-0.12 | | |
| | N | HN | | | | | | | | | | |
| ENP-X25 | TiAlN | HTA | | | | | | | 60-140 | 0.03-0.12 | 60-140 | 0.03-0.15 |
| | TiAlX | | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiN | | | | | | | | 60-120 | 0.03-0.12 | 60-120 | 0.03-0.15 |
| | N | HN | | | | | | | | | | |
| ENP-X20 | ZTA | | | | | | | | 60-140 | 0.03-0.18 | 60-140 | 0.03-0.18 |
| | HTiX | | | | | | | | 60-140 | 0.03-0.18 | 60-140 | 0.03-0.18 |

| G tolerance class | | Special 35° VC...11 | | | | | | | | | | |
|-------------------|-------|---------------------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| FL / FR-X10 | TiAlN | HTA | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiAlX | HTAX | 80-180 | 0.01-0.12 | 60-150 | 0.01-0.10 | 50-120 | 0.01-0.08 | 60-140 | 0.01-0.12 | 60-140 | 0.01-0.12 |
| | TiN | | 80-170 | 0.01-0.12 | 60-140 | 0.01-0.10 | | | 60-120 | 0.01-0.12 | 60-120 | 0.01-0.12 |
| | N | HN | | | | | | | | | | |
| ELP/ERP-X10 | TiAlN | HTA | 80-180 | 0.03-0.15 | 60-160 | 0.03-0.12 | 50-120 | 0.03-0.10 | 60-140 | 0.03-0.12 | 60-140 | 0.03-0.15 |
| | TiAlX | HTAX | 80-180 | 0.03-0.15 | 60-160 | 0.03-0.12 | 50-120 | 0.03-0.10 | 60-140 | 0.03-0.12 | 60-140 | 0.03-0.15 |
| | TiN | | 80-170 | 0.03-0.15 | 60-150 | 0.03-0.12 | | | 60-120 | 0.03-0.12 | 60-120 | 0.03-0.15 |
| | N | HN | | | | | | | | | | |
| FN-K18 | | HTA | 80-180 | 0.01-0.10 | 60-150 | 0.01-0.10 | | | 60-140 | 0.01-0.10 | 60-140 | 0.01-0.10 |
| | | HTiN | 80-170 | 0.01-0.10 | 60-140 | 0.01-0.10 | | | 60-120 | 0.01-0.10 | 60-120 | 0.01-0.10 |
| | | HN | | | | | | | | | | |
| FN-0 | | HTA | 80-150 | 0.01-0.10 | | | | | | | | |
| | | HTiN | 80-140 | 0.01-0.10 | | | | | | | | |
| | | HN | | | | | | | | | | |



N Alliage d'aluminium et non ferreux
Aluminium- und Nichteisenlegierungen
Aluminium and non-ferrous alloys

S Titane et superalliages
Titan und Superlegierungen
Titanium and superalloys

| Aluminium | | Al-Si | | Cuivre Kupfer Copper | | Laiton & bronze Messing & Bronze Brass & bronze | | Ti grade 1 - 3 | | Ti grade 4 - 6 | | Superalliages Superlegierungen Superalloys | |
|------------|-----------|------------|-----------|----------------------------|-----------|---|-----------|----------------|-----------|----------------|-----------|--|-----------|
| VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| | | 150-1600 | 0.01-0.15 | 80-300 | 0.01-0.12 | 100-400 | 0.01-0.15 | | | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| | | | | | | | | 30-70 | 0.01-0.12 | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| 120-2200 | 0.01-0.18 | 150-1600 | 0.01-0.15 | 80-300 | 0.01-0.12 | 100-400 | 0.01-0.15 | | | | | | |
| 120-2000 | 0.01-0.18 | 150-1500 | 0.01-0.15 | 80-250 | 0.01-0.12 | 100-300 | 0.01-0.15 | 30-70 | 0.01-0.12 | | | | |
| | | 150-800 | 0.03-0.18 | 80-300 | 0.03-0.15 | | | | | 30-60 | 0.03-0.12 | 40-70 | 0.03-0.10 |
| | | 150-800 | 0.03-0.18 | 80-300 | 0.03-0.15 | | | | | | | | |
| | | 150-800 | 0.03-0.18 | 80-250 | 0.03-0.15 | | | | | | | | |
| | | 150-1600 | 0.01-0.18 | 80-300 | 0.01-0.15 | 100-400 | 0.01-0.18 | | | 30-70 | 0.01-0.15 | 40-80 | 0.01-0.12 |
| | | | | | | | | 30-70 | 0.01-0.12 | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| 120-2200 | 0.01-0.25 | 150-1600 | 0.01-0.18 | 80-300 | 0.01-0.15 | 100-400 | 0.01-0.18 | | | | | | |
| 120-2000 | 0.01-0.25 | 150-1500 | 0.01-0.18 | 80-250 | 0.01-0.15 | 100-300 | 0.01-0.18 | 40-80 | 0.01-0.15 | | | | |
| | | 150-800 | 0.03-0.20 | 80-300 | 0.03-0.18 | | | | | 30-70 | 0.03-0.15 | 40-80 | 0.03-0.12 |
| | | | | | | | | 30-70 | 0.01-0.12 | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| | | 150-800 | 0.03-0.20 | 80-300 | 0.03-0.18 | | | | | | | | |
| | | 150-800 | 0.03-0.20 | 80-250 | 0.03-0.18 | | | | | | | | |
| | | 150-1600 | 0.01-0.22 | 80-300 | 0.01-0.18 | | | | | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| 120-2200 | 0.01-0.30 | 150-1600 | 0.01-0.22 | 80-300 | 0.01-0.18 | | | | | | | | |
| 120-2000 | 0.01-0.30 | 150-1500 | 0.01-0.22 | 80-250 | 0.01-0.18 | | | 30-70 | 0.01-0.12 | | | | |
| | | 150-800 | 0.03-0.25 | 80-300 | 0.03-0.20 | | | | | 30-60 | 0.03-0.12 | 40-70 | 0.03-0.10 |
| | | | | | | | | 30-70 | 0.01-0.12 | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| | | 150-800 | 0.03-0.25 | 80-300 | 0.03-0.20 | | | | | | | | |
| | | 150-800 | 0.03-0.25 | 80-250 | 0.03-0.20 | | | | | | | | |
| | | 150-800 | 0.03-0.25 | 80-300 | 0.03-0.20 | | | | | 40-90 | 0.03-0.15 | 40-100 | 0.03-0.15 |
| | | 150-800 | 0.03-0.25 | 80-300 | 0.03-0.20 | | | | | 40-80 | 0.03-0.15 | 40-90 | 0.03-0.15 |

| | | | | | | | | | | | | | |
|----------|-----------|----------|-----------|--------|-----------|---------|-----------|-------|-----------|-------|-----------|-------|-----------|
| | | 150-1600 | 0.01-0.18 | 80-300 | 0.01-0.15 | 100-400 | 0.01-0.18 | | | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| | | | | | | | | 30-70 | 0.01-0.12 | 30-60 | 0.01-0.12 | 40-70 | 0.01-0.10 |
| 120-2200 | 0.01-0.20 | 150-1600 | 0.01-0.18 | 80-300 | 0.01-0.15 | 100-400 | 0.01-0.18 | | | | | | |
| 120-2000 | 0.01-0.20 | 150-1500 | 0.01-0.18 | 80-250 | 0.01-0.15 | 100-300 | 0.01-0.18 | 30-70 | 0.01-0.12 | | | | |
| | | 150-1600 | 0.03-0.20 | 80-300 | 0.03-0.18 | | | | | 30-60 | 0.03-0.12 | 40-70 | 0.03-0.10 |
| | | | | | | | | | | 30-60 | 0.03-0.12 | 40-70 | 0.03-0.10 |
| | | 150-1600 | 0.03-0.20 | 80-300 | 0.01-0.18 | | | | | | | | |
| | | 150-1500 | 0.03-0.20 | 80-250 | 0.01-0.18 | | | | | | | | |
| | | 150-1600 | 0.01-0.12 | 80-300 | 0.01-0.10 | | | | | 30-70 | 0.01-0.10 | 40-80 | 0.01-0.10 |
| 120-2200 | 0.01-0.15 | 150-1600 | 0.01-0.12 | 80-300 | 0.01-0.10 | | | | | | | | |
| 120-2000 | 0.01-0.15 | 150-1500 | 0.01-0.12 | 80-250 | 0.01-0.10 | | | 40-80 | 0.01-0.10 | | | | |
| | | | | | | 100-400 | 0.01-0.18 | | | | | | |
| | | | | | | 100-400 | 0.01-0.18 | | | | | | |
| | | | | | | 100-300 | 0.01-0.18 | | | | | | |

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| ISO-Line | M tolerance class | Tough grade, for normal to difficult machining conditions | Wear resistant grade, for finishing and light machining | Acier Stahl Steel | | | | | | Inox Rostfreistahl Stainless steel | | | |
|----------|-------------------|---|---|--|-----------|---|-----------|--|-----------|--|-----------|---|-----------|
| | | | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier faiblement allié Leicht legierter Stahl Low alloyed steel | | Acier fortement allié Hochlegierter Stahl High alloyed steel | | Austénitique Austenitisch Austenitic | | Martensitique Martensitisch Martensitic | |
| | | | | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| EN-XF3 | TAC | HTAC | | 100-200 | 0.03-0.15 | 80-160 | 0.03-0.12 | 50-120 | 0.03-0.10 | 60-140 | 0.03-0.12 | 60-140 | 0.03-0.15 |
| EN-XF2 | TAC | HTAC | | 100-200 | 0.03-0.15 | 80-160 | 0.03-0.12 | 50-120 | 0.03-0.10 | 60-140 | 0.03-0.12 | 60-140 | 0.03-0.15 |
| | | HTI5 | | 100-250 | 0.03-0.15 | 80-220 | 0.03-0.12 | 50-180 | 0.03-0.10 | 80-200 | 0.03-0.12 | 80-200 | 0.03-0.15 |
| EN-MF2 | TAC | HTAC | | 100-200 | 0.04-0.15 | 80-160 | 0.04-0.12 | 50-120 | 0.04-0.10 | 60-140 | 0.04-0.12 | 60-140 | 0.04-0.15 |
| | | HTI5 | | 100-250 | 0.04-0.15 | 80-220 | 0.04-0.12 | 50-180 | 0.04-0.10 | 80-200 | 0.04-0.12 | 80-200 | 0.04-0.15 |
| EN-MF | Tmax | | | 100-220 | 0.04-0.30 | 80-180 | 0.04-0.25 | 50-150 | 0.04-0.20 | 60-150 | 0.04-0.25 | 60-150 | 0.04-0.25 |
| | | Ti4 | | 100-250 | 0.05-0.30 | 80-220 | 0.05-0.25 | 50-180 | 0.05-0.20 | 80-200 | 0.05-0.25 | 80-200 | 0.05-0.25 |
| EN-HF3 | TiX | HTiX | | 100-220 | 0.06-0.35 | 80-180 | 0.06-0.30 | 50-150 | 0.06-0.25 | 60-150 | 0.06-0.25 | 60-150 | 0.06-0.25 |
| | | Ti6 | | 100-250 | 0.06-0.35 | 80-220 | 0.06-0.30 | 50-180 | 0.06-0.25 | 80-200 | 0.06-0.25 | 80-200 | 0.06-0.25 |
| EN-HF | Tmax | | | 100-220 | 0.08-0.40 | 80-180 | 0.08-0.35 | 50-150 | 0.08-0.30 | 60-150 | 0.08-0.30 | 60-150 | 0.08-0.30 |
| | | TAC | | 100-200 | 0.08-0.40 | 80-160 | 0.08-0.35 | 50-140 | 0.08-0.30 | 60-140 | 0.08-0.30 | 60-140 | 0.08-0.30 |
| | | Ti4 | | 100-250 | 0.08-0.40 | 80-220 | 0.08-0.35 | 50-180 | 0.08-0.30 | 80-200 | 0.08-0.30 | 80-200 | 0.08-0.30 |
| | | Ti5 | HTi5 | | 100-280 | 0.08-0.40 | 80-250 | 0.08-0.35 | 50-200 | 0.08-0.30 | 80-220 | 0.08-0.30 | 80-220 |

| ISO-Line CERMET | | | | | | | | | | | | |
|--------------------|-----|------|---------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| FN-X8 CERMET | CTA | | 100-350 | 0.01-0.12 | 80-300 | 0.01-0.10 | 70-250 | 0.01-0.08 | 80-250 | 0.01-0.12 | 80-250 | 0.01-0.12 |
| | | CN6 | 100-300 | 0.01-0.12 | 80-250 | 0.01-0.10 | 70-200 | 0.01-0.08 | | | | |
| ENP-KX CERMET | CT7 | HCT7 | 100-350 | 0.03-0.20 | 80-300 | 0.03-0.18 | 70-250 | 0.03-0.15 | 80-250 | 0.03-0.18 | 80-250 | 0.03-0.18 |
| | | CN6 | 100-300 | 0.03-0.20 | 80-250 | 0.03-0.18 | 70-200 | 0.03-0.15 | | | | |
| EN-KM CERMET | CT7 | HCT7 | 100-350 | 0.03-0.25 | 80-300 | 0.03-0.20 | 70-250 | 0.03-0.18 | 80-250 | 0.03-0.20 | 80-250 | 0.03-0.20 |
| | | CN6 | 100-300 | 0.03-0.25 | 80-250 | 0.03-0.20 | 70-200 | 0.03-0.18 | | | | |

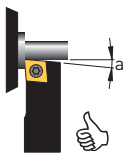


| N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys | | | | | | | | S Titane et superalliages Titan und Superlegierungen Titanium and superalloys | | | | | |
|---|----------|------------|-----------|----------------------------|-----------|---|-----------|---|----------|----------------|-----------|--|-----------|
| Aluminium | | Al-Si | | Cuivre Kupfer Copper | | Laiton & bronze Messing & Bronze Brass & bronze | | Ti grade 1 - 3 | | Ti grade 4 - 6 | | Superalliages Superlegierungen Superalloys | |
| VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| | | 120-1500 | 0.03-0.20 | 80-300 | 0.03-0.15 | 100-400 | 0.03-0.18 | | | 30-70 | 0.03-0.15 | 40-80 | 0.03-0.12 |
| | | | | | | 100-400 | 0.03-0.18 | | | 30-70 | 0.03-0.15 | 40-80 | 0.03-0.12 |
| | | 120-1500 | 0.04-0.20 | 80-300 | 0.04-0.15 | 100-400 | 0.04-0.18 | | | 30-70 | 0.04-0.15 | 40-80 | 0.04-0.12 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | 30-70 | 0.06-0.20 | 40-80 | 0.06-0.20 |

Conseils d'utilisation

Anwendungsempfehlungen

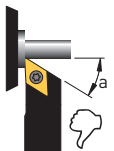
Application recommendations



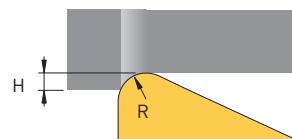
• pour un meilleur état de surface et une meilleure stabilité d'usinage, choisir une géométrie d'outil permettant un angle "a" le plus petit possible

• für bessere Oberflächegüte und Bearbeitungsstabilität, muss die Werkzeuggeometrie mit kleinstmöglichem Winkel "a" ausgewählt werden

• for a better surface finish and better machining stability, choose a tool geometry with angle "a" as small as possible



rapport hauteur de passe / rayon d'outil
Verhältnis zwischen Spantiefe und Werkzeugradius
machining depth / tool radius ratio



$H_{min} = 0.7 \times R$
 $R_{max} = 1.4 \times H$

Porte-outils / Halter / Holders

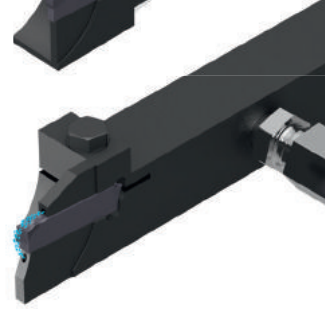
H

Système de serrage monobloc
Einteiliges Klemmsystem
Monobloc top clamp system



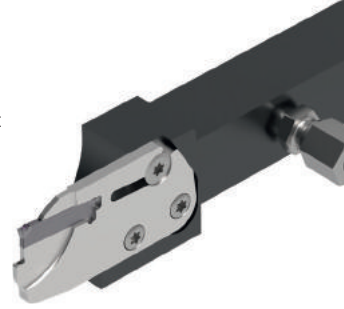
H JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



H-HM-JET
GWS-HM
MS-HM

Porte-lames avec arrosage
Halter für Stechklinge mit Kühlung
Holder for parting-off blades with coolant



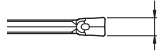
HM
HK
HUK

Lames
Stechklinge
Parting-off blades

Plaquettes / WSP / Inserts

ET 15

=

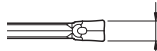


1.5 mm

Ø max 32 mm

ET 20

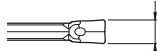
=



2.0 mm

ET 25

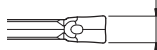
=



2.5 mm

ET 30

=

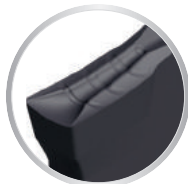


3.0 mm

Ø max 44 mm



U



J



T



A

Very rigid clamping system!

Index

Informations techniques
Technisches Informationen
Technical information > **8.02**

Géométries de coupe
Spanformgeometrie
Cutting geometries > **8.04**

Nuances
Sorten
Grades > **8.05**

H Series sans arrosage
ohne Kühlung
without coolant > **8.06**

H JET Series avec arrosage
mit Kühlung
with coolant > **8.07**

H-HM-JET Series avec arrosage
mit Kühlung
with coolant > **8.08** **new**

GWS Series Göltenbodt > **8.09** **new**

MS Series Index > **8.13** **new**

Lames
Stecklingen
Blades **HM-HK-HUK Series** > **8.14**

U Series > **8.20**

J Series > **8.22**

T Series > **8.24**

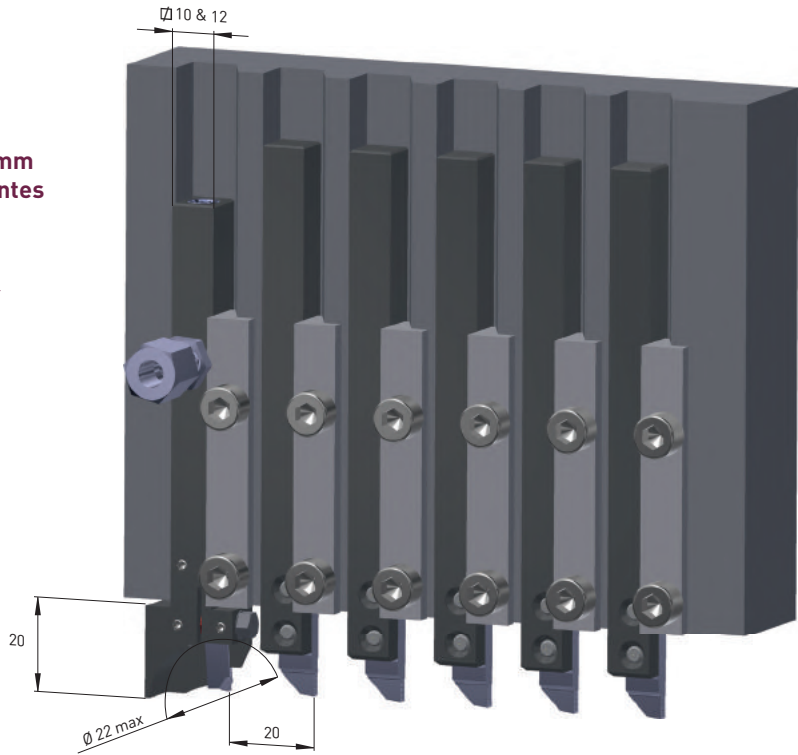
A Series > **8.26**

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data > **8.28**

Compact: seulement 20 mm pour les machines courantes

Kompakt: nur 20 mm für übliche Maschinen

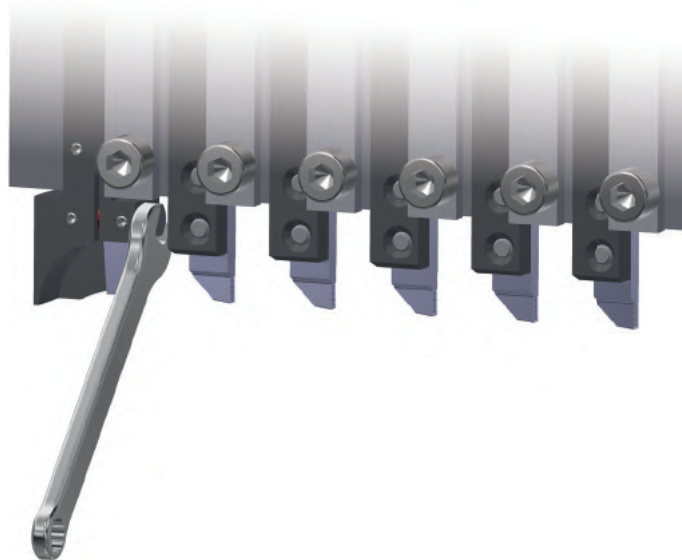
Compact: only 20 mm for current machines



Facilité d'accès

Zugangseichtigkeit

Excellent accessibility



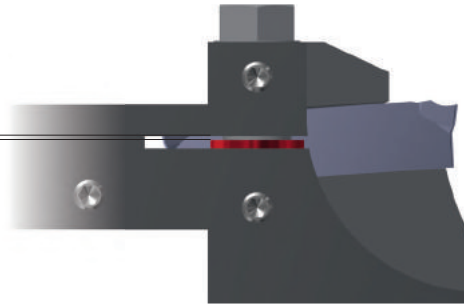
Changement de la plaquelette sans démontage

Veränderung der Platte ohne Zerlegung

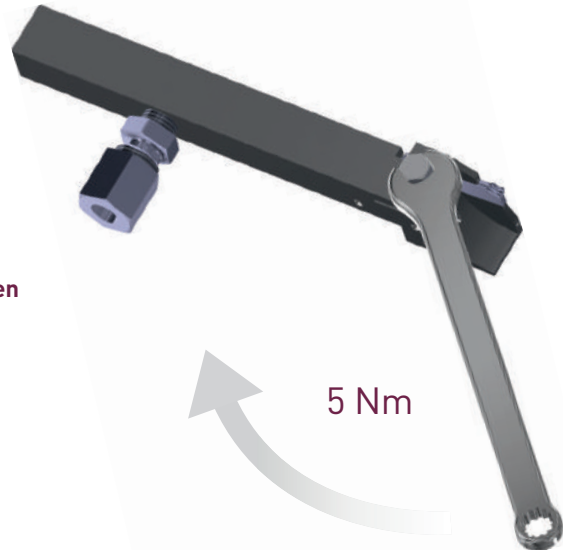
Change of insert without disassembly

Butée de serrage
Spannungs-Anschlag
Clamping stop

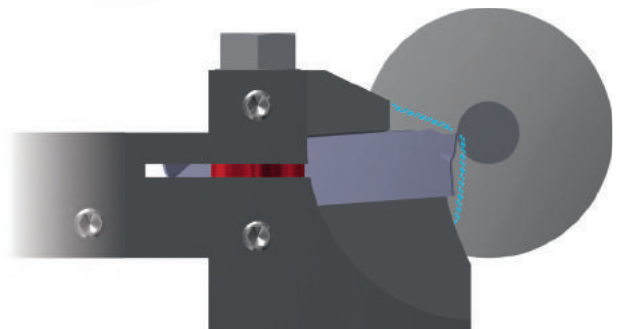
Distance de serrage
 Anschlagabstand
 Distance clamping



Recommendations de serrage:
 n'utiliser que la clé fournie
Spannungsempfehlungen:
 nur den gelieferten Schlüssel benutzen
Tightening recommendation:
 only use the delivered key



Support JET à double lubrification
JET Halter mit doppeltem Schmierung
Jet holder with double lubrication



EVOCUT-LINE

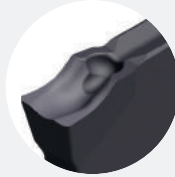
Géométries de coupe

Spanformgeometrie

Cutting geometries

UN

UL
UR



- géométrie positive universelle, faibles efforts de coupe
- bonne maîtrise du copeau
- 1^{er} choix pour l'inox

- allgemeine Geometrie, geringe Schnittkräfte
- gute Spankontrolle
- 1. Wahl für rostfreiem Stahl

- all-round geometry, low cutting forces
- efficient chip control
- 1st choice for stainless steel

JN

JR



- géométrie universelle
- excellent rétrécissement du copeau pour un meilleur contrôle
- conseillé pour le tronçonnage de pièces à parois minces
- pour acier et inox

- allgemeine Geometrie
- ausgezeichnete Spanversmälnerung für eine bessere Spankontrolle
- für abstechen von dünnwandigen Teilen empfohlen
- für Stahl und rostfreiem Stahl

- all-round geometry
- very efficient arrow for a better chip control
- recommended for parting off of thin-walled parts
- for steel and stainless steel

TN

TR



- géométrie négative
- utilisation dans des conditions de rigidité optimale
- pour les matières à haute ténacité
- universel pour les aciers et inox

- negative Geometrie
- bei stabilen Verhältnissen einsetzbar
- für hohe widerstandsfähige Rohstoffe
- allgemein für Stahl und rostfreiem Stahl

- negative geometry
- use in solid cutting conditions
- for high toughness material
- universal for steel and stainless steel

AN

AR



- géométrie fortement positive
- roule-copeau poli avec arêtes de coupe vives
- 1^{er} choix pour aluminium et matériaux non ferreux

- stark positive Geometrie
- geschliffene Spanrolle mit scharfe Schneidkanten
- 1. Wahl für Aluminium und Nichteisenmetalle

- very positive geometry
- polished chip roller with sharp cutting edge
- 1st choice for aluminium and non-ferrous materials

Nuances

Sorten

Grades

| | | |
|---|--|---|
| <p>P M N S</p> <p>TiAlN revêtement PVD PVD Beschichtung PVD coating</p> | <p>P M <input type="checkbox"/> <input type="checkbox"/></p> <p>Tmax revêtement PVD PVD Beschichtung PVD coating</p> | <p>P M <input type="checkbox"/> <input type="checkbox"/></p> <p>Zmax revêtement PVD PVD Beschichtung PVD coating</p> |
| <ul style="list-style-type: none"> pour l'usinage des aciers, aciers inoxydables et alliages de titane 1^{er} choix pour les avances faibles à modérées | <ul style="list-style-type: none"> nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables bonne résistance aux températures d'usinage élevées 1^{er} choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés | <ul style="list-style-type: none"> pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables bonne résistance aux chocs à des vitesses de coupe moyenne à faible 1^{er} choix pour le tronçonnage en coupe interrompue |
| <ul style="list-style-type: none"> für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen beste Wahl für niedrige bis mittlere Vorschübe | <ul style="list-style-type: none"> Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung gute Bearbeitungswarmfestigkeit für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl bestens geeignet | <ul style="list-style-type: none"> für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit für die Bearbeitung in unterbrochenen Schnitte bestens geeignet |
| <ul style="list-style-type: none"> for machining of steel, stainless steel and titanium alloys first choice for low to average cutting speed | <ul style="list-style-type: none"> grade for medium to heavy machining of steel, stainless steel and alloyed steel high machining heat resistance first choice for the machining of carbon steel and high alloyed steel | <ul style="list-style-type: none"> for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions good impact resistance with average to low cutting speed first choice for machining in interrupted cut |
| <p>P M <input type="checkbox"/> <input type="checkbox"/></p> <p>ZTi6 revêtement CVD CVD Beschichtung CVD coating</p> | <p><input type="checkbox"/> <input type="checkbox"/> N S</p> <p>AS revêtement PVD PVD Beschichtung PVD coating</p> | <p><input type="checkbox"/> <input type="checkbox"/> N S</p> <p>N non-revêtu unbeschichtet uncoated</p> |
| <ul style="list-style-type: none"> nuance très tenace grande résistance à la température 1^{er} choix pour les aciers «haute température» secondairement pour les aciers inox | <ul style="list-style-type: none"> nuance pour métaux non ferreux très faible coefficient de frottement 1^{er} choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés | <ul style="list-style-type: none"> nuance non revêtu recommandé pour l'usinage des matières non-ferreuses titane, laiton, cuivre, aluminium sans silicium, plastique |
| <ul style="list-style-type: none"> sehr zähe Sorte hohe Bearbeitungswarmfestigkeit 1. Wahl für „hohe Temperatur“ Stähle sekundär für rostfreie Stähle | <ul style="list-style-type: none"> Sorte für Nichteisenmetalle sehr geringer Reibwert für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet | <ul style="list-style-type: none"> unbeschichtete Sorte für die Bearbeitung von Nichteisenmetalle empfohlen Titan, Messing, Kupfer, Silicium freies Aluminium, Kunststoff |
| <ul style="list-style-type: none"> very strong grade good wear resistance 1st choice for "high temperature" steels secondarily for stainless steels | <ul style="list-style-type: none"> grade for non-ferrous materials very low friction ratio first choice for aluminium up to 5% Si, copper and low alloyed titanium | <ul style="list-style-type: none"> uncoated grade recommended for machining of non-ferrous materials titanium, brass, bronze, aluminium without silicium, plastic |

EVOCUT-LINE

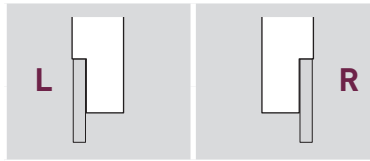
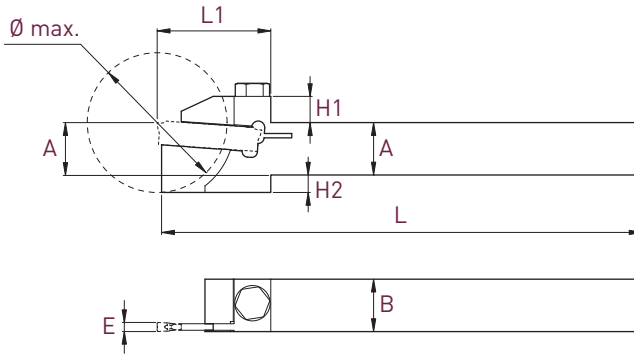
Porte-outils

Halter

Holder

Ø max 44 mm

H Series



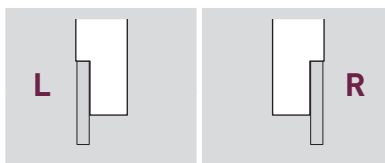
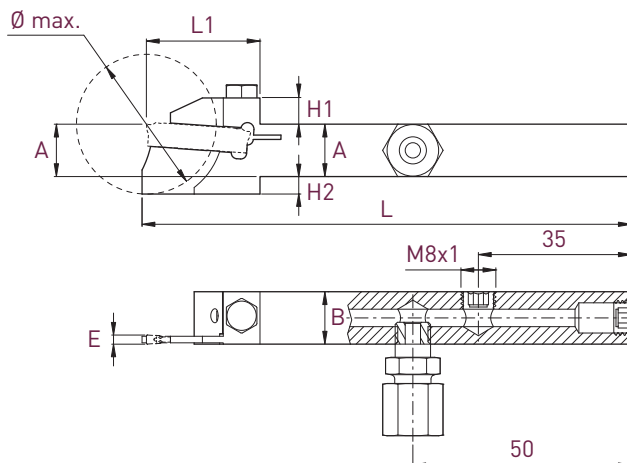
| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H1 | H2 | Art. N° | | Pièces de rechange Ersatzteile Spare parts | |
|------------------------------|-----------|-----|-----------|----|----|----|-----------------|-----------------|--|------------|
| | | | | | | | Art. N° | Art. N° | Art. N° | Art. N° |
| E 1.5 | 10x12 | 110 | 22 | 20 | 5 | 6 | ET15-H1012L-D22 | ET15-H1012R-D22 | V-M5X20-6P6 | C-6PEX-6.0 |
| | 12x12 | 110 | 22 | 20 | 5 | 4 | ET15-H1212L-D22 | ET15-H1212R-D22 | | |
| | 12.7x12.7 | 110 | 22 | 20 | 5 | 3 | ET15-H12.7L-D22 | ET15-H12.7R-D22 | | |
| Type ET15 | 12x12 | 110 | 32 | 26 | 6 | 4 | ET15-H1212L-D32 | ET15-H1212R-D32 | V-M5X21-6P7 | C-6PEX-7.0 |
| | 12.7x12.7 | 110 | 32 | 26 | 6 | 3 | ET15-H12.7L-D32 | ET15-H12.7R-D32 | | |
| | 16x16 | 110 | 32 | 26 | 6 | - | ET15-H1616L-D32 | ET15-H1616R-D32 | | |
| E 2.0 | 10x12 | 110 | 22 | 20 | 5 | 6 | ET20-H1012L-D22 | ET20-H1012R-D22 | V-M5X20-6P6 | C-6PEX-6.0 |
| | 12x12 | 110 | 22 | 20 | 5 | 4 | ET20-H1212L-D22 | ET20-H1212R-D22 | | |
| | 12.7x12.7 | 110 | 22 | 20 | 5 | 3 | ET20-H12.7L-D22 | ET20-H12.7R-D22 | | |
| Type ET20 | 12x12 | 110 | 32 | 26 | 6 | 4 | ET20-H1212L-D32 | ET20-H1212R-D32 | V-M5X21-6P7 | C-6PEX-7.0 |
| | 12.7x12.7 | 110 | 32 | 26 | 6 | 3 | ET20-H12.7L-D32 | ET20-H12.7R-D32 | | |
| | 16x16 | 110 | 32 | 26 | 6 | - | ET20-H1616L-D32 | ET20-H1616R-D32 | | |
| E 2.5 | 10x12 | 110 | 22 | 20 | 5 | 6 | ET25-H1012L-D22 | ET25-H1012R-D22 | V-M5X20-6P6 | C-6PEX-6.0 |
| | 12x12 | 110 | 22 | 20 | 5 | 4 | ET25-H1212L-D22 | ET25-H1212R-D22 | | |
| | 12.7x12.7 | 110 | 22 | 20 | 5 | 3 | ET25-H12.7L-D22 | ET25-H12.7R-D22 | | |
| Type ET25 | 12x12 | 110 | 32 | 26 | 6 | 4 | ET25-H1212L-D32 | ET25-H1212R-D32 | V-M5X21-6P7 | C-6PEX-7.0 |
| | 12.7x12.7 | 110 | 32 | 26 | 6 | 3 | ET25-H12.7L-D32 | ET25-H12.7R-D32 | | |
| | 16x16 | 110 | 32 | 26 | 6 | - | ET25-H1616L-D32 | ET25-H1616R-D32 | | |
| E 3.0 | 16x16 | 110 | 32 | 26 | 6 | - | ET30-H1616L-D32 | ET30-H1616R-D32 | V-M5X21-6P7 | C-6PEX-7.0 |
| | 16x16 | 130 | 44 | 35 | 8 | 4 | ET30-H1616L-D44 | ET30-H1616R-D44 | | |
| | 20x20 | 130 | 44 | 35 | 8 | - | ET30-H2020L-D44 | ET30-H2020R-D44 | | |
| Type ET30 | 20x20 | 130 | 44 | 35 | 8 | - | ET30-H2020L-D44 | ET30-H2020R-D44 | V-M5X27-6P7 | C-6PEX-7.0 |
| | 25x25 | 140 | 44 | 35 | 8 | - | ET30-H2525L-D44 | ET30-H2525R-D44 | | |


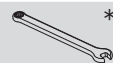
* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

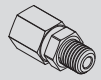

Ø max 44 mm

H JET Series



| Pièces de rechange Ersatzteile Spare parts | |
|--|---|
|  * |  * |
| Art. N° | Art. N° |
| V-M5X20-6P6-J | C-6PEX-6.0 |
| V-M5X21-6P7-J | C-6PEX-7.0 |
| V-M5X27-6P7-J | C-6PEX-7.0 |
| V-M5X20-6P6-J | C-6PEX-6.0 |
| V-M5X21-6P7-J | C-6PEX-7.0 |
| V-M5X27-6P7-J | C-6PEX-7.0 |
| V-M5X21-6P7-J | C-6PEX-7.0 |
| V-M5X27-6P7-J | C-6PEX-7.0 |

| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H1 | H2 | Art. N° | Art. N° |
|--|-----------|-----|-----------|----|----|----|-------------------|-------------------|
| E 2.0 Type ET20 | 10x12 | 110 | 22 | 20 | 5 | 6 | ET20-H1012L-JET22 | ET20-H1012R-JET22 |
| | 12x12 | 110 | 22 | 20 | 5 | 4 | ET20-H1212L-JET22 | ET20-H1212R-JET22 |
| | 12.7x12.7 | 110 | 22 | 20 | 5 | 3 | ET20-H12.7L-JET22 | ET20-H12.7R-JET22 |
| | 12x12 | 110 | 32 | 26 | 6 | 4 | ET20-H1212L-JET32 | ET20-H1212R-JET32 |
| | 12.7x12.7 | 110 | 32 | 26 | 6 | 3 | ET20-H12.7L-JET32 | ET20-H12.7R-JET32 |
| | 16x16 | 110 | 32 | 26 | 6 | - | ET20-H1616L-JET32 | ET20-H1616R-JET32 |
| E 2.5 Type ET25 | 16x16 | 130 | 44 | 35 | 8 | 4 | ET20-H1616L-JET44 | ET20-H1616R-JET44 |
| | 20x20 | 130 | 44 | 35 | 8 | - | ET20-H2020L-JET44 | ET20-H2020R-JET44 |
| | 10x12 | 110 | 22 | 20 | 5 | 6 | ET25-H1012L-JET22 | ET25-H1012R-JET22 |
| | 12x12 | 110 | 22 | 20 | 5 | 4 | ET25-H1212L-JET22 | ET25-H1212R-JET22 |
| | 12.7x12.7 | 110 | 22 | 20 | 5 | 3 | ET25-H12.7L-JET22 | ET25-H12.7R-JET22 |
| | 12x12 | 110 | 32 | 26 | 6 | 4 | ET25-H1212L-JET32 | ET25-H1212R-JET32 |
| E 3.0 Type ET30 | 12.7x12.7 | 110 | 32 | 26 | 6 | 3 | ET25-H12.7L-JET32 | ET25-H12.7R-JET32 |
| | 16x16 | 110 | 32 | 26 | 6 | - | ET25-H1616L-JET32 | ET25-H1616R-JET32 |
| | 16x16 | 130 | 44 | 35 | 8 | 4 | ET25-H1616L-JET44 | ET25-H1616R-JET44 |
| | 20x20 | 130 | 44 | 35 | 8 | - | ET25-H2020L-JET44 | ET25-H2020R-JET44 |
| | 16x16 | 110 | 32 | 26 | 6 | - | ET30-H1616L-JET32 | ET30-H1616R-JET32 |
| | 16x16 | 130 | 44 | 35 | 8 | 4 | ET30-H1616L-JET44 | ET30-H1616R-JET44 |
| | 20x20 | 130 | 44 | 35 | 8 | - | ET30-H2020L-JET44 | ET30-H2020R-JET44 |
| | 25x25 | 140 | 44 | 35 | 8 | - | ET30-H2525L-JET44 | ET30-H2525R-JET44 |

| Pièces de rechange Ersatzteile Spare parts |  |  |
|--|---|---|
| | Art. N° | Art. N° |
| | J-M8X1-D6 | JB-M8X1 |

* Livré avec chaque porte-outil
 mit jedem Halter geliefert
 delivered with each holder

EVOCUT-LINE

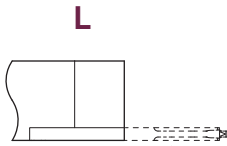
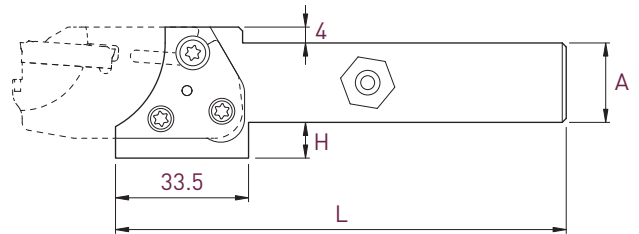
Porte-lames avec arrosage

Halter für Stechklinge mit Kühlung

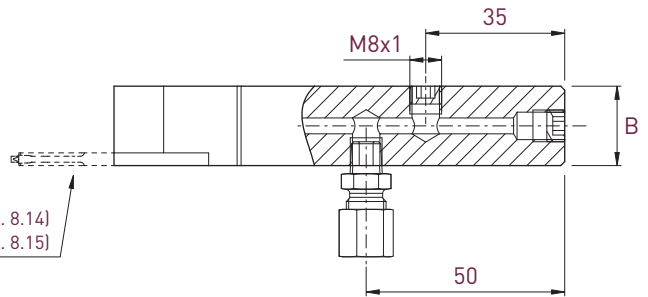
Holder for parting-off blades with coolant

H-HM-JET Series

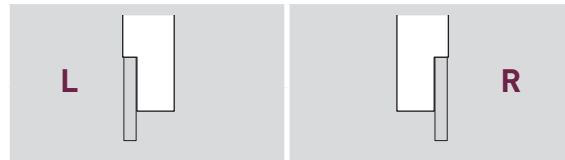
new








HM-IN (p. 8.14)
HM-IL-JET (p. 8.15)



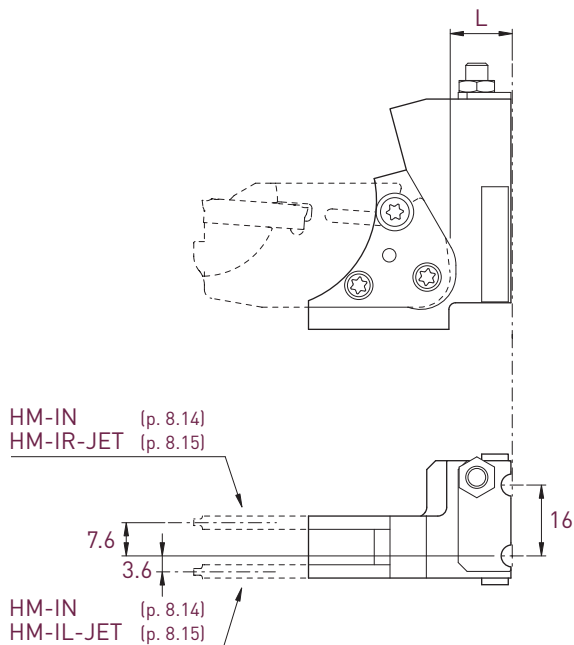
HM-IN (p. 8.14)
HM-IR-JET (p. 8.15)



| A x B | L | H | Art. N° | Art. N° |
|-------|-------|----|---------------|---------------|
| 16x16 | 113.5 | 13 | H1616L-HM-JET | H1616R-HM-JET |
| 20x20 | 113.5 | 9 | H2020L-HM-JET | H2020R-HM-JET |
| 25x25 | 138.5 | 4 | H2525L-HM-JET | H2525R-HM-JET |

| Pièces de rechange Ersatzteile Spare parts |  |  |  |  |  |
|--|---|---|---|---|--|
| | Art. N° | Art. N° | Art. N° | Art. N° | Art. N° |
| | V-M5X10-T20IP | V-M6X10-T20IP | J-M8X1-D6 | JB-M8X1 | C-T20IP |

new

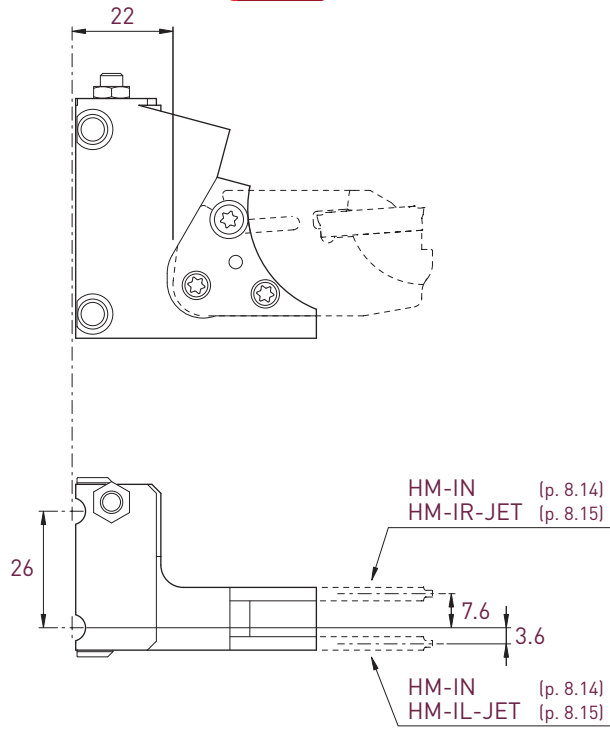


Pièces de rechange
Ersatzteile
Spare parts

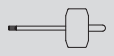


| Interface | Machine compatibility | L | Art. N° | Art. N° | Art. N° | Art. N° |
|-----------|-----------------------|----|---------------------|---------------|---------------|---------|
| GWS02 | AS14 | 14 | GWS02R-02001-HM-JET | V-M5X10-T20IP | V-M6X10-T20IP | C-T20IP |
| | SAS16 | | | | | |
| | SBS20 | | | | | |
| | Others | 22 | GWS02R-02002-HM-JET | | | |

new

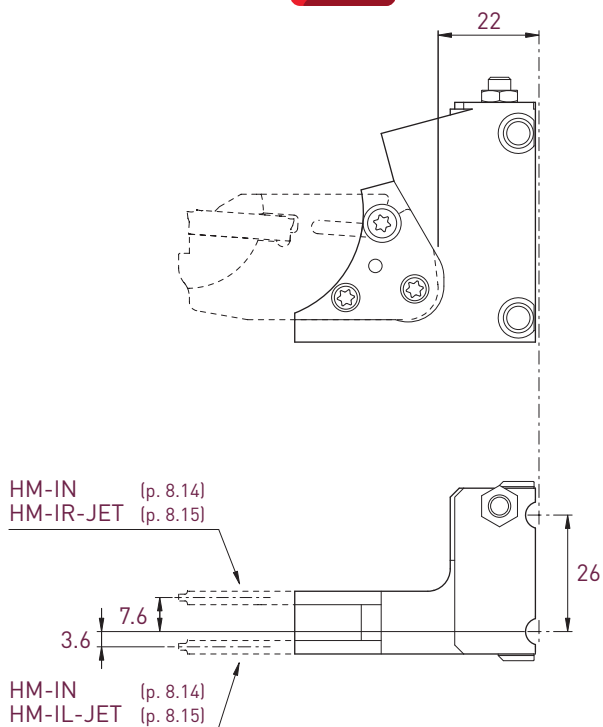


Pièces de rechange
Ersatzteile
Spare parts



| Interface | Machine compatibility | Art. N° | Pièces de rechange Ersatzteile Spare parts | | |
|--------------|-----------------------|----------------------------|--|----------------------|----------------|
| | | | Art. N° | Art. N° | Art. N° |
| GWS41 | MultiSwiss 6X16 | GWS41L-41001-HM-JET | V-M5X10-T20IP | V-M6X10-T20IP | C-T20IP |
| | MultiDeco 20X6 | | | | |
| | MultiDeco 20X8 | | | | |
| | MultiDeco 26X6 | | | | |
| | MultiDeco 32X6 | | | | |
| | MultiAlpha 20X8 | | | | |
| | MultiSigma 24X8 | | | | |

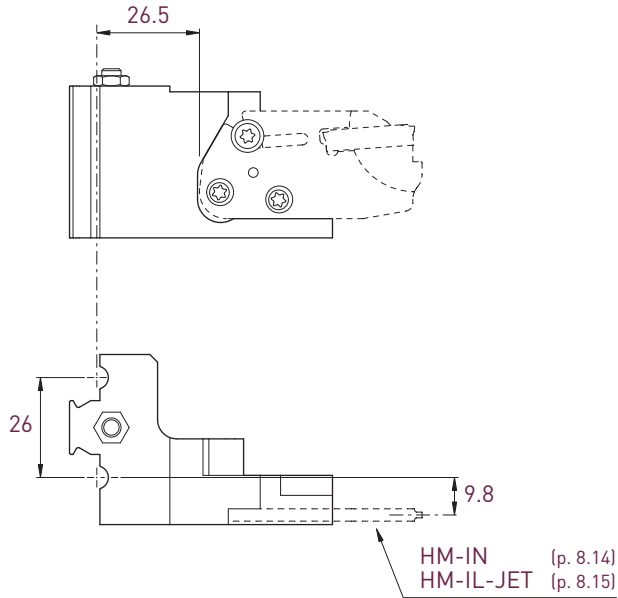
new



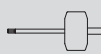


Pièces de rechange
Ersatzteile
Spare parts

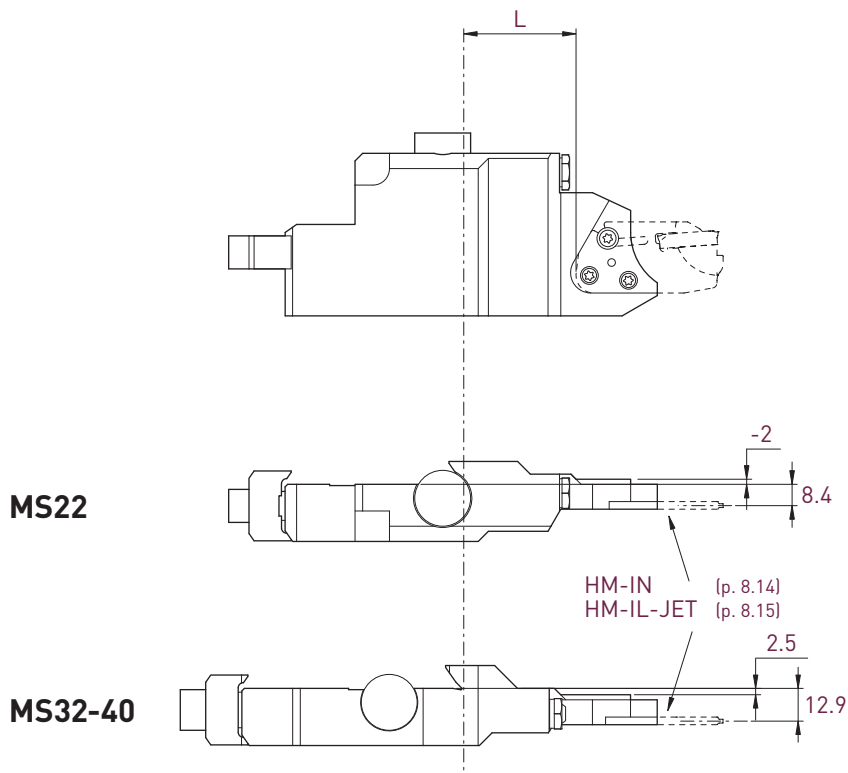
| Interface | Machine compatibility | Art. N° | Pièces de rechange Ersatzteile Spare parts | | |
|-----------|-----------------------|---------------------|--|---------------|---------|
| | | | Art. N° | Art. N° | Art. N° |
| GWS41 | MultiSwiss 6X16 | GWS41R-41001-HM-JET | V-M5X10-T20IP | V-M6X10-T20IP | C-T20IP |
| | MultiDeco 20X6 | | | | |
| | MultiDeco 20X8 | | | | |
| | MultiDeco 26X6 | | | | |
| | MultiDeco 32X6 | | | | |
| | MultiAlpha 20X8 | | | | |
| | MultiSigma 24X8 | | | | |

new



| | | Pièces de rechange Ersatzteile Spare parts | | | | |
|-----------|-----------------------|--|---------------|---|--|---|
| | | | |  |  |  |
| Interface | Machine compatibility | Art. N° | Art. N° | Art. N° | Art. N° | |
| GWS202 | MultiSwiss 6X32 | GWS202L-202001-HM-JET | V-M5X10-T20IP | V-M6X10-T20IP | C-T20IP | |
| | MultiSwiss 8X26 | | | | | |

new



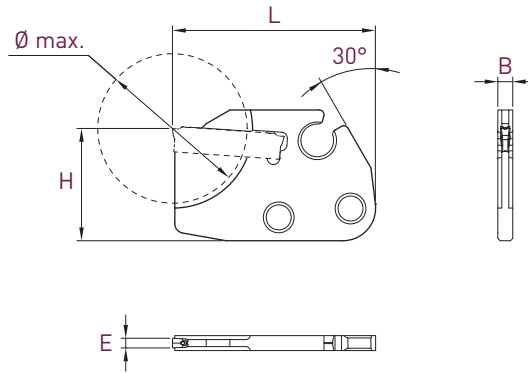
Pièces de rechange
Ersatzteile
Spare parts

| Machine compatibility | L | Art. N° | Pièces de rechange Ersatzteile Spare parts | | |
|-----------------------|------|-------------------------|--|---------------|---------|
| | | | Art. N° | Art. N° | Art. N° |
| MS22 | 44.2 | MS22-W5190231-HM-JET | V-M5X10-T20IP | V-M6X10-T20IP | C-T20IP |
| MS32-40 | 45.5 | MS32-40-W5190233-HM-JET | | | |

EVO CUT-LINE

Lames pour système modulaire
 Stechklinge für modulares System
 Parting-off blades for modular system

HM Series



N

| Plaquettes WSP Inserts | Ø max. | B | L | H | Art. N° |
|--|-----------|-----|------|----|-------------------|
| E 1.5 Type ET15 | 20 | 3.2 | 43.5 | 24 | ET15-HM-IN-43-D20 |
| | 32 | 3.2 | 43.5 | 24 | ET15-HM-IN-43-D32 |
| E 2.0 Type ET20 | 20 | 3.2 | 43.5 | 24 | ET20-HM-IN-43-D20 |
| | 26 | 3.2 | 43.5 | 24 | ET20-HM-IN-43-D26 |
| | 26 | 3.2 | 54 | 24 | ET20-HM-IN-54-D26 |
| | 32 | 3.2 | 43.5 | 24 | ET20-HM-IN-43-D32 |
| E 3.0 Type ET30 | 32 | 3.2 | 43.5 | 24 | ET30-HM-IN-43-D32 |

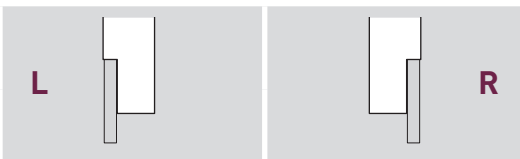
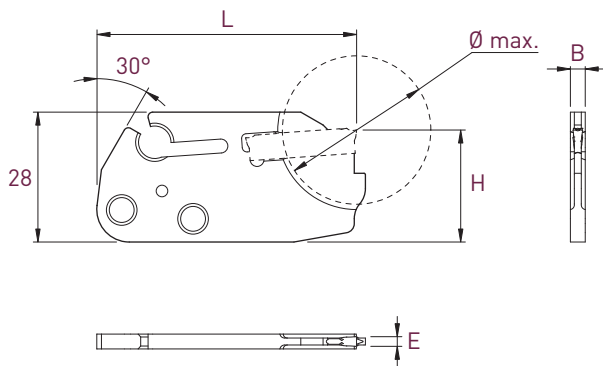
Lames avec arrosage intégré

Stechklinge mit integrierter Kühlmittelzufuhr

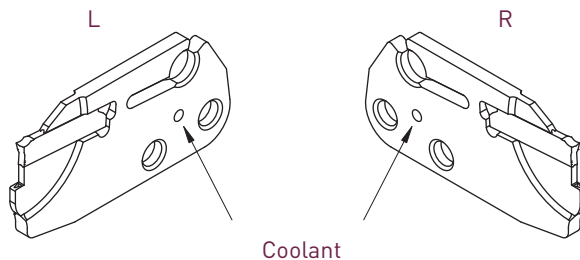
Parting-off blades with integrated coolant supply

HM-JET Series

new



| Plaquettes WSP Inserts | Ø max. | B | L | H | Art. N° | Art. N° |
|--|-----------|-----|------|----|-----------------------|-----------------------|
| E 2.0 Type ET20 | 20 | 3.2 | 48.5 | 24 | ET20-HM-IL-48.5-JET20 | ET20-HM-IR-48.5-JET20 |
| | 24 | | 48.5 | | ET20-HM-IL-48.5-JET24 | ET20-HM-IR-48.5-JET24 |
| | 32 | | 45.5 | | ET20-HM-IL-45.5-JET32 | ET20-HM-IR-45.5-JET32 |
| | 32 | | 56 | | ET20-HM-IL-56-JET32 | ET20-HM-IR-56-JET32 |
| | 42 | | 48.5 | | ET20-HM-IL-48.5-JET42 | ET20-HM-IR-48.5-JET42 |
| E 3.0 Type ET30 | 32 | 3.2 | 45.5 | 24 | ET30-HM-IL-45.5-JET32 | ET30-HM-IR-45.5-JET32 |
| | 44 | | 48.5 | | ET30-HM-IL-48.5-JET42 | ET30-HM-IR-48.5-JET42 |



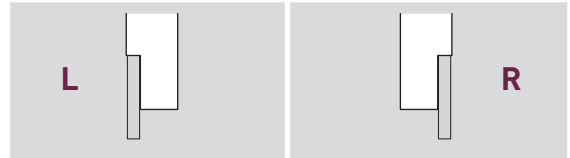
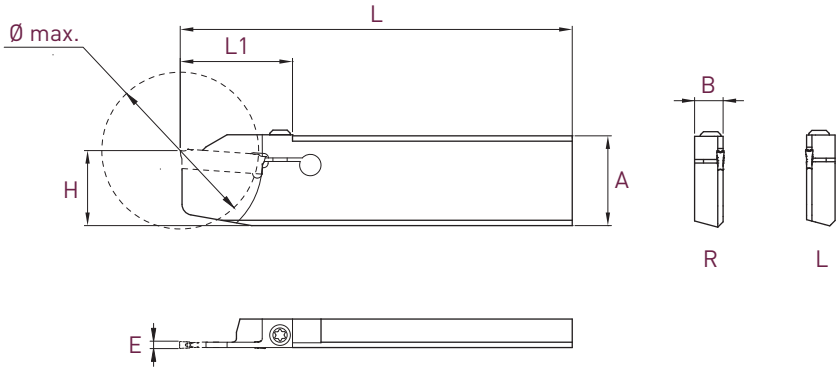
EVOCUT-LINE

Lames de tronçonnage



Stechklinge

Parting-off blades

HK Series



| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H | Art. N° | Art. N° |
|---------------------------------|-------|-----|--------|------|----|------------------------------|------------------------------|
| E 1.5 Type ET15 | 26x8 | 110 | 20 | 19.5 | 21 | ET15-HK-2608L-110-D20 | ET15-HK-2608R-110-D20 |
| | 26x8 | 110 | 32 | 25.5 | 21 | ET15-HK-2608L-110-D32 | ET15-HK-2608R-110-D32 |
| E 2.0 Type ET20 | 26x8 | 110 | 32 | 25.5 | 21 | ET20-HK-2608L-110-D32 | ET20-HK-2608R-110-D32 |
| | 26x8 | 110 | 44 | 31.5 | 21 | ET20-HK-2608L-110-D44 | ET20-HK-2608R-110-D44 |

| Pièces de rechange Ersatzteile Spare parts |  * |  * |
|--|---|---|
| | Art. N° | Art. N° |
| | V-M4X14.5-T15-EVOCUT | C-T15 |

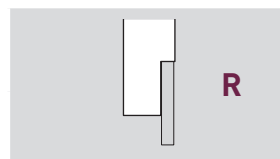
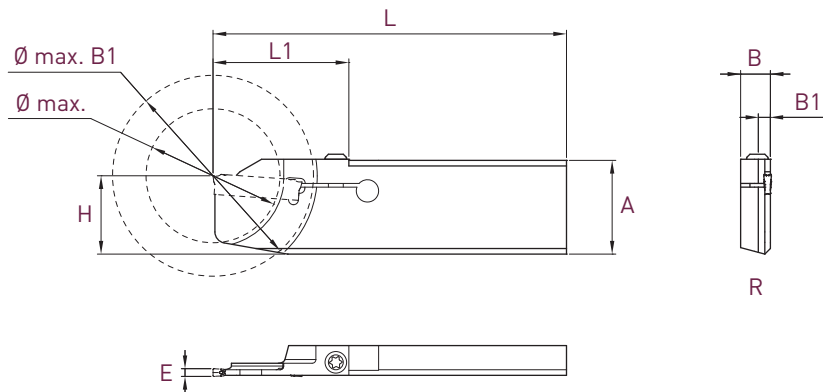
* livré avec chaque lame
mit jedem Stechkling geliefert
delivered with each blade

Lames de tronçonnage avec dégagement pour accès contre-broche



Stecklinge mit Aussparung für Gegenspindel Zugriff

Parting-off blades with recess for subspindle access

HK-RS Series



| Plaquettes WSP Inserts | A x B | L | Ø max. | Ø max. B1 | B1 | L1 | H | Art. N° |
|--|-------|----|--------|-----------|------|------|----|-----------------------|
| E 1.5 Type ET15 | 26x8 | 95 | 36 | 54 | 3.25 | 36.5 | 21 | ET15-HK-2608RS-95-D36 |
| E 2.0 Type ET20 | 26x8 | 95 | 36 | 54 | 3.25 | 36.5 | 21 | ET20-HK-2608RS-95-D36 |

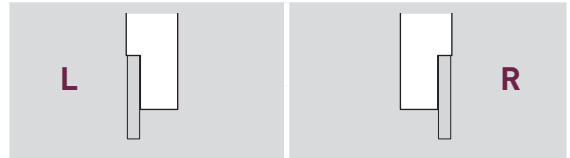
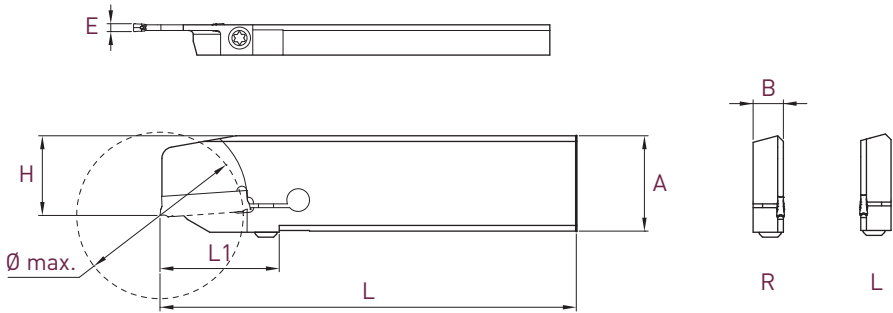
| | | |
|--|---|---|
| Pièces de rechange Ersatzteile Spare parts |  * |  * |
| | Art. N° | Art. N° |
| | V-M4X14.5-T15-EVOCUT | C-T15 |

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade



EVOCUT-LINE

Lames de tronçonnage inversées
 Überkopf Stechklinge
 Upside down parting-off blades

HUK Series



| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H | Art. N° | Art. N° |
|---------------------------------|-------|-----|--------|------|----|-------------------------------|-------------------------------|
| E 1.5 Type ET15 | 26x8 | 110 | 20 | 19.5 | 21 | ET15-HUK-2608L-110-D20 | ET15-HUK-2608R-110-D20 |
| | 26x8 | 110 | 32 | 25.5 | 21 | ET15-HUK-2608L-110-D32 | ET15-HUK-2608R-110-D32 |
| E 2.0 Type ET20 | 26x8 | 110 | 32 | 25.5 | 21 | ET20-HUK-2608L-110-D32 | ET20-HUK-2608R-110-D32 |
| | 26x8 | 110 | 44 | 31.5 | 21 | ET20-HUK-2608L-110-D44 | ET20-HUK-2608R-110-D44 |

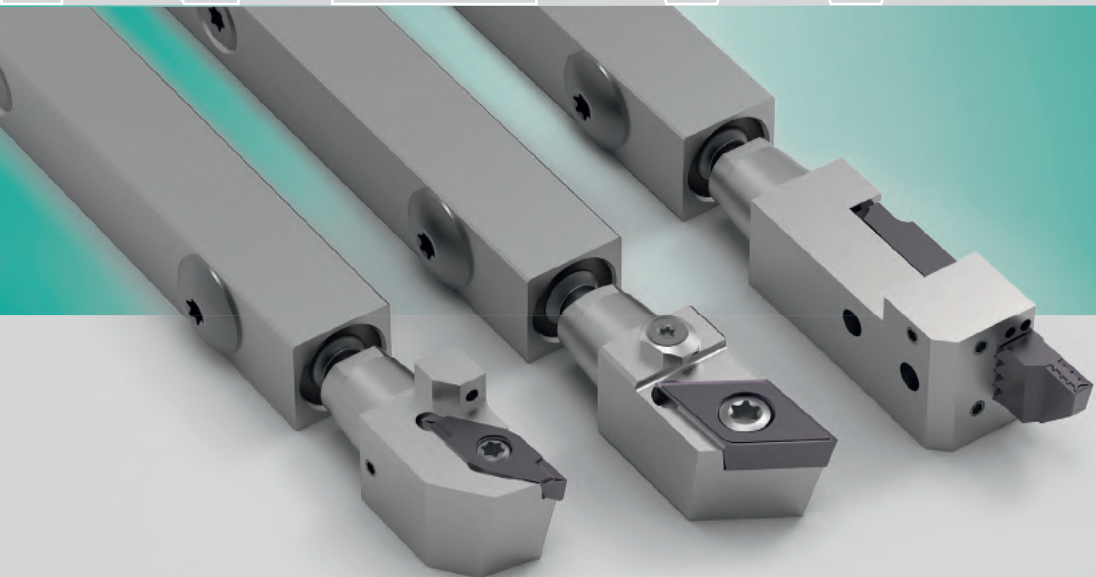
| | | |
|--|---|---|
| Pièces de rechange Ersatzteile Spare parts |  * |  * |
| | Art. N° | Art. N° |
| | V-M4X14.5-T15-EVOCUT | C-T15 |

* livré avec chaque lame
 mit jedem Steckling geliefert
 delivered with each blade

SWITCH-LINE



NEW

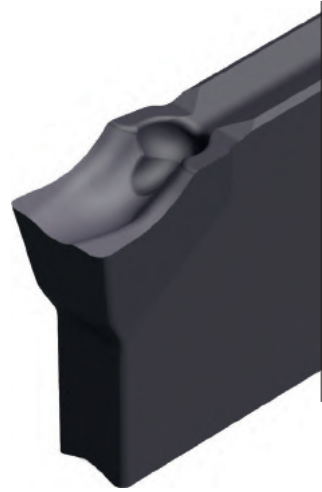
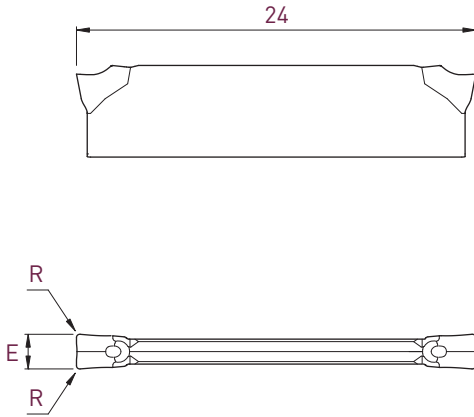


DISCOVER THE RANGE SWITCH-LINE IN CHAPTER 11!

EVOCUT-LINE

Plaquettes de tronçonnage
 Abstechwendeplatten
 Cut off inserts

UN Series



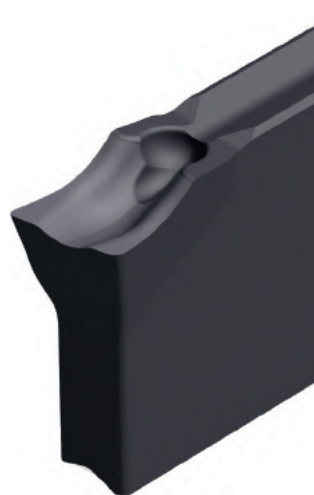
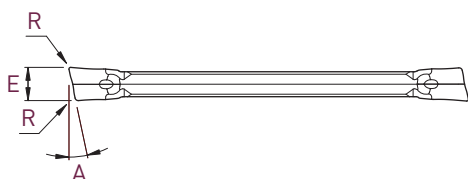
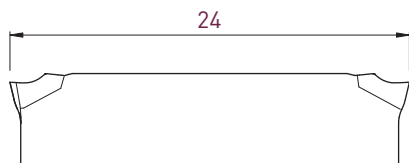
| | | | UN | | | | |
|------|----------------|-----|--------------|------------------|------------|------------|--------|
| | | | | | | | |
| Type | $E_{\pm 0.05}$ | R | Art. N° | P M N G | P M | P M | P M |
| | | | | TiAlN | Tmax | Zmax | ZTi6 |
| ET15 | 1.35 | 0 | ET15-UN-000F | ■ | | | |
| | 1.5 | 0.2 | ET15-UN-002 | ■ | ■ | ■ | |
| ET20 | 1.85 | 0 | ET20-UN-000F | ■ | | | |
| | 2.0 | 0.2 | ET20-UN-002 | ■ | ■ | ■ | ■ |
| ET25 | 2.35 | 0 | ET25-UN-000F | ■ | | | |
| | 2.5 | 0.3 | ET25-UN-003 | ■ | ■ | ■ | ■ |
| ET30 | 2.85 | 0 | ET30-UN-000F | ■ | | | |
| | 3.0 | 0.3 | ET30-UN-003 | ■ | ■ | ■ | ■ |

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

UL-UR Series



| Type | E ±0.05 | A | R | UL | | | UR | | | | |
|------|---------|-----|-----|---------------|-------------------------------------|--------------------------|--------------------------|---------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | | | Art. N° | TiAlN | Tmax | Zmax | Art. N° | TiAlN | Tmax | Zmax |
| ET15 | 1.5 | 6° | 0.2 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET15-UR-602 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.35 | 8° | 0 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET15-UR-800F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.5 | 12° | 0.1 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET15-UR-1201 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.35 | 15° | 0 | ET15-UL-1500F | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET15-UR-1500F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ET20 | 2.0 | 6° | 0.2 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET20-UR-602 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.85 | 8° | 0 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET20-UR-800F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.0 | 12° | 0.1 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET20-UR-1201 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.85 | 15° | 0 | ET20-UL-1500F | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET20-UR-1500F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ET25 | 2.5 | 6° | 0.2 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET25-UR-602 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.35 | 8° | 0 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET25-UR-800F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.5 | 12° | 0.1 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET25-UR-1201 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.35 | 15° | 0 | ET25-UL-1500F | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET25-UR-1500F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ET30 | 3.0 | 6° | 0.3 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET30-UR-603 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.85 | 8° | 0 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET30-UR-800F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.0 | 12° | 0.2 | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET30-UR-1202 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.85 | 15° | 0 | ET30-UL-1500F | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ET30-UR-1500F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

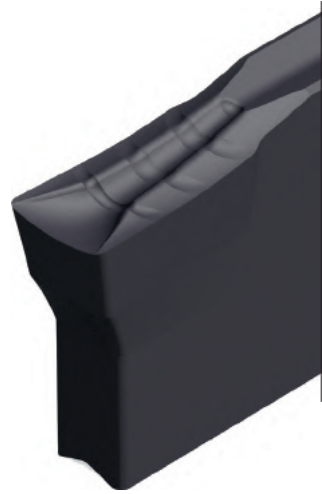
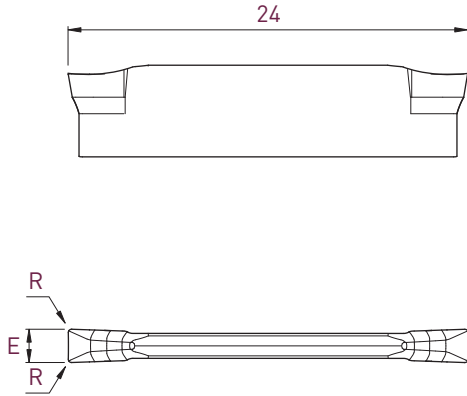
EVOCUT-LINE


Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

JN Series



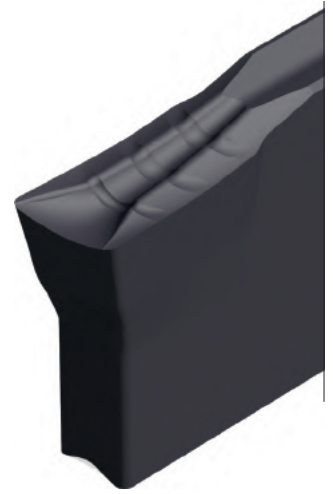
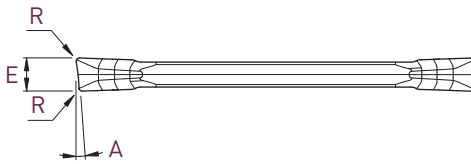
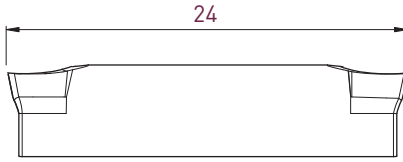
| | | | JN | | | | |
|------|---------|-----|---|-----------|----------|----------|----------|
| | | |  | | | | |
| Type | E ±0.05 | R | Art. N° | TiAlN | Tmax | Zmax | ZTi6 |
| ET15 | 1.5 | 0.2 | ET15-JN-002 | ■ | ■ | ■ | |
| ET20 | 2.0 | 0.2 | ET20-JN-002 | ■ | ■ | ■ | ■ |
| ET25 | 2.5 | 0.3 | ET25-JN-003 | ■ | ■ | ■ | ■ |
| ET30 | 3.0 | 0.3 | ET30-JN-003 | ■ | ■ | ■ | ■ |

Plaquettes de tronçonnage

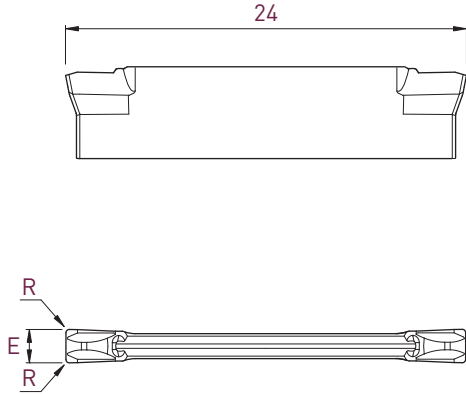
Abstechwendeplatten


Cut off inserts

JR Series



| | | | | JR | | | |
|------|--------------|----|-----|-------------|-------|------|------|
| Type | E ± 0.05 | A | R | Art. N° | TiAlN | Tmax | Zmax |
| ET15 | 1.5 | 6° | 0.2 | ET15-JR-602 | ■ | ■ | ■ |
| ET20 | 2.0 | 6° | 0.2 | ET20-JR-602 | ■ | ■ | ■ |
| ET25 | 2.5 | 6° | 0.2 | ET25-JR-602 | ■ | ■ | ■ |
| ET30 | 3.0 | 6° | 0.3 | ET30-JR-603 | ■ | ■ | ■ |



| | | | TN  | | | | |
|------|---------|-----|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Type | E ±0.05 | R | Art. N° | TiAlN <input type="checkbox"/> | Tmax <input type="checkbox"/> | Zmax <input type="checkbox"/> | ZTi6 <input type="checkbox"/> |
| ET20 | 2.0 | 0.2 | ET20-TN-002 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ET25 | 2.5 | 0.3 | ET25-TN-003 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ET30 | 3.0 | 0.3 | ET30-TN-003 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

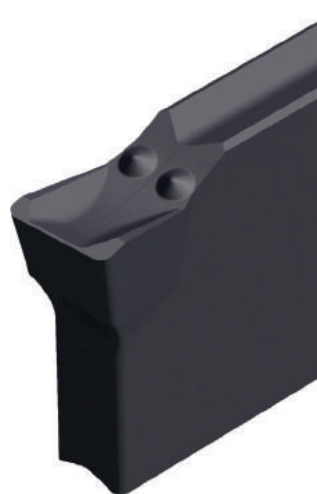
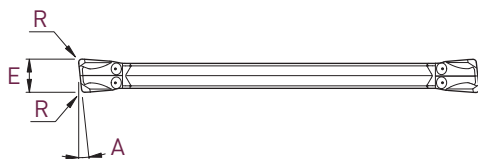
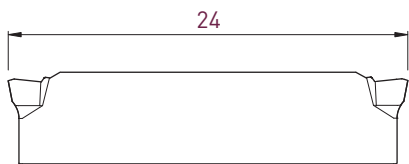
Plaquettes de tronçonnage


Abstechwendeplatten

Cut off inserts

Negative geometry

TR Series

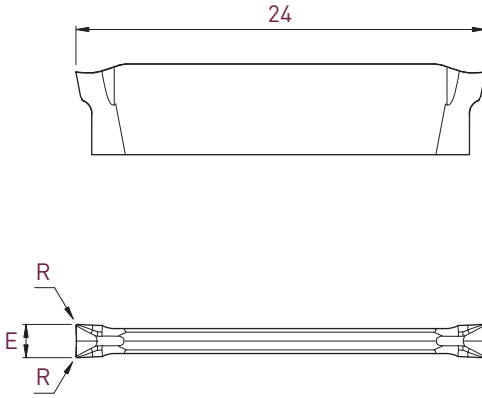



| | | | | TR |  | | | | | | | | | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|-------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Type | E ±0.05 | A | R | Art. N° | <table border="1"> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| ET20 | 2.0 | 6° | 0.2 | ET20-TR-602 | ■ ■ ■ | | | | | | | | | | | | | | | | |
| ET25 | 2.5 | 6° | 0.2 | ET25-TR-602 | ■ ■ ■ | | | | | | | | | | | | | | | | |
| ET30 | 3.0 | 6° | 0.3 | ET30-TR-603 | ■ ■ ■ ■ | | | | | | | | | | | | | | | | |

EVOCUT-LINE

- Plaquettes de tronçonnage
- Abstechwendeplatten
- Cut off inserts

AN Series



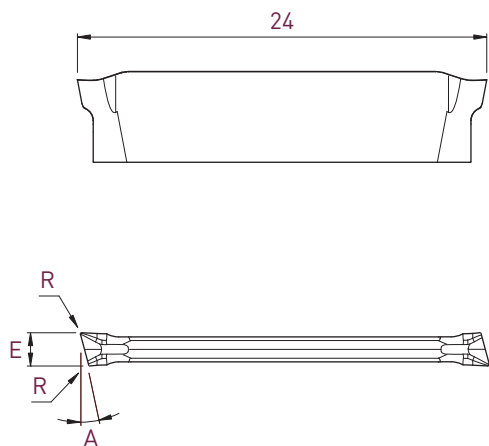
| | | | | AN  | | |
|------|--------------|-----|--------------|--|-------------------------------------|-------------------------------------|
| Type | E ± 0.05 | R | Art. N° | TIALN | A5 | N |
| ET20 | 2.0 | 0.2 | ET20-AN-002F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ET30 | 3.0 | 0.3 | ET30-AN-003F | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

AR Series













| | | | | AR | | | |
|------|--------------|-----|-----|---------------|---|--|--|
| Type | E ± 0.05 | A | R | Art. N° | TiAIN | AS | N |
| ET20 | 2.0 | 15° | 0.1 | ET20-AR-1501F | <input checked="" type="checkbox"/> M <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> S | <input type="checkbox"/> <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> S | <input type="checkbox"/> <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> S |
| ET30 | 3.0 | 15° | 0.2 | ET30-AR-1502F | <input type="checkbox"/> <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> S | <input type="checkbox"/> <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> S | <input type="checkbox"/> <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> S |

EVOCUT-LINE

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| | | | | | | P Acier Stahl Steel | | | | | | M Inox Rostfreistahl Stainless steel | | |
|---|---|-------|------|------|------|--|----------|---|----------|--|----------|--|----------|-----------|
| | | | | | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier faiblement allié Leicht legierter Stahl Low alloyed steel | | Acier fortement allié Legierter Stahl High alloyed steel | | Austenitique et martensitique Austenitic and martensitic | | |
| | | ET15 | ET20 | ET25 | ET30 | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | |
| Avance standard Standard Vorschub Standard feed rate | UN  | TiAlN | ■ | ■ | ■ | ■ | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | | Tmax | ■ | ■ | ■ | ■ | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.10 | 50-120* | 0.04-0.10 |
| | | ZTi6 | ■ | ■ | ■ | ■ | 110-200 | 0.04-0.08 | 80-160 | 0.04-0.08 | 70-140 | 0.04-0.08 | 70-160 | 0.04-0.08 |
| | UR  | TiAlN | ■ | ■ | ■ | ■ | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | | Tmax | ■ | ■ | ■ | ■ | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.10 | 50-120* | 0.04-0.10 |
| | | ZTi6 | ■ | ■ | ■ | ■ | 110-200 | 0.04-0.08 | 80-160 | 0.04-0.08 | 70-140 | 0.04-0.08 | 70-160 | 0.04-0.08 |
| | JN  | TiAlN | ■ | ■ | ■ | ■ | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | | Tmax | ■ | ■ | ■ | ■ | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.10 | 50-120* | 0.04-0.10 |
| | | ZTi6 | ■ | ■ | ■ | ■ | 110-200 | 0.04-0.08 | 80-160 | 0.04-0.08 | 70-140 | 0.04-0.08 | 70-160 | 0.04-0.08 |
| | JR  | TiAlN | ■ | ■ | ■ | ■ | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | | Tmax | ■ | ■ | ■ | ■ | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.10 | 50-120* | 0.04-0.10 |
| | | ZTi6 | ■ | ■ | ■ | ■ | 110-200 | 0.04-0.08 | 80-160 | 0.04-0.08 | 70-140 | 0.04-0.08 | 70-160 | 0.04-0.08 |
| | TN  | TiAlN | ■ | ■ | ■ | ■ | 90-150 | 0.08-0.18 | 70-130 | 0.08-0.18 | 50-100 | 0.08-0.15 | 50-120 | 0.08-0.20 |
| | | Tmax | ■ | ■ | ■ | ■ | 100-170 | 0.08-0.18 | 70-150 | 0.08-0.18 | 60-120 | 0.08-0.15 | 60-150 | 0.08-0.20 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-130* | 0.08-0.18 | 50-110* | 0.08-0.18 | 50-90* | 0.08-0.15 | 50-120* | 0.08-0.20 |
| | | ZTi6 | ■ | ■ | ■ | ■ | 110-200 | 0.08-0.18 | 80-160 | 0.08-0.18 | 70-140 | 0.08-0.15 | 70-160 | 0.08-0.20 |
| | TR  | TiAlN | ■ | ■ | ■ | ■ | 90-150 | 0.08-0.18 | 70-130 | 0.08-0.18 | 50-100 | 0.08-0.15 | 50-120 | 0.08-0.20 |
| | | Tmax | ■ | ■ | ■ | ■ | 100-170 | 0.08-0.18 | 70-150 | 0.08-0.18 | 60-120 | 0.08-0.15 | 60-150 | 0.08-0.20 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-130* | 0.08-0.18 | 50-110* | 0.08-0.18 | 50-90* | 0.08-0.15 | 50-120* | 0.08-0.20 |
| | | ZTi6 | ■ | ■ | ■ | ■ | 110-200 | 0.08-0.18 | 80-160 | 0.08-0.18 | 70-140 | 0.08-0.15 | 70-160 | 0.08-0.20 |
| Avance modérée Niedriger Vorschub Low feed rate | UN-000F  | TiAlN | ■ | ■ | ■ | ■ | 80-120 | 0.02-0.05 | 50-100 | 0.02-0.05 | 40-80 | 0.02-0.05 | 40-100 | 0.02-0.05 |
| | | Tmax | ■ | ■ | ■ | ■ | 80-120 | 0.02-0.05 | 50-100 | 0.02-0.05 | 40-80 | 0.02-0.05 | 40-100 | 0.02-0.05 |
| | UR/ULF  | TiAlN | ■ | ■ | ■ | ■ | 80-120 | 0.02-0.05 | 50-100 | 0.02-0.05 | 40-80 | 0.02-0.05 | 40-100 | 0.02-0.05 |
| | | Tmax | ■ | ■ | ■ | ■ | 80-120 | 0.02-0.05 | 50-100 | 0.02-0.05 | 40-80 | 0.02-0.05 | 40-100 | 0.02-0.05 |
| | | Zmax | ■ | ■ | ■ | ■ | 80-120 | 0.02-0.05 | 50-100 | 0.02-0.05 | 40-80 | 0.02-0.05 | 40-100 | 0.02-0.05 |
| | ANF  | N | ■ | ■ | ■ | ■ | | | | | | | | |
| | | TiAlN | ■ | ■ | ■ | ■ | | | | | | | 40-80 | 0.02-0.05 |
| | ARF  | N | ■ | ■ | ■ | ■ | | | | | | | | |
| | | TiAlN | ■ | ■ | ■ | ■ | | | | | | | 40-80 | 0.02-0.05 |
| | | Zmax | ■ | ■ | ■ | ■ | | | | | | | | |

* premier choix en cas de coupe interrompue
 ** arête de coupe vive

* beste Basis für unterbrochene Schnitte
 ** scharfe Schneidkante

* first choice for interrupted cut
 ** sharp cutting edge

| N Alliage d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys | | | | | | | | S Titane Titan Titanium | | | |
|--|-----------|--|-----------|----------------------------|-----------|---|-----------|-------------------------------|-----------|------------|-----------|
| Aluminium | | Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5% | | Cuivre Kupfer Copper | | Laiton & bronze Messing & Bronze Brass & bronze | | Gr. 1 - 3 | | Gr. 4 - 5 | |
| VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 50-100 | 0.04-0.08 |
| | | | | | | | | | | | |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 50-100 | 0.04-0.08 |
| | | | | | | | | | | | |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 50-100 | 0.04-0.08 |
| | | | | | | | | | | | |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 50-100 | 0.04-0.08 |
| | | | | | | | | | | | |
| | | | | | | 150-300 | 0.05-0.20 | | | | |
| | | | | | | | | | | | |
| | | | | | | 150-300 | 0.05-0.20 | | | | |
| | | | | | | | | | | | |
| 100-300 | 0.02-0.06 | 100-200 | 0.01-0.05 | 100-250 | 0.01-0.05 | 100-300 | 0.02-0.06 | | | 50-100 | 0.01-0.06 |
| | | | | | | | | | | | |
| 100-300 | 0.02-0.06 | 100-200 | 0.01-0.05 | 100-250 | 0.01-0.05 | 100-300 | 0.02-0.06 | | | 50-100 | 0.01-0.06 |
| | | | | | | | | | | | |
| 80-200 | 0.02-0.06 | | | 80-200 | 0.01-0.05 | 80-200 | 0.02-0.06 | 50-100 | 0.01-0.06 | 50-100 | 0.01-0.06 |
| 100-250 | 0.02-0.06 | 80-150 | 0.01-0.05 | 100-200 | 0.01-0.05 | 80-200 | 0.02-0.06 | | | 30-80 | 0.01-0.06 |
| 100-300 | 0.02-0.06 | 100-200 | 0.01-0.05 | 100-250 | 0.01-0.05 | 100-300 | 0.02-0.06 | 50-120 | 0.01-0.06 | 50-120 | 0.01-0.06 |
| 80-200 | 0.02-0.06 | | | 80-200 | 0.01-0.05 | 80-200 | 0.02-0.06 | 50-100 | 0.01-0.06 | 50-100 | 0.01-0.06 |
| 100-250 | 0.02-0.06 | 80-150 | 0.01-0.05 | 100-200 | 0.01-0.05 | 80-200 | 0.02-0.06 | | | 30-80 | 0.01-0.06 |
| 100-300 | 0.02-0.06 | 100-200 | 0.01-0.05 | 100-250 | 0.01-0.05 | 100-300 | 0.02-0.06 | 50-120 | 0.01-0.06 | 50-120 | 0.01-0.06 |



CUT-LINE

APPLITEC

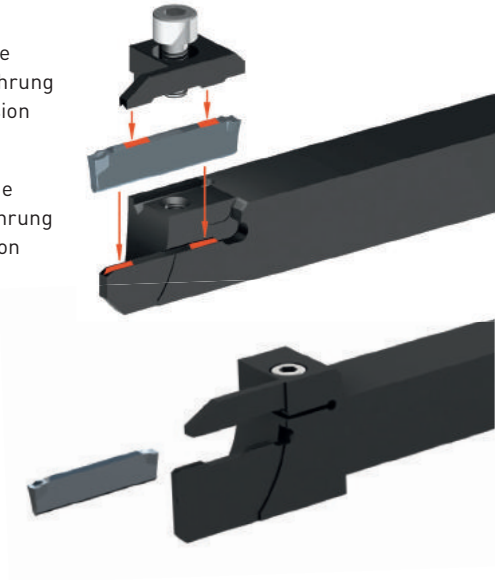
Porte-outils / Halter / Holders

H Système de serrage à bride, version courte
Spannbrücke Klemmsystem, kurze Ausführung
Independent top clamp system, short version

HX Système de serrage à bride, version longue
Spannbrücke Klemmsystem, lange Ausführung
Independent top clamp system, long version

HZ Porte-outils de grande capacité
Klemmhalter für grössere Durchmesser
High capacity tool holders

Very rigid clamping system!

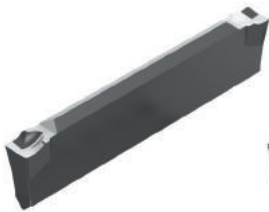


Plaquettes / WSP / Inserts

CUT 16 =  1.6 mm Ø max 20 mm

CUT 22 =  2.2 mm Ø max 42 mm

CUT 31 =  3.1 mm Ø max 65 mm



U



P



T



G

Nuances et géométries
Sorten und Geometrien
Grades and types of geometries > **9.02**

CUT 16 Ø max 20 mm > **9.04**

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data > **9.06**

CUT 31 Ø max 65 mm > **9.08**

H Series > **9.10**

Porte-outils
Halter
Holders > **9.11**

HZ Series > **9.12**

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply > **9.13**

U Series > **9.14**

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts > **9.16**

T Series > **9.20**

Plaquettes de fonçage, tournage et tronçonnage
WSP zum einstecken, drehen und abstechen
Inserts for grooving, turning and cut off > **9.21**

Nuances

Sorten

Grades

| <h2>TiAlN</h2> <p>revêtement PVD PVD Beschichtung PVD coating</p> | <h2>Tmax</h2> <p>revêtement PVD PVD Beschichtung PVD coating</p> | <h2>Zmax</h2> <p>revêtement PVD PVD Beschichtung PVD coating</p> |
|---|--|---|
| <ul style="list-style-type: none"> pour l'usinage des aciers, aciers inoxydables et alliages de titane 1^{er} choix pour les avances faibles à modérées | <ul style="list-style-type: none"> nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables bonne résistance aux températures d'usinage élevées 1^{er} choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés | <ul style="list-style-type: none"> pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables bonne résistance aux chocs à des vitesses de coupe moyenne à faible 1^{er} choix pour le tronçonnage en coupe interrompue |
| <ul style="list-style-type: none"> für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen beste Wahl für niedrige bis mittlere Vorschübe | <ul style="list-style-type: none"> Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung gute Bearbeitungswarmfestigkeit für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl bestens geeignet | <ul style="list-style-type: none"> für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit für die Bearbeitung in unterbrochenen Schnitte bestens geeignet |
| <ul style="list-style-type: none"> for machining of steel, stainless steel and titanium alloys first choice for low to average cutting speed | <ul style="list-style-type: none"> grade for medium to heavy machining of steel, stainless steel and alloyed steel high machining heat resistance first choice for the machining of carbon steel and high alloyed steel | <ul style="list-style-type: none"> for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions good impact resistance with average to low cutting speed first choice for machining in interrupted cut |

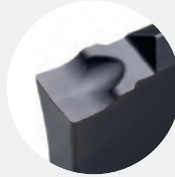
| <h2>HTA</h2> <p>revêtement PVD PVD Beschichtung PVD coating</p> | <h2>AS</h2> <p>revêtement PVD PVD Beschichtung PVD coating</p> | <h2>N</h2> <p>non revêtu unbeschichtet uncoated</p> |
|---|---|---|
| <ul style="list-style-type: none"> très bonne résistance à l'usure pour le tronçonnage des aciers, aciers inoxydables et alliages de titane déconseillé en coupe interrompue | <ul style="list-style-type: none"> nuance pour métaux non ferreux très faible coefficient de frottement 1^{er} choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés | <ul style="list-style-type: none"> nuance pour les laitons, pour la géométrie PNW et PRW |
| <ul style="list-style-type: none"> sehr gute Verschleissfestigkeit für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierung bestens geeignet für unterbrochene Schnitte ungeeignet | <ul style="list-style-type: none"> Sorte für Nichteisenmetalle sehr geringer Reibwert für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet | <ul style="list-style-type: none"> Sorte für Messing, für PNW und PRW Geometrie |
| <ul style="list-style-type: none"> very good wear resistance first choice for steel, stainless steel and titanium alloys machining not suitable for interrupted cut | <ul style="list-style-type: none"> grade for non-ferrous materials very low friction ratio first choice for Aluminium up to 5% Si, copper and low alloyed titanium | <ul style="list-style-type: none"> grade for brass, for PNW and PRW geometry |

Géométries de coupe

Spanformgeometrie

Cutting geometries

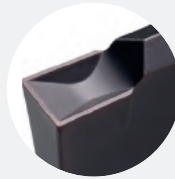
UN

UR
UL

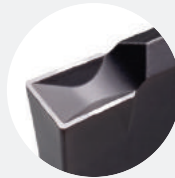
- géométrie positive universelle, bonne maîtrise du copeau
- allgemeine Geometrie, sehr gute Spankontrolle
- all-round insert with efficient chip control

PN

PR



- géométrie légèrement positive pour les aciers, aciers au carbone, aciers alliés
- leicht positive Geometrie für Stahl, Kohlenstoffstahl, legiertem Stahl
- slightly positive geometry for steel, carbon steel, alloyed steel

PNW
PRW

- géométrie neutre pour les laitons
- neutrale Geometrie für Messing
- neutral geometry for brasses

TN



- géométrie négative pour de fortes avances dans des conditions de rigidité favorable
- negative Geometrie für hohe Vorschübe in guten Stabilitätsfällen
- negative geometry for high feed rate in case of good stability

GN



- géométrie universelle pour fonçage-tournage, peut également être utilisée en tronçonnage
- allgemeine Geometrie zum einstecken-langdrehen, kann auch zum abstechen verwendet werden
- all-round insert for grooving and turning, can also be used for parting off



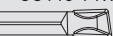
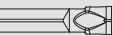


CUT-LINE

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

CUT 16

| | | P Acier Stahl Steel | | | | | | M Inox Rostfreistahl Stainless steel | | |
|---|--|--|----------|---|-----------|--|-----------|---|-----------|-----------|
| | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier faiblement allié Leicht legierter Stahl Low alloyed steel | | Acier fortement allié Legierter Stahl High alloyed steel | | Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic | | |
| | | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | |
| Avance standard Standard Vorschub Standard feed rate | CUT16-UN-001  | TiAlN | 90-140 | 0.03-0.07 | 60-120 | 0.03-0.07 | 50-100 | 0.04-0.08 | 50-120 | 0.03-0.07 |
| | | Tmax | 100-170 | 0.03-0.07 | 70-150 | 0.03-0.07 | 60-120 | 0.04-0.08 | 60-150 | 0.03-0.07 |
| | | Zmax | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.08 | 50-120* | 0.04-0.10 |
| | | HTA | 70-120 | 0.03-0.05 | 60-100 | 0.03-0.05 | 50-90 | 0.03-0.05 | 50-100 | 0.03-0.06 |
| | | AS | | | | | | | | |
| | CUT16-PR-801  | TiAlN | 90-140 | 0.03-0.07 | 60-120 | 0.03-0.07 | 50-100 | 0.03-0.07 | 50-120 | 0.03-0.07 |
| | | Tmax | 100-170 | 0.03-0.07 | 70-150 | 0.03-0.07 | 60-120 | 0.03-0.07 | 60-150 | 0.03-0.07 |
| | CUT16-PRW-801  | N | | | | | | | | |
| | Avance modérée Niedriger Vorschub Low feed rate | CUT16-UN-000F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 |
| HTA | | | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| AS | | | | | | | | | | |
| CUT16-UL/R-800F  | | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| CUT16-UL/R-1500F  | | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |

** arête de coupe vive

** scharfe Schneidkante

** sharp cutting edge

| N Alliage d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys | | | | | | | | S Titane Titan Titanium | | | |
|--|-----------|--|-----------|----------------------------|-----------|---|-----------|-------------------------------|-----------|------------|-----------|
| Aluminium | | Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5% | | Cuivre Kupfer Copper | | Laiton & bronze Messing & Bronze Brass & bronze | | Gr. 1 - 3 | | Gr. 4 - 5 | |
| VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 30-60 | 0.04-0.08 |
| 100-300 | 0.04-0.10 | 100-250 | 0.04-0.10 | 100-300 | 0.03-0.08 | 150-300 | 0.03-0.08 | | | 30-60 | 0.04-0.08 |
| 150-300 | 0.04-0.15 | 100-300 | 0.04-0.10 | 100-300 | 0.04-0.10 | 150-300 | 0.02-0.08 | 30-60 | 0.04-0.08 | 30-60 | 0.04-0.08 |
| | | | | | | 150-300 | 0.03-0.10 | | | | |
| | | | | | | 100-500 | 0.02-0.10 | | | | |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |






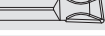
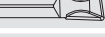




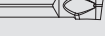
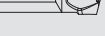
CUT-LINE

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

CUT 22

| | | | P Acier Stahl Steel | | | | | | M Inox Rostfreistahl Stainless steel | |
|--|---|-----------|--|-----------|---|-----------|--|-----------|---|-----------|
| | | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier faiblement allié Leicht legierter Stahl Low alloyed steel | | Acier fortement allié Legierter Stahl High alloyed steel | | Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic | |
| | | | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| Avance standard Standard Vorschub Standard feed rate | CUT22-UN-002 CUT22-UR-802  | TiAlN | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | | Tmax | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 |
| | | Zmax | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.08 | 50-120* | 0.04-0.10 |
| | | HTA | 70-120 | 0.04-0.06 | 60-100 | 0.04-0.06 | 50-90 | 0.04-0.06 | 50-100 | 0.04-0.06 |
| | | AS | | | | | | | | |
| | CUT22-PN-002  | TiAlN | 90-140 | 0.04-0.10 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | | |
| | Tmax | 100-170 | 0.04-0.10 | 70-150 | 0.04-0.10 | 60-120 | 0.04-0.10 | | | |
| | CUT22-PNW-002  | N | | | | | | | | |
| | CUT22-PR-002  | TiAlN | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | Tmax | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 | |
| CUT22-PRW-002  | N | | | | | | | | | |
| CUT22-TN-002  | TiAlN | 90-140 | 0.08-0.18 | 60-120 | 0.08-0.18 | 50-100 | 0.08-0.15 | 50-120 | 0.08-0.20 | |
| Tmax | 100-170 | 0.08-0.18 | 70-150 | 0.08-0.18 | 60-120 | 0.08-0.15 | 60-150 | 0.08-0.20 | | |
| Zmax | 80-130* | 0.08-0.18 | 50-110* | 0.08-0.18 | 50-90* | 0.08-0.15 | | | | |
| CUT22-GN-002 ***  | TiAlN | 90-140 | 0.03-0.12 | 60-120 | 0.03-0.12 | 50-100 | 0.03-0.10 | 50-120 | 0.03-0.08 | |
| Tmax | 100-170 | 0.03-0.12 | 70-150 | 0.03-0.12 | 60-120 | 0.03-0.10 | 70-120 | 0.03-0.08 | | |
| AS | | | | | | | | | | |
| Avance modérée Niedriger Vorschub Low feed rate | CUT22-UN-000F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| | CUT22-UL/R-800F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| | CUT22-UL/R-802F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| | CUT22-UL/R-1500F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |

* premier choix en cas de coupe interrompue

** arête de coupe vive

*** géométrie fonçage-tournage (évent. tronçonnage)

* beste Basis für unterbrochene Schnitte

** scharfe Schneidkante

*** Geometrie zum einstechen und drehen (event. abstechen)

* first choice for interrupted cut

** sharp cutting edge

*** geometry for grooving and turning (event. parting off)

| N Allages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys | | | | | | | | S Titane Titan Titanium | | | |
|--|-----------|---|-----------|----------------------------|-----------|---|-----------|-------------------------------|-----------|------------|-----------|
| Aluminium | | Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicium max. 5% | | Cuivre Kupfer Copper | | Laiton & bronze Messing & Bronze Brass & bronze | | Gr. 1 - 3 | | Gr. 4 - 5 | |
| VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 30-60 | 0.04-0.08 |
| 100-300 | 0.04-0.10 | 100-250 | 0.04-0.10 | 100-300 | 0.03-0.08 | 150-300 | 0.03-0.08 | | | 30-60 | 0.04-0.08 |
| 150-300 | 0.04-0.15 | 100-300 | 0.04-0.10 | 100-300 | 0.04-0.10 | 150-300 | 0.02-0.08 | 30-60 | 0.04-0.08 | 30-60 | 0.04-0.08 |
| | | | | | | 150-300 | 0.03-0.10 | | | | |
| | | | | | | 100-500 | 0.02-0.10 | | | | |
| | | | | | | 150-300 | 0.03-0.10 | | | | |
| | | | | | | 100-500 | 0.02-0.10 | | | | |
| | | | | | | 150-300 | 0.05-0.20 | | | | |
| 100-300 | 0.03-0.12 | 100-200 | 0.03-0.10 | 100-200 | 0.03-0.10 | 100-300 | 0.03-0.12 | | | 30-60 | 0.04-0.08 |
| | | | | | | 100-300 | 0.03-0.12 | | | | |
| 100-300 | 0.03-0.12 | 100-200 | 0.03-0.10 | 100-200 | 0.03-0.10 | 100-300 | 0.03-0.12 | 30-60 | 0.04-0.08 | 30-60 | 0.04-0.08 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |






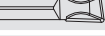
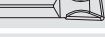


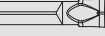

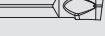
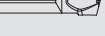
CUT-LINE

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

CUT 31

| | | P Acier Stahl Steel | | | | | | M Inox Rostfreistahl Stainless steel | | |
|--|---|--|-----------|---|-----------|--|-----------|---|-----------|-----------|
| | | Acier de décolletage Automatenstahl Free-cutting steel | | Acier faiblement allié Leicht legierter Stahl Low alloyed steel | | Acier fortement allié Legierter Stahl High alloyed steel | | Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic | | |
| | | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | |
| Avance standard Standard Vorschub Standard feed rate | CUT31-UN-002  | TiAlN | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.10 |
| | | Tmax | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.10 |
| | | Zmax | 80-130* | 0.04-0.10 | 50-110* | 0.04-0.10 | 50-90* | 0.04-0.08 | 50-120* | 0.04-0.10 |
| | | HTA | 70-120 | 0.04-0.06 | 60-100 | 0.04-0.06 | 50-90 | 0.04-0.06 | 50-100 | 0.04-0.06 |
| | | AS | | | | | | | | |
| | CUT31-PN-002  | TiAlN | 90-140 | 0.04-0.10 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | | |
| | | Tmax | 100-170 | 0.04-0.10 | 70-150 | 0.04-0.10 | 60-120 | 0.04-0.10 | | |
| | CUT31-PNW-002  | N | | | | | | | | |
| | CUT31-PR-802  | TiAlN | 90-140 | 0.04-0.08 | 60-120 | 0.04-0.08 | 50-100 | 0.04-0.08 | 50-120 | 0.04-0.08 |
| | | Tmax | 100-170 | 0.04-0.08 | 70-150 | 0.04-0.08 | 60-120 | 0.04-0.08 | 60-150 | 0.04-0.08 |
| CUT31-PRW-802  | N | | | | | | | | | |
| CUT31-TN-002  | TiAlN | 90-140 | 0.08-0.20 | 60-120 | 0.08-0.20 | 50-100 | 0.08-0.15 | 50-120 | 0.08-0.20 | |
| | Tmax | 100-170 | 0.08-0.20 | 70-150 | 0.08-0.20 | 60-120 | 0.08-0.15 | 60-150 | 0.08-0.20 | |
| | Zmax | 80-130* | 0.08-0.20 | 50-110* | 0.08-0.20 | 50-90* | 0.08-0.15 | | | |
| CUT31-GN-002 ***  | TiAlN | 90-140 | 0.04-0.15 | 60-120 | 0.04-0.15 | 50-100 | 0.04-0.10 | 50-120 | 0.04-0.10 | |
| | Tmax | 100-170 | 0.04-0.15 | 70-150 | 0.04-0.15 | 60-120 | 0.04-0.10 | 70-120 | 0.04-0.10 | |
| | AS | | | | | | | | | |
| Avance modérée Niedriger Vorschub Low feed rate | CUT31-UN-000F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| | CUT31-UL/R-800F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| | CUT31-UL/R-802F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |
| | CUT31-UL/R-1500F  | TiAlN | 80-130 | 0.02-0.05 | 50-110 | 0.02-0.05 | 50-90 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | HTA | 60-100 | 0.01-0.04 | 50-90 | 0.01-0.04 | 50-80 | 0.02-0.05 | 50-80 | 0.02-0.05 |
| | | AS | | | | | | | | |

* premier choix en cas de coupe interrompue

** arête de coupe vive

*** géométrie fonçage-tournage (évent. tronçonnage)

* beste Basis für unterbrochene Schnitte

** scharfe Schneidkante

*** Geometrie zum einstechen und drehen (event. abstechen)

* first choice for interrupted cut

** sharp cutting edge

*** geometry for grooving and turning (event. parting off)

| N Allages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys | | | | | | | | S Titane Titan Titanium | | | |
|--|-----------|---|-----------|----------------------------|-----------|---|-----------|-------------------------------|-----------|------------|-----------|
| Aluminium | | Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicium max. 5% | | Cuivre Kupfer Copper | | Laiton & bronze Messing & Bronze Brass & Bronze | | Gr. 1 - 3 | | Gr. 4 - 5 | |
| VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) | VC (m/min) | F (mm/U) |
| 100-250 | 0.03-0.10 | 100-250 | 0.03-0.10 | 100-300 | 0.03-0.10 | 100-300 | 0.03-0.10 | | | 30-60 | 0.04-0.08 |
| 100-300 | 0.04-0.10 | 100-250 | 0.04-0.10 | 100-300 | 0.03-0.08 | 150-300 | 0.03-0.08 | | | 30-60 | 0.04-0.08 |
| 150-300 | 0.04-0.15 | 100-300 | 0.04-0.10 | 100-300 | 0.04-0.10 | 150-300 | 0.02-0.08 | 30-60 | 0.04-0.08 | 30-60 | 0.04-0.08 |
| | | | | | | 150-300 | 0.03-0.10 | | | | |
| | | | | | | 100-500 | 0.02-0.15 | | | | |
| | | | | | | 150-300 | 0.03-0.10 | | | | |
| | | | | | | 100-500 | 0.02-0.15 | | | | |
| | | | | | | 150-300 | 0.05-0.20 | | | | |
| 100-300 | 0.04-0.15 | 100-200 | 0.04-0.10 | 100-200 | 0.04-0.10 | 100-300 | 0.04-0.15 | | | 30-60 | 0.04-0.08 |
| | | | | | | 100-300 | 0.04-0.15 | | | | |
| 100-300 | 0.04-0.15 | 100-200 | 0.04-0.10 | 100-200 | 0.04-0.10 | 100-300 | 0.04-0.15 | 30-60 | 0.04-0.08 | 30-60 | 0.04-0.08 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.01-0.04 | 100-250 | 0.01-0.04 | 100-300 | 0.02-0.05 | | | 30-60 | 0.01-0.04 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | | | 30-60 | 0.02-0.06 |
| 100-300 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-250 | 0.02-0.05 | 100-300 | 0.02-0.05 | 30-60 | 0.02-0.06 | 30-60 | 0.02-0.06 |



CUT-LINE

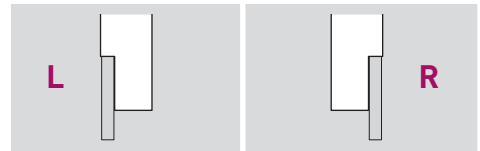
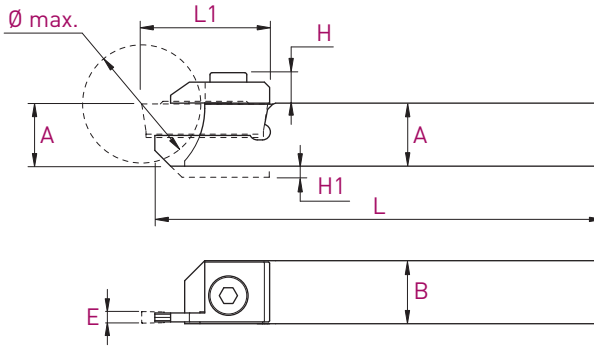
Porte-outils

Halter

Holders

Ø max 34 mm

H Series



| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H | H1 | Art. N° | Art. N° |
|--|-------------|-----|-----------|------|-----|--------------|-----------------|-----------------|
| E 1.6 mm Type CUT16 | 8 x 10 | 115 | 16 | 19.5 | 6.2 | 2 | CUT16-H0810L | CUT16-H0810R |
| | 10 x 10 | 115 | 16 | 19.5 | 6.2 | - | CUT16-H1010L | CUT16-H1010R |
| | 12 x 12 | 130 | 16 | 19.5 | 6.2 | - | CUT16-H1212L | CUT16-H1212R |
| | 12 x 12 | 90 | 16 | 19.5 | 6.2 | - | CUT16-H1212L-90 | CUT16-H1212R-90 |
| | 12.7 x 12.7 | 130 | 16 | 19.5 | 6.2 | - | CUT16-H127127L | CUT16-H127127R |
| | 16 x 16 | 130 | 16 | 19.5 | 6.2 | - | CUT16-H1616L | CUT16-H1616R |
| 20 x 20 | 120 | 16 | 19.5 | 6.2 | - | CUT16-H2020L | CUT16-H2020R | |
| E 2.2 mm Type CUT22 | 10 x 12 | 115 | 20 | 24 | 6.4 | - | CUT22-H1012L | CUT22-H1012R |
| | 12 x 12 | 130 | 20 | 24 | 6.4 | - | CUT22-H1212L | CUT22-H1212R |
| | 12 x 12 | 90 | 20 | 24 | 6.4 | - | CUT22-H1212L-90 | CUT22-H1212R-90 |
| | 12.7 x 12.7 | 130 | 20 | 24 | 6.4 | - | CUT22-H127127L | CUT22-H127127R |
| | 16 x 16 | 130 | 20 | 24 | 6.4 | - | CUT22-H1616L | CUT22-H1616R |
| | 20 x 20 | 120 | 20 | 24 | 6.4 | - | CUT22-H2020L | CUT22-H2020R |
| E 3.1 mm Type CUT31 | 16 x 16 | 130 | 34 | 35 | 7.8 | - | CUT31-H1616L | CUT31-H1616R |
| | 20 x 20 | 120 | 34 | 35 | 7.8 | - | CUT31-H2020L | CUT31-H2020R |
| | 25 x 25 | 140 | 34 | 35 | 7.8 | - | CUT31-H2525L | CUT31-H2525R |

| Pièces de rechange Ersatzteile Spare parts | L | R | Serrage Anzug Torque | |
|--|------------|------------|----------------------------|---------|
| | Art. N° | Art. N° | | Art. N° |
| CUT 16 | CUT16L-SET | CUT16R-SET | V-M4X10-BN7 | 3.5 Nm |
| CUT 22 | CUT22L-SET | CUT22R-SET | V-M4X10-BN7 | 3.5 Nm |
| CUT 31 | CUT31L-SET | CUT31R-SET | V-M5X10-BN7 | 4.5 Nm |

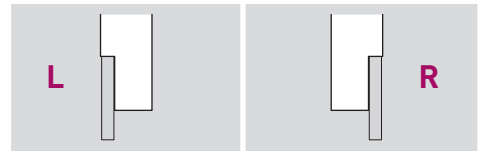
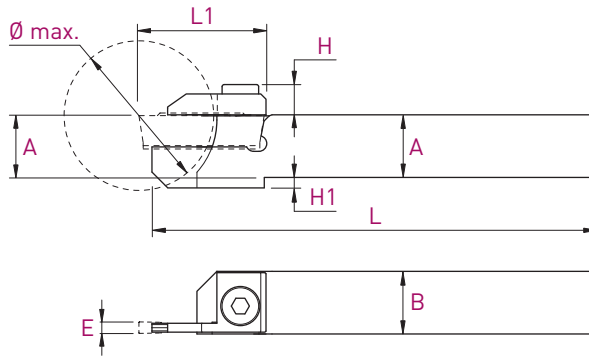
Porte-outils

Halter

Holders

Ø max 42 mm

HX Series



| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H | H1 | Art. N° | Art. N° |
|--|-------------|-----|-----------|----|-----|----|------------------|------------------|
| E 1.6 mm Type CUT16 | 10 x 12 | 115 | 20 | 21 | 6.2 | 2 | CUT16-H1012LX | CUT16-H1012RX |
| | 12 x 12 | 130 | 20 | 21 | 6.2 | - | CUT16-H1212LX | CUT16-H1212RX |
| | 12 x 12 | 90 | 20 | 21 | 6.2 | - | CUT16-H1212LX-90 | CUT16-H1212RX-90 |
| | 12.7 x 12.7 | 130 | 20 | 21 | 6.2 | - | CUT16-H127127LX | CUT16-H127127RX |
| | 16 x 16 | 130 | 20 | 21 | 6.2 | - | CUT16-H1616LX | CUT16-H1616RX |
| | 20 x 20 | 120 | 20 | 21 | 6.2 | - | CUT16-H2020LX | CUT16-H2020RX |
| E 2.2 mm Type CUT22 | 10 x 12 | 115 | 26 | 25 | 6.4 | 4 | CUT22-H1012LX | CUT22-H1012RX |
| | 12 x 12 | 130 | 26 | 25 | 6.4 | 2 | CUT22-H1212LX | CUT22-H1212RX |
| | 12 x 12 | 90 | 26 | 25 | 6.4 | 2 | CUT22-H1212LX-90 | CUT22-H1212RX-90 |
| | 12.7 x 12.7 | 130 | 26 | 25 | 6.4 | - | CUT22-H127127LX | CUT22-H127127RX |
| | 16 x 16 | 130 | 26 | 25 | 6.4 | - | CUT22-H1616LX | CUT22-H1616RX |
| | 20 x 20 | 120 | 26 | 25 | 6.4 | - | CUT22-H2020LX | CUT22-H2020RX |
| E 3.1 mm Type CUT31 | 16 x 16 | 120 | 42 | 37 | 7.8 | 4 | CUT31-H1616LX | CUT31-H1616RX |
| | 20 x 20 | 120 | 42 | 37 | 7.8 | - | CUT31-H2020LX | CUT31-H2020RX |
| | 25 x 25 | 140 | 42 | 37 | 7.8 | - | CUT31-H2525LX | CUT31-H2525RX |

| Pièces de rechange Ersatzteile Spare parts | L | R | | Serrage Anzug Torque |
|--|-------------|-------------|-------------|----------------------------|
| | Art. N° | Art. N° | Art. N° | |
| CUT 16 | CUT16LX-SET | CUT16RX-SET | V-M4X10-BN7 | 3.5 Nm |
| CUT 22 | CUT22LX-SET | CUT22RX-SET | V-M4X10-BN7 | 3.5 Nm |
| CUT 31 | CUT31LX-SET | CUT31RX-SET | V-M5X10-BN7 | 4.5 Nm |

CUT-LINE

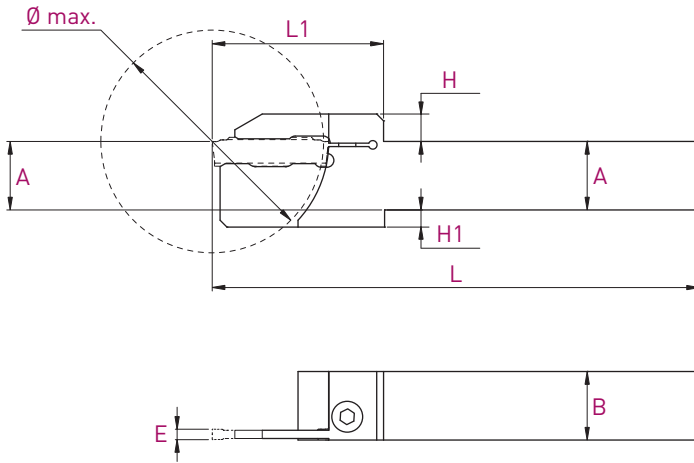
Porte-outils

Halter

Holders

Ø max 65 mm

HZ Series

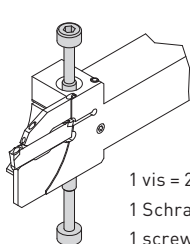
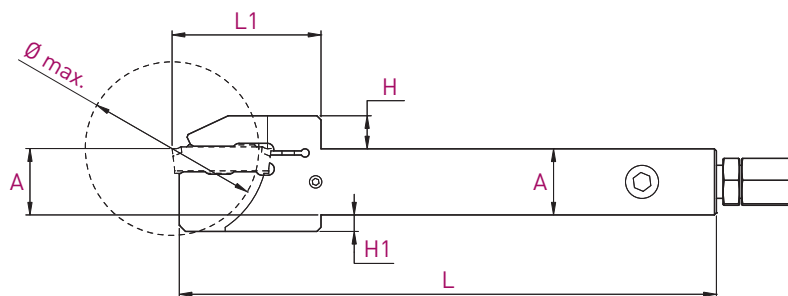


| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H | H1 | | |
|--|---------|-----|-----------|----|---|----|-------------------|-------------------|
| | | | | | | | Art. N° | Art. N° |
| E 2.2 mm Type CUT22 | 16 x 16 | 130 | 32 | 30 | 7 | - | CUT22-H1616LZ-D32 | CUT22-H1616RZ-D32 |
| | 20 x 20 | 130 | 32 | 30 | 7 | - | CUT22-H2020LZ-D32 | CUT22-H2020RZ-D32 |
| | 16 x 16 | 130 | 42 | 35 | 7 | 4 | CUT22-H1616LZ-D42 | CUT22-H1616RZ-D42 |
| | 20 x 20 | 130 | 42 | 35 | 7 | - | CUT22-H2020LZ-D42 | CUT22-H2020RZ-D42 |
| E 3.1 mm Type CUT31 | 20 x 20 | 140 | 52 | 44 | 8 | 5 | CUT31-H2020LZ-D52 | CUT31-H2020RZ-D52 |
| | 25 x 25 | 140 | 52 | 44 | 8 | - | CUT31-H2525LZ-D52 | CUT31-H2525RZ-D52 |
| | 20 x 20 | 140 | 65 | 50 | 8 | 5 | CUT31-H2020LZ-D65 | CUT31-H2020RZ-D65 |
| | 25 x 25 | 140 | 65 | 50 | 8 | - | CUT31-H2525LZ-D65 | CUT31-H2525RZ-D65 |

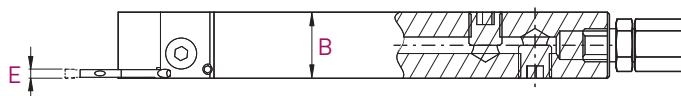
| Pièces de rechange Ersatzteile Spare parts | Art. N° | Serrage Anzug Torque |
|--|--------------------|----------------------------|
| | CUT 22 | |
| CUT 31 | V-M5X10-BN7 | 4.5 Nm |

Porte-outils avec arrosage intégré
 Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply


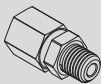

HZ-JET Series



1 vis = 2 possibilités de serrage
 1 Schraube = 2 Spannmöglichkeiten
 1 screw = 2 clamp possibilities



| Plaquettes WSP Inserts | A x B | L | Ø max. | L1 | H | H1 | Art. N° | Art. N° |
|---------------------------|---------|-----|--------|----|---|----|---------------------|---------------------|
| E 2.2 mm | 16 x 16 | 130 | 42 | 36 | 8 | 4 | CUT22-H1616LZ-JET42 | CUT22-H1616RZ-JET42 |
| Type CUT22 | 20 x 20 | 130 | 42 | 36 | 8 | - | CUT22-H2020LZ-JET42 | CUT22-H2020RZ-JET42 |
| E 3.1 mm | 16 x 16 | 140 | 65 | 49 | 9 | 9 | CUT31-H1616LZ-JET65 | CUT31-H1616RZ-JET65 |
| Type CUT31 | 20 x 20 | 140 | 65 | 51 | 9 | 5 | CUT31-H2020LZ-JET65 | CUT31-H2020RZ-JET65 |
| | 25 x 25 | 140 | 65 | 51 | 9 | - | CUT31-H2525LZ-JET65 | CUT31-H2525RZ-JET65 |

| Pièces de rechange Ersatzteile Spare parts |  | Serrage Anzug Torque |  |  |
|--|---|----------------------------|--|---|
| | Art. N° | | Art. N° | Art. N° |
| CUT 22 | V-M4X22-CUT | 3.5 Nm | J-M8X1-D6 | JB-M8X1 |
| CUT 31 | V-M5X25-CUT | 4.5 Nm | J-M8X1-D6 | JB-M8X1 |

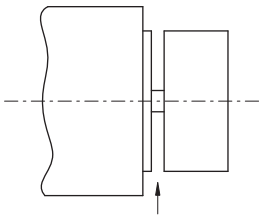
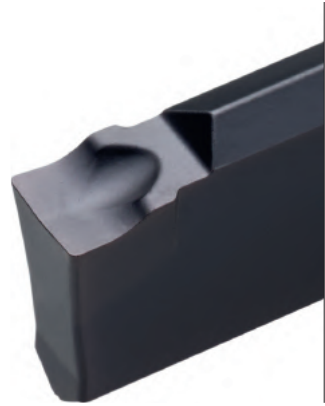
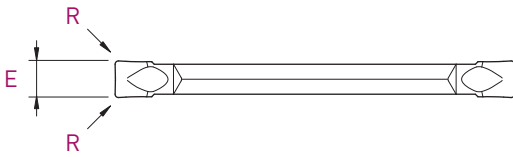
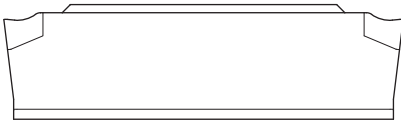
CUT-LINE

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

UN Series



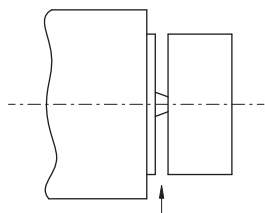
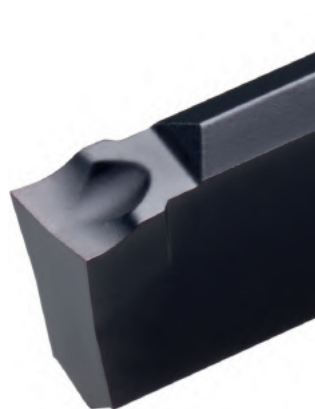
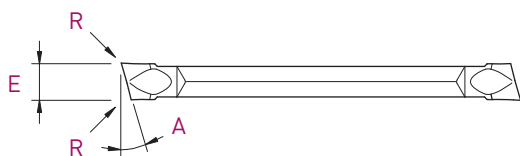
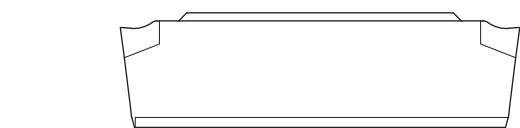
| Type | E _{±0.1} | R | Art. N° | TiAlN | T _{max} | Z _{max} | HTA | AS |
|-------|-------------------|------|---------------|-------|------------------|------------------|-----|----|
| CUT16 | 1.6 | 0.02 | CUT16-UN-000F | ■ | | | ■ | ■ |
| | 1.6 | 0.10 | CUT16-UN-001 | ■ | ■ | ■ | ■ | ■ |
| CUT22 | 2.2 | 0.02 | CUT22-UN-000F | ■ | | | ■ | ■ |
| | 2.2 | 0.20 | CUT22-UN-002 | ■ | ■ | ■ | ■ | ■ |
| CUT31 | 3.1 | 0.02 | CUT31-UN-000F | ■ | | | ■ | ■ |
| | 3.1 | 0.20 | CUT31-UN-002 | ■ | ■ | ■ | ■ | ■ |

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

UL-UR Series



| | | | | UL | | | UR | | | | | | |
|-------|--------|-----|------|----------------|-------|-----|----|----------------|-------|------|------|-----|----|
| Type | E ±0.1 | A | R | Art. N° | TiAlN | HTA | AS | Art. N° | TiAlN | Tmax | Zmax | HTA | AS |
| CUT16 | 1.6 | 8° | 0.02 | CUT16-UL-800F | ■ | ■ | ■ | CUT16-UR-800F | ■ | | | ■ | ■ |
| | 1.6 | 15° | 0.02 | CUT16-UL-1500F | ■ | ■ | ■ | CUT16-UR-1500F | ■ | | | ■ | ■ |
| CUT22 | 2.2 | 8° | 0.02 | CUT22-UL-800F | ■ | ■ | ■ | CUT22-UR-800F | ■ | | | ■ | ■ |
| | 2.2 | 8° | 0.20 | - | | | | CUT22-UR-802 | | ■ | ■ | | |
| | 2.2 | 8° | 0.20 | CUT22-UL-802F | ■ | ■ | ■ | CUT22-UR-802F | ■ | | | ■ | ■ |
| | 2.2 | 15° | 0.02 | CUT22-UL-1500F | ■ | ■ | ■ | CUT22-UR-1500F | ■ | | | ■ | ■ |
| CUT31 | 3.1 | 8° | 0.02 | CUT31-UL-800F | ■ | ■ | ■ | CUT31-UR-800F | ■ | | | ■ | ■ |
| | 3.1 | 8° | 0.20 | CUT31-UL-802F | ■ | ■ | ■ | CUT31-UR-802F | ■ | | | ■ | ■ |
| | 3.1 | 15° | 0.02 | CUT31-UL-1500F | ■ | ■ | ■ | CUT31-UR-1500F | ■ | | | ■ | ■ |

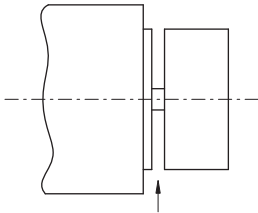
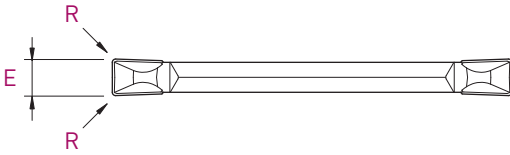
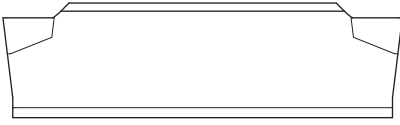
CUT-LINE

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

PN Series



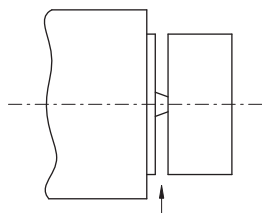
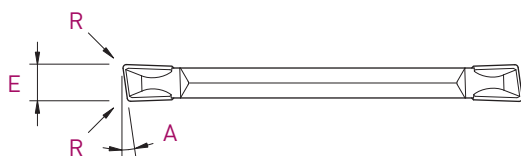
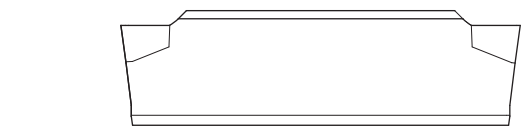
| Type | E ±0.1 | R | Art. N° | TrAIN | Tmax |
|-------|--------|------|--------------|-------|------|
| CUT22 | 2.2 | 0.20 | CUT22-PN-002 | ■ | ■ |
| CUT31 | 3.1 | 0.20 | CUT31-PN-002 | ■ | ■ |

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

PR Series



| Type | E ±0.1 | A | R | Art. N° | TiAlN | Tmax |
|-------|--------|----|------|--------------|-------|------|
| CUT16 | 1.6 | 8° | 0.10 | CUT16-PR-801 | ■ | ■ |
| CUT22 | 2.2 | 8° | 0.20 | CUT22-PR-802 | ■ | ■ |
| CUT31 | 3.1 | 8° | 0.20 | CUT31-PR-802 | ■ | ■ |

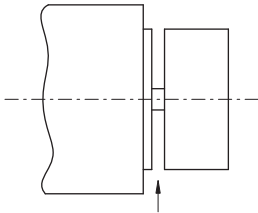
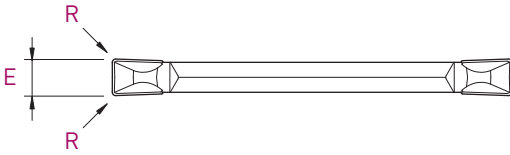
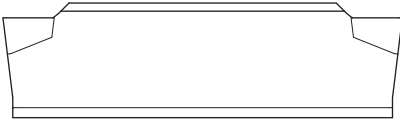
CUT-LINE

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

PNW Series



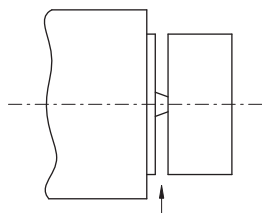
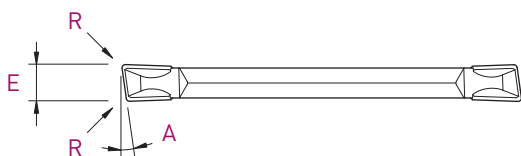
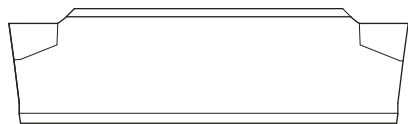
| Type | E ±0.1 | R | Art. N° | Z |
|-------|--------|------|---------------|---|
| CUT22 | 2.2 | 0.20 | CUT22-PNW-002 | ■ |
| CUT31 | 3.1 | 0.20 | CUT31-PNW-002 | ■ |

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

PRW Series



PRW



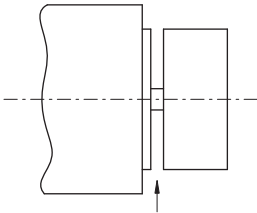
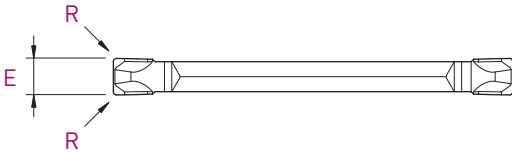
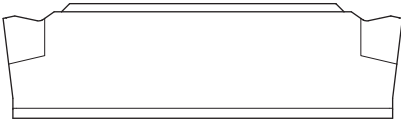
| Type | E ±0.1 | A | R | Art. N° | z |
|-------|--------|----|------|---------------|---|
| CUT16 | 1.6 | 8° | 0.10 | CUT16-PRW-801 | ■ |
| CUT22 | 2.2 | 8° | 0.20 | CUT22-PRW-802 | ■ |
| CUT31 | 3.1 | 8° | 0.20 | CUT31-PRW-802 | ■ |

CUT-LINE

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

Negative geometry

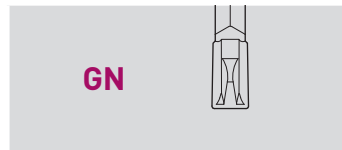
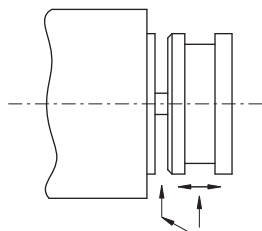
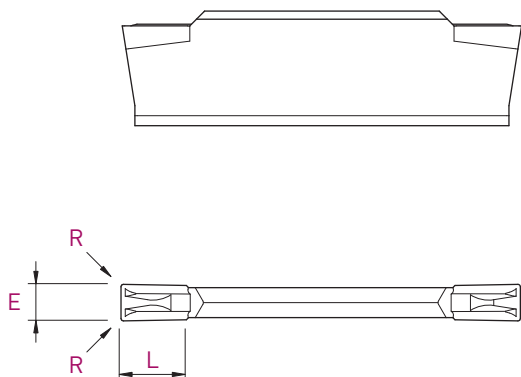
TN Series



| Type | E ± 0.1 | R | Art. N° | TiAlN | Tmax | Zmax |
|-------|-------------|------|--------------|-------|------|------|
| CUT22 | 2.2 | 0.20 | CUT22-TN-002 | ■ | ■ | ■ |
| CUT31 | 3.1 | 0.20 | CUT31-TN-002 | ■ | ■ | ■ |

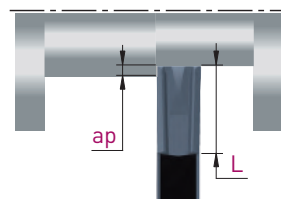
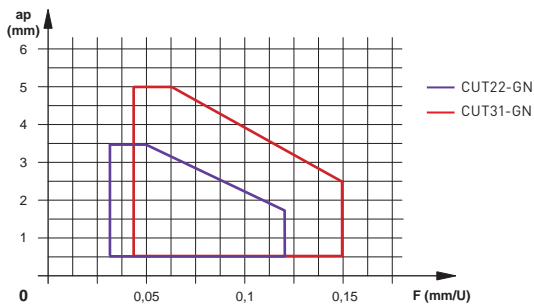
Plaquettes de fonçage, tournage et tronçonnage
 WSP zum einstecken, drehen und abstechen
 Solid carbide inserts for grooving, turning and cut off

GN Series



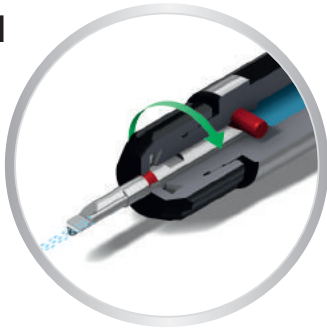
| Type | E ±0.1 | L | R | Art. N° | TiAlN | Tmax | AS |
|-------|--------|-----|------|--------------|-------|------|----|
| CUT22 | 2.2 | 3.5 | 0.15 | CUT22-GN-002 | ■ | ■ | ■ |
| CUT31 | 3.1 | 5.0 | 0.15 | CUT31-GN-002 | ■ | ■ | ■ |

Conseils d'utilisation pour plaquettes type GN
 Anwendungsempfehlungen für GN-Wendeleplatten
 Application recommendations for GN inserts

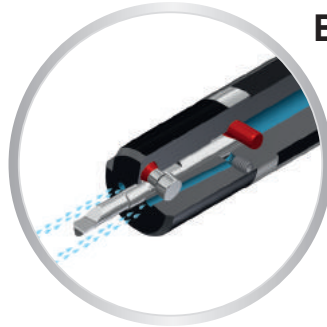


ap max = T dans matière à bonne usinabilité
 ap max = T in Werkstoffe mit gute Zerspanbarkeit
 ap max = T in material with good machinability

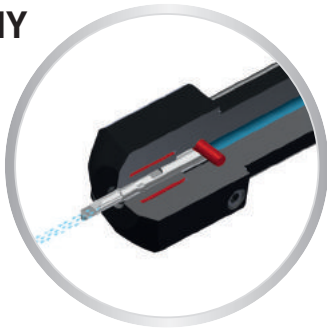
BH



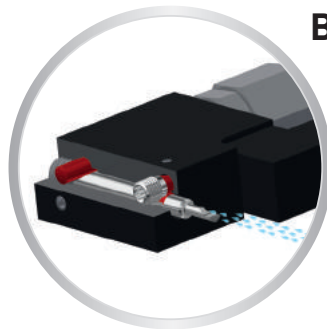
BHS



BHY




BHK

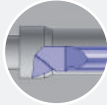


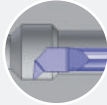
Système de désignation
Bezeichnungssystem
Designation system **Info** > **10.02**

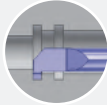
Nuances & paramètres de coupe
Sorten & Schnittwerte
Grades & machining data > **10.08**


Porte-outils
Halter
Holders **BH / BHS / BHY / BHK** > **10.10**

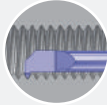
Alésage
Ausbohren
Boring **BA / BAX**  > **10.20**


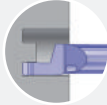
Alésage-copiage
Ausbohren-kopieren
Boring chambering **BCX**  > **10.24**

Copiage
Kopieren
Chambering **C45 / C45X**  > **10.26**

Gorge
Einstechen
Grooving **GX**  > **10.30**

Fonçage-tournage
Einstechen und drehen
Grooving and turning **GTX**  > **10.32**

Filetage
Gewindedrehen
Threading **TP60° / TP55° / TM**  > **10.34**

Gorge frontale
Axiales Stechen
Axial grooving **FEG / FIG**   > **10.40**

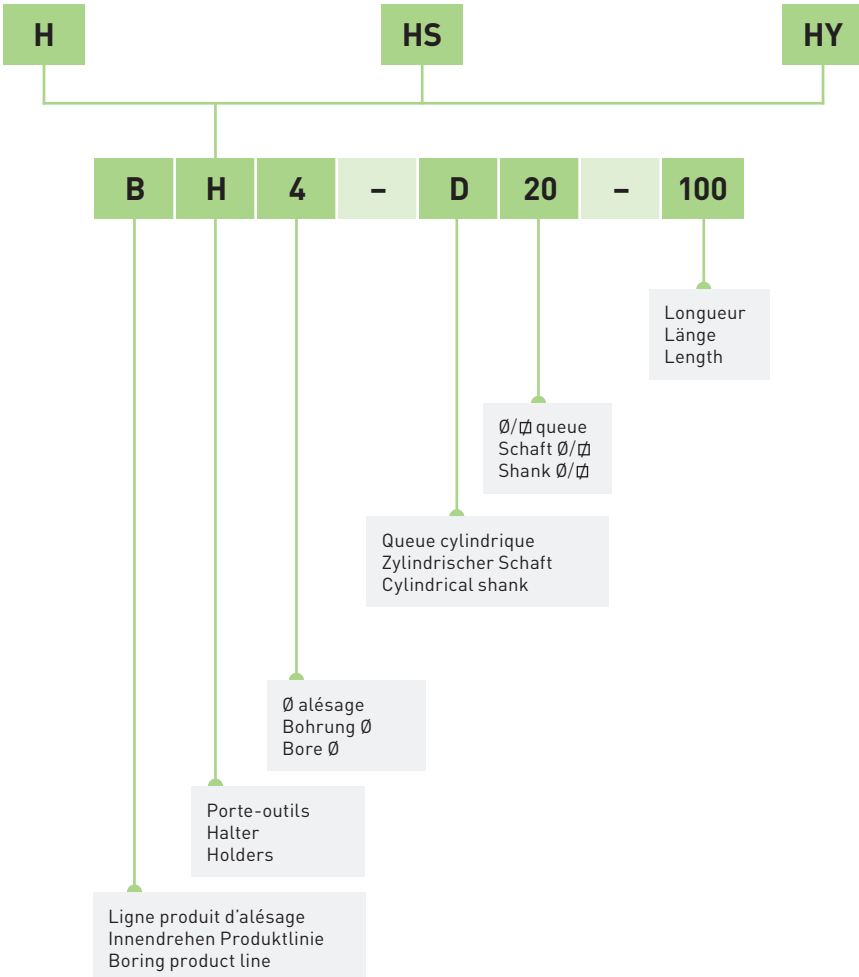
Ébauches / Jauges d'alignement / Adaptations machines / Accessoires
Rohlinge / Richtplatten / Maschinenanpassungen / Zubehöre
Blanks / Adjusting tools / Machines adapters / Accessories > **10.42**

Système de désignation des porte-outils

Halter Bezeichnungssystem

Holders designation system

BH-D / BHS
BHS-D / BHY-D

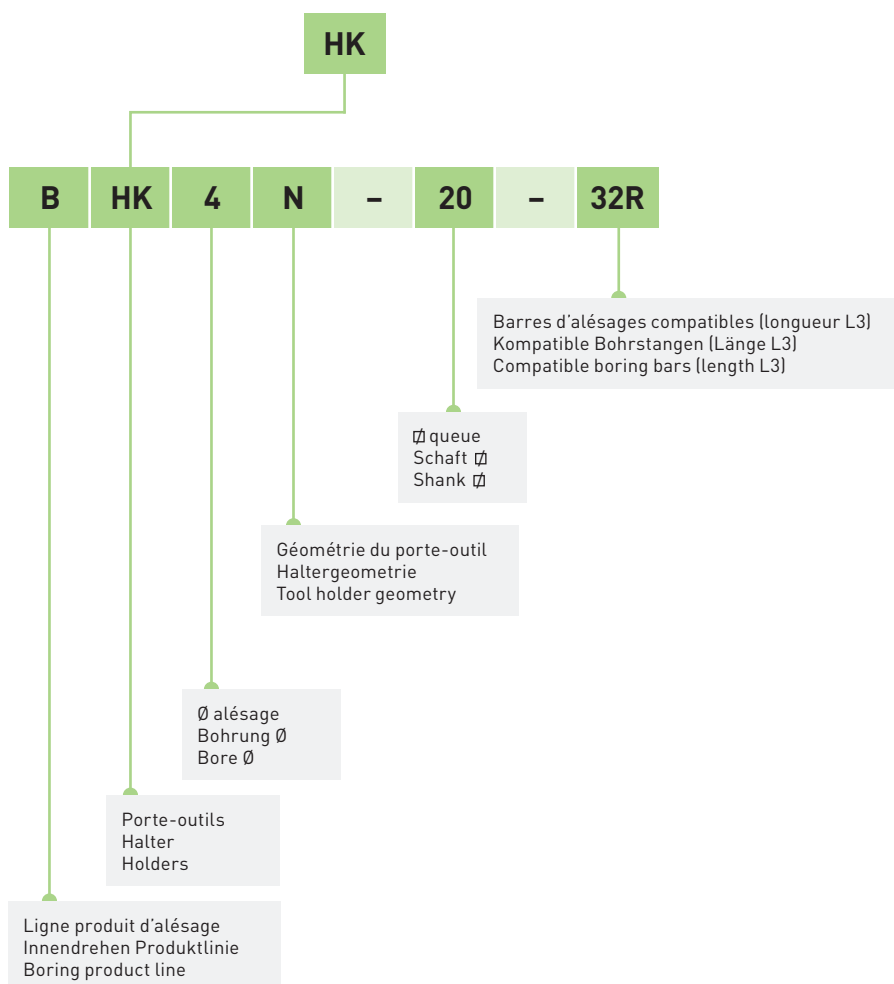
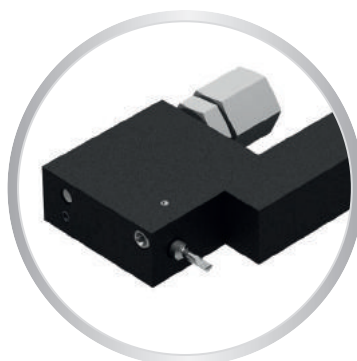


Système de désignation des porte-outils

Halter Bezeichnungssystem

Holders designation system

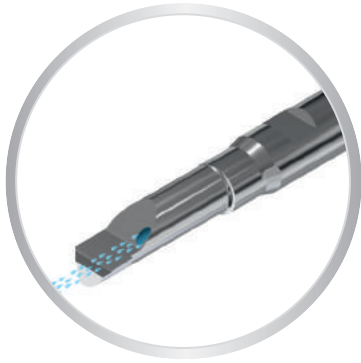
BHK



Système de désignation des barres d'alésage

Bohrstangen Bezeichnungssystem

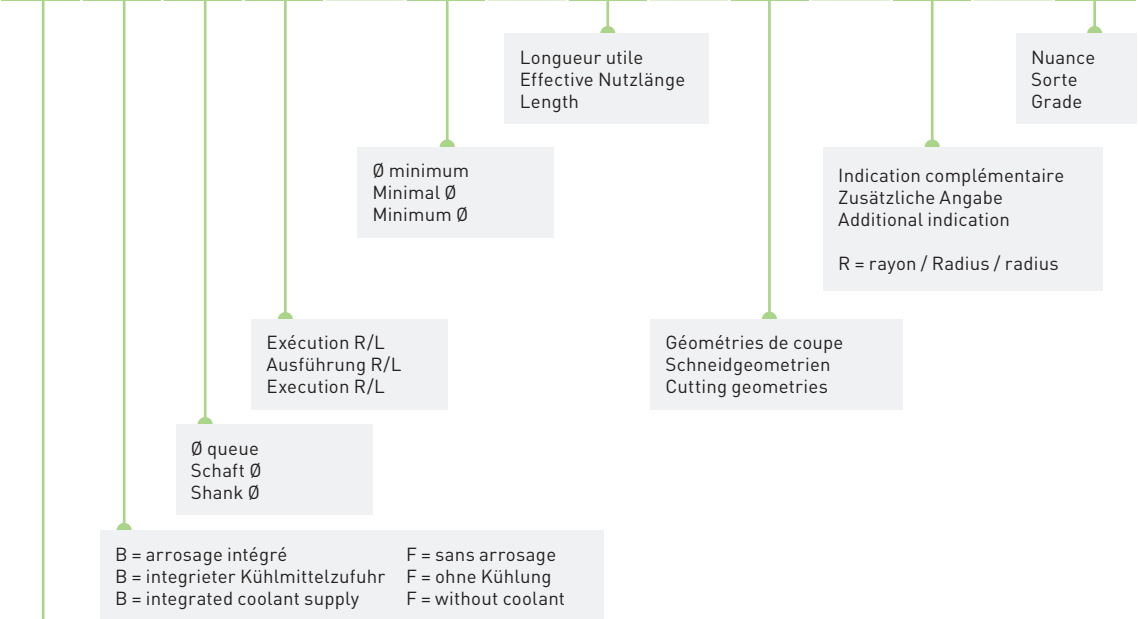
Boring bars designation system



B

F

B B 4 R - 25 - 75 - BAX - R05 - ZN



Ligne produit d'alésage
Innendrehen Produktlinie
Boring product line

Porte-outils avec écrou de serrage

Halter mit Spannmutter

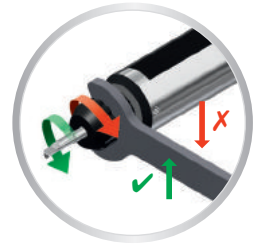
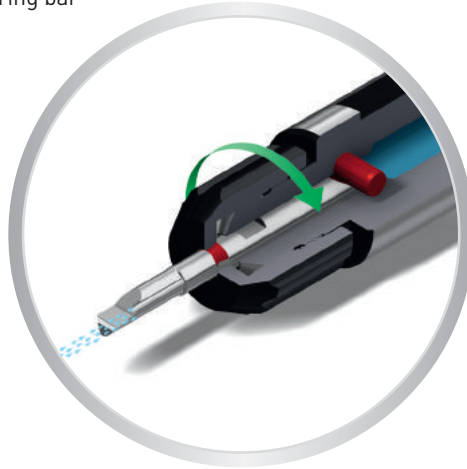
Tool holders with clamping nut

BH-D

Arrosage par la barre d'alésage

Kühlung durch die Bohrstange

Cooling through the boring bar



Porte-outils avec arrosage multiple

Halter mit mehrfaches Kühlungssystem

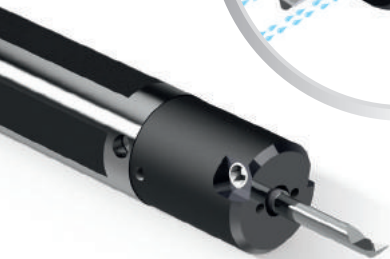
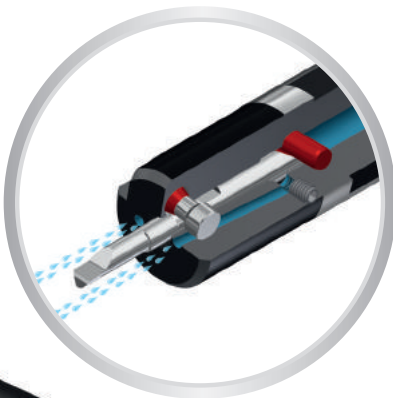
Tool holders with multiple coolant system

BHS-D

Système de serrage à vis transversale

Querverschraubungssystem

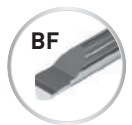
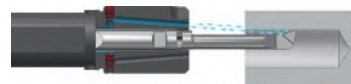
Clamping system with transverse screw



Arrosage sur l'arête de coupe

Kühlung auf der Schneidkante

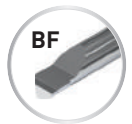
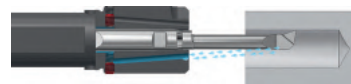
Cooling on the cutting edge



Arrosage favorisant l'évacuation des copeaux

Spanabfuhr fördernde Kühlung

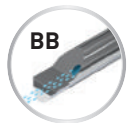
Cooling for better chip outflow



Arrosage par le centre de l'outil

Zentrale Kühlmittelzufuhr

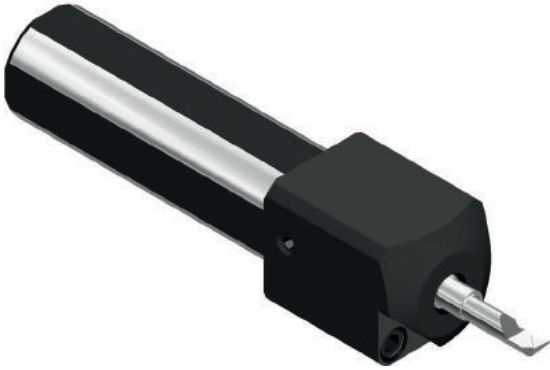
Cooling through the center of the tool



IN-LINE

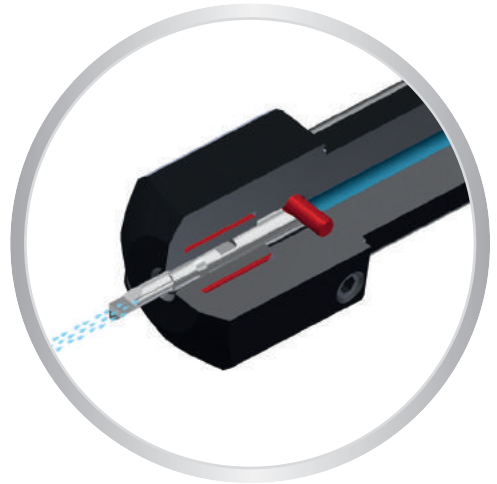
- Porte-outils à serrage hydraulique
- Halter mit Hydro-Dehnspann-System
- Tool holders with hydraulic clamping system

BHY



Excellente absorption des vibrations!
Ausgezeichnete Schwingungsdämpfung!
Excellent vibration absorbtion!

Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar

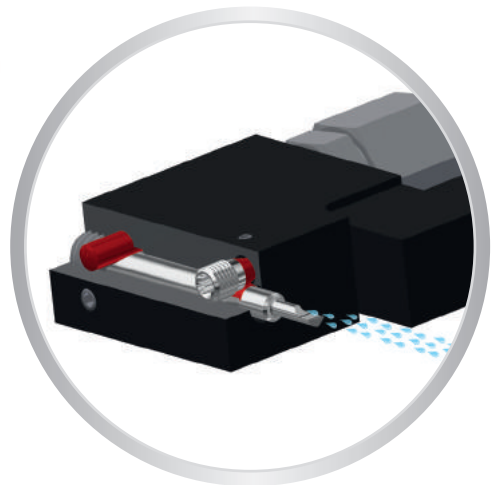
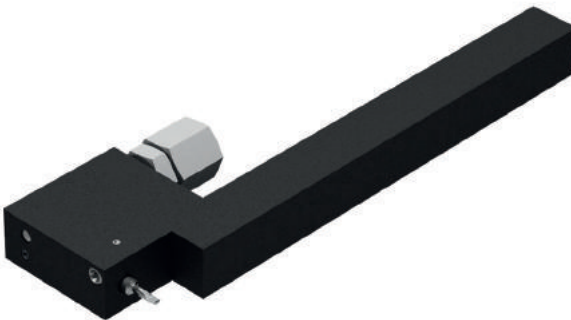


- Porte-outils coudés
- Gekröpfte Halter
- Cranked tool holders

BHK

Système de serrage à vis transversale
Querverschraubungssystem
Clamping system with transverse screw

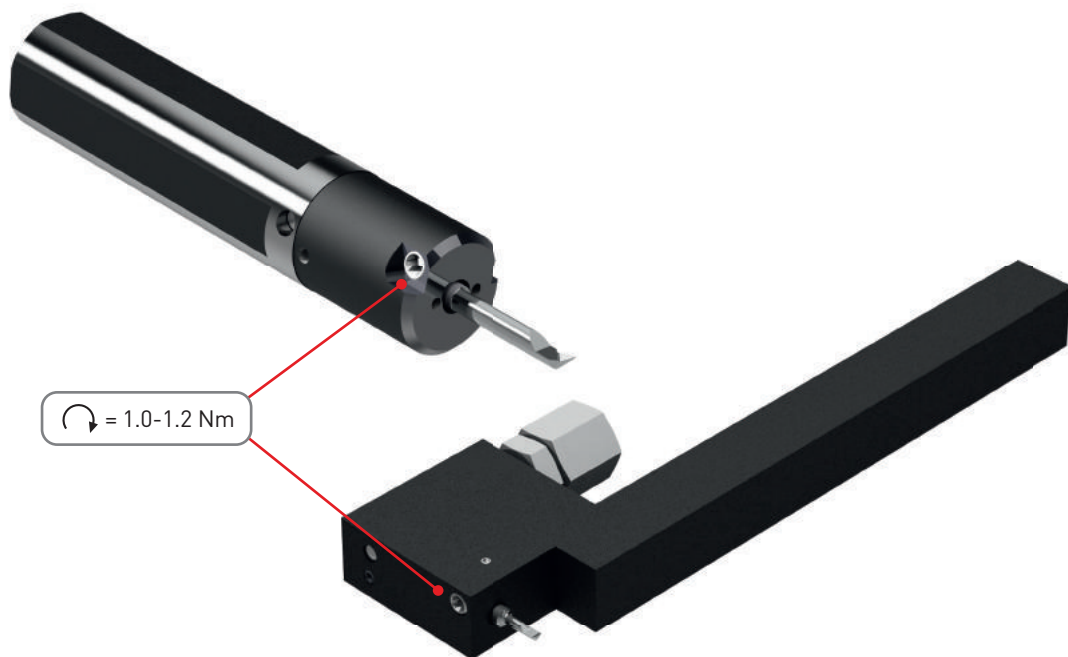
Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar



Accessoires de serrage

Spannzubehöre

Clamping accessories



Nous recommandons le serrage des porte-outils types BHS et BHK avec ce type de tournevis dynamométrique.

Wir empfehlen für das Anziehen der Halter Typ BHS und BHK diese Art von Drehmomentschraubendreher.

For holders type BHS and BHK clamping, we recommend this kind of torque screwdriver.



Art. N°

SET-NM1.2-TX8

Nuances

Sorten

Grades

P

M

N

S

ZTAF

ZN + revêtement PVD
ZN + PVD Beschichtung
ZN + PVD coating

- nuance universelle pour l'usinage des aciers, aciers inoxydables, aciers alliés, alliage de titane
- bonne résistance à la température

- Universalsorte für die Bearbeitung von Stahl, rostfreiem Stahl, Stahllegierung, Titanlegierung
- gute Warmfestigkeit

- universal grade for steel, stainless steel, alloyed steel, titanium alloys
- good heat resistance

P

M

S

ZTAXF

ZN + revêtement PVD
ZN + PVD Beschichtung
ZN + PVD coating

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

P

N

S

ZN

non revêtu
unbeschichtet
uncoated

- nuance de base micro-grain tenace
- 1^{er} choix pour l'usinage des métaux non ferreux

- zähe Basis Feinkornsorte
- beste Wahl für die Bearbeitung von Nichteisenmetalle

- tough base micro-grain grade
- first choice for non-ferrous materials

Paramètres de coupe

Schnittwerte

Machining data

| Matière Werkstoff Material | VC (m/min) | Ø barre d'alésage Bohrstange Ø boring bar Ø | | |
|--|---------------|---|-----------------------|-----------------------|
| | | Ø1.0 - Ø2.0 (mm/U) | Ø2.5 - Ø4.0 (mm/U) | Ø4.5 - Ø5.5 (mm/U) |
| Acier de décolletage Automatenstahl Free-cutting steel (P) | 60-100 | 0.02-0.03 | 0.02-0.08 | 0.03-0.10 |
| Acier faiblement allié Leicht legierter Stahl Low alloyed steel (P) | 50-80 | 0.01-0.03 | 0.02-0.05 | 0.03-0.06 |
| Acier fortement allié Legierter Stahl High alloyed steel (P) | 40-60 | 0.01-0.02 | 0.02-0.04 | 0.02-0.06 |
| Acier inoxydable Rostfreistahl Stainless steel (M) | 40-90 | 0.01-0.03 | 0.02-0.05 | 0.03-0.08 |
| Aluminium (N) | 60-150 | 0.01-0.03 | 0.02-0.06 | 0.03-0.10 |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N) | 60-150 | 0.01-0.03 | 0.02-0.05 | 0.03-0.08 |
| Titane Titan Titanium (S) | 30-70 | 0.01-0.03 | 0.02-0.05 | 0.03-0.10 |

Porte-outils avec écrou de serrage

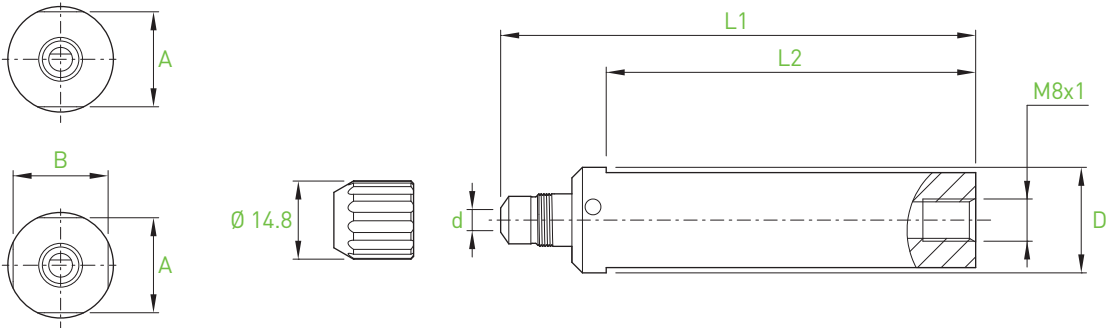
Halter mit Spannmutter

Tool holders with clamping nut

BH4-D



> page 10.05



| d | Bars | D | L1 | L2 | A x B | 2 flats | 4 flats | Art. N° |
|------|------------------|-------|-----------|-----|-----------|---------------|---------|----------------|
| 4 | BB4... BF4... | 10 | 75 | 55 | 8.8x8.8 | ■ | | BH4-D10-75 |
| | | 12 | 75 | 55 | 11.2x11.2 | ■ | | BH4-D12-75 |
| | | 12.7 | 75 | 55 | 11.2x11.2 | ■ | | BH4-D12.7-75 |
| | | 15.87 | 75 | 55 | 14x14 | ■ | | BH4-D15.87-75 |
| | | 16 | 75 | 55 | 14x14 | ■ | | BH4-D16-75 |
| | | 16 | 75 | 55 | 14x14 | | ■ | BH4-D16-75-F4 |
| | | 19.05 | 90 | 70 | 17x17 | ■ | | BH4-D19.05-90 |
| | | 20 | 90 | 70 | 18x18 | ■ | | BH4-D20-90 |
| | | 20 | 90 | 70 | 18x18 | | ■ | BH4-D20-90-F4 |
| | | 20 | 160 | 140 | 18x18 | | ■ | BH4-D20-160-F4 |
| | | 22 | 90 | 70 | 20x20 | ■ | | BH4-D22-90 |
| | | 22 | 90 | 70 | 20x20 | | ■ | BH4-D22-90-F4 |
| | | 22 | 130 | 110 | 20x20 | | ■ | BH4-D22-130-F4 |
| | | 25 | 100 | 80 | 23x23 | ■ | | BH4-D25-100 |
| | | 25 | 100 | 80 | 23x23 | | ■ | BH4-D25-100-F4 |
| | | 25 | 170 | 150 | 23x23 | | ■ | BH4-D25-170-F4 |
| 25.4 | 100 | 80 | 23.4x23.4 | ■ | | BH4-D25.4-100 | | |
| 28 | 100 | 80 | 26x26 | ■ | | BH4-D28-100 | | |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

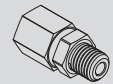
BH4-M10



Art. N°

C-BH4-M10

Option



Art. N°

BH4...

J-M8X1-D6

more option
see JET-Line

Porte-outils avec écrou de serrage

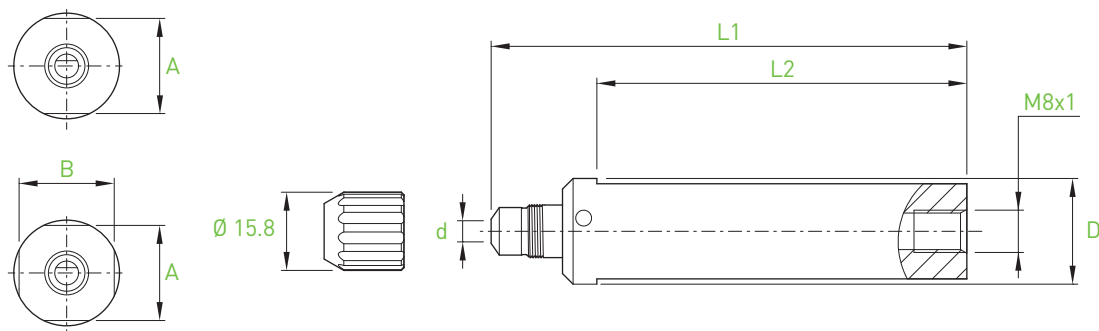
Halter mit Spannmutter

Tool holders with clamping nut


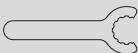
BH6-D

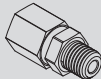


> page 10.05



| d | Bars | D | L1 | L2 | A x B | 2 flats | 4 flats | Art. N° |
|----|------------------|-------|-------|-----|-----------|-------------|---------|----------------|
| 6 | BB6... BF6... | 12 | 75 | 55 | 11.2x11.2 | ■ | | BH6-D12-75 |
| | | 12.7 | 75 | 55 | 11.2x11.2 | ■ | | BH6-D12.7-75 |
| | | 15.87 | 75 | 55 | 14x14 | ■ | | BH6-D15.87-75 |
| | | 16 | 75 | 55 | 14x14 | ■ | | BH6-D16-75 |
| | | 19.05 | 90 | 70 | 17x17 | ■ | | BH6-D19.05-90 |
| | | 20 | 90 | 70 | 18x18 | ■ | | BH6-D20-90 |
| | | 20 | 90 | 70 | 18x18 | | ■ | BH6-D20-90-F4 |
| | | 20 | 160 | 140 | 18x18 | | ■ | BH6-D20-160-F4 |
| | | 22 | 90 | 70 | 20x20 | ■ | | BH6-D22-90 |
| | | 22 | 90 | 70 | 20x20 | | ■ | BH6-D22-90-F4 |
| | | 22 | 130 | 110 | 20x20 | | ■ | BH6-D22-130-F4 |
| | | 25 | 100 | 80 | 23x23 | ■ | | BH6-D25-100 |
| | | 25 | 100 | 80 | 23x23 | | ■ | BH6-D25-100-F4 |
| | | 25 | 170 | 150 | 23x23 | | ■ | BH6-D25-170-F4 |
| | | 25.4 | 100 | 80 | 23.4x23.4 | ■ | | BH6-D25.4-100 |
| 28 | 100 | 80 | 26x26 | ■ | | BH6-D28-100 | | |

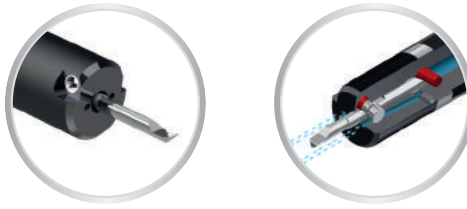
| Pièces de rechange Ersatzteile Spare parts |  Art. N° |  Art. N° |
|--|--|--|
| BH6... | BH6-M12 | C-BH6-M12 |

| Option |  Art. N° |
|--------|--|
| BH6... | J-M8X1-D6 <small>more option see JET-Line</small> |

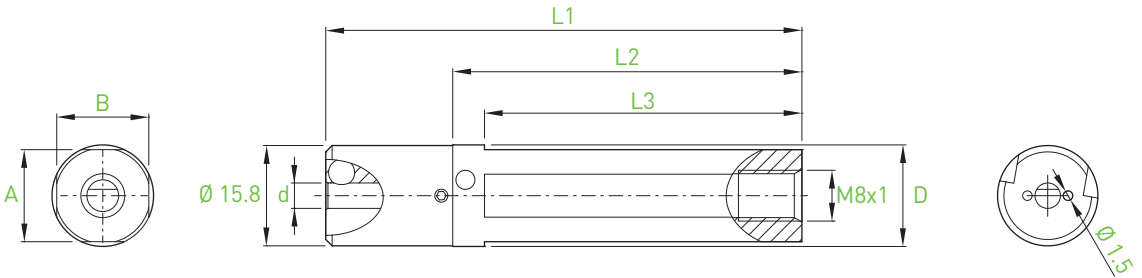
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Porte-outils avec arrosage multiple
 Halter mit mehrfaches Kühlungssystem
 Tool holders with multiple coolant system

BHS4-D

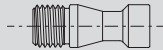


> page 10.05/10.07



| d | Bars | D | L1 | L2 | L3 | A x B | Art. N° |
|----|------------------|-------|-----|-------|-----------------|-----------|-------------------|
| 4 | BB4... BF4... | 10 | 75 | 55 | 50 | 9.2x9.2 | BHS4-D10-75-F4 |
| | | 12 | 75 | 55 | 50 | 11x11 | BHS4-D12-75-F4 |
| | | 12.7 | 75 | 55 | 50 | 11.7x11.7 | BHS4-D12.7-75-F4 |
| | | 15.87 | 75 | 55 | 50 | 14.5x14.5 | BHS4-D15.87-75-F4 |
| | | 16 | 75 | 55 | 50 | 14.5x14.5 | BHS4-D16-75-F4 |
| | | 16 | 110 | 90 | 85 | 14.5x14.5 | BHS4-D16-110-F4 |
| | | 19.05 | 90 | 70 | 65 | 17x17 | BHS4-D19.05-90-F4 |
| | | 20 | 90 | 70 | 65 | 18x18 | BHS4-D20-90-F4 |
| | | 20 | 160 | 140 | 135 | 18x18 | BHS4-D20-160-F4 |
| | | 22 | 90 | 70 | 65 | 20x20 | BHS4-D22-90-F4 |
| | | 22 | 130 | 110 | 105 | 20x20 | BHS4-D22-130-F4 |
| | | 25 | 100 | 80 | 75 | 23x23 | BHS4-D25-100-F4 |
| | | 25 | 170 | 150 | 145 | 23x23 | BHS4-D25-170-F4 |
| | | 25.4 | 100 | 80 | 75 | 23x23 | BHS4-D25.4-100-F4 |
| 28 | 100 | 80 | 75 | 26x26 | BHS4-D28-100-F4 | | |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°



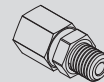
Art. N°

BHS4...

V-BHS-M4X0.5-T8

C-T8

Option



Art. N°



Art. N°

BHS4...

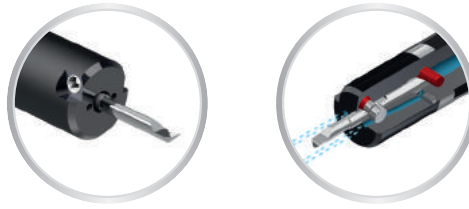
J-M8X1-D6

SET-NM1.2-TX8

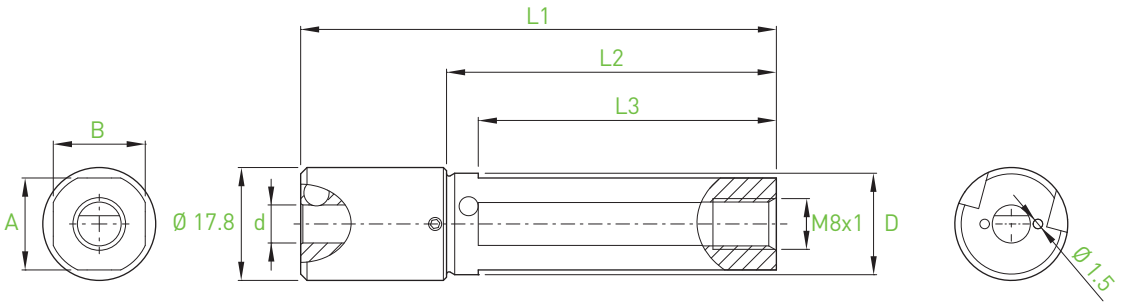
more option
see JET-Line

Porte-outils avec arrosage multiple
 Halter mit mehrfaches Kühlungssystem
 Tool holders with multiple coolant system

BHS6-D

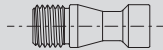


> page 10.05/10.07

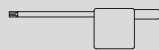


| d | Bars | D | L1 | L2 | L3 | A x B | Art. N° |
|----|------------------|-------|-----|-------|-----------------|-----------|-------------------|
| 6 | BB6... BF6... | 12 | 75 | 52 | 47 | 11x11 | BHS6-D12-75-F4 |
| | | 12.7 | 75 | 52 | 47 | 11.7x11.7 | BHS6-D12.7-75-F4 |
| | | 15.87 | 75 | 52 | 47 | 14.5x14.5 | BHS6-D15.87-75-F4 |
| | | 16 | 75 | 52 | 47 | 14.5x14.5 | BHS6-D16-75-F4 |
| | | 16 | 110 | 87 | 82 | 14.5x14.5 | BHS6-D16-110-F4 |
| | | 19.05 | 90 | 67 | 62 | 17x17 | BHS6-D19.05-90-F4 |
| | | 20 | 90 | 67 | 62 | 18x18 | BHS6-D20-90-F4 |
| | | 20 | 160 | 137 | 132 | 18x18 | BHS6-D20-160-F4 |
| | | 22 | 90 | 67 | 62 | 20x20 | BHS6-D22-90-F4 |
| | | 22 | 130 | 107 | 102 | 20x20 | BHS6-D22-130-F4 |
| | | 25 | 100 | 77 | 72 | 23x23 | BHS6-D25-100-F4 |
| | | 25 | 170 | 147 | 142 | 23x23 | BHS6-D25-170-F4 |
| | | 25.4 | 100 | 77 | 72 | 23x23 | BHS6-D25.4-100-F4 |
| 28 | 100 | 77 | 72 | 26x26 | BHS6-D28-100-F4 | | |

Pièces de rechange
 Ersatzteile
 Spare parts



Art. N°



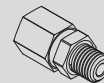
Art. N°

BHS6...

V-BHS-M4X0.5-T8

C-T8

Option



Art. N°



Art. N°

BHS6...

J-M8X1-D6

SET-NM1.2-TX8

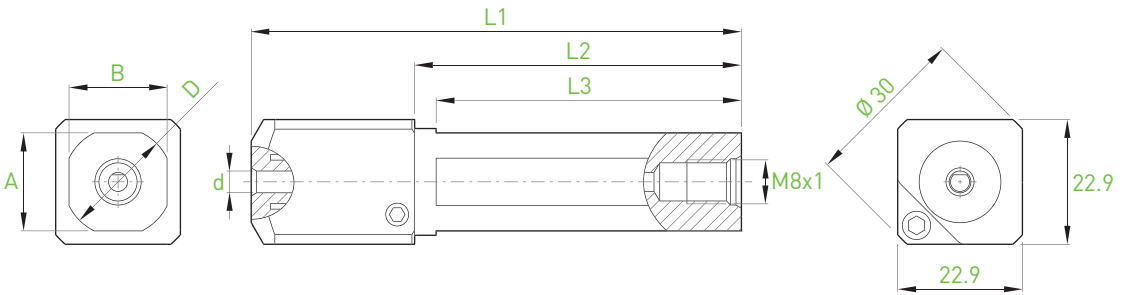
more option
 see JET-Line

Porte-outils à serrage hydraulique
 Halter mit Hydro-Dehnspann-System
 Tool holders with hydraulic clamping system

BHY4-D

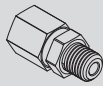


> page 10.06

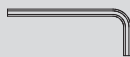


| d | Bars | D | L1 | L2 | L3 | A x B | Art. N° |
|---|------------------|-------|-----|----|----|-----------|-------------------|
| 4 | BB4... BF4... | 12 | 90 | 60 | 55 | 11.2x11.2 | BHY4-D12-90-F4 |
| | | 16 | 90 | 60 | 55 | 14.5x14.5 | BHY4-D16-90-F4 |
| | | 19.05 | 90 | 60 | 55 | 17x17 | BHY4-D19.05-90-F4 |
| | | 20 | 90 | 60 | 55 | 18x18 | BHY4-D20-90-F4 |
| | | 22 | 90 | 60 | 55 | 20x20 | BHY4-D22-90-F4 |
| | | 25 | 100 | 70 | 65 | 23x23 | BHY4-D25-100-F4 |

Pièces de rechange
 Ersatzteile
 Spare parts



Art. N°



Art. N°

BHY4...

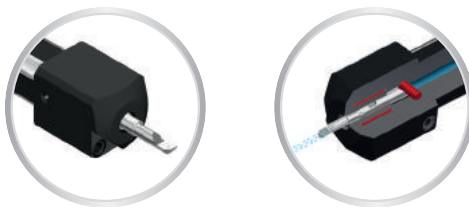
J-M8X1-D6

C-6P-3.0

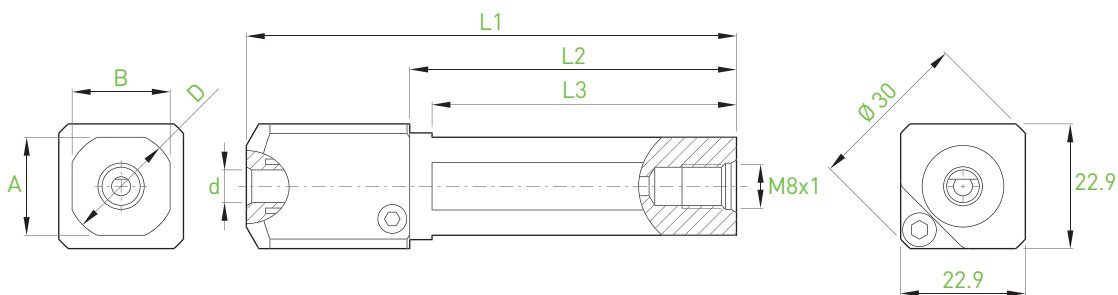
more option
 see JET-Line

Porte-outils à serrage hydraulique
 Halter mit Hydro-Dehnspann-System
 Tool holders with hydraulic clamping system

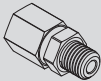
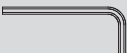
BHY6-D



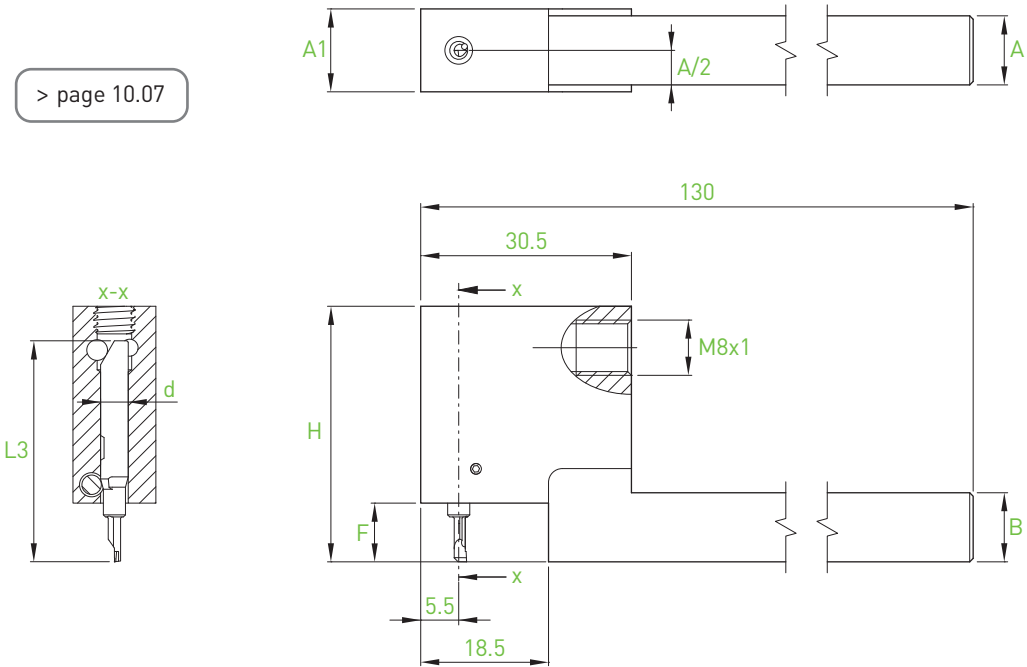
> page 10.06



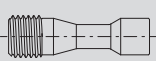
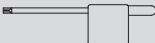
| d | Bars | D | L1 | L2 | L3 | A x B | Art. N° |
|---|------------------|-------|-----|----|----|-----------|-------------------|
| 6 | BB6... BF6... | 12 | 90 | 60 | 55 | 11.2x11.2 | BHY6-D12-90-F4 |
| | | 16 | 90 | 60 | 55 | 14.5x14.5 | BHY6-D16-90-F4 |
| | | 19.05 | 90 | 60 | 55 | 17x17 | BHY6-D19.05-90-F4 |
| | | 20 | 90 | 60 | 55 | 18x18 | BHY6-D20-90-F4 |
| | | 22 | 90 | 60 | 55 | 20x20 | BHY6-D22-90-F4 |
| | | 25 | 100 | 70 | 65 | 23x23 | BHY6-D25-100-F4 |

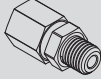

| | | |
|--|---|---|
| Pièces de rechange Ersatzteile Spare parts |  |  |
| | Art. N° | Art. N° |
| BHY6... | J-M8X1-D6 more option see JET-Line | C-6P-3.0 |

> page 10.07



| d | Bars | L3 | A x B | F | H | A1 | Art. N° |
|---|--------------------|----|-------|------|----|----|------------------------|
| 4 | BB4R... BF4R... | 32 | 8x8 | 8.5 | 37 | 12 | BHK4N-0808X-32R |
| | | | 10x10 | 8.5 | 37 | 12 | BHK4N-1010X-32R |
| | | | 12x12 | 8.5 | 37 | 12 | BHK4N-1212X-32R |
| | | | 16x16 | 8.5 | 37 | 16 | BHK4N-1616X-32R |
| | | 37 | 8x8 | 13.5 | 42 | 12 | BHK4N-0808X-37R |
| | | | 10x10 | 13.5 | 42 | 12 | BHK4N-1010X-37R |
| | | | 12x12 | 13.5 | 42 | 12 | BHK4N-1212X-37R |
| | | | 16x16 | 13.5 | 42 | 16 | BHK4N-1616X-37R |
| | | 42 | 10x10 | 18.5 | 47 | 12 | BHK4N-1010X-42R |
| | | | 12x12 | 18.5 | 47 | 12 | BHK4N-1212X-42R |
| | | | 16x16 | 18.5 | 47 | 16 | BHK4N-1616X-42R |

| Pièces de rechange Ersatzteile Spare parts |  |  |
|--|---|---|
| | Art. N° | Art. N° |
| BHK4N... | V-BHK-M4X0.5-T8 | C-T8 |

| Option |  |  |
|----------|---|---|
| | Art. N° | Art. N° |
| BHK4N... | J-M8X1-D6 | SET-NM1.2-TX8 |
| | more option see JET-Line | |

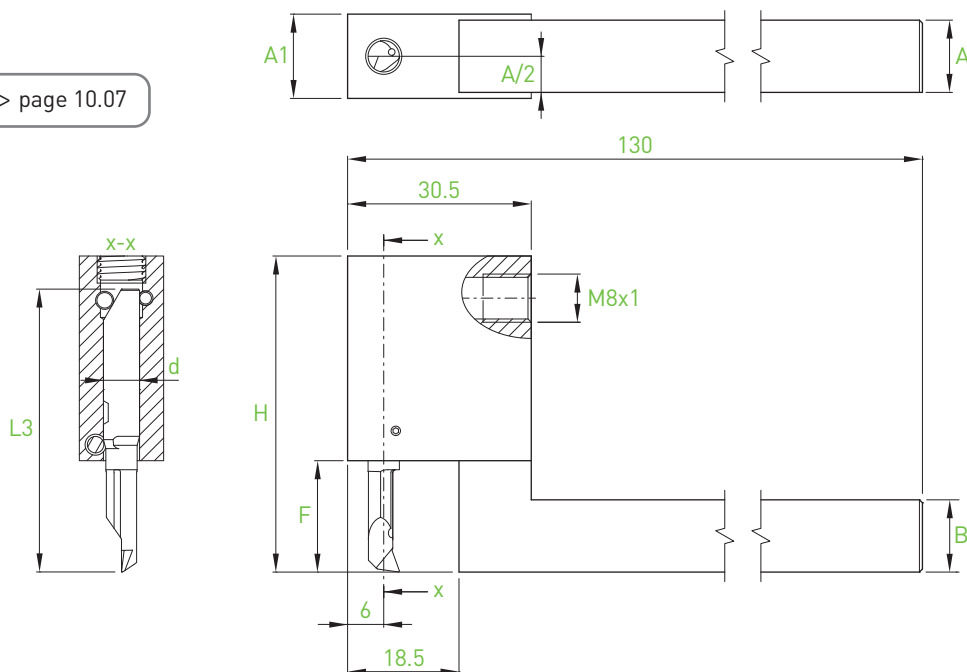
Porte-outils coudés

Kröpfunghalter

Cranked tool holders

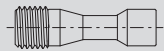
BHK6N

> page 10.07

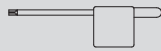


| d | Bars | L3 | A x B | F | H | A1 | Art. N° |
|---|--------------------|----|-------|------|------|----|-----------------|
| 6 | BB6R... BF6R... | 47 | 10x10 | 18.5 | 52.5 | 12 | BHK6N-1010X-47R |
| | | | 12x12 | 18.5 | 52.5 | 12 | BHK6N-1212X-47R |
| | | | 16x16 | 18.5 | 52.5 | 16 | BHK6N-1616X-47R |
| | | 57 | 10x10 | 28.5 | 62.5 | 12 | BHK6N-1010X-57R |
| | | | 12x12 | 28.5 | 62.5 | 12 | BHK6N-1212X-57R |
| | | | 16x16 | 28.5 | 62.5 | 16 | BHK6N-1616X-57R |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°



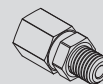
Art. N°

BHK6N...

V-BHK-M4X0.5-T8

C-T8

Option



Art. N°



Art. N°

BHK6N...

J-M8X1-D6

SET-NM1.2-TX8

more option
see JET-Line

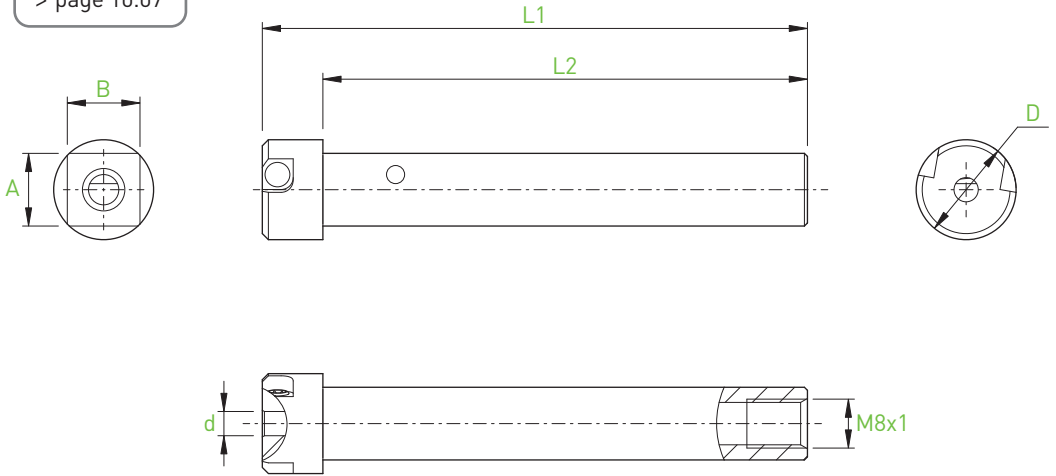
IN-LINE

Porte-outils section carrée
 Viereckige Halter
 Square holders

BHS4

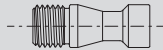
new

> page 10.07



| d | Bars | A x B | L1 | L2 | D | Art. N° |
|---|---------------|-------|-----|----|------|---------------------|
| 4 | BB4... BF4... | 12x12 | 90 | 80 | 16.5 | BHS4-1212-90 |
| | | 16x16 | 100 | 90 | 15.5 | BHS4-1616-90 |

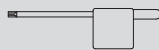
Pièces de rechange
 Ersatzteile
 Spare parts



Art. N°

BHS4...

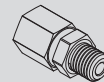
V-BHS-M4X0.5-T8



Art. N°

C-T8

Option



Art. N°

BHS4...

J-M8X1-D6

more option
 see JET-Line



Art. N°

SET-NM1.2-TX8

Porte-outils section carrée

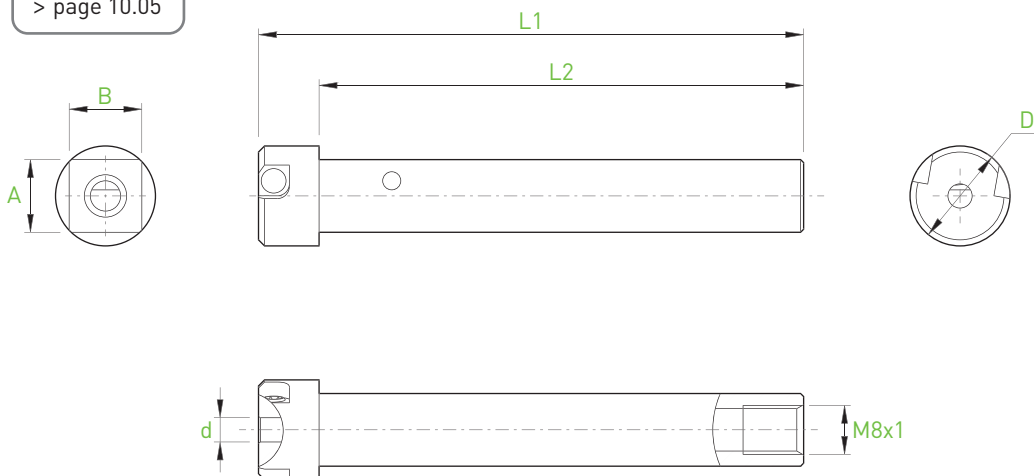
Viereckige Halter

Square holders

BHS6

new

> page 10.05



| d | Bars | A x B | L1 | L2 | D | Art. N° |
|---|---------------|----------------|-----------|---------|-----------|------------------------------|
| 6 | BB6... BF6... | 12x12 16x16 | 90 100 | 80 - | 17.5 - | BHS6-1212-90 BHS6-1616-90 |

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

BHS6...

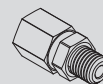
V-BHS-M4X0.5-T8



Art. N°

C-T8

Option



Art. N°

BHS6...

J-M8X1-D6

more option
see JET-Line

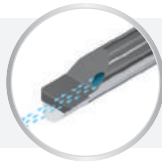


Art. N°

SET-NM1.2-TX8

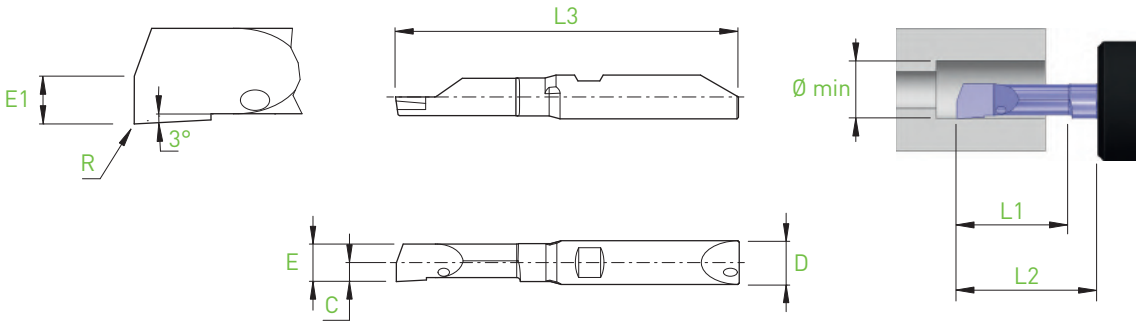
IN-LINE

Alésage
Ausbohren
Boring



BB4...

BA



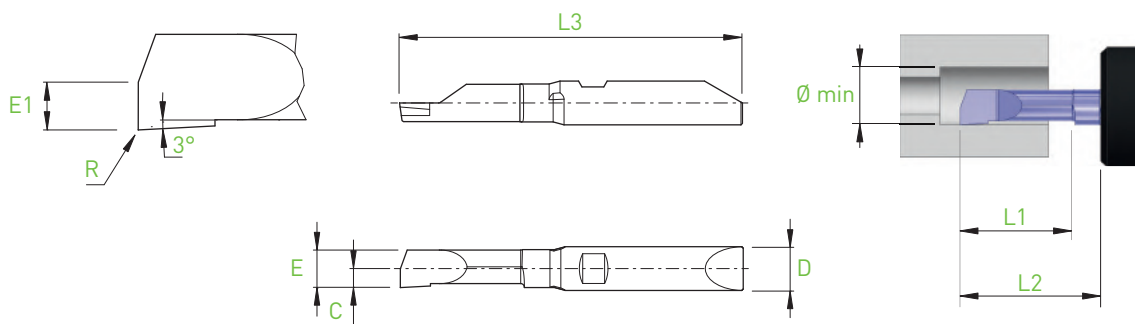
| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E | E1 | C | R | L3 | Art. N° | R | | | L | | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|---------------------|----|--------------------|------|-------|----|------|-------|-----|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZTAXF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.3 | 0.9 | 10 | 8.5 | 0.27 | 0.13 | 0.15 | 0 | 32 | BB4R/L-0309-BA | ■ | ■ | ■ | □ | □ | □ |
| | | 0.4 | 1.2 | 10 | 8.5 | 0.36 | 0.18 | 0.20 | 0 | 32 | BB4R/L-0412-BA | ■ | ■ | ■ | □ | □ | □ |
| | | 0.5 | 1.5 | 10 | 8.5 | 0.45 | 0.22 | 0.25 | 0 | 32 | BB4R/L-0515-BA | ■ | ■ | ■ | □ | □ | □ |
| | | 0.6 | 1.8 | 10 | 8.5 | 0.54 | 0.27 | 0.30 | 0 | 32 | BB4R/L-0618-BA | ■ | ■ | ■ | □ | □ | new |
| | | 0.7 | 2.1 | 10 | 8.5 | 0.63 | 0.31 | 0.35 | 0 | 32 | BB4R/L-0721-BA | ■ | ■ | ■ | □ | □ | new |
| | | 0.8 | 2.4 | 10 | 8.5 | 0.72 | 0.36 | 0.40 | 0 | 32 | BB4R/L-0824-BA | ■ | ■ | ■ | □ | □ | new |
| | | 0.9 | 2.7 | 10 | 8.5 | 0.81 | 0.40 | 0.45 | 0 | 32 | BB4R/L-0927-BA | ■ | ■ | ■ | □ | □ | new |
| | | 1.0 | 3.0 | 10 | 8.5 | 0.90 | 0.45 | 0.60 | 0.02 | 32 | BB4R/L-1030-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 1.2 | 3.6 | 10 | 8.5 | 1.08 | 0.54 | 0.60 | 0.02 | 32 | BB4R/L-1236-BA-R02 | ■ | ■ | ■ | □ | □ | new |
| | | 1.5 | 4.5 | 10 | 8.5 | 1.35 | 0.67 | 0.65 | 0.02 | 32 | BB4R/L-1545-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.0 | 6.0 | 10 | 8.5 | 1.80 | 0.90 | 1.15 | 0.02 | 32 | BB4R/L-2060-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.5 | 7.5 | 10 | 8.5 | 2.25 | 1.13 | 1.30 | 0.02 | 32 | BB4R/L-2575-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 3.0 | 9.0 | 15 | 13.5 | 2.70 | 1.35 | 1.35 | 0.05 | 37 | BB4R/L-3090-BA-R05 | ■ | ■ | ■ | □ | □ | |
| 3.5 | 10.5 | 15 | 13.5 | 3.15 | 1.58 | 1.60 | 0.05 | 37 | BB4R/L-35105-BA-R05 | ■ | ■ | ■ | □ | □ | | | |

Alésage
Ausbohren
Boring



BF4...

BA

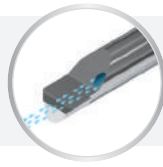


| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E | E1 | C | R | L3 | Art. N° | R | | | L | | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|---------------------|----|--------------------|------|-------|----|------|-------|--|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN | |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.3 | 0.9 | 10 | 8.5 | 0.27 | 0.13 | 0.15 | 0 | 32 | BF4R/L-0309-BA | ■ | ■ | ■ | □ | □ | |
| | | 0.4 | 1.2 | 10 | 8.5 | 0.36 | 0.18 | 0.20 | 0 | 32 | BF4R/L-0412-BA | ■ | ■ | ■ | □ | □ | |
| | | 0.5 | 1.5 | 10 | 8.5 | 0.45 | 0.22 | 0.25 | 0 | 32 | BF4R/L-0515-BA | ■ | ■ | ■ | □ | □ | |
| | | 0.6 | 1.8 | 10 | 8.5 | 0.54 | 0.27 | 0.30 | 0 | 32 | BF4R/L-0618-BA | ■ | ■ | ■ | □ | □ new | |
| | | 0.7 | 2.1 | 10 | 8.5 | 0.63 | 0.31 | 0.35 | 0 | 32 | BF4R/L-0721-BA | ■ | ■ | ■ | □ | □ new | |
| | | 0.8 | 2.4 | 10 | 8.5 | 0.72 | 0.36 | 0.40 | 0 | 32 | BF4R/L-0824-BA | ■ | ■ | ■ | □ | □ new | |
| | | 0.9 | 2.7 | 10 | 8.5 | 0.81 | 0.40 | 0.45 | 0 | 32 | BF4R/L-0927-BA | ■ | ■ | ■ | □ | □ new | |
| | | 1.0 | 3.0 | 10 | 8.5 | 0.90 | 0.45 | 0.60 | 0.02 | 32 | BF4R/L-1030-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 1.2 | 3.6 | 10 | 8.5 | 1.08 | 0.54 | 0.60 | 0.02 | 32 | BF4R/L-1236-BA-R02 | ■ | ■ | ■ | □ | □ new | |
| | | 1.5 | 4.5 | 10 | 8.5 | 1.35 | 0.67 | 0.65 | 0.02 | 32 | BF4R/L-1545-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.0 | 6.0 | 10 | 8.5 | 1.80 | 0.90 | 1.15 | 0.02 | 32 | BF4R/L-2060-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.5 | 7.5 | 10 | 8.5 | 2.25 | 1.13 | 1.30 | 0.02 | 32 | BF4R/L-2575-BA-R02 | ■ | ■ | ■ | □ | □ | |
| | | 3.0 | 9.0 | 15 | 13.5 | 2.70 | 1.35 | 1.35 | 0.05 | 37 | BF4R/L-3090-BA-R05 | ■ | ■ | ■ | □ | □ | |
| 3.5 | 10.5 | 15 | 13.5 | 3.15 | 1.58 | 1.60 | 0.05 | 37 | BF4R/L-35105-BA-R05 | ■ | ■ | ■ | □ | □ | | | |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

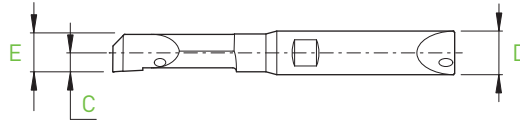
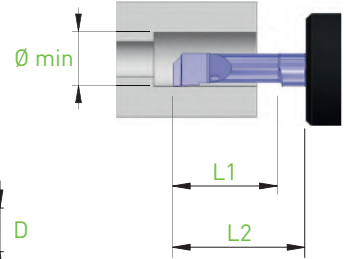
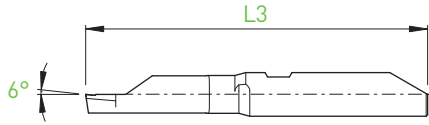
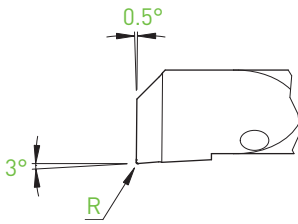
IN-LINE

Alésage
Ausbohren
Boring



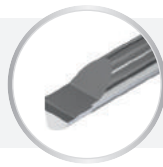
BB4... / BB6...

BAX



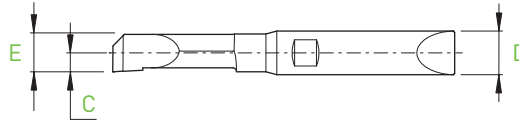
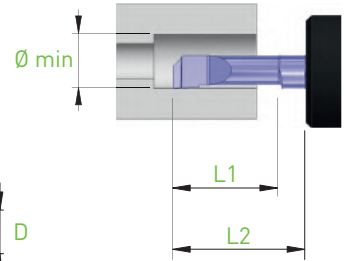
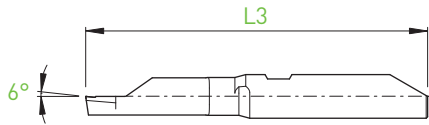
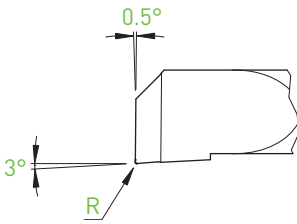
| D _{h5} | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E | C | R | L3 | Art. N° | R | | | L | | |
|-----------------|---|-------|------|-------------------------|--------------------------|------|------|----------------------|----|----------------------|------|-------|----|------|----|--|
| | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN | |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.5 | 1.5 | 10 | 8.5 | 0.45 | 0.25 | 0 | 32 | BB4R/L-0515-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.6 | 1.8 | 10 | 8.5 | 0.54 | 0.30 | 0 | 32 | BB4R/L-0618-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.7 | 2.1 | 10 | 8.5 | 0.63 | 0.35 | 0 | 32 | BB4R/L-0721-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.8 | 2.4 | 10 | 8.5 | 0.72 | 0.40 | 0 | 32 | BB4R/L-0824-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.9 | 2.7 | 10 | 8.5 | 0.81 | 0.45 | 0 | 32 | BB4R/L-0927-BAX | ■ | ■ | ■ | □ | □ | |
| | | 1.0 | 3.0 | 10 | 8.5 | 0.90 | 0.60 | 0.02 | 32 | BB4R/L-1030-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | | 5.0 | 10 | 8.5 | 0.90 | 0.60 | 0.02 | 32 | BB4R/L-1050-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | 1.5 | 4.5 | 10 | 8.5 | 1.35 | 0.65 | 0.02 | 32 | BB4R/L-1545-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | | 7.5 | 10 | 8.5 | 1.35 | 0.65 | 0.02 | 32 | BB4R/L-1575-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.0 | 6.0 | 10 | 8.5 | 1.80 | 1.15 | 0.02 | 32 | BB4R/L-2060-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | | 10.0 | 15 | 13.5 | 1.80 | 1.15 | 0.02 | 37 | BB4R/L-20100-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.5 | 7.5 | 10 | 8.5 | 2.25 | 1.30 | 0.05 | 32 | BB4R/L-2575-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 12.5 | 15 | 13.5 | 2.25 | 1.30 | 0.05 | 37 | BB4R/L-25125-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | 3.0 | 9.0 | 15 | 13.5 | 2.70 | 1.35 | 0.05 | 37 | BB4R/L-3090-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 15.0 | 20 | 18.5 | 2.70 | 1.35 | 0.05 | 42 | BB4R/L-30150-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | 3.5 | 10.5 | 15 | 13.5 | 3.15 | 1.60 | 0.05 | 37 | BB4R/L-35105-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| 17.5 | 20 | | 18.5 | 3.15 | 1.60 | 0.05 | 42 | BB4R/L-35175-BAX-R05 | ■ | ■ | ■ | □ | □ | | | |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 3.80 | 2.20 | 0.05 | 47 | BB6R/L-40120-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 20.0 | 30 | 28.5 | 3.80 | 2.20 | 0.05 | 57 | BB6R/L-40200-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | 4.5 | 13.5 | 20 | 18.5 | 4.28 | 2.30 | 0.05 | 47 | BB6R/L-45135-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 22.5 | 30 | 28.5 | 4.28 | 2.30 | 0.05 | 57 | BB6R/L-45225-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | 5.0 | 15.0 | 20 | 18.5 | 4.75 | 2.40 | 0.05 | 47 | BB6R/L-50150-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 25.0 | 30 | 28.5 | 4.75 | 2.40 | 0.05 | 57 | BB6R/L-50250-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | 5.5 | 16.5 | 20 | 18.5 | 5.15 | 2.60 | 0.05 | 47 | BB6R/L-55165-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 27.5 | 30 | 28.5 | 5.15 | 2.60 | 0.05 | 57 | BB6R/L-55275-BAX-R05 | ■ | ■ | ■ | □ | □ | |

Alésage
Ausbohren
Boring



BF4... / BF6...

BAX



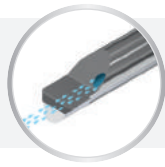
| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E | C | R | L3 | Art. N° | R | | | L | | |
|------|---|-------|------|-------------------------|--------------------------|------|------|----------------------|----|----------------------|------|-------|----|------|----|--|
| | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN | |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.5 | 1.5 | 10 | 8.5 | 0.45 | 0.25 | 0 | 32 | BF4R/L-0515-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.6 | 1.8 | 10 | 8.5 | 0.54 | 0.30 | 0 | 32 | BF4R/L-0618-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.7 | 2.1 | 10 | 8.5 | 0.63 | 0.35 | 0 | 32 | BF4R/L-0721-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.8 | 2.4 | 10 | 8.5 | 0.72 | 0.40 | 0 | 32 | BF4R/L-0824-BAX | ■ | ■ | ■ | □ | □ | |
| | | 0.9 | 2.7 | 10 | 8.5 | 0.81 | 0.45 | 0 | 32 | BF4R/L-0927-BAX | ■ | ■ | ■ | □ | □ | |
| | | 1.0 | 3.0 | 10 | 8.5 | 0.90 | 0.60 | 0.02 | 32 | BF4R/L-1030-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | | 5.0 | 10 | 8.5 | 0.90 | 0.60 | 0.02 | 32 | BF4R/L-1050-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | 1.5 | 4.5 | 10 | 8.5 | 1.35 | 0.65 | 0.02 | 32 | BF4R/L-1545-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | | 7.5 | 10 | 8.5 | 1.35 | 0.65 | 0.02 | 32 | BF4R/L-1575-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.0 | 6.0 | 10 | 8.5 | 1.80 | 1.15 | 0.02 | 32 | BF4R/L-2060-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | | 10.0 | 15 | 13.5 | 1.80 | 1.15 | 0.02 | 37 | BF4R/L-20100-BAX-R02 | ■ | ■ | ■ | □ | □ | |
| | | 2.5 | 7.5 | 10 | 8.5 | 2.25 | 1.30 | 0.05 | 32 | BF4R/L-2575-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | | 12.5 | 15 | 13.5 | 2.25 | 1.30 | 0.05 | 37 | BF4R/L-25125-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| | | 3.0 | 9.0 | 15 | 13.5 | 2.70 | 1.35 | 0.05 | 37 | BF4R/L-3090-BAX-R05 | ■ | ■ | ■ | □ | □ | |
| 15.0 | 20 | | 18.5 | 2.70 | 1.35 | 0.05 | 42 | BF4R/L-30150-BAX-R05 | ■ | ■ | ■ | □ | □ | | | |
| 3.5 | 10.5 | 15 | 13.5 | 3.15 | 1.60 | 0.05 | 37 | BF4R/L-35105-BAX-R05 | ■ | ■ | ■ | □ | □ | | | |
| | 17.5 | 20 | 18.5 | 3.15 | 1.60 | 0.05 | 42 | BF4R/L-35175-BAX-R05 | ■ | ■ | ■ | □ | □ | | | |

| D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | E | C | R | L3 | Art. N° | ZTAF | ZTAXF | ZN | ZTAF | ZN |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|----|----------------------|------|-------|----|------|----|
| | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 3.80 | 2.20 | 0.05 | 47 | BF6R/L-40120-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | | 20.0 | 30 | 28.5 | 3.80 | 2.20 | 0.05 | 57 | BF6R/L-40200-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | 4.5 | 13.5 | 20 | 18.5 | 4.28 | 2.30 | 0.05 | 47 | BF6R/L-45135-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | | 22.5 | 30 | 28.5 | 4.28 | 2.30 | 0.05 | 57 | BF6R/L-45225-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | 5.0 | 15.0 | 20 | 18.5 | 4.75 | 2.40 | 0.05 | 47 | BF6R/L-50150-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | | 25.0 | 30 | 28.5 | 4.75 | 2.40 | 0.05 | 57 | BF6R/L-50250-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | 5.5 | 16.5 | 20 | 18.5 | 5.15 | 2.60 | 0.05 | 47 | BF6R/L-55165-BAX-R05 | ■ | ■ | ■ | □ | □ |
| | | | 27.5 | 30 | 28.5 | 5.15 | 2.60 | 0.05 | 57 | BF6R/L-55275-BAX-R05 | ■ | ■ | ■ | □ | □ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

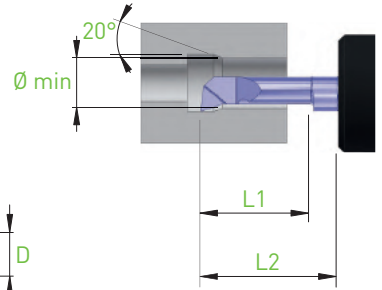
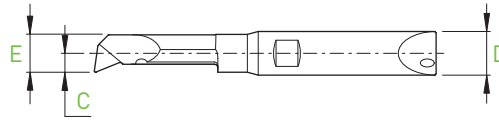
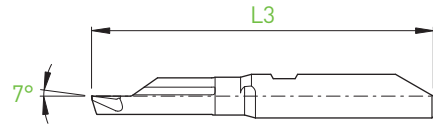
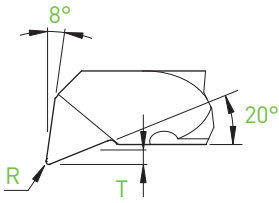
IN-LINE

- Alésage-copiage
- Ausbohren-kopieren
- Boring chambering



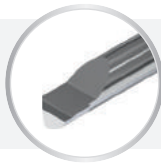
BB4... / BB6...

BCX



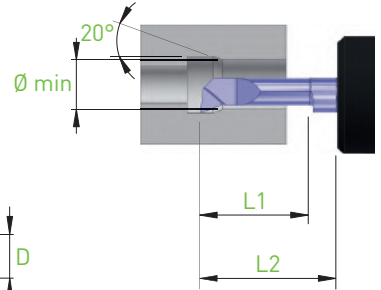
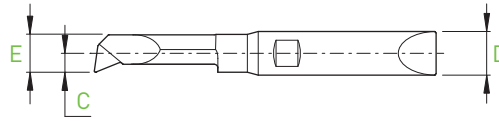
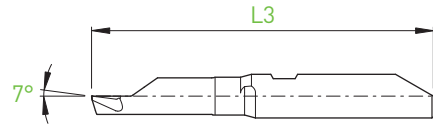
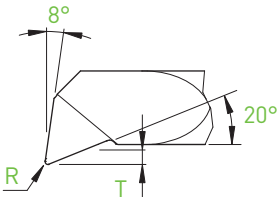
| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | T | E | C | R | L3 | Art. N° | R | | L | | | | |
|------|---|-------|---|-------------------------|--------------------------|------|------|------|------|------|----------------------|------|----------------------|----|------|----|---|---|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN | | |
| 4 | BH4... BHS4... BHY4... BHK4... | 1.0 | 3.0 | 10 | 8.5 | 0.15 | 0.90 | 0.70 | 0.05 | 32 | BB4R/L-1030-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | | 5.0 | 10 | 8.5 | 0.15 | 0.90 | 0.70 | 0.05 | 32 | BB4R/L-1050-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | 1.5 | 4.5 | 10 | 8.5 | 0.23 | 1.35 | 0.75 | 0.05 | 32 | BB4R/L-1545-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | | 7.5 | 10 | 8.5 | 0.23 | 1.35 | 0.75 | 0.05 | 32 | BB4R/L-1575-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | 2.0 | 6.0 | 10 | 8.5 | 0.30 | 1.80 | 1.15 | 0.05 | 32 | BB4R/L-2060-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | | 10.0 | 15 | 13.5 | 0.30 | 1.80 | 1.15 | 0.05 | 37 | BB4R/L-20100-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | 2.5 | 7.5 | 10 | 8.5 | 0.38 | 2.25 | 1.30 | 0.10 | 32 | BB4R/L-2575-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | | 12.5 | 15 | 13.5 | 0.38 | 2.25 | 1.30 | 0.10 | 37 | BB4R/L-25125-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | 3.0 | 9.0 | 15 | 13.5 | 0.45 | 2.70 | 1.35 | 0.10 | 37 | BB4R/L-3090-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | | 15.0 | 20 | 18.5 | 0.45 | 2.70 | 1.35 | 0.10 | 42 | BB4R/L-30150-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | 3.5 | 10.5 | 15 | 13.5 | 0.53 | 3.15 | 1.60 | 0.10 | 37 | BB4R/L-35105-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | | 17.5 | 20 | 18.5 | 0.53 | 3.15 | 1.60 | 0.10 | 42 | BB4R/L-35175-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 0.60 | 3.80 | 2.20 | 0.15 | 47 | BB6R/L-40120-BCX-R15 | ■ | ■ | ■ | □ | □ |
| | | | | | 20.0 | 30 | 28.5 | 0.60 | 3.80 | 2.20 | 0.15 | 57 | BB6R/L-40200-BCX-R15 | ■ | ■ | ■ | □ | □ |
| 4.5 | 13.5 | | | 20 | 18.5 | 0.68 | 4.28 | 2.30 | 0.15 | 47 | BB6R/L-45135-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| | 22.5 | | | 30 | 28.5 | 0.68 | 4.28 | 2.30 | 0.15 | 57 | BB6R/L-45225-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| 5.0 | 15.0 | | | 20 | 18.5 | 0.75 | 4.75 | 2.40 | 0.15 | 47 | BB6R/L-50150-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| | 25.0 | | | 30 | 28.5 | 0.75 | 4.75 | 2.40 | 0.15 | 57 | BB6R/L-50250-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| 5.5 | 16.5 | | | 20 | 18.5 | 0.83 | 5.15 | 2.60 | 0.15 | 47 | BB6R/L-55165-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| | 27.5 | | | 30 | 28.5 | 0.83 | 5.15 | 2.60 | 0.15 | 57 | BB6R/L-55275-BCX-R15 | ■ | ■ | ■ | □ | □ | | |

Alésage-copiage
 Ausbohren-kopieren
 Boring chambering



BF4... / BF6...

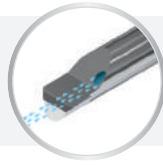
BCX



| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | T | E | C | R | L3 | Art. N° | R | | L | | | | |
|------|---|-------|---|-------------------------|--------------------------|-------------------------|--------------------------|------|------|------|----------------------|------|----------------------|------|-------|----|------|----|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN | | |
| 4 | BH4... BHS4... BHY4... BHK4... | 1.0 | 3.0 | 10 | 8.5 | 0.15 | 0.90 | 0.70 | 0.05 | 32 | BF4R/L-1030-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | | 5.0 | 10 | 8.5 | 0.15 | 0.90 | 0.70 | 0.05 | 32 | BF4R/L-1050-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | 1.5 | 4.5 | 10 | 8.5 | 0.23 | 1.35 | 0.75 | 0.05 | 32 | BF4R/L-1545-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | | 7.5 | 10 | 8.5 | 0.23 | 1.35 | 0.75 | 0.05 | 32 | BF4R/L-1575-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | 2.0 | 6.0 | 10 | 8.5 | 0.30 | 1.80 | 1.15 | 0.05 | 32 | BF4R/L-2060-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | | 10.0 | 15 | 13.5 | 0.30 | 1.80 | 1.15 | 0.05 | 37 | BF4R/L-20100-BCX-R05 | ■ | ■ | ■ | □ | □ | | |
| | | 2.5 | 7.5 | 10 | 8.5 | 0.38 | 2.25 | 1.30 | 0.10 | 32 | BF4R/L-2575-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | | 12.5 | 15 | 13.5 | 0.38 | 2.25 | 1.30 | 0.10 | 37 | BF4R/L-25125-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | 3.0 | 9.0 | 15 | 13.5 | 0.45 | 2.70 | 1.35 | 0.10 | 37 | BF4R/L-3090-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | | 15.0 | 20 | 18.5 | 0.45 | 2.70 | 1.35 | 0.10 | 42 | BF4R/L-30150-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | 3.5 | 10.5 | 15 | 13.5 | 0.53 | 3.15 | 1.60 | 0.10 | 37 | BF4R/L-35105-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | | 17.5 | 20 | 18.5 | 0.53 | 3.15 | 1.60 | 0.10 | 42 | BF4R/L-35175-BCX-R10 | ■ | ■ | ■ | □ | □ | | |
| | | D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | T | E | C | R | L3 | Art. N° | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| | | 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 0.60 | 3.80 | 2.20 | 0.15 | 47 | BF6R/L-40120-BCX-R15 | ■ | ■ | ■ | □ | □ |
| 20.0 | 30 | | | | 28.5 | 0.60 | 3.80 | 2.20 | 0.15 | 57 | BF6R/L-40200-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| 4.5 | 13.5 | | | 20 | 18.5 | 0.68 | 4.28 | 2.30 | 0.15 | 47 | BF6R/L-45135-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| | 22.5 | | | 30 | 28.5 | 0.68 | 4.28 | 2.30 | 0.15 | 57 | BF6R/L-45225-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| 5.0 | 15.0 | | | 20 | 18.5 | 0.75 | 4.75 | 2.40 | 0.15 | 47 | BF6R/L-50150-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| | 25.0 | | | 30 | 28.5 | 0.75 | 4.75 | 2.40 | 0.15 | 57 | BF6R/L-50250-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| 5.5 | 16.5 | | | 20 | 18.5 | 0.83 | 5.15 | 2.60 | 0.15 | 47 | BF6R/L-55165-BCX-R15 | ■ | ■ | ■ | □ | □ | | |
| | 27.5 | | | 30 | 28.5 | 0.83 | 5.15 | 2.60 | 0.15 | 57 | BF6R/L-55275-BCX-R15 | ■ | ■ | ■ | □ | □ | | |

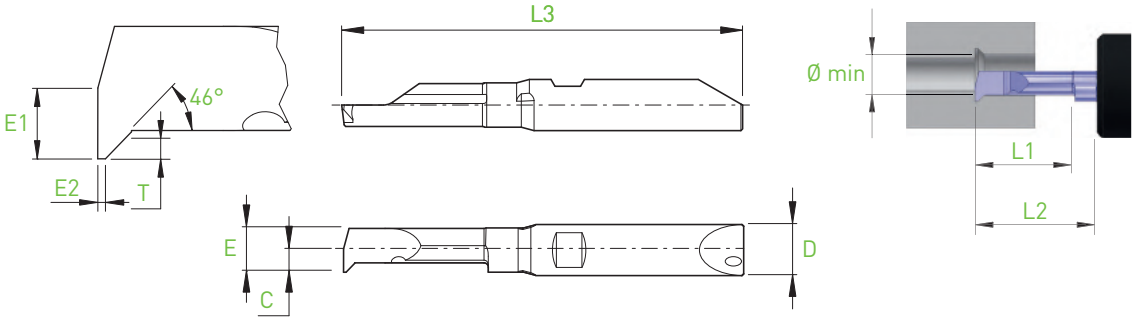
■ = disponible / verfügbar / available
 □ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

- Copiage
- Kopieren
- Chamfering



BB4... / BB6...

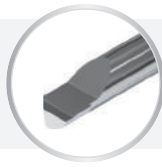
C45



| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | T | E | E1 | C | E2 | L3 | Art. N° | R | | L | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.3 | 0.6 | 10 | 8.5 | 0.05 | 0.27 | 0.13 | 0.15 | 0.03 | 32 | BB4R/L-0306-C45-E03 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.4 | 0.8 | 10 | 8.5 | 0.07 | 0.36 | 0.18 | 0.20 | 0.03 | 32 | BB4R/L-0408-C45-E03 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.5 | 1.0 | 10 | 8.5 | 0.08 | 0.45 | 0.22 | 0.25 | 0.03 | 32 | BB4R/L-0510-C45-E03 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.6 | 1.2 | 10 | 8.5 | 0.10 | 0.54 | 0.27 | 0.30 | 0.03 | 32 | BB4R/L-0612-C45-E03 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.7 | 1.2 | 10 | 8.5 | 0.12 | 0.63 | 0.32 | 0.35 | 0.03 | 32 | BB4R/L-0714-C45-E03 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.8 | 1.6 | 10 | 8.5 | 0.14 | 0.72 | 0.36 | 0.40 | 0.05 | 32 | BB4R/L-0816-C45-E05 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.9 | 1.8 | 10 | 8.5 | 0.15 | 0.81 | 0.41 | 0.45 | 0.05 | 32 | BB4R/L-0918-C45-E05 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1.0 | 3.0 | 10 | 8.5 | 0.17 | 0.90 | 0.45 | 0.70 | 0.10 | 32 | BB4R/L-1030-C45-E10 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1.2 | 3.6 | 10 | 8.5 | 0.20 | 1.08 | 0.54 | 0.70 | 0.10 | 32 | BB4R/L-1236-C45-E10 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1.5 | 4.5 | 10 | 8.5 | 0.25 | 1.35 | 0.67 | 0.75 | 0.10 | 32 | BB4R/L-1545-C45-E10 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 2.0 | 6.0 | 10 | 8.5 | 0.34 | 1.80 | 0.90 | 1.15 | 0.20 | 32 | BB4R/L-2060-C45-E20 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 2.5 | 7.5 | 10 | 8.5 | 0.43 | 2.25 | 1.13 | 1.30 | 0.20 | 32 | BB4R/L-2575-C45-E20 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.0 | 9.0 | 15 | 13.5 | 0.51 | 2.70 | 1.35 | 1.35 | 0.30 | 37 | BB4R/L-3090-C45-E30 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 3.5 | 10.5 | 15 | 13.5 | 0.60 | 3.15 | 1.58 | 1.60 | 0.30 | 37 | BB4R/L-35105-C45-E30 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 0.68 | 3.80 | 1.90 | 2.30 | 0.40 | 47 | BB6R/L-40120-C45-E40 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 5.0 | 15.0 | 20 | 18.5 | 0.85 | 4.75 | 2.37 | 2.50 | 0.50 | 47 | BB6R/L-50150-C45-E50 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

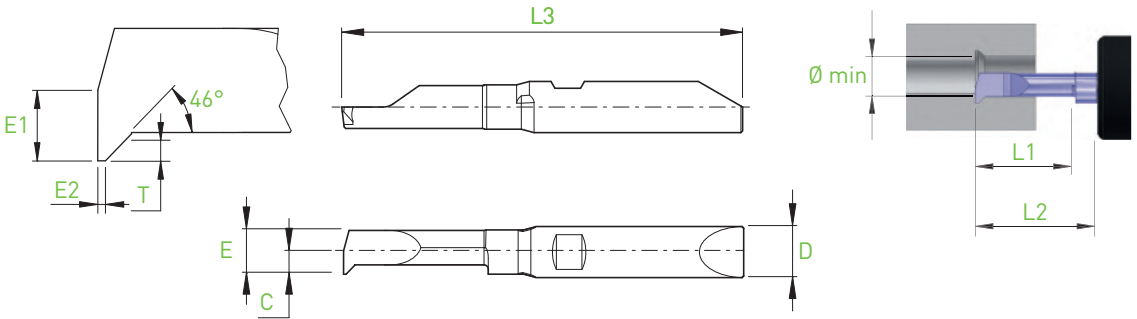
new

Copiage
Kopieren
Chamfering



BF4... / BF6...

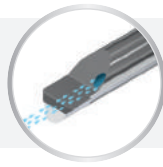
C45



| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | T | E | E1 | C | E2 | L3 | Art. N° | R | | L | | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|----------------------|----|----------------------|------|-------|----|------|--------------|
| | | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.3 | 0.6 | 10 | 8.5 | 0.05 | 0.27 | 0.13 | 0.15 | 0.03 | 32 | BF4R/L-0306-C45-E03 | ■ | ■ | ■ | □ | □ |
| | | 0.4 | 0.8 | 10 | 8.5 | 0.07 | 0.36 | 0.18 | 0.20 | 0.03 | 32 | BF4R/L-0408-C45-E03 | ■ | ■ | ■ | □ | □ |
| | | 0.5 | 1.0 | 10 | 8.5 | 0.08 | 0.45 | 0.22 | 0.25 | 0.03 | 32 | BF4R/L-0510-C45-E03 | ■ | ■ | ■ | □ | □ |
| | | 0.6 | 1.2 | 10 | 8.5 | 0.10 | 0.54 | 0.27 | 0.30 | 0.03 | 32 | BF4R/L-0612-C45-E03 | ■ | ■ | ■ | □ | □ |
| | | 0.7 | 1.2 | 10 | 8.5 | 0.12 | 0.63 | 0.32 | 0.35 | 0.03 | 32 | BF4R/L-0714-C45-E03 | ■ | ■ | ■ | □ | □ |
| | | 0.8 | 1.6 | 10 | 8.5 | 0.14 | 0.72 | 0.36 | 0.40 | 0.05 | 32 | BF4R/L-0816-C45-E05 | ■ | ■ | ■ | □ | □ |
| | | 0.9 | 1.8 | 10 | 8.5 | 0.15 | 0.81 | 0.41 | 0.45 | 0.05 | 32 | BF4R/L-0918-C45-E05 | ■ | ■ | ■ | □ | □ |
| | | 1.0 | 3.0 | 10 | 8.5 | 0.17 | 0.90 | 0.45 | 0.70 | 0.10 | 32 | BF4R/L-1030-C45-E10 | ■ | ■ | ■ | □ | □ |
| | | 1.2 | 3.6 | 10 | 8.5 | 0.20 | 1.08 | 0.54 | 0.70 | 0.10 | 32 | BF4R/L-1236-C45-E10 | ■ | ■ | ■ | □ | □ new |
| | | 1.5 | 4.5 | 10 | 8.5 | 0.25 | 1.35 | 0.67 | 0.75 | 0.10 | 32 | BF4R/L-1545-C45-E10 | ■ | ■ | ■ | □ | □ |
| | | 2.0 | 6.0 | 10 | 8.5 | 0.34 | 1.80 | 0.90 | 1.15 | 0.20 | 32 | BF4R/L-2060-C45-E20 | ■ | ■ | ■ | □ | □ |
| | | 2.5 | 7.5 | 10 | 8.5 | 0.43 | 2.25 | 1.13 | 1.30 | 0.20 | 32 | BF4R/L-2575-C45-E20 | ■ | ■ | ■ | □ | □ |
| 3.0 | 9.0 | 15 | 13.5 | 0.51 | 2.70 | 1.35 | 1.35 | 0.30 | 37 | BF4R/L-3090-C45-E30 | ■ | ■ | ■ | □ | □ | | |
| 3.5 | 10.5 | 15 | 13.5 | 0.60 | 3.15 | 1.58 | 1.60 | 0.30 | 37 | BF4R/L-35105-C45-E30 | ■ | ■ | ■ | □ | □ | | |
| D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | T | E | E1 | C | E2 | L3 | Art. N° | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 0.68 | 3.80 | 1.90 | 2.30 | 0.40 | 47 | BF6R/L-40120-C45-E40 | ■ | ■ | ■ | □ | □ |
| | | 5.0 | 15.0 | 20 | 18.5 | 0.85 | 4.75 | 2.37 | 2.50 | 0.50 | 47 | BF6R/L-50150-C45-E50 | ■ | ■ | ■ | □ | □ |

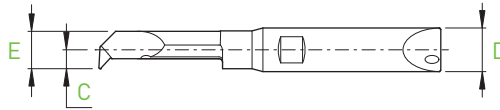
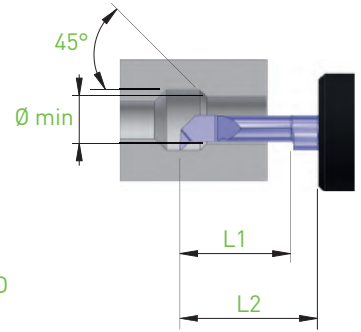
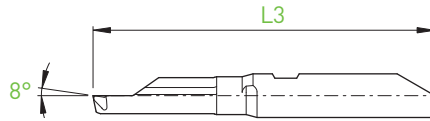
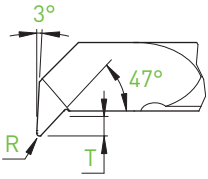
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Copiage
Kopieren
Chamfering



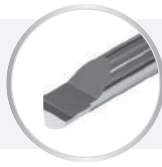
BB4... / BB6...

C45X



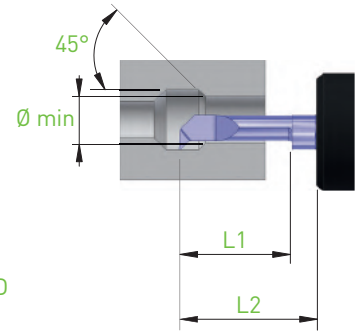
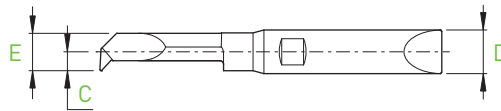
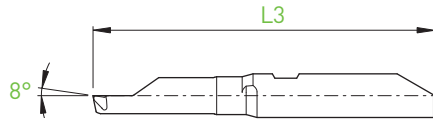
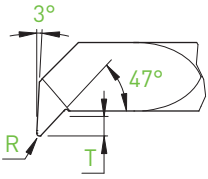
| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | T | E | C | R | L3 | Art. N° | R | | L | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|----|------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF |
| 4 | BH4... BHS4... BHY4... BHK4... | 2.5 | 7.5 | 10 | 8.5 | 0.50 | 2.25 | 1.35 | 0.10 | 32 | BB4R/L-2575-C45X-R10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 12.5 | 15 | 13.5 | 0.50 | 2.25 | 1.35 | 0.10 | 37 | BB4R/L-25125-C45X-R10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 3.0 | 9.0 | 15 | 13.5 | 0.60 | 2.70 | 1.45 | 0.10 | 37 | BB4R/L-3090-C45X-R10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 15.0 | 20 | 18.5 | 0.60 | 2.70 | 1.45 | 0.10 | 42 | BB4R/L-30150-C45X-R10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 3.5 | 10.5 | 15 | 13.5 | 0.70 | 3.15 | 1.60 | 0.10 | 37 | BB4R/L-35105-C45X-R10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 17.5 | 20 | 18.5 | 0.70 | 3.15 | 1.60 | 0.10 | 42 | BB4R/L-35175-C45X-R10 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 0.80 | 3.80 | 2.30 | 0.15 | 47 | BB6R/L-40120-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 20.0 | 30 | 28.5 | 0.80 | 3.80 | 2.30 | 0.15 | 57 | BB6R/L-40200-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 4.5 | 13.5 | 20 | 18.5 | 0.90 | 4.28 | 2.40 | 0.15 | 47 | BB6R/L-45135-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 22.5 | 30 | 28.5 | 0.90 | 4.28 | 2.40 | 0.15 | 57 | BB6R/L-45225-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 5.0 | 15.0 | 20 | 18.5 | 1.00 | 4.75 | 2.50 | 0.15 | 47 | BB6R/L-50150-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 25.0 | 30 | 28.5 | 1.00 | 4.75 | 2.50 | 0.15 | 57 | BB6R/L-50250-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 5.5 | 16.5 | 20 | 18.5 | 1.10 | 5.15 | 2.60 | 0.15 | 47 | BB6R/L-55165-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 27.5 | 30 | 28.5 | 1.10 | 5.15 | 2.60 | 0.15 | 57 | BB6R/L-55275-C45X-R15 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Copiage
Kopieren
Chambering



BF4... / BF6...

C45X

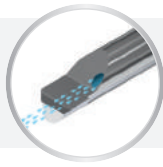


| D _{h5} | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | T | E | C | R | L3 | Art. N° | R | | L | | |
|-----------------|---|-------|------|-------------------------|--------------------------|------|------|------|------|----|-----------------------|------|-------|----|------|----|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 2.5 | 7.5 | 10 | 8.5 | 0.50 | 2.25 | 1.35 | 0.10 | 32 | BF4R/L-2575-C45X-R10 | ■ | ■ | ■ | □ | □ |
| | | | 12.5 | 15 | 13.5 | 0.50 | 2.25 | 1.35 | 0.10 | 37 | BF4R/L-25125-C45X-R10 | ■ | ■ | ■ | □ | □ |
| | | 3.0 | 9.0 | 15 | 13.5 | 0.60 | 2.70 | 1.45 | 0.10 | 37 | BF4R/L-3090-C45X-R10 | ■ | ■ | ■ | □ | □ |
| | | | 15.0 | 20 | 18.5 | 0.60 | 2.70 | 1.45 | 0.10 | 42 | BF4R/L-30150-C45X-R10 | ■ | ■ | ■ | □ | □ |
| | | 3.5 | 10.5 | 15 | 13.5 | 0.70 | 3.15 | 1.60 | 0.10 | 37 | BF4R/L-35105-C45X-R10 | ■ | ■ | ■ | □ | □ |
| | | | 17.5 | 20 | 18.5 | 0.70 | 3.15 | 1.60 | 0.10 | 42 | BF4R/L-35175-C45X-R10 | ■ | ■ | ■ | □ | □ |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 0.80 | 3.80 | 2.30 | 0.15 | 47 | BF6R/L-40120-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | | 20.0 | 30 | 28.5 | 0.80 | 3.80 | 2.30 | 0.15 | 57 | BF6R/L-40200-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | 4.5 | 13.5 | 20 | 18.5 | 0.90 | 4.28 | 2.40 | 0.15 | 47 | BF6R/L-45135-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | | 22.5 | 30 | 28.5 | 0.90 | 4.28 | 2.40 | 0.15 | 57 | BF6R/L-45225-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | 5.0 | 15.0 | 20 | 18.5 | 1.00 | 4.75 | 2.50 | 0.15 | 47 | BF6R/L-50150-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | | 25.0 | 30 | 28.5 | 1.00 | 4.75 | 2.50 | 0.15 | 57 | BF6R/L-50250-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | 5.5 | 16.5 | 20 | 18.5 | 1.10 | 5.15 | 2.60 | 0.15 | 47 | BF6R/L-55165-C45X-R15 | ■ | ■ | ■ | □ | □ |
| | | | 27.5 | 30 | 28.5 | 1.10 | 5.15 | 2.60 | 0.15 | 57 | BF6R/L-55275-C45X-R15 | ■ | ■ | ■ | □ | □ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

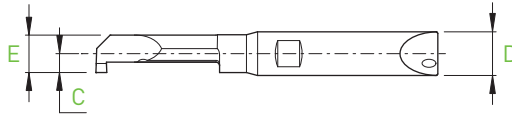
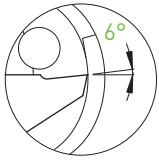
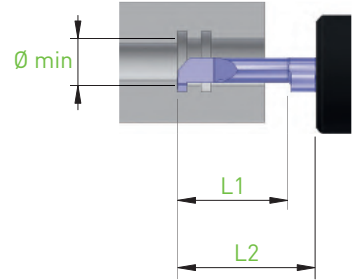
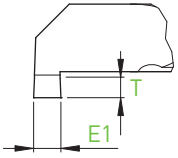
IN-LINE

Gorge
Einstecken
Grooving



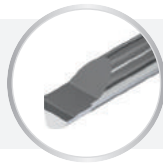
BB4... / BB6...

GX



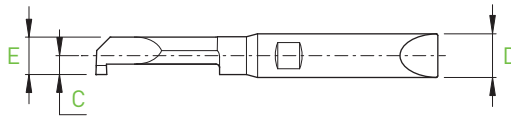
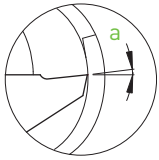
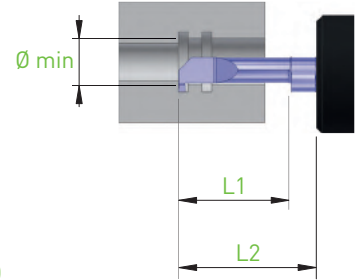
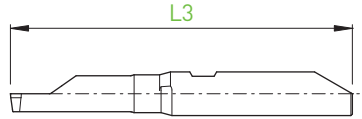
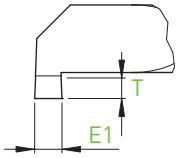
| D _{h5} | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E1 | T | E | C | L3 | Art. N° | R | | | L | | | |
|-----------------|---|-------|------|-------------------------|--------------------------|------|--------------|----------------------|------|------|--------------------|--|--|----|------|-------|----|---|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZTAXF | ZN | |
| 4 | BH4... BHS4... BHY4... BHK4... | 3.0 | 9.0 | 15 | 13.5 | 0.50 | 0.60 | 2.70 | 1.45 | 37 | BB4R/L-3090-G050X | ■ | ■ | ■ | □ | □ | □ | |
| | | | 15.0 | 20 | 18.5 | 0.50 | 0.60 | 2.70 | 1.45 | 42 | BB4R/L-30150-G050X | ■ | ■ | ■ | □ | □ | □ | |
| | | 3.5 | 10.5 | 15 | 13.5 | 0.75 | 0.70 | 3.15 | 1.60 | 37 | BB4R/L-35105-G075X | ■ | ■ | ■ | □ | □ | □ | |
| | | | 17.5 | 20 | 18.5 | 0.75 | 0.70 | 3.15 | 1.60 | 42 | BB4R/L-35175-G075X | ■ | ■ | ■ | □ | □ | □ | |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 1.00 | 0.80 | 3.80 | 2.20 | 47 | BB6R/L-40120-G100X | ■ | ■ | ■ | □ | □ | □ | |
| | | | 20.0 | 30 | 28.5 | 1.00 | 0.80 | 3.80 | 2.20 | 57 | BB6R/L-40200-G100X | ■ | ■ | ■ | □ | □ | □ | |
| | | | 4.5 | 13.5 | 20 | 18.5 | 1.00 1.50 | 0.90 | 4.28 | 2.40 | 47 | BB6R/L-45135-G100X BB6R/L-45135-G150X | ■ | ■ | ■ | □ | □ | □ |
| | | | | 22.5 | 30 | 28.5 | 1.00 1.50 | 0.90 | 4.28 | 2.40 | 57 | BB6R/L-45225-G100X BB6R/L-45225-G150X | ■ | ■ | ■ | □ | □ | □ |
| | | 5.0 | 15.0 | | 20 | 18.5 | 1.00 1.50 | 1.00 | 4.75 | 2.50 | 47 | BB6R/L-50150-G100X BB6R/L-50150-G150X | ■ | ■ | ■ | □ | □ | □ |
| | | | | 25.0 | 30 | 28.5 | 1.00 1.50 | 1.00 | 4.75 | 2.50 | 57 | BB6R/L-50250-G100X BB6R/L-50250-G150X | ■ | ■ | ■ | □ | □ | □ |
| | | | 5.5 | | 16.5 | 20 | 18.5 | 1.00 1.50 2.00 | 1.10 | 5.15 | 2.60 | 47 | BB6R/L-55165-G100X BB6R/L-55165-G150X BB6R/L-55165-G200X | ■ | ■ | ■ | □ | □ |
| | | | | 27.5 | | 30 | 28.5 | 1.00 1.50 2.00 | 1.10 | 5.15 | 2.60 | 57 | BB6R/L-55275-G100X BB6R/L-55275-G150X BB6R/L-55275-G200X | ■ | ■ | ■ | □ | □ |

Gorge
Einstecken
Grooving



BF4... / BF6...

GX

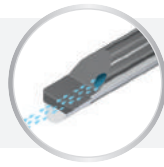


| D h5 | Holder | Ø min | L1 | L2 | | E1 | T | E | a | C | L3 | Art. N° | R | | L | |
|------|---|-------|------|-------------------|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | | | BH4... BHY4... | BHS4... BHK4... | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF |
| 4 | BH4... BHS4... BHY4... BHK4... | 0.5 | 1.0 | 10 | 8.5 | 0.15 | 0.10 | 0.45 | 3° | 0.25 | 32 | BF4R/L-0510-G015X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 0.7 | 1.4 | 10 | 8.5 | 0.20 | 0.14 | 0.63 | | 0.35 | 32 | BF4R/L-0714-G020X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1.0 | 2.0 | 10 | 8.5 | 0.30 | 0.20 | 0.90 | | 0.60 | 32 | BF4R/L-1020-G030X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1.5 | 3.0 | 10 | 8.5 | 0.40 | 0.30 | 1.35 | 6° | 0.80 | 32 | BF4R/L-1530-G040X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 2.0 | 6.0 | 10 | 8.5 | 0.40 | 0.40 | 1.80 | | 1.15 | 32 | BF4R/L-2060-G040X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 2.5 | 7.5 | 10 | 8.5 | 0.50 | 0.50 | 2.25 | | 1.15 | 32 | BF4R/L-2575-G050X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 3.0 | 9.0 | 15 | 13.5 | 0.50 | 0.60 | 2.70 | | 1.45 | 37 | BF4R/L-3090-G050X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 15.0 | 20 | 18.5 | 0.50 | 0.60 | 2.70 | | 1.45 | 42 | BF4R/L-30150-G050X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 3.5 | 10.5 | 15 | 13.5 | 0.75 | 0.70 | 3.15 | | 1.60 | 37 | BF4R/L-35105-G075X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 17.5 | 20 | 18.5 | 0.75 | 0.70 | 3.15 | | 1.60 | 42 | BF4R/L-35175-G075X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 12.0 | 20 | 18.5 | 1.00 | 0.80 | 3.80 | 6° | 2.20 | 47 | BF6R/L-40120-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 20.0 | 30 | 28.5 | 1.00 | 0.80 | 3.80 | | 2.20 | 57 | BF6R/L-40200-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 4.5 | 13.5 | 20 | 18.5 | 1.00 | 0.90 | 4.28 | | 2.40 | 47 | BF6R/L-45135-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 22.5 | 30 | 28.5 | 1.50 | 0.90 | 4.28 | | | 57 | BF6R/L-45225-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 5.0 | 15.0 | 20 | 18.5 | 1.00 | 1.00 | 4.75 | | 2.50 | 47 | BF6R/L-50150-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | 25.0 | 30 | 28.5 | 1.50 | 1.00 | | | 4.75 | 57 | BF6R/L-50150-G150X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | 25.0 | 30 | 28.5 | 1.50 | 1.00 | 4.75 | 57 | | BF6R/L-50250-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | 5.5 | 16.5 | 20 | 18.5 | 1.50 | 1.10 | 5.15 | 2.60 | 47 | BF6R/L-55165-G100X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | | | | 2.00 | 5.15 | 47 | BF6R/L-55165-G150X | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | | | | 2.00 | 5.15 | 47 | BF6R/L-55165-G200X | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | | | | 1.00 | 5.15 | 47 | BF6R/L-55275-G100X | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | | | | 1.50 | 5.15 | 57 | BF6R/L-55275-G150X | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| | | 2.00 | 5.15 | 57 | BF6R/L-55275-G200X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

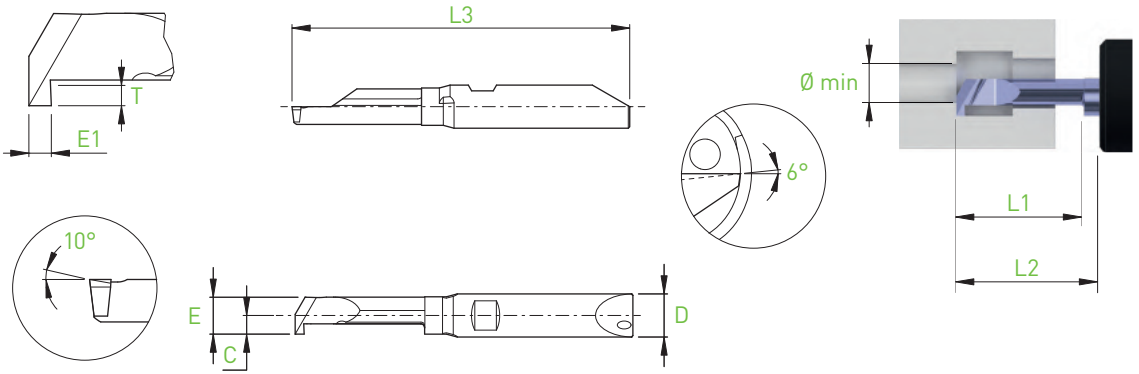
IN-LINE

Fonçage-tournage
Einstecken und drehen
Grooving and turning



BB4... / BB6...

GTX

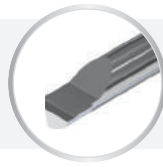


| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E1 | T | E | C | L3 | Art. N° | R | | L | | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|---------------------|---------------------|------|-------|----|------|----|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 3.0 | 9.0 | 15 | 13.5 | 1.00 | 0.60 | 2.7 | 1.45 | 37 | BB4R/L-3090-GT100X | ■ | ■ | ■ | □ | □ |
| | | | 15.0 | 20 | 18.5 | 1.00 | 0.60 | 2.7 | 1.45 | 42 | BB4R/L-30150-GT100X | ■ | ■ | ■ | □ | □ |
| | 3.5 | 10.5 | 15 | 13.5 | 1.00 | 0.70 | 3.15 | 1.6 | 37 | BB4R/L-35105-GT100X | ■ | ■ | ■ | □ | □ | |
| | | 17.5 | 20 | 18.5 | 1.00 | 0.70 | 3.15 | 1.6 | 42 | BB4R/L-35175-GT100X | ■ | ■ | ■ | □ | □ | |
| D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | E1 | T | E | C | L3 | Art. N° | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 14.0 | 20 | 18.5 | 1.25 | 0.80 | 3.8 | 2.2 | 47 | BB6R/L-40140-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 22.0 | 30 | 28.5 | 1.25 | 0.80 | 3.8 | 2.2 | 57 | BB6R/L-40220-GT125X | ■ | ■ | ■ | □ | □ |
| | | 4.5 | 16.0 | 20 | 18.5 | 1.25 | 0.90 | 4.28 | 2.4 | 47 | BB6R/L-45160-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 25.0 | 30 | 28.5 | 1.25 | 0.90 | 4.28 | 2.4 | 57 | BB6R/L-45250-GT125X | ■ | ■ | ■ | □ | □ |
| | | 5.0 | 17.5 | 20 | 18.5 | 1.25 | 1.00 | 4.75 | 2.5 | 47 | BB6R/L-50175-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 27.5 | 30 | 28.5 | 1.25 | 1.00 | 4.75 | 2.5 | 57 | BB6R/L-50275-GT125X | ■ | ■ | ■ | □ | □ |
| | | 5.5 | 17.5 | 20 | 18.5 | 1.25 | 1.10 | 5.15 | 2.6 | 47 | BB6R/L-55175-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 27.5 | 30 | 28.5 | 1.25 | 1.10 | 5.15 | 2.6 | 57 | BB6R/L-55275-GT125X | ■ | ■ | ■ | □ | □ |

Fonçage-tournage

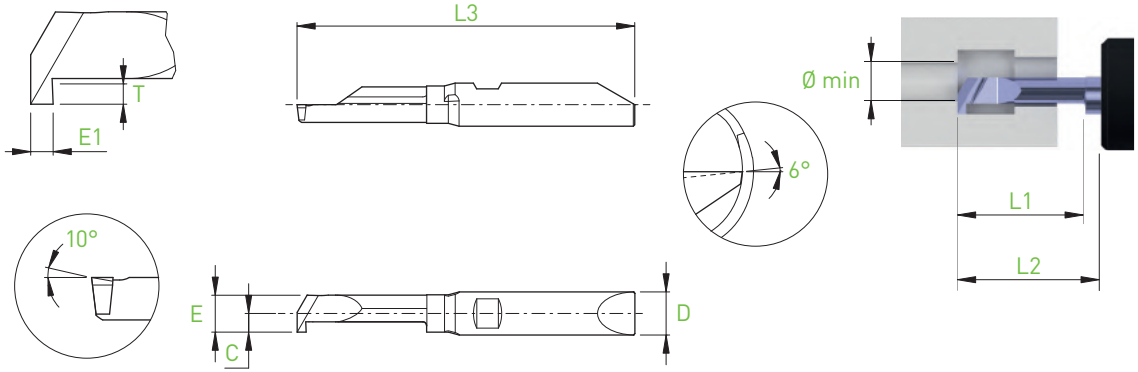
Einstechen und drehen

Grooving and turning



BF4... / BF6...

GTX



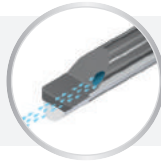
| D h5 | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E1 | T | E | C | L3 | Art. N° | R | | L | | |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|---------------------|---------------------|------|-------|----|------|----|
| | | | | | | | | | | | | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 3.0 | 9.0 | 15 | 13.5 | 1.00 | 0.60 | 2.7 | 1.45 | 37 | BF4R/L-3090-GT100X | ■ | ■ | ■ | □ | □ |
| | | | 15.0 | 20 | 18.5 | 1.00 | 0.60 | 2.7 | 1.45 | 42 | BF4R/L-30150-GT100X | ■ | ■ | ■ | □ | □ |
| | 3.5 | 10.5 | 15 | 13.5 | 1.00 | 0.70 | 3.15 | 1.6 | 37 | BF4R/L-35105-GT100X | ■ | ■ | ■ | □ | □ | |
| | | 17.5 | 20 | 18.5 | 1.00 | 0.70 | 3.15 | 1.6 | 42 | BF4R/L-35175-GT100X | ■ | ■ | ■ | □ | □ | |
| D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | E1 | T | E | C | L3 | Art. N° | ZTAF | ZTAXF | ZN | ZTAF | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.0 | 14.0 | 20 | 18.5 | 1.25 | 0.80 | 3.8 | 2.2 | 47 | BF6R/L-40140-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 22.0 | 30 | 28.5 | 1.25 | 0.80 | 3.8 | 2.2 | 57 | BF6R/L-40220-GT125X | ■ | ■ | ■ | □ | □ |
| | | 4.5 | 16.0 | 20 | 18.5 | 1.25 | 0.90 | 4.28 | 2.4 | 47 | BF6R/L-45160-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 25.0 | 30 | 28.5 | 1.25 | 0.90 | 4.28 | 2.4 | 57 | BF6R/L-45250-GT125X | ■ | ■ | ■ | □ | □ |
| | | 5.0 | 17.5 | 20 | 18.5 | 1.25 | 1.00 | 4.75 | 2.5 | 47 | BF6R/L-50175-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 27.5 | 30 | 28.5 | 1.25 | 1.00 | 4.75 | 2.5 | 57 | BF6R/L-50275-GT125X | ■ | ■ | ■ | □ | □ |
| | | 5.5 | 17.5 | 20 | 18.5 | 1.25 | 1.10 | 5.15 | 2.6 | 47 | BF6R/L-55175-GT125X | ■ | ■ | ■ | □ | □ |
| | | | 27.5 | 30 | 28.5 | 1.25 | 1.10 | 5.15 | 2.6 | 57 | BF6R/L-55275-GT125X | ■ | ■ | ■ | □ | □ |

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

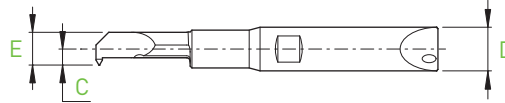
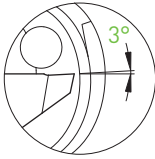
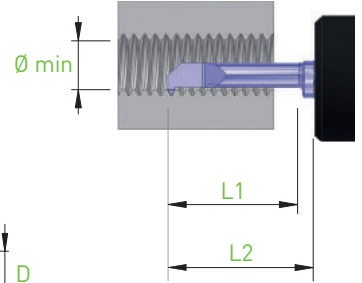
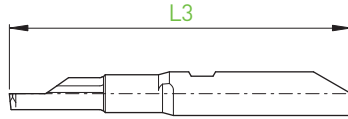
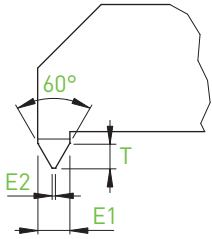
IN-LINE

Filetage
Gewindedrehen
Threading



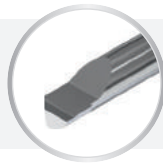
BB4... / BB6...

TP60



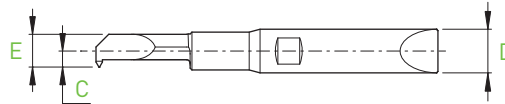
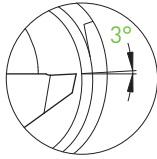
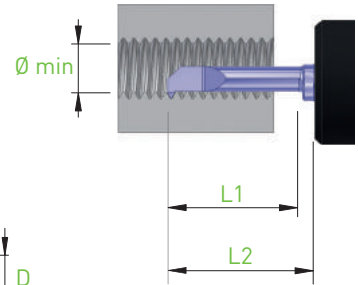
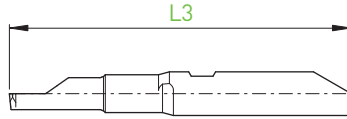
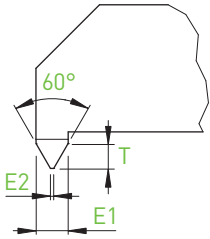
| D h5 | Holder | Ø min | L1 | L2 | | P (mm) | P (TPI) | E1 | E2 (0/-0.01) | T | E | C | L3 | Art. N° | R | | L | |
|---------|---|----------|------|-------------------|--------------------|-----------|---------|------|-----------------|------|------|-------------------|----|-------------------|------------|------------|------------|------------|
| | | | | BH4... BHY4... | BHS4... BHK4... | | | | | | | | | | ZTAF ZN | ZTAF ZN | ZTAF ZN | ZTAF ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 1.25 | 3.2 | 10 | 8.5 | 0.20-0.35 | 80 | 0.30 | 0.02 | 0.25 | 1.10 | 0.80 | 32 | BB4R/L-1232-TP60 | ■ | ■ | □ | □ |
| | | 1.6 | 4.0 | 10 | 8.5 | 0.25-0.40 | 72-64 | 0.35 | 0.03 | 0.28 | 1.41 | 0.90 | 32 | BB4R/L-1640-TP60 | ■ | ■ | □ | □ |
| | | 2.5 | 6.0 | 10 | 8.5 | 0.35-0.50 | 56-48 | 0.44 | 0.04 | 0.34 | 2.25 | 1.35 | 32 | BB4R/L-2560-TP60 | ■ | ■ | □ | □ |
| | | | 9.0 | 15 | 13.5 | 0.35-0.50 | 56-48 | 0.44 | 0.04 | 0.34 | 2.25 | 1.35 | 37 | BB4R/L-2590-TP60 | ■ | ■ | □ | □ |
| | | 3.3 | 8.0 | 15 | 13.5 | 0.50-0.75 | 40-36 | 0.62 | 0.06 | 0.48 | 2.97 | 1.50 | 37 | BB4R/L-3380-TP60 | ■ | ■ | □ | □ |
| 12.0 | 15 | | 13.5 | 0.50-0.75 | 40-36 | 0.62 | 0.06 | 0.48 | 2.97 | 1.50 | 37 | BB4R/L-33120-TP60 | ■ | ■ | □ | □ | | |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.2 | 10.0 | 20 | 18.5 | 0.50-0.80 | 36-32 | 0.70 | 0.06 | 0.55 | 3.78 | 2.10 | 47 | BB6R/L-42100-TP60 | ■ | ■ | □ | □ |
| | | | 15.0 | 20 | 18.5 | 0.50-0.80 | 36-32 | 0.70 | 0.06 | 0.55 | 3.78 | 2.10 | 47 | BB6R/L-42150-TP60 | ■ | ■ | □ | □ |
| | | 5.0 | 12.0 | 20 | 18.5 | 0.75-1.00 | 28-24 | 0.89 | 0.09 | 0.69 | 4.50 | 2.20 | 47 | BB6R/L-50120-TP60 | ■ | ■ | □ | □ |
| | | | 18.0 | 20 | 18.5 | 0.75-1.00 | 28-24 | 0.89 | 0.09 | 0.69 | 4.50 | 2.20 | 47 | BB6R/L-50180-TP60 | ■ | ■ | □ | □ |

Filetage
Gewindedrehen
Threading



BF4... / BF6...

TP60

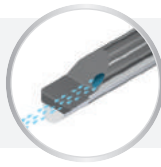


| D _{h5} | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | P (mm) | P (TPI) | E1 | E2 (0/-0.01) | T | E | C | L3 | Art. N° | R | | L | |
|-----------------|---|-------|------|-------------------------|--------------------------|-----------|---------|------|-----------------|------|------|-------------------|----|-------------------|------|----|------|----|
| | | | | | | | | | | | | | | | ZTAF | ZN | ZTAF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | 1.25 | 3.2 | 10 | 8.5 | 0.20-0.35 | 80 | 0.30 | 0.02 | 0.25 | 1.10 | 0.80 | 32 | BF4R/L-1232-TP60 | ■ | ■ | □ | □ |
| | | 1.6 | 4.0 | 10 | 8.5 | 0.25-0.40 | 72-64 | 0.35 | 0.03 | 0.28 | 1.41 | 0.90 | 32 | BF4R/L-1640-TP60 | ■ | ■ | □ | □ |
| | | 2.5 | 6.0 | 10 | 8.5 | 0.35-0.50 | 56-48 | 0.44 | 0.04 | 0.34 | 2.25 | 1.35 | 32 | BF4R/L-2560-TP60 | ■ | ■ | □ | □ |
| | | | 9.0 | 15 | 13.5 | 0.35-0.50 | 56-48 | 0.44 | 0.04 | 0.34 | 2.25 | 1.35 | 37 | BF4R/L-2590-TP60 | ■ | ■ | □ | □ |
| | | 3.3 | 8.0 | 15 | 13.5 | 0.50-0.75 | 40-36 | 0.62 | 0.06 | 0.48 | 2.97 | 1.50 | 37 | BF4R/L-3380-TP60 | ■ | ■ | □ | □ |
| 12.0 | 15 | | 13.5 | 0.50-0.75 | 40-36 | 0.62 | 0.06 | 0.48 | 2.97 | 1.50 | 37 | BF4R/L-33120-TP60 | ■ | ■ | □ | □ | | |
| 6 | BH6... BHS6... BHY6... BHK6... | 4.2 | 10.0 | 20 | 18.5 | 0.50-0.80 | 36-32 | 0.70 | 0.06 | 0.55 | 3.78 | 2.10 | 47 | BF6R/L-42100-TP60 | ■ | ■ | □ | □ |
| | | | 15.0 | 20 | 18.5 | 0.50-0.80 | 36-32 | 0.70 | 0.06 | 0.55 | 3.78 | 2.10 | 47 | BF6R/L-42150-TP60 | ■ | ■ | □ | □ |
| | | 5.0 | 12.0 | 20 | 18.5 | 0.75-1.00 | 28-24 | 0.89 | 0.09 | 0.69 | 4.50 | 2.20 | 47 | BF6R/L-50120-TP60 | ■ | ■ | □ | □ |
| | | | 18.0 | 20 | 18.5 | 0.75-1.00 | 28-24 | 0.89 | 0.09 | 0.69 | 4.50 | 2.20 | 47 | BF6R/L-50180-TP60 | ■ | ■ | □ | □ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

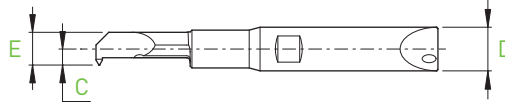
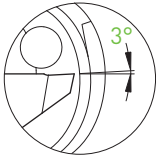
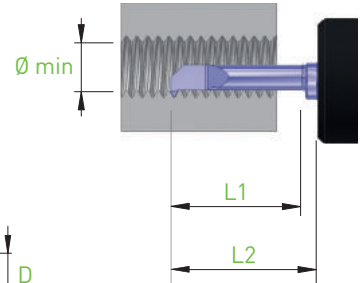
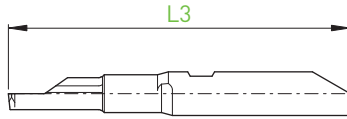
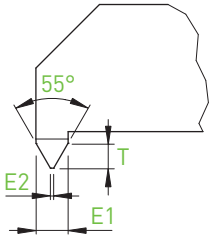
IN-LINE

Filetage
Gewindedrehen
Threading



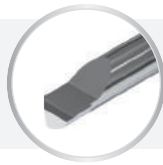
BB4... / BB6...

TP55



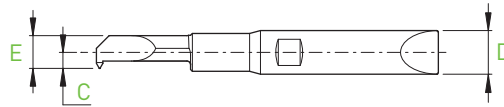
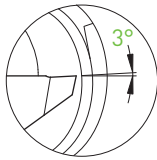
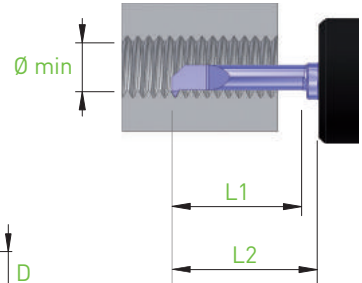
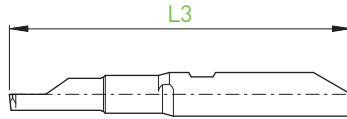
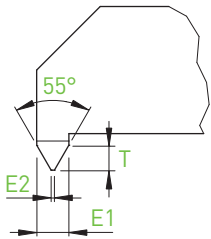
| D _{h5} | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | P (TPI) | E1 | E2 [0/-0.02] | T | E | C | L3 | Art. N° | R | | L | |
|-----------------|-------------------------------|-------|------|-------------------------|--------------------------|------------|------|-----------------|------|------|------|----|-------------------|------|----|------|----|
| | | | | | | | | | | | | | | ZTAF | ZN | ZTAF | ZN |
| 4 | BH4... | 1.85 | 4.5 | 10 | 8.5 | 48 | 0.54 | 0.09 | 0.44 | 1.67 | 0.97 | 32 | BB4R/L-1845-TP55 | ■ | ■ | □ | □ |
| | BHS4... BHY4... BHK4... | 2.55 | 6.0 | 10 | 8.5 | 40 | 0.64 | 0.10 | 0.52 | 2.25 | 1.35 | 32 | BB4R/L-2560-TP55 | ■ | ■ | □ | □ |
| D _{h5} | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | P (TPI) | E1 | E2 [0/-0.02] | T | E | C | L3 | Art. N° | ZTAF | ZN | ZTAF | ZN |
| 6 | BH6... | 3.70 | 11.0 | 20 | 18.5 | 32-24 | 1.08 | 0.13 | 0.91 | 3.33 | 1.83 | 47 | BB6R/L-37110-TP55 | ■ | ■ | □ | □ |
| | BHS6... BHY6... BHK6... | 5.10 | 15.0 | 20 | 18.5 | 26-20 | 1.30 | 0.16 | 1.09 | 4.60 | 2.05 | 47 | BB6R/L-51150-TP55 | ■ | ■ | □ | □ |
| | BH6... | 5.50 | 16.0 | 20 | 18.5 | 22-16 | 1.48 | 0.19 | 1.24 | 5.15 | 2.60 | 47 | BB6R/L-55160-TP55 | ■ | ■ | □ | □ |

Filetage
Gewindedrehen
Threading



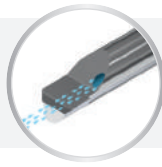
BF4... / BF6...

TP55

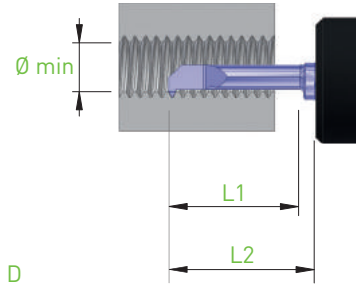
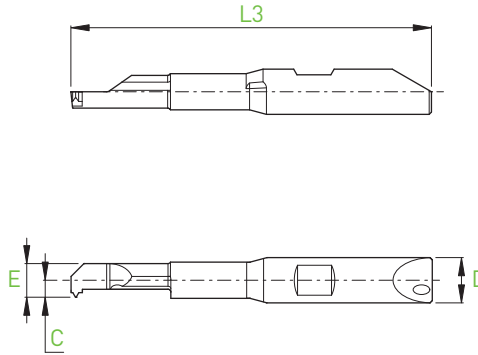
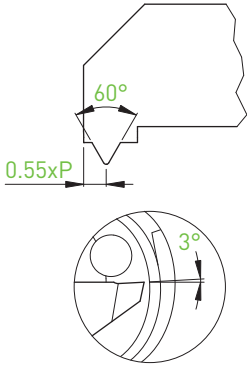


| D _{h5} | Holder | Ø min | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | P (TPI) | E1 | E2 (0/-0.02) | T | E | C | L3 | Art. N° | R | | L | |
|-----------------|--------------------|----------|------|-------------------------|--------------------------|------------|------|-----------------|------|------|------|----|-------------------|------|----|------|----|
| | | | | | | | | | | | | | | ZTAF | ZN | ZTAF | ZN |
| 4 | BH4... | 1.85 | 4.5 | 10 | 8.5 | 48 | 0.54 | 0.09 | 0.44 | 1.67 | 0.97 | 32 | BF4R/L-1845-TP55 | ■ | ■ | □ | □ |
| | BHS4... | | | | | | | | | | | | | | | | |
| | BHY4... BHK4... | 2.55 | 6.0 | 10 | 8.5 | 40 | 0.64 | 0.10 | 0.52 | 2.25 | 1.35 | 32 | BF4R/L-2560-TP55 | ■ | ■ | □ | □ |
| D _{h5} | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | P (TPI) | E1 | E2 (0/-0.02) | T | E | C | L3 | Art. N° | ZTAF | ZN | ZTAF | ZN |
| 6 | BH6... | 3.70 | 11.0 | 20 | 18.5 | 32-24 | 1.08 | 0.13 | 0.91 | 3.33 | 1.83 | 47 | BF6R/L-37110-TP55 | ■ | ■ | □ | □ |
| | BHS6... | 5.10 | 15.0 | 20 | 18.5 | 26-20 | 1.30 | 0.16 | 1.09 | 4.60 | 2.05 | 47 | BF6R/L-51150-TP55 | ■ | ■ | □ | □ |
| | BHY6... | | | | | | | | | | | | | | | | |
| | BHK6... | 5.50 | 16.0 | 20 | 18.5 | 22-16 | 1.48 | 0.19 | 1.24 | 5.15 | 2.60 | 47 | BF6R/L-55160-TP55 | ■ | ■ | □ | □ |

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

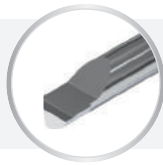


Profil complet métrique
Metrisches Vollprofil
Metric full profile



| D _{h5} | Holder | M (min) | Ø min | P (mm) | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E | C | L3 | Art. N° | R | |
|-----------------|---|---------|-------|--------|------|-------------------------|--------------------------|------|------|----|--------------------|------|----|
| | | | | | | | | | | | | ZTAF | ZN |
| 4 | BH4... BHS4... BHY4... BHK4... | M3x0.5 | 2.50 | 0.50 | 6.0 | 10 | 8.5 | 2.25 | 1.35 | 32 | BB4R-2560-TM-0.50 | ■ | ■ |
| | | M4x0.7 | 3.30 | 0.70 | 8.0 | 15 | 13.5 | 2.97 | 1.50 | 37 | BB4R-3380-TM-0.70 | ■ | ■ |
| D _{h5} | Holder | M (min) | Ø min | P (mm) | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | E | C | L3 | Art. N° | R | |
| | | | | | | | | | | | | ZTAF | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | M5x0.8 | 4.20 | 0.80 | 10.0 | 20 | 18.5 | 3.78 | 2.10 | 47 | BB6R-42100-TM-0.80 | ■ | ■ |
| | | M6x1.0 | 5.00 | 1.00 | 12.0 | 20 | 18.5 | 4.50 | 2.20 | 47 | BB6R-50120-TM-1.00 | ■ | ■ |

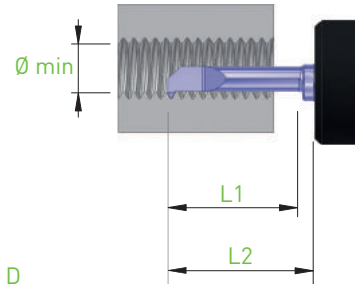
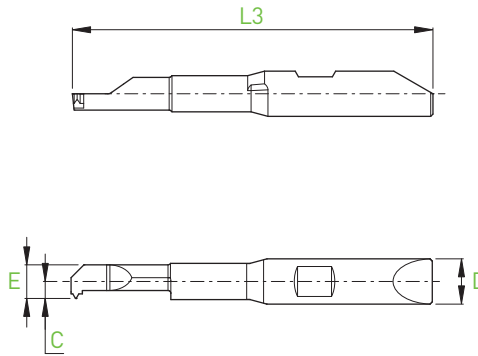
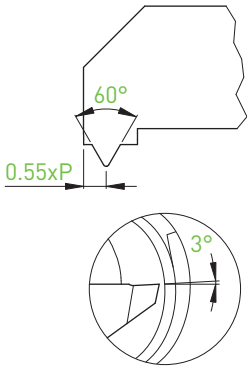
Filetage
Gewindedrehen
Threading



BF4... / BF6...

TM

Profil complet métrique
Metrisches Vollprofil
Metric full profile

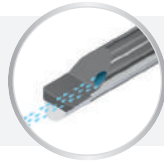


R

| D h5 | Holder | M (min) | Ø min | P (mm) | L1 | L2 BH4... BHY4... | L2 BHS4... BHK4... | E | C | L3 | Art. N° | ZTAF | ZN |
|------|---|---------|-------|--------|------|-------------------------|--------------------------|------|------|----|--------------------|------|----|
| 4 | BH4... BHS4... BHY4... BHK4... | M3x0.5 | 2.50 | 0.50 | 6.0 | 10 | 8.5 | 2.25 | 1.35 | 32 | BF4R-2560-TM-0.50 | ■ | ■ |
| | | M4x0.7 | 3.30 | 0.70 | 8.0 | 15 | 13.5 | 2.97 | 1.50 | 37 | BF4R-3380-TM-0.70 | ■ | ■ |
| D h5 | Holder | M (min) | Ø min | P (mm) | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | E | C | L3 | Art. N° | ZTAF | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | M5x0.8 | 4.20 | 0.80 | 10.0 | 20 | 18.5 | 3.78 | 2.10 | 47 | BF6R-42100-TM-0.80 | ■ | ■ |
| | | M6x1.0 | 5.00 | 1.00 | 12.0 | 20 | 18.5 | 4.50 | 2.20 | 47 | BF6R-50120-TM-1.00 | ■ | ■ |

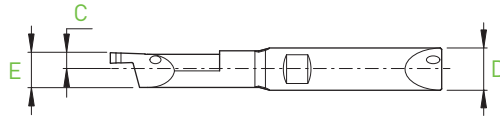
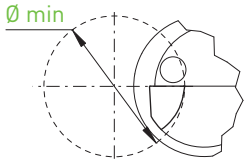
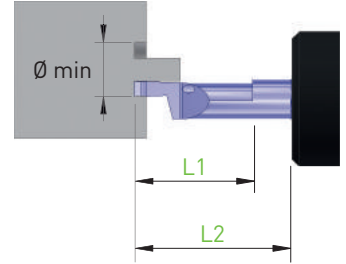
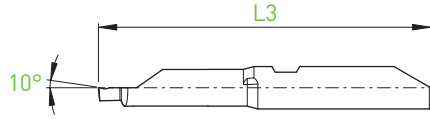
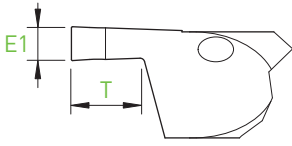
IN-LINE

- Gorge frontale extérieure
- Aussen axiales stechen
- External axial grooving



BB6...

FEG



R

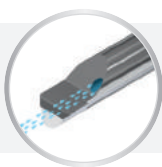
| D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | T | E | C | E1 | L3 | Art. N° | ZTAF | ZN |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|----|---------------------------|------|----|
| 6 | BH6... BHS6... BHY6... BHK6... | 5.0 | 15.0 | 20 | 18.5 | 3.00 | 4.90 | 2.30 | 1.50 | 47 | BB6R-50150-FEG150X | ■ | ■ |

P
 M
 N
 S
 P
 N
 S
ZTAF
ZN

Gorge frontale intérieure

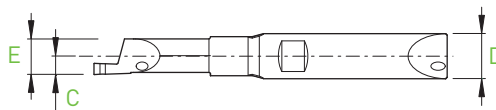
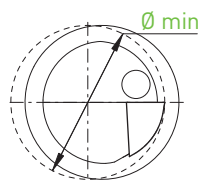
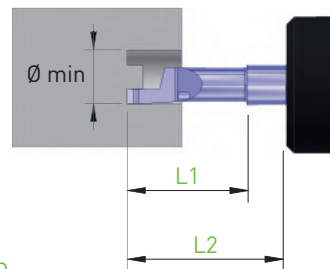
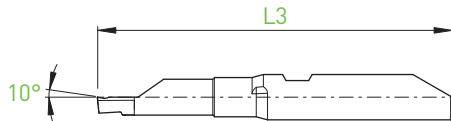
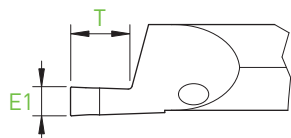
Innen axiales stechen

Internal axial grooving



BB6...

FIG



R

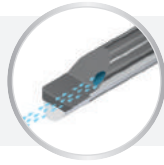
| D h5 | Holder | Ø min | L1 | L2 BH6... BHY6... | L2 BHS6... BHK6... | T | E | C | E1 | L3 | Art. N° | ZTAF | ZN |
|------|---|-------|------|-------------------------|--------------------------|------|------|------|------|----|--------------------|------|----|
| 6 | BH6... BHS6... BHY6... BHK6... | 5.0 | 15.0 | 20 | 18.5 | 3.00 | 4.75 | 2.45 | 1.50 | 47 | BB6R-50150-FIG150X | ■ | ■ |

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

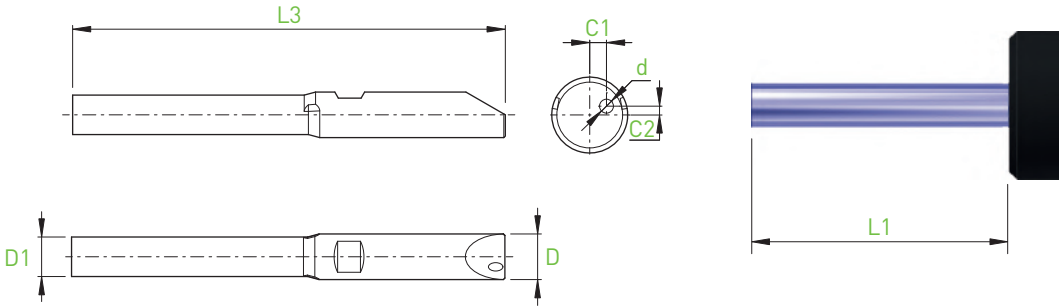
IN-LINE

Ébauches avec arrosage
 Rohlinge mit Kühlung
 Blanks with coolant



BB4... / BB6...

BB_E



| D_{h5} | Holder | L1 BH4... BHY4... | L1 BHS4... BHK4... | $D1$ | $C1$ | $C2$ | d | $L3$ | Art. N° | ZN |
|----------|---|-------------------------|--------------------------|------|------|------|------|------|-----------------|----|
| 4 | BH4... BHS4... BHY4... BHK4... | 20.0 | 18.5 | 3.20 | 0.84 | 0.55 | 0.85 | 42 | BB4R-E42 | ■ |
| D_{h5} | Holder | L1 BH6... BHY6... | L1 BHS6... BHK6... | $D1$ | $C1$ | $C2$ | d | $L3$ | Art. N° | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | 30.0 | 28.5 | 5.20 | 1.33 | 0.70 | 1.10 | 57 | BB6R-E57 | ■ |

Ébauches

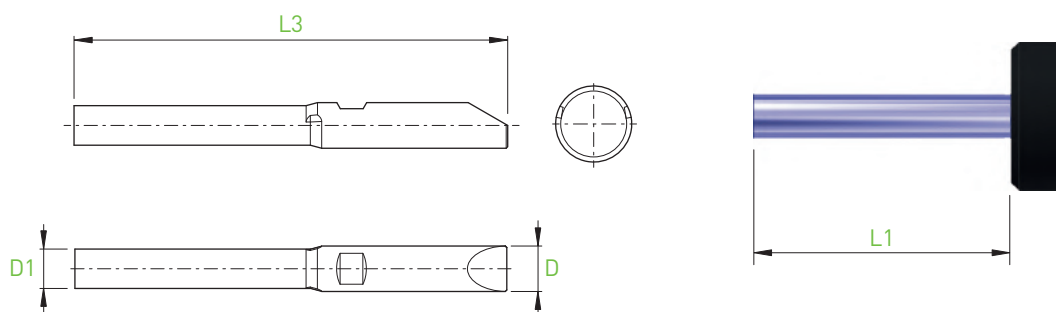
Rohlinge

Blanks



BF4... / BF6...

BF_E



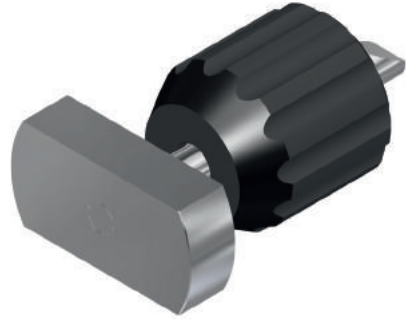
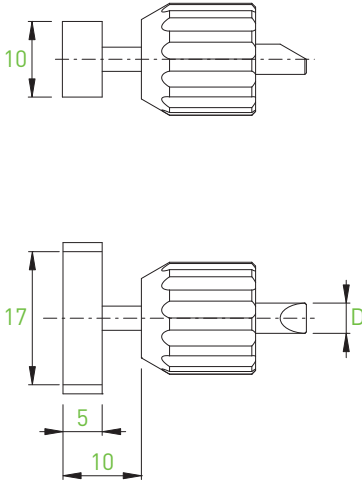
| D_{h5} | Holder | L1 BH4... BHY4... | L1 BHS4... BHK4... | D1 | L3 | Art. N° | ZN |
|----------|---|-------------------------|--------------------------|------|----|---------|----|
| 4 | BH4... BHS4... BHY4... BHK4... | 20.0 | 18.5 | 3.20 | 42 | BF4-E42 | ■ |
| D_{h5} | Holder | L1 BH6... BHY6... | L1 BHS6... BHK6... | D1 | L3 | Art. N° | ZN |
| 6 | BH6... BHS6... BHY6... BHK6... | 30.0 | 28.5 | 5.20 | 57 | BF6-E57 | ■ |

IN-LINE

Jauges d'alignement
Richtplatten
Adjusting tools

MASTER

BH4 / BH6

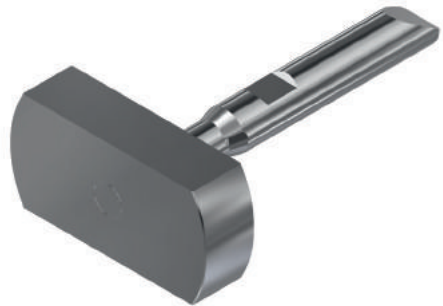
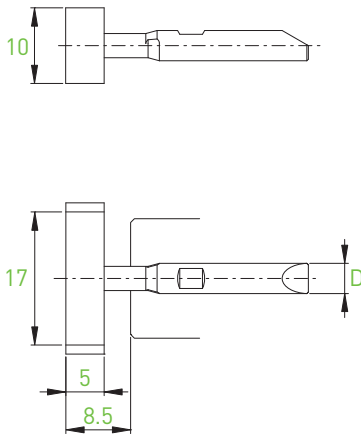


| D h5 | Art. N° | |
|------|------------|---|
| 4 | BH4-MASTER | ■ |
| 6 | BH6-MASTER | ■ |

Jauges d'alignement
Richtplatten
Adjusting tools

MASTER

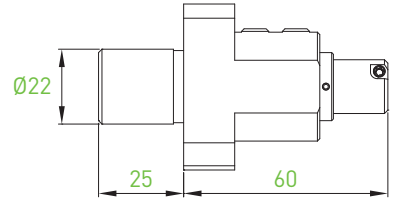
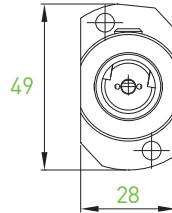
BHSY...



| D h5 | Art. N° | |
|------|--------------|---|
| 4 | BHSY4-MASTER | ■ |
| 6 | BHSY6-MASTER | ■ |

Porte-outils avec arrosage pour contre-opération - Machines STAR
 Halter mit Kühlungssystem für Gegenbearbeitung – STAR-Maschinen
 Backworking holders with through coolant – STAR-Machines

BH4 / BH6
 BHS4 / BHS6



Art. N°

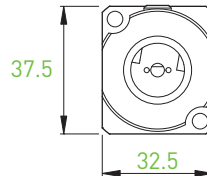
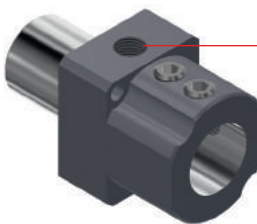
BWD1-2022-STAR-SRR

Art. N°

BHS4-D20-55-BWD1
 BHS6-D20-55-BWD1

Types of STAR machines

SR10J (T22+T24)
 SB16/20 Types C + D + E (T21-T24)
 SB20R Types E + G + N (T21-T24)
 SR20J / JN (T21-T24)
 SR20R / II / III (T21-T24)
 SR20R IV (T21-T24)
 SR32J/JN (T21-T24)
 SW12RII (T21-T24)
 SV20R (T21-T24)
 ECAS12/20 (T21-T24)
 SW20 (T21-T23)



Art. N°

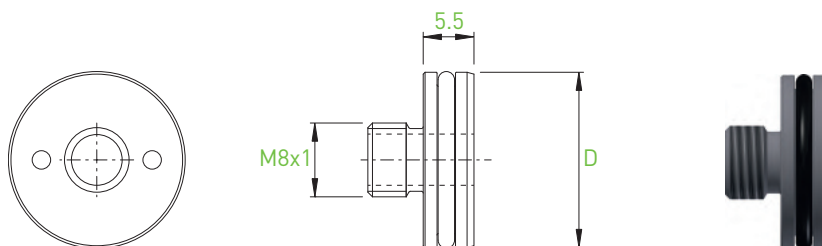
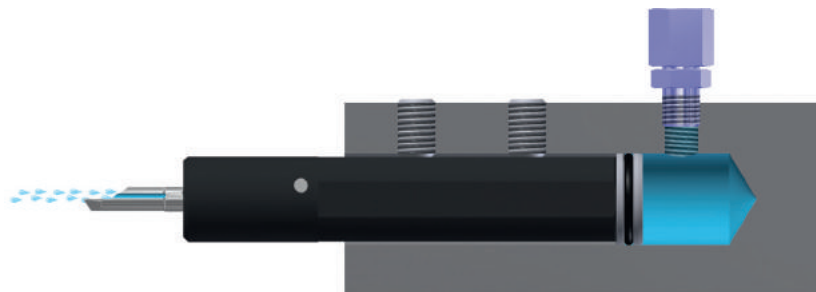
BWD1-2022-STAR-SW

Art. N°

BHS4-D20-55-BWD1
 BHS6-D20-55-BWD1

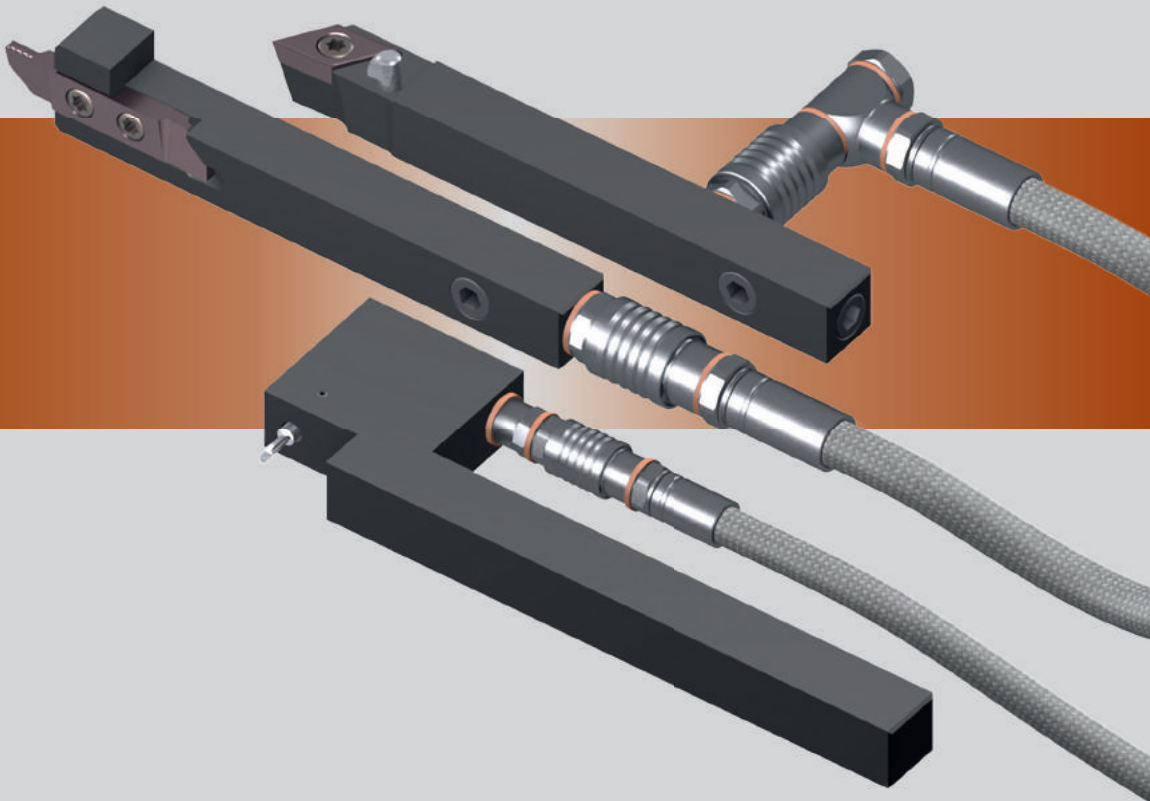
Types of STAR machines

SW12RII (T21-T28)
 SW20 (T21-T23 + T25-T27)
 SV20R (T21-T28)
 SR-20R IV (T21-T28)
 SB12/20R (T22-T24)
 SR38 (T21-T28)



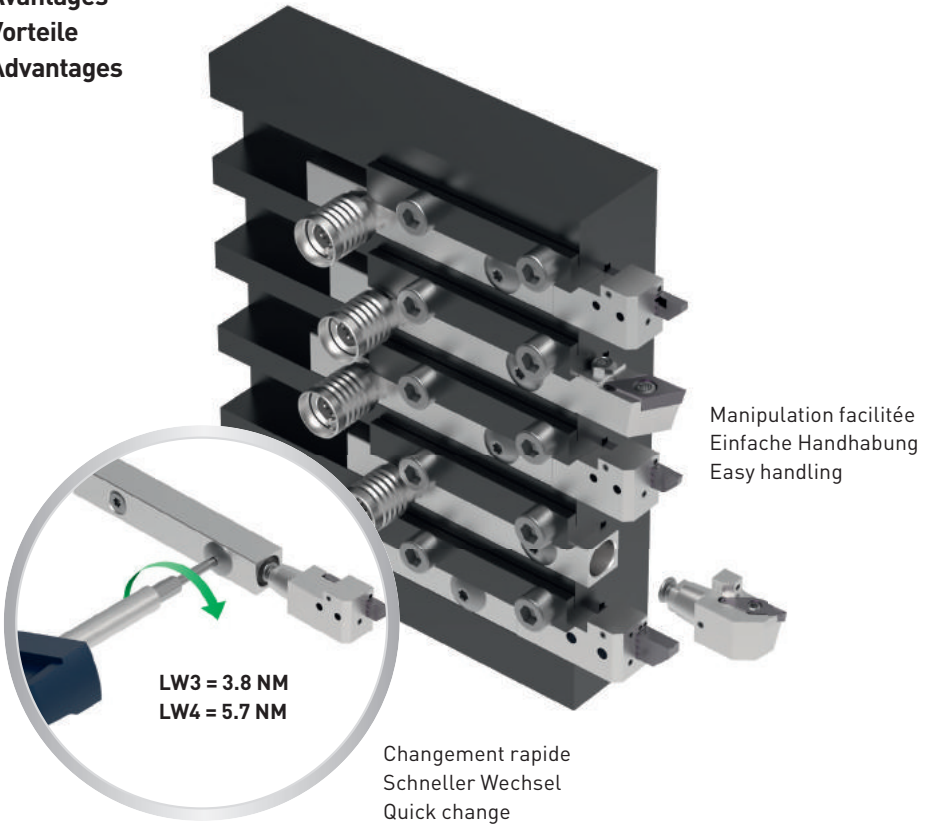
| D | Art. N° | |
|-------|----------------|---|
| 19.05 | JB-M8X1-D19.05 | ■ |
| 20 | JB-M8X1-D20 | ■ |
| 22 | JB-M8X1-D22 | ■ |
| 25 | JB-M8X1-D25 | ■ |
| 25.4 | JB-M8X1-D25.4 | ■ |

JET-LINE

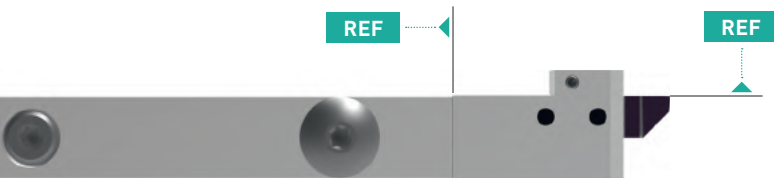
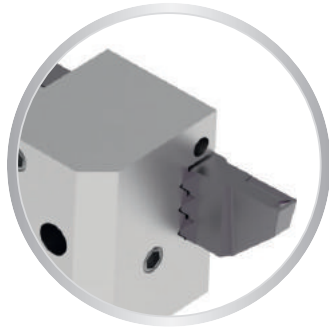


DISCOVER JET-LINE IN CHAPTER 16!

Avantages
Vorteile
Advantages



Lubrification intégrée
Integrierte Kühlung
Integrated coolant



Excellente répétabilité
Ausgezeichnete
Wiederholgenauigkeit
Excellent repeatability

INFO > **11.02**

Supports carrés
Viereckige Halter
Square holders



> **11.05**

Têtes interchangeables | Wechsetköpfe | Interchangeable heads

TOP-Line



LW-730-740 > **11.06**
LW-750-760 > **11.07**
LW-770-780 > **11.08**

TURN-Line



88° LW-310-320 > **11.09**
LW-310-BC/320-BC > **11.10**

85° LW-330-340 > **11.11**

ISO-Line



80° LW-SCL > **11.12**
LW-SCM > **11.13**

55° LW-SDJ > **11.14**
LW-SDN > **11.15**
LW-SDH > **11.16**

35° LW-SVJ > **11.17**
LW-SVV > **11.18**

Supports cylindriques
Zylindrische Halter
Cylinder holders



> **11.19**

Têtes interchangeables porte-pince
Spannzangenwechsetköpfe
Interchangeable head gripper holder



> **11.20**

Porte-outils
Halter
Holders

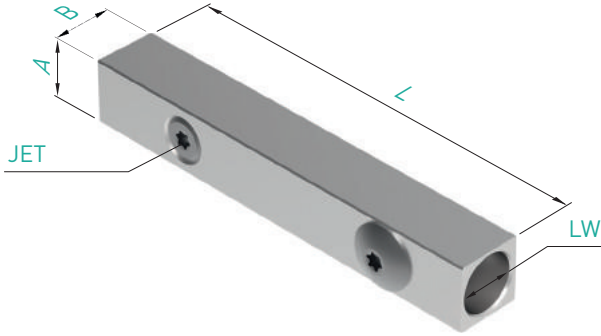


> **11.21**

SWITCH-LINE

Désignations - Carrés
 Bezeichnungen - Quadrat
 Designation - Square

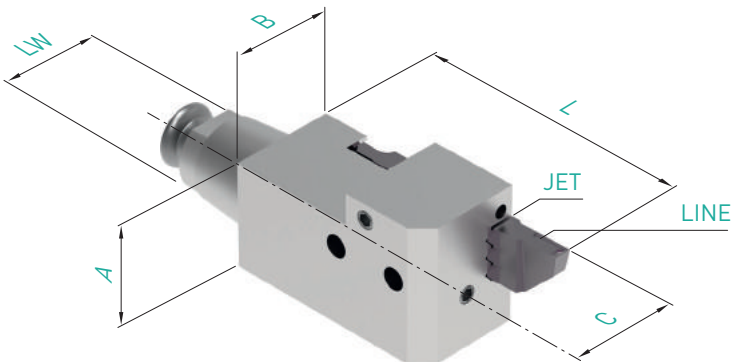
INFO



| LW | A x B | L | JET |
|-----------|---------|-----------------------------|---|
| Interface | Section | Longueur Länge Length | Arrosage intégré Integrierte Kühlung Integrated coolant |

Désignations - Têtes interchangeables
 Bezeichnungen - Wechselköpfe
 Designation - Interchangeable heads

INFO



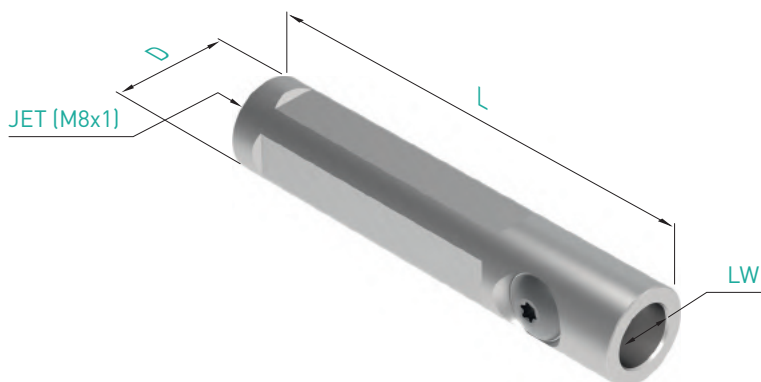
| LW | LINE | A x B | C | L | JET |
|-----------|-------|---------|--|-----------------------------|---|
| Interface | Serie | Section | Localisation axe Achselokalisation Axis location | Longueur Länge Length | Arrosage intégré Integrierte Kühlung Integrated coolant |

Désignations - Cylindres

Bezeichnungen - Zylinder

Designations - Cylinder

INFO



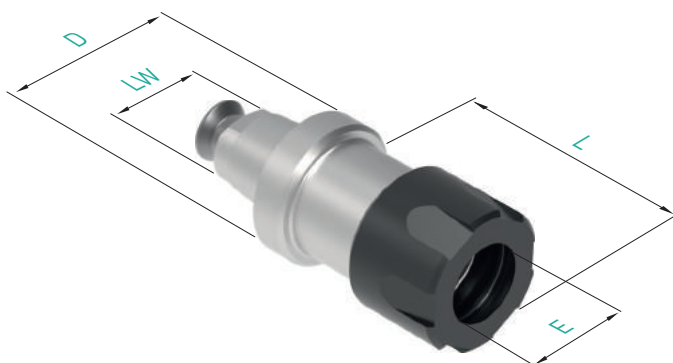
| LW | D | L | JET |
|-----------|---|-----------------------------|---|
| Interface | ∅ | Longueur Länge Length | Arrosage intégré Integrierte Kühlung Integrated coolant |

Désignations - Têtes porte-pinces

Bezeichnungen - Spannzangenköpfe

Designation - Gripper holder heads

INFO

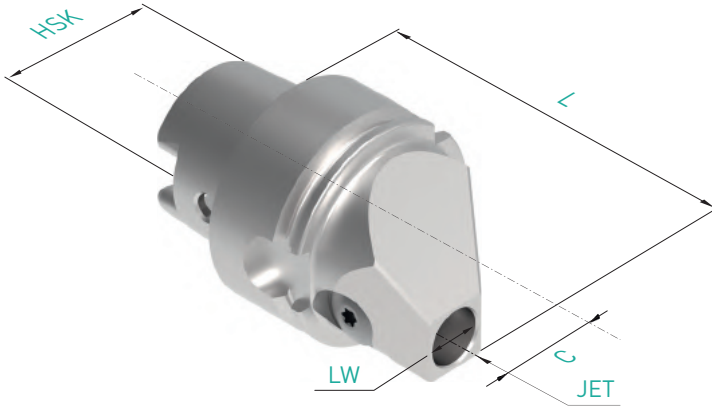


| LW | E | D | L |
|-----------|--|---|-----------------------------|
| Interface | Pince type Spannzange Typ Gripper type | ∅ | Longueur Länge Length |

SWITCH-LINE

- Désignations - HSK
- Bezeichnungen - HSK
- Designation - HSK

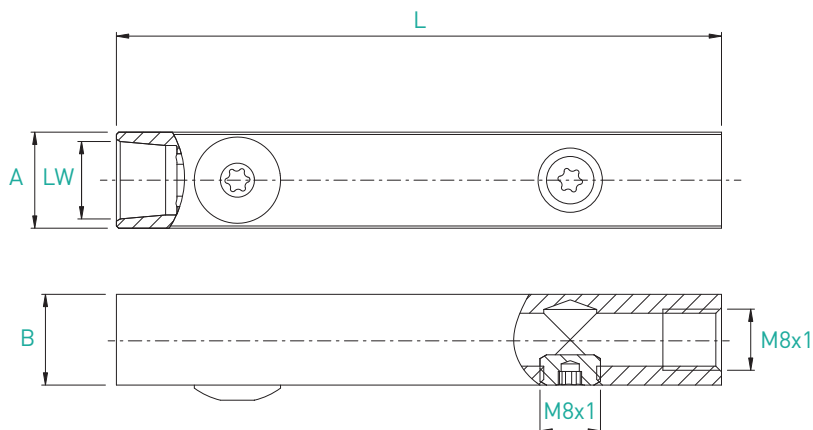
INFO




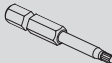


| HSK | LW | C | L | JET | X |
|-------------------|--|--|-----------------------------|---|---|
| Machine interface | Interface tête interchangeable Wechselkopfschnittstelle Interchangeable head interface | Localisation axe Achsellokalisierung Axis location LW | Longueur Länge Length | Arrosage intégré Integrierte Kühlung Integrated coolant | Spécificité fabricant machine Spezifität Maschinenhersteller Specificity machine manufacturer |

Supports carrés
 Viereckige Halter
 Square holders

LW-JET




| Pièces recharges Ersatzteile Spare parts | | Options | |
|--|--|--|--|
|  |  |  |  |

| LW | A x B | L | Art. N° | Art. N° | Art. N° | Art. N° | Art. N° |
|-----|----------|----|------------------|---------|-----------------|----------|-----------|
| LW3 | 12x12 | 80 | LW3-1212-80-JET | JB-M8X1 | LW3-ER1.012.014 | CD-NM3.8 | TX15-E6.3 |
| LW3 | 12.7x12 | 80 | LW3-12.7-80-JET | | | | |
| LW4 | 15.87x16 | 80 | LW4-15.87-80-JET | JB-M8X1 | LW4-ER1.014.019 | CD-NM5.7 | TX20-E6.3 |
| LW4 | 16x16 | 80 | LW4-1616-80-JET | | | | |



Utilisation clé dynamométrique recommandée
 Benutzung eines Drehmomentschlüssels empfohlen
 Recommended use of dynamometric key

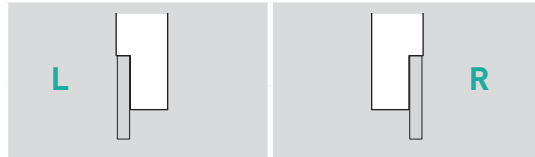
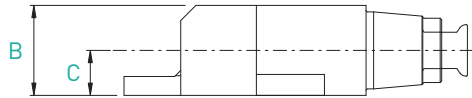
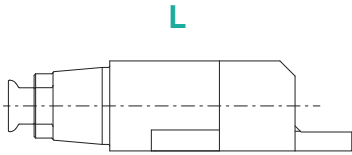
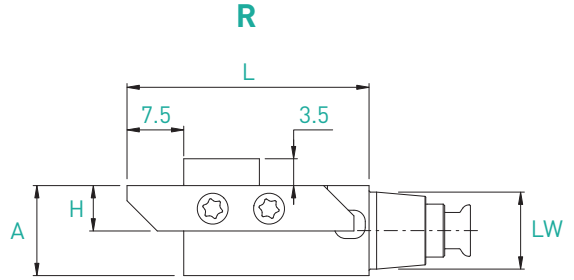
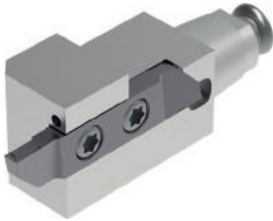
| Options |  |
|---------|---|
| | Art. N° |
| | M8X1 voir JET-LINE siehe JET-LINE see JET-LINE |

SWITCH-LINE

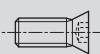


Têtes interchangeables
 Wechselköpfe
 Interchangeable heads

TOP-Line

LW-730/740-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------------|-----|-------|---|---|----|---------------------|---------------------|
| | | | | | | Art. N° | Art. N° |
| 73_-74_ | LW3 | 12x12 | 6 | 6 | 32 | LW3-730-12-0632-JET | LW3-740-12-0632-JET |
| | LW4 | 16x16 | 8 | 8 | 32 | LW4-730-16-0832-JET | LW4-740-16-0832-JET |

| Pièces de rechange Ersatzteile Spare parts | LW |  |  |  |
|--|----|---|---|---|
| | | Art. N° | Art. N° | Art. N° |
| | | LW3 | V-M3X7-T8 | C-T8 |
| LW4 | | | LW4-U00.ER1.000 | |

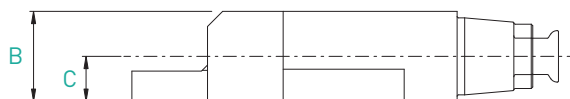
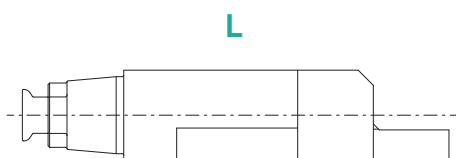
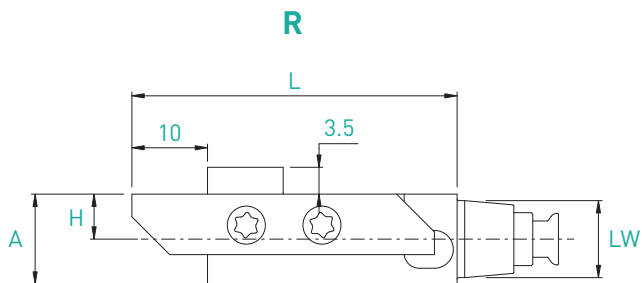
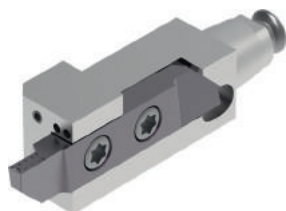
Têtes interchangeables

Wechselköpfe

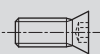


Interchangeable heads

TOP-Line

LW-750/760-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------------|-----|-------|---|---|----|---------------------|---------------------|
| | | | | | | Art. N° | Art. N° |
| 75_-76_ | LW3 | 12x12 | 6 | 6 | 43 | LW3-750-12-0643-JET | LW3-760-12-0643-JET |
| | LW4 | 16x16 | 8 | 8 | 43 | LW4-750-16-0843-JET | LW4-760-16-0843-JET |

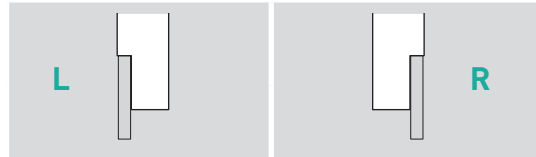
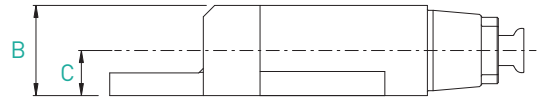
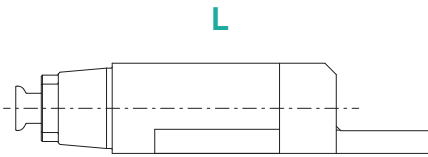
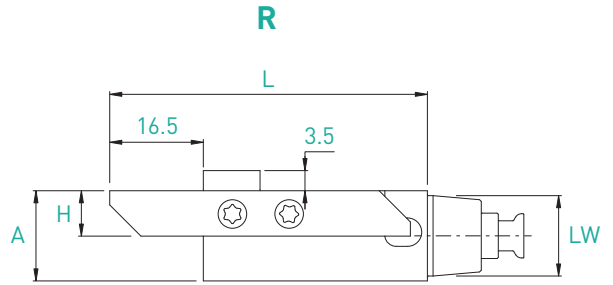
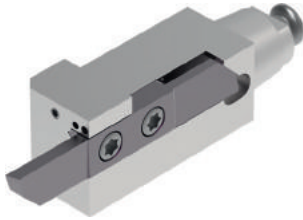
| Pièces de rechange Ersatzteile Spare parts | LW |  |  |  |
|--|----|---|---|---|
| | | Art. N° | Art. N° | Art. N° |
| | | LW3 | V-M4X9-T15 | C-T15 |
| LW4 | | | LW4-U00.ER1.000 | |

SWITCH-LINE

Têtes interchangeables
Wechselköpfe
Interchangeable heads

TOP-Line

LW-770/780-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | Art. N° |
|------------------------|-----|-------|---|---|----|---------------------|---------------------|
| 77_-78_ | LW4 | 16x16 | 8 | 8 | 56 | LW4-770-16-0856-JET | LW4-780-16-0856-JET |

| Pièces de rechange Ersatzteile Spare parts | LW | Art. N° | Art. N° | Art. N° |
|--|-----|------------|---------|-----------------|
| | LW4 | V-M4X9-T15 | C-T15 | LW4-U00.ER1.000 |

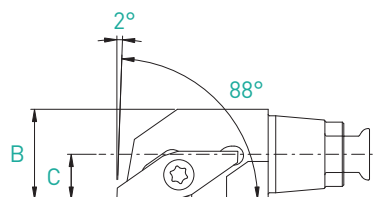
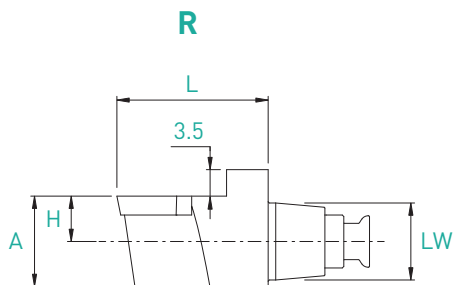
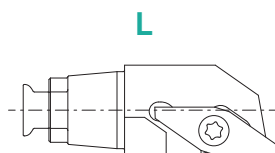
Têtes interchangeables

Wechselköpfe

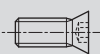


Interchangeable heads

TURN-Line 88°

LW-310/320-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------------|-----|-------|---|---|----|---------------------|---------------------|
| | | | | | | Art. N° | Art. N° |
| 31_-32_ | LW3 | 12x12 | 6 | 6 | 20 | LW3-310-12-0620-JET | LW3-320-12-0620-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-310-16-0825-JET | LW4-320-16-0825-JET |

| Pièces de rechange Ersatzteile Spare parts | LW |  |  |  |
|--|-----|---|---|---|
| | | Art. N° | Art. N° | Art. N° |
| | LW3 | V-M2.5X7.8-T8 | C-T8 | LW3-U00.ER1.000 |
| | LW4 | | | LW4-U00.ER1.000 |

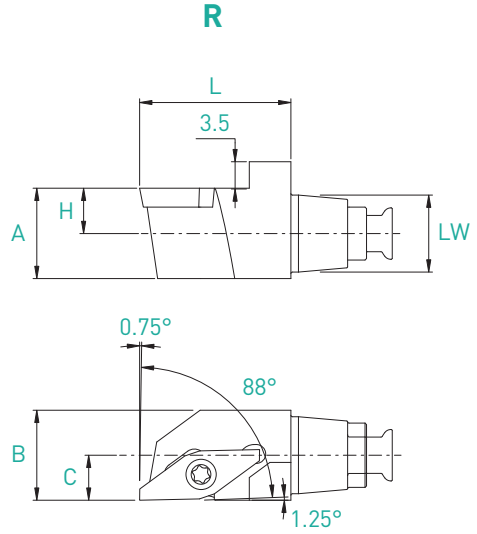
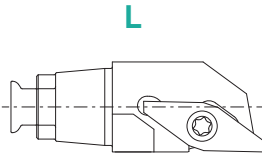
SWITCH-LINE

Têtes interchangeables
Wechselköpfe
Interchangeable heads

TURN-Line

88°

LW-310-BC/320-BC-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------------|-----|-------|---|---|----|------------------------|------------------------|
| | | | | | | L | R |
| 31_-32_ | LW3 | 12x12 | 6 | 6 | 20 | LW3-310-12-0620-BC-JET | LW3-320-12-0620-BC-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-310-16-0825-BC-JET | LW4-320-16-0825-BC-JET |

| Pièces de rechange Ersatzteile Spare parts | LW | Art. N° | | |
|--|-----|---------------|------|------------------------------------|
| | | V-M2.5X7.8-T8 | C-T8 | LW3-U00.ER1.000 LW4-U00.ER1.000 |
| | LW3 | V-M2.5X7.8-T8 | C-T8 | LW3-U00.ER1.000 |
| | LW4 | V-M2.5X7.8-T8 | C-T8 | LW4-U00.ER1.000 |

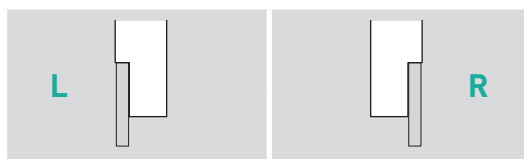
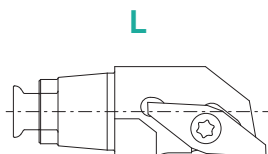
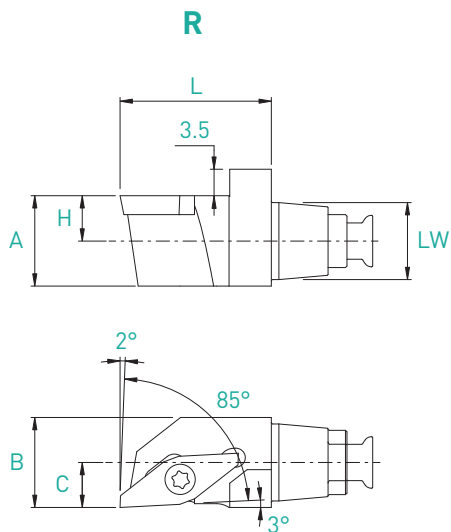
Têtes interchangeables

Wechselköpfe

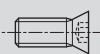


Interchangeable heads

TURN-Line 85°

LW-330/340-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------------|-----|-------|---|---|----|---------------------|---------------------|
| | | | | | | Art. N° | Art. N° |
| 33_-34_ | LW3 | 12x12 | 6 | 6 | 20 | LW3-330-12-0620-JET | LW3-340-12-0620-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-330-16-0825-JET | LW4-340-16-0825-JET |

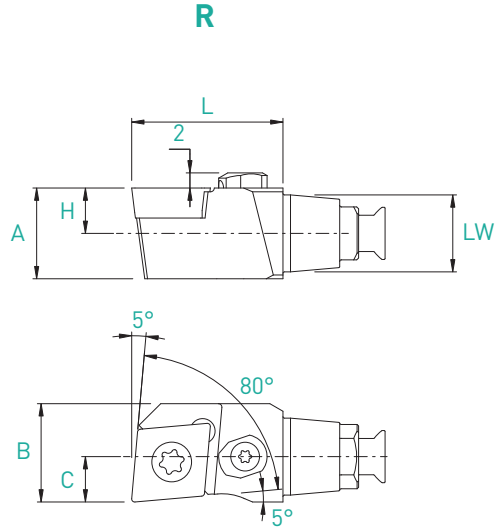
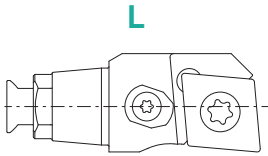
| Pièces de rechange Ersatzteile Spare parts | LW |  |  |  |
|--|----|---|---|---|
| | | Art. N° | Art. N° | Art. N° |
| | | LW3 | V-M2.5X7.8-T8 | C-T8 |
| LW4 | | | LW4-U00.ER1.000 | |

SWITCH-LINE

Têtes interchangeables
Wechselköpfe
Interchangeable heads

ISO-Line 80°

LW-SCL-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------|-----|-------|---|---|----|--------------------------|--------------------------|
| | | | | | | Art. N° | Art. N° |
| CC...-0602.. | LW3 | 12x12 | 6 | 6 | 20 | LW3-SCLCL-12-0620-06-JET | LW3-SCLCR-12-0620-06-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SCLCL-16-0825-06-JET | LW4-SCLCR-16-0825-06-JET |
| CC...-09T3.. | LW3 | 12x12 | 6 | 6 | 20 | LW3-SCLCL-12-0620-09-JET | LW3-SCLCR-12-0620-09-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SCLCL-16-0825-09-JET | LW4-SCLCR-16-0825-09-JET |

| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW | Art. N° | Art. N° | Art. N° | Art. N° |
|--|------------------------|----------------|---------|-----------------|-----------------|---------|
| | | | Art. N° | Art. N° | Art. N° | Art. N° |
| CC...-0602.. | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| CC...-09T3.. | LW3 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |

Têtes interchangeables

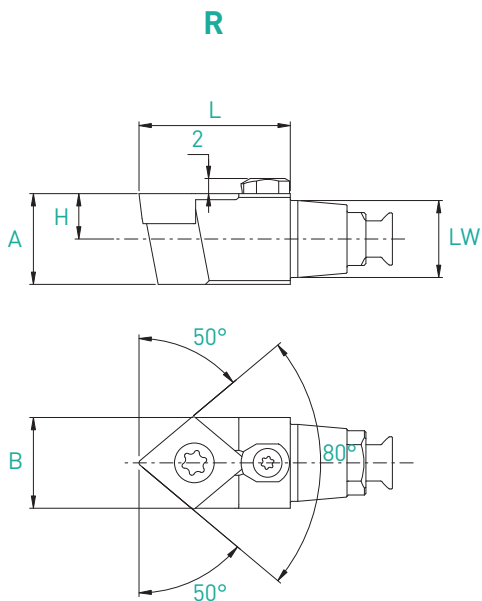
Wechselköpfe

Interchangeable heads

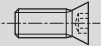



ISO-Line

80°

LW-SCM-JET



| Plaquettes WSP Inserts | LW | A x B | H | L | Art. N° |
|------------------------|-----|-------|---|----|--------------------------|
| CC...-0602.. | LW3 | 12x12 | 6 | 20 | LW3-SCMCN-12-0020-06-JET |
| | LW4 | 16x16 | 8 | 25 | LW4-SCMCN-16-0025-06-JET |
| CC...-09T3.. | LW3 | 12x12 | 6 | 20 | LW3-SCMCN-12-0020-09-JET |
| | LW4 | 16x16 | 8 | 25 | LW4-SCMCN-16-0025-09-JET |

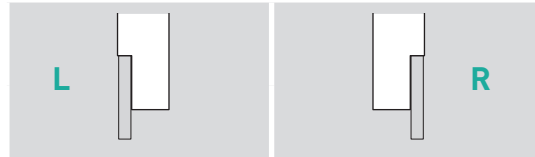
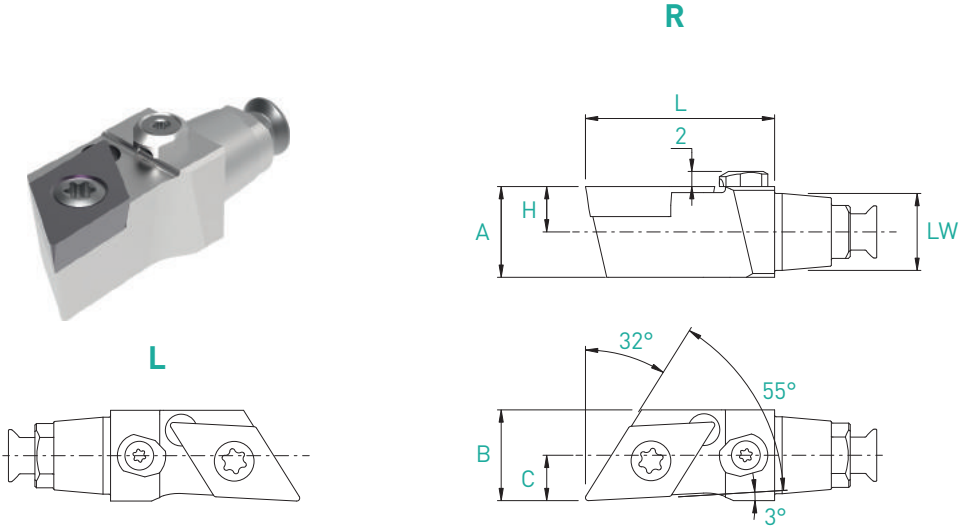
| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW |  |  |  |  |
|--|------------------------|----------------|---|---|---|---|
| | | | Art. N° | Art. N° | Art. N° | Art. N° |
| CC...-0602.. | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| CC...-09T3.. | LW3 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |

SWITCH-LINE

Têtes interchangeables
Wechselköpfe
Interchangeable heads

ISO-Line 55°

LW-SDJ-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------|-----|-------|---|---|----|--------------------------|--------------------------|
| | | | | | | Art. N° | Art. N° |
| DC...-0702.. | LW3 | 12x12 | 6 | 6 | 20 | LW3-SDJCL-12-0620-07-JET | LW3-SDJCR-12-0620-07-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SDJCL-16-0825-07-JET | LW4-SDJCR-16-0825-07-JET |
| DC...-11T3.. | LW3 | 12x12 | 6 | 6 | 25 | LW3-SDJCL-12-0625-11-JET | LW3-SDJCR-12-0625-11-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SDJCL-16-0825-11-JET | LW4-SDJCR-16-0825-11-JET |

| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW | Art. N° | Art. N° | Art. N° | Art. N° |
|--|------------------------|----------------|---------------|-----------------|-----------------|------------------------------------|
| | | | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 LW4-U00.ER1.000 |
| DC...-0702.. | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | | LW3-U00.ER1.000 |
| | LW4 | | | | LW4-U00.ER1.000 | |
| DC...-11T3.. | LW3 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |

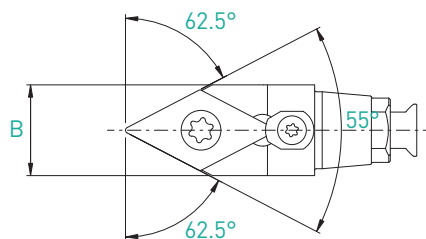
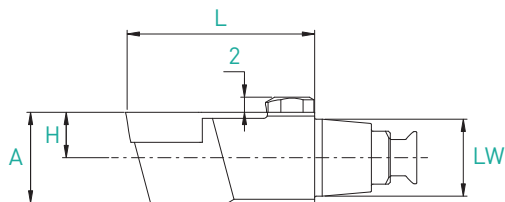
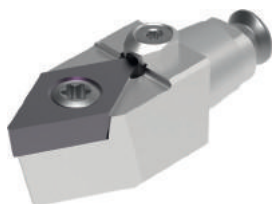
Têtes interchangeables

Wechselköpfe

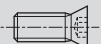



Interchangeable heads

ISO-Line 55°

LW-SDN-JET



| Plaquettes WSP Inserts | LW | A x B | H | L | Art. N° |
|------------------------|-----|-------|---|----|--------------------------|
| DC..-0702 | LW3 | 12x12 | 6 | 20 | LW3-SDNCN-12-0020-07-JET |
| | LW4 | 16x16 | 8 | 25 | LW4-SDNCN-16-0025-07-JET |
| DC..-11T3 | LW3 | 12x12 | 6 | 25 | LW3-SDNCN-12-0025-11-JET |
| | LW4 | 16x16 | 8 | 25 | LW4-SDNCN-16-0025-11-JET |

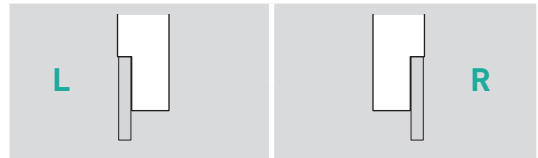
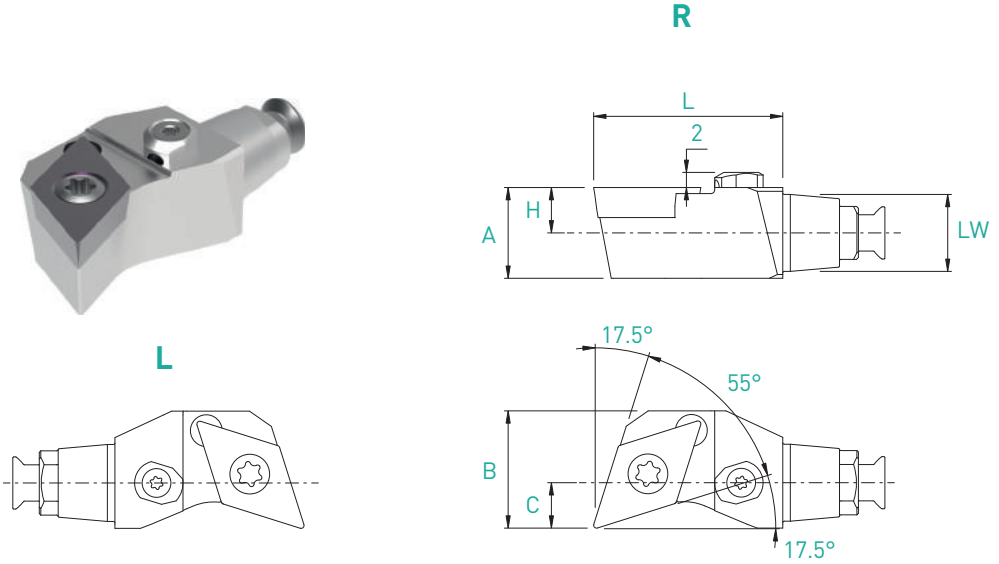
| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW |  |  |  |  |
|--|------------------------|----------------|---|---|---|---|
| | | | Art. N° | Art. N° | Art. N° | Art. N° |
| DC..-0702 | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| DC..-11T3 | LW3 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |

SWITCH-LINE

Têtes interchangeables
Wechselköpfe
Interchangeable heads

ISO-Line 55°

LW-SDH-JET



| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | |
|------------------------|-----|---------|---|---|----|--------------------------|--------------------------|
| | | | | | | L | R |
| DC...-0702.. | LW3 | 12x15.5 | 6 | 6 | 20 | LW3-SDHCL-12-0620-07-JET | LW3-SDHCR-12-0620-07-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SDHCL-16-0825-07-JET | LW4-SDHCR-16-0825-07-JET |
| DC...-11T3.. | LW3 | 12x15.5 | 6 | 6 | 25 | LW3-SDHCL-12-0625-11-JET | LW3-SDHCR-12-0625-11-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SDHCL-16-0825-11-JET | LW4-SDHCR-16-0825-11-JET |

| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW | Art. N° | Art. N° | Art. N° | Art. N° |
|--|------------------------|----------------|---------------|-----------------|-----------------|------------------------------------|
| | | | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 LW4-U00.ER1.000 |
| DC...-0702.. | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | | LW3-U00.ER1.000 |
| | LW4 | | | | LW4-U00.ER1.000 | |
| DC...-11T3.. | LW3 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |

Têtes interchangeables

Wechselköpfe

Interchangeable heads

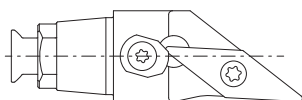
ISO-Line

35°

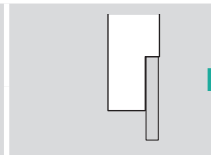
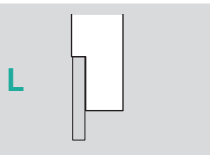
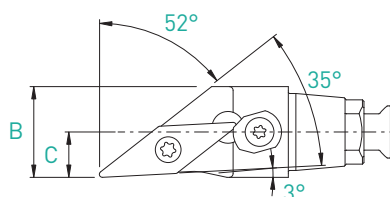
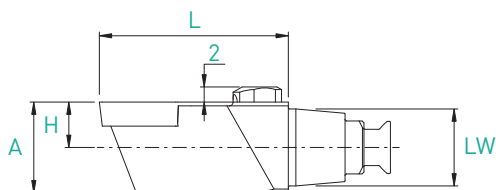
LW-SVJ-JET



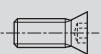
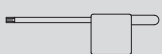


L



R



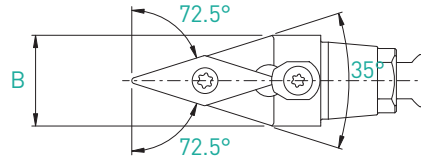
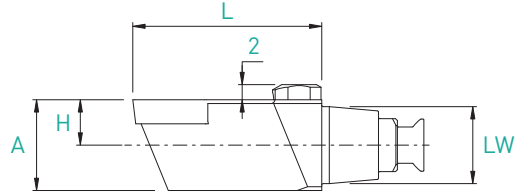
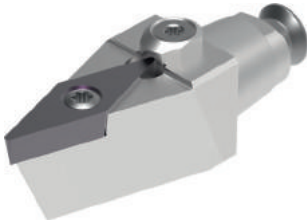
| Plaquettes WSP Inserts | LW | A x B | H | C | L | Art. N° | Art. N° |
|------------------------|-----|-------|---|---|----|--------------------------|--------------------------|
| VC...-1103.. | LW3 | 12x12 | 6 | 6 | 25 | LW3-SVJCL-12-0625-11-JET | LW3-SVJCR-12-0625-11-JET |
| | LW4 | 16x16 | 8 | 8 | 25 | LW4-SVJCL-16-0825-11-JET | LW4-SVJCR-16-0825-11-JET |
| VC...-1303.. | LW3 | 12x12 | 6 | 6 | 30 | LW3-SVJCL-12-0630-13-JET | LW3-SVJCR-12-0630-13-JET |
| | LW4 | 16x16 | 8 | 8 | 30 | LW4-SVJCL-16-0830-13-JET | LW4-SVJCR-16-0830-13-JET |
| VC...-1604.. | LW4 | 16x16 | 8 | 8 | 35 | LW4-SVJCL-16-0835-16-JET | LW4-SVJCR-16-0835-16-JET |

| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW |  |  |  |  |
|--|------------------------|----------------|---|---|---|---|
| | | | Art. N° | Art. N° | Art. N° | Art. N° |
| VC...-1103.. | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| VC...-1303.. | LW3 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| VC...-1604.. | LW4 | V-M4X9-T15-ISO | C-T15 | LWX-ER1.007.002 | LW4-U00.ER1.000 | |





Têtes interchangeables
 Wechselköpfe
 Interchangeable heads

ISO-Line 35°

LW-SVV-JET



| Plaquettes WSP Inserts | LW | A x B | H | L | Art. N° |
|------------------------|-----|-------|---|----|--------------------------|
| VC..-1103.. | LW3 | 12x12 | 6 | 25 | LW3-SVVCN-12-0025-11-JET |
| | LW4 | 16x16 | 8 | 25 | LW4-SVVCN-16-0025-11-JET |
| VC..-1303.. | LW3 | 12x12 | 6 | 30 | LW3-SVVCN-12-0030-13-JET |
| | LW4 | 16x16 | 8 | 30 | LW4-SVVCN-16-0030-13-JET |
| VC..-1604.. | LW4 | 16x16 | 8 | 35 | LW4-SVVCN-16-0035-16-JET |

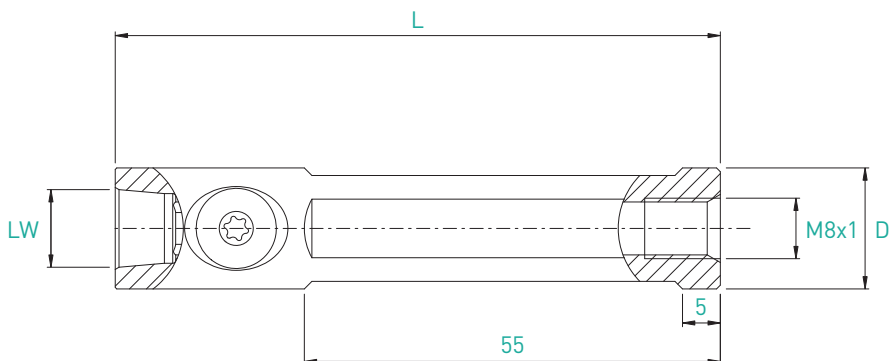
| Pièces de rechange Ersatzteile Spare parts | Plaquettes WSP Inserts | LW |  |  |  |  |
|--|------------------------|-----------------|---|---|---|---|
| | | | Art. N° | Art. N° | Art. N° | Art. N° |
| VC..-1103.. | LW3 | V-M2.5X7.8-T8 | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| VC..-1303.. | LW3 | V-M3X7.3-T8-ISO | C-T8 | LWX-ER1.007.002 | LW3-U00.ER1.000 | |
| | LW4 | | | | LW4-U00.ER1.000 | |
| VC..-1604.. | LW4 | V-M4X9-T15-ISO | C-T15 | | LW4-U00.ER1.000 | |





Supports cylindriques

Zylindrische Halter

Cylinder holders


LW-D



| | | | | Pièces rechanges Ersatzteile Spare parts | | Options | | |
|-----|-------|----|----|--|--|---|--|-----------|
| | | | |  |  |  |  | |
| LW | D | L | L1 | Art. N° | Art. N° | Art. N° | Art. N° | |
| LW3 | 16 | 80 | 55 | LW3-D16-80-JET | LW3-ER1.012.014 | JB-M8X1 | CD-NM3.8 | TX15-E6.3 |
| LW4 | 19.05 | 80 | 55 | LW4-D19.05-80-JET | LW4-ER1.014.018 | | CD-NM5.7 | TX20-E6.3 |
| | 20 | 80 | 55 | LW4-D20-80-JET | LW4-ER1.014.019 | | | |
| | 22 | 80 | 55 | LW4-D22-80-JET | LW4-ER1.014.019 | | | |
| | 25 | 80 | 55 | LW4-D25-80-JET | LW4-ER1.015.023 | | | |
| | 25.4 | 80 | 55 | LW4-D25.4-80-JET | LW4-ER1.015.023 | | | |



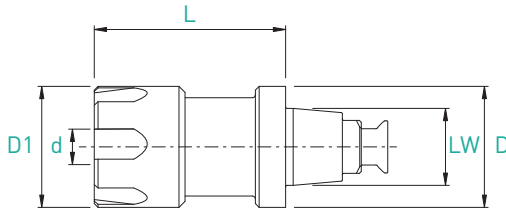
Utilisation clé dynamométrique recommandée
 Benutzung eines Drehmomentschlüssel empfohlen
 Recommended use of dynamometric key

| | |
|------------------|---|
| Options raccords |  |
| | Art. N° |
| | M8X1 voir JET-LINE siehe JET-LINE see JET-LINE |

SWITCH-LINE

Têtes interchangeables porte-pince
 Spannzangenwechselköpfe
 Interchangeable heads gripper holder

LW-E



Pièces rechanges
 Ersatzteile
 Spare parts



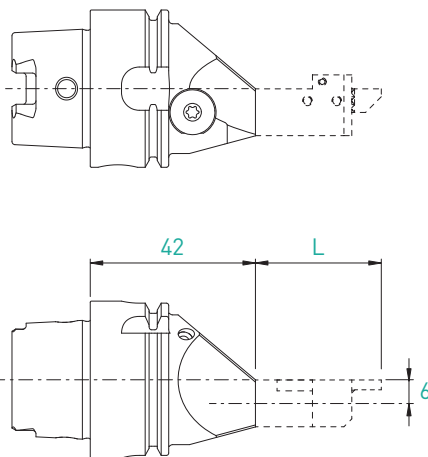
| LW | D | D1 | L | Pince type | d | Art. N° | Art. N° | Art. N° |
|-----|----|----|----|------------|--------|----------------|-----------------|----------------|
| LW3 | 16 | 16 | 26 | ER11 | 0.5-7 | LW3-E11-D16-26 | E11-ER1.001-012 | LW3-U00.ER1.00 |
| LW4 | 19 | 16 | 26 | ER11 | 0.5-7 | LW4-E11-D19-26 | | LW4-U00.ER1.00 |
| | 19 | 22 | 35 | ER16 | 0.5-10 | LW4-E16-D19-35 | E16-ER1.001-018 | |

Porte-outils

Halter

Holders

HSK-40-LW3



BUMOTEC S191

| LW | Compatibility | Page | L | Art. N° | Art. N° |
|-------------|---------------|-------------|----|----------------------|---------------------------|
| LW3 | LW3-740.. | 11.06 | 32 | HSK-T40-LW3-0642-JET | HSK-A40-LW3-0642-JET-BU** |
| | LW3-760.. | 11.07 | 43 | | |
| | LW3-320-340.. | 11.09/11.11 | 20 | | |
| | LW3-SCLCR.. | 11.12 | 20 | | |
| | LW3-SCMCN.. | 11.13 | 20 | | |
| | LW3-SDJCR.. | 11.14 | 20 | | |
| | LW3-SDNCN.. | 11.15 | 20 | | |
| | LW3-SDHCR.. | 11.16 | 20 | | |
| LW3-SVJCR.. | 11.17 | 25 | | | |

** Pour machines Bumotec

| Pièces rechanges Ersatzteile Spare parts | Options | |
|--|----------|-----------|
| | | |
| Art. N° | Art. N° | Art. N° |
| LW3-ER1.012.014 | CD-NM3.8 | TX15-E6.3 |

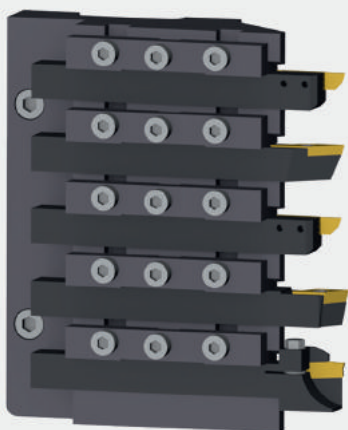


Système d'outils modulaires

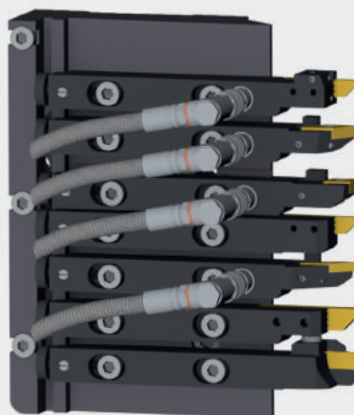
Modulares Werkzeugsystem

Modular tooling system

Original system



MODU-Line system



Système d'outils modulaires
pour tours automatiques

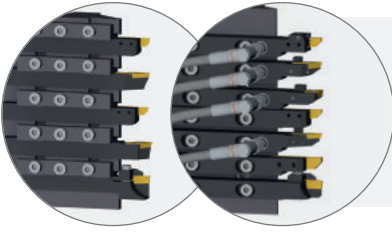
Modulares Werkzeugsystem
für Langdrehautomaten

Modular tooling system for
sliding headstock automatic lathes

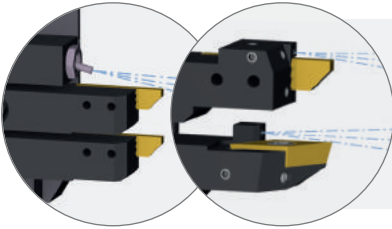
Les avantages

Die Vorteile

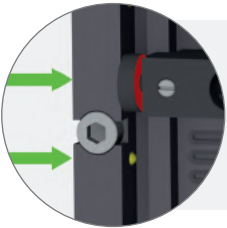
The advantages



Plus d'outils disponibles
Höhere Werkzeuganzahl
More available tools



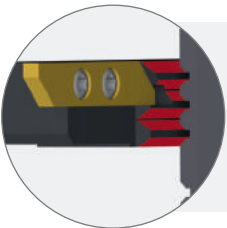
Système d'arrosage efficace
Effizientes Kühlmittelzufuhrsystem
Efficient coolant supply system



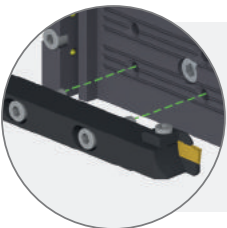
Repositionnement précis, poussée axiale automatique
Präzise Nachpositionierung, automatischer Axialschub
Precise repositioning, automatic axial thrust



Possibilité de pré réglage et de réglage de la longueur des outils
Voreinstellbar auf feste oder einstellbare Länge
Presetting on fixed or adjustable length



Système de fixation robuste et rigide
Robustes und starres Spannsystem
Strong and stable clamping system



Changement d'outil simple et rapide
Einfacher und schneller Werkzeugwechsel
Easy and quick tool replacement

Adaptations disponibles pour les machines suivantes:
 Verfügbare Anpassungen für folgende Maschinen:
 Available adapters for the following machines:

**Citizen - Hanwha -
 Manurhin - Metafil - > 12.06
 Star - Tornos - Tsugami**

Porte-outils
 Halter
 Holders

INFO > 12.60

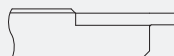
ML12



ML16



Right cut



TOP-Line > 12.64

TURN-Line > 12.65

ISO-Line > 12.66

EVOCUT-Line > 12.68

CUT-Line > 12.69

PRO-Line > 12.70

ECO-Line > 12.70

IN-Line > 12.71

TOOLING-Line > 12.73

Cut off line



TOP-Line > 12.74

TURN-Line > 12.76

ISO-Line > 12.77

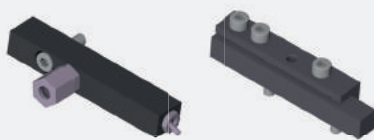
EVOCUT-Line > 12.78

CUT-Line > 12.79

PRO-Line > 12.80

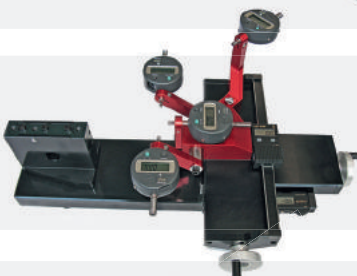
ECO-Line > 12.81

Modules d'arrosage et de serrage
 Kühlmittelzufuhr- und Spannelemente
 Coolant and clamping supply unit



> 12.82

Banc de pré réglage
 Voreinstellgerät
 Presetting device



> 12.84

Pièces de rechange
 Ersatzteile
 Spare parts



> 12.86

Adaptations disponibles pour les machines suivantes

Verfügbare Anpassungen für folgende Maschinen

Available adapters for the following machines

| Fabricant Hersteller Manufacturer | Machine Maschine Machine | Adaptations Anpassungen Adapters | Type Typ Type | Page Seite Page | |
|---|-------------------------------------|--|---------------------|-----------------------------|-------------------------------------|
| Citizen | C12/C16 | ML12-CITIZEN-C16 | ML12 | 12.06 | |
| | L12-1M7 | ML12-CITIZEN-L12-1M7 | | 12.07 | |
| | L12-2M10 | ML12-CITIZEN-L12-2M10 | | 12.08 | |
| | M16V/VIII | ML12-CITIZEN-M16V/VIII | | 12.09 | |
| | R04 | | | ML12-CITIZEN-R04-QTF3101-3T | 12.12 |
| | | | | ML12-CITIZEN-R04-QTF5008-4T | 12.10 |
| | | | | ML12-CITIZEN-R04-QTF5108-4T | |
| | R07 | | | ML12-CITIZEN-R07-QTF4008-5T | 12.13 |
| | | | | ML12-CITIZEN-R07-QTF4108-6T | |
| | | | | ML12-CITIZEN-R07-QTF4208-3T | |
| | K12/K16 | | | ML12-CITIZEN-R07-QTF4608-4T | 12.14 |
| | | | | ML16-CITIZEN-K16 | 12.15 |
| ML16-CITIZEN-L20 | | | 12.16 | | |
| ML16-CITIZEN-L20E | | | 12.17 | | |
| L16/L20-5M1/5M7 | | | ML16 | | |
| | | | | | L20E-1M8/L20X-1M10/ L20-2M8/2M12 |
| Hanwha | XD20M | ML12-HANWHA-XD20M | ML12 | 12.18 | |
| | SL12/16 | ML16-HANWHA-SL12/16 | ML16 | 12.19 | |
| Manuhrin | KMX 426/526/626/ Swingg 20-26 MM | ML16-KMX26-DUO | ML16 | 12.20 | |
| | | ML16-KMX26-JET | | | |
| Metafil | D3/D10/D13 | ML12-D10-3T | ML12 | 12.21 | |
| Star | SB-12RG | ML12-STAR-SB-12RG | ML12 | 12.22 | |
| | SR-10J | ML12-STAR-SR-10J | | 12.23 | |
| | SW-12RII | ML12-STAR-SW-12RII-2T | | 12.24 | |
| | | ML12-STAR-SW-12RII-8T | | | |
| | SA-12/SA-16/SA-16R | ML16-STAR-SA-16 | ML16 | 12.25 | |
| | SB-16 | ML16-STAR-SB-16 | | 12.26 | |
| | SB-16/20RG | ML16-STAR-SB-16/20RG | | 12.27 | |
| | SB-20C/E | ML16-STAR-SB-20 | | 12.28 | |
| | SR-16R/SR-20R/SR-20RII | ML16-STAR-SR-20R | | 12.29 | |
| | SR-20J/SR-20RIII | ML16-STAR-SR-20J | | 12.30 | |
| | SR-20JII-A/B | ML16-STAR-SR-20JII-A/B | | 12.31 | |
| | | | | | |
| | SR-20RIV | ML16-STAR-SR-20RIV-2T | | 12.32 | |
| | | ML16-STAR-SR-20RIV-6T | | | |
| | SR-32J | ML16-STAR-SR-32J | | 12.33 | |
| | SV-12/20 | ML16-STAR-SV-12/20 | | 12.35 | |
| | SV-20R | ML16-STAR-SV-20R | | | |
| SW-20R | ML16-STAR-SW-20R-2T | 12.36 | | | |
| | ML16-STAR-SW-20R-6T | | | | |

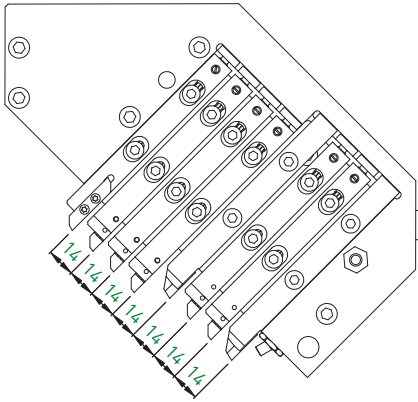
Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

| Fabricant Hersteller Manufacturer | Machine Maschine Machine | Adaptations Anpassungen Adapters | Type Typ Type | Page Seite Page |
|---|--------------------------------|--|---------------------|-----------------------|
| Tornos | DEC07/10 - EvoDECO 10 | ML12-DEC010-DUO | ML12 | 12.37 |
| | | ML12-DEC010-JET | | |
| | SWISS-NANO /SWISS-NANO 7 | ML12-SWISS-NANO-2T | | 12.40 |
| | | ML12-SWISS-NANO-3T | | |
| | | ML12-SWISS-NANO-6T | | |
| | SWISS-NANO 7 | ML12-SWISS-NANO-4T | | 12.38 |
| | DT13 | ML12-DT13-2020206-9T | | 12.41 |
| | CT20 | ML12-CT20-2020019-7T | | 12.42 |
| | GT13 | ML12-GT13-390224-5T | | 12.44 |
| | | ML12-GT13-390223-7T | | |
| | GT26 | ML16-GT26-386210-5T | | 12.46 |
| | | ML16-GT26-386209-6T | | |
| | GT32 | ML16-GT32-389210-4T | | 12.48 |
| | | ML16-GT32-389209-5T | | |
| | DEC013- EvoDECO16 | ML16-DEC013-DUO | | 12.50 |
| | | ML16-DEC013-JET | | |
| DEC020/26 - EvoDECO20/32 | ML16-DEC020-DUO | 12.51 | | |
| | ML16-DEC020-JET | | | |
| SIGMA20/32 | ML16-S20-DUO | 12.52 | | |
| | ML16-S20-JET | | | |
| SWISS ST26 | ML16-SWISS-ST26-DUO | 12.53 | | |
| | ML16-SWISS-ST26-JET | | | |
| DT26 | ML16-DT26-2020206-7T | 12.54 | | |
| Tsugami | B074 | ML12-B074-1-6T | ML12 | 12.55 |
| | B075 | ML12-B075-1-8T | | 12.56 |
| | PO34 | ML12-PO34-1-5T | | 12.57 |
| | | ML12-PO34-1-7T | | 12.58 |
| | | ML12-PO34-2-4T | | 12.57 |
| | | ML12-PO34-2-10T | | 12.58 |

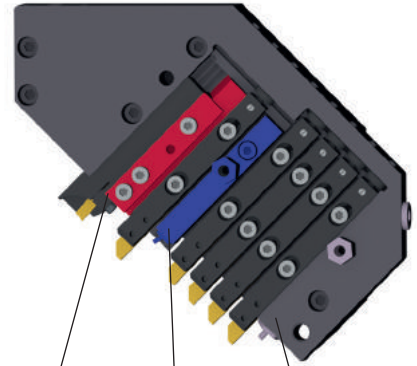
Citizen C12 / C16

+ 2 outils (max 8)
 + 2 Werkzeuge (max 8)
 + 2 tools (max 8)

ML12

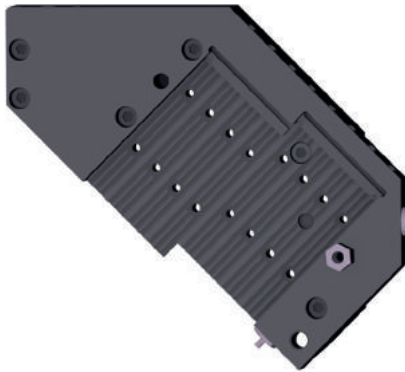


Outil 12 mm possible avec module de serrage
 Werkzeug 12 mm mit Spannelement möglich
 Tool 12mm possible with clamping unit



Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)

Arrosage intégré
 Integrierter Kühlmittel
 Integrated coolant



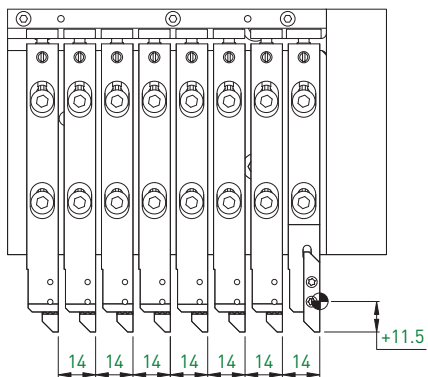
Accessoires
 Zubehöre
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-CITIZEN-C16 | ML12 | > 12.63 | ML12-FIX-12/14 | ML12-JET-5/16 | 12.82 |

Citizen L12-1M7

- + 2 outils (max 8)
- + 2 Werkzeuge (max 8)
- + 2 tools (max 8)

ML12



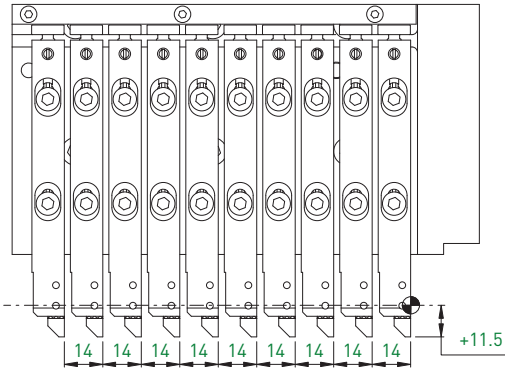
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-CITIZEN-L12-1M7 | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Citizen L12-2M10

- + 3 outils (max 10)
- + 3 Werkzeuge (max 10)
- + 3 tools (max 10)

ML12



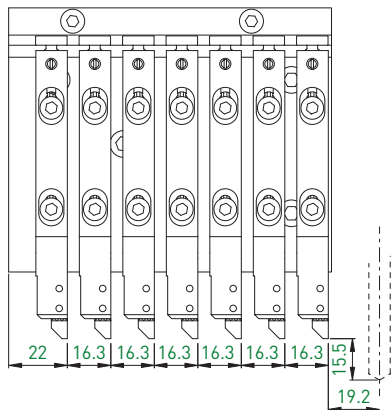
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-CITIZEN-L12-2M10 | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Citizen M16 V/VIII

- + 2 outils (max 7)
- + 2 Werkzeuge (max 7)
- + 2 tools (max 7)

ML12



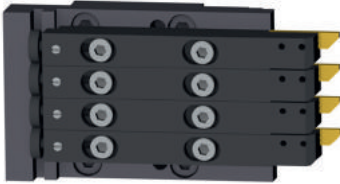
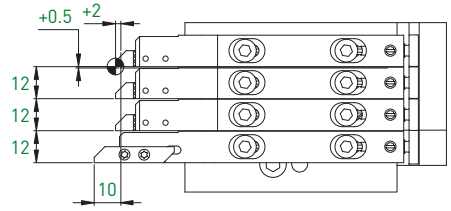
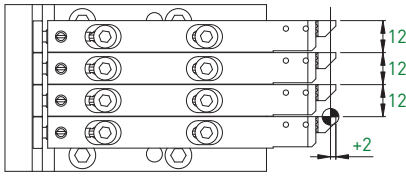
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-CITIZEN-M16V/VIII | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Citizen R04

- + 1 outil (max 8)
- + 1 Werkzeug (max 8)
- + 1 tool (max 8)

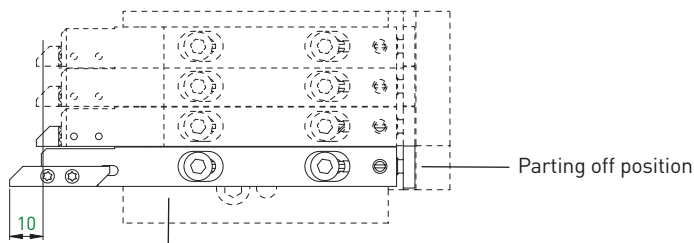
ML12



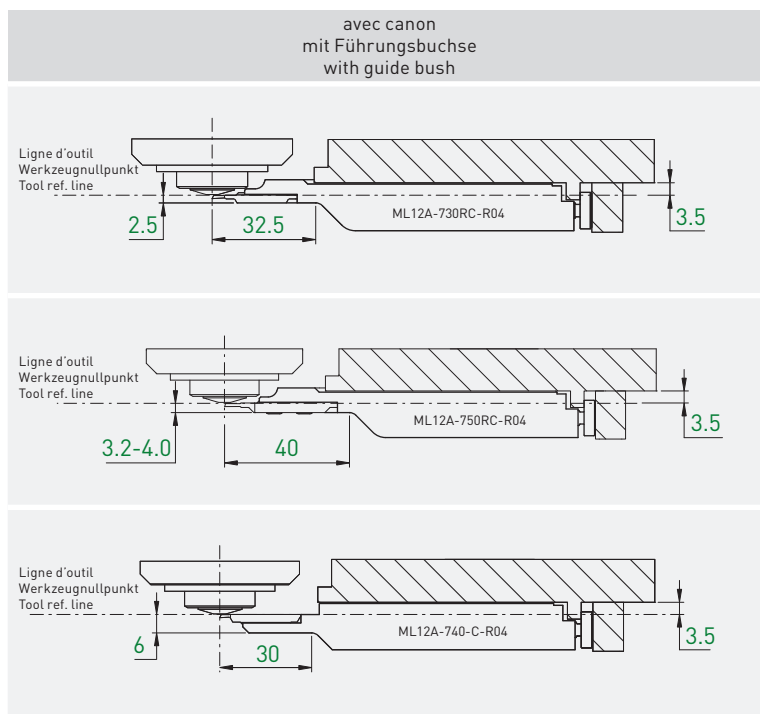
ML12-CITIZEN-R04-QTF5008-4T

ML12-CITIZEN-R04-QTF5108-4T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|--|-----------------------------------|--------------------------|--|---|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
| 4T | ML12-CITIZEN-R04-QTF5008-4T ML12-CITIZEN-R04-QTF5108-4T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |



ML12-CITIZEN-R04-QTF5108-4T

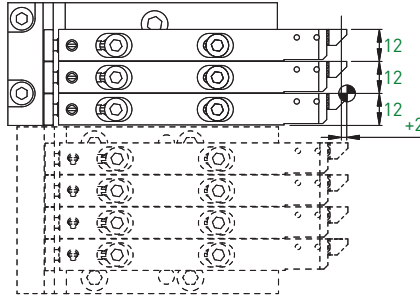


| Type de machine Maschinen-Typ Type of machine | Porte-outils Halter Holders | Art. N° | Plaquettes Wendplatten Inserts | Pages Seiten Pages |
|---|-----------------------------------|-----------------|--------------------------------------|--------------------------|
| Citizen R04 | ML12 | ML12A-730RC-R04 | 731R... / 731RSF | > TOP-Line TOP-Watch |
| | | ML12A-750RC-R04 | 751R... / 751RDSF | |
| | | ML12A-740-C-R04 | 741 / 741SF | |

Citizen R04

- + 3 outils (max 3)
- + 3 Werkzeuge (max 3)
- + 3 tools (max 3)

ML12

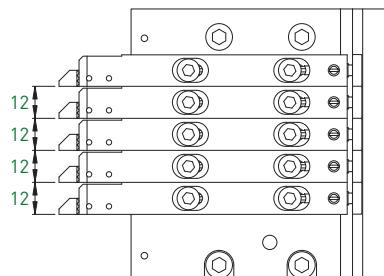
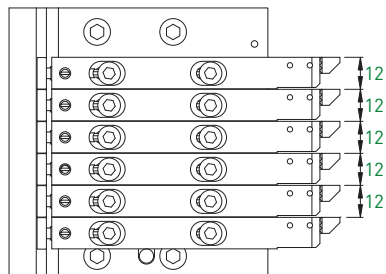


| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|-----------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
| ML12-CITIZEN-R04-QTF3101-3T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Citizen R07

- + 1 outil (max 11)
- + 1 Werkzeug (max 11)
- + 1 tool (max 11)

ML12



ML12-CITIZEN-R07-QTF4108-6T

ML12-CITIZEN-R07-QTF4008-5T

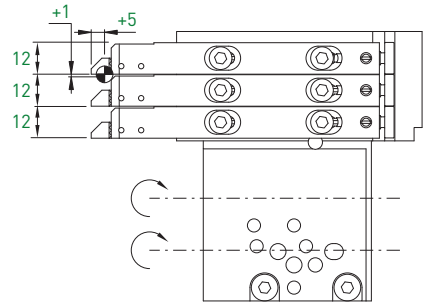
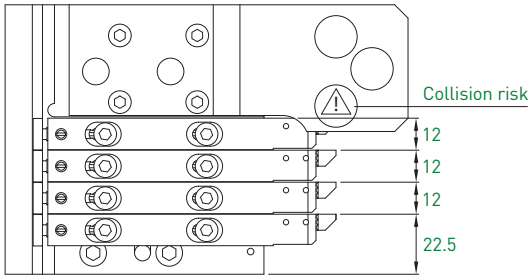
| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|-----------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 5T | ML12-CITIZEN-R07-QTF4008-5T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |
| 6T | ML12-CITIZEN-R07-QTF4108-6T | | | | | |

Accessoires
Zubehöre
Accessories

Citizen R07

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML12



ML12-CITIZEN-R07-QTF4608-4T

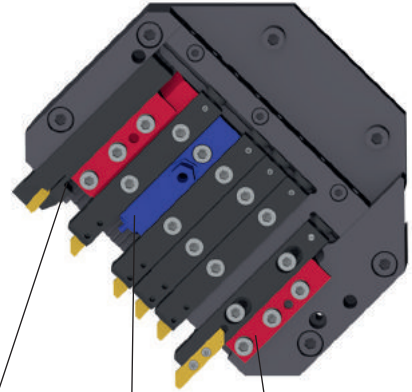
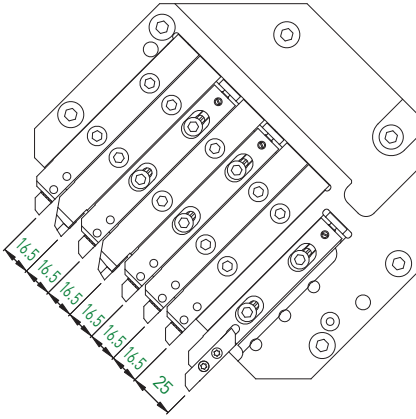
ML12-CITIZEN-R07-QTF4208-3T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Accessoires Zubehöre Accessories | Page Seite Page |
|---------------------|------------------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 3T | ML12-CITIZEN-R07-QTF4208-3T | ML12 | > 12.63 | - | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | ML12-JET-5/16 |
| 4T | ML12-CITIZEN-R07-QTF4608-4T | | | | | |

Citizen K12 / K16
K12E / K16E

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

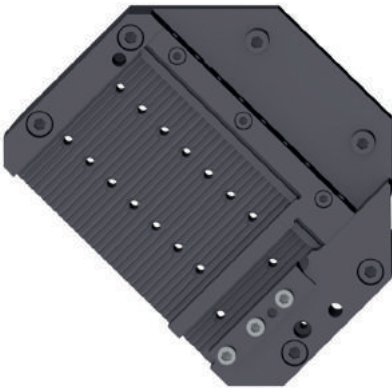
ML16



Outil \square 16 mm possible avec module de serrage
Werkzeug \square 16 mm mit Spannelement möglich
Tool \square 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

1 serrage ML16-FIX-16 pour outil \square 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug \square 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool \square 16 mm included



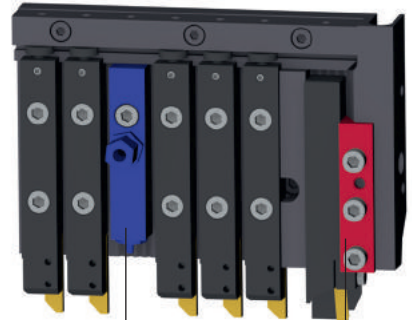
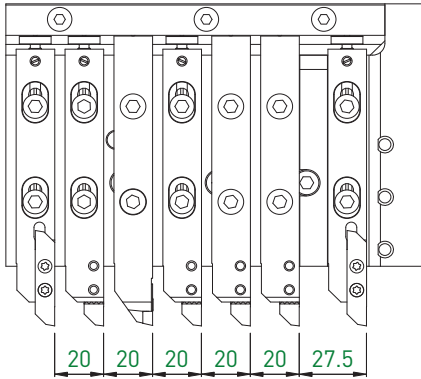
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-CITIZEN-K16 | ML16 | > 12.63 | ML16-FIX-16/16.5 | ML16-JET-7/16 | 12.82 |

Citizen L16 / L20-5M1 / 5M7

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)

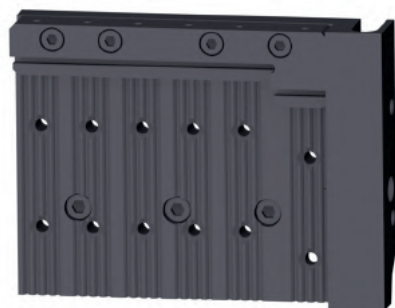
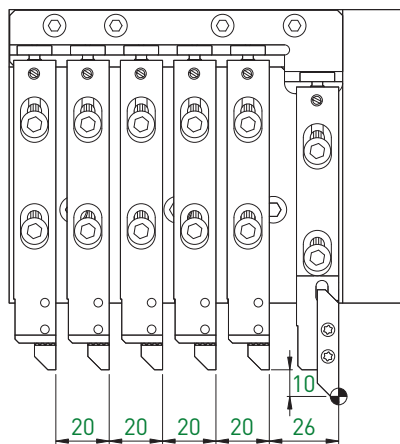
- 1 serrage ML16-FIX-16 pour outil \varnothing 16 mm inclus
- 1 Spannung ML16-FIX-16 für Werkzeug \varnothing 16 mm inbegriffen
- 1 clamping ML16-FIX-16 for tool \varnothing 16 mm included



Accessoires
 Zubehöre
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-CITIZEN-L20 | ML16 | > 12.63 | - | ML16-JET-7/16 | 12.82 |

- L20E-1M8** + 1 outil (max 6)
- Citizen L20X-1M10** + 1 Werkzeug (max 6)
- L20-2M8/2M12** + 1 tool (max 6)



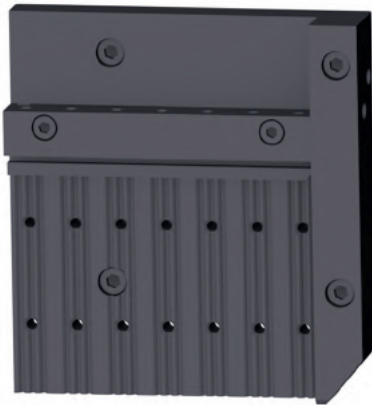
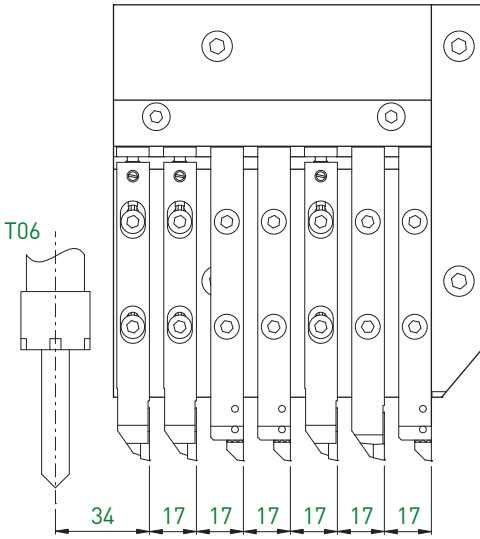
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmitelzufuhrelement Coolant supply unit | Page Seite Page |
|-------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| ML16-CITIZEN-L20E | ML16 | > 12.63 | - | ML16-JET-7/16 | 12.82 |

Hanwha XD20M

- + 2 outils (max 7)
- + 2 Werkzeuge (max 7)
- + 2 tools (max 7)

ML12



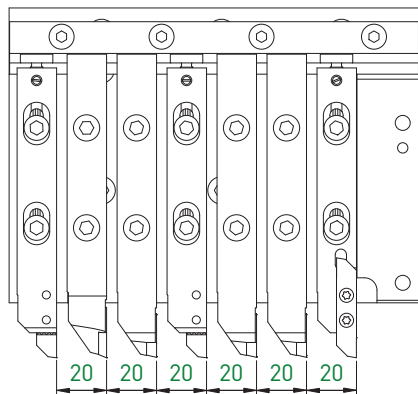
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-HANWHA-XD20M | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Hanwha SL12 / 16

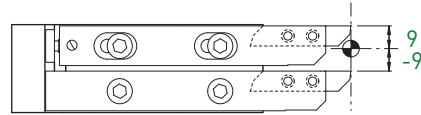
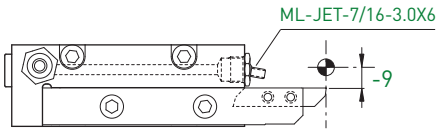
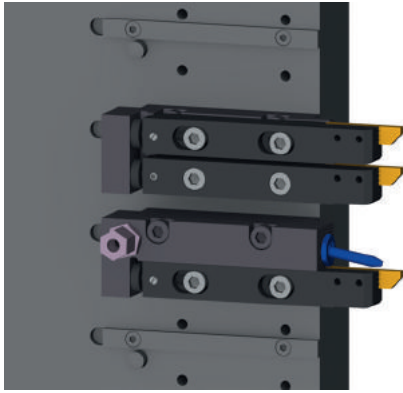
- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmitelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| ML16-HANWHA-SL12/16 | ML16 | > 12.63 | - | ML16-JET-7/16 | 12.82 |



Jet

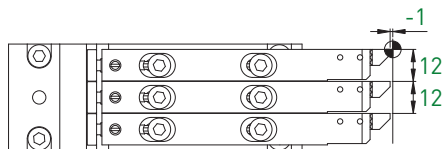


Duo

Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|-----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| Jet | ML16-KMX26-JET | ML16 | > 12.63 | - | ML-JET-7/16... | 12.82 |
| Duo | ML16-KMX26-DUO | | | | ML16-JET-7/16 | |

| | | |
|--------------------|----------------------|-------------|
| D3 | + 1 outil (max 3) | ML12 |
| Metafil D10 | + 1 Werkzeug (max 3) | |
| D13 | + 1 tool (max 3) | |



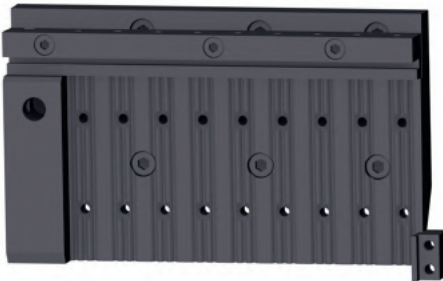
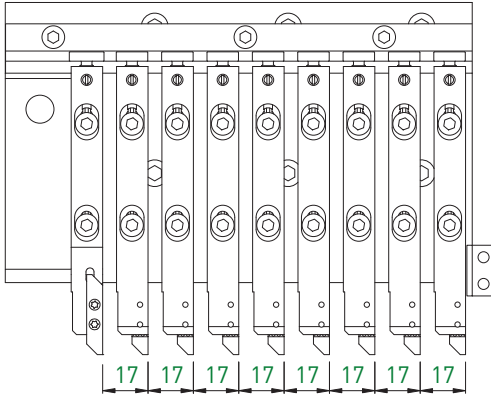
Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-D10-3T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Star SB-12RG

- + 2 outils (max 9)
- + 2 Werkzeuge (max 9)
- + 2 tools (max 9)

ML12

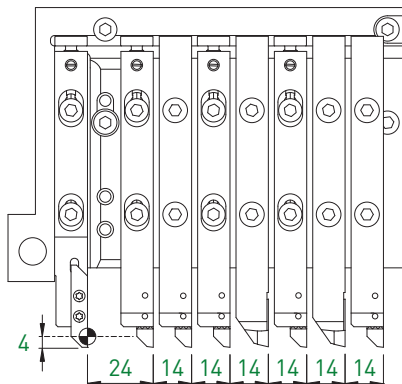


| | | | Accessoires Zubehöre Accessories | | |
|--------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
| ML12-STAR-SB-12RG | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Star SR-10J

- + 2 outils (max 8)
- + 2 Werkzeuge (max 8)
- + 2 tools (max 8)

ML12



- 1 serrage ML12-FIX-12 pour outil \square 12 mm inclus
- 1 Spannung ML12-FIX-12 für Werkzeug \square 12 mm inbegriffen
- 1 clamping ML12-FIX-12 for tool \square 12 mm included

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)



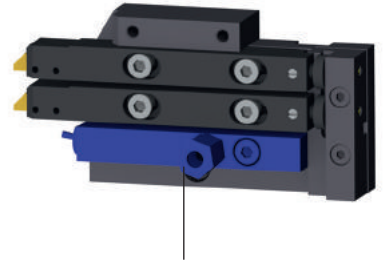
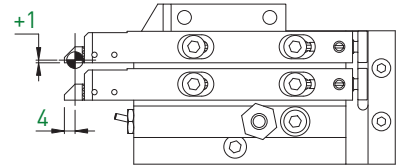
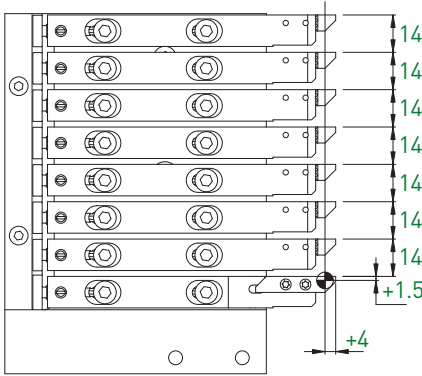
Accessoires
 Zubehör
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML12-STAR-SR-10J | ML12 | > 12.63 | ML12-FIX-12/14 | ML12-JET-5/16 | 12.82 |

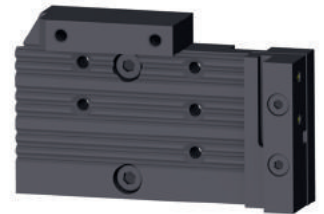
Star SW-12RII

+ 2 outils (max 10)
 + 2 Werkzeuge (max 10)
 + 2 tools (max 10)

ML12



Position uniquement utilisable avec module d'arrosage, en option
 Position nur mit Kühlmittelzufuhrelement verwendbar, optional
 Position only with coolant supply unit usable, optional



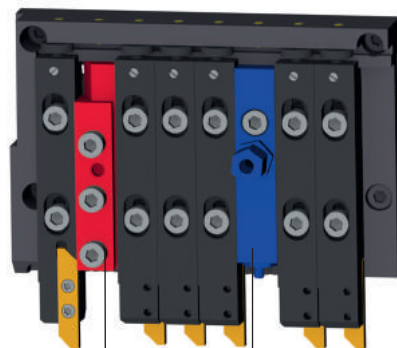
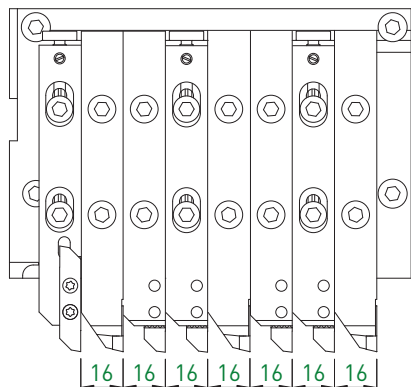
ML12-STAR-SW-12RII-8T

ML12-STAR-SW-12RII-2T

Accessoires
 Zubehör
 Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|------------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 2T | ML12-STAR-SW-12RII-2T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |
| 8T | ML12-STAR-SW-12RII-8T | | | | | |

- SA-12 + 2 outils (max 8)
- Star SA-16 + 2 Werkzeuge (max 8)
- SA-16R + 2 tools (max 8)



Outil \square 16 mm possible avec module de serrage
 Werkzeug \square 16 mm mit Spannelement möglich
 Tool \square 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)



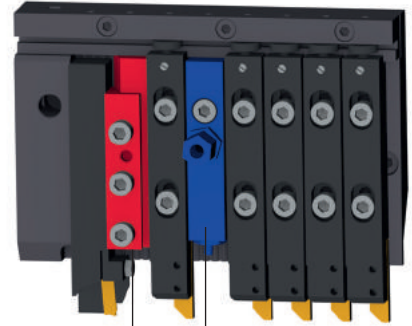
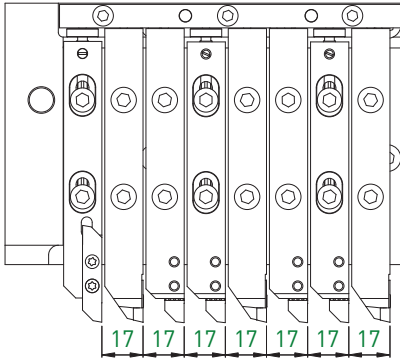
Accessoires
 Zubehör
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-----------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SA-16 | ML16 | > 12.63 | ML16-FIX-16/16 | ML16-JET-7/16 | 12.82 |

Star SB-16

+ 3 outils (max 8)
 + 3 Werkzeuge (max 8)
 + 3 tools (max 8)

ML16



Outil \square 16 mm possible avec module de serrage
 Werkzeug \square 16 mm mit Spannelement möglich
 Tool \square 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)



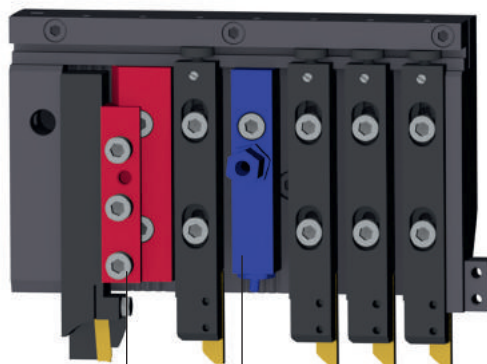
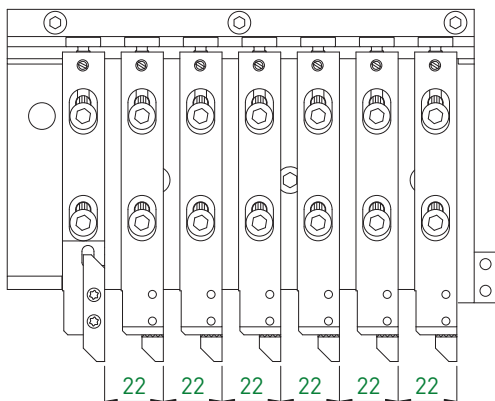
Accessoires
 Zubehöre
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-----------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SB-16 | ML16 | > 12.63 | ML16-FIX-16/17 | ML16-JET-7/16 | 12.82 |

Star SB-16/20RG

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Outil \varnothing 16 mm possible avec module de serrage
 Werkzeug \varnothing 16 mm mit Spannelement möglich
 Tool \varnothing 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)



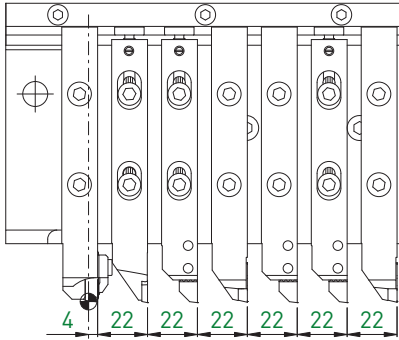
Accessoires
 Zubehör
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SB-16/20RG | ML16 | > 12.63 | ML16-FIX-16/22 | ML16-JET-7/16 | 12.82 |

Star SB-20C/E

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Outil \square 16 mm possible avec module de serrage
 Werkzeug \square 16 mm mit Spannelement möglich
 Tool \square 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)

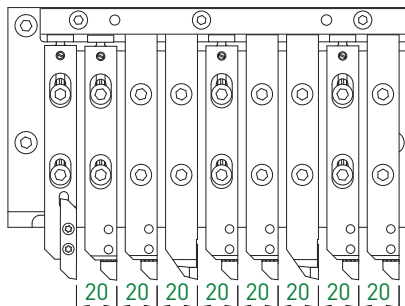


Accessoires
 Zubehöre
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SB20C/E | ML16 | > 12.63 | ML16-FIX-16/22 | ML16-JET-7/16 | 12.82 |

- SR-16R** + 3 outils (max 9)
- Star SR-20R** + 3 Werkzeuge (max 9)
- SR-20RII** + 3 tools (max 9)

ML16



Outil \square 16 mm possible avec module de serrage
 Werkzeug \square 16 mm mit Spannelement möglich
 Tool \square 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)



Accessoires
 Zubehör
 Accessories

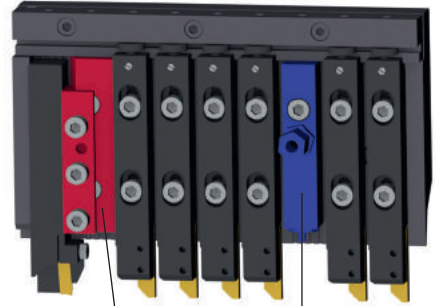
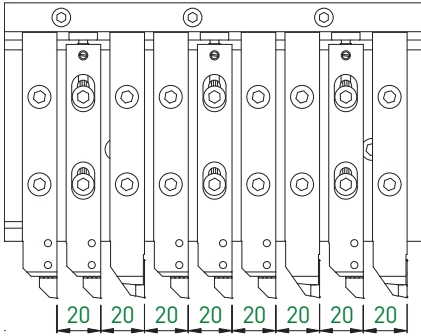
| Art. N° | Porte-outils Holder Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SR-20R | ML16 | > 12.63 | ML16-FIX-16/20 | ML16-JET-7/16 | 12.82 |

MODU-LINE

Star **SR-20RIII**
SR-20J

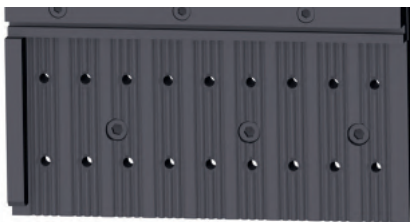
+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML16



Outil \square 16 mm possible avec module de serrage
Werkzeug \square 16 mm mit Spannelement möglich
Tool \square 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)



Accessoires
Zubehöre
Accessories

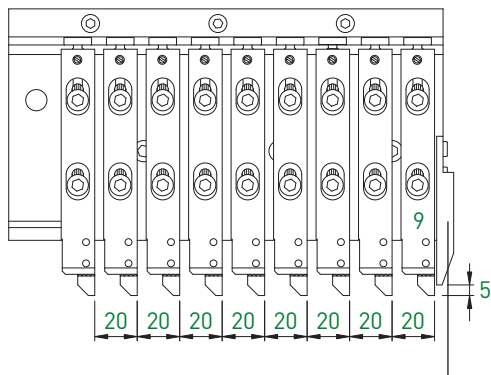
| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SR-20RIII | ML16 | > 12.63 | ML16-FIX-16/20 | ML16-JET-7/16 | 12.82 |
| ML16-STAR-SR-20J | | | | | |

Star SR20JII type A/B

- + 3 outils (max 9)
- + 3 Werkzeuge (max 9)
- + 3 tools (max 9)

ML16

new



Risque de collision avec outil 9
 Kollisionsrisiko mit Werkzeug 9
 Collision risk with tool 9



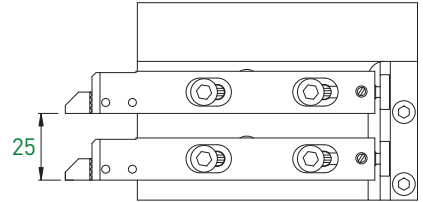
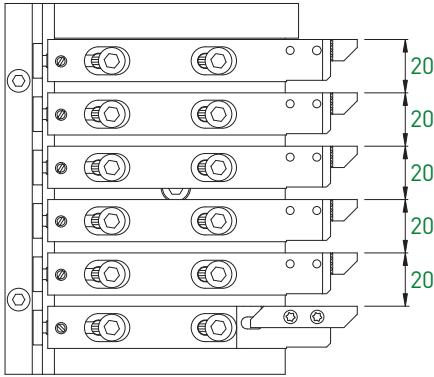
Accessoires
 Zubehöre
 Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|-----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SR20JII-A/B | ML16 | > 12.63 | ML16-FIX-16/20 | ML16-JET-7/16 | 12.82 |

Star SR-20RIV

- + 1 outil (max 8)
- + 1 Werkzeug (max 8)
- + 1 tool (max 8)

ML16



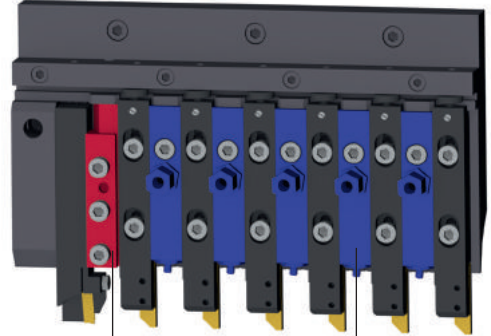
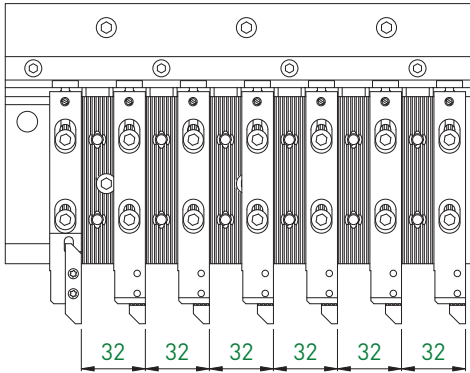
ML16-STAR-SR-20RIV-6T

ML16-STAR-SR-20RIV-2T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Accessoires Zubehöre Accessories | Page Seite Page |
|---------------------|------------------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| 2T | ML16-STAR-SR-20RIV-2T | ML16 | > 12.63 | - | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | ML16-JET-7/16 |
| 6T | ML16-STAR-SR-20RIV-6T | | | | | |

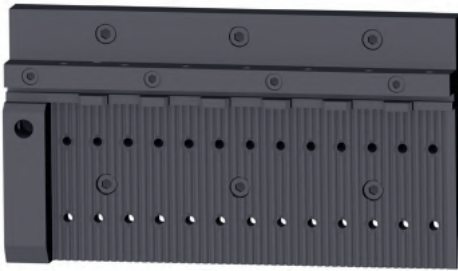
Star SR-32J \varnothing max 32 mm + 1 outil (max 7)
 + 1 Werkzeug (max 7)
 + 1 tool (max 7)

\varnothing max 16 mm + 7 outils (max 13)
 + 7 Werkzeuge (max 13) **ML16**
 + 7 tools (max 13)



Outil \varnothing 16 mm possible avec module de serrage
 Werkzeug \varnothing 16 mm mit Spannelement möglich
 Tool \varnothing 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
 Coolant supply unit (takes the place of one tool)

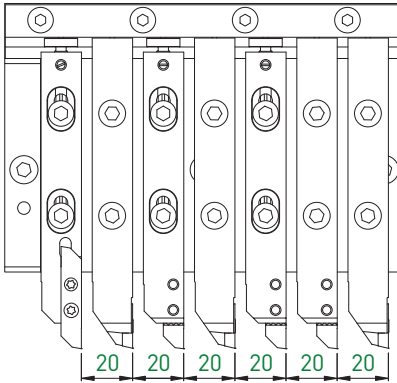


| | | | Accessoires Zubehöre Accessories | | |
|------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
| ML16-STAR-SR-32J | ML16 | > 12.63 | ML16-FIX-16/16 | ML16-JET-7/16 | 12.82 |

Star SV-12 / 20

+ 2 outils (max 7)
 + 2 Werkzeuge (max 7)
 + 2 tools (max 7)

ML16



Outil ∇ 16 mm possible avec module de serrage
 Werkzeug ∇ 16 mm mit Spannelement möglich
 Tool ∇ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
 Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeugs)
 Coolant supply unit (takes the place of one tool)



Accessoires
 Zubehör
 Accessories

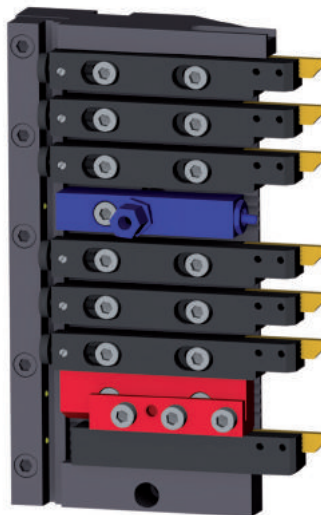
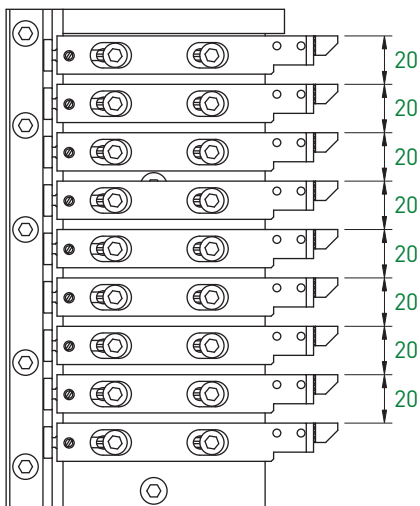
| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|--------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| ML16-STAR-SV-12/20 | ML16 | > 12.63 | ML16-FIX-16/20 | ML16-JET-7/16 | 12.82 |

Star SV-20R

- + 2 outils (max 9)
- + 2 Werkzeuge (max 9)
- + 2 tools (max 9)

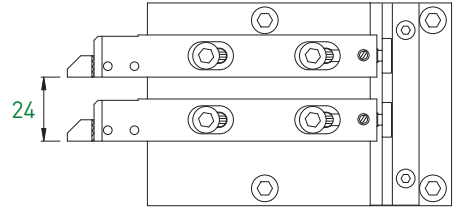
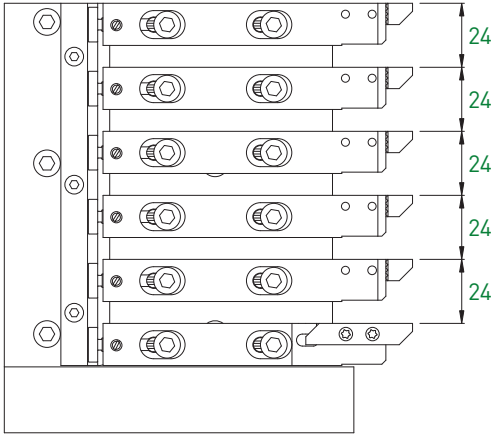
ML16

new



Accessoires
Zubehöre
Accessories

| Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmitelzufuhrelement Coolant supply unit | Page Seite Page |
|------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| ML16-STAR-SV-20R | ML16 | > 12.63 | ML16-FIX-16/20 | ML16-JET-7/16 | 12.82 |



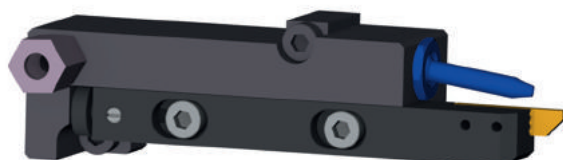
ML16-STAR-SW-20R-6T

ML16-STAR-SW-20R-2T

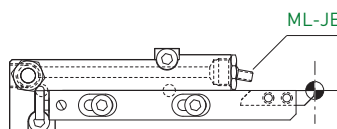
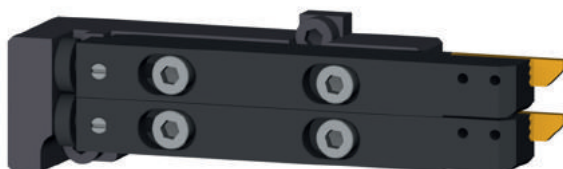
Accessoires
 Zubehör
 Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|----------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 2T | ML16-STAR-SW-20R-2T | ML16 | > 62 | - | ML16-JET-7/16 | 12.82 |
| 6T | ML16-STAR-SW-20R-6T | | | ML16-FIX-16/24 | | |

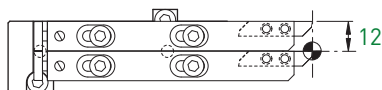
Jet



Duo



ML-JET-7/16-3.0x6



12



Jet



Duo

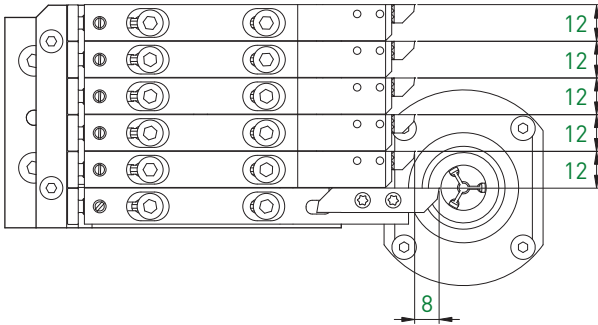
Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|-----------------|-----------------------------------|--------------------------|--|--|-----------------------|
| Jet | ML12-DEC010-JET | ML12 | > 12.63 | - | ML-JET-7/16... | 12.82 |
| Duo | ML12-DEC010-DUO | | | | ML12-JET-5/16 | |

Tornos **SwissNano**
SwissNano 7

+ 2 outils (max 6)
+ 2 Werkzeuge (max 6)
+ 2 tools (max 6)

ML12



6T



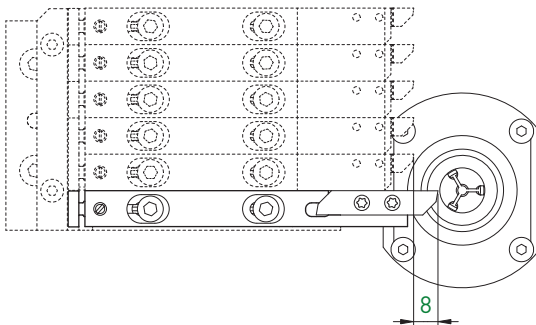
6T

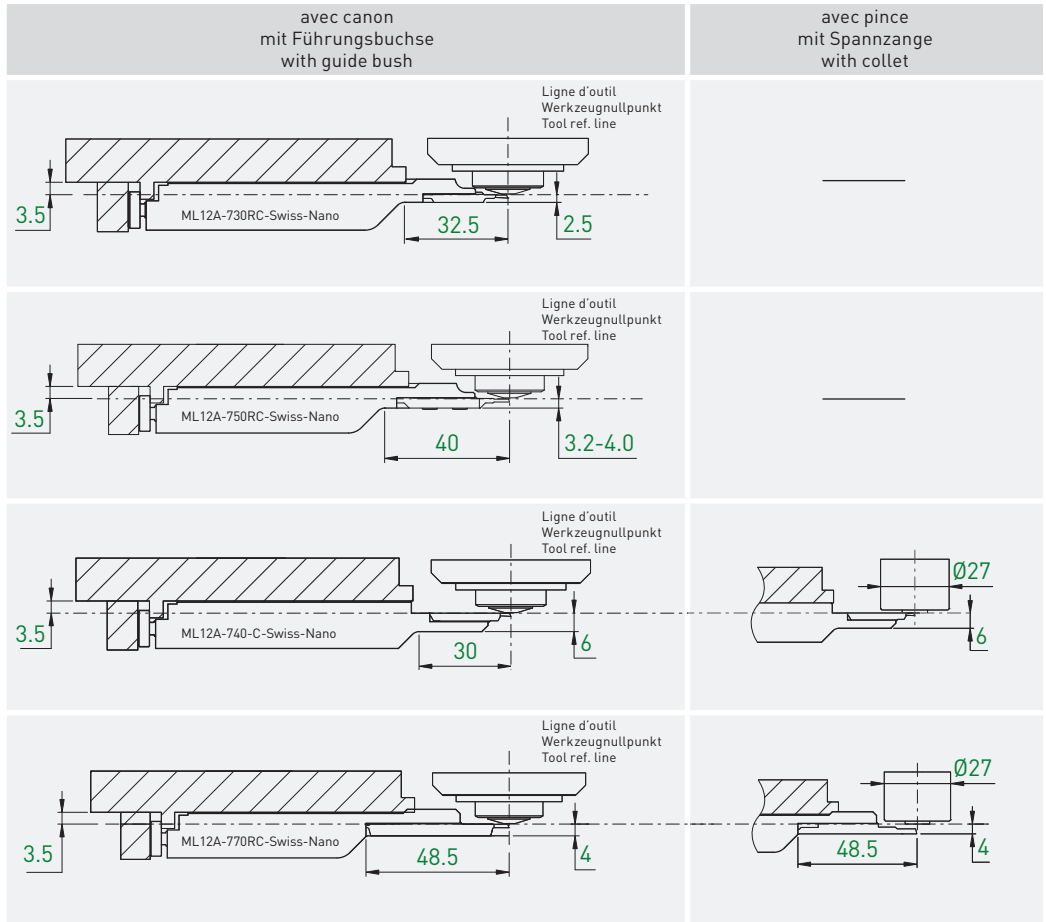
Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|--------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| 6T | ML12-SWISS-NANO-6T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

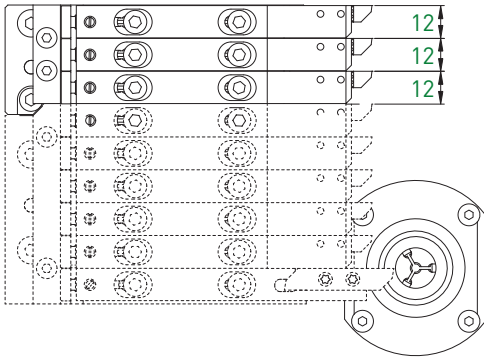
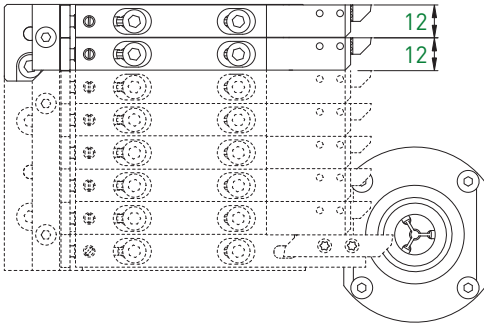
Tornos **SwissNano**
SwissNano 7

ML12



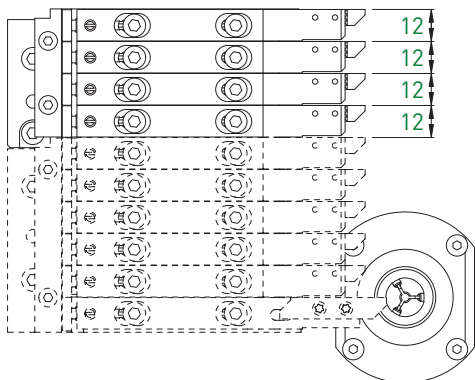


| Type de machine Maschinen-Typ Type of machine | Porte-outils Halter Holders | Art. N° | Plaquettes Wendepplatten Inserts | Pages Seiten Pages |
|---|-----------------------------------|------------------------|--|--------------------------|
| SwissNano | ML12 | ML12A-730RC-SWISS-NANO | 731R... / 731RSF | > TOP-Line TOP-Watch |
| | | ML12A-750RC-SWISS-NANO | 751R... / 751RDSF | |
| | | ML12A-740-C-SWISS-NANO | 741... / 741SF | > TOP-Line |
| | | ML12A-770RC-SWISS-NANO | 771R... | |



Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|---------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 2T | ML12-SWISS-NANO-2T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |
| 3T | ML12-SWISS-NANO-3T | | | | | |

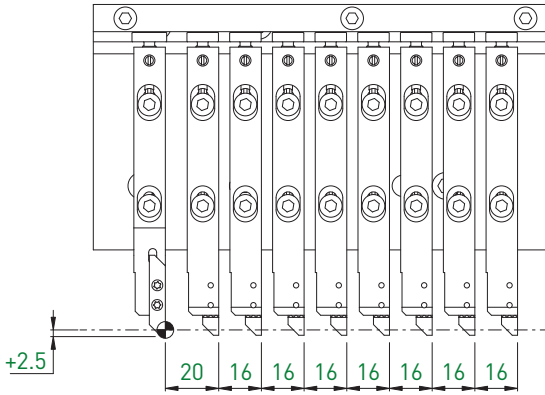


| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelelement Coolant supply unit | Page Seite Page |
| 4T | ML12-SWISS-NANO-7-4T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Tornos DT 13

+ 3 outils (max 9)
 + 3 Werkzeuge (max 9)
 + 3 tools (max 9)

ML12



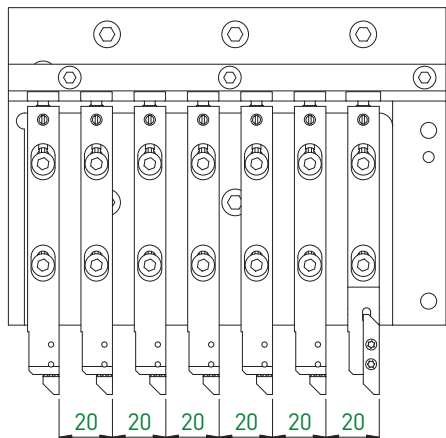
Accessoires
 Zubehöre
 Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmitelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|----------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| 9T | ML12-DT13-2020206-9T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Tornos CT 20

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML12



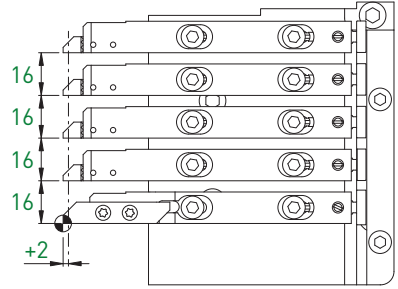
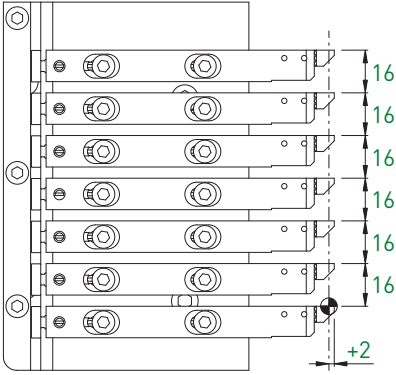
Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|----------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 7T | ML12-CT20-2020019-7T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Tornos GT 13

- + 5 outils (max 12)
- + 5 Werkzeuge (max 12)
- + 5 tools (max 12)

ML12



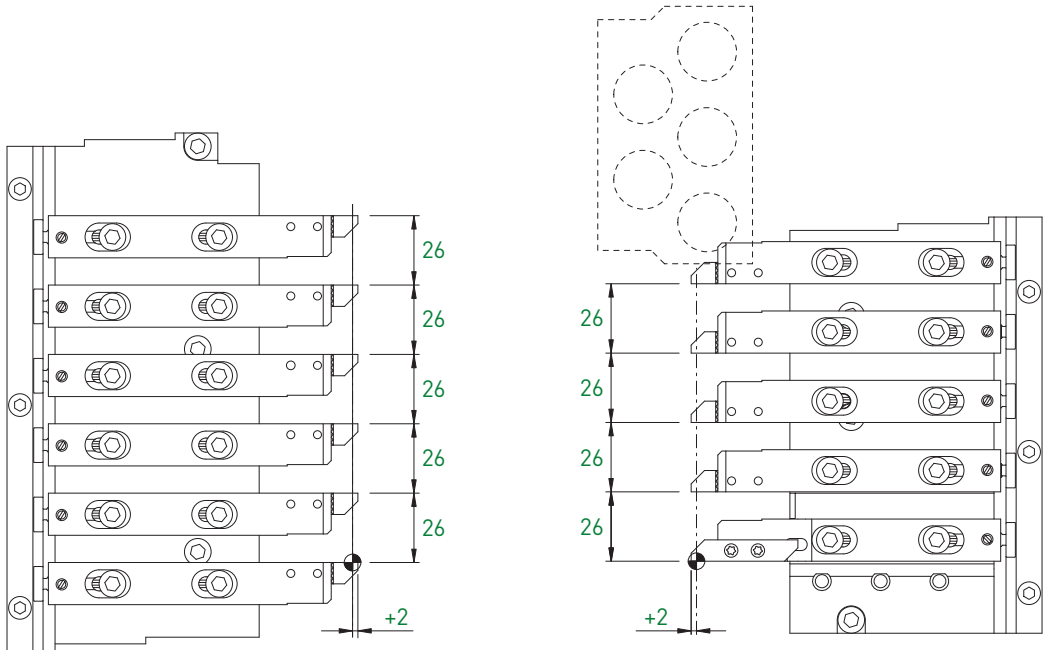


ML12-GT13-390223-7T



ML12-GT13-390224-5T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|----------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
| 5T | ML12-GT13-390224-5T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |
| 7T | ML12-GT13-390223-7T | | | | | |



1 serrage ML16-FIX-16 pour outil \square 16 mm inclus
 1 Spannung ML16-FIX-16 für Werkzeug \square 16 mm inbegriffen
 1 clamping ML16-FIX-16 for tool \square 16 mm included



ML16-GT26-386209-6T



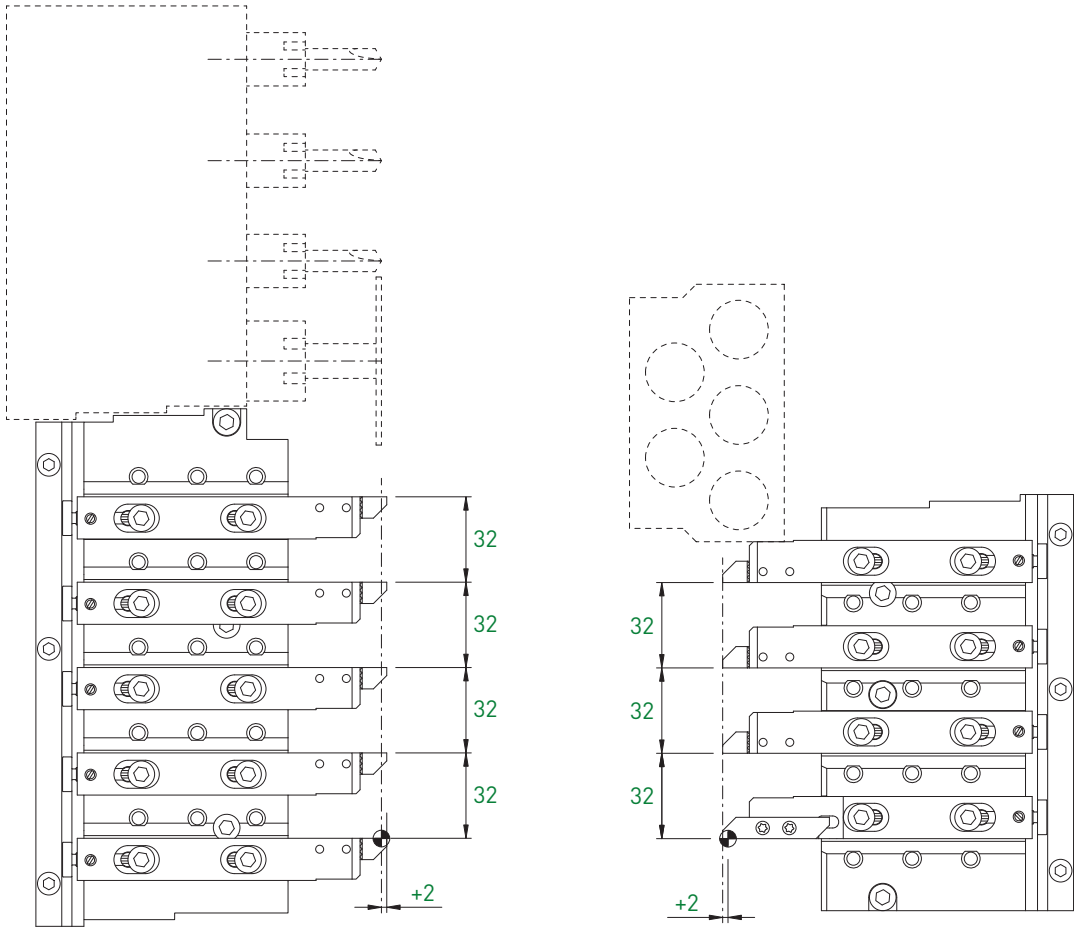
ML16-GT26-386210-5T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|----------------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | Page Seite Page |
| 5T | ML16-GT26-386210-5T | ML16 | > 12.63 | - | ML16-JET-7/16 | 12.82 |
| 6T | ML16-GT26-386209-6T | | | | | |

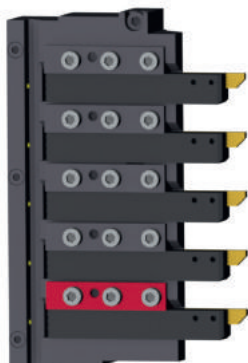
Tornos GT 32

max + 9 outils
 + 9 Werkzeuge
 + 9 tools

ML16



Holder ML16



Holder □16



Holder ML16



Holder □16



ML16-GT32-386209-5T



ML16-GT32-386210-4T

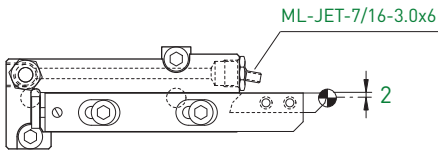
| | | | | Accessoires Zubehöre Accessories | | | | |
|---------------------|---------------------|-----------------------------------|--------------------------|---|--|---|----------------------|--------------------------|
| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | | Pages Seiten Pages |
| 4T | ML16-GT32-386210-4T | ML16 | > 12.63 | 1x inclus 1x inbegriffen 1x included | | Option ML16-FIX-16 | ML16-JET-7/16 | 12.82 |
| 5T | ML16-GT32-386209-5T | | | | | | | |



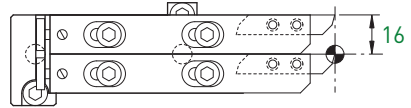
Jet



Duo



ML-JET-7/16-3.0x6



16



Jet



Duo

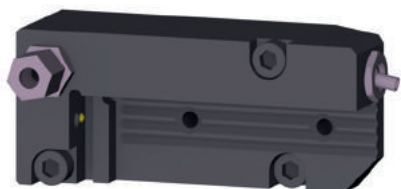
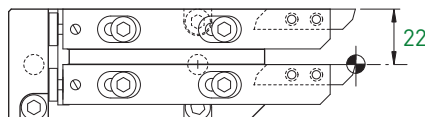
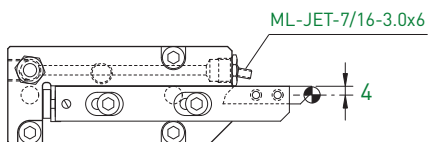
Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|------------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| Jet | ML16-DEC013-JET | ML16 | > 12.63 | - | ML-JET-7/16... | 12.82 |
| Duo | ML16-DEC013-DUO | | | | ML16-JET-7/16 | 12.82 |

Jet



Duo



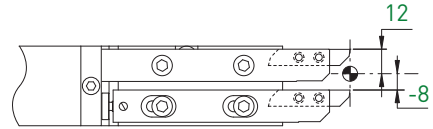
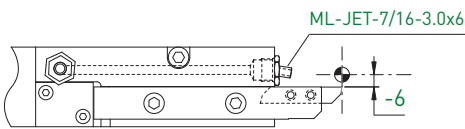
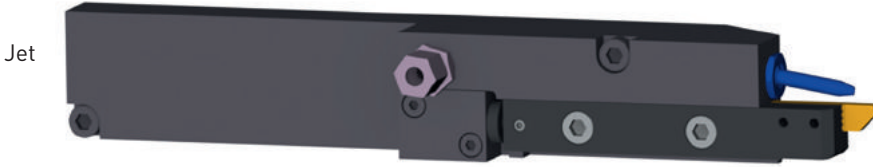
Jet



Duo

Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|------------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| Jet | ML16-DECO20-JET | ML16 | > 12.63 | - | ML-JET-7/16... | 12.82 |
| Duo | ML16-DECO20-DUO | | | | ML16-JET-7/16 | 12.82 |



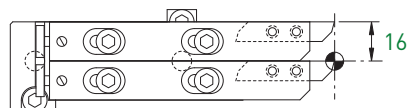
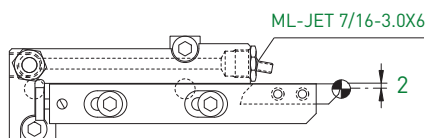
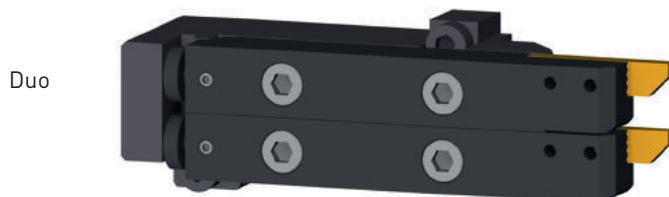
Jet



Duo

Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|---------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| Jet | ML16-S20-JET | ML16 | > 12.63 | - | ML-JET-7/16... | 12.82 |
| Duo | ML16-S20-DUO | | | | ML16-JET-7/16 | 12.82 |



Jet



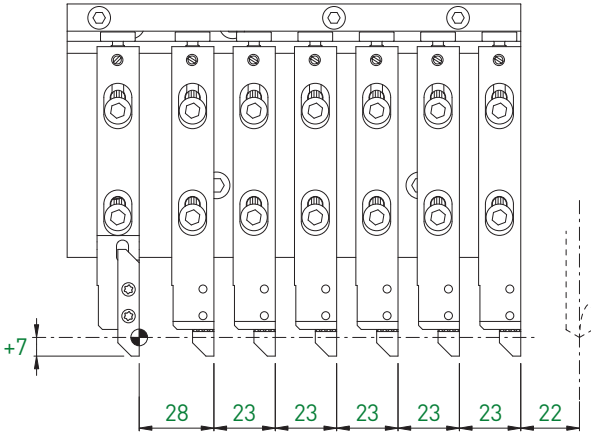
Duo

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Accessoires Zubehöre Accessories | Page Seite Page |
|---------------------|----------------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| Jet | ML16-SWISS-ST26-JET | ML16 | > 12.63 | - | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | 12.82 |
| Duo | ML16-SWISS-ST26-DUO | | | | ML-JET-7/16... | 12.82 |

Tornos DT 26

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



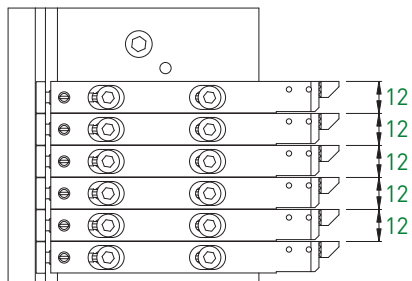
Accessoires
Zubehöre
Accessories

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | Page Seite Page |
|---------------------|-----------------------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 7T | ML16-DT26-2020206-7T | ML16 | > 12.63 | - | ML16-JET-7/16 | 12.82 |

Tsugami B074

- + 3 outils (max 6)
- + 3 Werkzeuge (max 6)
- + 3 tools (max 6)

ML12

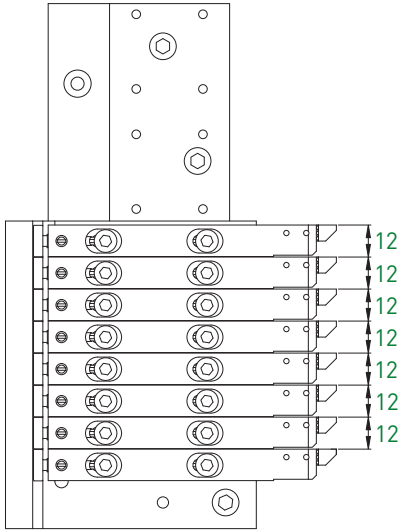


| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|-----------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmitelzufuhrelement Coolant supply unit | Page Seite Page |
| 6T | ML12-B074-1-6T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Tsugami B075

- + 5 outils (max 8)
- + 5 Werkzeuge (max 8)
- + 5 tools (max 8)

ML12

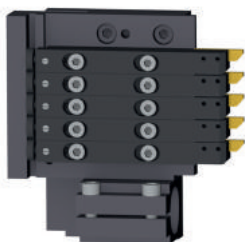
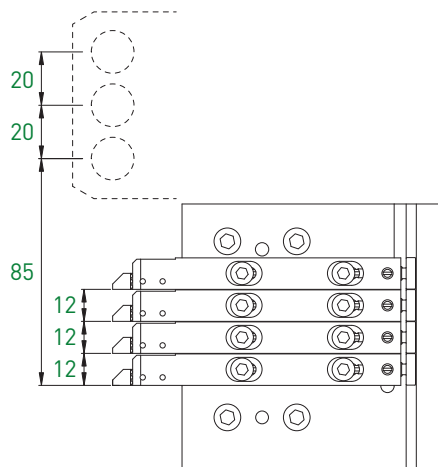
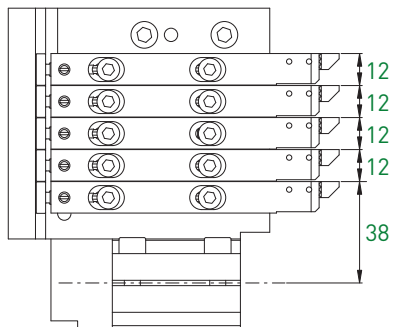


| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|-----------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmitelzufuhrelement Coolant supply unit | Page Seite Page |
| 8T | ML12-B075-1-8T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |

Tsugami P034

- + 3 outils (max 9)
- + 3 Werkzeuge (max 9)
- + 3 tools (max 9)

ML12



ML12-P034-1-5T

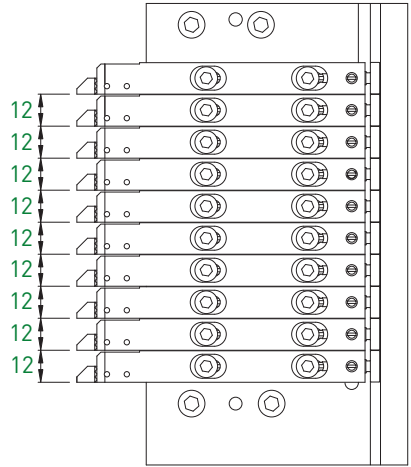
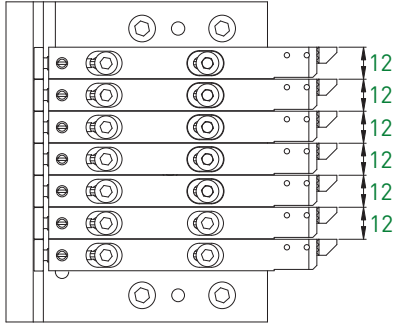
ML12-P034-2-4T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Module de serrage Spannelement Clamping unit | Accessoires Zubehöre Accessories | Page Seite Page |
|---------------------|----------------|-----------------------------------|--------------------------|--|---|-----------------------|
| 4T | ML12-P034-2-4T | ML12 | > 12.63 | - | Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit | 12.82 |
| 5T | ML12-P034-1-5T | | | | | |

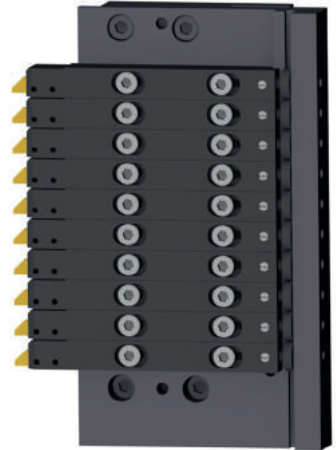
Tsugami P034

max + 17 outils
+ 17 Werkzeuge
+ 17 tools

ML12



ML12-P034-1-7T



ML12-P034-2-10T



ML12-P034-1-7T



ML12-P034-2-10T

| Type Typ Type | Art. N° | Porte-outils Halter Holders | Pages Seiten Pages | Accessoires Zubehöre Accessories | | |
|---------------------|------------------------|-----------------------------------|--------------------------|--|--|-----------------------|
| | | | | Module de serrage Spannelement Clamping unit | Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit | Page Seite Page |
| 7T | ML12-P034-1-7T | ML12 | > 12.63 | - | ML12-JET-5/16 | 12.82 |
| 10T | ML12-P034-2-10T | | | | | |

Les différents types de porte-outils
Die verschiedenen Haltertypen
The various types of holders

Type Standard

ML12A-740



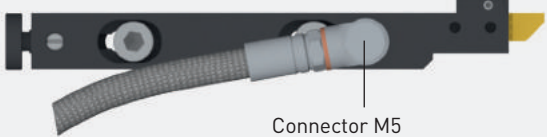
Type -D

ML12A-740-D

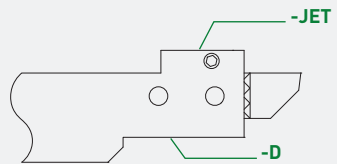


Type -JET-D

ML12A-740-JET-D



Connector M5

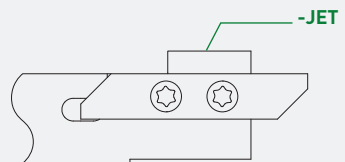


Type -JET

ML12A-740-JET



Connector M5



Informations techniques
 Technische Informationen
 Technical information

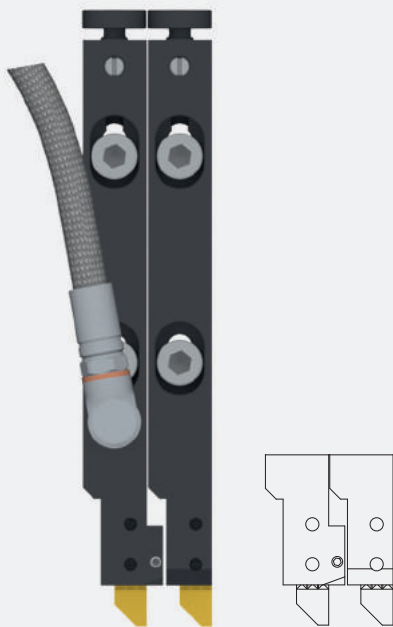
Porte-outils
 Halter
 Holders

Compatibilité
 Kompatibilität
 Compatibility

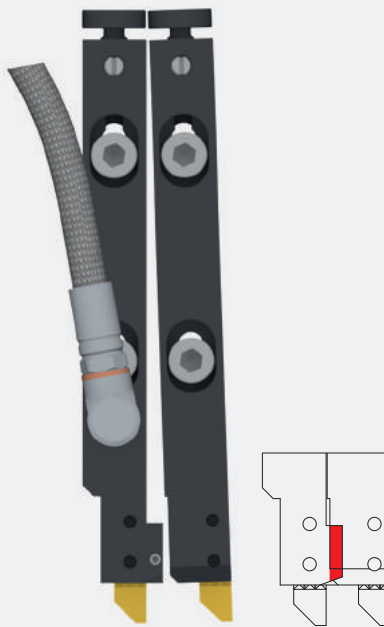
OK

NOT OK

-JET-D -D



-JET-D -Standard



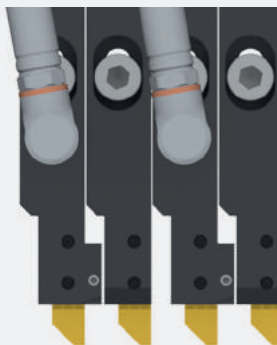
MIX

TYPE D

-Standard -JET-D -D



-JET-D -D -JET-D -D



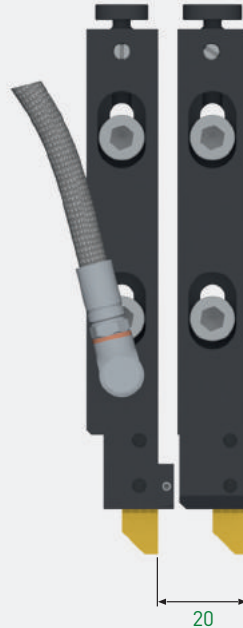
Exceptions
 Ausnahmen
 Exceptions

Exception ML12

Exception ML16

-JET-D
 -JET -Standard

-JET-D
 -JET -Standard



≥ 15 mm = Total compatibility

≥ 20 mm = Total compatibility

Brochure JET-Line:

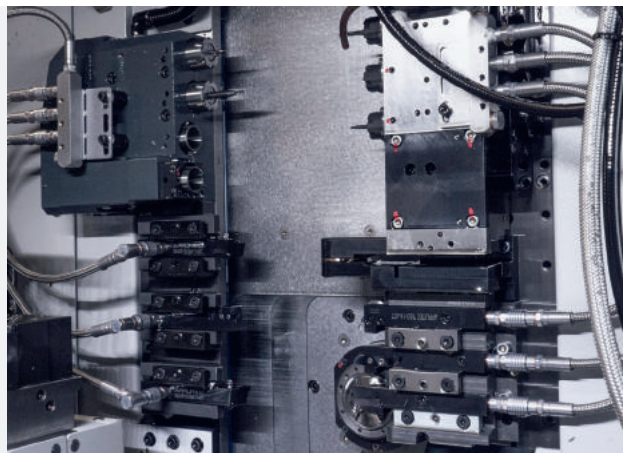
Système de distribution du liquide de refroidissement pour haute pression

JET-Line Broschüre:

Kühlmittelverteilungssystem für hohen Druck

JET-Line brochure:

Coolant distribution system for high pressure



Porte-outils

Halter

Holders

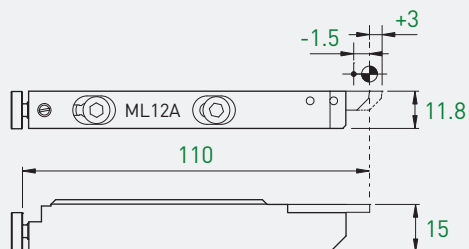
ML12 / ML16

Système de fixation
Befestigungssystem
Clamping system

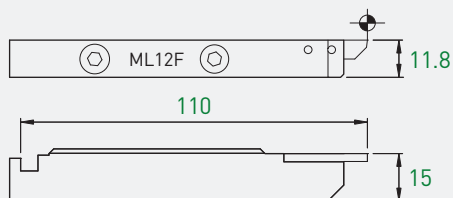
A = réglable
einstellbar
adjustable

F = longueur fixe
fixlänge
fixed length

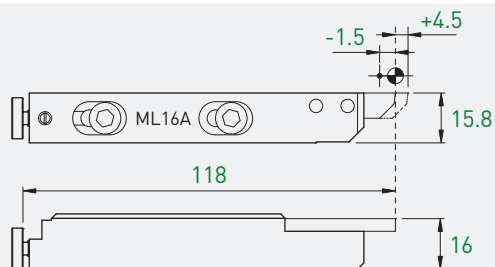
ML12A



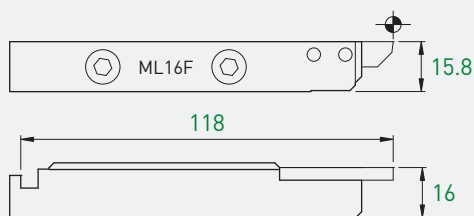
ML12F

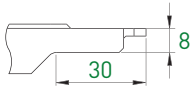


ML16A

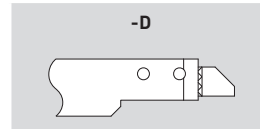


ML16F

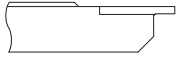




TOP-Line
731-737

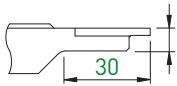


| Art. N° | Art. N° | Art. N° |
|---------|--------------------------|---------|
| ML12 | ML12 | ML12 |
| - | ML12A-730-C-D new | - |



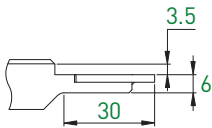
TOP-Line
741-747

| Standard | -D | -JET-D |
|-----------|-------------|-----------------|
| | | |
| ML12 | ML12 | ML12 |
| ML12A-740 | ML12A-740-D | ML12A-740-JET-D |
| ML12F-740 | ML12F-740-D | - |
| ML16 | ML16 | ML16 |
| ML16A-740 | ML16A-740-D | ML16A-740-JET-D |
| ML16F-740 | - | - |



TOP-Line
741-747

| ML12 | ML12 | ML12 |
|-------------|---------------|-------------------|
| ML12A-740-C | ML12A-740-C-D | ML12A-740-C-JET-D |
| ML12F-740-C | ML12F-740-C-D | - |



TOP-Line
741

| ML12 | ML12 | ML12 |
|------------------------|------|------|
| ML12A-740-C-R04 | - | - |
| ML12A-740-C-SWISS-NANO | - | - |



TOP-Line
761-767

| ML12 | ML12 | ML12 |
|-----------|-------------|-----------------|
| ML12A-760 | ML12A-760-D | ML12A-760-JET-D |
| ML12F-760 | ML12F-760-D | - |
| ML16 | ML16 | ML16 |
| ML16A-760 | ML16A-760-D | ML16A-760-JET-D |
| ML16F-760 | - | - |

Porte-plaquettes



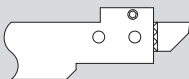
WSP-Halter

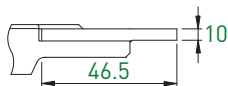
Insert holders

TOP-Line



TOP-Line
761-767

| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML16 | ML16 | ML16 |
| ML16A-760-C | ML16A-760-C-D | - |
| ML16F-760-C | - | - |



TOP-Line
781

| | | |
|------|---------------|------|
| ML16 | ML16 | ML16 |
| - | ML16A-780-C-D | - |

Porte-plaquettes

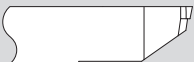

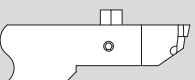
WSP-Halter

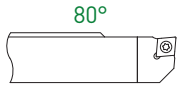
Insert holders

TURN-Line

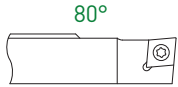


TURN-Line
347-349

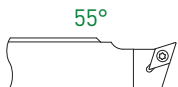
| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-340 | ML12A-340-D | ML12A-340-JET-D |
| ML12F-340 | ML12F-340-D | - |
| ML16 | ML16 | ML16 |
| ML16A-340 | ML16A-340-D | ML16A-340-JET-D |
| ML16F-340 | - | - |



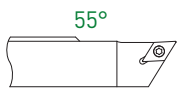
ISO-Line
CC...-0602..



ISO-Line
CC...-09T3..



ISO-Line
DC...-0702..



ISO-Line
DC...-0702..

| Standard | -D | -JET-D |
|---------------|-----------------|---------------------|
| | | |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-SCLCR06 | ML12A-SCLCR06-D | ML12A-SCLCR06-JET-D |
| ML12F-SCLCR06 | ML12F-SCLCR06-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SCLCR06 | ML16A-SCLCR06-D | ML16A-SCLCR06-JET-D |
| ML16F-SCLCR06 | ML16F-SCLCR06-D | - |

| | | |
|---------------|-----------------|---------------------|
| ML12 | ML12 | ML12 |
| ML12A-SCLCR09 | ML12A-SCLCR09-D | ML12A-SCLCR09-JET-D |
| ML12F-SCLCR09 | ML12F-SCLCR09-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SCLCR09 | ML16A-SCLCR09-D | ML16A-SCLCR09-JET-D |
| ML16F-SCLCR09 | ML16F-SCLCR09-D | - |

| | | |
|---------------|------|------|
| ML16 | ML16 | ML16 |
| ML16A-SDHCR07 | - | - |

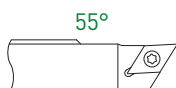
| | | |
|---------------|-----------------|---------------------|
| ML12 | ML12 | ML12 |
| ML12A-SDJCR07 | ML12A-SDJCR07-D | ML12A-SDJCR07-JET-D |
| ML12F-SDJCR07 | ML12F-SDJCR07-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SDJCR07 | ML16A-SDJCR07-D | ML16A-SDJCR07-JET-D |
| ML16F-SDJCR07 | ML16F-SDJCR07-D | - |

Porte-plaquettes

WSP-Halter

Insert holders

ISO-Line



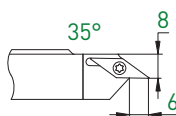
ISO-Line
DC...-11T3..



ISO-Line
DC...-11T3..



ISO-Line
VC...-1103..



ISO-Line
VC...-1103..

| Standard | -D | -JET-D |
|---------------|-----------------|---------------------|
| | | |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-SDJCR11 | ML12A-SDJCR11-D | ML12A-SDJCR11-JET-D |
| ML12F-SDJCR11 | ML12F-SDJCR11-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SDJCR11 | ML16A-SDJCR11-D | ML16A-SDJCR11-JET-D |
| ML16F-SDJCR11 | ML16F-SDJCR11-D | - |

| | | |
|---------------|-----------------|------|
| ML12 | ML12 | ML12 |
| ML12A-SDNCN11 | ML12A-SDNCN11-D | - |
| ML12F-SDNCN11 | ML12F-SDNCN11-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SDNCN11 | ML16A-SDNCN11-D | - |
| ML16F-SDNCN11 | ML16F-SDNCN11-D | - |

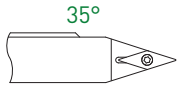
| | | |
|---------------|-----------------|---------------------|
| ML12 | ML12 | ML12 |
| ML12A-SVJCR11 | ML12A-SVJCR11-D | ML12A-SVJCR11-JET-D |
| ML12F-SVJCR11 | ML12F-SVJCR11-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SVJCR11 | ML16A-SVJCR11-D | ML16A-SVJCR11-JET-D |
| ML16F-SVJCR11 | ML16F-SVJCR11-D | - |

| | | |
|---------------|-----------------|------|
| ML12 | ML12 | ML12 |
| ML12A-SV-CR11 | ML12A-SV-CR11-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SV-CR11 | ML16A-SV-CR11-D | - |

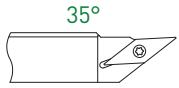
MODU-LINE

Porte-plaquettes
WSP-Halter
Insert holders

ISO-Line



ISO-Line
VC...-1103..

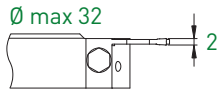


ISO-Line
VC...-1303..

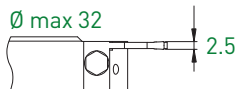
| Standard | -D | -JET-D |
|----------------------|------------------------|----------------------------|
| | | |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-SVVCN11 | ML12A-SVVCN11-D | ML12A-SVVCN11-JET-D |
| ML12F-SVVCN11 | ML12F-SVVCN11-D | - |
| ML16 | ML16 | ML16 |
| ML16A-SVVCN11 | ML16A-SVVCN11-D | - |
| ML16F-SVVCN11 | ML16F-SVVCN11-D | - |
| ML12 | ML12 | ML12 |
| - | ML12A-SVJCR13-D | - |
| ML16 | ML16 | ML16 |
| - | ML16A-SVJCR13-D | ML16A-SVJCR13-JET-D |

Porte-plaquettes
WSP-Halter
Insert holders

EVOCUT-Line



EVOCUT-Line
ET20..



EVOCUT-Line
ET25..

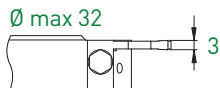
| | | -JET (-D) |
|-------------|-------------|-------------------------|
| | | |
| Art. N° | Art. N° | Art. N° |
| ML16 | ML16 | ML16 |
| - | - | ML16A-ET20-JET32 |
| ML16 | ML16 | ML16 |
| - | - | ML16A-ET25-JET32 |

Porte-plaquettes

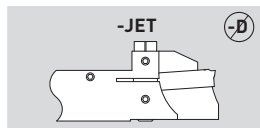
WSP-Halter

Insert holders

EVOCUT-Line



EVOCUT-Line
ET30..



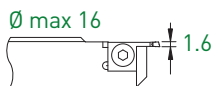
| Art. N° | Art. N° | Art. N° |
|---------|---------|------------------|
| ML16 | ML16 | ML16 |
| - | - | ML16A-ET30-JET32 |

Porte-plaquettes

WSP-Halter

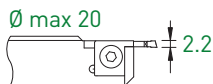
Insert holders

CUT-Line



CUT-Line
CUT16..

| Standard | | |
|-------------|---------|---------|
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-CUT16 | - | - |
| ML12F-CUT16 | - | - |
| ML16 | ML16 | ML16 |
| ML16A-CUT16 | - | - |
| ML16F-CUT16 | - | - |



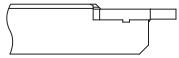
CUT-Line
CUT22..

| | | |
|-------------|------|------|
| ML12 | ML12 | ML12 |
| ML12A-CUT22 | - | - |
| ML12F-CUT22 | - | - |
| ML16 | ML16 | ML16 |
| ML16A-CUT22 | - | - |
| ML16F-CUT22 | - | - |

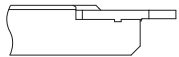
MODU-LINE

Porte-plaquettes
WSP-Halter
Insert holders

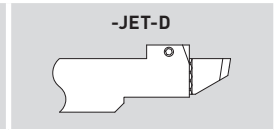
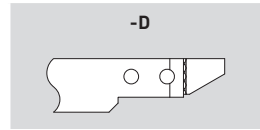
PRO-Line



PRO-Line
642-647



PRO-Line
661

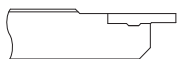


| Art. N° | Art. N° | Art. N° |
|---------|-------------|-----------------|
| ML12 | ML12 | ML12 |
| - | ML12A-640-D | ML12A-640-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-640-D | ML16A-640-JET-D |




| | | |
|------|-------------|-----------------|
| ML12 | ML12 | ML12 |
| - | ML12A-660-D | ML12A-660-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-660-D | ML16A-660-JET-D |

Porte-plaquettes
WSP-Halter
Insert holders

ECO-Line



ECO-Line
261-266

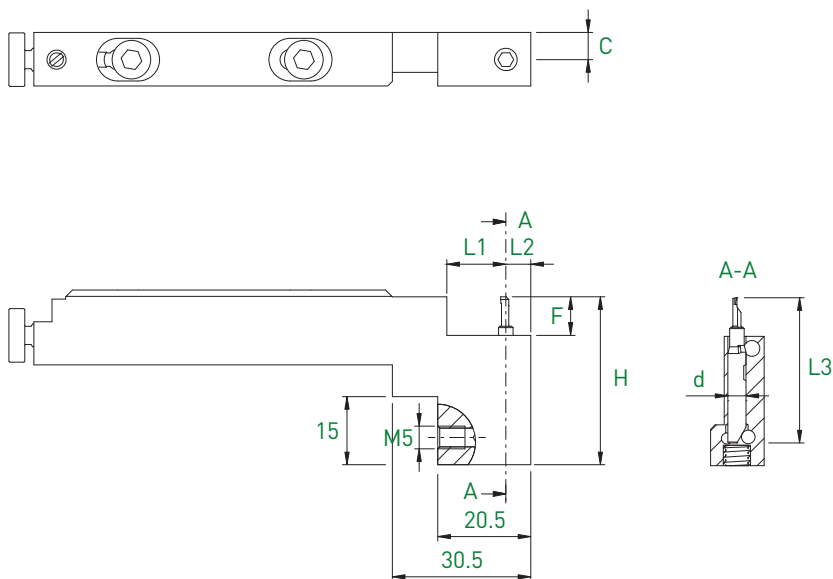
| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-260 | ML12A-260-D | ML12A-260-JET-D |
| ML12F-260 | ML12F-260-D | - |
| ML16 | ML16 | ML16 |
| ML16A-260 | ML16A-260-D | ML16A-260-JET-D |
| ML16F-260 | - | - |

Porte-outils

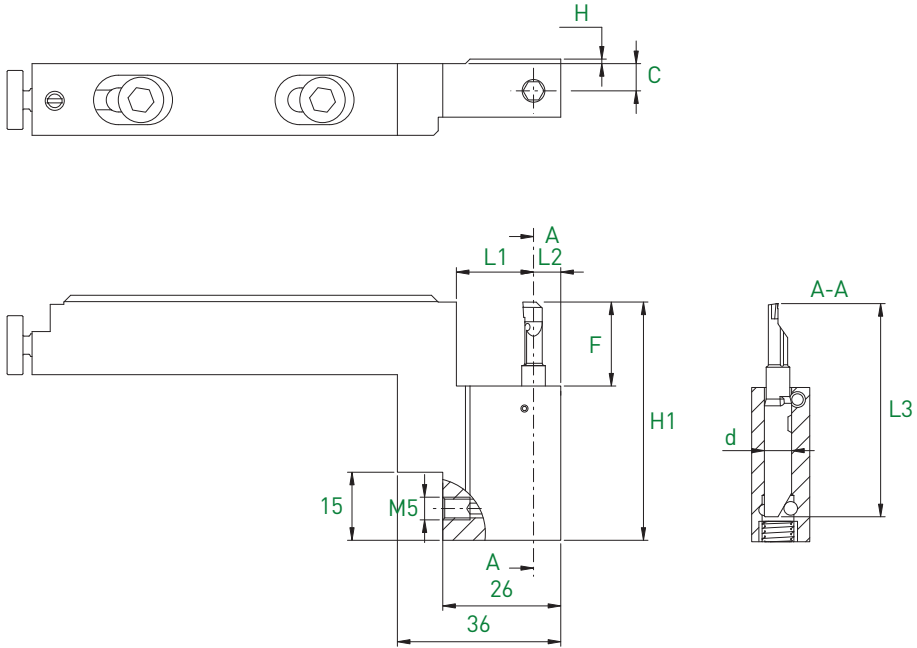
Halter

Holders

IN-Line



| | | | | | | | | ML12 |
|---|--------------------|----|------|----|---|----|-----|-------------------|
| d | Compatible bars | L3 | F | H | C | L1 | L2 | Art. N° |
| 4 | BB4R... BF4R... | 32 | 8.5 | 37 | 6 | 13 | 5.5 | ML12A-BHK4N-32R-D |
| | | 37 | 13.5 | 42 | 6 | 13 | 5.5 | ML12A-BHK4N-37R-D |
| | | 42 | 18.5 | 47 | 6 | 13 | 5.5 | ML12A-BHK4N-42R-D |



| | | | | | | | | | ML16 |
|---|--------------------|----|------|----|---|---|------|-----|-------------------|
| d | Compatible bars | L3 | F | H1 | C | H | L1 | L2 | Art. N° |
| 4 | BB4R... BF4R... | 32 | 8.5 | 37 | 6 | - | 17.5 | 5.5 | ML16A-BHK4N-32R-D |
| | | 37 | 13.5 | 42 | 6 | - | 17.5 | 5.5 | ML16A-BHK4N-37R-D |
| | | 42 | 18.5 | 47 | 6 | - | 17.5 | 5.5 | ML16A-BHK4N-42R-D |

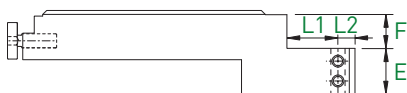
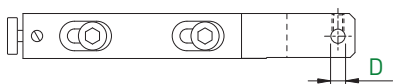
| | | | | | | | | | ML16 |
|---|--------------------|----|------|------|---|---|----|----|-------------------|
| d | Compatible bars | L3 | F | H1 | C | H | L1 | L2 | Art. N° |
| 6 | BB4R... BF4R... | 47 | 18.5 | 52.5 | 6 | 1 | 17 | 6 | ML16A-BHK6N-47R-D |
| | | 57 | 28.5 | 62.5 | 6 | 1 | 17 | 6 | ML16A-BHK6N-57R-D |

Porte-outils

Halter

Holder

TOOLING-Line



| | | | | | ML12 |
|----|---|----|----|----|-----------------|
| F | D | E | L1 | L2 | Art. N° |
| 8 | 3 | 12 | 13 | 6 | ML12A-2440-8-3 |
| 8 | 4 | 12 | 13 | 6 | ML12A-2440-8-4 |
| 8 | 5 | 12 | 13 | 6 | ML12A-2440-8-5 |
| 12 | 6 | 12 | 13 | 6 | ML12A-2440-12-6 |

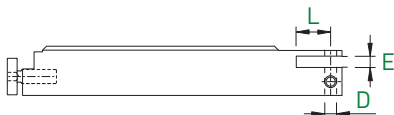
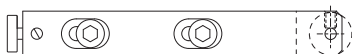
| | | | | | ML16 |
|----|---|----|----|----|-----------------|
| F | D | E | L1 | L2 | Art. N° |
| 12 | 3 | 16 | 18 | 6 | ML16A-2440-12-3 |
| 12 | 4 | 16 | 18 | 6 | ML16A-2440-12-4 |
| 12 | 5 | 16 | 18 | 6 | ML16A-2440-12-5 |
| 12 | 6 | 16 | 18 | 6 | ML16A-2440-12-6 |
| 18 | 8 | 16 | 18 | 6 | ML16A-2440-18-8 |

Porte-molettes

Rändelhalter

Knurl holders

TOOLING-Line



| | | | ML12 |
|---|---|---|---------------|
| E | D | L | Art. N° |
| 4 | 4 | 8 | ML12A-2402-44 |

| | | | ML16 |
|---|---|----|---------------|
| E | D | L | Art. N° |
| 4 | 4 | 11 | ML16A-2402-44 |

MODU-LINE

Porte-plaquettes – Coupe déportée & contre-opération

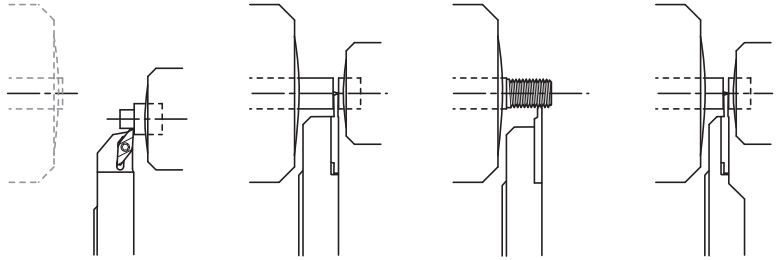
WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle

Coupe à droite déportée ou usinage
à gauche sur contre-broche

Rechtsschneidend versetzt oder
linksschneidend auf Gegenspindel

Right hand cut off line or left hand
cut on subspindle



TURN-Line
ISO-Line

TOP-Line
EVOCUT-Line
CUT-Line
PRO-Line
ECO-Line

TOP-Line
EVOCUT-Line
CUT-Line
PRO-Line
ECO-Line

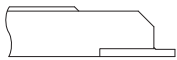
TOP-Line
PRO-Line
ECO-Line

Porte-plaquettes – Coupe déportée & contre-opération



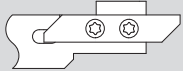
WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle

TOP-Line



TOP-Line
731-737



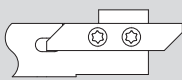
| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-730-V | ML12A-730-V-D | ML12A-730-V-JET-D |
| ML16 | ML16 | ML16 |
| ML16A-730-V | ML16A-730-V-D | ML16A-730-V-JET-D |

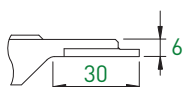
Porte-plaquettes – Coupe déportée & contre-opération

WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle

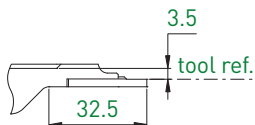
TOP-Line

| Standard | -D | -JET ^(-D) |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-730RC | - | ML12A-730RC-JET |



TOP-Line
731R

| ML16 | ML16 | ML16 |
|-------------|---------------|-------------------|
| ML16A-730RC | ML16A-730RC-D | ML16A-730RC-JET-D |



TOP-Line
731R

| ML12 | ML12 | ML12 |
|------------------------|------|------|
| ML12A-730RC-R04 | - | - |
| ML12A-730RC-SWISS-NANO | - | - |



TOP-Line
751-757

| | | |
|-------------|---------------|-------------------|
| ML12 | ML12 | ML12 |
| ML12A-750-V | ML12A-750-V-D | ML12A-750-V-JET-D |
| ML16 | ML16 | ML16 |
| ML16A-750-V | ML16A-750-V-D | ML16A-750-V-JET-D |



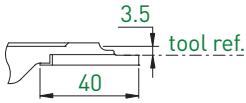
TOP-Line
751R

| ML12 | ML12 | ML12 ^(-D) |
|-------------|---------------|----------------------|
| ML12A-750RC | - | ML12A-750RC-JET |
| ML16 | ML16 | ML16 |
| ML16A-750RC | ML16A-750RC-D | ML16A-750RC-JET-D |



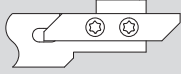
MODU-LINE

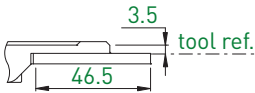
Porte-plaquettes – Coupe déportée & contre-opération
 WSP-Halter – Versetztes Schneiden & Gegenspindel
 Insert holders – Cut off line & cut on subspindle

TOP-Line



TOP-Line
751R

| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-750RC-R04 | - | - |
| ML12A-750RC-SWISS-NANO | - | - |



TOP-Line
771R



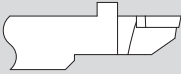
| ML12 | ML12 | ML12 |
|------------------------|------|------|
| ML12A-770RC-SWISS-NANO | - | - |

Porte-plaquettes – Contre-opération
 WSP-Halter – Gegenspindel
 Insert holders – Cut on subspindle

TURN-Line



TURN-Line
337-339

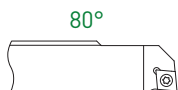
| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-330-V | ML12A-330-V-D | ML12A-330-V-JET-D |
| ML16 | ML16 | ML16 |
| ML16A-330-V | ML16A-330-V-D | ML16A-330-V-JET-D |

Porte-plaquettes – Contre-opération

WSP-Halter – Gegenspindel

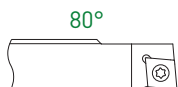
Insert holders – Cut on subspindle

ISO-Line



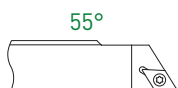
ISO-Line
CC...0602..

| Standard | -D | -JET-D |
|----------|-------------------|-----------------------|
| | | |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| - | ML12A-SCLCL06-V-D | ML12A-SCLCL06-V-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-SCLCL06-V-D | ML16A-SCLCL06-V-JET-D |



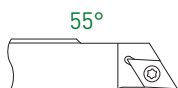
ISO-Line
CC...9T3..

| ML12 | ML12 | ML12 |
|------|-------------------|-----------------------|
| - | ML12A-SCLCL09-V-D | ML12A-SCLCL09-V-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-SCLCL09-V-D | ML16A-SCLCL09-V-JET-D |



ISO-Line
DC...0702..

| ML12 | ML12 | ML12 |
|------|-------------------|-----------------------|
| - | ML12A-SDJCL07-V-D | ML12A-SDJCL07-V-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-SDJCL07-V-D | ML16A-SDJCL07-V-JET-D |



ISO-Line
DC...11T3..

| ML12 | ML12 | ML12 |
|-----------------|-------------------|-----------------------|
| ML12A-SDJCL11-V | ML12A-SDJCL11-V-D | ML12A-SDJCL11-V-JET-D |
| ML16 | ML16 | ML16 |
| ML16A-SDJCL11-V | ML16A-SDJCL11-V-D | ML16A-SDJCL11-V-JET-D |

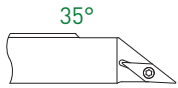
MODU-LINE

Porte-plaquettes – Contre-opération

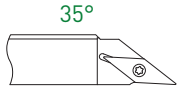
WSP-Halter – Gegenspindel

Insert holders – Cut on subspindle

ISO-Line



ISO-Line
VC...-1103..



ISO-Line
VC...-1303..

| Standard | -D | -JET-D |
|-----------------|-------------------|-----------------------|
| | | |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-SVJCL11-V | ML12A-SVJCL11-V-D | ML12A-SVJCL11-V-JET-D |
| ML16 | ML16 | ML16 |
| ML16A-SVJCL11-V | ML16A-SVJCL11-V-D | ML16A-SVJCL11-V-JET-D |

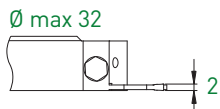
| | | |
|------|-------------------|-----------------------|
| ML12 | ML12 | ML12 |
| - | ML12A-SVJCL13-V-D | - |
| ML16 | ML16 | ML16 |
| - | ML16A-SVJCL13-V-D | ML16A-SVJCL13-V-JET-D |

Porte-plaquettes – Coupe déportée

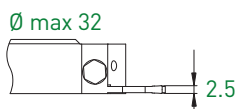
WSP-Halter – Versetztes Schneiden

Insert holders – Cut off line

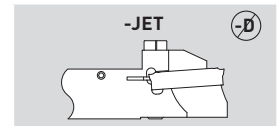
EVO CUT-Line



EVO CUT-Line
ET20



EVO CUT-Line
ET25



| Art. N° | Art. N° | Art. N° |
|---------|---------|--------------------|
| ML16 | ML16 | ML16 |
| - | - | ML16A-ET20-V-JET32 |

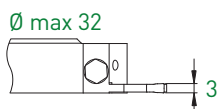
| | | |
|------|------|--------------------|
| ML16 | ML16 | ML16 |
| - | - | ML16A-ET25-V-JET32 |

Porte-plaquettes – Coupe déportée

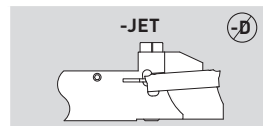
WSP-Halter – Versetztes Schneiden

Insert holders – Cut off line

EVOCUT-Line



EVOCUT-Line
ET30



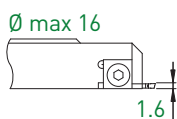
| | | |
|------|------|--------------------|
| ML16 | ML16 | ML16 |
| - | - | ML16A-ET30-V-JET32 |

Porte-plaquettes – Coupe déportée

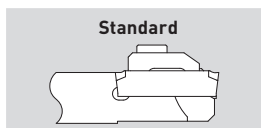
WSP-Halter – Versetztes Schneiden

Insert holders – Cut off line

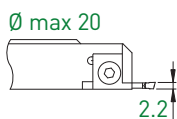
CUT-Line



CUT-Line
CUT16

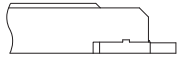


| Art. N° | Art. N° | Art. N° |
|---------------|---------|---------|
| ML12 | ML12 | ML12 |
| ML12A-CUT16-V | - | - |
| ML12F-CUT16-V | - | - |
| ML16 | ML16 | ML16 |
| ML16A-CUT16-V | - | - |
| ML16F-CUT16-V | - | - |






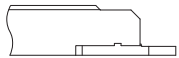
CUT-Line
CUT22

| | | |
|---------------|------|------|
| ML12 | ML12 | ML12 |
| ML12A-CUT22-V | - | - |
| ML12F-CUT22-V | - | - |
| ML16 | ML16 | ML16 |
| ML16A-CUT22-V | - | - |
| ML16F-CUT22-V | - | - |



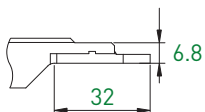
PRO-Line
632-636

| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| - | ML12A-630-V-D | ML12A-630-V-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-630-V-D | ML16A-630-V-JET-D |



PRO-Line
651R

| | | |
|------|---------------|-------------------|
| ML12 | ML12 | ML12 |
| - | ML12A-650-V-D | ML12A-650-V-JET-D |
| ML16 | ML16 | ML16 |
| - | ML16A-650-V-D | ML16A-650-V-JET-D |



PRO-Line
651R

| | | |
|-------------|---------------|-------------------|
| ML12 | ML12 | ML12 |
| ML12A-650RC | ML12A-650RC-D | - |
| ML16 | ML16 | ML16 |
| - | ML16A-650RC-D | ML16A-650RC-JET-D |

Porte-plaquettes – Coupe déportée & contre-opération


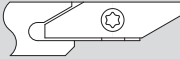
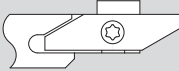
WSP-Halter – Versetztes Schneiden & Gegenspindel

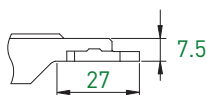
Insert holders – Cut off line & cut on subspindle

ECO-Line



ECO-Line
251-261

| Standard | -D | -JET-D |
|---|---|--|
|  |  |  |
| Art. N° | Art. N° | Art. N° |
| ML12 | ML12 | ML12 |
| ML12A-250-V | ML12A-250-V-D | ML12A-250-V-JET-D |
| ML16 | ML16 | ML16 |
| ML16A-250-V | ML16A-250-V-D | ML16A-250-V-JET-D |



ECO-Line
251R

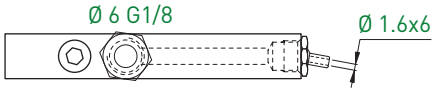
| | | |
|------|---------------|------|
| ML12 | ML12 | ML12 |
| - | ML12A-250RC-D | - |
| ML16 | ML16 | ML16 |
| - | ML16A-250RC-D | - |

MODU-LINE

Modules d'arrosage
Kühlmittelzufuhrelemente
Coolant supply units

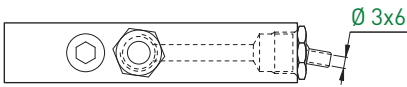
ML12 / ML16

ML12



| Raccord Anschluss Connection | Buses d'arrosage Kühlmitteldüse Coolant nozzles | ML12 Art. N° |
|------------------------------------|---|-----------------|
| Ø 6 G 1/8 | 5/16" | ML12-JET-5/16 |

ML16

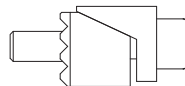
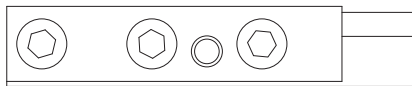


| Raccord Anschluss Connection | Buses d'arrosage Kühlmitteldüse Coolant nozzles | ML16 Art. N° |
|------------------------------------|---|-----------------|
| Ø 6 G 1/8 | 7/16" | ML16-JET-7/16 |

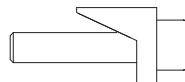
buses optionnelles voir page 12.81
zusätzliche Düsen siehe Seite 12.81
optional nozzles see page 12.81

Modules de serrage
Spannelemente
Clamping units

ML12 / ML16



| ML12 Art. N° | ML16 Art. N° |
|-----------------|------------------|
| ML12-FIX-12/14 | ML16-FIX-16/16 |
| - | ML16-FIX-16/16.5 |
| - | ML16-FIX-16/17 |
| - | ML16-FIX-16/20 |
| - | ML16-FIX-16/22 |
| - | ML16-FIX-16/24 |



| ML12 Art. N° | ML16 Art. N° |
|-----------------|-----------------|
| ML12-FIX-12 | ML16-FIX-16 |

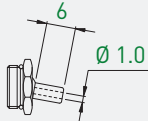
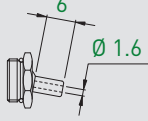
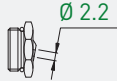
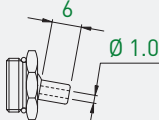
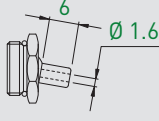
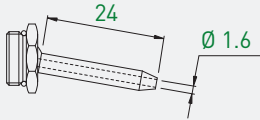
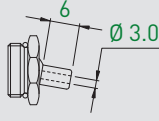
Buses d'arrosage

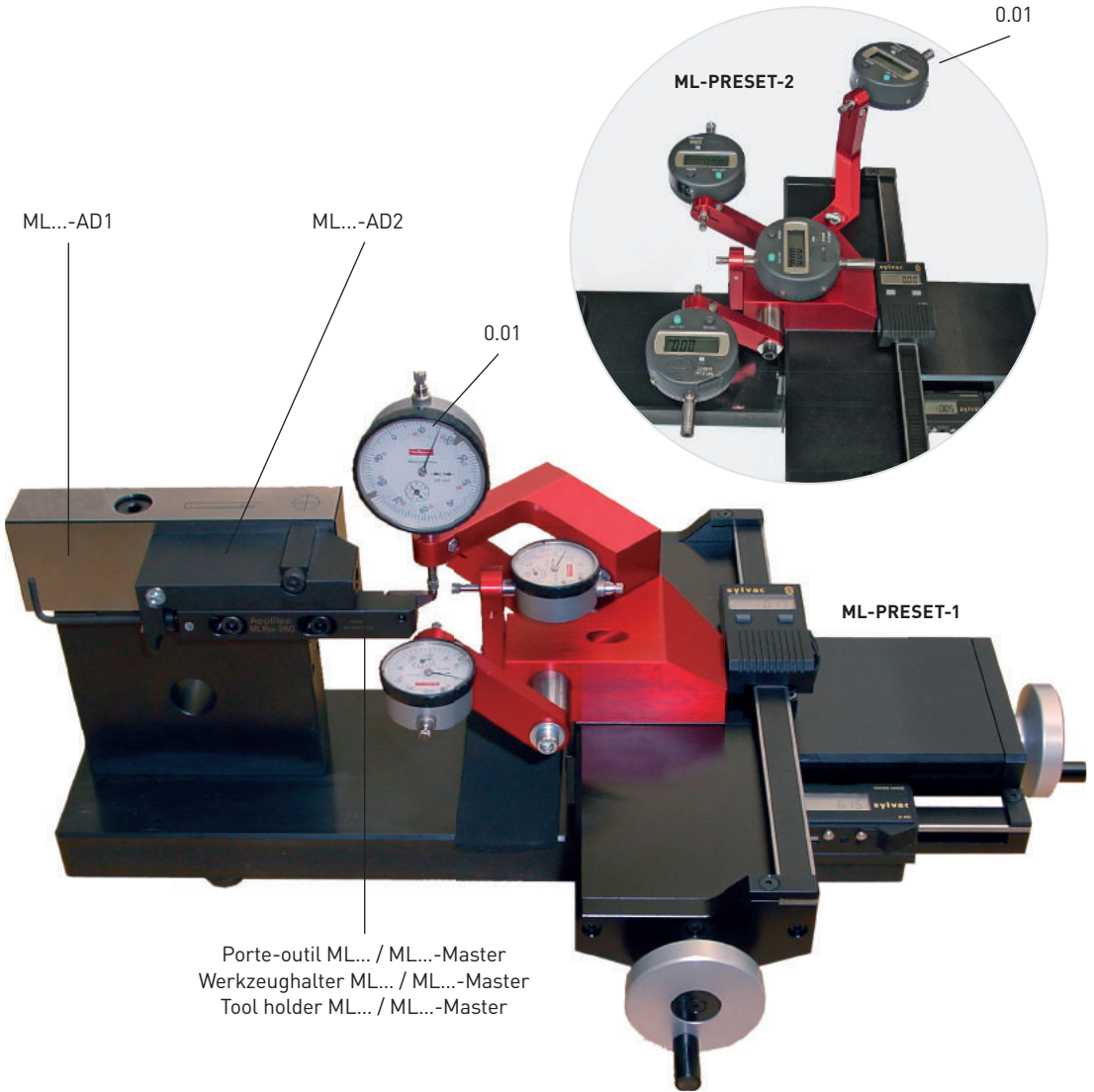
Kühlmitteldüsen

Coolant nozzles

5/16" / 7/16"

JET

| 5/16" | Art. N° | Références compatibles Kompatible Artikeln Compatible items |
|---|--------------------|--|
|  | ML-JET 5/16-1.0X6 | ML12-JET-5/1.6 |
|  | ML-JET 5/16-1.6X6 | <p>une buse ML-JET-5/16-1.6x6 est comprise</p> <p>eine Düse ML-JET-5/16-1.6x6 ist inbegriffen</p> <p>a nozzle ML-JET-5/16-1.6x6 is included</p> |
|  | ML-JET 5/16-2.2X0 | |
| 7/16" | Art. N° | Références compatibles Kompatible Artikeln Compatible items |
|  | ML-JET 7/16-1.0X6 | |
|  | ML-JET 7/16-1.6X6 | <p>ML16-KMX26-JET ML16-JET-7/16 ML12-DEC010-JET ML16-DEC013-JET ML16-DEC020-JET ML16-S20-JET ML16-SWISS-ST26-JET</p> |
|  | ML-JET-7/16-1.6X24 | <p>une buse ML-JET-7/16-3.0x6 est comprise avec chaque article ci-dessus</p> <p>eine Düse ML-JET 7/16-3.0x6 ist mit jedem vorstehenden Artikel inbegriffen</p> |
|  | ML-JET-7/16-3.0X6 | <p>a nozzle ML-JET 7/16-3.0x6 is included with each above item</p> |



Art. N°

ML-PRESET-1

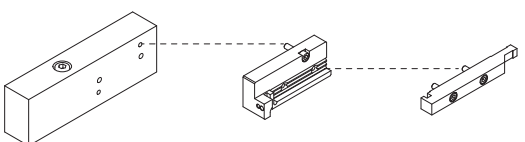
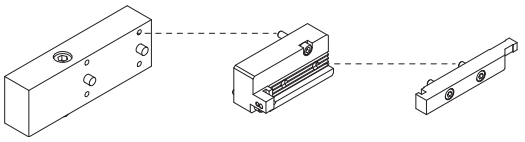
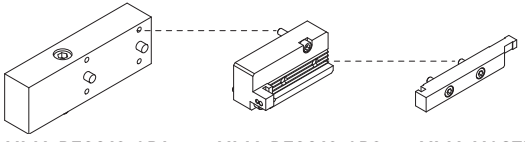
ML-PRESET-2

Banc de pré réglage

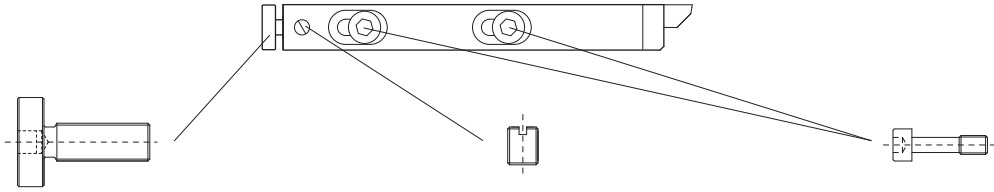
Voreinstellgerät

Presetting device

ML12 / ML16

| Type Typ Type | Fabricant Hersteller Manufacturer | Machines Maschinen Machines | Adaptateurs et jauges d'étalonnage Adapter und Einstellehre Adaptators and master gauges |
|---------------------|---|-----------------------------------|--|
| ML12 | CITIZEN | C12/C16 |  <p>ML12-AD1 ML12-AD2 ML12-MASTER</p> |
| | | L12-1M7 | |
| | | L12-2M10 | |
| | | M16 V/VIII | |
| | | R04 | |
| | HANWHA | R07 | |
| | | XD20M | |
| | METAFIL | D3/D10/D13 | |
| | | SB-12RG | |
| | STAR | SR10-J | |
| | | SW-12RII | |
| | TORNOS | DECO7/10 - EvoDECO 10 | |
| | | SwissNano/SwissNano 7 | |
| DT13 | | | |
| CT20 | | | |
| GT13 | | | |
| TSUGAMI | B074 | | |
| | B075 | | |
| | | P034 | |
| ML16 | CITIZEN | K12/K16/K12E/K16E |  <p>ML16/20-AD1 ML16-AD2 ML16-MASTER</p> |
| | | L16/L20 | |
| | | L20E | |
| | HANWHA | SL12/16 | |
| | | MANUHRIN | |
| | SA-12/SA-16/SA-16R | | |
| | SB-16 | | |
| | SB-16/20RG | | |
| | SB-20C/E | | |
| | SR-20J/SR-20RIII | | |
| | SR-20JII-A/B | | |
| | SR-16R/SR-20R/SR-20RII | | |
| | SR-20RIII/SR-20J | | |
| | SR-20RIV | | |
| | SR-32J | | |
| | SV-12/20/ SV-20R | | |
| | SW-20R | | |
| | TORNOS | DECO20/26 - EvoDECO20/32 | |
| | | SIGMA20/32 | |
| | | DT26 | |
| GT26 | | | |
| GT32 | | | |
| ML16 | TORNOS | DECO13-EvoDECO16 |  <p>ML16-DECO13-AD1 ML16-DECO13-AD2 ML16-MASTER</p> |
| | | ST26 | |

ML12



Vis de réglage
 Einstellungsschraube
 Setting screw

Art. N°

ML12A-M5X0.5

Vis de blocage
 Blockierschraube
 Locking screw

Art. N°

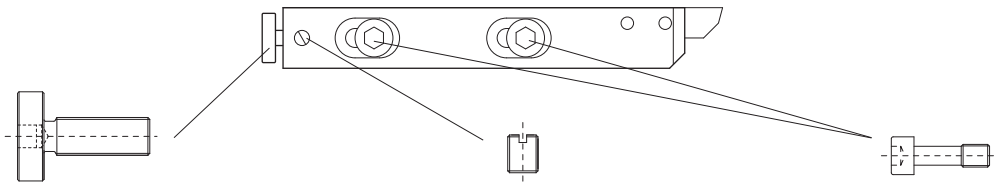
ML-M4X4-T

Vis de fixation
 Befestigungsschraube
 Fixing screw

Art. N°

ML12-M5XL20

ML16



Vis de réglage
 Einstellungsschraube
 Setting screw

Art. N°

ML16A-M5X0.5

Vis de blocage
 Blockierschraube
 Locking screw

Art. N°

ML-M4X4-T

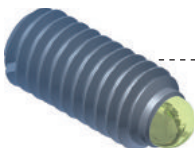
Vis de fixation
 Befestigungsschraube
 Fixing screw

Art. N°

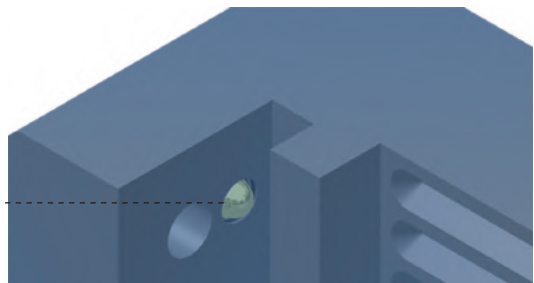
ML16/20-M6XL20

Art. N°

ML-205004



Butée à ressort
 Federnde Schraube
 Spring bumper



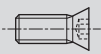




Pièces de rechange

Ersatzteile

Spare parts

ML12 / ML16

Vis et clés pour le serrage des plaquettes
Schrauben und Schlüssel für WSP-Befestigung
Screws and keys for insert clamping

| Porte-outils Halter Holders |  |  |  |  |  |
|-----------------------------------|---|---|---|---|---|
| ML...250 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...260 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...330 | V-M2.5X7.8-T8 | C-T8 | - | - | - |
| ML...340 | V-M2.5X7.8-T8 | C-T8 | - | - | - |
| ML...630 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...640 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...650 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...650RC | V-M4X6.5-T15 | C-T15 | - | - | - |
| ML...660 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...730 | V-M3X7-T8 | C-T8 | - | - | - |
| ML...730RC | V-M3X5.5-T8 | C-T8 | - | - | - |
| ML...730RC-R04 | V-M3X4.5-T8 V-M3X7-T8 | C-T8 | - | - | - |
| ML...730RC-SWISS-NANO | V-M3X4.5-T8 V-M3X7-T8 | C-T8 | - | - | - |
| ML...740 | V-M3X7-T8 | C-T8 | - | - | - |
| ML...750 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...750RC | V-M4X7.3-T15 | C-T15 | - | - | - |
| ML...750RC-R04 | V-M4X5.6-T15 V-M4X7.3-T15 | C-T15 | - | - | - |
| ML...750RC-SWISS-NANO | V-M4X5.6-T15 V-M4X7.3-T15 | C-T15 | - | - | - |
| ML...760 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...770RC-SWISS-NANO | V-M4X7.3-T15 | C-T15 | - | - | - |
| ML...780 | V-M4X9-T15 | C-T15 | - | - | - |
| ML...SC...06 | V-M2.5X5.8-T8 | C-T8 | - | - | - |
| ML...SC...09 | V-M4X7-T15-ISO | C-T15 | - | - | - |
| ML...-SD...07 | V-M2.5X7.8-T8 | C-T8 | - | - | - |
| ML...-SD...07-D | V-M2.5X5.8-T8 | C-T8 | - | - | - |
| ML12...-SDJ...11 | V-M4X7-T15-ISO | C-T15 | - | - | - |
| ML12...-SDN...11 | V-M4X9-T15-ISO | C-T15 | - | - | - |
| ML16...-SD...11 | V-M4X9-T15-ISO | C-T15 | - | - | - |
| ML...-SV...11 | V-M2.5X7.8-T8 | C-T8 | - | - | - |
| ML...-SV...13 | V-M3X7.3-T8-ISO | C-T8 | - | - | - |
| ML...-CUT16 | - | - | CUT16RS-SET | - | - |
| ML...-CUT16-V | - | - | CUT16LS-SET | - | - |
| ML...-CUT22 | - | - | CUT22RS-SET | - | - |
| ML...-CUT16-V | - | - | CUT22LS-SET | - | - |
| ML16...-ET... JET32 | - | - | - | - | - |
| ML16...-ET... V-JET32 | - | - | - | V-M5X21-6P7-J | C-6PEX-7.0 |
| ML...-BHK | V-BHK-M4X0.5-T8 | - | - | - | - |

Outils et porte-outils traditionnels pour le décolletage et la mécanique de précision

- Porte-outils
- Forets à centrer
- Burins intérieurs
- Porte-molettes
- Molettes MD

Übliche Werkzeuge und Halter für Decolletage und Präzisionsmechanik

- Werkzeughalter
- Zentrierbohrer
- Innendrehwerkzeuge
- Rändelhalter
- Rändelrädchen

Usual tools and tool holders for automatic lathes and precision mechanics

- Tool holders
- Centring drills
- Internal turning tools
- Knurl holders
- Knurling wheels



Index

Porte-outils
Werkzeughalter
Tool holders

Type 14xx / 24xx



> 13.02

Porte-outils monoblocs pour machines Tornos
Monoblockwerkzeughalter für Tornos Maschinen
Monobloc tool holders for Tornos machines

Type 2435 / 2436



> 13.12

Forets à centrer plats
Zentrierflachbohrer
Centering flat drills

Type 1200 / 2200



> 13.14

Forets à centrer hélicoïdaux
Zentrierspiralbohrer
Centering twist drills

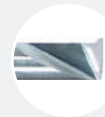
Type 15xx / 25xx



> 13.15

Burins intérieurs en métal dur
Vollhartmetall Innendrehwerkzeuge
Solid carbide internal turning tools

Type 16xx / 26xx



> 13.16

Porte-molettes
Rändelhalter
Knurl holders

Type 1402 / 2402



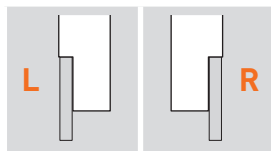
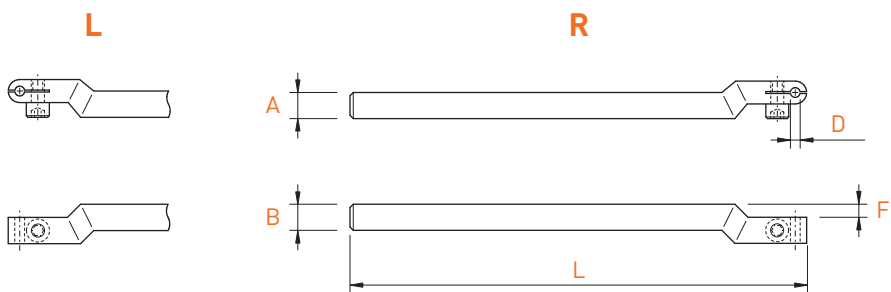
> 13.18

Molettes en métal dur
Vollhartmetall Rändelrädchen
Solid carbide knurling wheels

Type 1107



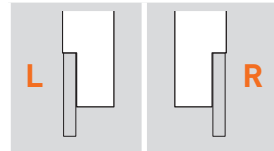
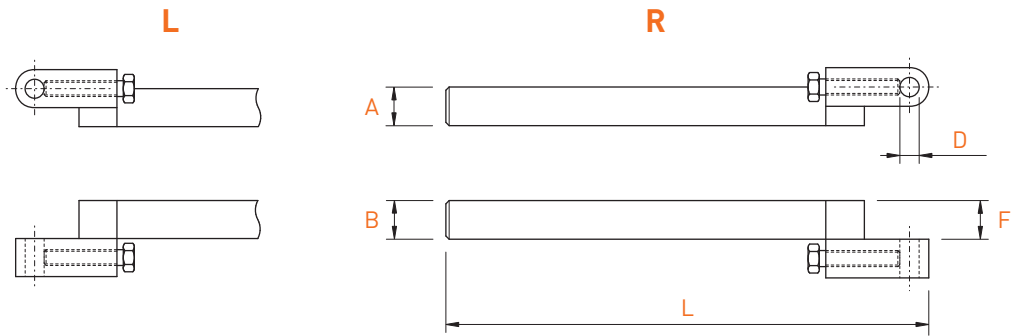
> 13.19



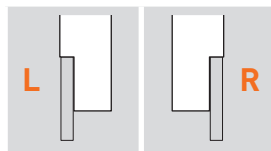
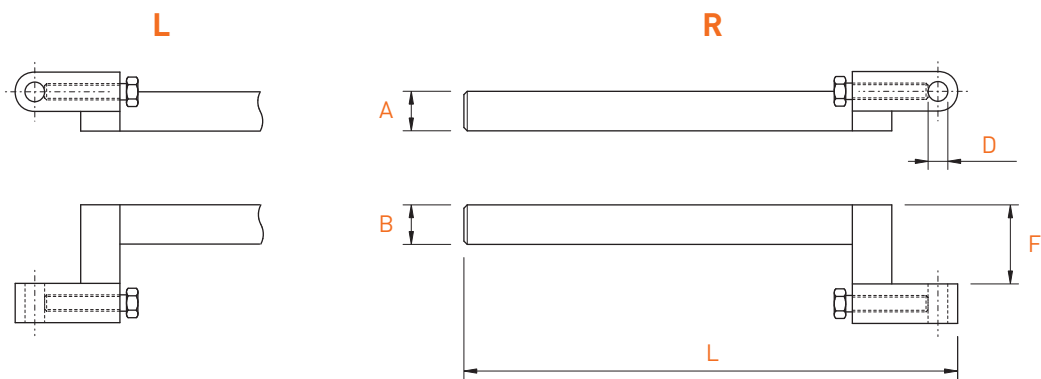
| A x B | L | F | D | Art. N° | Art. N° |
|-------|-----|---|-----|------------|------------|
| 6 x 6 | 132 | 3 | 1.5 | 1400-J-615 | 2400-J-615 |
| 6 x 6 | 132 | 3 | 2.0 | 1400-J-620 | 2400-J-620 |
| 6 x 6 | 132 | 3 | 3.0 | 1400-J-630 | 2400-J-630 |
| 7 x 7 | 140 | 3 | 1.5 | 1400-J-715 | 2400-J-715 |
| 7 x 7 | 140 | 3 | 2.0 | 1400-J-720 | 2400-J-720 |
| 7 x 7 | 140 | 3 | 3.0 | 1400-J-730 | 2400-J-730 |
| 8 x 8 | 140 | 4 | 1.5 | 1400-J-815 | 2400-J-815 |
| 8 x 8 | 140 | 4 | 2.0 | 1400-J-820 | 2400-J-820 |
| 8 x 8 | 140 | 4 | 3.0 | 1400-J-830 | 2400-J-830 |

Porte-outils
 Werkzeughalter
 Tool holders

1401-K / 2401-K



| A x B | L | F | D | Art. N° | Art. N° |
|---------|-----|----|-----|-------------|-------------|
| 7 x 7 | 146 | 7 | 2.0 | 1401-K-720 | - |
| 7 x 7 | 146 | 7 | 3.0 | 1401-K-730 | 2401-K-730 |
| 7 x 7 | 146 | 7 | 4.0 | 1401-K-740 | 2401-K-740 |
| 8 x 8 | 146 | 8 | 2.0 | 1401-K-820 | - |
| 8 x 8 | 146 | 8 | 3.0 | 1401-K-830 | 2401-K-830 |
| 8 x 8 | 146 | 8 | 4.0 | 1401-K-840 | 2401-K-840 |
| 8 x 8 | 146 | 8 | 5.0 | 1401-K-850 | 2401-K-850 |
| 8 x 8 | 146 | 8 | 6.0 | 1401-K-860 | 2401-K-860 |
| 10 x 10 | 150 | 10 | 3.0 | - | 2401-K-1030 |
| 10 x 10 | 150 | 10 | 4.0 | 1401-K-1040 | 2401-K-1040 |
| 10 x 10 | 150 | 10 | 5.0 | 1401-K-1050 | 2401-K-1050 |
| 10 x 10 | 150 | 10 | 6.0 | 1401-K-1060 | 2401-K-1060 |
| 10 x 10 | 150 | 10 | 7.0 | 1401-K-1070 | 2401-K-1070 |
| 12 x 12 | 150 | 12 | 3.0 | - | 2401-K-1230 |
| 12 x 12 | 150 | 12 | 4.0 | 1401-K-1240 | 2401-K-1240 |
| 12 x 12 | 150 | 12 | 5.0 | 1401-K-1250 | 2401-K-1250 |
| 12 x 12 | 150 | 12 | 6.0 | 1401-K-1260 | 2401-K-1260 |
| 12 x 12 | 150 | 12 | 8.0 | 1401-K-1280 | 2401-K-1280 |
| 14 x 14 | 150 | 14 | 4.0 | 1401-K-1440 | 2401-K-1440 |
| 14 x 14 | 150 | 14 | 6.0 | 1401-K-1460 | 2401-K-1460 |
| 14 x 14 | 150 | 14 | 8.0 | 1401-K-1480 | 2401-K-1480 |



| A x B | L | F | D | Art. N° | Art. N° |
|---------|-----|----|-----|------------|------------|
| 7 x 7 | 146 | 12 | 4.0 | 1420-7124 | 2420-7124 |
| 8 x 8 | 146 | 12 | 4.0 | 1420-8124 | 2420-8124 |
| 8 x 8 | 146 | 14 | 3.0 | 1420-8143 | 2420-8143 |
| 8 x 8 | 146 | 15 | 5.0 | 1420-8155 | 2420-8155 |
| 8 x 8 | 146 | 20 | 5.0 | 1420-8205 | 2420-8205 |
| 10 x 10 | 150 | 20 | 6.0 | 1420-10206 | 2420-10206 |
| 12 x 12 | 150 | 18 | 6.0 | 1420-12186 | 2420-12186 |
| 12 x 12 | 150 | 18 | 8.0 | 1420-12188 | - |
| 12 x 12 | 150 | 24 | 8.0 | 1420-12248 | 2420-12248 |
| 14 x 14 | 150 | 20 | 8.0 | 1420-14208 | 2420-14208 |
| 14 x 14 | 150 | 24 | 8.0 | 1420-14248 | 2420-14248 |

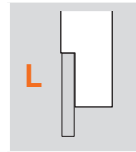
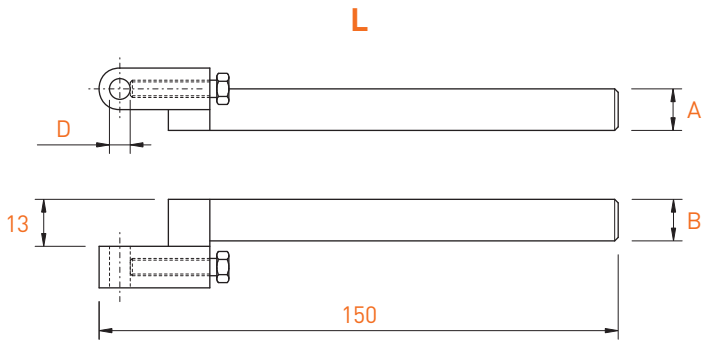
Porte-outils

Werkzeughalter

Tool holders

∅ 12 x 12

1460



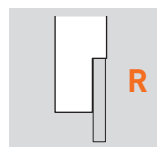
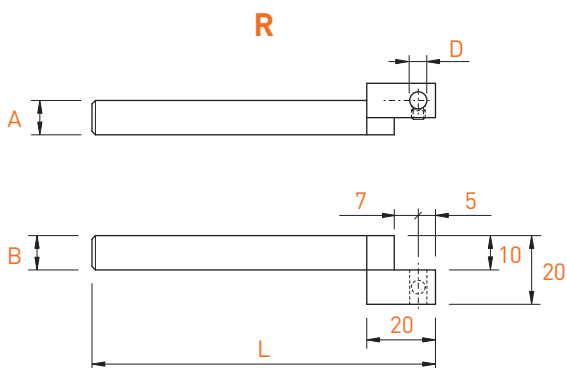
| A x B | D | Art. N° |
|---------|-----|---------|
| 12 x 12 | 4.0 | 1460-4 |
| 12 x 12 | 5.0 | 1460-5 |
| 12 x 12 | 6.0 | 1460-6 |
| 12 x 12 | 8.0 | 1460-8 |

TOOLING-LINE

Porte-outils
Werkzeughalter
Tool holders

∅ 10 x 10

2450-SP

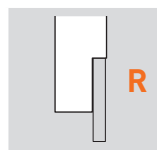
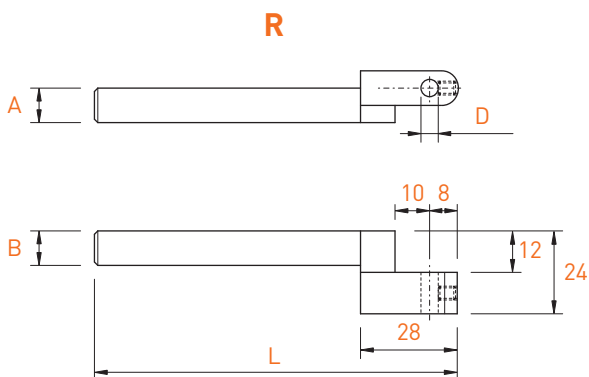


| A x B | L | D | Art. N° |
|---------|-----|-----|---------------|
| 10 x 10 | 100 | 3.0 | 2450-SP-3 |
| 10 x 10 | 100 | 4.0 | 2450-SP-4 |
| 10 x 10 | 100 | 5.0 | 2450-SP-5 |
| 10 x 10 | 100 | 6.0 | 2450-SP-6 |
| 10 x 10 | 120 | 3.0 | 2450-SP-3-120 |
| 10 x 10 | 120 | 4.0 | 2450-SP-4-120 |
| 10 x 10 | 120 | 5.0 | 2450-SP-5-120 |
| 10 x 10 | 120 | 6.0 | 2450-SP-6-120 |

Porte-outils
Werkzeughalter
Tool holders

∅ 10 x 10

2470

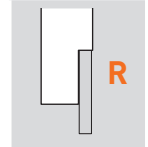
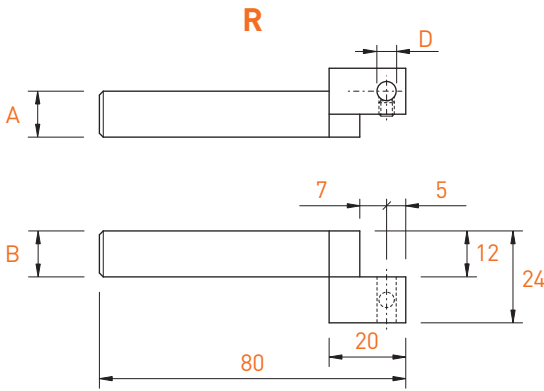


| A x B | L | D | Art. N° |
|---------|-----|-----|---------|
| 10 x 10 | 105 | 3.0 | 2470-3 |
| 10 x 10 | 105 | 4.0 | 2470-4 |
| 10 x 10 | 105 | 5.0 | 2470-5 |
| 10 x 10 | 105 | 6.0 | 2470-6 |
| 10 x 10 | 105 | 7.0 | 2470-7 |

Porte-outils
Werkzeughalter
Tool holders

∅ 12 x 12

2450

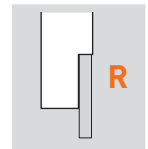
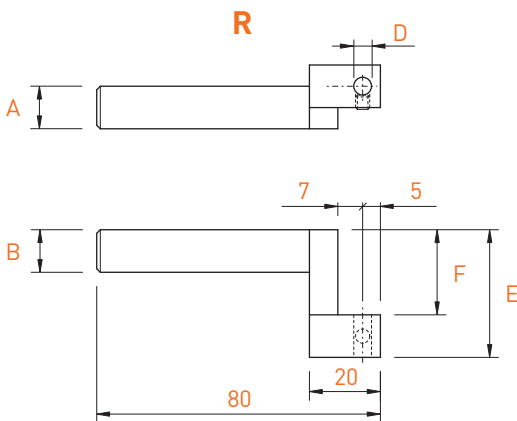


| A x B | D | Art. N° |
|---------|-----|---------|
| 12 x 12 | 3.0 | 2450-3 |
| 12 x 12 | 4.0 | 2450-4 |
| 12 x 12 | 5.0 | 2450-5 |
| 12 x 12 | 6.0 | 2450-6 |
| 12 x 12 | 8.0 | 2450-8 |

Porte-outils
Werkzeughalter
Tool holders

∅ 12 x 12

2460



| A x B | F | E | D | Art. N° |
|---------|----|----|-----|----------|
| 12 x 12 | 16 | 28 | 4.0 | 2460-284 |
| 12 x 12 | 16 | 28 | 6.0 | 2460-286 |
| 12 x 12 | 16 | 28 | 8.0 | 2460-288 |
| 12 x 12 | 20 | 32 | 4.0 | 2460-324 |
| 12 x 12 | 20 | 32 | 6.0 | 2460-326 |
| 12 x 12 | 20 | 32 | 8.0 | 2460-328 |
| 12 x 12 | 24 | 36 | 4.0 | 2460-364 |
| 12 x 12 | 24 | 36 | 6.0 | 2460-366 |
| 12 x 12 | 24 | 36 | 8.0 | 2460-368 |



| A x B | L | F | D | Art. N° |
|---------|-----|----|-----|-------------|
| 8 x 8 | 120 | 8 | 3.0 | 2405-K-830 |
| 8 x 8 | 120 | 8 | 4.0 | 2405-K-840 |
| 8 x 8 | 120 | 8 | 5.0 | 2405-K-850 |
| 8 x 8 | 120 | 8 | 6.0 | 2405-K-860 |
| 10 x 10 | 100 | 10 | 4.0 | 2405-K-1040 |
| 10 x 10 | 100 | 10 | 5.0 | 2405-K-1050 |
| 10 x 10 | 100 | 10 | 6.0 | 2405-K-1060 |
| 12 x 12 | 150 | 12 | 4.0 | 2405-K-1240 |
| 12 x 12 | 150 | 12 | 6.0 | 2405-K-1260 |
| 12 x 12 | 150 | 12 | 8.0 | 2405-K-1280 |

Porte-outils

Werkzeughalter

Tool holders

2425



| A x B | L | F | D | Art. N° |
|---------|-----|----|-----|------------|
| 8 x 8 | 120 | 12 | 4.0 | 2425-8124 |
| 8 x 8 | 120 | 15 | 5.0 | 2425-8155 |
| 8 x 8 | 120 | 20 | 5.0 | 2425-8205 |
| 10 x 10 | 100 | 15 | 6.0 | 2425-10156 |
| 10 x 10 | 100 | 20 | 6.0 | 2425-10206 |
| 12 x 12 | 150 | 18 | 6.0 | 2425-12186 |
| 12 x 12 | 150 | 24 | 8.0 | 2425-12248 |

TOOLING-LINE

Porte-outils
Werkzeughalter
Tool holders

□ 12 x 16

2441

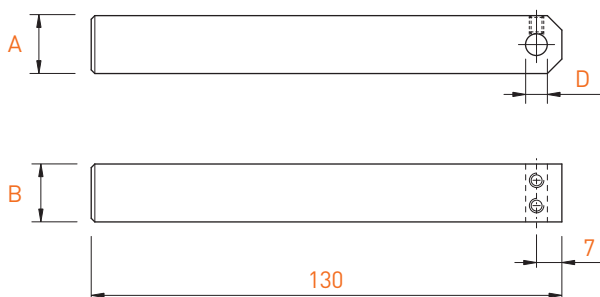


| A x B | D | Art. N° |
|---------|-----|----------|
| 12 x 16 | 3.0 | 2441-0-3 |
| 12 x 16 | 4.0 | 2441-0-4 |
| 12 x 16 | 5.0 | 2441-0-5 |
| 12 x 16 | 6.0 | 2441-0-6 |

Porte-outils
Werkzeughalter
Tool holders

□ 16 x 16

2440-0

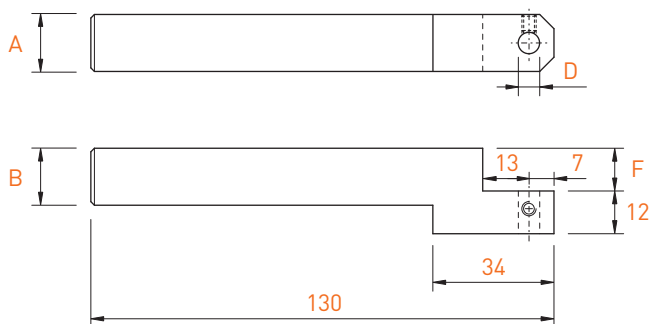


| A x B | D | Art. N° |
|---------|-----|----------|
| 16 x 16 | 3.0 | 2440-0-3 |
| 16 x 16 | 4.0 | 2440-0-4 |
| 16 x 16 | 5.0 | 2440-0-5 |
| 16 x 16 | 6.0 | 2440-0-6 |

Porte-outils
 Werkzeughalter
 Tool holders

∅ 16 x 16

2440-8 / 2440-12

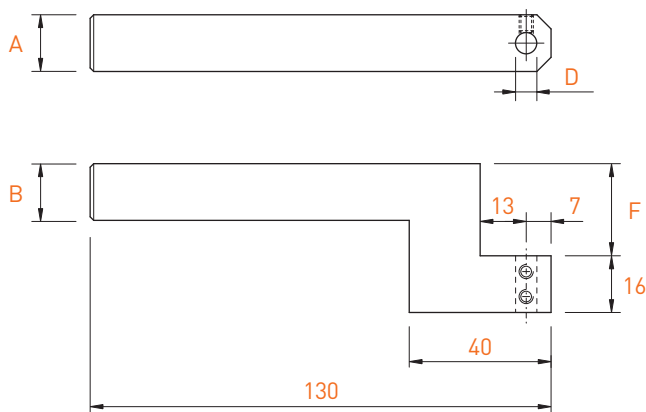


| A x B | F | D | Art. N° |
|---------|----|-----|-----------|
| 16 x 16 | 8 | 3.0 | 2440-8-3 |
| 16 x 16 | 8 | 4.0 | 2440-8-4 |
| 16 x 16 | 8 | 5.0 | 2440-8-5 |
| 16 x 16 | 8 | 6.0 | 2440-8-6 |
| 16 x 16 | 8 | 8.0 | 2440-8-8 |
| 16 x 16 | 12 | 3.0 | 2440-12-3 |
| 16 x 16 | 12 | 4.0 | 2440-12-4 |
| 16 x 16 | 12 | 5.0 | 2440-12-5 |
| 16 x 16 | 12 | 6.0 | 2440-12-6 |
| 16 x 16 | 12 | 8.0 | 2440-12-8 |

Porte-outils
 Werkzeughalter
 Tool holders

∅ 16 x 16

2440-18 / 2440-26



| A x B | F | D | Art. N° |
|---------|----|-----|-----------|
| 16 x 16 | 18 | 4.0 | 2440-18-4 |
| 16 x 16 | 18 | 5.0 | 2440-18-5 |
| 16 x 16 | 18 | 6.0 | 2440-18-6 |
| 16 x 16 | 18 | 8.0 | 2440-18-8 |
| 16 x 16 | 26 | 4.0 | 2440-26-4 |
| 16 x 16 | 26 | 5.0 | 2440-26-5 |
| 16 x 16 | 26 | 6.0 | 2440-26-6 |
| 16 x 16 | 26 | 8.0 | 2440-26-8 |

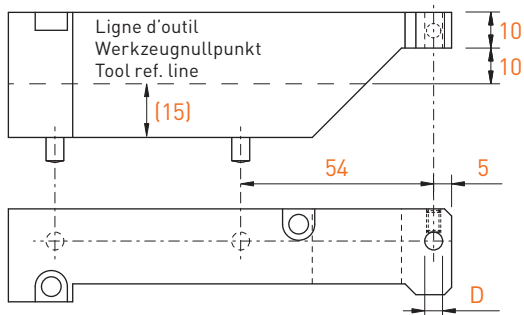
TOOLING-LINE

Porte-outils pour machines Tornos DECO 7/10 / EvoDECO 10

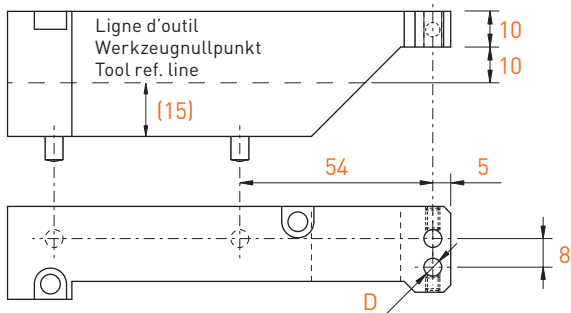
Werkzeughalter für Tornos DECO 7/10 / EvoDECO 10 Maschinen

Tool holders for Tornos DECO 7/10 / EvoDECO 10 machines

2435 / 2435-T



| D | Art. N° |
|-----|---------|
| 3.0 | 2435-3 |
| 4.0 | 2435-4 |
| 5.0 | 2435-5 |
| 6.0 | 2435-6 |



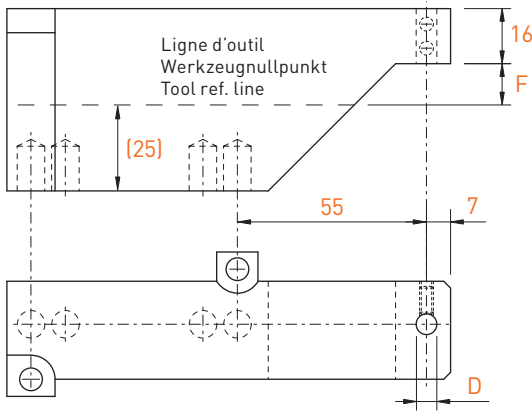
| D | Art. N° |
|-----|----------|
| 3.0 | 2435-3-T |
| 4.0 | 2435-4-T |
| 5.0 | 2435-5-T |
| 6.0 | 2435-6-T |

Porte-outils pour machines Tornos DECO 13 / EvoDECO 16

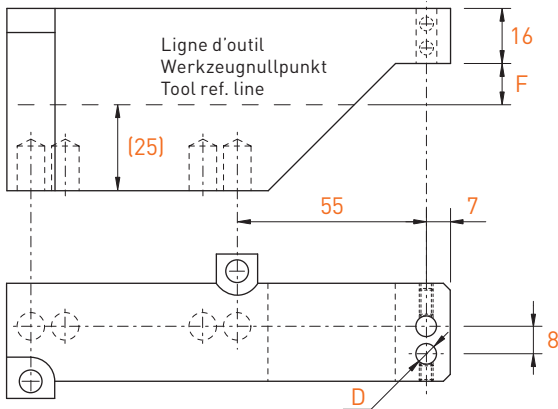
Werkzeughalter für Tornos DECO 13 / EvoDECO 16 Maschinen

Tool holders for Tornos DECO 13 / EvoDECO 16 machines

2436 / 2436T



| F | D | Art. N° |
|----|-----|-----------|
| 12 | 3.0 | 2436-12-3 |
| 12 | 4.0 | 2436-12-4 |
| 12 | 5.0 | 2436-12-5 |
| 12 | 6.0 | 2436-12-6 |
| 12 | 8.0 | 2436-12-8 |
| 18 | 3.0 | 2436-18-3 |
| 18 | 4.0 | 2436-18-4 |
| 18 | 5.0 | 2436-18-5 |
| 18 | 6.0 | 2436-18-6 |
| 18 | 8.0 | 2436-18-8 |



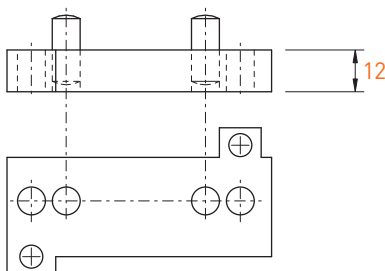
| F | D | Art. N° |
|----|-----|------------|
| 12 | 3.0 | 2436T-12-3 |
| 12 | 4.0 | 2436T-12-4 |
| 12 | 5.0 | 2436T-12-5 |
| 12 | 6.0 | 2436T-12-6 |
| 18 | 3.0 | 2436T-18-3 |
| 18 | 4.0 | 2436T-18-4 |
| 18 | 5.0 | 2436T-18-5 |
| 18 | 6.0 | 2436T-18-6 |

Entretoise

Erhöhungplatte

Spacer

2436-S12



Art. N°

2436-S12

TOOLING-LINE

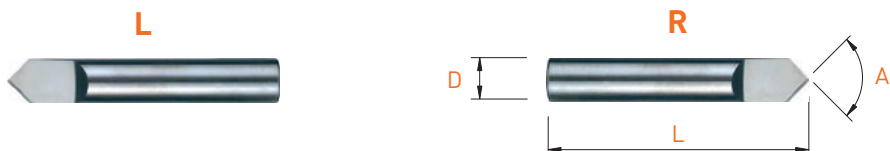
Forets à centrer plats

Zentrierflachbohrer

Centering flat drills

90°

1200 / 2200



| MD VHM HM | | | L | R |
|-----------------|----|----|-----------|-----------|
| A | D | L | Art. N° | Art. N° |
| 90° | 3 | 17 | 1200-317 | 2200-317 |
| 90° | 3 | 38 | 1200-338 | 2200-338 |
| 90° | 4 | 40 | 1200-440 | 2200-440 |
| 90° | 5 | 50 | 1200-550 | 2200-550 |
| 90° | 6 | 50 | 1200-650 | 2200-650 |
| 90° | 8 | 58 | 1200-858 | 2200-858 |
| 90° | 10 | 66 | 1200-1066 | 2200-1066 |
| 90° | 12 | 73 | 1200-1273 | 2200-1273 |

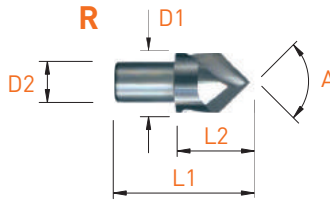
Forets à centrer hélicoïdaux

Zentrierspiralbohrer

Centering twist drills

90°

1500 / 2520



| A | D1 | D2 | L1 | L2 | HSS | | MD / VHM / HM | |
|-----|----|----|----|----|-------------|-------------|---------------|---------|
| | | | | | L | R | L | R |
| 90° | 5 | 4 | 17 | 8 | Art. N° | Art. N° | Art. N° | Art. N° |
| 90° | 5 | 4 | 17 | 8 | 1500-5-HSS | 2520-5-HSS | 1500-5 | 2520-5 |
| 90° | 7 | 5 | 17 | 8 | 1500-7-HSS | 2520-7-HSS | 1500-7 | 2520-7 |
| 90° | 10 | 6 | 22 | 10 | 1500-10-HSS | 2520-10-HSS | 1500-10 | 2520-10 |
| 90° | 12 | 8 | 26 | 12 | 1500-12-HSS | 2520-12-HSS | 1500-12 | 2520-12 |

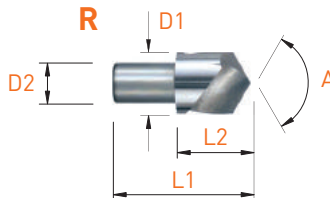
Forets à centrer hélicoïdaux

Zentrierspiralbohrer

Centering twist drills

120°

1510 / 2530

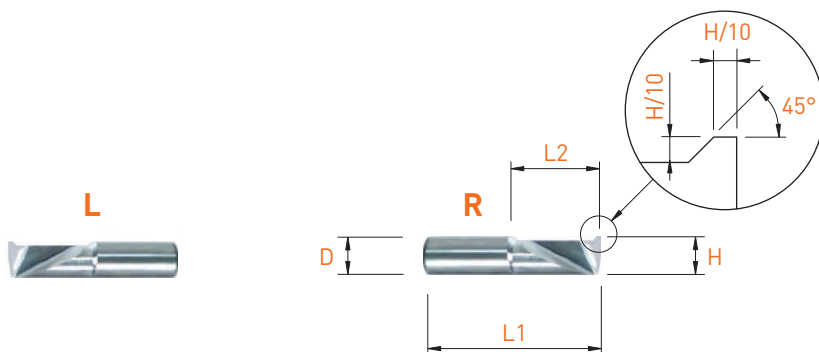


| A | D1 | D2 | L1 | L2 | MD / VHM / HM | |
|------|----|----|----|----|---------------|---------|
| | | | | | L | R |
| 120° | 5 | 4 | 17 | 8 | Art. N° | Art. N° |
| 120° | 5 | 4 | 17 | 8 | 1510-5 | 2530-5 |
| 120° | 7 | 5 | 17 | 8 | 1510-7 | 2530-7 |
| 120° | 10 | 6 | 22 | 10 | 1510-10 | 2530-10 |
| 120° | 12 | 8 | 26 | 12 | 1510-12 | 2530-12 |

TOOLING-LINE

Burins intérieurs en métal dur
 Vollhartmetall Innendrehwerkzeuge
 Solid carbide internal turning tools

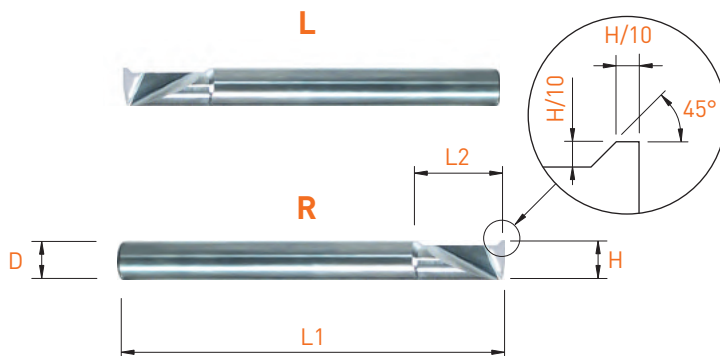
1600 / 2620



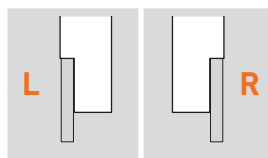
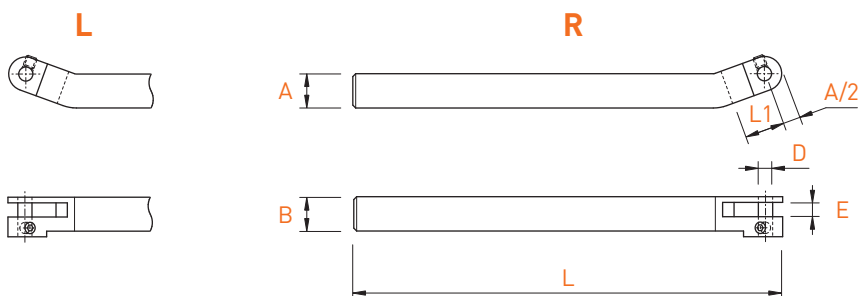
| | | | | L | R |
|-----------|---|----|----|-----------|-----------|
| | | | | Art. N° | Art. N° |
| MD | | | | | |
| VHM | | | | | |
| HM | | | | | |
| H 0/-0.05 | D | L1 | L2 | Art. N° | Art. N° |
| 2 | 3 | 13 | 4 | 1600-2-4 | 2620-2-4 |
| 3 | 3 | 15 | 6 | 1600-3-6 | 2620-3-6 |
| 4 | 4 | 17 | 8 | 1600-4-8 | 2620-4-8 |
| 4 | 4 | 21 | 12 | 1600-4-12 | 2620-4-12 |
| 5 | 5 | 21 | 10 | 1600-5-10 | 2620-5-10 |
| 5 | 5 | 26 | 15 | 1600-5-15 | 2620-5-15 |
| 6 | 6 | 25 | 12 | 1600-6-12 | 2620-6-12 |
| 6 | 6 | 31 | 18 | 1600-6-18 | 2620-6-18 |
| 8 | 8 | 32 | 16 | 1600-8-16 | 2620-8-16 |
| 8 | 8 | 40 | 24 | 1600-8-24 | 2620-8-24 |

Burins intérieurs en métal dur
 Vollhartmetall Innendrehwerkzeuge
 Solid carbide internal turning tools

1610 / 2630



| MD VHM HM | | | | L | R |
|-----------------|----|----|----|-----------|------------|
| H 0/-0.05 | D | L1 | L2 | Art. N° | Art. N° |
| 2 | 3 | 38 | 4 | 1610-2-4 | 2630-2-4 |
| 3 | 3 | 38 | 6 | 1610-3-6 | 2630-3-6 |
| 4 | 4 | 40 | 8 | 1610-4-8 | 2630-4-8 |
| 4 | 4 | 40 | 12 | 1610-4-12 | 2630-4-12 |
| 5 | 5 | 50 | 10 | 1610-5-10 | 2630-5-10 |
| 5 | 5 | 54 | 15 | 1610-5-15 | 2630-5-15 |
| 6 | 6 | 50 | 12 | 1610-6-12 | 2630-6-12 |
| 6 | 6 | 57 | 18 | 1610-6-18 | 2630-6-18 |
| 8 | 8 | 58 | 16 | 1610-8-16 | 2630-8-16 |
| 8 | 8 | 63 | 24 | 1610-8-24 | 2630-8-24 |
| 10 | 10 | 72 | 30 | - | 2630-10-30 |
| 12 | 12 | 83 | 36 | - | 2630-12-36 |



Pièces de rechange
Ersatzteile
Spare parts



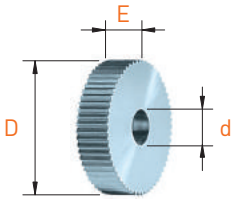
| A x B | L | E | D | L1 | A/2 | Art. N° | Art. N° | Art. N° |
|---------|-----|---|---|----|-----|-----------|-----------|----------------|
| 6 x 6 | 132 | 2 | 3 | 10 | 3 | 1402-623 | 2402-623 | GP-3X10-A6H2.5 |
| 6 x 6 | 132 | 3 | 3 | 10 | 3 | 1402-633 | 2402-633 | GP-3X10-A6H2.5 |
| 7 x 7 | 140 | 2 | 3 | 10 | 3.5 | 1402-723 | 2402-723 | GP-3X12-A6H2.5 |
| 7 x 7 | 140 | 3 | 3 | 10 | 3.5 | 1402-733 | 2402-733 | GP-3X12-A6H2.5 |
| 7 x 7 | 140 | 4 | 3 | 10 | 3.5 | 1402-743 | 2402-743 | GP-3X12-A6H2.5 |
| 7 x 7 | 140 | 2 | 4 | 10 | 3.5 | 1402-724 | 2402-724 | GP-4X12-A6H3.5 |
| 7 x 7 | 140 | 3 | 4 | 10 | 3.5 | 1402-734 | 2402-734 | GP-4X12-A6H3.5 |
| 7 x 7 | 140 | 4 | 4 | 10 | 3.5 | 1402-744 | 2402-744 | GP-4X12-A6H3.5 |
| 8 x 8 | 140 | 2 | 3 | 10 | 4 | 1402-823 | 2402-823 | GP-3X12-A6H2.5 |
| 8 x 8 | 140 | 3 | 3 | 10 | 4 | 1402-833 | 2402-833 | GP-3X12-A6H2.5 |
| 8 x 8 | 140 | 4 | 3 | 10 | 4 | 1402-843 | 2402-843 | GP-3X12-A6H2.5 |
| 8 x 8 | 140 | 2 | 4 | 10 | 4 | 1402-824 | 2402-824 | GP-4X12-A6H3.5 |
| 8 x 8 | 140 | 3 | 4 | 10 | 4 | 1402-834 | 2402-834 | GP-4X12-A6H3.5 |
| 8 x 8 | 140 | 4 | 4 | 10 | 4 | 1402-844 | 2402-844 | GP-4X12-A6H3.5 |
| 10 x 10 | 150 | 3 | 3 | 10 | 5 | 1402-1033 | 2402-1033 | GP-3X14-A8H2.5 |
| 10 x 10 | 150 | 4 | 3 | 10 | 5 | 1402-1043 | 2402-1043 | GP-3X14-A8H2.5 |
| 10 x 10 | 150 | 3 | 4 | 10 | 5 | 1402-1034 | 2402-1034 | GP-4X14-A8H3.5 |
| 10 x 10 | 150 | 4 | 4 | 10 | 5 | 1402-1044 | 2402-1044 | GP-4X14-A8H3.5 |
| 10 x 10 | 150 | 5 | 4 | 10 | 5 | 1402-1054 | - | GP-4X14-A8H3.5 |
| 12 x 12 | 150 | 4 | 4 | 12 | 6 | 1402-1244 | 2402-1244 | GP-4X14-A8H3.5 |
| 12 x 12 | 150 | 5 | 4 | 12 | 6 | 1402-1254 | 2402-1254 | GP-4X14-A8H3.5 |
| 12 x 12 | 150 | 4 | 5 | 12 | 6 | 1402-1245 | 2402-1245 | GP-5X14-A8H4.5 |
| 12 x 12 | 150 | 5 | 5 | 12 | 6 | 1402-1255 | 2402-1255 | GP-5X14-A8H4.5 |
| 16 x 16 | 150 | 4 | 4 | 12 | 8 | 1402-1644 | 2402-1644 | GP-4X16-A8H3.5 |
| 16 x 16 | 150 | 4 | 5 | 12 | 8 | - | 2402-1645 | GP-5X16-A9H4.5 |
| 16 x 16 | 150 | 5 | 5 | 12 | 8 | - | 2402-1655 | GP-5X16-A9H4.5 |
| 16 x 16 | 150 | 6 | 4 | 12 | 8 | - | 2402-1664 | GP-4X16-A8H3.5 |
| 16 x 16 | 150 | 6 | 6 | 12 | 8 | - | 2402-1666 | GP-6X16-A9H5.5 |
| 16 x 16 | 150 | 8 | 6 | 12 | 8 | - | 2402-1686 | GP-6X16-A9H5.5 |

Molettes en métal dur

Vollhartmetall Rändelrädchen

Solid carbide knurling wheels

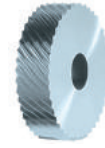
1107



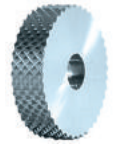
AA



BL



BR



GE

| Molettes standards Standard Rändelrädchen Standard knurls | D | E | d | Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm) | |
|---|---|----|-----------|--|-----------|
| AA (0°) | 8 | 2 | 3 | 0.2 - 0.6 | |
| | 8 | 2 | 4 | 0.2 - 0.6 | |
| | 8 | 3 | 3 | 0.2 - 0.6 | |
| | 8 | 3 | 4 | 0.2 - 0.6 | |
| | 8 | 4 | 3 | 0.2 - 0.6 | |
| | 8 | 4 | 4 | 0.2 - 0.6 | |
| | 10 | 2 | 3 | 0.2 - 0.8 | |
| | 10 | 2 | 4 | 0.2 - 0.8 | |
| | 10 | 3 | 3 | 0.2 - 0.8 | |
| | BL 15° / BR 15° BL 30° / BR 30° BL 45° / BR 45° | 10 | 3 | 4 | 0.2 - 0.8 |
| | | 10 | 4 | 3 | 0.2 - 0.8 |
| | | 10 | 4 | 4 | 0.2 - 0.8 |
| | | 10 | 4 | 4 | 0.2 - 0.8 |
| | GE 30° GE 45° | 12 | 4 | 4 | 0.3 - 1.0 |
| | | 15 | 4 | 4 | 0.4 - 1.0 |
| | | 15 | 4 | 5 | 0.4 - 1.0 |
| | | 15 | 5 | 4 | 0.4 - 1.0 |
| | | 15 | 5 | 5 | 0.4 - 1.0 |
| | | 20 | 4 | 5 | 0.5 - 1.2 |
| 20 | | 5 | 5 | 0.5 - 1.2 | |
| 20 | | 6 | 6 | 0.5 - 1.2 | |
| 20 | 8 | 6 | 0.5 - 1.2 | | |

| Molettes "Quick" "Quick"-Rändelrädchen "Quick"-knurling wheels | D | E | d | Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm) |
|--|------|-----|---|--|
| AA (0°) | 8.9 | 2.5 | 4 | 0.2 - 0.8 |
| BL 15° / BR 15° | 14.5 | 3 | 5 | 0.4 - 1.0 |
| BL 30° / BR 30° | 21.5 | 5 | 8 | 0.5 - 1.2 |

Exécutions spéciales sur demande
Sonderausführungen auf Anfrage
Special executions on request

MICRO-LINE

APPLITEC



Index

Nuances
Sorten
Grades > 14.02

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



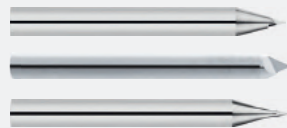
> 14.04

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



> 14.51

Fraises à graver
Gravierfräser
Engraving mills



> 14.98

Micro-forets et centreurs
Mikrobohrer und Zentrierbohrer
Micro drills and centering drills



> 14.104

Informations techniques et symboles
Technische Informationen und Symbole
Technical information and symbols

> 14.126

Nuances

Sorten

Grades

new

N

Non revêtu
Unbeschichtet
Uncoated

- Carbures de haute qualité et spécifiques selon les groupes produits
- Tous les carbures ont une excellente dureté et résistance à la flexion exceptionnelle
- Acuité d'arête maximale grâce à une finition super polie
- Idéal pour l'usinage en super finition de matières non ferreuses ou faiblement alliées

- Hochqualität und spezifische Hartmetalle gemäß den Produktgruppen
- Alle Hartmetalle haben eine ausgezeichnete Härte und außergewöhnliche Biegefestigkeit
- Maximale Kantenschärfe durch hochpoliertes Finish
- Ideal für superfinish Bearbeitung von Nichteisen- oder niedriglegierten Materialien

- High quality and specific carbides according to the product groups in our catalog
- All carbides have excellent hardness and exceptional flexural strength
- Maximum edge sharpness thanks to a super polished tool finish
- Ideal for super-finish machining of non-ferrous or low-alloy materials

TiAlN

Revêtement PDV à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

- Revêtement de dernière génération couche mince et lisse
- Idéal pour tous les aciers et aciers inoxydables
- Bonne condition pour les grades de titane et alliage de nickel
- Excellente variante universelle pour un fraisage en finition ou ébauche
- Très bonne résistance à la température

- Neuesten Generation Beschichtung, dünne und glatte Schicht
- Hervorragend für alle Stähle und rostfreie Stähle
- Guter Zustand für Titan- und Nickellegierungsorten
- Ausgezeichnete Universalsorte zum Schlicht- oder Schruppfräsen
- Sehr gute Temperaturbeständigkeit

- Latest generation coating thin and smooth layer
- Specially adapted for our tools Ideal for all basic steels and stainless steels
- Good condition for Titan grades and Nickel alloy
- Excellent universal variant for finishing or rough milling
- Very good temperature resistance

STF

Revêtement PDV à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

- Revêtement haute performance
- Premier choix pour les alliages de chrome/nickel, inox, titane, zirkonium
- Spécialement adapté aux matières extrêmes en générale

- Hochleistungsbeschichtung
- Erste Wahl für Chrom/ Nickel, rostfreier Stahl, Titan, Zirkoniumlegierungen
- Speziell angepasst für extreme Materialien im Allgemeinen

- High performance coating
- First choice for chrome/nickel, stainless steel, titan, zirkonium alloys
- Specially adapted to extreme materials in general

Nuances

Sorten

Grades

TiCN

Revêtement PDV à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

- Revêtement de dernière génération, excellente adhérence couche mince et lisse
- Idéal pour le fraisage en finition de tous les aciers et aciers inoxydables
- Excellente nuance pour les outils de petits diamètres (0.02-0.90 mm)

- Neuesten Generation Beschichtung, dünne und glatte Schicht
- Hervorragend für Schlichtfräsen aller Stähle und rostfreien Stähle
- Ausgezeichnete Sorte für Werkzeuge mit kleinem Durchmesser (0.02-0.90 mm)

- Latest generation coating excellent adhesion thin and smooth layer
- Specially adapted for small diameters (0.02-0.90 mm)
- Ideal for finish milling for all steels and stainless steel

DLC

Revêtement DLC à couche mince
Dünnschicht DLC Beschichtung
Thin DLC coating






- Revêtement très haute performance couche extra mince
- Très faible coefficient de frottement
- Premier choix pour toutes les matières précieuses, non ferreuse et abrasives, telles que or, argent, laiton sans plomb, cuivre, aluminium, fibre de carbone, nacre et divers polymères...
- Angles de coupe parfaitement lisses et excellente acuité d'arrête
- Durée de vie de l'outil démultipliée

- Extra Dünnschicht Hochleistungsbeschichtung
- Sehr geringer Reibwert
- Erste Wahl für alle edlen, NE- und abrasiven Materialien wie Gold, Silber, bleifreies Messing, Kupfer, Aluminium, Kohlefaser, Perlmutter und diverse Polymere...
- Perfekt glatte Schnittwinkel und hervorragende Kantenschärfe
- Erhöhte Lebensdauer des Werkzeugs

- Very high-performance coating extra thin layer
- Very low ratio
- First choice for all precious, non-ferrous and abrasive materials, such as gold, silver, lead-free brass, copper, aluminum, carbon fiber, mother-of-pearl and various polymers...
- Perfectly smooth cutting angles and excellent edge sharpness
- Increased tool life

Paramètres de coupe indicatif
Empfohlene Schnittwerte
Standard machining data

14.06


|  Sharp Corner  Radius Corner | Micro-fraises avec angles vifs Mikropräzisionsfräser mit scharfkantigen Ecken Micro end mills with sharp corners | | | | | | | |
|---|--|-------------|--------------|--------------|-------------|-------------|-------|------------|
| | Z | λ | L2 | D1 | D2 | Type | page | |
|  | Z=1 | 0° | 2x D1 | 00.20 - 3.00 | 03h4 / 04h5 | 3170-2 | 14.07 | |
| | | | 2x D1 | 00.20 - 3.00 | 03h4 / 04h5 | 3170R-2 | 14.08 | |
| | | | 3x D1 | 00.20 - 3.00 | 03h4 / 04h5 | 3170R-3 | 14.09 | |
| | | | 4x D1 | 00.30 - 3.00 | 03h4 / 04h5 | 3170R-4 | 14.10 | |
|  | Z=2 | 30° | 0.75x D1 | 00.20 - 2.00 | 03h4 | 3271-0.75 | 14.11 | |
| | | | 1x D1 | 00.30 - 2.50 | 03h4 | 3271-1 | 14.12 | |
| | | | 1.5x D1 | 00.10 - 2.00 | 03h4 | 3271-1.5 | 14.13 | |
| | | | 2x D1 | 00.10 - 2.00 | 03h4 | 3271-2 | 14.14 | |
| | | | 3x D1 | 00.10 - 2.90 | 03h4 | 3271-3 | 14.15 | |
| | | | 5x D1 | 00.30 - 2.50 | 03h4 | 3271-5 | 14.16 | |
| | | | 8x D1 | 00.40 - 2.50 | 03h4 / 04h5 | 3271-8 | 14.17 | |
| | | | 2x D1 | 00.20 - 3.00 | 03h4 / 06h5 | 3270S-3X | 14.18 | new |
| | | | 2x D1 | 00.30 - 3.00 | 03h4 / 06h5 | 3270S-6X | 14.19 | new |
| | | | 2x D1 | 00.40 - 3.00 | 03h4 / 06h5 | 3270S-9X | 14.20 | new |
| | | | 2x D1 | 00.30 - 3.00 | 03h4 / 06h5 | 3279T-3X | 14.21 | new |
| | | | 2x D1 | 00.30 - 3.00 | 03h4 / 06h5 | 3279T-6X | 14.22 | new |
| 2x D1 | 00.40 - 3.00 | 03h4 / 06h5 | 3279T-9X | 14.23 | new | | | |
|  | Z=3 | 30° | 1.3x D1 | 00.30 - 2.90 | 03h4 | 3371-1.3 | 14.24 | |
| | | | 2x D1 | 00.30 - 2.90 | 03h4 | 3371-2 | 14.25 | |
| | | | 3x D1 | 00.30 - 2.90 | 03h4 | 3371-3 | 14.26 | |
| | | | 4x D1 | 00.30 - 2.90 | 03h4 | 3371-4 | 14.27 | |
| | | | 5x D1 | 00.50 - 2.50 | 03h4 | 3371-5 | 14.28 | |
| | | | 8x D1 | 00.50 - 2.50 | 03h4 / 04h5 | 3371-8 | 14.29 | |
| | | 45° | 2.5x D1 | 00.30 - 2.90 | 03h4 | 3375-2.5 | 14.30 | |
| | | | 1.5x D1 | 00.30 - 2.50 | 03h4 | DHD3371-1.5 | 14.31 | |
| | | 36°-38°-40° | 3x D1 | 00.30 - 2.50 | 03h4 | DHD3371-3 | 14.32 | |
| | | | 2x D1 | 00.30 - 3.00 | 03h4 / 06h5 | 3370S-3X | 14.33 | new |
| | | 30° | 2x D1 | 00.30 - 3.00 | 03h4 / 06h5 | 3370S-6X | 14.34 | new |
| | | | 2x D1 | 00.40 - 3.00 | 03h4 / 06h5 | 3370S-9X | 14.35 | new |
| 2x D1 | 00.30 - 3.00 | | 03h4 / 06h5 | 3379T-3X | 14.36 | new | | |
| 2x D1 | 00.30 - 3.00 | | 03h4 / 06h5 | 3379T-6X | 14.37 | new | | |
| 2x D1 | 00.30 - 3.00 | | 03h4 / 06h5 | 3379T-9X | 14.38 | new | | |
| 2x D1 | 00.40 - 3.00 | | 03h4 / 06h5 | 3379T-9X | 14.38 | new | | |
| Z=4 | 30° | 1.5x D1 | 00.30 - 2.90 | 03h4 | 3471-1.5 | 14.39 | | |
| | | 3x D1 | 00.30 - 2.90 | 03h4 | 3471-3 | 14.40 | | |
| | | 3x D1 | 00.50 - 2.50 | 03h4 | DHP3471-3 | 14.41 | | |
| | | 2x D1 | 00.30 - 2.90 | 03h4 | 3472-2 | 14.42 | | |
| 35°-38° | 40° | 2x D1 | 00.30 - 2.90 | 03h4 | 3472-2 | 14.42 | | |
| | | 4x D1 | 00.40 - 2.90 | 03h4 | 3472-4 | 14.43 | | |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

Index

| U | Micro-fraises hémisphériques Vollradius Mikropräzisionsfräser Ball nose micro end mills | | | | | | |
|---|---|-----------|----------|--------------|-------------|-----------|------------------|
| | Z | λ | L2 | Range | D2 | Type | page |
|  | Z = 2 | 30° | 0.75x D1 | Ø0.20 - 2.50 | Ø3h4 | 3278-0.75 | 14.44 |
| | | | 1x D1 | Ø0.20 - 2.90 | Ø3h4 | 3278-1 | 14.45 |
| | | | 1.5x D1 | Ø0.20 - 2.90 | Ø3h4 | 3278-1.5 | 14.46 |
| | | | 3x D1 | Ø0.20 - 2.90 | Ø3h4 | 3278-3 | 14.47 |
| | | | 1.5x D1 | Ø0.20 - 3.00 | Ø3h4 / Ø6h5 | 3278H-3X | 14.48 new |
| | | | 1.5x D1 | Ø0.30 - 3.00 | Ø3h4 / Ø6h5 | 3278H-6X | 14.49 new |
| | | | 1.5x D1 | Ø0.40 - 3.00 | Ø3h4 / Ø6h5 | 3278H-9X | 14.50 new |

| Matière Werkstoff Material | VC | 0.10 - 0.50 | 0.60 - 1.50 | 1.60 - 2.90 | Z | TiAlN | STF | TiCN | DLC | |
|--|---------------------------|-------------|---------------|---------------|---------------|-------|-----|------|-----|-----|
| | (m/min) | fz (mm) | fz (mm) | fz (mm) | | | | | | |
| Acier de décolletage Automatenstahl Free-cutting steel | P | 80 - 130 | 0.003 - 0.005 | 0.006 - 0.010 | 0.013 - 0.020 | - | *** | *** | ** | - |
| Acier Stahl Steel | < 600 N/mm ² P | 70 - 100 | 0.003 - 0.005 | 0.006 - 0.010 | 0.013 - 0.020 | - | *** | *** | ** | - |
| Acier Stahl Steel | < 800 N/mm ² P | 70 - 100 | 0.003 - 0.005 | 0.006 - 0.010 | 0.013 - 0.020 | - | *** | *** | ** | - |
| Acier Stahl Steel | > 800 N/mm ² P | 50 - 80 | 0.003 - 0.005 | 0.006 - 0.010 | 0.013 - 0.020 | - | *** | *** | ** | - |
| Acier trempé Gehärteter Stahl -55HRC Hardened steel | H | 60 - 90 | 0.001 - 0.002 | 0.003 - 0.005 | 0.007 - 0.010 | - | *** | *** | * | - |
| Acier trempé Gehärteter Stahl +55HRC Hardened steel | H | 40 - 70 | 0.001 - 0.002 | 0.003 - 0.005 | 0.007 - 0.010 | - | *** | *** | * | - |
| Inox Rostfreistahl Stainless steel | M | 40 - 80 | 0.003 - 0.005 | 0.006 - 0.010 | 0.013 - 0.020 | - | *** | *** | ** | - |
| Aluminium | N | 200 - 300 | 0.002 - 0.005 | 0.005 - 0.010 | 0.010 - 0.030 | *** | - | - | ** | *** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N | 100 - 200 | 0.001 - 0.005 | 0.006 - 0.010 | 0.010 - 0.015 | *** | ** | ** | ** | *** |
| Matière synthétique Synthetisches Material Synthetic material | N | 200 - 700 | 0.002 - 0.004 | 0.006 - 0.015 | 0.015 - 0.050 | *** | ** | ** | ** | *** |
| Métaux précieux Edelmetalle Precious metals | N | 90 - 140 | 0.002 - 0.003 | 0.004 - 0.012 | 0.012 - 0.025 | *** | ** | ** | * | *** |
| Titane Titan Titanium | S | 25 - 70 | 0.001 - 0.003 | 0.004 - 0.010 | 0.006 - 0.015 | - | *** | *** | ** | - |
| Alliage de nickel Nickel-Legierung Nickel alloy | S | 40 - 70 | 0.001 - 0.003 | 0.004 - 0.008 | 0.008 - 0.012 | - | *** | *** | ** | - |
| Matière exotique Exotisches material Exotic material | O | 15 - 25 | 0.001 - 0.002 | 0.003 - 0.005 | 0.006 - 0.010 | - | *** | *** | ** | *** |

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

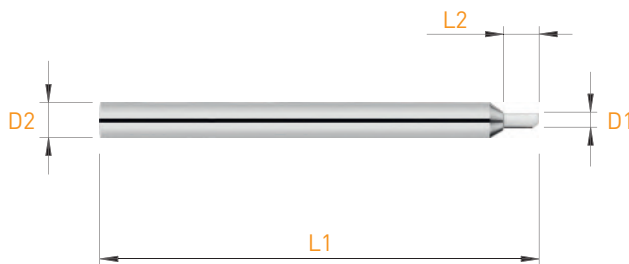
* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3170-2



| D1 +0.005 / -0.010 | L2 | D2 h4 03.0 h5 04.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|--------------------------|----|-------------|---|-------|-----|------|-----|
| 0.20 | 0.40 | 3.00 | 39 | 3170-2-0.20 | ■ | | | | |
| 0.30 | 0.60 | 3.00 | 39 | 3170-2-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 3.00 | 39 | 3170-2-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 39 | 3170-2-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.00 | 39 | 3170-2-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 3.00 | 39 | 3170-2-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 3.00 | 39 | 3170-2-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 3.00 | 39 | 3170-2-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 39 | 3170-2-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.00 | 39 | 3170-2-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.00 | 39 | 3170-2-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.00 | 39 | 3170-2-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 3.00 | 39 | 3170-2-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 3.00 | 39 | 3170-2-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 3.00 | 39 | 3170-2-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 3.00 | 39 | 3170-2-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 3.00 | 39 | 3170-2-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 3.00 | 39 | 3170-2-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 3.00 | 39 | 3170-2-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 3.00 | 39 | 3170-2-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 3.00 | 39 | 3170-2-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 3.00 | 39 | 3170-2-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 3.00 | 39 | 3170-2-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 3.00 | 39 | 3170-2-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 5.20 | 3.00 | 39 | 3170-2-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 5.40 | 3.00 | 39 | 3170-2-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 5.60 | 3.00 | 39 | 3170-2-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 5.80 | 3.00 | 39 | 3170-2-2.90 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 4.00 | 40 | 3170-2-3.00 | ■ | ■ | ■ | ■ | ■ |

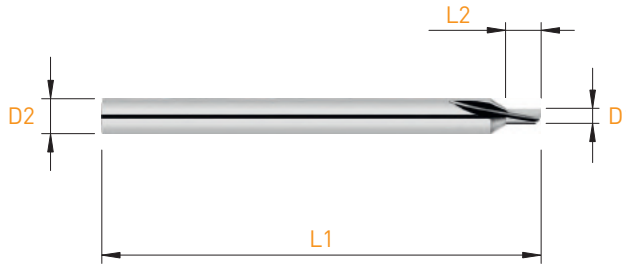
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3170R-2



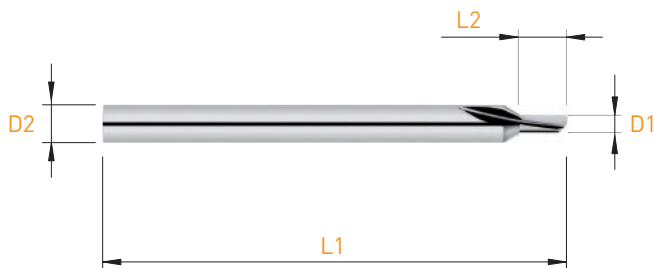
| D1 +0.005 / -0.010 | L2 | D2 h4 Ø3.0 h5 Ø4.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|--------------------------|----|--------------|---|-------|-----|------|-----|
| 0.20 | 0.40 | 3.00 | 39 | 3170R-2-0.20 | ■ | | | | |
| 0.30 | 0.60 | 3.00 | 39 | 3170R-2-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 3.00 | 39 | 3170R-2-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 39 | 3170R-2-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.00 | 39 | 3170R-2-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 3.00 | 39 | 3170R-2-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 3.00 | 39 | 3170R-2-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 3.00 | 39 | 3170R-2-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 39 | 3170R-2-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.00 | 39 | 3170R-2-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.00 | 39 | 3170R-2-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.00 | 39 | 3170R-2-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 3.00 | 39 | 3170R-2-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 3.00 | 39 | 3170R-2-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 3.00 | 39 | 3170R-2-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 3.00 | 39 | 3170R-2-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 3.00 | 39 | 3170R-2-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 3.00 | 39 | 3170R-2-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 3.00 | 39 | 3170R-2-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.10 | 3.00 | 39 | 3170R-2-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 3.00 | 39 | 3170R-2-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 3.00 | 39 | 3170R-2-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 3.00 | 39 | 3170R-2-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 3.00 | 39 | 3170R-2-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 5.20 | 3.00 | 39 | 3170R-2-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 5.40 | 3.00 | 39 | 3170R-2-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 5.60 | 3.00 | 39 | 3170R-2-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 5.80 | 3.00 | 39 | 3170R-2-2.90 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 4.00 | 40 | 3170R-2-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

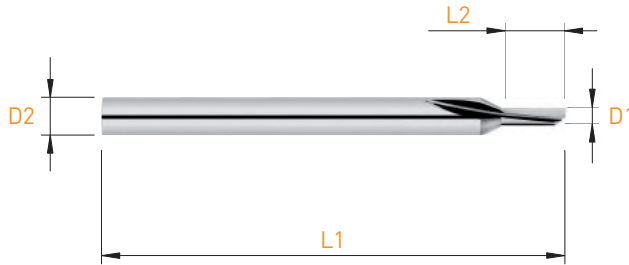
Mikropräzisionsfräser

Precision micro end mills

3170R-3



| D1 +0.005 / -0.010 | L2 | D2 h4 Ø3.0 h5 Ø4.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|--------------------------|----|--------------|---|-------|-----|------|-----|
| 0.20 | 0.60 | 3.00 | 39 | 3170R-3-0.20 | ■ | | | | |
| 0.30 | 0.90 | 3.00 | 39 | 3170R-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.20 | 3.00 | 39 | 3170R-3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.50 | 3.00 | 39 | 3170R-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.80 | 3.00 | 39 | 3170R-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.10 | 3.00 | 39 | 3170R-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.40 | 3.00 | 39 | 3170R-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.70 | 3.00 | 39 | 3170R-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | 3170R-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 3.30 | 3.00 | 39 | 3170R-3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 3.60 | 3.00 | 39 | 3170R-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 3.90 | 3.00 | 39 | 3170R-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 4.20 | 3.00 | 39 | 3170R-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | 3170R-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | 3170R-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | 3170R-3-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 9.00 | 4.00 | 40 | 3170R-3-3.00 | ■ | ■ | ■ | ■ | ■ |



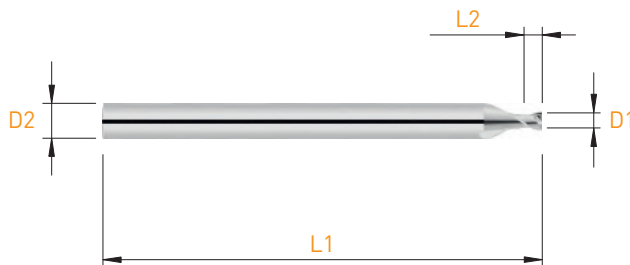
| D1 +0.005 / -0.010 | L2 | D2 h4 03.0 h5 04.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|--------------------------|----|--------------|---|-------|-----|------|-----|
| 0.30 | 1.20 | 3.00 | 39 | 3170R-4-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.60 | 3.00 | 39 | 3170R-4-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 2.00 | 3.00 | 39 | 3170R-4-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 2.40 | 3.00 | 39 | 3170R-4-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.80 | 3.00 | 39 | 3170R-4-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 3.20 | 3.00 | 39 | 3170R-4-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 3.60 | 3.00 | 39 | 3170R-4-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 4.00 | 3.00 | 39 | 3170R-4-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 4.40 | 3.00 | 39 | 3170R-4-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 4.80 | 3.00 | 39 | 3170R-4-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 5.20 | 3.00 | 39 | 3170R-4-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 5.60 | 3.00 | 39 | 3170R-4-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 6.00 | 3.00 | 39 | 3170R-4-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 8.00 | 3.00 | 39 | 3170R-4-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 10.00 | 3.00 | 39 | 3170R-4-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 12.00 | 4.00 | 40 | 3170R-4-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3271-0.75



| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|----------------|---|-------|-----|------|-----|
| 0.20 | 0.15 | 3.00 | 39 | 3271-0.75-0.20 | ■ | | | | |
| 0.30 | 0.25 | 3.00 | 39 | 3271-0.75-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.30 | 3.00 | 39 | 3271-0.75-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.37 | 3.00 | 39 | 3271-0.75-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.45 | 3.00 | 39 | 3271-0.75-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.53 | 3.00 | 39 | 3271-0.75-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.60 | 3.00 | 39 | 3271-0.75-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.70 | 3.00 | 39 | 3271-0.75-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.75 | 3.00 | 39 | 3271-0.75-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.90 | 3.00 | 39 | 3271-0.75-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.90 | 3.00 | 39 | 3271-0.75-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 1.00 | 3.00 | 39 | 3271-0.75-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 1.10 | 3.00 | 39 | 3271-0.75-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 1.15 | 3.00 | 39 | 3271-0.75-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 1.20 | 3.00 | 39 | 3271-0.75-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 1.30 | 3.00 | 39 | 3271-0.75-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 1.40 | 3.00 | 39 | 3271-0.75-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 1.45 | 3.00 | 39 | 3271-0.75-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.50 | 3.00 | 39 | 3271-0.75-2.00 | ■ | ■ | ■ | ■ | ■ |

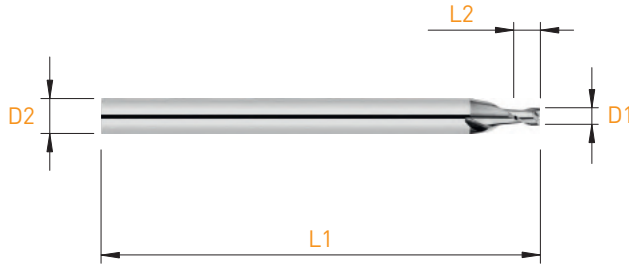
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3271-1



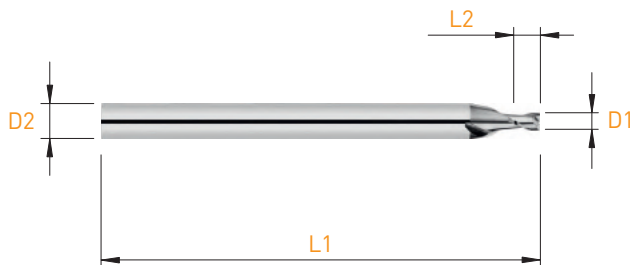
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 0.30 | 3.00 | 39 | 3271-1-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.40 | 3.00 | 39 | 3271-1-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.50 | 3.00 | 39 | 3271-1-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.60 | 3.00 | 39 | 3271-1-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.70 | 3.00 | 39 | 3271-1-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.80 | 3.00 | 39 | 3271-1-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.90 | 3.00 | 39 | 3271-1-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 1.00 | 3.00 | 39 | 3271-1-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 1.10 | 3.00 | 39 | 3271-1-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 1.20 | 3.00 | 39 | 3271-1-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 1.30 | 3.00 | 39 | 3271-1-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 1.40 | 3.00 | 39 | 3271-1-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 1.50 | 3.00 | 39 | 3271-1-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 1.60 | 3.00 | 39 | 3271-1-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 1.70 | 3.00 | 39 | 3271-1-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 1.80 | 3.00 | 39 | 3271-1-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 1.90 | 3.00 | 39 | 3271-1-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 2.00 | 3.00 | 39 | 3271-1-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 2.50 | 3.00 | 39 | 3271-1-2.50 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3271-1.5



| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|---------------|---|-------|-----|------|-----|
| 0.10 | 0.15 | 3.00 | 39 | 3271-1.5-0.10 | ■ | | | | |
| 0.15 | 0.20 | 3.00 | 39 | 3271-1.5-0.15 | ■ | | | | |
| 0.20 | 0.30 | 3.00 | 39 | 3271-1.5-0.20 | ■ | | | | |
| 0.25 | 0.35 | 3.00 | 39 | 3271-1.5-0.25 | ■ | | | | |
| 0.30 | 0.45 | 3.00 | 39 | 3271-1.5-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.60 | 3.00 | 39 | 3271-1.5-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.45 | 0.70 | 3.00 | 39 | 3271-1.5-0.45 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.75 | 3.00 | 39 | 3271-1.5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.90 | 3.00 | 39 | 3271-1.5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.05 | 3.00 | 39 | 3271-1.5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.20 | 3.00 | 39 | 3271-1.5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.35 | 3.00 | 39 | 3271-1.5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 1.50 | 3.00 | 39 | 3271-1.5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 1.65 | 3.00 | 39 | 3271-1.5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 1.80 | 3.00 | 39 | 3271-1.5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 1.95 | 3.00 | 39 | 3271-1.5-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.10 | 3.00 | 39 | 3271-1.5-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 2.25 | 3.00 | 39 | 3271-1.5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 2.40 | 3.00 | 39 | 3271-1.5-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 2.55 | 3.00 | 39 | 3271-1.5-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 2.70 | 3.00 | 39 | 3271-1.5-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 2.85 | 3.00 | 39 | 3271-1.5-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 3.00 | 3.00 | 39 | 3271-1.5-2.00 | ■ | ■ | ■ | ■ | ■ |

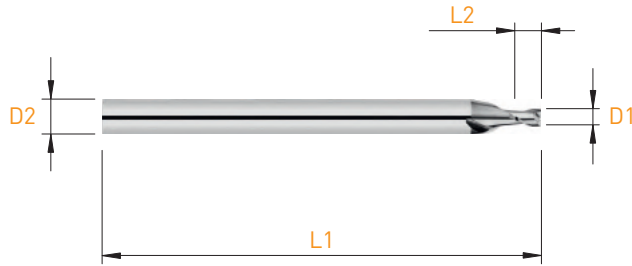
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3271-2



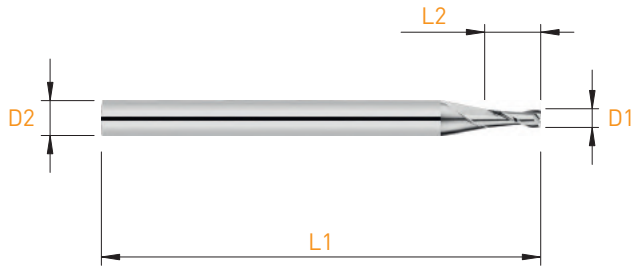
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.10 | 0.20 | 3.00 | 39 | 3271-2-0.10 | ■ | | | | |
| 0.15 | 0.30 | 3.00 | 39 | 3271-2-0.15 | ■ | | | | |
| 0.20 | 0.40 | 3.00 | 39 | 3271-2-0.20 | ■ | | | | |
| 0.25 | 0.50 | 3.00 | 39 | 3271-2-0.25 | ■ | | | | |
| 0.30 | 0.60 | 3.00 | 39 | 3271-2-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 3.00 | 39 | 3271-2-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 39 | 3271-2-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.00 | 39 | 3271-2-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 3.00 | 39 | 3271-2-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 3.00 | 39 | 3271-2-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 3.00 | 39 | 3271-2-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 39 | 3271-2-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.00 | 39 | 3271-2-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.00 | 39 | 3271-2-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.00 | 39 | 3271-2-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 3.00 | 39 | 3271-2-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 3.00 | 39 | 3271-2-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 3.00 | 39 | 3271-2-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 3.00 | 39 | 3271-2-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 3.00 | 39 | 3271-2-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 3.00 | 39 | 3271-2-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 3.00 | 39 | 3271-2-2.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

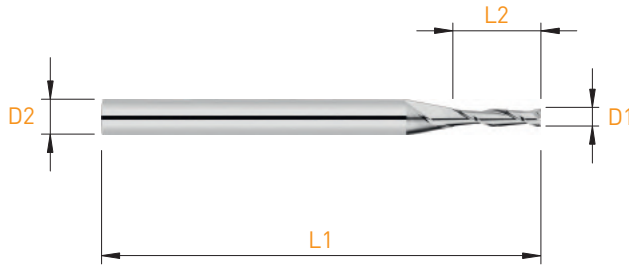
3271-3



MD VHM HM λ 30° Sharp Corner 3xD1 Z=2

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.10 | 0.25 | 3.00 | 39 | 3271-3-0.10 | ■ | | | | |
| 0.15 | 0.45 | 3.00 | 39 | 3271-3-0.15 | ■ | | | | |
| 0.20 | 0.50 | 3.00 | 39 | 3271-3-0.20 | ■ | | | | |
| 0.25 | 0.75 | 3.00 | 39 | 3271-3-0.25 | ■ | | | | |
| 0.30 | 1.00 | 3.00 | 39 | 3271-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.35 | 1.10 | 3.00 | 39 | 3271-3-0.35 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.20 | 3.00 | 39 | 3271-3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.50 | 3.00 | 39 | 3271-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 2.00 | 3.00 | 39 | 3271-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.65 | 2.00 | 3.00 | 39 | 3271-3-0.65 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.00 | 3.00 | 39 | 3271-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.75 | 2.00 | 3.00 | 39 | 3271-3-0.75 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.50 | 3.00 | 39 | 3271-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.50 | 3.00 | 39 | 3271-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 0.95 | 3.00 | 3.00 | 39 | 3271-3-0.95 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | 3271-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.05 | 3.00 | 3.00 | 39 | 3271-3-1.05 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 3.00 | 3.00 | 39 | 3271-3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.15 | 3.50 | 3.00 | 39 | 3271-3-1.15 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 4.00 | 3.00 | 39 | 3271-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 4.00 | 3.00 | 39 | 3271-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.35 | 4.00 | 3.00 | 39 | 3271-3-1.35 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 4.00 | 3.00 | 39 | 3271-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.45 | 4.40 | 3.00 | 39 | 3271-3-1.45 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | 3271-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.55 | 4.50 | 3.00 | 39 | 3271-3-1.55 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 4.50 | 3.00 | 39 | 3271-3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.65 | 5.00 | 3.00 | 39 | 3271-3-1.65 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 5.00 | 3.00 | 39 | 3271-3-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.75 | 5.30 | 3.00 | 39 | 3271-3-1.75 | ■ | ■ | ■ | ■ | ■ |

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 1.80 | 6.00 | 3.00 | 39 | 3271-3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.85 | 6.00 | 3.00 | 39 | 3271-3-1.85 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 6.00 | 3.00 | 39 | 3271-3-1.90 | ■ | ■ | ■ | ■ | ■ |
| 1.95 | 6.00 | 3.00 | 39 | 3271-3-1.95 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | 3271-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 6.00 | 3.00 | 39 | 3271-3-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 6.50 | 3.00 | 39 | 3271-3-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 7.00 | 3.00 | 39 | 3271-3-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 7.00 | 3.00 | 39 | 3271-3-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | 3271-3-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 7.50 | 3.00 | 39 | 3271-3-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 8.00 | 3.00 | 39 | 3271-3-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 8.00 | 3.00 | 39 | 3271-3-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 8.00 | 3.00 | 39 | 3271-3-2.90 | ■ | ■ | ■ | ■ | ■ |



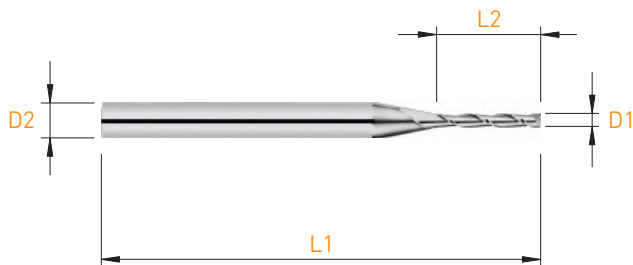
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 1.50 | 3.00 | 39 | 3271-5-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.35 | 1.80 | 3.00 | 39 | 3271-5-0.35 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 2.00 | 3.00 | 39 | 3271-5-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 2.50 | 3.00 | 39 | 3271-5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.55 | 2.80 | 3.00 | 39 | 3271-5-0.55 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 3.00 | 3.00 | 39 | 3271-5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.65 | 3.30 | 3.00 | 39 | 3271-5-0.65 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 3.50 | 3.00 | 39 | 3271-5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.75 | 3.80 | 3.00 | 39 | 3271-5-0.75 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 4.00 | 3.00 | 39 | 3271-5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.85 | 4.30 | 3.00 | 39 | 3271-5-0.85 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 4.50 | 3.00 | 39 | 3271-5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 0.95 | 4.80 | 3.00 | 39 | 3271-5-0.95 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 5.00 | 3.00 | 39 | 3271-5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 5.50 | 3.00 | 39 | 3271-5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 6.00 | 3.00 | 39 | 3271-5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 7.50 | 3.00 | 39 | 3271-5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 10.00 | 3.00 | 39 | 3271-5-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 12.50 | 3.00 | 39 | 3271-5-2.50 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

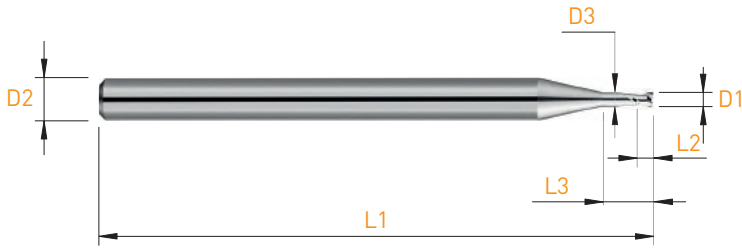
Mikropräzisionsfräser

Precision micro end mills

3271-8



| D1 +0.005 / -0.010 | L2 | D2 h4 03.0 h5 04.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|--------------------------|----|-------------|---|-------|-----|------|-----|
| 0.40 | 3.20 | 3.00 | 39 | 3271-8-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 4.00 | 3.00 | 39 | 3271-8-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 5.00 | 3.00 | 39 | 3271-8-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 5.60 | 3.00 | 39 | 3271-8-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 6.00 | 3.00 | 39 | 3271-8-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 7.20 | 3.00 | 39 | 3271-8-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 8.00 | 3.00 | 39 | 3271-8-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 9.00 | 3.00 | 39 | 3271-8-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 12.00 | 4.00 | 50 | 3271-8-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 16.00 | 4.00 | 50 | 3271-8-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 20.00 | 4.00 | 50 | 3271-8-2.50 | ■ | ■ | ■ | ■ | ■ |



| D1 +0.005 / -0.010 | L2 | L3 | D3 | D2 h4 $\emptyset 3.0$ h5 $\emptyset 6.0$ | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|------|------|--|----|---------------|---|-------|-----|------|-----|
| 0.20 | 0.40 | 0.60 | 0.17 | 3.00 | 39 | 3270S-3X-0.20 | ■ | | | | |
| 0.30 | 0.60 | 0.90 | 0.27 | 3.00 | 39 | 3270S-3X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 1.20 | 0.37 | 3.00 | 39 | 3270S-3X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 1.50 | 0.45 | 3.00 | 39 | 3270S-3X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 1.80 | 0.55 | 3.00 | 39 | 3270S-3X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 2.10 | 0.65 | 3.00 | 39 | 3270S-3X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 2.40 | 0.75 | 3.00 | 39 | 3270S-3X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 2.70 | 0.85 | 3.00 | 39 | 3270S-3X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 0.95 | 3.00 | 39 | 3270S-3X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.30 | 1.05 | 3.00 | 39 | 3270S-3X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.60 | 1.15 | 3.00 | 39 | 3270S-3X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.90 | 1.25 | 3.00 | 39 | 3270S-3X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 4.20 | 1.35 | 3.00 | 39 | 3270S-3X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 4.50 | 1.45 | 3.00 | 39 | 3270S-3X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 4.80 | 1.55 | 3.00 | 39 | 3270S-3X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 5.10 | 1.65 | 3.00 | 39 | 3270S-3X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 5.40 | 1.75 | 3.00 | 39 | 3270S-3X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 5.70 | 1.85 | 3.00 | 39 | 3270S-3X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 6.00 | 1.95 | 6.00 | 50 | 3270S-3X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 6.30 | 2.05 | 6.00 | 50 | 3270S-3X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 6.60 | 2.15 | 6.00 | 50 | 3270S-3X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 6.90 | 2.25 | 6.00 | 50 | 3270S-3X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 7.20 | 2.35 | 6.00 | 50 | 3270S-3X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 7.50 | 2.45 | 6.00 | 50 | 3270S-3X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 9.00 | 2.95 | 6.00 | 50 | 3270S-3X-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3270S-6X

new



MD VHM HM $\lambda 30^\circ$ Sharp Corner  L3 6xD1 Z=2 

| D1 +0.005 / -0.010 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.60 | 1.80 | 0.27 | 3.00 | 39 | 3270S-6X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 2.40 | 0.37 | 3.00 | 39 | 3270S-6X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 0.45 | 3.00 | 39 | 3270S-6X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.60 | 0.55 | 3.00 | 39 | 3270S-6X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 4.20 | 0.65 | 3.00 | 39 | 3270S-6X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 4.80 | 0.75 | 3.00 | 39 | 3270S-6X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 5.40 | 0.85 | 3.00 | 39 | 3270S-6X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 6.00 | 0.95 | 3.00 | 39 | 3270S-6X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 6.60 | 1.05 | 3.00 | 39 | 3270S-6X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 7.20 | 1.15 | 3.00 | 39 | 3270S-6X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 7.80 | 1.25 | 3.00 | 39 | 3270S-6X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 8.40 | 1.35 | 3.00 | 39 | 3270S-6X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 9.00 | 1.45 | 3.00 | 39 | 3270S-6X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 9.60 | 1.55 | 3.00 | 39 | 3270S-6X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 10.20 | 1.65 | 3.00 | 39 | 3270S-6X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 10.80 | 1.75 | 3.00 | 39 | 3270S-6X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 11.40 | 1.85 | 3.00 | 39 | 3270S-6X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 12.00 | 1.95 | 6.00 | 50 | 3270S-6X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 12.60 | 2.05 | 6.00 | 50 | 3270S-6X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 13.20 | 2.15 | 6.00 | 50 | 3270S-6X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 13.80 | 2.25 | 6.00 | 50 | 3270S-6X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 14.40 | 2.35 | 6.00 | 50 | 3270S-6X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 15.00 | 2.45 | 6.00 | 50 | 3270S-6X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 18.00 | 2.95 | 6.00 | 50 | 3270S-6X-3.00 | ■ | ■ | ■ | ■ | ■ |

MICRO-LINE

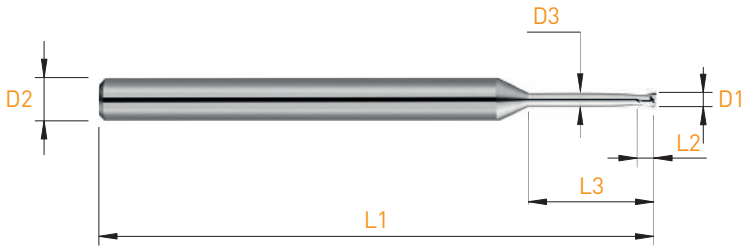
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3270S-9X

new



| D1 +0.005 / -0.010 | L2 | L3 | D3 | D2 h4 $\emptyset 3.0$ h5 $\emptyset 6.0$ | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|------|--|----|---------------|---|-------|-----|------|-----|
| 0.40 | 0.80 | 3.60 | 0.37 | 3.00 | 39 | 3270S-9X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 4.50 | 0.45 | 3.00 | 39 | 3270S-9X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 5.40 | 0.55 | 3.00 | 39 | 3270S-9X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 6.30 | 0.65 | 3.00 | 39 | 3270S-9X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 7.20 | 0.75 | 3.00 | 39 | 3270S-9X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 8.10 | 0.85 | 3.00 | 39 | 3270S-9X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 9.00 | 0.95 | 3.00 | 39 | 3270S-9X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 9.90 | 1.05 | 3.00 | 39 | 3270S-9X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 10.80 | 1.15 | 3.00 | 39 | 3270S-9X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 11.70 | 1.25 | 3.00 | 39 | 3270S-9X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 12.60 | 1.35 | 3.00 | 39 | 3270S-9X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 13.50 | 1.45 | 3.00 | 39 | 3270S-9X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 14.40 | 1.55 | 3.00 | 39 | 3270S-9X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 15.30 | 1.65 | 3.00 | 39 | 3270S-9X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 16.20 | 1.75 | 3.00 | 39 | 3270S-9X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 17.10 | 1.85 | 3.00 | 39 | 3270S-9X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 18.00 | 1.95 | 6.00 | 50 | 3270S-9X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 18.90 | 2.05 | 6.00 | 50 | 3270S-9X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 19.80 | 2.15 | 6.00 | 50 | 3270S-9X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 20.70 | 2.25 | 6.00 | 50 | 3270S-9X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 21.60 | 2.35 | 6.00 | 50 | 3270S-9X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 22.50 | 2.45 | 6.00 | 50 | 3270S-9X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 27.00 | 2.95 | 6.00 | 50 | 3270S-9X-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

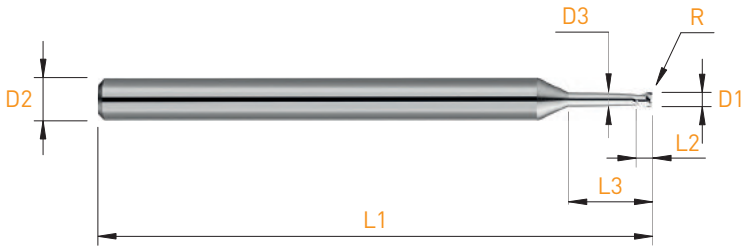
Precision micro end mills

3279T-3X

new



| D1 +0.005 / -0.010 | R +/- 0.02 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|---------------|------|------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.05 | 0.60 | 0.90 | 0.27 | 3.00 | 39 | 3279T-3X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.05 | 0.80 | 1.20 | 0.37 | 3.00 | 39 | 3279T-3X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 1.50 | 0.45 | 3.00 | 39 | 3279T-3X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.05 | 1.20 | 1.80 | 0.55 | 3.00 | 39 | 3279T-3X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.05 | 1.40 | 2.10 | 0.65 | 3.00 | 39 | 3279T-3X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.05 | 1.60 | 2.40 | 0.75 | 3.00 | 39 | 3279T-3X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.05 | 1.80 | 2.70 | 0.85 | 3.00 | 39 | 3279T-3X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 3.00 | 0.95 | 3.00 | 39 | 3279T-3X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.10 | 2.20 | 3.30 | 1.05 | 3.00 | 39 | 3279T-3X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.10 | 2.40 | 3.60 | 1.15 | 3.00 | 39 | 3279T-3X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.10 | 2.60 | 3.90 | 1.25 | 3.00 | 39 | 3279T-3X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.10 | 2.80 | 4.20 | 1.35 | 3.00 | 39 | 3279T-3X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.20 | 3.00 | 4.50 | 1.45 | 3.00 | 39 | 3279T-3X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.20 | 3.20 | 4.80 | 1.55 | 3.00 | 39 | 3279T-3X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.20 | 3.40 | 5.10 | 1.65 | 3.00 | 39 | 3279T-3X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.20 | 3.60 | 5.40 | 1.75 | 3.00 | 39 | 3279T-3X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.20 | 3.80 | 5.70 | 1.85 | 3.00 | 39 | 3279T-3X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 6.00 | 1.95 | 6.00 | 50 | 3279T-3X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 0.20 | 4.20 | 6.30 | 2.05 | 6.00 | 50 | 3279T-3X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 0.20 | 4.40 | 6.60 | 2.15 | 6.00 | 50 | 3279T-3X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 0.20 | 4.60 | 6.90 | 2.25 | 6.00 | 50 | 3279T-3X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 0.20 | 4.80 | 7.20 | 2.35 | 6.00 | 50 | 3279T-3X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 0.20 | 5.00 | 7.50 | 2.45 | 6.00 | 50 | 3279T-3X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 0.20 | 6.00 | 9.00 | 2.95 | 6.00 | 50 | 3279T-3X-3.00 | ■ | ■ | ■ | ■ | ■ |



| D1 +0.005 / -0.010 | R +/- 0.02 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|---------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.05 | 0.60 | 1.80 | 0.27 | 3.00 | 39 | 3279T-6X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.05 | 0.80 | 2.40 | 0.37 | 3.00 | 39 | 3279T-6X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 3.00 | 0.45 | 3.00 | 39 | 3279T-6X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.05 | 1.20 | 3.60 | 0.55 | 3.00 | 39 | 3279T-6X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.05 | 1.40 | 4.20 | 0.65 | 3.00 | 39 | 3279T-6X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.05 | 1.60 | 4.80 | 0.75 | 3.00 | 39 | 3279T-6X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.05 | 1.80 | 5.40 | 0.85 | 3.00 | 39 | 3279T-6X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 6.00 | 0.95 | 3.00 | 39 | 3279T-6X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.10 | 2.20 | 6.60 | 1.05 | 3.00 | 39 | 3279T-6X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.10 | 2.40 | 7.20 | 1.15 | 3.00 | 39 | 3279T-6X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.10 | 2.60 | 7.80 | 1.25 | 3.00 | 39 | 3279T-6X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.10 | 2.80 | 8.40 | 1.35 | 3.00 | 39 | 3279T-6X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.20 | 3.00 | 9.00 | 1.45 | 3.00 | 39 | 3279T-6X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.20 | 3.20 | 9.60 | 1.55 | 3.00 | 39 | 3279T-6X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.20 | 3.40 | 10.20 | 1.65 | 3.00 | 39 | 3279T-6X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.20 | 3.60 | 10.80 | 1.75 | 3.00 | 39 | 3279T-6X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.20 | 3.80 | 11.40 | 1.85 | 3.00 | 39 | 3279T-6X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 12.00 | 1.95 | 6.00 | 50 | 3279T-6X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 0.20 | 4.20 | 12.60 | 2.05 | 6.00 | 50 | 3279T-6X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 0.20 | 4.40 | 13.20 | 2.15 | 6.00 | 50 | 3279T-6X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 0.20 | 4.60 | 13.80 | 2.25 | 6.00 | 50 | 3279T-6X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 0.20 | 4.80 | 14.40 | 2.35 | 6.00 | 50 | 3279T-6X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 0.20 | 5.00 | 15.00 | 2.45 | 6.00 | 50 | 3279T-6X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 0.20 | 6.00 | 18.00 | 2.95 | 6.00 | 50 | 3279T-6X-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3279T-9X

new



| D1 +0.005 / -0.010 | R +/- 0.02 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|---------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.40 | 0.05 | 0.80 | 3.60 | 0.37 | 3.00 | 39 | 3279T-9X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 4.50 | 0.45 | 3.00 | 39 | 3279T-9X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.05 | 1.20 | 5.40 | 0.55 | 3.00 | 39 | 3279T-9X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.05 | 1.40 | 6.30 | 0.65 | 3.00 | 39 | 3279T-9X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.05 | 1.60 | 7.20 | 0.75 | 3.00 | 39 | 3279T-9X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.05 | 1.80 | 8.10 | 0.85 | 3.00 | 39 | 3279T-9X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 9.00 | 0.95 | 3.00 | 39 | 3279T-9X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.10 | 2.20 | 9.90 | 1.05 | 3.00 | 39 | 3279T-9X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.10 | 2.40 | 10.80 | 1.15 | 3.00 | 39 | 3279T-9X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.10 | 2.60 | 11.70 | 1.25 | 3.00 | 39 | 3279T-9X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.10 | 2.80 | 12.60 | 1.35 | 3.00 | 39 | 3279T-9X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.20 | 3.00 | 13.50 | 1.45 | 3.00 | 39 | 3279T-9X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.20 | 3.20 | 14.40 | 1.55 | 3.00 | 39 | 3279T-9X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.20 | 3.40 | 15.30 | 1.65 | 3.00 | 39 | 3279T-9X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.20 | 3.60 | 16.20 | 1.75 | 3.00 | 39 | 3279T-9X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.20 | 3.80 | 17.10 | 1.85 | 3.00 | 39 | 3279T-9X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 18.00 | 1.95 | 6.00 | 50 | 3279T-9X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 0.20 | 4.20 | 18.90 | 2.05 | 6.00 | 50 | 3279T-9X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 0.20 | 4.40 | 19.80 | 2.15 | 6.00 | 50 | 3279T-9X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 0.20 | 4.60 | 20.70 | 2.25 | 6.00 | 50 | 3279T-9X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 0.20 | 4.80 | 21.60 | 2.35 | 6.00 | 50 | 3279T-9X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 0.20 | 5.00 | 22.50 | 2.45 | 6.00 | 50 | 3279T-9X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 0.20 | 6.00 | 27.00 | 2.95 | 6.00 | 50 | 3279T-9X-3.00 | ■ | ■ | ■ | ■ | ■ |

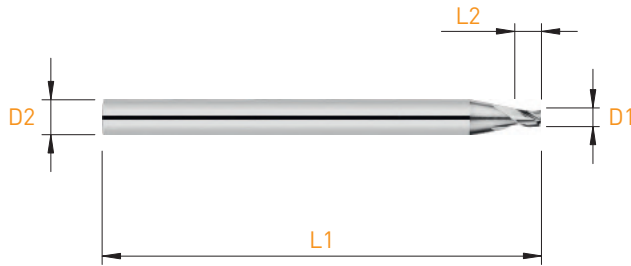
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3371-1.3



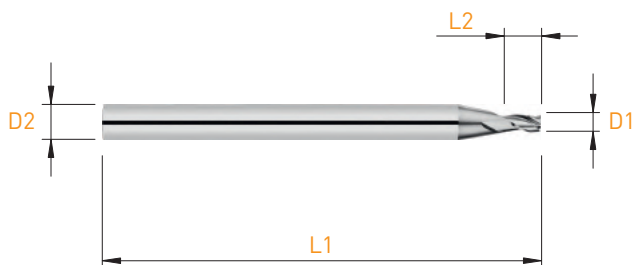
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.40 | 3.00 | 39 | 3371-1.3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.35 | 0.50 | 3.00 | 39 | 3371-1.3-0.35 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.50 | 3.00 | 39 | 3371-1.3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.45 | 0.60 | 3.00 | 39 | 3371-1.3-0.45 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.70 | 3.00 | 39 | 3371-1.3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.80 | 3.00 | 39 | 3371-1.3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.90 | 3.00 | 39 | 3371-1.3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.00 | 3.00 | 39 | 3371-1.3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.30 | 3.00 | 39 | 3371-1.3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 1.30 | 3.00 | 39 | 3371-1.3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 1.50 | 3.00 | 39 | 3371-1.3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 1.60 | 3.00 | 39 | 3371-1.3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 1.80 | 3.00 | 39 | 3371-1.3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 1.80 | 3.00 | 39 | 3371-1.3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 2.00 | 3.00 | 39 | 3371-1.3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.55 | 2.00 | 3.00 | 39 | 3371-1.3-1.55 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 2.00 | 3.00 | 39 | 3371-1.3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.65 | 2.00 | 3.00 | 39 | 3371-1.3-1.65 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 2.00 | 3.00 | 39 | 3371-1.3-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 2.40 | 3.00 | 39 | 3371-1.3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 2.40 | 3.00 | 39 | 3371-1.3-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 2.60 | 3.00 | 39 | 3371-1.3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.05 | 2.70 | 3.00 | 39 | 3371-1.3-2.05 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 3.00 | 3.00 | 39 | 3371-1.3-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 3.30 | 3.00 | 39 | 3371-1.3-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 3.50 | 3.00 | 39 | 3371-1.3-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 3.50 | 3.00 | 39 | 3371-1.3-2.90 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3371-2



| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 0.60 | 3.00 | 39 | 3371-2-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.35 | 0.70 | 3.00 | 39 | 3371-2-0.35 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 3.00 | 39 | 3371-2-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.45 | 0.90 | 3.00 | 39 | 3371-2-0.45 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 39 | 3371-2-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.00 | 39 | 3371-2-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 3.00 | 39 | 3371-2-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.75 | 1.50 | 3.00 | 39 | 3371-2-0.75 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 3.00 | 39 | 3371-2-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 3.00 | 39 | 3371-2-0.90 | ■ | ■ | ■ | ■ | ■ |
| 0.95 | 1.90 | 3.00 | 39 | 3371-2-0.95 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 39 | 3371-2-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.00 | 39 | 3371-2-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.00 | 39 | 3371-2-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.00 | 39 | 3371-2-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 3.00 | 39 | 3371-2-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 3.00 | 39 | 3371-2-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 3.00 | 39 | 3371-2-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 3.00 | 39 | 3371-2-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 3.00 | 39 | 3371-2-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 3.00 | 39 | 3371-2-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 3.00 | 39 | 3371-2-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 3.00 | 39 | 3371-2-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 3.00 | 39 | 3371-2-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 3.00 | 39 | 3371-2-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 3.00 | 39 | 3371-2-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 3.00 | 39 | 3371-2-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 5.20 | 3.00 | 39 | 3371-2-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 5.40 | 3.00 | 39 | 3371-2-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 5.60 | 3.00 | 39 | 3371-2-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 5.80 | 3.00 | 39 | 3371-2-2.90 | ■ | ■ | ■ | ■ | ■ |

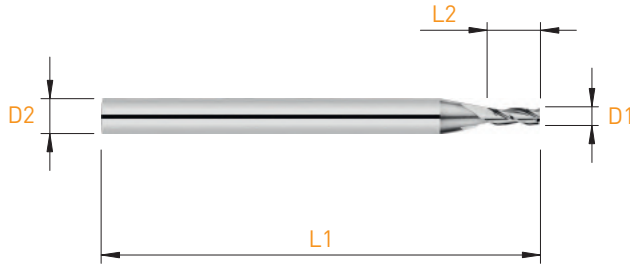
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3371-3



MD VHM HM λ 30° Sharp Corner 3xD1 Z=3

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | N | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 0.90 | 3.00 | 39 | 3371-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.20 | 3.00 | 39 | 3371-3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.45 | 1.40 | 3.00 | 39 | 3371-3-0.45 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.50 | 3.00 | 39 | 3371-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.55 | 1.80 | 3.00 | 39 | 3371-3-0.55 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 2.00 | 3.00 | 39 | 3371-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.65 | 2.00 | 3.00 | 39 | 3371-3-0.65 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.00 | 3.00 | 39 | 3371-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.75 | 2.00 | 3.00 | 39 | 3371-3-0.75 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.50 | 3.00 | 39 | 3371-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.85 | 2.50 | 3.00 | 39 | 3371-3-0.85 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.50 | 3.00 | 39 | 3371-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 0.95 | 2.90 | 3.00 | 39 | 3371-3-0.95 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | 3371-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.05 | 3.20 | 3.00 | 39 | 3371-3-1.05 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 3.30 | 3.00 | 39 | 3371-3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.15 | 3.50 | 3.00 | 39 | 3371-3-1.15 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 4.00 | 3.00 | 39 | 3371-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.25 | 4.00 | 3.00 | 39 | 3371-3-1.25 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 4.00 | 3.00 | 39 | 3371-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.35 | 4.00 | 3.00 | 39 | 3371-3-1.35 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 4.00 | 3.00 | 39 | 3371-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.45 | 4.50 | 3.00 | 39 | 3371-3-1.45 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | 3371-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 4.50 | 3.00 | 39 | 3371-3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.65 | 5.00 | 3.00 | 39 | 3371-3-1.65 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 5.00 | 3.00 | 39 | 3371-3-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 6.00 | 3.00 | 39 | 3371-3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.85 | 6.00 | 3.00 | 39 | 3371-3-1.85 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 6.00 | 3.00 | 39 | 3371-3-1.90 | ■ | ■ | ■ | ■ | ■ |
| 1.95 | 6.00 | 3.00 | 39 | 3371-3-1.95 | ■ | ■ | ■ | ■ | ■ |

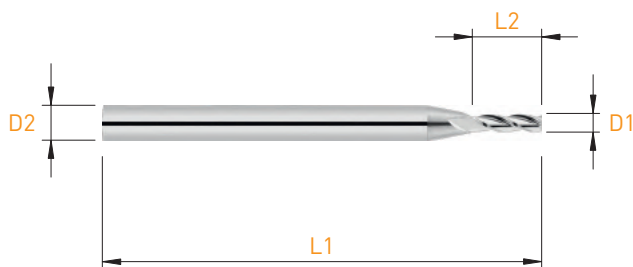
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | N | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 2.00 | 6.00 | 3.00 | 39 | 3371-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 6.00 | 3.00 | 39 | 3371-3-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 6.50 | 3.00 | 39 | 3371-3-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 7.00 | 3.00 | 39 | 3371-3-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 7.00 | 3.00 | 39 | 3371-3-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | 3371-3-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 7.50 | 3.00 | 39 | 3371-3-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 8.00 | 3.00 | 39 | 3371-3-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 8.00 | 3.00 | 39 | 3371-3-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 8.50 | 3.00 | 39 | 3371-3-2.90 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

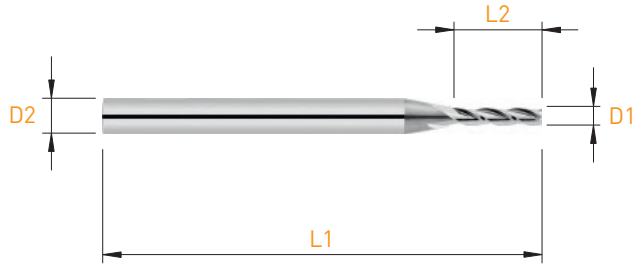
Mikropräzisionsfräser

Precision micro end mills

3371-4



| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 1.20 | 3.00 | 39 | 3371-4-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.60 | 3.00 | 39 | 3371-4-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 2.00 | 3.00 | 39 | 3371-4-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 2.40 | 3.00 | 39 | 3371-4-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.80 | 3.00 | 39 | 3371-4-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 3.20 | 3.00 | 39 | 3371-4-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 3.60 | 3.00 | 39 | 3371-4-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 4.00 | 3.00 | 39 | 3371-4-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 4.40 | 3.00 | 39 | 3371-4-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 4.80 | 3.00 | 39 | 3371-4-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 5.20 | 3.00 | 39 | 3371-4-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 5.60 | 3.00 | 39 | 3371-4-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 6.00 | 3.00 | 39 | 3371-4-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 6.40 | 3.00 | 39 | 3371-4-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 6.80 | 3.00 | 39 | 3371-4-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 7.20 | 3.00 | 39 | 3371-4-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 7.60 | 3.00 | 39 | 3371-4-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 8.00 | 3.00 | 39 | 3371-4-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 8.40 | 3.00 | 39 | 3371-4-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 8.80 | 3.00 | 39 | 3371-4-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 9.20 | 3.00 | 39 | 3371-4-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 9.60 | 3.00 | 39 | 3371-4-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 10.00 | 3.00 | 39 | 3371-4-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 10.40 | 3.00 | 39 | 3371-4-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 10.80 | 3.00 | 39 | 3371-4-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 11.20 | 3.00 | 39 | 3371-4-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 11.60 | 3.00 | 39 | 3371-4-2.90 | ■ | ■ | ■ | ■ | ■ |



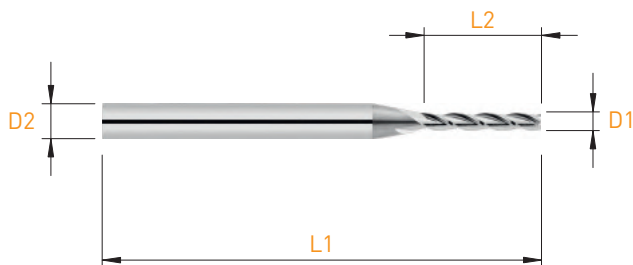
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | N | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|-------|----|-------------|---|-------|-----|------|-----|
| 0.50 | 2.50 | 3.00 | 39 | 3371-5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 3.00 | 3.00 | 39 | 3371-5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 3.50 | 3.00 | 39 | 3371-5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 4.00 | 3.00 | 39 | 3371-5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 4.50 | 3.00 | 39 | 3371-5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 5.00 | 3.00 | 39 | 3371-5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 5.50 | 3.00 | 39 | 3371-5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 6.00 | 3.00 | 39 | 3371-5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 7.50 | 3.00 | 39 | 3371-5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 10.00 | 3.00 | 39 | 3371-5-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 12.50 | 3.00 | 39 | 3371-5-2.50 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

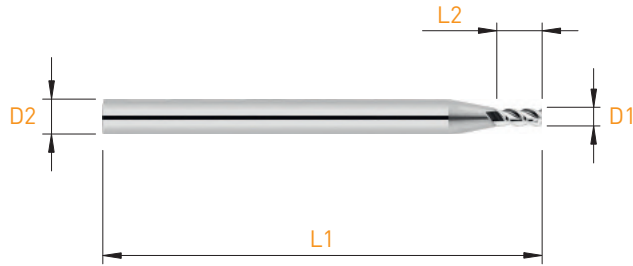
Precision micro end mills

3371-8



MD VHM HM λ 30° Sharp Corner  8xD1 Z=3 

| D1 +0.005 / -0.010 | L2 | D2 h4 Ø3.0 h5 Ø4.0 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|-------|--------------------------|----|-------------|---|-------|-----|------|-----|
| 0.50 | 4.00 | 3.00 | 39 | 3371-8-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 5.00 | 3.00 | 39 | 3371-8-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 5.60 | 3.00 | 39 | 3371-8-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 6.00 | 3.00 | 39 | 3371-8-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 7.20 | 3.00 | 39 | 3371-8-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 8.00 | 3.00 | 39 | 3371-8-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 9.00 | 3.00 | 39 | 3371-8-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 11.00 | 3.00 | 39 | 3371-8-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 12.00 | 4.00 | 50 | 3371-8-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 16.00 | 4.00 | 50 | 3371-8-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 20.00 | 4.00 | 50 | 3371-8-2.50 | ■ | ■ | ■ | ■ | ■ |



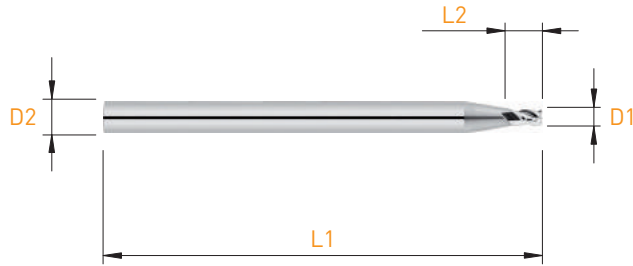
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.80 | 3.00 | 39 | 3375-2.5-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.00 | 3.00 | 39 | 3375-2.5-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.30 | 3.00 | 39 | 3375-2.5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.50 | 3.00 | 39 | 3375-2.5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.70 | 3.00 | 39 | 3375-2.5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.00 | 3.00 | 39 | 3375-2.5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.30 | 3.00 | 39 | 3375-2.5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.50 | 3.00 | 39 | 3375-2.5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.80 | 3.00 | 39 | 3375-2.5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 3.00 | 3.00 | 39 | 3375-2.5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 3.30 | 3.00 | 39 | 3375-2.5-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 3.50 | 3.00 | 39 | 3375-2.5-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.80 | 3.00 | 39 | 3375-2.5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 4.00 | 3.00 | 39 | 3375-2.5-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 4.30 | 3.00 | 39 | 3375-2.5-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 4.50 | 3.00 | 39 | 3375-2.5-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 4.80 | 3.00 | 39 | 3375-2.5-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 5.00 | 3.00 | 39 | 3375-2.5-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 5.30 | 3.00 | 39 | 3375-2.5-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 5.50 | 3.00 | 39 | 3375-2.5-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 5.80 | 3.00 | 39 | 3375-2.5-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 6.00 | 3.00 | 39 | 3375-2.5-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 6.30 | 3.00 | 39 | 3375-2.5-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 6.50 | 3.00 | 39 | 3375-2.5-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 6.80 | 3.00 | 39 | 3375-2.5-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 7.00 | 3.00 | 39 | 3375-2.5-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 7.30 | 3.00 | 39 | 3375-2.5-2.90 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

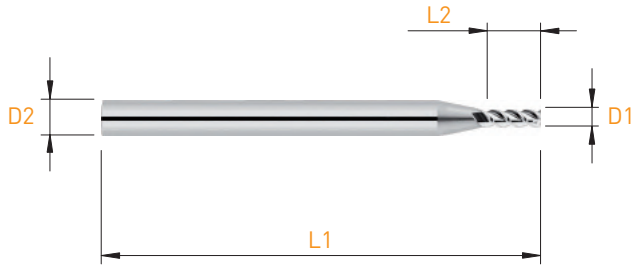
Precision micro end mills

DHD3371-1.5



DHD Denture à pas irrégulier, angle d'hélice différent pour chaque dent
 Ungleiche Teilung, unterschiedlicher Dratlwinkel
 Uneven tooth pitch, different helix angle per tooth

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|------------------|---|-------|-----|------|-----|
| 0.30 | 0.45 | 3.00 | 39 | DHD3371-1.5-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.60 | 3.00 | 39 | DHD3371-1.5-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.75 | 3.00 | 39 | DHD3371-1.5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.90 | 3.00 | 39 | DHD3371-1.5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.05 | 3.00 | 39 | DHD3371-1.5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.20 | 3.00 | 39 | DHD3371-1.5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.35 | 3.00 | 39 | DHD3371-1.5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 1.50 | 3.00 | 39 | DHD3371-1.5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 1.65 | 3.00 | 39 | DHD3371-1.5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 1.80 | 3.00 | 39 | DHD3371-1.5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 1.95 | 3.00 | 39 | DHD3371-1.5-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.10 | 3.00 | 39 | DHD3371-1.5-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 2.25 | 3.00 | 39 | DHD3371-1.5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 2.40 | 3.00 | 39 | DHD3371-1.5-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 2.55 | 3.00 | 39 | DHD3371-1.5-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 2.70 | 3.00 | 39 | DHD3371-1.5-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 2.85 | 3.00 | 39 | DHD3371-1.5-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 3.00 | 3.00 | 39 | DHD3371-1.5-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 3.75 | 3.00 | 39 | DHD3371-1.5-2.50 | ■ | ■ | ■ | ■ | ■ |



DHD Denture à pas irrégulier, angle d'hélice différent pour chaque dent
 Ungleiche Teilung, unterschiedlicher Drallwinkel
 Uneven tooth pitch, different helix angle per tooth

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|----------------|---|-------|-----|------|-----|
| 0.30 | 0.90 | 3.00 | 39 | DHD3371-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.20 | 3.00 | 39 | DHD3371-3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.50 | 3.00 | 39 | DHD3371-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.80 | 3.00 | 39 | DHD3371-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.10 | 3.00 | 39 | DHD3371-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.40 | 3.00 | 39 | DHD3371-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.70 | 3.00 | 39 | DHD3371-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | DHD3371-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 3.30 | 3.00 | 39 | DHD3371-3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 3.60 | 3.00 | 39 | DHD3371-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 3.90 | 3.00 | 39 | DHD3371-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 4.20 | 3.00 | 39 | DHD3371-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | DHD3371-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 4.80 | 3.00 | 39 | DHD3371-3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 5.10 | 3.00 | 39 | DHD3371-3-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 5.40 | 3.00 | 39 | DHD3371-3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 5.70 | 3.00 | 39 | DHD3371-3-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | DHD3371-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | DHD3371-3-2.50 | ■ | ■ | ■ | ■ | ■ |

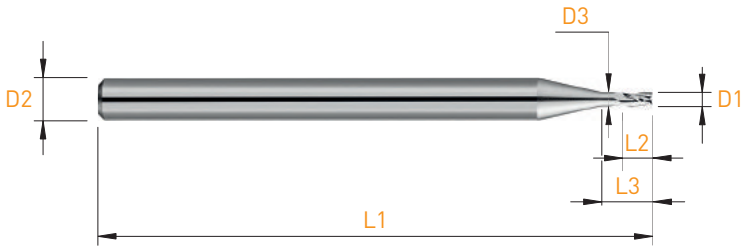
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3370S-3X

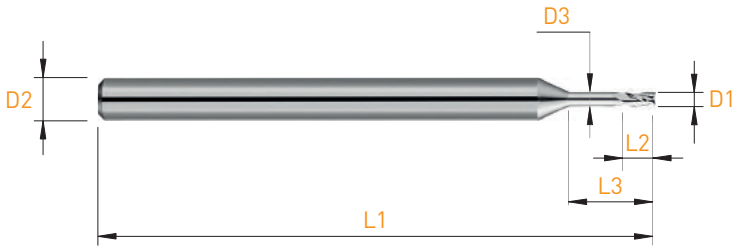
new



MD VHM HM $\lambda 30^\circ$ Sharp Corner  L3 3xD1 Z=3 

| D1 +0.005 / -0.010 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.60 | 0.90 | 0.27 | 3.00 | 39 | 3370S-3X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 1.20 | 0.37 | 3.00 | 39 | 3370S-3X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 1.50 | 0.45 | 3.00 | 39 | 3370S-3X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 1.80 | 0.55 | 3.00 | 39 | 3370S-3X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 2.10 | 0.65 | 3.00 | 39 | 3370S-3X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 2.40 | 0.75 | 3.00 | 39 | 3370S-3X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 2.70 | 0.85 | 3.00 | 39 | 3370S-3X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 0.95 | 3.00 | 39 | 3370S-3X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.30 | 1.05 | 3.00 | 39 | 3370S-3X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.60 | 1.15 | 3.00 | 39 | 3370S-3X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.90 | 1.25 | 3.00 | 39 | 3370S-3X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 4.20 | 1.35 | 3.00 | 39 | 3370S-3X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 4.50 | 1.45 | 3.00 | 39 | 3370S-3X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 4.80 | 1.55 | 3.00 | 39 | 3370S-3X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 5.10 | 1.65 | 3.00 | 39 | 3370S-3X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 5.40 | 1.75 | 3.00 | 39 | 3370S-3X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 5.70 | 1.85 | 3.00 | 39 | 3370S-3X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 6.00 | 1.95 | 6.00 | 50 | 3370S-3X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 6.30 | 2.05 | 6.00 | 50 | 3370S-3X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 6.60 | 2.15 | 6.00 | 50 | 3370S-3X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 6.90 | 2.25 | 6.00 | 50 | 3370S-3X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 7.20 | 2.35 | 6.00 | 50 | 3370S-3X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 7.50 | 2.45 | 6.00 | 50 | 3370S-3X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 9.00 | 2.95 | 6.00 | 50 | 3370S-3X-3.00 | ■ | ■ | ■ | ■ | ■ |

new



| D1 +0.005 / -0.010 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.60 | 1.80 | 0.27 | 3.00 | 39 | 3370S-6X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 2.40 | 0.37 | 3.00 | 39 | 3370S-6X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 0.45 | 3.00 | 39 | 3370S-6X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.60 | 0.55 | 3.00 | 39 | 3370S-6X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 4.20 | 0.65 | 3.00 | 39 | 3370S-6X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 4.80 | 0.75 | 3.00 | 39 | 3370S-6X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 5.40 | 0.85 | 3.00 | 39 | 3370S-6X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 6.00 | 0.95 | 3.00 | 39 | 3370S-6X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 6.60 | 1.05 | 3.00 | 39 | 3370S-6X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 7.20 | 1.15 | 3.00 | 39 | 3370S-6X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 7.80 | 1.25 | 3.00 | 39 | 3370S-6X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 8.40 | 1.35 | 3.00 | 39 | 3370S-6X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 9.00 | 1.45 | 3.00 | 39 | 3370S-6X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 9.60 | 1.55 | 3.00 | 39 | 3370S-6X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 10.20 | 1.65 | 3.00 | 39 | 3370S-6X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 10.80 | 1.75 | 3.00 | 39 | 3370S-6X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 11.40 | 1.85 | 3.00 | 39 | 3370S-6X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 12.00 | 1.95 | 6.00 | 50 | 3370S-6X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 12.60 | 2.05 | 6.00 | 50 | 3370S-6X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 13.20 | 2.15 | 6.00 | 50 | 3370S-6X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 13.80 | 2.25 | 6.00 | 50 | 3370S-6X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 14.40 | 2.35 | 6.00 | 50 | 3370S-6X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 15.00 | 2.45 | 6.00 | 50 | 3370S-6X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 18.00 | 2.95 | 6.00 | 50 | 3370S-6X-3.00 | ■ | ■ | ■ | ■ | ■ |

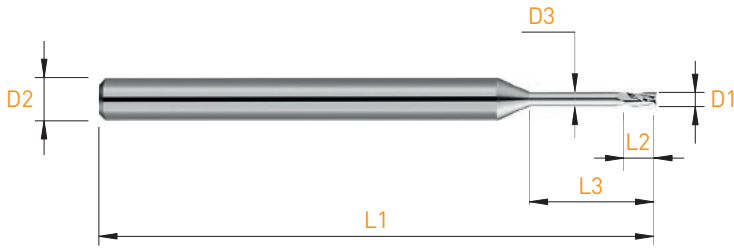
Micro-fraises de précision

Mikropräzisionsfräser

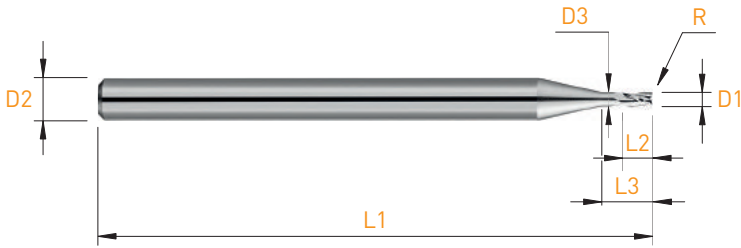
Precision micro end mills

3370S-9X

new



| D1 +0.005 / -0.010 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.40 | 0.80 | 3.60 | 0.37 | 3.00 | 39 | 3370S-9X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 4.50 | 0.45 | 3.00 | 39 | 3370S-9X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 5.40 | 0.55 | 3.00 | 39 | 3370S-9X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 6.30 | 0.65 | 3.00 | 39 | 3370S-9X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 7.20 | 0.75 | 3.00 | 39 | 3370S-9X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 8.10 | 0.85 | 3.00 | 39 | 3370S-9X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 9.00 | 0.95 | 3.00 | 39 | 3370S-9X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 9.90 | 1.05 | 3.00 | 39 | 3370S-9X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 10.80 | 1.15 | 3.00 | 39 | 3370S-9X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 11.70 | 1.25 | 3.00 | 39 | 3370S-9X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 12.60 | 1.35 | 3.00 | 39 | 3370S-9X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 13.50 | 1.45 | 3.00 | 39 | 3370S-9X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 14.40 | 1.55 | 3.00 | 39 | 3370S-9X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 15.30 | 1.65 | 3.00 | 39 | 3370S-9X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 16.20 | 1.75 | 3.00 | 39 | 3370S-9X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 17.10 | 1.85 | 3.00 | 39 | 3370S-9X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 18.00 | 1.95 | 6.00 | 50 | 3370S-9X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 18.90 | 2.05 | 6.00 | 50 | 3370S-9X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 19.80 | 2.15 | 6.00 | 50 | 3370S-9X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 20.70 | 2.25 | 6.00 | 50 | 3370S-9X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 21.60 | 2.35 | 6.00 | 50 | 3370S-9X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 22.50 | 2.45 | 6.00 | 50 | 3370S-9X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 27.00 | 2.95 | 6.00 | 50 | 3370S-9X-3.00 | ■ | ■ | ■ | ■ | ■ |



MD VHM HM λ 30° Radius Corner L3 3xD1 Z=3

| D1 +0.005 / -0.010 | R +/- 0.02 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|---------------|------|------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.05 | 0.60 | 0.90 | 0.27 | 3.00 | 39 | 3379T-3X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.05 | 0.80 | 1.20 | 0.37 | 3.00 | 39 | 3379T-3X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 1.50 | 0.45 | 3.00 | 39 | 3379T-3X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.05 | 1.20 | 1.80 | 0.55 | 3.00 | 39 | 3379T-3X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.05 | 1.40 | 2.10 | 0.65 | 3.00 | 39 | 3379T-3X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.05 | 1.60 | 2.40 | 0.75 | 3.00 | 39 | 3379T-3X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.05 | 1.80 | 2.70 | 0.85 | 3.00 | 39 | 3379T-3X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 3.00 | 0.95 | 3.00 | 39 | 3379T-3X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.10 | 2.20 | 3.30 | 1.05 | 3.00 | 39 | 3379T-3X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.10 | 2.40 | 3.60 | 1.15 | 3.00 | 39 | 3379T-3X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.10 | 2.60 | 3.90 | 1.25 | 3.00 | 39 | 3379T-3X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.10 | 2.80 | 4.20 | 1.35 | 3.00 | 39 | 3379T-3X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.20 | 3.00 | 4.50 | 1.45 | 3.00 | 39 | 3379T-3X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.20 | 3.20 | 4.80 | 1.55 | 3.00 | 39 | 3379T-3X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.20 | 3.40 | 5.10 | 1.65 | 3.00 | 39 | 3379T-3X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.20 | 3.60 | 5.40 | 1.75 | 3.00 | 39 | 3379T-3X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.20 | 3.80 | 5.70 | 1.85 | 3.00 | 39 | 3379T-3X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 6.00 | 1.95 | 6.00 | 50 | 3379T-3X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 0.20 | 4.20 | 6.30 | 2.05 | 6.00 | 50 | 3379T-3X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 0.20 | 4.40 | 6.60 | 2.15 | 6.00 | 50 | 3379T-3X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 0.20 | 4.60 | 6.90 | 2.25 | 6.00 | 50 | 3379T-3X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 0.20 | 4.80 | 7.20 | 2.35 | 6.00 | 50 | 3379T-3X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 0.20 | 5.00 | 7.50 | 2.45 | 6.00 | 50 | 3379T-3X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 0.20 | 6.00 | 9.00 | 2.95 | 6.00 | 50 | 3379T-3X-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3379T-6X

new



MD VHM HM λ 30° Radius Corner L3 6xD1 Z=3

| D1 +0.005 / -0.010 | R +/- 0.02 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|---------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.05 | 0.60 | 1.80 | 0.27 | 3.00 | 39 | 3379T-6X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.05 | 0.80 | 2.40 | 0.37 | 3.00 | 39 | 3379T-6X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 3.00 | 0.45 | 3.00 | 39 | 3379T-6X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.05 | 1.20 | 3.60 | 0.55 | 3.00 | 39 | 3379T-6X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.05 | 1.40 | 4.20 | 0.65 | 3.00 | 39 | 3379T-6X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.05 | 1.60 | 4.80 | 0.75 | 3.00 | 39 | 3379T-6X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.05 | 1.80 | 5.40 | 0.85 | 3.00 | 39 | 3379T-6X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 6.00 | 0.95 | 3.00 | 39 | 3379T-6X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.10 | 2.20 | 6.60 | 1.05 | 3.00 | 39 | 3379T-6X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.10 | 2.40 | 7.20 | 1.15 | 3.00 | 39 | 3379T-6X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.10 | 2.60 | 7.80 | 1.25 | 3.00 | 39 | 3379T-6X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.10 | 2.80 | 8.40 | 1.35 | 3.00 | 39 | 3379T-6X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.20 | 3.00 | 9.00 | 1.45 | 3.00 | 39 | 3379T-6X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.20 | 3.20 | 9.60 | 1.55 | 3.00 | 39 | 3379T-6X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.20 | 3.40 | 10.20 | 1.65 | 3.00 | 39 | 3379T-6X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.20 | 3.60 | 10.80 | 1.75 | 3.00 | 39 | 3379T-6X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.20 | 3.80 | 11.40 | 1.85 | 3.00 | 39 | 3379T-6X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 12.00 | 1.95 | 6.00 | 50 | 3379T-6X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 0.20 | 4.20 | 12.60 | 2.05 | 6.00 | 50 | 3379T-6X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 0.20 | 4.40 | 13.20 | 2.15 | 6.00 | 50 | 3379T-6X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 0.20 | 4.60 | 13.80 | 2.25 | 6.00 | 50 | 3379T-6X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 0.20 | 4.80 | 14.40 | 2.35 | 6.00 | 50 | 3379T-6X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 0.20 | 5.00 | 15.00 | 2.45 | 6.00 | 50 | 3379T-6X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 0.20 | 6.00 | 18.00 | 2.95 | 6.00 | 50 | 3379T-6X-3.00 | ■ | ■ | ■ | ■ | ■ |

MICRO-LINE

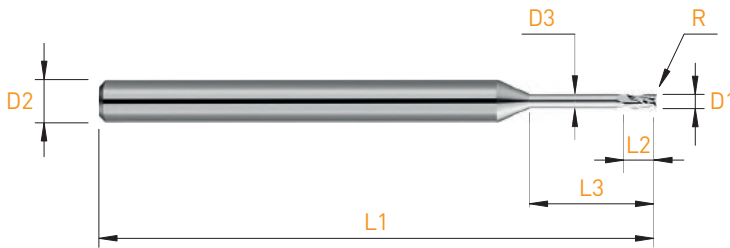
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3379T-9X

new



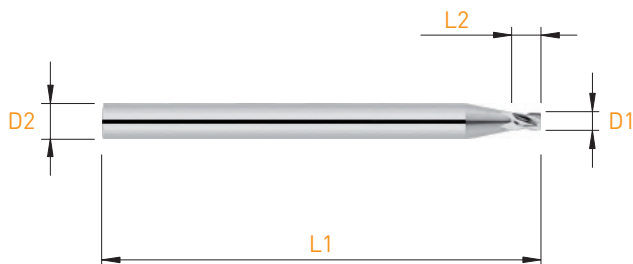
| D1 +0.005 / -0.010 | R +/- 0.02 | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|---------------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.40 | 0.05 | 0.80 | 3.60 | 0.37 | 3.00 | 39 | 3379T-9X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 4.50 | 0.45 | 3.00 | 39 | 3379T-9X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.05 | 1.20 | 5.40 | 0.55 | 3.00 | 39 | 3379T-9X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.05 | 1.40 | 6.30 | 0.65 | 3.00 | 39 | 3379T-9X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.05 | 1.60 | 7.20 | 0.75 | 3.00 | 39 | 3379T-9X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.05 | 1.80 | 8.10 | 0.85 | 3.00 | 39 | 3379T-9X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 9.00 | 0.95 | 3.00 | 39 | 3379T-9X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.10 | 2.20 | 9.90 | 1.05 | 3.00 | 39 | 3379T-9X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.10 | 2.40 | 10.80 | 1.15 | 3.00 | 39 | 3379T-9X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.10 | 2.60 | 11.70 | 1.25 | 3.00 | 39 | 3379T-9X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.10 | 2.80 | 12.60 | 1.35 | 3.00 | 39 | 3379T-9X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.20 | 3.00 | 13.50 | 1.45 | 3.00 | 39 | 3379T-9X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.20 | 3.20 | 14.40 | 1.55 | 3.00 | 39 | 3379T-9X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.20 | 3.40 | 15.30 | 1.65 | 3.00 | 39 | 3379T-9X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.20 | 3.60 | 16.20 | 1.75 | 3.00 | 39 | 3379T-9X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.20 | 3.80 | 17.10 | 1.85 | 3.00 | 39 | 3379T-9X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 18.00 | 1.95 | 6.00 | 50 | 3379T-9X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 0.20 | 4.20 | 18.90 | 2.05 | 6.00 | 50 | 3379T-9X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 0.20 | 4.40 | 19.80 | 2.15 | 6.00 | 50 | 3379T-9X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 0.20 | 4.60 | 20.70 | 2.25 | 6.00 | 50 | 3379T-9X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 0.20 | 4.80 | 21.60 | 2.35 | 6.00 | 50 | 3379T-9X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 0.20 | 5.00 | 22.50 | 2.45 | 6.00 | 50 | 3379T-9X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 0.20 | 6.00 | 27.00 | 2.95 | 6.00 | 50 | 3379T-9X-3.00 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

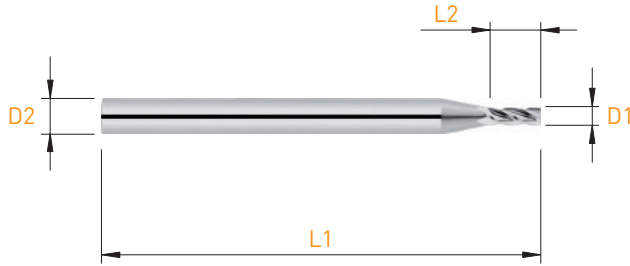
Mikropräzisionsfräser

Precision micro end mills

3471-1.5



| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | N | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.45 | 3.00 | 39 | 3471-1.5-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.60 | 3.00 | 39 | 3471-1.5-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.75 | 3.00 | 39 | 3471-1.5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.90 | 3.00 | 39 | 3471-1.5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.05 | 3.00 | 39 | 3471-1.5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.20 | 3.00 | 39 | 3471-1.5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.35 | 3.00 | 39 | 3471-1.5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 1.50 | 3.00 | 39 | 3471-1.5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 1.65 | 3.00 | 39 | 3471-1.5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 1.80 | 3.00 | 39 | 3471-1.5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 1.95 | 3.00 | 39 | 3471-1.5-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.10 | 3.00 | 39 | 3471-1.5-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 2.25 | 3.00 | 39 | 3471-1.5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 2.40 | 3.00 | 39 | 3471-1.5-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 2.55 | 3.00 | 39 | 3471-1.5-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 2.70 | 3.00 | 39 | 3471-1.5-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 2.85 | 3.00 | 39 | 3471-1.5-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 3.00 | 3.00 | 39 | 3471-1.5-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 3.15 | 3.00 | 39 | 3471-1.5-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 3.30 | 3.00 | 39 | 3471-1.5-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 3.45 | 3.00 | 39 | 3471-1.5-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 3.60 | 3.00 | 39 | 3471-1.5-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 3.75 | 3.00 | 39 | 3471-1.5-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 3.90 | 3.00 | 39 | 3471-1.5-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 4.05 | 3.00 | 39 | 3471-1.5-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 4.20 | 3.00 | 39 | 3471-1.5-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 4.35 | 3.00 | 39 | 3471-1.5-2.90 | ■ | ■ | ■ | ■ | ■ |



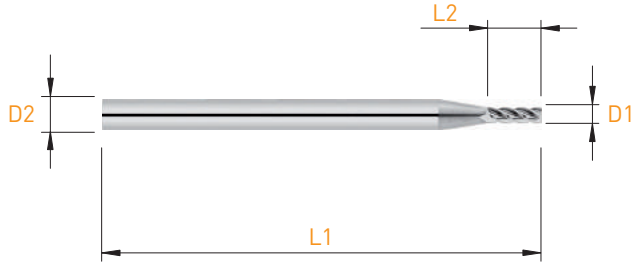
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | N | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 0.90 | 3.00 | 39 | 3471-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 1.20 | 3.00 | 39 | 3471-3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.50 | 3.00 | 39 | 3471-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.55 | 1.70 | 3.00 | 39 | 3471-3-0.55 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.80 | 3.00 | 39 | 3471-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.10 | 3.00 | 39 | 3471-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.75 | 2.30 | 3.00 | 39 | 3471-3-0.75 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.40 | 3.00 | 39 | 3471-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.85 | 2.60 | 3.00 | 39 | 3471-3-0.85 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.70 | 3.00 | 39 | 3471-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 0.95 | 2.90 | 3.00 | 39 | 3471-3-0.95 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | 3471-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 3.30 | 3.00 | 39 | 3471-3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 3.60 | 3.00 | 39 | 3471-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 3.90 | 3.00 | 39 | 3471-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 4.20 | 3.00 | 39 | 3471-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | 3471-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 4.80 | 3.00 | 39 | 3471-3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 5.10 | 3.00 | 39 | 3471-3-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 5.40 | 3.00 | 39 | 3471-3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 5.70 | 3.00 | 39 | 3471-3-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | 3471-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 6.30 | 3.00 | 39 | 3471-3-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 6.60 | 3.00 | 39 | 3471-3-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 6.90 | 3.00 | 39 | 3471-3-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 7.20 | 3.00 | 39 | 3471-3-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | 3471-3-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 7.80 | 3.00 | 39 | 3471-3-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 8.10 | 3.00 | 39 | 3471-3-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 8.40 | 3.00 | 39 | 3471-3-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 8.70 | 3.00 | 39 | 3471-3-2.90 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

DHP3471-3



DHP Denture à pas irrégulier, angle d'hélice progressive
 Ungleiche Teilung, progressive Drallwinkel
 Uneven tooth pitch, progressive helix angle

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | N | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|----------------|---|-------|-----|------|-----|
| 0.50 | 1.50 | 3.00 | 39 | DHP3471-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.80 | 3.00 | 39 | DHP3471-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.10 | 3.00 | 39 | DHP3471-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 2.40 | 3.00 | 39 | DHP3471-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 2.70 | 3.00 | 39 | DHP3471-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | DHP3471-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 3.30 | 3.00 | 39 | DHP3471-3-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 3.60 | 3.00 | 39 | DHP3471-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 3.90 | 3.00 | 39 | DHP3471-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 4.20 | 3.00 | 39 | DHP3471-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | DHP3471-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 4.80 | 3.00 | 39 | DHP3471-3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 5.10 | 3.00 | 39 | DHP3471-3-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 5.40 | 3.00 | 39 | DHP3471-3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 5.70 | 3.00 | 39 | DHP3471-3-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | DHP3471-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | DHP3471-3-2.50 | ■ | ■ | ■ | ■ | ■ |

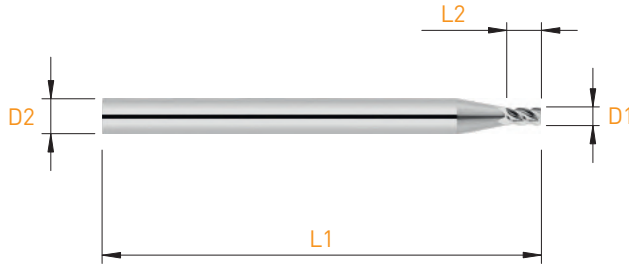
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3472-2



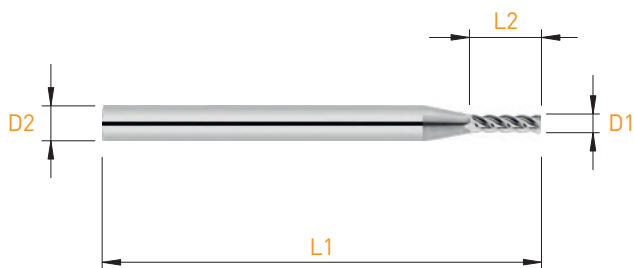
| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.30 | 0.60 | 3.00 | 39 | 3472-2-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.80 | 3.00 | 39 | 3472-2-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 1.00 | 3.00 | 39 | 3472-2-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 1.20 | 3.00 | 39 | 3472-2-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 1.40 | 3.00 | 39 | 3472-2-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 1.60 | 3.00 | 39 | 3472-2-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 1.80 | 3.00 | 39 | 3472-2-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 2.00 | 3.00 | 39 | 3472-2-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 2.20 | 3.00 | 39 | 3472-2-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 2.40 | 3.00 | 39 | 3472-2-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 2.60 | 3.00 | 39 | 3472-2-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 2.80 | 3.00 | 39 | 3472-2-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 3.00 | 3.00 | 39 | 3472-2-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 3.20 | 3.00 | 39 | 3472-2-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 3.40 | 3.00 | 39 | 3472-2-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 3.60 | 3.00 | 39 | 3472-2-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 3.80 | 3.00 | 39 | 3472-2-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 3.00 | 39 | 3472-2-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 4.20 | 3.00 | 39 | 3472-2-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 4.40 | 3.00 | 39 | 3472-2-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 4.60 | 3.00 | 39 | 3472-2-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 4.80 | 3.00 | 39 | 3472-2-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 5.00 | 3.00 | 39 | 3472-2-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 5.20 | 3.00 | 39 | 3472-2-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 5.40 | 3.00 | 39 | 3472-2-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 5.60 | 3.00 | 39 | 3472-2-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 5.80 | 3.00 | 39 | 3472-2-2.90 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3472-4



| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|-------|----|-------------|---|-------|-----|------|-----|
| 0.40 | 1.60 | 3.00 | 39 | 3472-4-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 2.00 | 3.00 | 39 | 3472-4-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 2.40 | 3.00 | 39 | 3472-4-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 2.80 | 3.00 | 39 | 3472-4-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 3.20 | 3.00 | 39 | 3472-4-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 3.60 | 3.00 | 39 | 3472-4-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 4.00 | 3.00 | 39 | 3472-4-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 4.40 | 3.00 | 39 | 3472-4-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 4.80 | 3.00 | 39 | 3472-4-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 5.20 | 3.00 | 39 | 3472-4-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 5.60 | 3.00 | 39 | 3472-4-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 6.00 | 3.00 | 39 | 3472-4-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 6.40 | 3.00 | 39 | 3472-4-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 6.80 | 3.00 | 39 | 3472-4-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 7.20 | 3.00 | 39 | 3472-4-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 7.60 | 3.00 | 39 | 3472-4-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 8.00 | 3.00 | 39 | 3472-4-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 8.40 | 3.00 | 39 | 3472-4-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 8.80 | 3.00 | 39 | 3472-4-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 9.20 | 3.00 | 39 | 3472-4-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 9.60 | 3.00 | 39 | 3472-4-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 10.00 | 3.00 | 39 | 3472-4-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 10.40 | 3.00 | 39 | 3472-4-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 10.80 | 3.00 | 39 | 3472-4-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 11.20 | 3.00 | 39 | 3472-4-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 11.60 | 3.00 | 39 | 3472-4-2.90 | ■ | ■ | ■ | ■ | ■ |

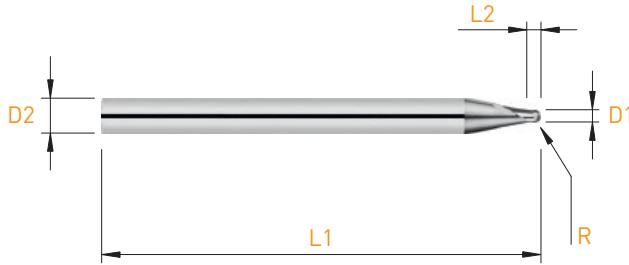
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3278-0.75



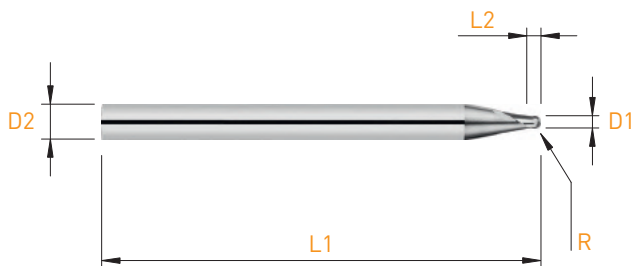
| D1 +0.005 / -0.010 | R | L2 | D2 h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----------------------|------|------|-------|----|----------------|---|-------|-----|------|-----|
| 0.20 | 0.10 | 0.15 | 3.00 | 39 | 3278-0.75-0.20 | ■ | | | | |
| 0.30 | 0.15 | 0.20 | 3.00 | 39 | 3278-0.75-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.20 | 0.30 | 3.00 | 39 | 3278-0.75-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 0.35 | 3.00 | 39 | 3278-0.75-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 0.45 | 3.00 | 39 | 3278-0.75-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 0.55 | 3.00 | 39 | 3278-0.75-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 0.60 | 3.00 | 39 | 3278-0.75-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 0.70 | 3.00 | 39 | 3278-0.75-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 0.75 | 3.00 | 39 | 3278-0.75-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 1.15 | 3.00 | 39 | 3278-0.75-1.50 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 1.50 | 3.00 | 39 | 3278-0.75-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 1.90 | 3.00 | 39 | 3278-0.75-2.50 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3278-1



| D1 +0.005 / -0.010 | R | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.20 | 0.10 | 0.20 | 3.00 | 39 | 3278-1-0.20 | ■ | | | | |
| 0.30 | 0.15 | 0.30 | 3.00 | 39 | 3278-1-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.20 | 0.40 | 3.00 | 39 | 3278-1-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 0.50 | 3.00 | 39 | 3278-1-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 0.60 | 3.00 | 39 | 3278-1-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 0.70 | 3.00 | 39 | 3278-1-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 0.80 | 3.00 | 39 | 3278-1-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 0.90 | 3.00 | 39 | 3278-1-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 1.00 | 3.00 | 39 | 3278-1-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.55 | 1.10 | 3.00 | 39 | 3278-1-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.60 | 1.20 | 3.00 | 39 | 3278-1-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.35 | 1.30 | 3.00 | 39 | 3278-1-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.70 | 1.40 | 3.00 | 39 | 3278-1-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 1.50 | 3.00 | 39 | 3278-1-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.80 | 1.60 | 3.00 | 39 | 3278-1-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.85 | 1.70 | 3.00 | 39 | 3278-1-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.90 | 1.80 | 3.00 | 39 | 3278-1-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.95 | 1.90 | 3.00 | 39 | 3278-1-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 2.00 | 3.00 | 39 | 3278-1-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 1.05 | 2.10 | 3.00 | 39 | 3278-1-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 1.10 | 2.20 | 3.00 | 39 | 3278-1-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 1.15 | 2.30 | 3.00 | 39 | 3278-1-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 1.20 | 2.40 | 3.00 | 39 | 3278-1-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 2.50 | 3.00 | 39 | 3278-1-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 1.30 | 2.60 | 3.00 | 39 | 3278-1-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 1.35 | 2.70 | 3.00 | 39 | 3278-1-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 1.40 | 2.80 | 3.00 | 39 | 3278-1-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 1.45 | 2.90 | 3.00 | 39 | 3278-1-2.90 | ■ | ■ | ■ | ■ | ■ |

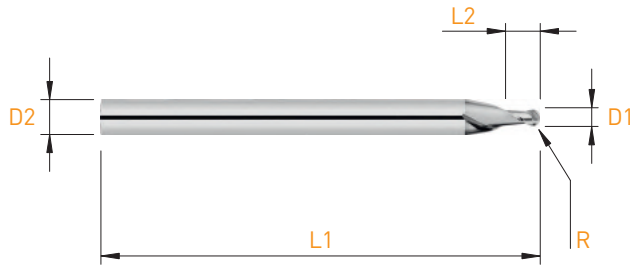
MICRO-LINE

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3278-1.5



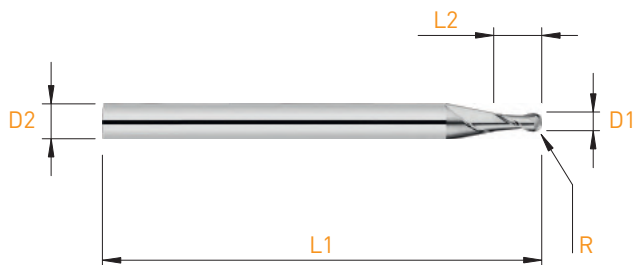
| D1 +0.005 / -0.010 | R | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|------|-------|----|---------------|---|-------|-----|------|-----|
| 0.20 | 0.10 | 0.30 | 3.00 | 39 | 3278-1.5-0.20 | ■ | | | | |
| 0.25 | 0.125 | 0.35 | 3.00 | 39 | 3278-1.5-0.25 | ■ | | | | |
| 0.30 | 0.15 | 0.45 | 3.00 | 39 | 3278-1.5-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.20 | 0.60 | 3.00 | 39 | 3278-1.5-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 0.75 | 3.00 | 39 | 3278-1.5-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 0.90 | 3.00 | 39 | 3278-1.5-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 1.05 | 3.00 | 39 | 3278-1.5-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 1.20 | 3.00 | 39 | 3278-1.5-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.85 | 0.40 | 1.30 | 3.00 | 39 | 3278-1.5-0.85 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 1.35 | 3.00 | 39 | 3278-1.5-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 1.50 | 3.00 | 39 | 3278-1.5-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.55 | 1.65 | 3.00 | 39 | 3278-1.5-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.15 | 0.55 | 1.75 | 3.00 | 39 | 3278-1.5-1.15 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.60 | 1.80 | 3.00 | 39 | 3278-1.5-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.65 | 1.95 | 3.00 | 39 | 3278-1.5-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.70 | 2.10 | 3.00 | 39 | 3278-1.5-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 2.25 | 3.00 | 39 | 3278-1.5-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.80 | 2.40 | 3.00 | 39 | 3278-1.5-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.85 | 2.60 | 3.00 | 39 | 3278-1.5-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.90 | 2.70 | 3.00 | 39 | 3278-1.5-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.95 | 2.90 | 3.00 | 39 | 3278-1.5-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 3.00 | 3.00 | 39 | 3278-1.5-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 1.05 | 3.20 | 3.00 | 39 | 3278-1.5-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 1.10 | 3.30 | 3.00 | 39 | 3278-1.5-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 1.15 | 3.50 | 3.00 | 39 | 3278-1.5-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 1.20 | 3.60 | 3.00 | 39 | 3278-1.5-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 3.75 | 3.00 | 39 | 3278-1.5-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 1.30 | 3.90 | 3.00 | 39 | 3278-1.5-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 1.35 | 4.00 | 3.00 | 39 | 3278-1.5-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 1.40 | 4.20 | 3.00 | 39 | 3278-1.5-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 1.45 | 4.40 | 3.00 | 39 | 3278-1.5-2.90 | ■ | ■ | ■ | ■ | ■ |

Micro-fraises de précision

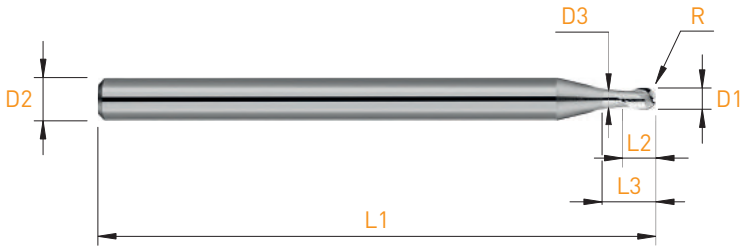
Mikropräzisionsfräser

Precision micro end mills

3278-3



| D1 +0.005 / -0.010 | R | L2 | D2 h4 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|-------|------|-------|----|-------------|---|-------|-----|------|-----|
| 0.20 | 0.10 | 0.60 | 3.00 | 39 | 3278-3-0.20 | ■ | | | | |
| 0.30 | 0.15 | 1.00 | 3.00 | 39 | 3278-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.20 | 1.00 | 3.00 | 39 | 3278-3-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 1.50 | 3.00 | 39 | 3278-3-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 1.50 | 3.00 | 39 | 3278-3-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 2.00 | 3.00 | 39 | 3278-3-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 2.00 | 3.00 | 39 | 3278-3-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 2.50 | 3.00 | 39 | 3278-3-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 3.00 | 3.00 | 39 | 3278-3-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.60 | 4.00 | 3.00 | 39 | 3278-3-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.65 | 4.00 | 3.00 | 39 | 3278-3-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.70 | 4.00 | 3.00 | 39 | 3278-3-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 4.50 | 3.00 | 39 | 3278-3-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.55 | 0.775 | 5.00 | 3.00 | 39 | 3278-3-1.55 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.80 | 5.00 | 3.00 | 39 | 3278-3-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.90 | 5.50 | 3.00 | 39 | 3278-3-1.80 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 6.00 | 3.00 | 39 | 3278-3-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 1.05 | 6.50 | 3.00 | 39 | 3278-3-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 1.10 | 7.00 | 3.00 | 39 | 3278-3-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 7.50 | 3.00 | 39 | 3278-3-2.50 | ■ | ■ | ■ | ■ | ■ |
| 2.60 | 1.30 | 7.80 | 3.00 | 39 | 3278-3-2.60 | ■ | ■ | ■ | ■ | ■ |
| 2.70 | 1.35 | 8.10 | 3.00 | 39 | 3278-3-2.70 | ■ | ■ | ■ | ■ | ■ |
| 2.80 | 1.40 | 8.40 | 3.00 | 39 | 3278-3-2.80 | ■ | ■ | ■ | ■ | ■ |
| 2.90 | 1.45 | 8.70 | 3.00 | 39 | 3278-3-2.90 | ■ | ■ | ■ | ■ | ■ |



| D1 +0.005 / -0.010 | R | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|------|------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.20 | 0.10 | 0.30 | 0.60 | 0.19 | 3.00 | 39 | 3278H-3X-0.20 | ■ | | | | |
| 0.30 | 0.15 | 0.45 | 0.90 | 0.27 | 3.00 | 39 | 3278H-3X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.20 | 0.60 | 1.20 | 0.37 | 3.00 | 39 | 3278H-3X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 0.75 | 1.50 | 0.45 | 3.00 | 39 | 3278H-3X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 0.90 | 1.80 | 0.55 | 3.00 | 39 | 3278H-3X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 1.05 | 2.10 | 0.65 | 3.00 | 39 | 3278H-3X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 1.20 | 2.40 | 0.75 | 3.00 | 39 | 3278H-3X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 1.35 | 2.70 | 0.85 | 3.00 | 39 | 3278H-3X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 1.50 | 3.00 | 0.95 | 3.00 | 39 | 3278H-3X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.55 | 1.65 | 3.30 | 1.05 | 3.00 | 39 | 3278H-3X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.60 | 1.80 | 3.60 | 1.15 | 3.00 | 39 | 3278H-3X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.65 | 1.95 | 3.90 | 1.25 | 3.00 | 39 | 3278H-3X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.70 | 2.10 | 4.20 | 1.35 | 3.00 | 39 | 3278H-3X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 2.25 | 4.50 | 1.45 | 3.00 | 39 | 3278H-3X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.80 | 2.40 | 4.80 | 1.55 | 3.00 | 39 | 3278H-3X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.85 | 2.55 | 5.10 | 1.65 | 3.00 | 39 | 3278H-3X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.90 | 2.70 | 5.40 | 1.75 | 3.00 | 39 | 3278H-3X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.95 | 2.85 | 5.70 | 1.85 | 3.00 | 39 | 3278H-3X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 3.00 | 6.00 | 1.95 | 6.00 | 50 | 3278H-3X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 1.05 | 3.15 | 6.30 | 2.05 | 6.00 | 50 | 3278H-3X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 1.10 | 3.30 | 6.60 | 2.15 | 6.00 | 50 | 3278H-3X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 1.15 | 3.45 | 6.90 | 2.25 | 6.00 | 50 | 3278H-3X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 1.20 | 3.60 | 7.20 | 2.35 | 6.00 | 50 | 3278H-3X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 3.75 | 7.50 | 2.45 | 6.00 | 50 | 3278H-3X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 1.50 | 4.50 | 9.00 | 2.95 | 6.00 | 50 | 3278H-3X-3.00 | ■ | ■ | ■ | ■ | ■ |

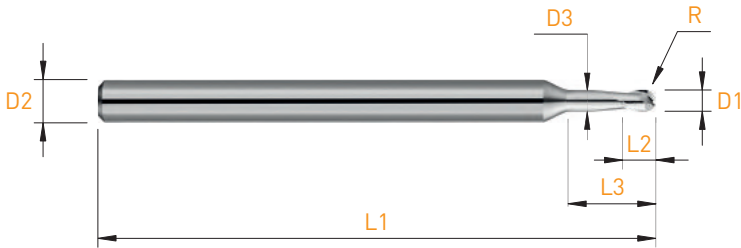
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3278H-6X

new



| D1 +0.005 / -0.010 | R | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.30 | 0.15 | 0.45 | 1.80 | 0.27 | 3.00 | 39 | 3278H-6X-0.30 | ■ | ■ | ■ | ■ | ■ |
| 0.40 | 0.20 | 0.60 | 2.40 | 0.37 | 3.00 | 39 | 3278H-6X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 0.75 | 3.00 | 0.45 | 3.00 | 39 | 3278H-6X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 0.90 | 3.60 | 0.55 | 3.00 | 39 | 3278H-6X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 1.05 | 4.20 | 0.65 | 3.00 | 39 | 3278H-6X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 1.20 | 4.80 | 0.75 | 3.00 | 39 | 3278H-6X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 1.35 | 5.40 | 0.85 | 3.00 | 39 | 3278H-6X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 1.50 | 6.00 | 0.95 | 3.00 | 39 | 3278H-6X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.55 | 1.65 | 6.60 | 1.05 | 3.00 | 39 | 3278H-6X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.60 | 1.80 | 7.20 | 1.15 | 3.00 | 39 | 3278H-6X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.65 | 1.95 | 7.80 | 1.25 | 3.00 | 39 | 3278H-6X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.70 | 2.10 | 8.40 | 1.35 | 3.00 | 39 | 3278H-6X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 2.25 | 9.00 | 1.45 | 3.00 | 39 | 3278H-6X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.80 | 2.40 | 9.60 | 1.55 | 3.00 | 39 | 3278H-6X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.85 | 2.55 | 10.20 | 1.65 | 3.00 | 39 | 3278H-6X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.90 | 2.70 | 10.80 | 1.75 | 3.00 | 39 | 3278H-6X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.95 | 2.85 | 11.40 | 1.85 | 3.00 | 39 | 3278H-6X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 3.00 | 12.00 | 1.95 | 6.00 | 50 | 3278H-6X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 1.05 | 3.15 | 12.60 | 2.05 | 6.00 | 50 | 3278H-6X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 1.10 | 3.30 | 13.20 | 2.15 | 6.00 | 50 | 3278H-6X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 1.15 | 3.45 | 13.80 | 2.25 | 6.00 | 50 | 3278H-6X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 1.20 | 3.60 | 14.40 | 2.35 | 6.00 | 50 | 3278H-6X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 3.75 | 15.00 | 2.45 | 6.00 | 50 | 3278H-6X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 1.50 | 4.50 | 18.00 | 2.95 | 6.00 | 50 | 3278H-6X-3.00 | ■ | ■ | ■ | ■ | ■ |

MICRO-LINE

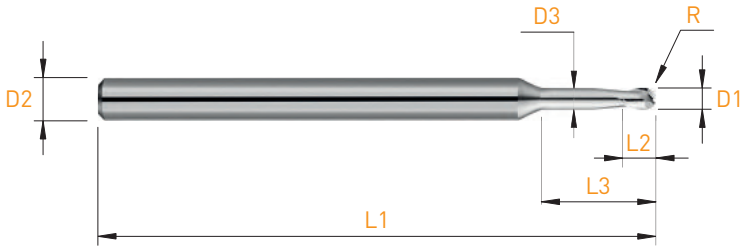
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3278H-9X

new



| D1 +0.005 / -0.010 | R | L2 | L3 | D3 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|------|-------|------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 0.40 | 0.20 | 0.60 | 3.60 | 0.37 | 3.00 | 39 | 3278H-9X-0.40 | ■ | ■ | ■ | ■ | ■ |
| 0.50 | 0.25 | 0.75 | 4.50 | 0.45 | 3.00 | 39 | 3278H-9X-0.50 | ■ | ■ | ■ | ■ | ■ |
| 0.60 | 0.30 | 0.90 | 5.40 | 0.55 | 3.00 | 39 | 3278H-9X-0.60 | ■ | ■ | ■ | ■ | ■ |
| 0.70 | 0.35 | 1.05 | 6.30 | 0.65 | 3.00 | 39 | 3278H-9X-0.70 | ■ | ■ | ■ | ■ | ■ |
| 0.80 | 0.40 | 1.20 | 7.20 | 0.75 | 3.00 | 39 | 3278H-9X-0.80 | ■ | ■ | ■ | ■ | ■ |
| 0.90 | 0.45 | 1.35 | 8.10 | 0.85 | 3.00 | 39 | 3278H-9X-0.90 | ■ | ■ | ■ | ■ | ■ |
| 1.00 | 0.50 | 1.50 | 9.00 | 0.95 | 3.00 | 39 | 3278H-9X-1.00 | ■ | ■ | ■ | ■ | ■ |
| 1.10 | 0.55 | 1.65 | 9.90 | 1.05 | 3.00 | 39 | 3278H-9X-1.10 | ■ | ■ | ■ | ■ | ■ |
| 1.20 | 0.60 | 1.80 | 10.80 | 1.15 | 3.00 | 39 | 3278H-9X-1.20 | ■ | ■ | ■ | ■ | ■ |
| 1.30 | 0.65 | 1.95 | 11.70 | 1.25 | 3.00 | 39 | 3278H-9X-1.30 | ■ | ■ | ■ | ■ | ■ |
| 1.40 | 0.70 | 2.10 | 12.60 | 1.35 | 3.00 | 39 | 3278H-9X-1.40 | ■ | ■ | ■ | ■ | ■ |
| 1.50 | 0.75 | 2.25 | 13.50 | 1.45 | 3.00 | 39 | 3278H-9X-1.50 | ■ | ■ | ■ | ■ | ■ |
| 1.60 | 0.80 | 2.40 | 14.40 | 1.55 | 3.00 | 39 | 3278H-9X-1.60 | ■ | ■ | ■ | ■ | ■ |
| 1.70 | 0.85 | 2.55 | 15.30 | 1.65 | 3.00 | 39 | 3278H-9X-1.70 | ■ | ■ | ■ | ■ | ■ |
| 1.80 | 0.90 | 2.70 | 16.20 | 1.75 | 3.00 | 39 | 3278H-9X-1.80 | ■ | ■ | ■ | ■ | ■ |
| 1.90 | 0.95 | 2.85 | 17.10 | 1.85 | 3.00 | 39 | 3278H-9X-1.90 | ■ | ■ | ■ | ■ | ■ |
| 2.00 | 1.00 | 3.00 | 18.00 | 1.95 | 6.00 | 50 | 3278H-9X-2.00 | ■ | ■ | ■ | ■ | ■ |
| 2.10 | 1.05 | 3.15 | 18.90 | 2.05 | 6.00 | 50 | 3278H-9X-2.10 | ■ | ■ | ■ | ■ | ■ |
| 2.20 | 1.10 | 3.30 | 19.80 | 2.15 | 6.00 | 50 | 3278H-9X-2.20 | ■ | ■ | ■ | ■ | ■ |
| 2.30 | 1.15 | 3.45 | 20.70 | 2.25 | 6.00 | 50 | 3278H-9X-2.30 | ■ | ■ | ■ | ■ | ■ |
| 2.40 | 1.20 | 3.60 | 21.60 | 2.35 | 6.00 | 50 | 3278H-9X-2.40 | ■ | ■ | ■ | ■ | ■ |
| 2.50 | 1.25 | 3.75 | 22.50 | 2.45 | 6.00 | 50 | 3278H-9X-2.50 | ■ | ■ | ■ | ■ | ■ |
| 3.00 | 1.50 | 4.50 | 27.00 | 2.95 | 6.00 | 50 | 3278H-9X-3.00 | ■ | ■ | ■ | ■ | ■ |

Fraises en bout








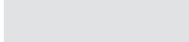

Schaftfräser






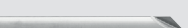

End mills

Index

Paramètres de coupe indicatif
Empfohlene Schnittwerte
Standard machining data

14.53

|  | Fraises en bout avec angle vif Schaftfräser mit scharfkantigen Ecken End mills with sharp corners | | | | | |
|---|---|-----------|--------------|---------|---------------|------------------|
| | Z | λ | D1 | D2 | Type | page |
|  | Z=3 | Div. | Ø1.00 - 8.00 | Ø3/6/8 | E-DHP4300-1.5 | 14.57 |
| | Z=4 | 26° / 33° | Ø10.00 | Ø10 h6 | E-DHP4400-1.5 | |
| | Z=3 | Div. | Ø1.00 - 8.00 | Ø3/6/8 | E-DHP4300-2.5 | |
| | Z=4 | 26° / 33° | Ø10.00 | Ø10h6 | E-DHP4400-2.5 | |
|  | Z=1 | 23° | Ø1.00 - 6.00 | Ø6h5 | 3123-2 | 14.58 new |
| | | | Ø1.00 - 6.00 | Ø6h5 | 3123-4 | 14.59 new |
|  | Z=2 | 60° | Ø0.50 - 6.00 | Ø3/6/8 | 3260MV | 14.60 new |
| | | 90° | Ø0.30 - 6.00 | Ø3/6/8 | 3290MV | 14.61 new |
| | | 120° | Ø0.50 - 6.00 | Ø3/6/8 | 32120MV | 14.62 new |
|  | Z=2 | 30° | Ø1.00 - 6.00 | Ø6 h5 | 3230 | 14.63 |
| | | | Ø3.00 - 6.00 | Ø6 h5 | 3230-1.5 | 14.64 new |
| | | | Ø3.00 - 6.00 | Ø6 h5 | 3230-3 | 14.65 new |
| | | | Ø2.00 - 6.00 | D1 = D2 | 3231 | 14.66 |
| | | | Ø3.00 - 6.00 | Ø6 h5 | 3239T-2.5X | 14.67 new |
| | | | Ø3.00 - 6.00 | Ø6 h5 | 3239T-4X | 14.68 new |
|  | Z=3 | 30° | Ø1.00 - 6.00 | Ø6 h6 | 3330-S | 14.69 |
| | | | Ø3.00-12.00 | D1 = D2 | 3330 | 14.70 |
| | | | Ø3.00 - 6.00 | Ø6 h5 | 3330-4 | 14.71 new |
| | | | Ø2.00 - 6.00 | D1 = D2 | 3331 | 14.72 |
| | | | Ø1.50 - 6.00 | Ø6 h5 | 3336-HA | 14.73 |
| | | | Ø1.50 - 6.00 | Ø6 h5 | 3337-HA | 14.73 |
| | | | Ø2.00 - 6.00 | D1 = D2 | 3341 | 14.74 |
| | | | Ø0.50 - 6.00 | Ø6 h6 | 3345-S | 14.75 new |
|  | Z=4 | 30° | Ø3.00 - 6.00 | D1 = D2 | 3430 | 14.78 |
| | | | Ø2.00 - 6.00 | D1 = D2 | 3431 | 14.79 |
| | | | Ø2.00 - 6.00 | D1 = D2 | 3441 | 14.80 |
| | | | Ø0.50 - 6.00 | Ø6 h6 | 3445-S | 14.81 |
| | | | Ø1.00 - 6.00 | Ø6 h5 | 3450 | 14.82 new |
| | | | Ø1.00 - 6.00 | Ø6 h5 | DHP3436 | 14.83 |
|  | Z=4 | 30° | Ø3.00 - 6.00 | Ø6 h5 | 3439T-2.5X | 14.84 new |
| | | | Ø3.00 - 6.00 | Ø6 h5 | 3439T-4X | 14.85 new |
| | | | Ø1.00 - 6.00 | Ø6 h5 | 3545 | 14.86 new |
| | | | Ø1.00 - 6.00 | Ø6 h5 | 35645 | 14.87 new |
|  | Z=8 | 10° | Ø6.00 | Ø6 h5 | 3810 | 14.88 new |

|   | Z | λ | D1 | D2 | Type | page | |
|---|--|-----------|---------------|-------------------------|-------------|------------|------------|
| |      | Z=2 | 30° | Ø2.00 - 6.00 | D1 = D2 | 3238 | 14.89 |
| Z=3 | | 30° | Ø2.00 - 6.00 | D1 = D2 | 3338 | 14.90 | |
| Z=3 | | | | Ø0.30 - 3.50 | Ø6 h5 | 701S3371-1 | |
| | | | | Ø0.30 - 3.50 | Ø6 h5 | 701S3371-2 | 14.91 |
| | | | | Ø0.30 - 3.00 | Ø6 h5 | 701S3371-3 | |
| Z=3 | | 30° | Ø8.00-12.00 | Ø6h6 | 3383 | 14.93 | |
| Z=10 | | 30° | Ø16.3 / 20.30 | Ø10h6 | 3831 / 3833 | 14.94 | |
| Z=3 | | 0° | Ø0.50 - 3.00 | Ø3h4 | 3611 | 14.95 | new |
| Z=3 | | 0° | Ø0.50 - 3.00 | Ø3h4 | 3911 | 14.96 | |
| Z=4 | | 0° | Ø3.00-8.00 | Ø3 h4 Ø6 h5 Ø8 h6 | 3901 | 14.97 | |

Fraises ébauches

Schrupfräser

Roughing mills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | VC | 1.0 - 2.0 | 2.0 - 4.0 | 4.0 - 6.0 | 6.0 - 10.0 | Z | TAIN | STF |
|--|--------------------|---------------|---------------|---------------|---------------|---|------|-----|
| | [m/min] | fz (mm) | fz (mm) | fz (mm) | fz (mm) | | | |
| Acier de décolletage Automatenstahl Free-cutting steel | P 100 - 140 | 0.010 - 0.015 | 0.015 - 0.030 | 0.030 - 0.040 | 0.040 - 0.060 | - | *** | *** |
| Acier Stahl Steel < 600 N/mm ² | P 90 - 140 | 0.010 - 0.015 | 0.015 - 0.030 | 0.030 - 0.040 | 0.040 - 0.060 | - | *** | *** |
| Acier Stahl Steel < 800 N/mm ² | P 90 - 140 | 0.010 - 0.015 | 0.015 - 0.030 | 0.030 - 0.040 | 0.040 - 0.060 | - | *** | *** |
| Acier Stahl Steel > 800 N/mm ² | P 80 - 120 | 0.010 - 0.015 | 0.015 - 0.030 | 0.030 - 0.040 | 0.040 - 0.060 | - | *** | *** |
| Acier trempé Gehärteter Stahl -55HRC Hardened steel | H 120 - 170 | 0.005 - 0.008 | 0.008 - 0.015 | 0.015 - 0.020 | 0.020 - 0.035 | - | *** | *** |
| Acier trempé Gehärteter Stahl +55HRC Hardened steel | H 110 - 150 | 0.005 - 0.008 | 0.008 - 0.015 | 0.015 - 0.020 | 0.020 - 0.035 | - | *** | *** |
| Inox Rostfreistahl Stainless steel | M 50 - 90 | 0.004 - 0.008 | 0.008 - 0.012 | 0.012 - 0.020 | 0.020 - 0.040 | - | *** | *** |
| Aluminium | N 250 - 350 | 0.008 - 0.015 | 0.015 - 0.030 | 0.030 - 0.040 | 0.040 - 0.065 | - | *** | ** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N 130 - 240 | 0.005 - 0.010 | 0.010 - 0.020 | 0.020 - 0.030 | 0.030 - 0.050 | - | *** | ** |
| Matière synthétique Synthetisches Material Synthetic material | N 150 - 300 | 0.020 - 0.030 | 0.030 - 0.050 | 0.050 - 0.080 | 0.080 - 0.150 | - | *** | ** |
| Métaux précieux Edelmetalle Precious metals | N 120 - 150 | 0.005 - 0.010 | 0.010 - 0.020 | 0.020 - 0.030 | 0.030 - 0.050 | - | *** | ** |
| Titane Titan Titanium | S 50 - 100 | 0.010 - 0.015 | 0.015 - 0.020 | 0.020 - 0.030 | 0.030 - 0.050 | - | *** | *** |
| Alliage de nickel Nickel-Legierung Nickel alloy | S 40 - 60 | 0.005 - 0.007 | 0.007-0.012 | 0.012 - 0.020 | 0.020 - 0.030 | - | *** | *** |
| Matière exotique Exotisches material Exotic material | O 15 - 25 | 0.005 - 0.010 | 0.010 - 0.020 | 0.020 - 0.030 | 0.030 - 0.050 | - | *** | *** |

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr Gut / Very good

*** Excellent / Ausgezeichnet / Excellent

Fraises en bout

Schafffräser

End mills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | VC | 0.50 - 2.0 | 2.0 - 4.0 | 4.0 - 6.0 | 6.0 - 8.0 | 8.0 - 12.0 | Z | TAIN | STF | DLC |
|--|--------------------|---------------|---------------|---------------|---------------|---------------|-----|------|-----|-----|
| | (m/min) | fz (mm) | fz (mm) | fz (mm) | fz (mm) | fz (mm) | | | | |
| Acier de décolletage Automatenstahl Free-cutting steel | P 80 - 130 | 0.004-0.015 | 0.015 - 0.025 | 0.025 - 0.035 | 0.035 - 0.050 | 0.050 - 0.080 | - | *** | *** | - |
| Acier Stahl Steel < 600 N/mm ² | P 70 - 100 | 0.004-0.015 | 0.015 - 0.025 | 0.025 - 0.035 | 0.035 - 0.050 | 0.050 - 0.080 | - | *** | *** | - |
| Acier Stahl Steel < 800 N/mm ² | P 70 - 100 | 0.004-0.015 | 0.015 - 0.025 | 0.025 - 0.035 | 0.035 - 0.050 | 0.050 - 0.080 | - | *** | *** | - |
| Acier Stahl Steel > 800 N/mm ² | P 50 - 80 | 0.004-0.015 | 0.015 - 0.025 | 0.025 - 0.035 | 0.035 - 0.050 | 0.050 - 0.080 | - | *** | *** | - |
| Acier trempé Gehärteter Stahl -55HRC Hardened steel | H 60 - 90 | 0.002 - 0.008 | 0.008 - 0.015 | 0.012 - 0.020 | 0.020 - 0.025 | 0.025 - 0.030 | - | *** | *** | - |
| Acier trempé Gehärteter Stahl +55HRC Hardened steel | H 40 - 70 | 0.002 - 0.008 | 0.008 - 0.015 | 0.012 - 0.020 | 0.020 - 0.025 | 0.020 - 0.030 | - | *** | *** | - |
| Inox Rostfreistahl Stainless steel | M 40 - 80 | 0.003 - 0.008 | 0.008 - 0.015 | 0.015 - 0.020 | 0.020 - 0.030 | 0.030 - 0.050 | - | *** | *** | - |
| Aluminium | N 230 - 320 | 0.003 - 0.010 | 0.010 - 0.025 | 0.025 - 0.030 | 0.030 - 0.050 | 0.050 - 0.080 | ** | * | ** | *** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N 100 - 190 | 0.003 - 0.010 | 0.010 - 0.020 | 0.020 - 0.030 | 0.030 - 0.040 | 0.040 - 0.070 | ** | * | ** | *** |
| Matière synthétique Synthetisches Material Synthetic material | N 250 - 500 | 0.005 - 0.030 | 0.030 - 0.050 | 0.050 - 0.080 | 0.080 - 0.100 | 0.100 - 0.200 | *** | - | ** | *** |
| Métaux précieux Edelmetalle Precious metals | N 90 - 150 | 0.003 - 0.015 | 0.015 - 0.025 | 0.025 - 0.030 | 0.030 - 0.050 | 0.050 - 0.080 | *** | * | ** | *** |
| Titane Titan Titanium | S 30 - 70 | 0.004 - 0.010 | 0.010 - 0.017 | 0.017-0.025 | 0.025 - 0.035 | 0.035 - 0.050 | - | ** | *** | - |
| Alliage de nickel Nickel-Legierung Nickel alloy | S 30 - 60 | 0.003 - 0.008 | 0.008 - 0.015 | 0.015 - 0.020 | 0.020 - 0.025 | 0.025 - 0.040 | - | *** | *** | - |
| Matière exotique Exotisches material Exotic material | O 15 - 25 | 0.002 - 0.008 | 0.008 - 0.020 | 0.020 - 0.030 | 0.030 - 0.040 | 0.040 - 0.050 | - | *** | *** | ** |

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr Gut / Very good

*** Excellent / Ausgezeichnet / Excellent

Outils WM 701S

Werkzeuge WM 701S

Tools WM 701S

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | | VC | Z | TiAlN | STF | DLC |
|--|---------------------------|-----------|-----|-------|-----|-----|
| | | (m/min) | | | | |
| Acier de décolletage Automatenstahl Free-cutting steel | P | 120 - 180 | - | *** | *** | - |
| Acier Stahl Steel | < 600 N/mm ² P | 100 - 150 | - | *** | *** | - |
| Acier Stahl Steel | < 800 N/mm ² P | 100 - 130 | - | *** | *** | - |
| Acier Stahl Steel | > 800 N/mm ² P | 80 - 100 | - | *** | *** | - |
| Acier trempé Gehärteter Stahl -55HRC Hardened steel | H | - | - | *** | *** | - |
| Acier trempé Gehärteter Stahl +55HRC Hardened steel | H | - | - | *** | *** | - |
| Inox Rostfreistahl Stainless steel | M | 60 - 90 | - | *** | *** | - |
| Aluminium | N | 250 - 400 | ** | *** | *** | *** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N | 150 - 200 | *** | ** | ** | *** |
| Matière synthétique Synthetisches Material Synthetic material | N | 100 - 150 | *** | ** | ** | *** |
| Métaux précieux Edelmetalle Precious metals | N | 140 - 200 | *** | ** | ** | *** |
| Titane Titan Titanium | S | 40 - 70 | - | *** | *** | - |
| Alliage de nickel Nickel-Legierung Nickel alloy | S | 30 - 60 | - | *** | *** | - |
| Matière exotique Exotisches material Exotic material | O | 30 - 60 | - | *** | *** | *** |

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr Gut / Very good

*** Excellent / Ausgezeichnet / Excellent

Fraises à angler

Kegelsenker

Chamfering tools

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | | VC | Z | TiAlN | STF |
|--|---------------------------|-----------|-----|-------|-----|
| | | (m/min) | | | |
| Acier de décolletage Automatenstahl Free-cutting steel | P | 80 - 130 | * | *** | *** |
| Acier Stahl Steel | < 600 N/mm ² P | 70 - 100 | * | *** | *** |
| Acier Stahl Steel | < 800 N/mm ² P | 70 - 100 | * | *** | *** |
| Acier Stahl Steel | > 800 N/mm ² P | 50 - 80 | * | *** | *** |
| Acier trempé Gehärteter Stahl Hardened steel | -55HRC H | 60 - 90 | - | ** | *** |
| Acier trempé Gehärteter Stahl Hardened steel | +55HRC H | 40 - 70 | - | ** | *** |
| Inox Rostfreistahl Stainless steel | M | 50 - 100 | * | *** | *** |
| Aluminium | N | 200 - 300 | *** | ** | *** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N | 100 - 200 | *** | ** | *** |
| Matière synthétique Synthetisches Material Synthetic material | N | 200 - 500 | *** | ** | ** |
| Métaux précieux Edelmetalle Precious metals | N | 90 - 140 | *** | ** | *** |
| Titane Titan Titanium | S | 30 - 80 | - | *** | *** |
| Alliage de nickel Nickel-Legierung Nickel alloy | S | 30 - 60 | - | *** | *** |
| Matière exotique Exotisches material Exotic material | O | 20 - 30 | - | *** | *** |

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

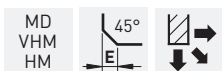
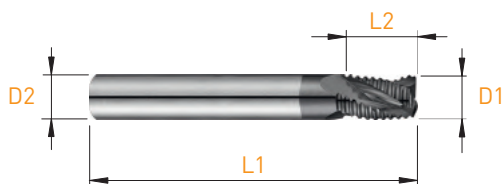
* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Fraises ébauches

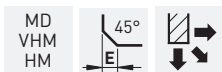
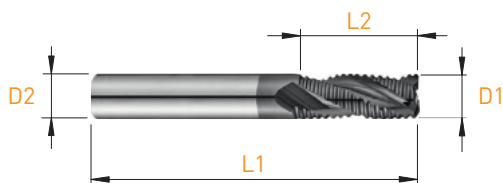
Schrupfräser

Roughing mills

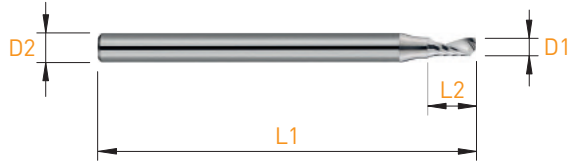
E-DHP3300 / 3400



| | Z | E | λ | D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z | TiAIN | STF |
|--|---|------|-----------|--------|-------|-------|----|---------------------|---|-------|-----|
| | 3 | 0.05 | 26°/30° | 1.00 | 1.50 | 3.00 | 39 | E-DHP3300-1.5-1.00 | ■ | ■ | ■ |
| | 3 | 0.10 | 26°/30° | 1.50 | 2.25 | 3.00 | 39 | E-DHP3300-1.5-1.50 | ■ | ■ | ■ |
| | 3 | 0.20 | 26°/30° | 2.00 | 3.00 | 3.00 | 39 | E-DHP3300-1.5-2.00 | ■ | ■ | ■ |
| | 3 | 0.20 | 26°/33° | 2.50 | 3.75 | 6.00 | 50 | E-DHP3300-1.5-2.50 | ■ | ■ | ■ |
| | 3 | 0.20 | 26°/33° | 3.00 | 4.25 | 6.00 | 50 | E-DHP3300-1.5-3.00 | ■ | ■ | ■ |
| | 3 | 0.30 | 26°/33° | 4.00 | 6.00 | 6.00 | 50 | E-DHP3300-1.5-4.00 | ■ | ■ | ■ |
| | 3 | 0.30 | 26°/33° | 5.00 | 7.50 | 6.00 | 50 | E-DHP3300-1.5-5.00 | ■ | ■ | ■ |
| | 3 | 0.40 | 26°/33° | 6.00 | 9.00 | 6.00 | 50 | E-DHP3300-1.5-6.00 | ■ | ■ | ■ |
| | 3 | 0.50 | 26°/33° | 8.00 | 12.00 | 8.00 | 64 | E-DHP3300-1.5-8.00 | ■ | ■ | ■ |
| | 4 | 0.50 | 26°/33° | 10.00 | 15.00 | 10.00 | 73 | E-DHP3400-1.5-10.00 | ■ | ■ | ■ |



| | Z | E | λ | D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z | TiAIN | STF |
|--|---|------|-----------|--------|-------|-------|----|---------------------|---|-------|-----|
| | 3 | 0.05 | 26°/30° | 1.00 | 2.50 | 3.00 | 39 | E-DHP3300-2.5-1.00 | ■ | ■ | ■ |
| | 3 | 0.10 | 26°/30° | 1.50 | 3.75 | 3.00 | 39 | E-DHP3300-2.5-1.50 | ■ | ■ | ■ |
| | 3 | 0.20 | 26°/30° | 2.00 | 5.00 | 3.00 | 39 | E-DHP3300-2.5-2.00 | ■ | ■ | ■ |
| | 3 | 0.20 | 26°/33° | 2.50 | 6.25 | 6.00 | 58 | E-DHP3300-2.5-2.50 | ■ | ■ | ■ |
| | 3 | 0.20 | 26°/33° | 3.00 | 7.50 | 6.00 | 58 | E-DHP3300-2.5-3.00 | ■ | ■ | ■ |
| | 3 | 0.30 | 26°/33° | 4.00 | 10.00 | 6.00 | 58 | E-DHP3300-2.5-4.00 | ■ | ■ | ■ |
| | 3 | 0.30 | 26°/33° | 5.00 | 12.50 | 6.00 | 58 | E-DHP3300-2.5-5.00 | ■ | ■ | ■ |
| | 3 | 0.40 | 26°/33° | 6.00 | 15.00 | 6.00 | 58 | E-DHP3300-2.5-6.00 | ■ | ■ | ■ |
| | 3 | 0.50 | 26°/33° | 8.00 | 20.00 | 8.00 | 64 | E-DHP3300-2.5-8.00 | ■ | ■ | ■ |
| | 4 | 0.50 | 26°/33° | 10.00 | 25.00 | 10.00 | 73 | E-DHP3400-2.5-10.00 | ■ | ■ | ■ |



| | | | | | |
|-----------------|---------------|-----------------|--|------|-----|
| MD VHM HM | λ 23° | Sharp Corner | | 2xD1 | Z=1 |
|-----------------|---------------|-----------------|--|------|-----|

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAIN | STF | DLC |
|--------|-------|-------|----|------------|---|-------|-----|-----|
| 1.00 | 2.00 | 6.00 | 50 | 3123-2-1.0 | ■ | ■ | ■ | ■ |
| 2.00 | 4.00 | 6.00 | 50 | 3123-2-2.0 | ■ | ■ | ■ | ■ |
| 3.00 | 6.00 | 6.00 | 50 | 3123-2-3.0 | ■ | ■ | ■ | ■ |
| 4.00 | 8.00 | 6.00 | 50 | 3123-2-4.0 | ■ | ■ | ■ | ■ |
| 5.00 | 10.00 | 6.00 | 50 | 3123-2-5.0 | ■ | ■ | ■ | ■ |
| 6.00 | 12.00 | 6.00 | 50 | 3123-2-6.0 | ■ | ■ | ■ | ■ |

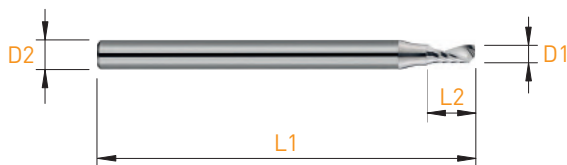
Fraises en bout de finition

Schlicht Schafffräser

Finishing end mills

3123-4

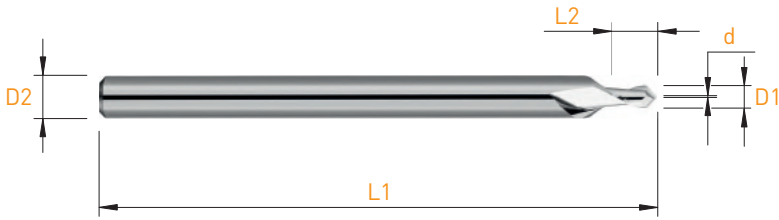
new



| | | | | | |
|-----------------|---------------|-----------------|--|------|-----|
| MD VHM HM | λ 23° | Sharp Corner | | 4xD1 | Z=1 |
|-----------------|---------------|-----------------|--|------|-----|

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAIN | STF | DLC |
|--------|-------|-------|----|------------|---|-------|-----|-----|
| 1.00 | 4.00 | 6.00 | 50 | 3123-4-1.0 | ■ | ■ | ■ | ■ |
| 2.00 | 8.00 | 6.00 | 50 | 3123-4-2.0 | ■ | ■ | ■ | ■ |
| 3.00 | 12.00 | 6.00 | 50 | 3123-4-3.0 | ■ | ■ | ■ | ■ |
| 4.00 | 16.00 | 6.00 | 50 | 3123-4-4.0 | ■ | ■ | ■ | ■ |
| 5.00 | 20.00 | 6.00 | 50 | 3123-4-5.0 | ■ | ■ | ■ | ■ |
| 6.00 | 24.00 | 6.00 | 50 | 3123-4-6.0 | ■ | ■ | ■ | ■ |

new



| D1 h10 | d | L2 | D2 Ø3h4 Ø4h5 Ø8h6 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----------------------------|----|------------|---|-------|-----|
| 0.50 | 0.05 | 1.00 | 3.00 | 39 | 3260MV-0.5 | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 3.00 | 39 | 3260MV-1.0 | ■ | ■ | ■ |
| 1.50 | 0.15 | 3.00 | 3.00 | 39 | 3260MV-1.5 | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 3.00 | 39 | 3260MV-2.0 | ■ | ■ | ■ |
| 2.50 | 0.25 | 5.00 | 3.00 | 39 | 3260MV-2.5 | ■ | ■ | ■ |
| 3.00 | 0.30 | 6.00 | 6.00 | 50 | 3260MV-3.0 | ■ | ■ | ■ |
| 4.00 | 0.40 | 8.00 | 6.00 | 50 | 3260MV-4.0 | ■ | ■ | ■ |
| 6.00 | 0.60 | 12.00 | 8.00 | 64 | 3260MV-6.0 | ■ | ■ | ■ |

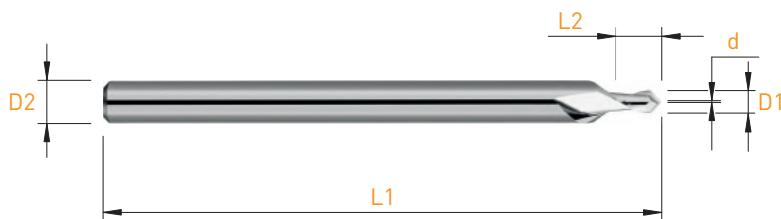
Fraises en bout

Schafffräser

End mills

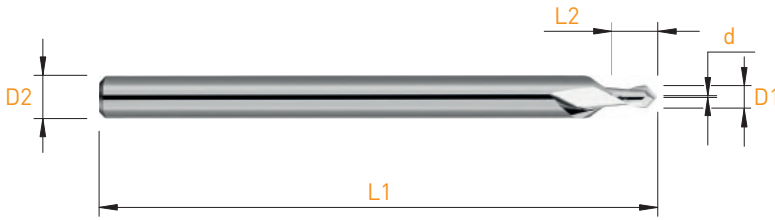
3290MV

new



| D1 h10 | d | L2 | D2 Ø3h4 Ø6h5 Ø8h6 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----------------------------|----|------------|---|-------|-----|
| 0.30 | 0.03 | 0.60 | 3.00 | 39 | 3290MV-0.3 | ■ | ■ | ■ |
| 0.40 | 0.04 | 0.80 | 3.00 | 39 | 3290MV-0.4 | ■ | ■ | ■ |
| 0.50 | 0.05 | 1.00 | 3.00 | 39 | 3290MV-0.5 | ■ | ■ | ■ |
| 0.60 | 0.06 | 1.20 | 3.00 | 39 | 3290MV-0.6 | ■ | ■ | ■ |
| 0.70 | 0.07 | 1.40 | 3.00 | 39 | 3290MV-0.7 | ■ | ■ | ■ |
| 0.80 | 0.08 | 1.60 | 3.00 | 39 | 3290MV-0.8 | ■ | ■ | ■ |
| 0.90 | 0.09 | 1.80 | 3.00 | 39 | 3290MV-0.9 | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 3.00 | 39 | 3290MV-1.0 | ■ | ■ | ■ |
| 1.10 | 0.11 | 2.20 | 3.00 | 39 | 3290MV-1.1 | ■ | ■ | ■ |
| 1.20 | 0.12 | 2.40 | 3.00 | 39 | 3290MV-1.2 | ■ | ■ | ■ |
| 1.30 | 0.13 | 2.60 | 3.00 | 39 | 3290MV-1.3 | ■ | ■ | ■ |
| 1.40 | 0.14 | 2.80 | 3.00 | 39 | 3290MV-1.4 | ■ | ■ | ■ |
| 1.50 | 0.15 | 3.00 | 3.00 | 39 | 3290MV-1.5 | ■ | ■ | ■ |
| 1.60 | 0.16 | 3.20 | 3.00 | 39 | 3290MV-1.6 | ■ | ■ | ■ |
| 1.70 | 0.17 | 3.40 | 3.00 | 39 | 3290MV-1.7 | ■ | ■ | ■ |
| 1.80 | 0.18 | 3.60 | 3.00 | 39 | 3290MV-1.8 | ■ | ■ | ■ |
| 1.90 | 0.19 | 3.80 | 3.00 | 39 | 3290MV-1.9 | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 3.00 | 39 | 3290MV-2.0 | ■ | ■ | ■ |
| 2.50 | 0.25 | 5.00 | 3.00 | 39 | 3290MV-2.5 | ■ | ■ | ■ |
| 3.00 | 0.30 | 6.00 | 6.00 | 50 | 3290MV-3.0 | ■ | ■ | ■ |
| 4.00 | 0.40 | 8.00 | 6.00 | 50 | 3290MV-4.0 | ■ | ■ | ■ |
| 6.00 | 0.60 | 12.00 | 8.00 | 64 | 3290MV-6.0 | ■ | ■ | ■ |

new



| D1 h10 | d | L2 | D2 Ø3h4 Ø4h5 Ø8h6 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----------------------------|----|-------------|---|-------|-----|
| 0.50 | 0.05 | 1.00 | 3.00 | 39 | 32120MV-0.5 | ■ | ■ | ■ |
| 1.00 | 0.10 | 2.00 | 3.00 | 39 | 32120MV-1.0 | ■ | ■ | ■ |
| 1.50 | 0.15 | 3.00 | 3.00 | 39 | 32120MV-1.5 | ■ | ■ | ■ |
| 2.00 | 0.20 | 4.00 | 3.00 | 39 | 32120MV-2.0 | ■ | ■ | ■ |
| 2.50 | 0.25 | 5.00 | 3.00 | 39 | 32120MV-2.5 | ■ | ■ | ■ |
| 3.00 | 0.30 | 6.00 | 6.00 | 50 | 32120MV-3.0 | ■ | ■ | ■ |
| 4.00 | 0.40 | 8.00 | 6.00 | 50 | 32120MV-4.0 | ■ | ■ | ■ |
| 6.00 | 0.60 | 12.00 | 8.00 | 64 | 32120MV-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

Schlicht Schafffräser

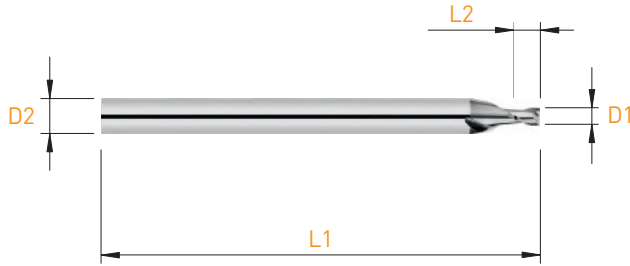
Finishing end mills

3230



| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----|----------|---|-------|-----|
| 1.00 | 1.00 | 6.00 | 50 | 3230-1.0 | ■ | ■ | ■ |
| 1.50 | 1.50 | 6.00 | 50 | 3230-1.5 | ■ | ■ | ■ |
| 2.00 | 2.00 | 6.00 | 50 | 3230-2.0 | ■ | ■ | ■ |
| 2.50 | 2.50 | 6.00 | 50 | 3230-2.5 | ■ | ■ | ■ |
| 3.00 | 3.00 | 6.00 | 50 | 3230-3.0 | ■ | ■ | ■ |
| 4.00 | 4.00 | 6.00 | 50 | 3230-4.0 | ■ | ■ | ■ |
| 5.00 | 5.00 | 6.00 | 50 | 3230-5.0 | ■ | ■ | ■ |
| 6.00 | 6.00 | 6.00 | 50 | 3230-6.0 | ■ | ■ | ■ |

new



| | | | | | | |
|-----------------|---------------|-----------------|--|--------|-----|--|
| MD VHM HM | λ 30° | Sharp Corner | | 1.5xD1 | Z=2 | |
|-----------------|---------------|-----------------|--|--------|-----|--|

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----|--------------|---|-------|-----|
| 3.00 | 4.50 | 6.00 | 50 | 3230-1.5-3.0 | ■ | ■ | ■ |
| 3.50 | 5.00 | 6.00 | 50 | 3230-1.5-3.5 | ■ | ■ | ■ |
| 4.00 | 6.00 | 6.00 | 50 | 3230-1.5-4.0 | ■ | ■ | ■ |
| 4.50 | 7.00 | 6.00 | 50 | 3230-1.5-4.5 | ■ | ■ | ■ |
| 5.00 | 8.00 | 6.00 | 50 | 3230-1.5-5.0 | ■ | ■ | ■ |
| 6.00 | 9.00 | 6.00 | 50 | 3230-1.5-6.0 | ■ | ■ | ■ |

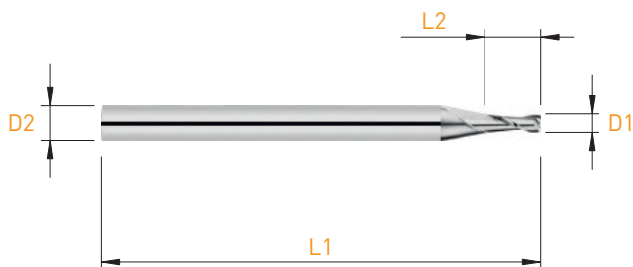
Fraises en bout de finition

Schlicht Schafffräser

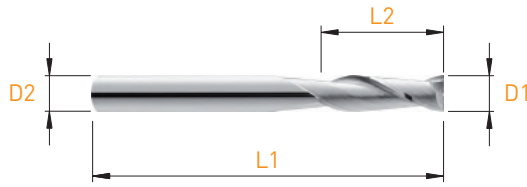
Finishing end mills

3230-3

new



| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TIAIN | STF |
|--------|-------|-------|----|------------|---|-------|-----|
| 3.00 | 9.00 | 6.00 | 50 | 3230-3-3.0 | ■ | ■ | ■ |
| 3.50 | 10.00 | 6.00 | 50 | 3230-3-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 6.00 | 50 | 3230-3-4.0 | ■ | ■ | ■ |
| 4.50 | 13.00 | 6.00 | 50 | 3230-3-4.5 | ■ | ■ | ■ |
| 5.00 | 15.00 | 6.00 | 50 | 3230-3-5.0 | ■ | ■ | ■ |
| 6.00 | 18.00 | 6.00 | 50 | 3230-3-6.0 | ■ | ■ | ■ |



| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|----------|---|-------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3231-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3231-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3231-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3231-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3231-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3231-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3231-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3231-6.0 | ■ | ■ | ■ |

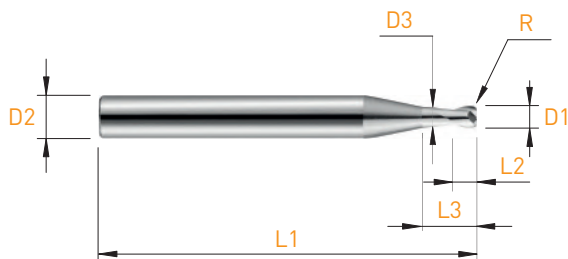
Fraises en bout de finition

Schlicht Schafffräser

Finishing end mills

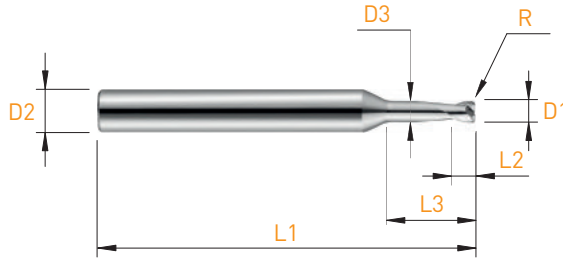
3239T-2.5X

new



| D1 h10 | R +/- 0.02 | L2 | L3 | D3 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|---------------|------|-------|------|-------|----|----------------|---|-------|-----|
| 3.00 | 0.50 | 3.00 | 7.50 | 2.95 | 6.00 | 57 | 3239T-2.5X-3.0 | ■ | ■ | ■ |
| 3.50 | 0.50 | 3.50 | 8.75 | 3.45 | 6.00 | 57 | 3239T-2.5X-3.5 | ■ | ■ | ■ |
| 4.00 | 0.50 | 4.00 | 10.00 | 3.95 | 6.00 | 57 | 3239T-2.5X-4.0 | ■ | ■ | ■ |
| 4.50 | 0.50 | 4.50 | 11.25 | 4.45 | 6.00 | 57 | 3239T-2.5X-4.5 | ■ | ■ | ■ |
| 5.00 | 0.50 | 5.00 | 12.50 | 4.95 | 6.00 | 57 | 3239T-2.5X-5.0 | ■ | ■ | ■ |
| 5.50 | 0.50 | 5.50 | 13.75 | 5.45 | 6.00 | 57 | 3239T-2.5X-5.5 | ■ | ■ | ■ |
| 6.00 | 0.50 | 6.00 | 15.00 | 5.95 | 6.00 | 57 | 3239T-2.5X-6.0 | ■ | ■ | ■ |

new



| D1 h10 | R +/- 0.02 | L2 | L3 | D3 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|---------------|------|-------|------|-------|----|--------------|---|-------|-----|
| 3.00 | 0.50 | 3.00 | 12.00 | 2.95 | 6.00 | 57 | 3239T-4X-3.0 | ■ | ■ | ■ |
| 3.50 | 0.50 | 3.50 | 14.00 | 3.45 | 6.00 | 57 | 3239T-4X-3.5 | ■ | ■ | ■ |
| 4.00 | 0.50 | 4.00 | 16.00 | 3.95 | 6.00 | 57 | 3239T-4X-4.0 | ■ | ■ | ■ |
| 4.50 | 0.50 | 4.50 | 18.00 | 4.45 | 6.00 | 57 | 3239T-4X-4.5 | ■ | ■ | ■ |
| 5.00 | 0.50 | 5.00 | 20.00 | 4.95 | 6.00 | 57 | 3239T-4X-5.0 | ■ | ■ | ■ |
| 5.50 | 0.50 | 5.50 | 22.00 | 5.45 | 6.00 | 57 | 3239T-4X-5.5 | ■ | ■ | ■ |
| 6.00 | 0.50 | 6.00 | 24.00 | 5.95 | 6.00 | 57 | 3239T-4X-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

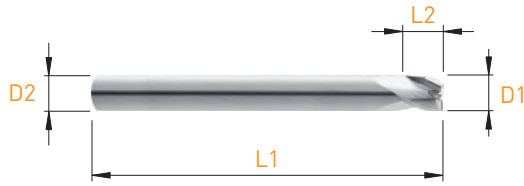
Schlicht Schafffräser

Finishing end mills

3330-S



| D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----|------------|---|-------|-----|
| 1.00 | 3.00 | 6.00 | 40 | 3330-S-1.0 | ■ | ■ | ■ |
| 1.50 | 3.00 | 6.00 | 40 | 3330-S-1.5 | ■ | ■ | ■ |
| 2.00 | 3.00 | 6.00 | 40 | 3330-S-2.0 | ■ | ■ | ■ |
| 2.50 | 3.00 | 6.00 | 40 | 3330-S-2.5 | ■ | ■ | ■ |
| 3.00 | 4.00 | 6.00 | 40 | 3330-S-3.0 | ■ | ■ | ■ |
| 3.50 | 4.00 | 6.00 | 40 | 3330-S-3.5 | ■ | ■ | ■ |
| 4.00 | 5.00 | 6.00 | 40 | 3330-S-4.0 | ■ | ■ | ■ |
| 4.50 | 5.00 | 6.00 | 40 | 3330-S-4.5 | ■ | ■ | ■ |
| 5.00 | 6.00 | 6.00 | 40 | 3330-S-5.0 | ■ | ■ | ■ |
| 6.00 | 7.00 | 6.00 | 40 | 3330-S-6.0 | ■ | ■ | ■ |



| D1 e9 | L2 | D2 h6 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|-----------|---|-------|-----|
| 3.00 | 3.00 | 3.00 | 39 | 3330-3.0 | ■ | ■ | ■ |
| 4.00 | 4.00 | 4.00 | 50 | 3330-4.0 | ■ | ■ | ■ |
| 5.00 | 5.00 | 5.00 | 50 | 3330-5.0 | ■ | ■ | ■ |
| 6.00 | 6.00 | 6.00 | 50 | 3330-6.0 | ■ | ■ | ■ |
| 8.00 | 8.00 | 8.00 | 58 | 3330-8.0 | ■ | | |
| 10.00 | 10.00 | 10.00 | 66 | 3330-10.0 | ■ | | |
| 12.00 | 12.00 | 12.00 | 73 | 3330-12.0 | ■ | | |

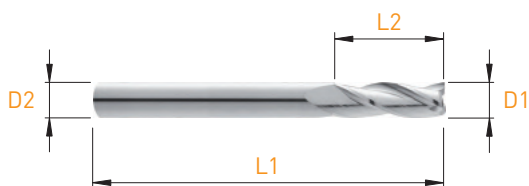
Fraises en bout de finition

Schlicht Schafffräser

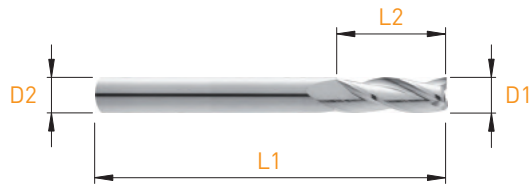
Finishing end mills

3330-4

new



| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|-------|-------|----|------------|---|-------|-----|
| 3.00 | 12.00 | 6.00 | 50 | 3330-4-3.0 | ■ | ■ | ■ |
| 4.00 | 16.00 | 6.00 | 50 | 3330-4-4.0 | ■ | ■ | ■ |
| 5.00 | 20.00 | 6.00 | 50 | 3330-4-5.0 | ■ | ■ | ■ |
| 6.00 | 24.00 | 6.00 | 57 | 3330-4-6.0 | ■ | ■ | ■ |



| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|----------|---|-------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3331-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3331-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3331-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3331-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3331-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3331-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3331-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3331-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

Schlicht Schafffräser

Finishing end mills

3336-HA / 3337-HA

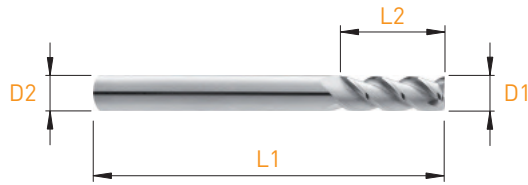


| | | | | | | |
|-----------------|---------------|-----------------|--|--------------|-----|--|
| MD VHM HM | λ 30° | Sharp Corner | | DIN 6527K | Z=3 | |
|-----------------|---------------|-----------------|--|--------------|-----|--|

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----|-------------|---|-------|-----|
| 1.50 | 3.00 | 6.00 | 50 | 3336-HA-1.5 | ■ | ■ | ■ |
| 1.80 | 3.00 | 6.00 | 50 | 3336-HA-1.8 | ■ | ■ | ■ |
| 2.00 | 3.00 | 6.00 | 50 | 3336-HA-2.0 | ■ | ■ | ■ |
| 2.50 | 3.00 | 6.00 | 50 | 3336-HA-2.5 | ■ | ■ | ■ |
| 2.80 | 4.00 | 6.00 | 50 | 3336-HA-2.8 | ■ | ■ | ■ |
| 3.00 | 4.00 | 6.00 | 50 | 3336-HA-3.0 | ■ | ■ | ■ |
| 3.50 | 4.00 | 6.00 | 50 | 3336-HA-3.5 | ■ | ■ | ■ |
| 3.80 | 5.00 | 6.00 | 54 | 3336-HA-3.8 | ■ | ■ | ■ |
| 4.00 | 5.00 | 6.00 | 54 | 3336-HA-4.0 | ■ | ■ | ■ |
| 4.50 | 5.00 | 6.00 | 54 | 3336-HA-4.5 | ■ | ■ | ■ |
| 4.80 | 6.00 | 6.00 | 54 | 3336-HA-4.8 | ■ | ■ | ■ |
| 5.00 | 6.00 | 6.00 | 54 | 3336-HA-5.0 | ■ | ■ | ■ |
| 5.50 | 7.00 | 6.00 | 54 | 3336-HA-5.5 | ■ | ■ | ■ |
| 5.80 | 7.00 | 6.00 | 54 | 3336-HA-5.8 | ■ | ■ | ■ |
| 6.00 | 7.00 | 6.00 | 54 | 3336-HA-6.0 | ■ | ■ | ■ |

| | | | | | | |
|-----------------|---------------|-----------------|--|--------------|-----|--|
| MD VHM HM | λ 30° | Sharp Corner | | DIN 6527L | Z=3 | |
|-----------------|---------------|-----------------|--|--------------|-----|--|

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|-------|-------|----|-------------|---|-------|-----|
| 1.50 | 6.00 | 6.00 | 57 | 3337-HA-1.5 | ■ | ■ | ■ |
| 1.80 | 6.00 | 6.00 | 57 | 3337-HA-1.8 | ■ | ■ | ■ |
| 2.00 | 6.00 | 6.00 | 57 | 3337-HA-2.0 | ■ | ■ | ■ |
| 2.50 | 6.00 | 6.00 | 57 | 3337-HA-2.5 | ■ | ■ | ■ |
| 2.80 | 7.00 | 6.00 | 57 | 3337-HA-2.8 | ■ | ■ | ■ |
| 3.00 | 7.00 | 6.00 | 57 | 3337-HA-3.0 | ■ | ■ | ■ |
| 3.50 | 7.00 | 6.00 | 57 | 3337-HA-3.5 | ■ | ■ | ■ |
| 3.80 | 8.00 | 6.00 | 57 | 3337-HA-3.8 | ■ | ■ | ■ |
| 4.00 | 8.00 | 6.00 | 57 | 3337-HA-4.0 | ■ | ■ | ■ |
| 4.50 | 8.00 | 6.00 | 57 | 3337-HA-4.5 | ■ | ■ | ■ |
| 4.80 | 10.00 | 6.00 | 57 | 3337-HA-4.8 | ■ | ■ | ■ |
| 5.00 | 10.00 | 6.00 | 57 | 3337-HA-5.0 | ■ | ■ | ■ |
| 5.50 | 10.00 | 6.00 | 57 | 3337-HA-5.5 | ■ | ■ | ■ |
| 5.80 | 10.00 | 6.00 | 57 | 3337-HA-5.8 | ■ | ■ | ■ |
| 6.00 | 10.00 | 6.00 | 57 | 3337-HA-6.0 | ■ | ■ | ■ |



| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|-----------------|---|-------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3341-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3341-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3341-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3341-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3341-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3341-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3341-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3341-6.0 | ■ | ■ | ■ |

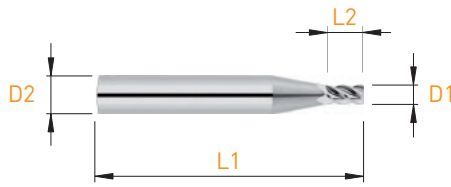
Fraises en bout de finition

Schlicht Schafffräser

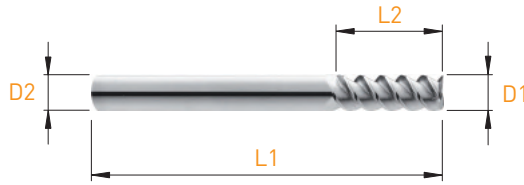
Finishing end mills

3345-S

new



| D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z | TAIN | STF |
|--------|-------|-------|----|------------|---|------|-----|
| 0.50 | 1.00 | 6.00 | 40 | 3345-S-0.5 | ■ | ■ | ■ |
| 0.60 | 1.20 | 6.00 | 40 | 3345-S-0.6 | ■ | ■ | ■ |
| 0.70 | 1.40 | 6.00 | 40 | 3345-S-0.7 | ■ | ■ | ■ |
| 0.80 | 1.60 | 6.00 | 40 | 3345-S-0.8 | ■ | ■ | ■ |
| 0.90 | 1.80 | 6.00 | 40 | 3345-S-0.9 | ■ | ■ | ■ |
| 1.00 | 2.00 | 6.00 | 40 | 3345-S-1.0 | ■ | ■ | ■ |
| 1.10 | 2.20 | 6.00 | 40 | 3345-S-1.1 | ■ | ■ | ■ |
| 1.20 | 2.40 | 6.00 | 40 | 3345-S-1.2 | ■ | ■ | ■ |
| 1.30 | 2.60 | 6.00 | 40 | 3345-S-1.3 | ■ | ■ | ■ |
| 1.40 | 2.80 | 6.00 | 40 | 3345-S-1.4 | ■ | ■ | ■ |
| 1.50 | 3.00 | 6.00 | 40 | 3345-S-1.5 | ■ | ■ | ■ |
| 1.60 | 3.20 | 6.00 | 40 | 3345-S-1.6 | ■ | ■ | ■ |
| 1.70 | 3.40 | 6.00 | 40 | 3345-S-1.7 | ■ | ■ | ■ |
| 1.80 | 3.60 | 6.00 | 40 | 3345-S-1.8 | ■ | ■ | ■ |
| 1.90 | 3.80 | 6.00 | 40 | 3345-S-1.9 | ■ | ■ | ■ |
| 2.00 | 4.00 | 6.00 | 40 | 3345-S-2.0 | ■ | ■ | ■ |
| 2.10 | 4.20 | 6.00 | 40 | 3345-S-2.1 | ■ | ■ | ■ |
| 2.20 | 4.40 | 6.00 | 40 | 3345-S-2.2 | ■ | ■ | ■ |
| 2.30 | 4.60 | 6.00 | 40 | 3345-S-2.3 | ■ | ■ | ■ |
| 2.40 | 4.80 | 6.00 | 40 | 3345-S-2.4 | ■ | ■ | ■ |
| 2.50 | 5.00 | 6.00 | 40 | 3345-S-2.5 | ■ | ■ | ■ |
| 2.60 | 5.20 | 6.00 | 40 | 3345-S-2.6 | ■ | ■ | ■ |
| 2.70 | 5.40 | 6.00 | 40 | 3345-S-2.7 | ■ | ■ | ■ |
| 2.80 | 5.60 | 6.00 | 40 | 3345-S-2.8 | ■ | ■ | ■ |
| 2.90 | 5.80 | 6.00 | 40 | 3345-S-2.9 | ■ | ■ | ■ |
| 3.00 | 6.00 | 6.00 | 40 | 3345-S-3.0 | ■ | ■ | ■ |
| 3.50 | 7.00 | 6.00 | 40 | 3345-S-3.5 | ■ | ■ | ■ |
| 4.00 | 8.00 | 6.00 | 40 | 3345-S-4.0 | ■ | ■ | ■ |
| 4.50 | 9.00 | 6.00 | 40 | 3345-S-4.5 | ■ | ■ | ■ |
| 5.00 | 10.00 | 6.00 | 40 | 3345-S-5.0 | ■ | ■ | ■ |
| 6.00 | 12.00 | 6.00 | 40 | 3345-S-6.0 | ■ | ■ | ■ |



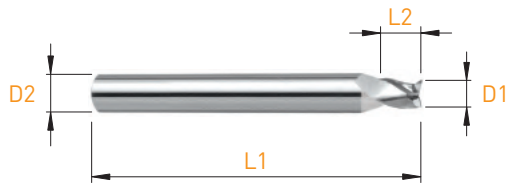
| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|-----------------|---|-------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3361-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3361-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3361-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3361-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3361-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3361-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3361-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3361-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

Schlicht Schafffräser

Finishing end mills

DHP3336



DHP

Denture à pas irrégulier, angle d'hélice progressif
 Ungleiche Teilung, progressive Drallwinkel
 Uneven tooth pitch, progressive helix angle

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TIALIN | STF |
|--------|------|-------|----|-------------|---|--------|-----|
| 1.00 | 4.00 | 6.00 | 40 | DHP3336-1.0 | ■ | ■ | ■ |
| 1.50 | 4.00 | 6.00 | 40 | DHP3336-1.5 | ■ | ■ | ■ |
| 2.00 | 4.00 | 6.00 | 40 | DHP3336-2.0 | ■ | ■ | ■ |
| 2.50 | 4.00 | 6.00 | 40 | DHP3336-2.5 | ■ | ■ | ■ |
| 3.00 | 5.00 | 6.00 | 40 | DHP3336-3.0 | ■ | ■ | ■ |
| 3.50 | 5.00 | 6.00 | 40 | DHP3336-3.5 | ■ | ■ | ■ |
| 4.00 | 6.00 | 6.00 | 40 | DHP3336-4.0 | ■ | ■ | ■ |
| 5.00 | 7.00 | 6.00 | 40 | DHP3336-5.0 | ■ | ■ | ■ |
| 6.00 | 8.00 | 6.00 | 40 | DHP3336-6.0 | ■ | ■ | ■ |



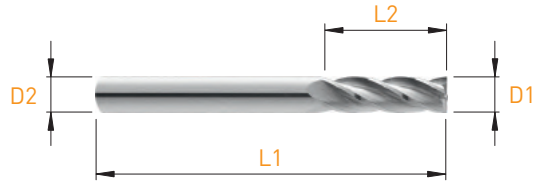
| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|------|-------|----|----------|---|-------|-----|
| 3.00 | 3.00 | 3.00 | 39 | 3430-3.0 | ■ | ■ | ■ |
| 4.00 | 4.00 | 4.00 | 50 | 3430-4.0 | ■ | ■ | ■ |
| 5.00 | 5.00 | 5.00 | 50 | 3430-5.0 | ■ | ■ | ■ |
| 6.00 | 6.00 | 6.00 | 50 | 3430-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

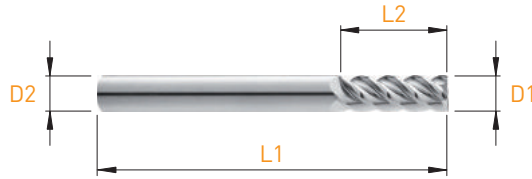
Schlicht Schafffräser

Finishing end mills

3431



| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TAIN | STF |
|-------|-------|-------|----|----------|---|------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3431-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3431-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3431-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3431-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3431-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3431-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3431-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3431-6.0 | ■ | ■ | ■ |



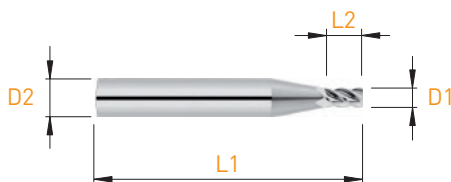
| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|----------|---|-------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3441-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3441-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3441-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3441-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3441-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3441-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3441-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3441-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

Schlicht Schafffräser

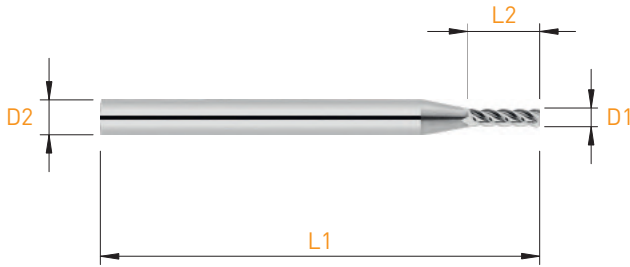
Finishing end mills

3445-S



| D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z | TIAIN | STF |
|--------|-------|-------|----|------------|---|-------|-----|
| 0.50 | 1.00 | 6.00 | 40 | 3445-S-0.5 | ■ | ■ | new |
| 0.60 | 1.20 | 6.00 | 40 | 3445-S-0.6 | ■ | ■ | new |
| 0.70 | 1.40 | 6.00 | 40 | 3445-S-0.7 | ■ | ■ | new |
| 0.80 | 1.60 | 6.00 | 40 | 3445-S-0.8 | ■ | ■ | new |
| 0.90 | 1.80 | 6.00 | 40 | 3445-S-0.9 | ■ | ■ | new |
| 1.00 | 2.00 | 6.00 | 40 | 3445-S-1.0 | ■ | ■ | |
| 1.10 | 2.20 | 6.00 | 40 | 3445-S-1.1 | ■ | ■ | new |
| 1.20 | 2.40 | 6.00 | 40 | 3445-S-1.2 | ■ | ■ | new |
| 1.30 | 2.60 | 6.00 | 40 | 3445-S-1.3 | ■ | ■ | new |
| 1.40 | 2.80 | 6.00 | 40 | 3445-S-1.4 | ■ | ■ | new |
| 1.50 | 3.00 | 6.00 | 40 | 3445-S-1.5 | ■ | ■ | |
| 1.60 | 3.20 | 6.00 | 40 | 3445-S-1.6 | ■ | ■ | new |
| 1.70 | 3.40 | 6.00 | 40 | 3445-S-1.7 | ■ | ■ | new |
| 1.80 | 3.60 | 6.00 | 40 | 3445-S-1.8 | ■ | ■ | new |
| 1.90 | 3.80 | 6.00 | 40 | 3445-S-1.9 | ■ | ■ | new |
| 2.00 | 4.00 | 6.00 | 40 | 3445-S-2.0 | ■ | ■ | |
| 2.10 | 4.20 | 6.00 | 40 | 3445-S-2.1 | ■ | ■ | new |
| 2.20 | 4.40 | 6.00 | 40 | 3445-S-2.2 | ■ | ■ | new |
| 2.30 | 4.60 | 6.00 | 40 | 3445-S-2.3 | ■ | ■ | new |
| 2.40 | 4.80 | 6.00 | 40 | 3445-S-2.4 | ■ | ■ | new |
| 2.50 | 5.00 | 6.00 | 40 | 3445-S-2.5 | ■ | ■ | |
| 2.60 | 5.20 | 6.00 | 40 | 3445-S-2.6 | ■ | ■ | new |
| 2.70 | 5.40 | 6.00 | 40 | 3445-S-2.7 | ■ | ■ | new |
| 2.80 | 5.60 | 6.00 | 40 | 3445-S-2.8 | ■ | ■ | new |
| 2.90 | 5.80 | 6.00 | 40 | 3445-S-2.9 | ■ | ■ | new |
| 3.00 | 6.00 | 6.00 | 40 | 3445-S-3.0 | ■ | ■ | |
| 3.50 | 7.00 | 6.00 | 40 | 3445-S-3.5 | ■ | ■ | |
| 4.00 | 8.00 | 6.00 | 40 | 3445-S-4.0 | ■ | ■ | |
| 4.50 | 9.00 | 6.00 | 40 | 3445-S-4.5 | ■ | ■ | |
| 5.00 | 10.00 | 6.00 | 40 | 3445-S-5.0 | ■ | ■ | |
| 6.00 | 12.00 | 6.00 | 40 | 3445-S-6.0 | ■ | ■ | |

new



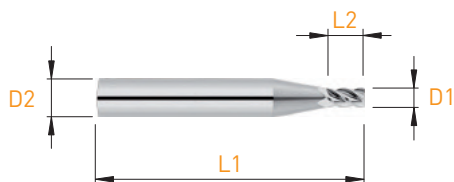
| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAIN | STF |
|--------|------|-------|----|----------|---|-------|-----|
| 1.00 | 1.50 | 6.00 | 50 | 3450-1.0 | ■ | ■ | ■ |
| 1.50 | 2.25 | 6.00 | 50 | 3450-1.5 | ■ | ■ | ■ |
| 2.00 | 3.00 | 6.00 | 50 | 3450-2.0 | ■ | ■ | ■ |
| 2.50 | 3.75 | 6.00 | 50 | 3450-2.5 | ■ | ■ | ■ |
| 3.00 | 4.50 | 6.00 | 50 | 3450-3.0 | ■ | ■ | ■ |
| 3.50 | 5.25 | 6.00 | 50 | 3450-3.5 | ■ | ■ | ■ |
| 4.00 | 6.00 | 6.00 | 50 | 3450-4.0 | ■ | ■ | ■ |
| 5.00 | 7.50 | 6.00 | 50 | 3450-5.0 | ■ | ■ | ■ |
| 6.00 | 9.00 | 6.00 | 50 | 3450-6.0 | ■ | ■ | ■ |

Fraises en bout de finition

Schlicht Schafffräser

Finishing end mills

DHP3436

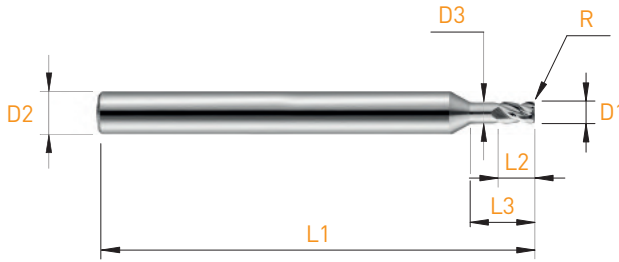


DHP

Denture à pas irrégulier, angle d'hélice progressive
 Ungleiche Teilung, progressive Drallwinkel
 Uneven tooth pitch, progressive helix angle

| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAIN | STF |
|--------|------|-------|----|-------------|---|-------|-----|
| 1.00 | 4.00 | 6.00 | 40 | DHP3436-1.0 | ■ | ■ | ■ |
| 1.50 | 4.00 | 6.00 | 40 | DHP3436-1.5 | ■ | ■ | ■ |
| 2.00 | 4.00 | 6.00 | 40 | DHP3436-2.0 | ■ | ■ | ■ |
| 2.50 | 4.00 | 6.00 | 40 | DHP3436-2.5 | ■ | ■ | ■ |
| 3.00 | 5.00 | 6.00 | 40 | DHP3436-3.0 | ■ | ■ | ■ |
| 3.50 | 5.00 | 6.00 | 40 | DHP3436-3.5 | ■ | ■ | ■ |
| 4.00 | 6.00 | 6.00 | 40 | DHP3436-4.0 | ■ | ■ | ■ |
| 5.00 | 7.00 | 6.00 | 40 | DHP3436-5.0 | ■ | ■ | ■ |
| 6.00 | 8.00 | 6.00 | 40 | DHP3436-6.0 | ■ | ■ | ■ |

new



MD VHM HM λ 30° Radius Corner L3 2.5xD1 Z=4

| D1 h10 | R +/- 0.02 | L2 | L3 | D3 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------------|------|-------|------|-------|----|----------------|---|-------|-----|
| 3.00 | 0.50 | 3.00 | 7.50 | 2.95 | 6.00 | 57 | 3439T-2.5X-3.0 | ■ | ■ | ■ |
| 3.50 | 0.50 | 3.50 | 8.75 | 3.45 | 6.00 | 57 | 3439T-2.5X-3.5 | ■ | ■ | ■ |
| 4.00 | 0.50 | 4.00 | 10.00 | 3.95 | 6.00 | 57 | 3439T-2.5X-4.0 | ■ | ■ | ■ |
| 4.50 | 0.50 | 4.50 | 11.25 | 4.45 | 6.00 | 57 | 3439T-2.5X-4.5 | ■ | ■ | ■ |
| 5.00 | 0.50 | 5.00 | 12.50 | 4.95 | 6.00 | 57 | 3439T-2.5X-5.0 | ■ | ■ | ■ |
| 5.50 | 0.50 | 5.50 | 13.75 | 5.45 | 6.00 | 57 | 3439T-2.5X-5.5 | ■ | ■ | ■ |
| 6.00 | 0.50 | 6.00 | 15.00 | 5.95 | 6.00 | 57 | 3439T-2.5X-6.0 | ■ | ■ | ■ |

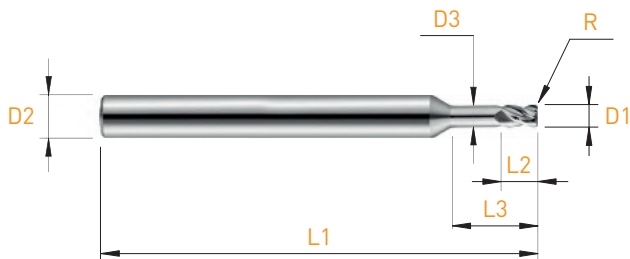
Fraises en bout toriques

Torische Schaftfräser

Toric end mills

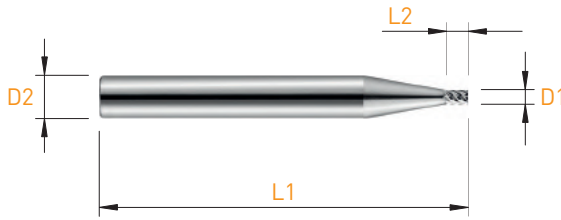
3439T-4X

new



| D1 h10 | R +/- 0.02 | L2 | L3 | D3 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|---------------|------|-------|------|-------|----|--------------|---|-------|-----|
| 3.00 | 0.50 | 3.00 | 12.00 | 2.95 | 6.00 | 57 | 3439T-4X-3.0 | ■ | ■ | ■ |
| 3.50 | 0.50 | 3.50 | 14.00 | 3.45 | 6.00 | 57 | 3439T-4X-3.5 | ■ | ■ | ■ |
| 4.00 | 0.50 | 4.00 | 16.00 | 3.95 | 6.00 | 57 | 3439T-4X-4.0 | ■ | ■ | ■ |
| 4.50 | 0.50 | 4.50 | 18.00 | 4.45 | 6.00 | 57 | 3439T-4X-4.5 | ■ | ■ | ■ |
| 5.00 | 0.50 | 5.00 | 20.00 | 4.95 | 6.00 | 57 | 3439T-4X-5.0 | ■ | ■ | ■ |
| 5.50 | 0.50 | 5.50 | 22.00 | 5.45 | 6.00 | 57 | 3439T-4X-5.5 | ■ | ■ | ■ |
| 6.00 | 0.50 | 6.00 | 24.00 | 5.95 | 6.00 | 57 | 3439T-4X-6.0 | ■ | ■ | ■ |

new



| D1 h10 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|--------|------|-------|----|----------|---|-------|-----|
| 1.00 | 1.50 | 6.00 | 50 | 3545-1.0 | ■ | ■ | ■ |
| 2.00 | 3.00 | 6.00 | 50 | 3545-2.0 | ■ | ■ | ■ |
| 3.00 | 4.50 | 6.00 | 50 | 3545-3.0 | ■ | ■ | ■ |
| 4.00 | 6.00 | 6.00 | 50 | 3545-4.0 | ■ | ■ | ■ |
| 5.00 | 7.50 | 6.00 | 50 | 3545-5.0 | ■ | ■ | ■ |
| 6.00 | 9.00 | 6.00 | 50 | 3545-6.0 | ■ | ■ | ■ |

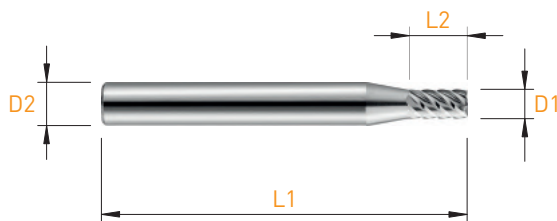
Fraises en bout de finition

Schlicht Schafffräser

Finishing end mills

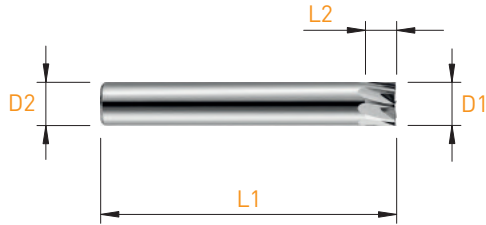
35645

new

MD
VHM
HM λ 45°Sharp
CornerZ=4
Z=5
Z=6

| D1 h10 | L2 | Z | D2 h5 | L1 | Art. N° | Z | TiAIN | STF |
|--------|-------|---|-------|----|-----------|---|-------|-----|
| 1.00 | 2.00 | 4 | 6.00 | 50 | 35645-1.0 | ■ | ■ | ■ |
| 1.50 | 3.00 | 5 | 6.00 | 50 | 35645-1.5 | ■ | ■ | ■ |
| 2.00 | 4.00 | 5 | 6.00 | 50 | 35645-2.0 | ■ | ■ | ■ |
| 2.50 | 5.00 | 5 | 6.00 | 50 | 35645-2.5 | ■ | ■ | ■ |
| 3.00 | 6.00 | 5 | 6.00 | 50 | 35645-3.0 | ■ | ■ | ■ |
| 3.50 | 7.00 | 5 | 6.00 | 50 | 35645-3.5 | ■ | ■ | ■ |
| 4.00 | 8.00 | 6 | 6.00 | 50 | 35645-4.0 | ■ | ■ | ■ |
| 4.50 | 9.00 | 6 | 6.00 | 50 | 35645-4.5 | ■ | ■ | ■ |
| 5.00 | 10.00 | 6 | 6.00 | 50 | 35645-5.0 | ■ | ■ | ■ |
| 6.00 | 12.00 | 6 | 6.00 | 50 | 35645-6.0 | ■ | ■ | ■ |

new



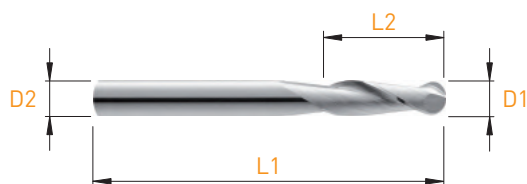
| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TiAIN | STF |
|-------|------|-------|----|---------------|---|-------|-----|
| 6.00 | 4.00 | 6.00 | 50 | 3810-0.65-6.0 | ■ | ■ | ■ |
| 6.00 | 6.00 | 6.00 | 57 | 3810-1.0-6.0 | ■ | ■ | ■ |
| 6.00 | 9.00 | 6.00 | 57 | 3810-1.5-6.0 | ■ | ■ | ■ |

Fraises en bout hémisphériques

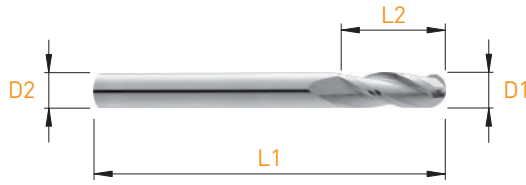
Vollradius Schaftfräser

Ball nose end mills

3238



| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TAIN | STF |
|-------|-------|-------|----|----------|---|------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3238-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3238-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3238-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3238-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3238-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3238-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3238-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3238-6.0 | ■ | ■ | ■ |



| D1 e9 | L2 | D2 h5 | L1 | Art. N° | Z | TAIN | STF |
|-------|-------|-------|----|----------|---|------|-----|
| 2.00 | 8.00 | 2.00 | 32 | 3338-2.0 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 32 | 3338-2.5 | ■ | ■ | ■ |
| 3.00 | 12.00 | 3.00 | 32 | 3338-3.0 | ■ | ■ | ■ |
| 3.50 | 12.00 | 3.50 | 32 | 3338-3.5 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 40 | 3338-4.0 | ■ | ■ | ■ |
| 4.50 | 14.00 | 4.50 | 50 | 3338-4.5 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 3338-5.0 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 3338-6.0 | ■ | ■ | ■ |

Outils pour machine WM 701S

Werkzeuge für Maschine WM 701S

Executions for machine WM 701S



Tous les outils de la gamme MICRO-Line sont réalisables pour la machine WM 701S sur demande.

Alle Werkzeuge aus der MICRO-Line sind machbar für die Maschine WM 701S auf Anfrage.

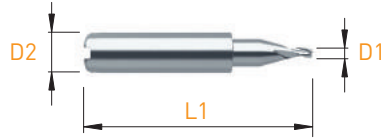
All tools of MICRO-Line can be produced for the machine WM 701S on request.

Fraises en bout de finition pour machine WM 701S

Schafffräser für Maschine WM 701S

End mills for machine WM 701S

701S3371



| | | | | |
|--------------|--|------|-----|--|
| Sharp Corner | | 1xD1 | Z=3 | Disponible tous les 0.1 mm Verfügbar jede 0.1 mm Available each 0.1 mm |
|--------------|--|------|-----|--|

| D1 +0.005 / -0.010 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-----------------|---|-------|-----|------|-----|
| 0.30 | 0.30 | 6.00 | 33 | 701S3371-1-0.30 | ■ | ■ | ■ | ■ | ■ |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |
| 3.50 | 3.50 | 6.00 | 33 | 701S3371-1-3.50 | ■ | ■ | ■ | ■ | ■ |

| | | | | |
|--------------|--|------|-----|--|
| Sharp Corner | | 2xD1 | Z=3 | Disponible tous les 0.1 mm Verfügbar jede 0.1 mm Available each 0.1 mm |
|--------------|--|------|-----|--|

| D1 +0.005 / -0.010 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-----------------|---|-------|-----|------|-----|
| 0.30 | 0.60 | 6.00 | 33 | 701S3371-2-0.30 | ■ | ■ | ■ | ■ | ■ |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |
| 3.50 | 7.00 | 6.00 | 33 | 701S3371-2-3.50 | ■ | ■ | ■ | ■ | ■ |

| | | | | |
|--------------|--|------|-----|--|
| Sharp Corner | | 3xD1 | Z=3 | Disponible tous les 0.1 mm Verfügbar jede 0.1 mm Available each 0.1 mm |
|--------------|--|------|-----|--|

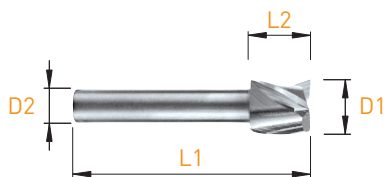
| D1 +0.005 / -0.010 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|-----------------------|------|-------|----|-----------------|---|-------|-----|------|-----|
| 0.30 | 0.90 | 6.00 | 33 | 701S3371-3-0.30 | ■ | ■ | ■ | ■ | ■ |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |
| 3.00 | 9.00 | 6.00 | 33 | 701S3371-3-3.00 | ■ | ■ | ■ | ■ | ■ |

Fraises en bout pour usinage en bout plat

Schaftfräser für flache Frontbearbeitung

End mills for flat front machining

3383

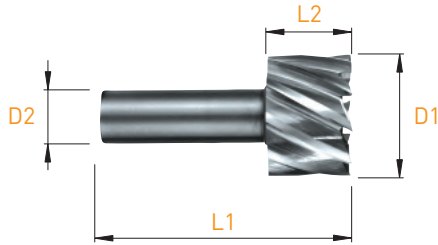


| D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z |
|--------|-------|-------|----|------------------|---|
| 8.00 | 8.00 | 6.00 | 40 | 3383-8.0 | ■ |
| 10.00 | 10.00 | 6.00 | 40 | 3383-10.0 | ■ |
| 12.00 | 12.00 | 6.00 | 40 | 3383-12.0 | ■ |

MICRO-LINE

Fraises en bout avec queue réduite
 Schafffräser mit reduziertem Schaft
 End mills with reduced shank

3831 / 3833



| | | | | |
|-----------------|---------------|-----------------|--|------|
| MD VHM HM | λ 30° | Sharp Corner | | Z=10 |
|-----------------|---------------|-----------------|--|------|

| D1 h10 | L2 | D2 h6 | L1 | Art. N° | Z |
|--------|-------|-------|----|---------|---|
| 16.30 | 15.00 | 10.00 | 45 | 3831 | ■ |
| 20.30 | 15.00 | 10.00 | 45 | 3833 | ■ |

Fraises à angler

Kegelsenker

Chamfering tools

3611

new



| | | | | |
|-----------------|---------------------|--|-----|-----|
| MD VHM HM | λ^{0° | | Z=3 | 60° |
|-----------------|---------------------|--|-----|-----|

| D1 +0.005 / -0.010 | L2 | D2 h4 | L1 | d | Art. N° | Z | TIALN | STF |
|-----------------------|------|-------|----|------|----------|---|-------|-----|
| 0.50 | 3.00 | 3.00 | 39 | 0.10 | 3611-0.5 | ■ | ■ | ■ |
| 0.60 | 3.00 | 3.00 | 39 | 0.10 | 3611-0.6 | ■ | ■ | ■ |
| 0.70 | 3.00 | 3.00 | 39 | 0.10 | 3611-0.7 | ■ | ■ | ■ |
| 0.80 | 3.00 | 3.00 | 39 | 0.10 | 3611-0.8 | ■ | ■ | ■ |
| 0.90 | 3.00 | 3.00 | 39 | 0.10 | 3611-0.9 | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | 0.10 | 3611-1.0 | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | 0.10 | 3611-1.5 | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | 0.10 | 3611-2.0 | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | 0.10 | 3611-2.5 | ■ | ■ | ■ |
| 3.00 | - | 3.00 | 39 | 0.10 | 3611-3.0 | ■ | ■ | ■ |



| | | | | |
|-----------------|---------------------|--|-----|-----|
| MD VHM HM | λ^{0° | | Z=3 | 90° |
|-----------------|---------------------|--|-----|-----|

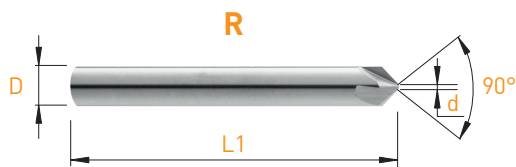
| D1 | L2 | D2 h4 | L1 | d | Art. N° | Z | TiAlN | STF |
|------|------|-------|----|------|-----------------|---|-------|-----|
| 0.50 | 3.00 | 3.00 | 39 | 0.10 | 3911-0.5 | ■ | ■ | ■ |
| 0.60 | 3.00 | 3.00 | 39 | 0.10 | 3911-0.6 | ■ | ■ | ■ |
| 0.70 | 3.00 | 3.00 | 39 | 0.10 | 3911-0.7 | ■ | ■ | ■ |
| 0.80 | 3.00 | 3.00 | 39 | 0.10 | 3911-0.8 | ■ | ■ | ■ |
| 0.90 | 3.00 | 3.00 | 39 | 0.10 | 3911-0.9 | ■ | ■ | ■ |
| 1.00 | 3.00 | 3.00 | 39 | 0.10 | 3911-1.0 | ■ | ■ | ■ |
| 1.50 | 4.50 | 3.00 | 39 | 0.10 | 3911-1.5 | ■ | ■ | ■ |
| 2.00 | 6.00 | 3.00 | 39 | 0.10 | 3911-2.0 | ■ | ■ | ■ |
| 2.50 | 7.50 | 3.00 | 39 | 0.10 | 3911-2.5 | ■ | ■ | ■ |
| 3.00 | - | 3.00 | 39 | 0.10 | 3911-3.0 | ■ | ■ | ■ |

Fraises à angler

Kegelsenker

Chamfering tools

1901 / 3901



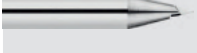
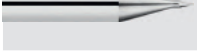


| MD VHM HM | λ^{0° | | Z=4 | 90° | L | | R | | |
|---------------------------|---------------------|----|----------|-----|----------|---|-------|-----|--|
| D Ø3h4 Ø6h5 Ø8h6 | d | L1 | Art. N° | Z | Art. N° | Z | TiAlN | STF | |
| 3.00 | 0.30 | 39 | 1901-3.0 | ■ | 3901-3.0 | ■ | ■ | ■ | |
| 6.00 | 0.70 | 50 | 1901-6.0 | ■ | 3901-6.0 | ■ | ■ | ■ | |
| 8.00 | 1.20 | 59 | 1901-8.0 | ■ | 3901-8.0 | ■ | ■ | ■ | |

Fraises à graver

Gravierfräser

Engraving mills

| Paramètres de coupe indicatif Empfohlene Schnittwerte Standard machining data | | | | | 14.99 |
|---|--|--|--------------|---------------------|-----------------------|
| | A | Plat [E] / Rayon [r] Fläche [E] / Radius [r] Flat [E] / Radius [r] | D | Type Typ Type | Page Seite Page |
|  | 20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° / 120° | 0.05-0.30 0.05-0.10 / every 0.01 0.10-0.30 / every 0.05 | Ø3h4 Ø6h5 | E100-P | 14.100 new |
|  | 20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° | 0.02-0.30 0.02-0.10 / every 0.01 0.10-0.30 / every 0.05 | Ø3h4 | E300-P | 14.101 |
|  | 20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° | 0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05 | Ø3h4 | E300-R | 14.102 |
|  | 20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° | 0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05 | Ø3h4 | E900-P | 14.103 |

Fraises à graver

Gravierfräser

Engraving mills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | n | Vf | Z | TiAlN | STF | TiCN | DLC |
|--|-------------|-----------|-----|-------|-----|------|-----|
| | [tr/min] | [mm/min] | | | | | |
| Acier de décolletage Automatenstahl Free-cutting steel (P) | 20 - 50'000 | 100 - 180 | - | *** | *** | ** | - |
| Acier Stahl < 600 N/mm ² (P) | 20 - 50'000 | 100 - 180 | - | *** | *** | ** | - |
| Acier Stahl < 800 N/mm ² (P) | 20 - 50'000 | 100 - 180 | - | *** | *** | ** | - |
| Acier Stahl > 800 N/mm ² (P) | 20 - 50'000 | 100 - 150 | - | *** | *** | ** | - |
| Acier trempé Gehärteter Stahl -55HRC (H) | 20 - 50'000 | - | - | *** | *** | * | - |
| Acier trempé Gehärteter Stahl +55HRC (H) | 20 - 50'00 | - | - | *** | *** | * | - |
| Inox Rostfreistahl Stainless steel (M) | 20 - 50'000 | 100 - 170 | - | *** | *** | ** | - |
| Aluminium (N) | 20 - 50'000 | 100 - 250 | *** | ** | ** | * | *** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N) | 20 - 50'000 | 70 - 150 | *** | ** | ** | ** | *** |
| Matière synthétique Synthetisches Material Synthetic material (N) | 20 - 50'000 | 100 - 200 | *** | ** | ** | ** | *** |
| Métaux précieux Edelmetalle Precious metals (N) | 20 - 50'000 | 100 - 200 | *** | ** | ** | ** | *** |
| Titane Titan Titanium (S) | 20 - 50'000 | 70 - 150 | - | *** | *** | ** | - |
| Alliage de nickel Nickel-Legierung Nickel alloy (S) | 20 - 50'000 | 80 - 180 | - | *** | *** | ** | - |
| Matière exotique Exotisches material Exotic material (O) | 20 - 50'000 | 80 - 180 | * | *** | *** | ** | *** |

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr Gut / Very good

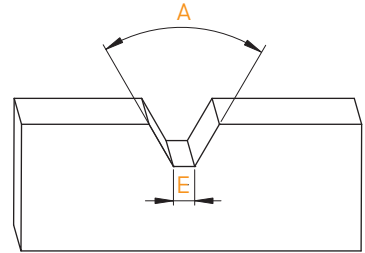
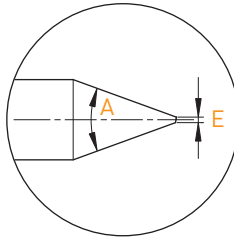
*** Excellent / Ausgezeichnet / Excellent

MICRO-LINE

Fraises à graver avec plat
 Gravierfräser mit Fläche
 Engraving mills with flat

E100-P

new



MD
 VHM
 HM

| A | E | L2 | D2 h4 Ø3.0 h5 Ø6.0 | L1 | Art. N° | Z | TiAlN | STF | TiCN | DLC |
|------|---------------------------|-------|--------------------------|----|---------------|---|-------|-----|------|-----|
| 20° | 0.05-0.10* / 0.10-0.30 ** | 5.20 | 3.00 | 33 | E120-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 30° | 0.05-0.10* / 0.10-0.30 ** | 5.20 | 3.00 | 33 | E130-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 35° | 0.05-0.10* / 0.10-0.30 ** | 5.20 | 3.00 | 33 | E135-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 40° | 0.05-0.10* / 0.10-0.30 ** | 6.00 | 3.00 | 33 | E140-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 45° | 0.05-0.10* / 0.10-0.30 ** | 6.00 | 3.00 | 33 | E145-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 50° | 0.05-0.10* / 0.10-0.30 ** | 6.00 | 3.00 | 33 | E150-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 55° | 0.05-0.10* / 0.10-0.30 ** | 6.00 | 3.00 | 33 | E155-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 60° | 0.05-0.10* / 0.10-0.30 ** | 8.00 | 3.00 | 33 | E160-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 65° | 0.05-0.10* / 0.10-0.30 ** | 8.00 | 3.00 | 33 | E165-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 70° | 0.05-0.10* / 0.10-0.30 ** | 8.00 | 3.00 | 33 | E170-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 90° | 0.05-0.10* / 0.10-0.30 ** | 8.00 | 3.00 | 33 | E190-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 120° | 0.05-0.10* / 0.10-0.30 ** | 8.00 | 3.00 | 33 | E1120-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 30° | 0.05-0.10* / 0.10-0.30 ** | 12.00 | 6.00 | 40 | E130-6-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 40° | 0.05-0.10* / 0.10-0.30 ** | 12.00 | 6.00 | 40 | E140-6-P-_(E) | ■ | ■ | ■ | ■ | ■ |

* tous les 0.01 mm
 alle 0.01 mm
 every 0.01 mm

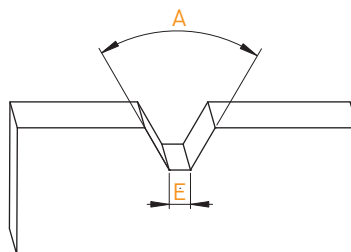
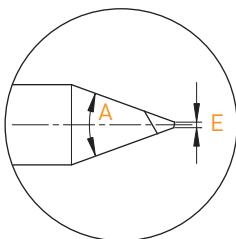
** tous les 0.05 mm
 alle 0.05 mm
 every 0.05 mm

Fraises à graver avec plat

Gravierfräser mit Fläche

Engraving mills with flat

E300-P



MD
VHM
HM

| A | E | D h4 | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----|--------------------------|------|----|-------------|---|-------|-----|------|-----|
| 20° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E320-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 30° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E330-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 35° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E335-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 40° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E340-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 45° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E345-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 50° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E350-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 55° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E355-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 60° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E360-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 65° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E365-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 70° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E370-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 90° | 0.02-0.10* / 0.10-0.30** | 3.00 | 33 | E390-P-_(E) | ■ | ■ | ■ | ■ | ■ |

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

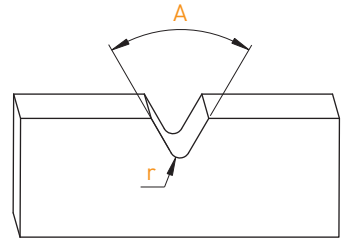
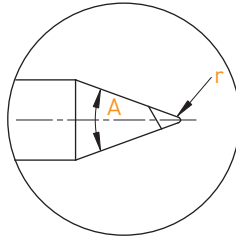
MICRO-LINE

Fraises à graver à rayon

Gravierfräser mit Radius

Engraving mills with radius

E300-R



MD
VHM
HM

| A | r | D h4 | L1 | Art. N° | N | TiAlN | STF | TiCN | DLC |
|-----|--------------------------|------|----|------------|---|-------|-----|------|-----|
| 20° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E320-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 30° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E330-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 35° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E335-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 40° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E340-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 45° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E345-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 50° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E350-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 55° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E355-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 60° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E360-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 65° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E365-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 70° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E370-R_(r) | ■ | ■ | ■ | ■ | ■ |
| 90° | 0.04-0.10* / 0.10-0.30** | 3.00 | 33 | E390-R_(r) | ■ | ■ | ■ | ■ | ■ |

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

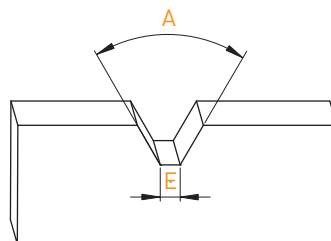
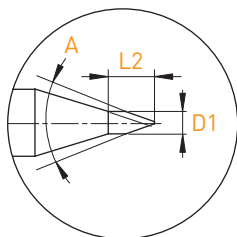
** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver renforcées

Verstärkte Gravierfräser

Reinforced engraving mills

E900-P



MD
VHM
HM

| A | E | D1 | L2 | D _{h4} | L1 | Art. N° | Z | TiAIN | STF | TiCN | DLC |
|-----|--------------------------|------|------|-----------------|----|-------------|---|-------|-----|------|-----|
| 20° | 0.04-0.10* / 0.10-0.30** | 0.60 | 1.80 | 3.00 | 33 | E920-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 30° | 0.04-0.10* / 0.10-0.30** | 0.60 | 1.80 | 3.00 | 33 | E930-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 35° | 0.04-0.10* / 0.10-0.30** | 0.60 | 1.80 | 3.00 | 33 | E935-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 40° | 0.04-0.10* / 0.10-0.30** | 0.60 | 1.80 | 3.00 | 33 | E940-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 45° | 0.04-0.10* / 0.10-0.30** | 1.00 | 1.80 | 3.00 | 33 | E945-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 50° | 0.04-0.10* / 0.10-0.30** | 1.00 | 2.00 | 3.00 | 33 | E950-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 55° | 0.04-0.10* / 0.10-0.30** | 1.00 | 2.00 | 3.00 | 33 | E955-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 60° | 0.04-0.10* / 0.10-0.30** | 1.20 | 2.00 | 3.00 | 33 | E960-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 65° | 0.04-0.10* / 0.10-0.30** | 1.20 | 2.00 | 3.00 | 33 | E965-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 70° | 0.04-0.10* / 0.10-0.30** | 1.20 | 2.00 | 3.00 | 33 | E970-P-_(E) | ■ | ■ | ■ | ■ | ■ |
| 90° | 0.04-0.10* / 0.10-0.30** | 1.20 | 2.00 | 3.00 | 33 | E990-P-_(E) | ■ | ■ | ■ | ■ | ■ |

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Paramètres de coupe indicatif
Empfohlene Schnittwerte
Standard machining data

Micro-forets et centreurs
Mikrobohrer und Zentrierbohrer
Micro drills and centering drills

| Point angle | λ | L2 | D1 | D2 | Type | Page |
|-------------|-----------|------|----------------|--------------|----------|--------|
| 60° | 25° | Div. | Ø 2.00 - 6.00 | D1 = D2 | 2680-60 | 14.107 |
| 90° | 25° | Div. | Ø 0.50 - 20.00 | Ø 2.0 - 20.0 | 2680-90 | 14.108 |
| 90° | 25° | Div. | Ø 2.00 - 16.00 | D1 = D2 | 1680-90 | 14.108 |
| 120° | 25° | Div. | Ø 0.50 - 20.00 | Ø 2.0 - 20.0 | 2680-120 | 14.109 |
| 120° | 25° | Div. | Ø 2.00 - 12.00 | D1 = D2 | 1680-120 | 14.109 |

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drill

| Z | Point angle | λ | L2 | D1 | D2 | Type | Page |
|----|-------------|-----------|----------|---------------|--------------|------|--------|
| Z2 | 90° | 25° - 32° | Div. | Ø 0.50 - 3.00 | Ø2h5 Ø3h4 | 2690 | 14.110 |
| Z2 | 130° | 30° | ~ 2 x D1 | Ø 0.10 - 2.00 | Ø3h6 | 2020 | 14.115 |

Micro-forets avec affûtage à facettes
Mikrobohrer mit Facettenschliff
Micro drills with faceted drill point

| Z | Point angle | λ | L2 | D1 | D2 | Type | Page |
|----|-------------|-----------|-------------|---------------|----------------|------|--------|
| Z2 | 118° | 25° | ~ 5-10 x D1 | Ø 0.50 - 6.00 | D1 = D2 | 1010 | 14.111 |
| Z2 | 118° | 25°/35° | ~ 5-10 x D1 | Ø 0.50 - 6.00 | D1 = D2 | 2010 | 14.112 |
| Z2 | 120° | 30° | ~ 2 x D1 | Ø 0.80 - 2.00 | Ø 2h6 | 2011 | 14.113 |
| Z2 | 120° | 24° | ~ 3 x D1 | Ø 0.50 - 2.40 | Ø 1.5 - 3.0 h6 | 2012 | 14.113 |
| Z2 | 120° | 35° | ~ 8 x D1 | Ø 0.40 - 1.90 | Ø 1.0 - 2.0 h6 | 2013 | 14.114 |
| Z2 | 120° | 30° | ~ 12 x D1 | Ø 0.50 - 1.95 | Ø 1.5 - 2.0 h6 | 2014 | 14.114 |
| Z2 | 130° | 35° | 6 x D1 | Ø 0.10 - 3.00 | Ø3h6 | 2023 | 14.117 |
| Z2 | 130° | 35° | 12 x D1 | Ø 0.20 - 2.00 | Ø3h6 | 2026 | 14.120 |
| Z3 | 140° | 35° | 5 x D1 | Ø 0.20 - 2.99 | Ø3h6 | 2030 | 14.122 |

Forets à centrer NC

NC-Zentrierbohrer

NC centering drills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

| Matière Werkstoff Material | VC | f | Z | TAIN | STF |
|--|-----------|--------|-----|------|-----|
| | [m/min] | [mm] | | | |
| Acier de décolletage Automatenstahl Free-cutting steel | 60 | D1/55 | ** | *** | *** |
| Acier Stahl Steel < 600 N/mm ² | 55 | D1/55 | ** | *** | *** |
| Acier Stahl Steel < 800 N/mm ² | 55 | D1/55 | ** | *** | *** |
| Acier Stahl Steel > 800 N/mm ² | 55 | D1/55 | ** | *** | *** |
| Acier trempé Gehärteter Stahl -55HRC Hardened steel | 10 | D1/100 | - | *** | *** |
| Acier trempé Gehärteter Stahl +55HRC Hardened steel | - | - | - | - | - |
| Inox Rostfreistahl Stainless steel | 30 | D1/85 | ** | *** | *** |
| Aluminium | 100 - 180 | D1/50 | *** | ** | ** |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | 60 - 90 | D1/60 | *** | ** | ** |
| Matière synthétique Synthetisches Material Synthetic material | 350 - 700 | D1/60 | *** | ** | ** |
| Métaux précieux Edelmetalle Precious metals | 50 - 80 | D1/100 | *** | ** | ** |
| Titane Titan Titanium | 30 | D1/115 | ** | *** | *** |
| Alliage de nickel Nickel-Legierung Nickel alloy | 15 - 20 | D1/120 | ** | *** | *** |
| Matière exotique Exotisches material Exotic material | 10 | D1/100 | ** | *** | *** |

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr Gut / Very good

*** Excellent / Ausgezeichnet / Excellent

| Matière Werkstoff Material | | VC | f | Débourrage Enspannvorgang Pecking |
|--|----------------------------------|-----------|--------|---|
| | | (m/min) | (mm) | |
| Acier de décolletage Automatenstahl Free-cutting steel | P | 60 - 90 | D1/70 | 1.5xØ |
| Acier Stahl Steel | < 600 N/mm ² P | 50 - 80 | D1/70 | 1.5xØ |
| Acier Stahl Steel | < 800 N/mm ² P | 50 - 80 | D1/70 | 1.5xØ |
| Acier Stahl Steel | > 800 N/mm ² P | 50 - 80 | D1/70 | 1.5xØ |
| Acier trempé Gehärteter Stahl Hardened steel | -55HRC H | - | - | - |
| Acier trempé Gehärteter Stahl Hardened steel | +55HRC H | - | - | - |
| Inox Rostfreistahl Stainless steel | M | 20 - 30 | D1/70 | 3xØ |
| Aluminium | N | 100 - 180 | D1/40 | 2xØ |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N | 50 - 85 | D1/120 | 1xØ |
| Matière synthétique Synthetisches Material Synthetic material | N | 350 - 750 | D1/40 | 2xØ |
| Métaux précieux Edelmetalle Precious metals | N | 60 - 90 | D1/100 | 0.85xØ |
| Titane Titan Titanium | S | 20 - 40 | D1/120 | 1.3xØ |
| Alliage de nickel Nickel-Legierung Nickel alloy | S | 20 | D1/120 | 1xØ |
| Matière exotique Exotisches material Exotic material | O | 5 - 10 | D1/100 | 1xØ |

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

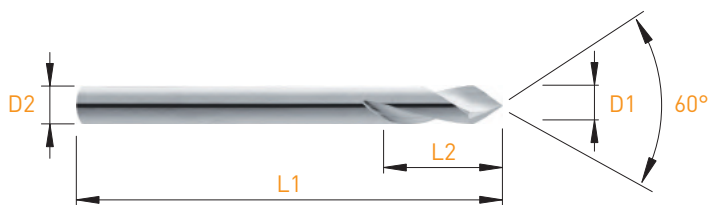
With coating, increase data by 20-30%

Centreurs NC

NC-Zentrierbohrer

NC centering drills

2680-60



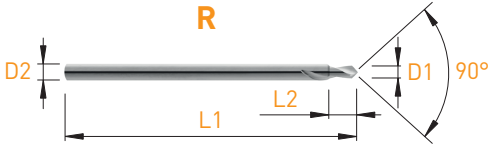
| | | |
|-----------------|----------------------|------------|
| MD VHM HM | λ^{25° | 60° |
|-----------------|----------------------|------------|

| D1 h6 | L2 | D2 h5 | L1 | Art. N° | Z | TiAlN | STF |
|-------|-------|-------|----|--------------|---|-------|-----|
| 2.00 | 8.00 | 2.00 | 39 | 2680-2.00-60 | ■ | ■ | ■ |
| 3.00 | 10.00 | 3.00 | 39 | 2680-3.00-60 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 50 | 2680-4.00-60 | ■ | ■ | ■ |
| 5.00 | 14.00 | 5.00 | 50 | 2680-5.00-60 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 50 | 2680-6.00-60 | ■ | ■ | ■ |

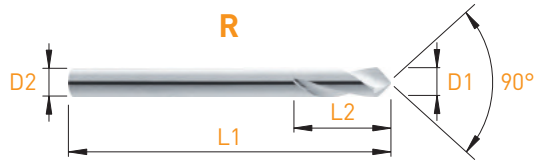
MICRO-LINE

Centreurs NC
 NC-Zentrierbohrer
 NC centering drills

1680-90° / 2680-90°



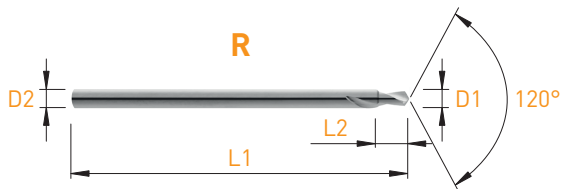
| MD VHM HM | λ | | R | | | | | |
|-----------------|-----------|-----|-------------------|------|-------------------|----|--------------|---|
| | 25° | 90° | D1 h ₆ | L2 | D2 h ₅ | L1 | Art. N° | Z |
| | | | 0.50 | 1.50 | 2.00 | 39 | 2680-0.50-90 | ■ |
| | | | 0.60 | 1.50 | 2.00 | 39 | 2680-0.60-90 | ■ |
| | | | 0.70 | 1.50 | 2.00 | 39 | 2680-0.70-90 | ■ |
| | | | 0.80 | 1.50 | 2.00 | 39 | 2680-0.80-90 | ■ |
| | | | 0.90 | 1.50 | 2.00 | 39 | 2680-0.90-90 | ■ |
| | | | 1.00 | 3.00 | 2.00 | 39 | 2680-1.00-90 | ■ |
| | | | 1.10 | 3.00 | 2.00 | 39 | 2680-1.10-90 | ■ |
| | | | 1.20 | 3.00 | 2.00 | 39 | 2680-1.20-90 | ■ |
| | | | 1.30 | 3.00 | 2.00 | 39 | 2680-1.30-90 | ■ |
| | | | 1.40 | 3.00 | 2.00 | 39 | 2680-1.40-90 | ■ |
| | | | 1.50 | 4.00 | 2.00 | 39 | 2680-1.50-90 | ■ |
| | | | 1.60 | 4.00 | 2.00 | 39 | 2680-1.60-90 | ■ |
| | | | 1.70 | 4.00 | 2.00 | 39 | 2680-1.70-90 | ■ |
| | | | 1.80 | 4.00 | 2.00 | 39 | 2680-1.80-90 | ■ |
| | | | 1.90 | 4.00 | 2.00 | 39 | 2680-1.90-90 | ■ |



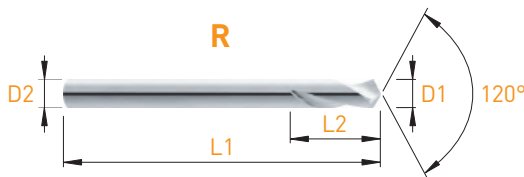
| MD VHM HM | λ | | L | | | | R | | | | HSS | R | | |
|-----------------|-----------|-----|-------|-------|-------------------|----|---------------|---|---------------|---|-----|-------|-------------------|---------|
| | 25° | 90° | D1 | L2 | D2 h ₆ | L1 | Art. N° | Z | Art. N° | Z | | TiAIN | STF | Art. N° |
| | | | 2.00 | 8.00 | 2.00 | 39 | 1680-2.00-90 | ■ | 2680-2.00-90 | ■ | ■ | ■ | - | |
| | | | 2.50 | 8.00 | 2.50 | 39 | 1680-2.50-90 | ■ | 2680-2.50-90 | ■ | ■ | ■ | - | |
| | | | 3.00 | 10.00 | 3.00 | 39 | 1680-3.00-90 | ■ | 2680-3.00-90 | ■ | ■ | ■ | 2680-3.00-90-HSS | ■ |
| | | | 4.00 | 12.00 | 4.00 | 50 | 1680-4.00-90 | ■ | 2680-4.00-90 | ■ | ■ | ■ | 2680-4.00-90-HSS | ■ |
| | | | 5.00 | 15.00 | 5.00 | 50 | 1680-5.00-90 | ■ | 2680-5.00-90 | ■ | ■ | ■ | 2680-5.00-90-HSS | ■ |
| | | | 6.00 | 16.00 | 6.00 | 57 | 1680-6.00-90 | ■ | 2680-6.00-90 | ■ | ■ | ■ | 2680-6.00-90-HSS | ■ |
| | | | 8.00 | 20.00 | 8.00 | 63 | 1680-8.00-90 | ■ | 2680-8.00-90 | ■ | | | 2680-8.00-90-HSS | ■ |
| | | | 10.00 | 22.00 | 10.00 | 72 | 1680-10.00-90 | ■ | 2680-10.00-90 | ■ | | | 2680-10.00-90-HSS | ■ |
| | | | 12.00 | 24.00 | 12.00 | 73 | 1680-12.00-90 | ■ | 2680-12.00-90 | ■ | | | 2680-12.00-90-HSS | ■ |
| | | | 16.00 | 26.00 | 16.00 | 82 | 1680-16.00-90 | ■ | 2680-16.00-90 | ■ | | | - | |
| | | | 20.00 | 30.00 | 20.00 | 92 | - | | 2680-20.00-90 | ■ | | | - | |

Centreurs NC
 NC-Zentrierbohrer
 NC centering drills

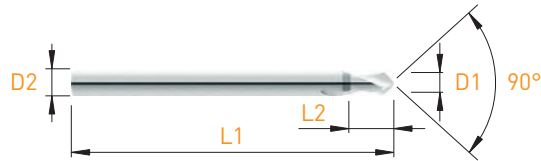
1680-120° / 2680-120°



| MD VHM HM | λ 25° | | 120° | | R | |
|-----------------|---------------|------|-------|---------------|---------|---|
| | D1 h6 | L2 | D2 h5 | L1 | Art. N° | Z |
| 0.50 | 1.50 | 2.00 | 39 | 2680-0.50-120 | ■ | |
| 0.60 | 1.50 | 2.00 | 39 | 2680-0.60-120 | ■ | |
| 0.70 | 1.50 | 2.00 | 39 | 2680-0.70-120 | ■ | |
| 0.80 | 1.50 | 2.00 | 39 | 2680-0.80-120 | ■ | |
| 0.90 | 1.50 | 2.00 | 39 | 2680-0.90-120 | ■ | |
| 1.00 | 3.00 | 2.00 | 39 | 2680-1.00-120 | ■ | |
| 1.10 | 3.00 | 2.00 | 39 | 2680-1.10-120 | ■ | |
| 1.20 | 3.00 | 2.00 | 39 | 2680-1.20-120 | ■ | |
| 1.30 | 3.00 | 2.00 | 39 | 2680-1.30-120 | ■ | |
| 1.40 | 3.00 | 2.00 | 39 | 2680-1.40-120 | ■ | |
| 1.50 | 4.00 | 2.00 | 39 | 2680-1.50-120 | ■ | |
| 1.60 | 4.00 | 2.00 | 39 | 2680-1.60-120 | ■ | |
| 1.70 | 4.00 | 2.00 | 39 | 2680-1.70-120 | ■ | |
| 1.80 | 4.00 | 2.00 | 39 | 2680-1.80-120 | ■ | |
| 1.90 | 4.00 | 2.00 | 39 | 2680-1.90-120 | ■ | |



| MD VHM HM | λ 25° | | 120° | | L | | R | | |
|-----------------|---------------|-------|-------|----------------|---------|----------------|---------|---|--------------|
| | D1 | L2 | D2 h6 | L1 | Art. N° | Z | Art. N° | Z | TiAlN STF |
| 2.00 | 8.00 | 2.00 | 39 | 1680-2.00-120 | ■ | 2680-2.00-120 | ■ | ■ | ■ |
| 2.50 | 8.00 | 2.50 | 39 | 1680-2.50-120 | ■ | 2680-2.50-120 | ■ | ■ | ■ |
| 3.00 | 10.00 | 3.00 | 39 | 1680-3.00-120 | ■ | 2680-3.00-120 | ■ | ■ | ■ |
| 4.00 | 12.00 | 4.00 | 50 | 1680-4.00-120 | ■ | 2680-4.00-120 | ■ | ■ | ■ |
| 5.00 | 15.00 | 5.00 | 50 | 1680-5.00-120 | ■ | 2680-5.00-120 | ■ | ■ | ■ |
| 6.00 | 16.00 | 6.00 | 57 | 1680-6.00-120 | ■ | 2680-6.00-120 | ■ | ■ | ■ |
| 8.00 | 20.00 | 8.00 | 63 | 1680-8.00-120 | ■ | 2680-8.00-120 | ■ | | |
| 10.00 | 22.00 | 10.00 | 72 | 1680-10.00-120 | ■ | 2680-10.00-120 | ■ | | |
| 12.00 | 24.00 | 12.00 | 73 | 1680-12.00-120 | ■ | 2680-12.00-120 | ■ | | |
| 16.00 | 26.00 | 16.00 | 82 | - | | 2680-16.00-120 | ■ | | |
| 20.00 | 30.00 | 20.00 | 92 | - | | 2680-20.00-120 | ■ | | |



| MD VHM HM | * | | | Art. N° | Z | TiAlN | STF |
|-----------------|---------------|---------------|-----|-----------|---|-------|-----|
| | λ 32° | λ 25° | 90° | | | | |
| D1 h5 | L2 | D2 h5 | L1 | | | | |
| 0.50* | 2.50 | 2.00 | 39 | 2690-0.50 | ■ | | |
| 0.60* | 2.50 | 2.00 | 39 | 2690-0.60 | ■ | | |
| 0.70* | 2.50 | 2.00 | 39 | 2690-0.70 | ■ | | |
| 0.80* | 2.50 | 2.00 | 39 | 2690-0.80 | ■ | | |
| 0.90* | 2.50 | 2.00 | 39 | 2690-0.90 | ■ | | |
| 1.00 | 3.00 | 2.00 | 39 | 2690-1.00 | ■ | | |
| 1.10 | 3.00 | 2.00 | 39 | 2690-1.10 | ■ | | |
| 1.20 | 3.00 | 2.00 | 39 | 2690-1.20 | ■ | | |
| 1.30 | 3.00 | 2.00 | 39 | 2690-1.30 | ■ | | |
| 1.40 | 3.00 | 2.00 | 39 | 2690-1.40 | ■ | | |
| 1.50 | 3.50 | 2.00 | 39 | 2690-1.50 | ■ | | |
| 1.60 | 3.50 | 2.00 | 39 | 2690-1.60 | ■ | | |
| 1.70 | 3.50 | 2.00 | 39 | 2690-1.70 | ■ | | |
| 1.80 | 3.50 | 2.00 | 39 | 2690-1.80 | ■ | | |
| 1.90 | 3.50 | 2.00 | 39 | 2690-1.90 | ■ | | |
| 2.00 | - | 2.00 | 39 | 2690-2.00 | ■ | ■ | ■ |
| 2.10 | 4.00 | 3.00 | 39 | 2690-2.10 | ■ | ■ | ■ |
| 2.20 | 4.00 | 3.00 | 39 | 2690-2.20 | ■ | ■ | ■ |
| 2.30 | 4.00 | 3.00 | 39 | 2690-2.30 | ■ | ■ | ■ |
| 2.40 | 4.00 | 3.00 | 39 | 2690-2.40 | ■ | ■ | ■ |
| 2.50 | 4.00 | 3.00 | 39 | 2690-2.50 | ■ | ■ | ■ |
| 2.60 | 4.00 | 3.00 | 39 | 2690-2.60 | ■ | ■ | ■ |
| 2.70 | 4.00 | 3.00 | 39 | 2690-2.70 | ■ | ■ | ■ |
| 2.80 | 4.00 | 3.00 | 39 | 2690-2.80 | ■ | ■ | ■ |
| 2.90 | 4.00 | 3.00 | 39 | 2690-2.90 | ■ | ■ | ■ |
| 3.00 | - | 3.00 | 50 | 2690-3.00 | ■ | ■ | ■ |

Forets cylindriques

Zylindrische Bohrer

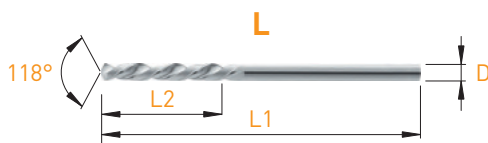
Cylindrical drills

Coupe à gauche

Linksschneidend

Left hand cut

1010

MD
VHM
HM λ 25°

Z=2

118°

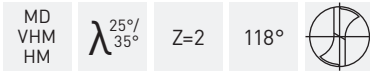
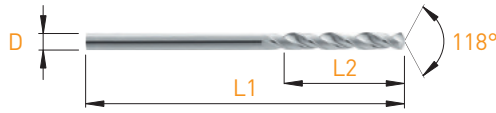


L

L

| D h6 | L1 | L2 | Art. N° | Z |
|------|----|-------|-----------|---|
| 0.50 | 30 | 5.00 | 1010-0.50 | ■ |
| 0.55 | 30 | 5.00 | 1010-0.55 | ■ |
| 0.60 | 30 | 5.00 | 1010-0.60 | ■ |
| 0.65 | 30 | 6.00 | 1010-0.65 | ■ |
| 0.70 | 30 | 6.00 | 1010-0.70 | ■ |
| 0.75 | 30 | 8.00 | 1010-0.75 | ■ |
| 0.80 | 30 | 8.00 | 1010-0.80 | ■ |
| 0.85 | 30 | 9.00 | 1010-0.85 | ■ |
| 0.90 | 30 | 9.00 | 1010-0.90 | ■ |
| 0.95 | 30 | 10.00 | 1010-0.95 | ■ |
| 1.00 | 30 | 10.00 | 1010-1.00 | ■ |
| 1.05 | 30 | 10.00 | 1010-1.05 | ■ |
| 1.10 | 30 | 10.00 | 1010-1.10 | ■ |
| 1.15 | 30 | 12.00 | 1010-1.15 | ■ |
| 1.20 | 30 | 12.00 | 1010-1.20 | ■ |
| 1.25 | 30 | 12.00 | 1010-1.25 | ■ |
| 1.30 | 30 | 12.00 | 1010-1.30 | ■ |
| 1.35 | 30 | 12.00 | 1010-1.35 | ■ |
| 1.40 | 30 | 12.00 | 1010-1.40 | ■ |
| 1.45 | 30 | 12.00 | 1010-1.45 | ■ |
| 1.50 | 30 | 12.00 | 1010-1.50 | ■ |
| 1.55 | 40 | 16.00 | 1010-1.55 | ■ |
| 1.60 | 40 | 16.00 | 1010-1.60 | ■ |
| 1.65 | 40 | 16.00 | 1010-1.65 | ■ |
| 1.70 | 40 | 16.00 | 1010-1.70 | ■ |
| 1.75 | 40 | 16.00 | 1010-1.75 | ■ |
| 1.80 | 40 | 16.00 | 1010-1.80 | ■ |
| 1.85 | 40 | 16.00 | 1010-1.85 | ■ |
| 1.90 | 40 | 16.00 | 1010-1.90 | ■ |
| 1.95 | 40 | 16.00 | 1010-1.95 | ■ |
| 2.00 | 40 | 16.00 | 1010-2.00 | ■ |
| 2.05 | 40 | 18.00 | 1010-2.05 | ■ |
| 2.10 | 40 | 18.00 | 1010-2.10 | ■ |
| 2.15 | 40 | 18.00 | 1010-2.15 | ■ |
| 2.20 | 40 | 18.00 | 1010-2.20 | ■ |
| 2.25 | 40 | 18.00 | 1010-2.25 | ■ |
| 2.30 | 40 | 18.00 | 1010-2.30 | ■ |
| 2.35 | 40 | 18.00 | 1010-2.35 | ■ |
| 2.40 | 40 | 18.00 | 1010-2.40 | ■ |
| 2.45 | 40 | 18.00 | 1010-2.45 | ■ |
| 2.50 | 40 | 18.00 | 1010-2.50 | ■ |

| D h6 | L1 | L2 | Art. N° | Z |
|------|----|-------|-----------|---|
| 2.55 | 45 | 18.00 | 1010-2.55 | ■ |
| 2.60 | 45 | 18.00 | 1010-2.60 | ■ |
| 2.65 | 45 | 18.00 | 1010-2.65 | ■ |
| 2.70 | 45 | 18.00 | 1010-2.70 | ■ |
| 2.75 | 45 | 18.00 | 1010-2.75 | ■ |
| 2.80 | 45 | 18.00 | 1010-2.80 | ■ |
| 2.85 | 45 | 18.00 | 1010-2.85 | ■ |
| 2.90 | 45 | 18.00 | 1010-2.90 | ■ |
| 2.95 | 45 | 18.00 | 1010-2.95 | ■ |
| 3.00 | 45 | 18.00 | 1010-3.00 | ■ |
| 3.10 | 50 | 20.00 | 1010-3.10 | ■ |
| 3.20 | 50 | 20.00 | 1010-3.20 | ■ |
| 3.30 | 50 | 20.00 | 1010-3.30 | ■ |
| 3.40 | 50 | 20.00 | 1010-3.40 | ■ |
| 3.50 | 50 | 20.00 | 1010-3.50 | ■ |
| 3.60 | 50 | 20.00 | 1010-3.60 | ■ |
| 3.70 | 50 | 20.00 | 1010-3.70 | ■ |
| 3.80 | 50 | 20.00 | 1010-3.80 | ■ |
| 3.90 | 50 | 20.00 | 1010-3.90 | ■ |
| 4.00 | 50 | 20.00 | 1010-4.00 | ■ |
| 4.10 | 50 | 25.00 | 1010-4.10 | ■ |
| 4.20 | 50 | 25.00 | 1010-4.20 | ■ |
| 4.30 | 50 | 25.00 | 1010-4.30 | ■ |
| 4.40 | 50 | 25.00 | 1010-4.40 | ■ |
| 4.50 | 50 | 25.00 | 1010-4.50 | ■ |
| 4.60 | 50 | 25.00 | 1010-4.60 | ■ |
| 4.70 | 50 | 25.00 | 1010-4.70 | ■ |
| 4.80 | 50 | 25.00 | 1010-4.80 | ■ |
| 4.90 | 50 | 25.00 | 1010-4.90 | ■ |
| 5.00 | 50 | 25.00 | 1010-5.00 | ■ |
| 5.10 | 50 | 25.00 | 1010-5.10 | ■ |
| 5.20 | 50 | 25.00 | 1010-5.20 | ■ |
| 5.30 | 50 | 25.00 | 1010-5.30 | ■ |
| 5.40 | 50 | 25.00 | 1010-5.40 | ■ |
| 5.50 | 50 | 25.00 | 1010-5.50 | ■ |
| 5.60 | 50 | 25.00 | 1010-5.60 | ■ |
| 5.70 | 50 | 25.00 | 1010-5.70 | ■ |
| 5.80 | 50 | 25.00 | 1010-5.80 | ■ |
| 5.90 | 50 | 25.00 | 1010-5.90 | ■ |
| 6.00 | 50 | 25.00 | 1010-6.00 | ■ |



| D h6 | L1 | L2 | Art. N° | Z |
|------|----|-------|------------------|---|
| 0.50 | 30 | 5.00 | 2010-0.50 | ■ |
| 0.55 | 30 | 5.00 | 2010-0.55 | ■ |
| 0.60 | 30 | 5.00 | 2010-0.60 | ■ |
| 0.65 | 30 | 6.00 | 2010-0.65 | ■ |
| 0.70 | 30 | 6.00 | 2010-0.70 | ■ |
| 0.75 | 30 | 8.00 | 2010-0.75 | ■ |
| 0.80 | 30 | 8.00 | 2010-0.80 | ■ |
| 0.85 | 30 | 9.00 | 2010-0.85 | ■ |
| 0.90 | 30 | 9.00 | 2010-0.90 | ■ |
| 0.95 | 30 | 10.00 | 2010-0.95 | ■ |
| 1.00 | 30 | 10.00 | 2010-1.00 | ■ |
| 1.05 | 30 | 10.00 | 2010-1.05 | ■ |
| 1.10 | 30 | 10.00 | 2010-1.10 | ■ |
| 1.15 | 30 | 12.00 | 2010-1.15 | ■ |
| 1.20 | 30 | 12.00 | 2010-1.20 | ■ |
| 1.25 | 30 | 12.00 | 2010-1.25 | ■ |
| 1.30 | 30 | 12.00 | 2010-1.30 | ■ |
| 1.35 | 30 | 12.00 | 2010-1.35 | ■ |
| 1.40 | 30 | 12.00 | 2010-1.40 | ■ |
| 1.45 | 30 | 12.00 | 2010-1.45 | ■ |
| 1.50 | 30 | 12.00 | 2010-1.50 | ■ |
| 1.55 | 40 | 16.00 | 2010-1.55 | ■ |
| 1.60 | 40 | 16.00 | 2010-1.60 | ■ |
| 1.65 | 40 | 16.00 | 2010-1.65 | ■ |
| 1.70 | 40 | 16.00 | 2010-1.70 | ■ |
| 1.75 | 40 | 16.00 | 2010-1.75 | ■ |
| 1.80 | 40 | 16.00 | 2010-1.80 | ■ |
| 1.85 | 40 | 16.00 | 2010-1.85 | ■ |
| 1.90 | 40 | 16.00 | 2010-1.90 | ■ |
| 1.95 | 40 | 16.00 | 2010-1.95 | ■ |
| 2.00 | 40 | 16.00 | 2010-2.00 | ■ |
| 2.05 | 40 | 18.00 | 2010-2.05 | ■ |
| 2.10 | 40 | 18.00 | 2010-2.10 | ■ |
| 2.15 | 40 | 18.00 | 2010-2.15 | ■ |
| 2.20 | 40 | 18.00 | 2010-2.20 | ■ |
| 2.25 | 40 | 18.00 | 2010-2.25 | ■ |
| 2.30 | 40 | 18.00 | 2010-2.30 | ■ |
| 2.35 | 40 | 18.00 | 2010-2.35 | ■ |
| 2.40 | 40 | 18.00 | 2010-2.40 | ■ |
| 2.45 | 40 | 18.00 | 2010-2.45 | ■ |
| 2.50 | 40 | 18.00 | 2010-2.50 | ■ |

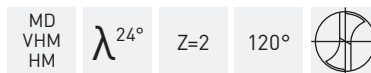
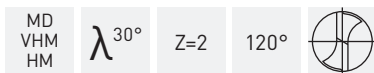
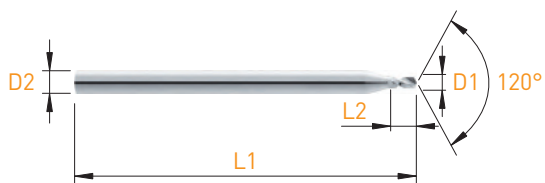
| D h6 | L1 | L2 | Art. N° | Z |
|------|----|-------|------------------|---|
| 2.55 | 45 | 18.00 | 2010-2.55 | ■ |
| 2.60 | 45 | 18.00 | 2010-2.60 | ■ |
| 2.65 | 45 | 18.00 | 2010-2.65 | ■ |
| 2.70 | 45 | 18.00 | 2010-2.70 | ■ |
| 2.75 | 45 | 18.00 | 2010-2.75 | ■ |
| 2.80 | 45 | 18.00 | 2010-2.80 | ■ |
| 2.85 | 45 | 18.00 | 2010-2.85 | ■ |
| 2.90 | 45 | 18.00 | 2010-2.90 | ■ |
| 2.95 | 45 | 18.00 | 2010-2.95 | ■ |
| 3.00 | 45 | 18.00 | 2010-3.00 | ■ |
| 3.10 | 50 | 20.00 | 2010-3.10 | ■ |
| 3.20 | 50 | 20.00 | 2010-3.20 | ■ |
| 3.30 | 50 | 20.00 | 2010-3.30 | ■ |
| 3.40 | 50 | 20.00 | 2010-3.40 | ■ |
| 3.50 | 50 | 20.00 | 2010-3.50 | ■ |
| 3.60 | 50 | 20.00 | 2010-3.60 | ■ |
| 3.70 | 50 | 20.00 | 2010-3.70 | ■ |
| 3.80 | 50 | 20.00 | 2010-3.80 | ■ |
| 3.90 | 50 | 20.00 | 2010-3.90 | ■ |
| 4.00 | 50 | 20.00 | 2010-4.00 | ■ |
| 4.10 | 50 | 25.00 | 2010-4.10 | ■ |
| 4.20 | 50 | 25.00 | 2010-4.20 | ■ |
| 4.30 | 50 | 25.00 | 2010-4.30 | ■ |
| 4.40 | 50 | 25.00 | 2010-4.40 | ■ |
| 4.50 | 50 | 25.00 | 2010-4.50 | ■ |
| 4.60 | 50 | 25.00 | 2010-4.60 | ■ |
| 4.70 | 50 | 25.00 | 2010-4.70 | ■ |
| 4.80 | 50 | 25.00 | 2010-4.80 | ■ |
| 4.90 | 50 | 25.00 | 2010-4.90 | ■ |
| 5.00 | 50 | 25.00 | 2010-5.00 | ■ |
| 5.10 | 50 | 25.00 | 2010-5.10 | ■ |
| 5.20 | 50 | 25.00 | 2010-5.20 | ■ |
| 5.30 | 50 | 25.00 | 2010-5.30 | ■ |
| 5.40 | 50 | 25.00 | 2010-5.40 | ■ |
| 5.50 | 50 | 25.00 | 2010-5.50 | ■ |
| 5.60 | 50 | 25.00 | 2010-5.60 | ■ |
| 5.70 | 50 | 25.00 | 2010-5.70 | ■ |
| 5.80 | 50 | 25.00 | 2010-5.80 | ■ |
| 5.90 | 50 | 25.00 | 2010-5.90 | ■ |
| 6.00 | 50 | 25.00 | 2010-6.00 | ■ |

Micro-forets

Mikrobohrer

Micro drills

2011 / 2012



| D1 h ₆ | L2 | D2 h ₆ | L1 | Art. N° | Z |
|-------------------|------|-------------------|----|-----------|---|
| 0.80 | 2.50 | 2.00 | 30 | 2011-0.80 | ■ |
| 0.90 | 2.50 | 2.00 | 30 | 2011-0.90 | ■ |
| 1.00 | 2.50 | 2.00 | 30 | 2011-1.00 | ■ |
| 1.10 | 2.50 | 2.00 | 30 | 2011-1.10 | ■ |
| 1.20 | 2.50 | 2.00 | 30 | 2011-1.20 | ■ |
| 1.30 | 2.50 | 2.00 | 30 | 2011-1.30 | ■ |
| 1.40 | 2.50 | 2.00 | 30 | 2011-1.40 | ■ |
| 1.50 | 2.50 | 2.00 | 30 | 2011-1.50 | ■ |
| 2.00 | 2.50 | 2.00 | 30 | 2011-2.00 | ■ |

| D1 h ₆ | L2 | D2 h ₆ | L1 | Art. N° | Z |
|-------------------|------|-------------------|----|-----------|---|
| 0.50 | 1.70 | 1.50 | 30 | 2012-0.50 | ■ |
| 0.55 | 1.90 | 1.50 | 30 | 2012-0.55 | ■ |
| 0.60 | 1.90 | 1.50 | 30 | 2012-0.60 | ■ |
| 0.65 | 1.90 | 1.50 | 30 | 2012-0.65 | ■ |
| 0.70 | 2.40 | 1.50 | 30 | 2012-0.70 | ■ |
| 0.75 | 2.40 | 1.50 | 30 | 2012-0.75 | ■ |
| 0.80 | 2.60 | 1.50 | 30 | 2012-0.80 | ■ |
| 0.85 | 2.60 | 1.50 | 30 | 2012-0.85 | ■ |
| 0.90 | 3.00 | 1.50 | 30 | 2012-0.90 | ■ |
| 0.95 | 3.00 | 1.50 | 30 | 2012-0.95 | ■ |
| 1.00 | 3.40 | 1.50 | 30 | 2012-1.00 | ■ |
| 1.10 | 3.80 | 1.50 | 30 | 2012-1.10 | ■ |
| 1.20 | 4.20 | 1.50 | 30 | 2012-1.20 | ■ |
| 1.30 | 4.20 | 1.50 | 30 | 2012-1.30 | ■ |
| 1.40 | 4.70 | 1.50 | 30 | 2012-1.40 | ■ |
| 1.50 | 4.70 | 2.00 | 38 | 2012-1.50 | ■ |
| 1.60 | 5.40 | 2.00 | 38 | 2012-1.60 | ■ |
| 1.70 | 5.40 | 2.00 | 38 | 2012-1.70 | ■ |
| 1.80 | 6.50 | 2.00 | 38 | 2012-1.80 | ■ |
| 1.90 | 6.50 | 2.00 | 38 | 2012-1.90 | ■ |
| 2.00 | 6.50 | 3.00 | 38 | 2012-2.00 | ■ |
| 2.10 | 6.50 | 3.00 | 38 | 2012-2.10 | ■ |
| 2.20 | 6.50 | 3.00 | 38 | 2012-2.20 | ■ |
| 2.30 | 6.50 | 3.00 | 38 | 2012-2.30 | ■ |
| 2.40 | 6.50 | 3.00 | 38 | 2012-2.40 | ■ |

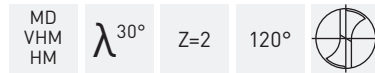
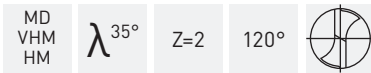
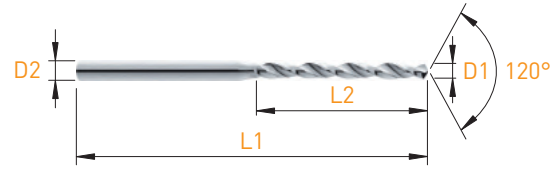
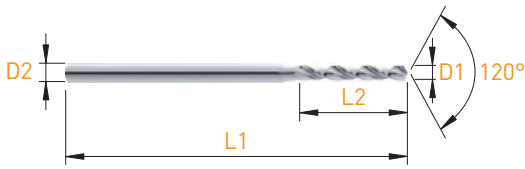
MICRO-LINE

Micro-forets

Mikrobohrer

Micro drills

2013 / 2014



| D1 h6 | L2 | D2 h6 | L1 | Art. N° | Z |
|-------|-------|-------|----|-----------|---|
| 0.40 | 3.60 | 1.00 | 25 | 2013-0.40 | ■ |
| 0.45 | 3.60 | 1.00 | 25 | 2013-0.45 | ■ |
| 0.50 | 4.00 | 1.00 | 25 | 2013-0.50 | ■ |
| 0.55 | 4.50 | 1.00 | 25 | 2013-0.55 | ■ |
| 0.60 | 4.50 | 1.50 | 30 | 2013-0.60 | ■ |
| 0.65 | 5.00 | 1.50 | 30 | 2013-0.65 | ■ |
| 0.70 | 5.60 | 1.50 | 30 | 2013-0.70 | ■ |
| 0.75 | 5.60 | 1.50 | 30 | 2013-0.75 | ■ |
| 0.80 | 6.30 | 1.50 | 30 | 2013-0.80 | ■ |
| 0.85 | 6.30 | 1.50 | 30 | 2013-0.85 | ■ |
| 0.90 | 7.10 | 1.50 | 30 | 2013-0.90 | ■ |
| 0.95 | 7.10 | 1.50 | 30 | 2013-0.95 | ■ |
| 1.00 | 8.00 | 1.50 | 30 | 2013-1.00 | ■ |
| 1.05 | 8.00 | 1.50 | 30 | 2013-1.05 | ■ |
| 1.10 | 9.00 | 1.50 | 30 | 2013-1.10 | ■ |
| 1.15 | 9.00 | 1.50 | 30 | 2013-1.15 | ■ |
| 1.20 | 10.00 | 1.50 | 30 | 2013-1.20 | ■ |
| 1.25 | 10.00 | 1.50 | 30 | 2013-1.25 | ■ |
| 1.30 | 10.00 | 1.50 | 30 | 2013-1.30 | ■ |
| 1.35 | 11.20 | 1.50 | 30 | 2013-1.35 | ■ |
| 1.40 | 11.20 | 1.50 | 30 | 2013-1.40 | ■ |
| 1.45 | 11.20 | 1.50 | 30 | 2013-1.45 | ■ |
| 1.50 | 12.00 | 2.00 | 38 | 2013-1.50 | ■ |
| 1.60 | 12.00 | 2.00 | 38 | 2013-1.60 | ■ |
| 1.70 | 12.00 | 2.00 | 38 | 2013-1.70 | ■ |
| 1.80 | 12.00 | 2.00 | 38 | 2013-1.80 | ■ |
| 1.90 | 12.00 | 2.00 | 38 | 2013-1.90 | ■ |

| D1 h6 | L2 | D2 h6 | L1 | Art. N° | Z |
|-------|-------|-------|----|-----------|---|
| 0.50 | 6.00 | 1.50 | 30 | 2014-0.50 | ■ |
| 0.55 | 6.50 | 1.50 | 30 | 2014-0.55 | ■ |
| 0.60 | 6.50 | 1.50 | 30 | 2014-0.60 | ■ |
| 0.65 | 7.50 | 1.50 | 30 | 2014-0.65 | ■ |
| 0.70 | 8.50 | 1.50 | 30 | 2014-0.70 | ■ |
| 0.75 | 8.50 | 1.50 | 30 | 2014-0.75 | ■ |
| 0.80 | 9.50 | 1.50 | 30 | 2014-0.80 | ■ |
| 0.85 | 9.50 | 1.50 | 30 | 2014-0.85 | ■ |
| 0.90 | 10.50 | 1.50 | 30 | 2014-0.90 | ■ |
| 0.95 | 10.50 | 1.50 | 30 | 2014-0.95 | ■ |
| 1.00 | 12.00 | 1.50 | 38 | 2014-1.00 | ■ |
| 1.05 | 12.00 | 1.50 | 38 | 2014-1.05 | ■ |
| 1.10 | 13.50 | 1.50 | 38 | 2014-1.10 | ■ |
| 1.15 | 13.50 | 1.50 | 38 | 2014-1.15 | ■ |
| 1.20 | 15.00 | 1.50 | 38 | 2014-1.20 | ■ |
| 1.25 | 15.00 | 1.50 | 38 | 2014-1.25 | ■ |
| 1.30 | 17.00 | 1.50 | 38 | 2014-1.30 | ■ |
| 1.35 | 17.00 | 1.50 | 38 | 2014-1.35 | ■ |
| 1.40 | 17.00 | 1.50 | 38 | 2014-1.40 | ■ |
| 1.45 | 17.00 | 1.50 | 38 | 2014-1.45 | ■ |
| 1.50 | 18.00 | 2.00 | 38 | 2014-1.50 | ■ |
| 1.55 | 18.00 | 2.00 | 38 | 2014-1.55 | ■ |
| 1.60 | 18.00 | 2.00 | 38 | 2014-1.60 | ■ |
| 1.65 | 18.00 | 2.00 | 38 | 2014-1.65 | ■ |
| 1.70 | 18.00 | 2.00 | 38 | 2014-1.70 | ■ |
| 1.75 | 18.00 | 2.00 | 38 | 2014-1.75 | ■ |
| 1.80 | 18.00 | 2.00 | 38 | 2014-1.80 | ■ |
| 1.85 | 18.00 | 2.00 | 38 | 2014-1.85 | ■ |
| 1.90 | 18.00 | 2.00 | 38 | 2014-1.90 | ■ |
| 1.95 | 18.00 | 2.00 | 38 | 2014-1.95 | ■ |

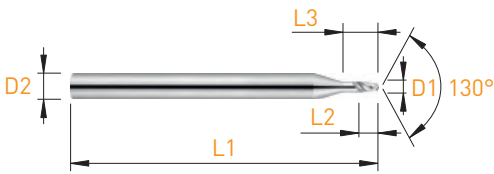
Micro-forets de préperçage

Mikro Pilotbohrer

Micro pilot drill

Ø 0.10 - Ø 0.99 mm

2020



| | | | | | |
|-----------------|---------------|------|-----|------|--|
| MD VHM HM | λ 30° | 2xD1 | Z=2 | 130° | |
|-----------------|---------------|------|-----|------|--|

| D1 +0.005 / 0 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|------------------|------|------|----|-------|-----------|---|
| 0.10 | 0.35 | 0.55 | 38 | 3.00 | 2020-0.10 | ■ |
| 0.11 | 0.35 | 0.55 | 38 | 3.00 | 2020-0.11 | ■ |
| 0.12 | 0.35 | 0.55 | 38 | 3.00 | 2020-0.12 | ■ |
| 0.13 | 0.40 | 0.60 | 38 | 3.00 | 2020-0.13 | ■ |
| 0.14 | 0.40 | 0.60 | 38 | 3.00 | 2020-0.14 | ■ |
| 0.15 | 0.40 | 0.60 | 38 | 3.00 | 2020-0.15 | ■ |
| 0.16 | 0.40 | 0.60 | 38 | 3.00 | 2020-0.16 | ■ |
| 0.17 | 0.50 | 0.70 | 38 | 3.00 | 2020-0.17 | ■ |
| 0.18 | 0.50 | 0.70 | 38 | 3.00 | 2020-0.18 | ■ |
| 0.19 | 0.50 | 0.70 | 38 | 3.00 | 2020-0.19 | ■ |
| 0.20 | 0.55 | 0.75 | 38 | 3.00 | 2020-0.20 | ■ |
| 0.21 | 0.55 | 0.75 | 38 | 3.00 | 2020-0.21 | ■ |
| 0.22 | 0.60 | 0.80 | 38 | 3.00 | 2020-0.22 | ■ |
| 0.23 | 0.60 | 0.80 | 38 | 3.00 | 2020-0.23 | ■ |
| 0.24 | 0.60 | 0.80 | 38 | 3.00 | 2020-0.24 | ■ |
| 0.25 | 0.70 | 0.90 | 38 | 3.00 | 2020-0.25 | ■ |
| 0.26 | 0.70 | 0.90 | 38 | 3.00 | 2020-0.26 | ■ |
| 0.27 | 0.70 | 0.90 | 38 | 3.00 | 2020-0.27 | ■ |
| 0.28 | 0.80 | 1.00 | 38 | 3.00 | 2020-0.28 | ■ |
| 0.29 | 0.80 | 1.00 | 38 | 3.00 | 2020-0.29 | ■ |
| 0.30 | 0.90 | 1.20 | 38 | 3.00 | 2020-0.30 | ■ |
| 0.31 | 0.90 | 1.20 | 38 | 3.00 | 2020-0.31 | ■ |
| 0.32 | 0.90 | 1.20 | 38 | 3.00 | 2020-0.32 | ■ |
| 0.33 | 0.90 | 1.20 | 38 | 3.00 | 2020-0.33 | ■ |
| 0.34 | 0.90 | 1.35 | 38 | 3.00 | 2020-0.34 | ■ |
| 0.35 | 0.90 | 1.35 | 38 | 3.00 | 2020-0.35 | ■ |
| 0.36 | 0.95 | 1.35 | 38 | 3.00 | 2020-0.36 | ■ |
| 0.37 | 0.95 | 1.35 | 38 | 3.00 | 2020-0.37 | ■ |
| 0.38 | 0.95 | 1.50 | 38 | 3.00 | 2020-0.38 | ■ |
| 0.39 | 0.95 | 1.50 | 38 | 3.00 | 2020-0.39 | ■ |
| 0.40 | 0.80 | 1.60 | 38 | 3.00 | 2020-0.40 | ■ |
| 0.41 | 0.82 | 1.60 | 38 | 3.00 | 2020-0.41 | ■ |
| 0.42 | 0.84 | 1.60 | 38 | 3.00 | 2020-0.42 | ■ |
| 0.43 | 0.86 | 1.60 | 38 | 3.00 | 2020-0.43 | ■ |
| 0.44 | 0.88 | 1.60 | 38 | 3.00 | 2020-0.44 | ■ |
| 0.45 | 0.90 | 1.60 | 38 | 3.00 | 2020-0.45 | ■ |
| 0.46 | 0.92 | 1.70 | 38 | 3.00 | 2020-0.46 | ■ |
| 0.47 | 0.94 | 1.70 | 38 | 3.00 | 2020-0.47 | ■ |
| 0.48 | 0.96 | 1.70 | 38 | 3.00 | 2020-0.48 | ■ |

| D1 +0.005 / 0 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|------------------|------|------|----|-------|-----------|---|
| 0.49 | 0.98 | 1.70 | 38 | 3.00 | 2020-0.49 | ■ |
| 0.50 | 1.00 | 1.70 | 38 | 3.00 | 2020-0.50 | ■ |
| 0.51 | 1.02 | 1.80 | 38 | 3.00 | 2020-0.51 | ■ |
| 0.52 | 1.04 | 1.80 | 38 | 3.00 | 2020-0.52 | ■ |
| 0.53 | 1.06 | 1.80 | 38 | 3.00 | 2020-0.53 | ■ |
| 0.54 | 1.08 | 1.80 | 38 | 3.00 | 2020-0.54 | ■ |
| 0.55 | 1.10 | 1.80 | 38 | 3.00 | 2020-0.55 | ■ |
| 0.56 | 1.12 | 1.90 | 38 | 3.00 | 2020-0.56 | ■ |
| 0.57 | 1.14 | 1.90 | 38 | 3.00 | 2020-0.57 | ■ |
| 0.58 | 1.16 | 1.90 | 38 | 3.00 | 2020-0.58 | ■ |
| 0.59 | 1.18 | 1.90 | 38 | 3.00 | 2020-0.59 | ■ |
| 0.60 | 1.20 | 1.90 | 38 | 3.00 | 2020-0.60 | ■ |
| 0.61 | 1.22 | 2.00 | 38 | 3.00 | 2020-0.61 | ■ |
| 0.62 | 1.24 | 2.00 | 38 | 3.00 | 2020-0.62 | ■ |
| 0.63 | 1.26 | 2.00 | 38 | 3.00 | 2020-0.63 | ■ |
| 0.64 | 1.28 | 2.00 | 38 | 3.00 | 2020-0.64 | ■ |
| 0.65 | 1.30 | 2.00 | 38 | 3.00 | 2020-0.65 | ■ |
| 0.66 | 1.32 | 2.10 | 38 | 3.00 | 2020-0.66 | ■ |
| 0.67 | 1.34 | 2.10 | 38 | 3.00 | 2020-0.67 | ■ |
| 0.68 | 1.36 | 2.10 | 38 | 3.00 | 2020-0.68 | ■ |
| 0.69 | 1.38 | 2.10 | 38 | 3.00 | 2020-0.69 | ■ |
| 0.70 | 1.40 | 2.10 | 38 | 3.00 | 2020-0.70 | ■ |
| 0.71 | 1.42 | 2.20 | 38 | 3.00 | 2020-0.71 | ■ |
| 0.72 | 1.44 | 2.20 | 38 | 3.00 | 2020-0.72 | ■ |
| 0.73 | 1.46 | 2.20 | 38 | 3.00 | 2020-0.73 | ■ |
| 0.74 | 1.48 | 2.20 | 38 | 3.00 | 2020-0.74 | ■ |
| 0.75 | 1.50 | 2.20 | 38 | 3.00 | 2020-0.75 | ■ |
| 0.76 | 1.52 | 2.30 | 38 | 3.00 | 2020-0.76 | ■ |
| 0.77 | 1.54 | 2.30 | 38 | 3.00 | 2020-0.77 | ■ |
| 0.78 | 1.56 | 2.30 | 38 | 3.00 | 2020-0.78 | ■ |
| 0.79 | 1.58 | 2.30 | 38 | 3.00 | 2020-0.79 | ■ |
| 0.80 | 1.60 | 2.30 | 38 | 3.00 | 2020-0.80 | ■ |
| 0.81 | 1.62 | 2.40 | 38 | 3.00 | 2020-0.81 | ■ |
| 0.82 | 1.64 | 2.40 | 38 | 3.00 | 2020-0.82 | ■ |
| 0.83 | 1.66 | 2.40 | 38 | 3.00 | 2020-0.83 | ■ |
| 0.84 | 1.68 | 2.40 | 38 | 3.00 | 2020-0.84 | ■ |
| 0.85 | 1.70 | 2.40 | 38 | 3.00 | 2020-0.85 | ■ |
| 0.86 | 1.72 | 2.50 | 38 | 3.00 | 2020-0.86 | ■ |
| 0.87 | 1.74 | 2.50 | 38 | 3.00 | 2020-0.87 | ■ |
| 0.88 | 1.76 | 2.50 | 38 | 3.00 | 2020-0.88 | ■ |
| 0.89 | 1.78 | 2.50 | 38 | 3.00 | 2020-0.89 | ■ |
| 0.90 | 1.80 | 2.50 | 38 | 3.00 | 2020-0.90 | ■ |
| 0.91 | 1.82 | 2.60 | 38 | 3.00 | 2020-0.91 | ■ |
| 0.92 | 1.84 | 2.60 | 38 | 3.00 | 2020-0.92 | ■ |
| 0.93 | 1.86 | 2.60 | 38 | 3.00 | 2020-0.93 | ■ |
| 0.94 | 1.88 | 2.60 | 38 | 3.00 | 2020-0.94 | ■ |
| 0.95 | 1.90 | 2.60 | 38 | 3.00 | 2020-0.95 | ■ |
| 0.96 | 1.92 | 2.70 | 38 | 3.00 | 2020-0.96 | ■ |
| 0.97 | 1.94 | 2.70 | 38 | 3.00 | 2020-0.97 | ■ |
| 0.98 | 1.96 | 2.70 | 38 | 3.00 | 2020-0.98 | ■ |
| 0.99 | 1.98 | 2.70 | 38 | 3.00 | 2020-0.99 | ■ |

| D1 +0.005/0 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|----------------|------|------|----|-------|-----------|---|
| 1.00 | 2.00 | 2.70 | 38 | 3.00 | 2020-1.00 | ■ |
| 1.01 | 2.02 | 3.50 | 38 | 3.00 | 2020-1.01 | ■ |
| 1.02 | 2.04 | 3.50 | 38 | 3.00 | 2020-1.02 | ■ |
| 1.03 | 2.06 | 3.50 | 38 | 3.00 | 2020-1.03 | ■ |
| 1.04 | 2.08 | 3.50 | 38 | 3.00 | 2020-1.04 | ■ |
| 1.05 | 2.10 | 3.50 | 38 | 3.00 | 2020-1.05 | ■ |
| 1.06 | 2.12 | 3.60 | 38 | 3.00 | 2020-1.06 | ■ |
| 1.07 | 2.14 | 3.60 | 38 | 3.00 | 2020-1.07 | ■ |
| 1.08 | 2.16 | 3.60 | 38 | 3.00 | 2020-1.08 | ■ |
| 1.09 | 2.18 | 3.60 | 38 | 3.00 | 2020-1.09 | ■ |
| 1.10 | 2.20 | 3.60 | 38 | 3.00 | 2020-1.10 | ■ |
| 1.11 | 2.22 | 3.70 | 38 | 3.00 | 2020-1.11 | ■ |
| 1.12 | 2.24 | 3.70 | 38 | 3.00 | 2020-1.12 | ■ |
| 1.13 | 2.26 | 3.70 | 38 | 3.00 | 2020-1.13 | ■ |
| 1.14 | 2.28 | 3.70 | 38 | 3.00 | 2020-1.14 | ■ |
| 1.15 | 2.30 | 3.70 | 38 | 3.00 | 2020-1.15 | ■ |
| 1.16 | 2.32 | 3.80 | 38 | 3.00 | 2020-1.16 | ■ |
| 1.17 | 2.34 | 3.80 | 38 | 3.00 | 2020-1.17 | ■ |
| 1.18 | 2.36 | 3.80 | 38 | 3.00 | 2020-1.18 | ■ |
| 1.19 | 2.38 | 3.80 | 38 | 3.00 | 2020-1.19 | ■ |
| 1.20 | 2.40 | 3.80 | 38 | 3.00 | 2020-1.20 | ■ |
| 1.21 | 2.42 | 4.20 | 38 | 3.00 | 2020-1.21 | ■ |
| 1.22 | 2.44 | 4.20 | 38 | 3.00 | 2020-1.22 | ■ |
| 1.23 | 2.46 | 4.20 | 38 | 3.00 | 2020-1.23 | ■ |
| 1.24 | 2.48 | 4.20 | 38 | 3.00 | 2020-1.24 | ■ |
| 1.25 | 2.50 | 4.20 | 38 | 3.00 | 2020-1.25 | ■ |
| 1.26 | 2.52 | 4.30 | 38 | 3.00 | 2020-1.26 | ■ |
| 1.27 | 2.54 | 4.30 | 38 | 3.00 | 2020-1.27 | ■ |
| 1.28 | 2.56 | 4.30 | 38 | 3.00 | 2020-1.28 | ■ |
| 1.29 | 2.58 | 4.30 | 38 | 3.00 | 2020-1.29 | ■ |
| 1.30 | 2.60 | 4.30 | 38 | 3.00 | 2020-1.30 | ■ |
| 1.31 | 2.62 | 4.40 | 38 | 3.00 | 2020-1.31 | ■ |
| 1.32 | 2.64 | 4.40 | 38 | 3.00 | 2020-1.32 | ■ |
| 1.33 | 2.66 | 4.40 | 38 | 3.00 | 2020-1.33 | ■ |
| 1.34 | 2.68 | 4.40 | 38 | 3.00 | 2020-1.34 | ■ |
| 1.35 | 2.70 | 4.40 | 38 | 3.00 | 2020-1.35 | ■ |
| 1.36 | 2.72 | 4.50 | 38 | 3.00 | 2020-1.36 | ■ |
| 1.37 | 2.74 | 4.50 | 38 | 3.00 | 2020-1.37 | ■ |
| 1.38 | 2.76 | 4.50 | 38 | 3.00 | 2020-1.38 | ■ |
| 1.39 | 2.78 | 4.50 | 38 | 3.00 | 2020-1.39 | ■ |
| 1.40 | 2.80 | 4.50 | 38 | 3.00 | 2020-1.40 | ■ |
| 1.41 | 2.82 | 4.60 | 38 | 3.00 | 2020-1.41 | ■ |
| 1.42 | 2.84 | 4.60 | 38 | 3.00 | 2020-1.42 | ■ |
| 1.43 | 2.86 | 4.60 | 38 | 3.00 | 2020-1.43 | ■ |
| 1.44 | 2.88 | 4.60 | 38 | 3.00 | 2020-1.44 | ■ |
| 1.45 | 2.90 | 4.60 | 38 | 3.00 | 2020-1.45 | ■ |
| 1.46 | 2.92 | 4.70 | 38 | 3.00 | 2020-1.46 | ■ |
| 1.47 | 2.94 | 4.70 | 38 | 3.00 | 2020-1.47 | ■ |
| 1.48 | 2.96 | 4.70 | 38 | 3.00 | 2020-1.48 | ■ |
| 1.49 | 2.98 | 4.70 | 38 | 3.00 | 2020-1.49 | ■ |
| 1.50 | 3.00 | 4.70 | 38 | 3.00 | 2020-1.50 | ■ |

| D1 +0.005/0 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|----------------|------|------|----|-------|-----------|---|
| 1.51 | 3.02 | 5.10 | 38 | 3.00 | 2020-1.51 | ■ |
| 1.52 | 3.04 | 5.10 | 38 | 3.00 | 2020-1.52 | ■ |
| 1.53 | 3.06 | 5.10 | 38 | 3.00 | 2020-1.53 | ■ |
| 1.54 | 3.08 | 5.10 | 38 | 3.00 | 2020-1.54 | ■ |
| 1.55 | 3.10 | 5.10 | 38 | 3.00 | 2020-1.55 | ■ |
| 1.56 | 3.12 | 5.20 | 38 | 3.00 | 2020-1.56 | ■ |
| 1.57 | 3.14 | 5.20 | 38 | 3.00 | 2020-1.57 | ■ |
| 1.58 | 3.16 | 5.20 | 38 | 3.00 | 2020-1.58 | ■ |
| 1.59 | 3.18 | 5.20 | 38 | 3.00 | 2020-1.59 | ■ |
| 1.60 | 3.20 | 5.20 | 38 | 3.00 | 2020-1.60 | ■ |
| 1.61 | 3.22 | 5.30 | 38 | 3.00 | 2020-1.61 | ■ |
| 1.62 | 3.24 | 5.30 | 38 | 3.00 | 2020-1.62 | ■ |
| 1.63 | 3.26 | 5.30 | 38 | 3.00 | 2020-1.63 | ■ |
| 1.64 | 3.28 | 5.30 | 38 | 3.00 | 2020-1.64 | ■ |
| 1.65 | 3.30 | 5.30 | 38 | 3.00 | 2020-1.65 | ■ |
| 1.66 | 3.32 | 5.40 | 38 | 3.00 | 2020-1.66 | ■ |
| 1.67 | 3.34 | 5.40 | 38 | 3.00 | 2020-1.67 | ■ |
| 1.68 | 3.36 | 5.40 | 38 | 3.00 | 2020-1.68 | ■ |
| 1.69 | 3.38 | 5.40 | 38 | 3.00 | 2020-1.69 | ■ |
| 1.70 | 3.40 | 5.40 | 38 | 3.00 | 2020-1.70 | ■ |
| 1.71 | 3.42 | 5.50 | 38 | 3.00 | 2020-1.71 | ■ |
| 1.72 | 3.44 | 5.50 | 38 | 3.00 | 2020-1.72 | ■ |
| 1.73 | 3.46 | 5.50 | 38 | 3.00 | 2020-1.73 | ■ |
| 1.74 | 3.48 | 5.50 | 38 | 3.00 | 2020-1.74 | ■ |
| 1.75 | 3.50 | 5.50 | 38 | 3.00 | 2020-1.75 | ■ |
| 1.76 | 3.52 | 5.60 | 38 | 3.00 | 2020-1.76 | ■ |
| 1.77 | 3.54 | 5.60 | 38 | 3.00 | 2020-1.77 | ■ |
| 1.78 | 3.56 | 5.60 | 38 | 3.00 | 2020-1.78 | ■ |
| 1.79 | 3.58 | 5.60 | 38 | 3.00 | 2020-1.79 | ■ |
| 1.80 | 3.60 | 5.60 | 38 | 3.00 | 2020-1.80 | ■ |
| 1.81 | 3.62 | 5.70 | 38 | 3.00 | 2020-1.81 | ■ |
| 1.82 | 3.64 | 5.70 | 38 | 3.00 | 2020-1.82 | ■ |
| 1.83 | 3.66 | 5.70 | 38 | 3.00 | 2020-1.83 | ■ |
| 1.84 | 3.68 | 5.70 | 38 | 3.00 | 2020-1.84 | ■ |
| 1.85 | 3.70 | 5.70 | 38 | 3.00 | 2020-1.85 | ■ |
| 1.86 | 3.72 | 5.80 | 38 | 3.00 | 2020-1.86 | ■ |
| 1.87 | 3.74 | 5.80 | 38 | 3.00 | 2020-1.87 | ■ |
| 1.88 | 3.76 | 5.80 | 38 | 3.00 | 2020-1.88 | ■ |
| 1.89 | 3.78 | 5.80 | 38 | 3.00 | 2020-1.89 | ■ |
| 1.90 | 3.80 | 5.80 | 38 | 3.00 | 2020-1.90 | ■ |
| 1.91 | 3.82 | 5.90 | 38 | 3.00 | 2020-1.91 | ■ |
| 1.92 | 3.84 | 5.90 | 38 | 3.00 | 2020-1.92 | ■ |
| 1.93 | 3.86 | 5.90 | 38 | 3.00 | 2020-1.93 | ■ |
| 1.94 | 3.88 | 5.90 | 38 | 3.00 | 2020-1.94 | ■ |
| 1.95 | 3.90 | 5.90 | 38 | 3.00 | 2020-1.95 | ■ |
| 1.96 | 3.92 | 6.00 | 38 | 3.00 | 2020-1.96 | ■ |
| 1.97 | 3.94 | 6.00 | 38 | 3.00 | 2020-1.97 | ■ |
| 1.98 | 3.96 | 6.00 | 38 | 3.00 | 2020-1.98 | ■ |
| 1.99 | 3.98 | 6.00 | 38 | 3.00 | 2020-1.99 | ■ |
| 2.00 | 4.00 | 6.00 | 38 | 3.00 | 2020-2.00 | ■ |

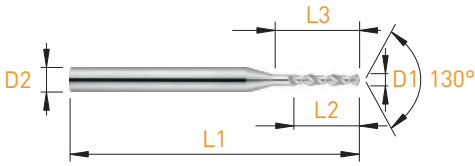
Micro-forets

Mikrobohrer

Micro drills

Ø 0.10 - Ø 0.99 mm

2023



| D1 0/-0.004 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|----------------|------|------|----|-------|-----------|---|
| 0.10 | 0.50 | 0.70 | 38 | 3.00 | 2023-0.10 | ■ |
| 0.11 | 0.50 | 0.70 | 38 | 3.00 | 2023-0.11 | ■ |
| 0.12 | 0.50 | 0.70 | 38 | 3.00 | 2023-0.12 | ■ |
| 0.13 | 0.80 | 1.00 | 38 | 3.00 | 2023-0.13 | ■ |
| 0.14 | 0.80 | 1.00 | 38 | 3.00 | 2023-0.14 | ■ |
| 0.15 | 0.80 | 1.00 | 38 | 3.00 | 2023-0.15 | ■ |
| 0.16 | 1.10 | 1.40 | 38 | 3.00 | 2023-0.16 | ■ |
| 0.17 | 1.10 | 1.40 | 38 | 3.00 | 2023-0.17 | ■ |
| 0.18 | 1.10 | 1.40 | 38 | 3.00 | 2023-0.18 | ■ |
| 0.19 | 1.10 | 1.40 | 38 | 3.00 | 2023-0.19 | ■ |
| 0.20 | 1.50 | 1.80 | 38 | 3.00 | 2023-0.20 | ■ |
| 0.21 | 1.50 | 1.80 | 38 | 3.00 | 2023-0.21 | ■ |
| 0.22 | 1.50 | 1.80 | 38 | 3.00 | 2023-0.22 | ■ |
| 0.23 | 1.50 | 1.80 | 38 | 3.00 | 2023-0.23 | ■ |
| 0.24 | 1.50 | 1.80 | 38 | 3.00 | 2023-0.24 | ■ |
| 0.25 | 1.90 | 2.20 | 38 | 3.00 | 2023-0.25 | ■ |
| 0.26 | 1.90 | 2.20 | 38 | 3.00 | 2023-0.26 | ■ |
| 0.27 | 1.90 | 2.20 | 38 | 3.00 | 2023-0.27 | ■ |
| 0.28 | 1.90 | 2.20 | 38 | 3.00 | 2023-0.28 | ■ |
| 0.29 | 1.90 | 2.20 | 38 | 3.00 | 2023-0.29 | ■ |
| 0.30 | 1.80 | 2.40 | 38 | 3.00 | 2023-0.30 | ■ |
| 0.31 | 1.80 | 2.40 | 38 | 3.00 | 2023-0.31 | ■ |
| 0.32 | 1.80 | 2.40 | 38 | 3.00 | 2023-0.32 | ■ |
| 0.33 | 1.80 | 2.40 | 38 | 3.00 | 2023-0.33 | ■ |
| 0.34 | 1.80 | 2.40 | 38 | 3.00 | 2023-0.34 | ■ |
| 0.35 | 2.20 | 2.80 | 38 | 3.00 | 2023-0.35 | ■ |
| 0.36 | 2.20 | 2.80 | 38 | 3.00 | 2023-0.36 | ■ |
| 0.37 | 2.20 | 2.80 | 38 | 3.00 | 2023-0.37 | ■ |
| 0.38 | 2.20 | 2.80 | 38 | 3.00 | 2023-0.38 | ■ |
| 0.39 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.39 | ■ |
| 0.40 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.40 | ■ |
| 0.41 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.41 | ■ |
| 0.42 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.42 | ■ |
| 0.43 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.43 | ■ |
| 0.44 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.44 | ■ |
| 0.45 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.45 | ■ |
| 0.46 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.46 | ■ |
| 0.47 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.47 | ■ |
| 0.48 | 2.70 | 3.60 | 38 | 3.00 | 2023-0.48 | ■ |

| D1 0/-0.004 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|----------------|------|------|----|-------|-----------|---|
| 0.49 | 3.20 | 4.00 | 38 | 3.00 | 2023-0.49 | ■ |
| 0.50 | 3.20 | 4.00 | 38 | 3.00 | 2023-0.50 | ■ |
| 0.51 | 3.20 | 4.00 | 38 | 3.00 | 2023-0.51 | ■ |
| 0.52 | 3.20 | 4.00 | 38 | 3.00 | 2023-0.52 | ■ |
| 0.53 | 3.20 | 4.00 | 38 | 3.00 | 2023-0.53 | ■ |
| 0.54 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.54 | ■ |
| 0.55 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.55 | ■ |
| 0.56 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.56 | ■ |
| 0.57 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.57 | ■ |
| 0.58 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.58 | ■ |
| 0.59 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.59 | ■ |
| 0.60 | 3.60 | 4.50 | 38 | 3.00 | 2023-0.60 | ■ |
| 0.61 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.61 | ■ |
| 0.62 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.62 | ■ |
| 0.63 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.63 | ■ |
| 0.64 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.64 | ■ |
| 0.65 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.65 | ■ |
| 0.66 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.66 | ■ |
| 0.67 | 3.90 | 5.00 | 38 | 3.00 | 2023-0.67 | ■ |
| 0.68 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.68 | ■ |
| 0.69 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.69 | ■ |
| 0.70 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.70 | ■ |
| 0.71 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.71 | ■ |
| 0.72 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.72 | ■ |
| 0.73 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.73 | ■ |
| 0.74 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.74 | ■ |
| 0.75 | 4.50 | 5.60 | 38 | 3.00 | 2023-0.75 | ■ |
| 0.76 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.76 | ■ |
| 0.77 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.77 | ■ |
| 0.78 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.78 | ■ |
| 0.79 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.79 | ■ |
| 0.80 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.80 | ■ |
| 0.81 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.81 | ■ |
| 0.82 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.82 | ■ |
| 0.83 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.83 | ■ |
| 0.84 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.84 | ■ |
| 0.85 | 5.00 | 6.30 | 38 | 3.00 | 2023-0.85 | ■ |
| 0.86 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.86 | ■ |
| 0.87 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.87 | ■ |
| 0.88 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.88 | ■ |
| 0.89 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.89 | ■ |
| 0.90 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.90 | ■ |
| 0.91 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.91 | ■ |
| 0.92 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.92 | ■ |
| 0.93 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.93 | ■ |
| 0.94 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.94 | ■ |
| 0.95 | 5.70 | 7.10 | 38 | 3.00 | 2023-0.95 | ■ |
| 0.96 | 6.50 | 8.00 | 38 | 3.00 | 2023-0.96 | ■ |
| 0.97 | 6.50 | 8.00 | 38 | 3.00 | 2023-0.97 | ■ |
| 0.98 | 6.50 | 8.00 | 38 | 3.00 | 2023-0.98 | ■ |
| 0.99 | 6.50 | 8.00 | 38 | 3.00 | 2023-0.99 | ■ |

| D1 0/-0.004 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|----------------|------|-------|----|-------|------------------|---|
| 1.00 | 6.50 | 8.00 | 38 | 3.00 | 2023-1.00 | ■ |
| 1.01 | 6.50 | 8.00 | 38 | 3.00 | 2023-1.01 | ■ |
| 1.02 | 6.50 | 8.00 | 38 | 3.00 | 2023-1.02 | ■ |
| 1.03 | 6.50 | 8.00 | 38 | 3.00 | 2023-1.03 | ■ |
| 1.04 | 6.50 | 8.00 | 38 | 3.00 | 2023-1.04 | ■ |
| 1.05 | 6.50 | 8.00 | 38 | 3.00 | 2023-1.05 | ■ |
| 1.06 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.06 | ■ |
| 1.07 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.07 | ■ |
| 1.08 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.08 | ■ |
| 1.09 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.09 | ■ |
| 1.10 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.10 | ■ |
| 1.11 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.11 | ■ |
| 1.12 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.12 | ■ |
| 1.13 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.13 | ■ |
| 1.14 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.14 | ■ |
| 1.15 | 7.30 | 9.00 | 38 | 3.00 | 2023-1.15 | ■ |
| 1.16 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.16 | ■ |
| 1.17 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.17 | ■ |
| 1.18 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.18 | ■ |
| 1.19 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.19 | ■ |
| 1.20 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.20 | ■ |
| 1.21 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.21 | ■ |
| 1.22 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.22 | ■ |
| 1.23 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.23 | ■ |
| 1.24 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.24 | ■ |
| 1.25 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.25 | ■ |
| 1.26 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.26 | ■ |
| 1.27 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.27 | ■ |
| 1.28 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.28 | ■ |
| 1.29 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.29 | ■ |
| 1.30 | 8.20 | 10.00 | 38 | 3.00 | 2023-1.30 | ■ |
| 1.31 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.31 | ■ |
| 1.32 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.32 | ■ |
| 1.33 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.33 | ■ |
| 1.34 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.34 | ■ |
| 1.35 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.35 | ■ |
| 1.36 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.36 | ■ |
| 1.37 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.37 | ■ |
| 1.38 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.38 | ■ |
| 1.39 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.39 | ■ |
| 1.40 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.40 | ■ |
| 1.41 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.41 | ■ |
| 1.42 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.42 | ■ |
| 1.43 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.43 | ■ |
| 1.44 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.44 | ■ |
| 1.45 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.45 | ■ |
| 1.46 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.46 | ■ |
| 1.47 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.47 | ■ |
| 1.48 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.48 | ■ |
| 1.49 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.49 | ■ |
| 1.50 | 9.20 | 11.20 | 38 | 3.00 | 2023-1.50 | ■ |

| D1 0/-0.004 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|----------------|-------|-------|----|-------|------------------|---|
| 1.51 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.51 | ■ |
| 1.52 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.52 | ■ |
| 1.53 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.53 | ■ |
| 1.54 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.54 | ■ |
| 1.55 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.55 | ■ |
| 1.56 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.56 | ■ |
| 1.57 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.57 | ■ |
| 1.58 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.58 | ■ |
| 1.59 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.59 | ■ |
| 1.60 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.60 | ■ |
| 1.61 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.61 | ■ |
| 1.62 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.62 | ■ |
| 1.63 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.63 | ■ |
| 1.64 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.64 | ■ |
| 1.65 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.65 | ■ |
| 1.66 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.66 | ■ |
| 1.67 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.67 | ■ |
| 1.68 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.68 | ■ |
| 1.69 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.69 | ■ |
| 1.70 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.70 | ■ |
| 1.71 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.71 | ■ |
| 1.72 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.72 | ■ |
| 1.73 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.73 | ■ |
| 1.74 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.74 | ■ |
| 1.75 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.75 | ■ |
| 1.76 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.76 | ■ |
| 1.77 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.77 | ■ |
| 1.78 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.78 | ■ |
| 1.79 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.79 | ■ |
| 1.80 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.80 | ■ |
| 1.81 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.81 | ■ |
| 1.82 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.82 | ■ |
| 1.83 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.83 | ■ |
| 1.84 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.84 | ■ |
| 1.85 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.85 | ■ |
| 1.86 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.86 | ■ |
| 1.87 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.87 | ■ |
| 1.88 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.88 | ■ |
| 1.89 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.89 | ■ |
| 1.90 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.90 | ■ |
| 1.91 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.91 | ■ |
| 1.92 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.92 | ■ |
| 1.93 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.93 | ■ |
| 1.94 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.94 | ■ |
| 1.95 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.95 | ■ |
| 1.96 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.96 | ■ |
| 1.97 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.97 | ■ |
| 1.98 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.98 | ■ |
| 1.99 | 11.20 | 13.40 | 38 | 3.00 | 2023-1.99 | ■ |
| 2.00 | 11.20 | 13.40 | 38 | 3.00 | 2023-2.00 | ■ |

Micro-forets

Mikrobohrer

Micro drills

Ø 2.01 - Ø 3.00 mm

2023

| D1 0/-0.004 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|----------------|-------|-------|----|-------|-----------|---|
| 2.01 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.01 | ■ |
| 2.02 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.02 | ■ |
| 2.03 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.03 | ■ |
| 2.04 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.04 | ■ |
| 2.05 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.05 | ■ |
| 2.06 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.06 | ■ |
| 2.07 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.07 | ■ |
| 2.08 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.08 | ■ |
| 2.09 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.09 | ■ |
| 2.10 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.10 | ■ |
| 2.11 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.11 | ■ |
| 2.12 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.12 | ■ |
| 2.13 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.13 | ■ |
| 2.14 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.14 | ■ |
| 2.15 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.15 | ■ |
| 2.16 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.16 | ■ |
| 2.17 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.17 | ■ |
| 2.18 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.18 | ■ |
| 2.19 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.19 | ■ |
| 2.20 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.20 | ■ |
| 2.21 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.21 | ■ |
| 2.22 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.22 | ■ |
| 2.23 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.23 | ■ |
| 2.24 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.24 | ■ |
| 2.25 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.25 | ■ |
| 2.26 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.26 | ■ |
| 2.27 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.27 | ■ |
| 2.28 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.28 | ■ |
| 2.29 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.29 | ■ |
| 2.30 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.30 | ■ |
| 2.31 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.31 | ■ |
| 2.32 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.32 | ■ |
| 2.33 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.33 | ■ |
| 2.34 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.34 | ■ |
| 2.35 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.35 | ■ |
| 2.36 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.36 | ■ |
| 2.37 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.37 | ■ |
| 2.38 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.38 | ■ |
| 2.39 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.39 | ■ |
| 2.40 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.40 | ■ |
| 2.41 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.41 | ■ |
| 2.42 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.42 | ■ |
| 2.43 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.43 | ■ |
| 2.44 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.44 | ■ |
| 2.45 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.45 | ■ |
| 2.46 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.46 | ■ |
| 2.47 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.47 | ■ |
| 2.48 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.48 | ■ |
| 2.49 | 12.50 | 14.00 | 38 | 3.00 | 2023-2.49 | ■ |
| 2.50 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.50 | ■ |

| D1 0/-0.004 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|----------------|-------|-------|----|-------|-----------|---|
| 2.51 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.51 | ■ |
| 2.52 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.52 | ■ |
| 2.53 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.53 | ■ |
| 2.54 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.54 | ■ |
| 2.55 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.55 | ■ |
| 2.56 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.56 | ■ |
| 2.57 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.57 | ■ |
| 2.58 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.58 | ■ |
| 2.59 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.59 | ■ |
| 2.60 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.60 | ■ |
| 2.61 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.61 | ■ |
| 2.62 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.62 | ■ |
| 2.63 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.63 | ■ |
| 2.64 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.64 | ■ |
| 2.65 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.65 | ■ |
| 2.66 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.66 | ■ |
| 2.67 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.67 | ■ |
| 2.68 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.68 | ■ |
| 2.69 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.69 | ■ |
| 2.70 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.70 | ■ |
| 2.71 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.71 | ■ |
| 2.72 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.72 | ■ |
| 2.73 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.73 | ■ |
| 2.74 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.74 | ■ |
| 2.75 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.75 | ■ |
| 2.76 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.76 | ■ |
| 2.77 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.77 | ■ |
| 2.78 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.78 | ■ |
| 2.79 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.79 | ■ |
| 2.80 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.80 | ■ |
| 2.81 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.81 | ■ |
| 2.82 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.82 | ■ |
| 2.83 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.83 | ■ |
| 2.84 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.84 | ■ |
| 2.85 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.85 | ■ |
| 2.86 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.86 | ■ |
| 2.87 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.87 | ■ |
| 2.88 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.88 | ■ |
| 2.89 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.89 | ■ |
| 2.90 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.90 | ■ |
| 2.91 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.91 | ■ |
| 2.92 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.92 | ■ |
| 2.93 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.93 | ■ |
| 2.94 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.94 | ■ |
| 2.95 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.95 | ■ |
| 2.96 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.96 | ■ |
| 2.97 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.97 | ■ |
| 2.98 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.98 | ■ |
| 2.99 | 14.00 | 17.00 | 38 | 3.00 | 2023-2.99 | ■ |
| 3.00 | 14.00 | 17.00 | 38 | 3.00 | 2023-3.00 | ■ |

MICRO-LINE

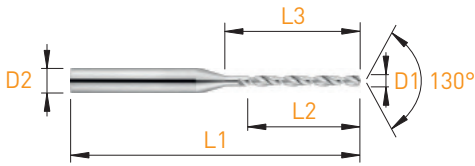
Micro-forets

Mikrobohrer

Micro drills

Ø 0.20 - Ø 1.09 mm

2026



| | | | | | |
|-----------------|----------------------|-----|-------|------|--|
| MD VHM HM | λ^{25° | Z=2 | 12xD1 | 130° | |
|-----------------|----------------------|-----|-------|------|--|

| D1 h ₆ | L2 | L3 | L1 | D2 h ₆ | Art. N° | Z |
|-------------------|------|------|----|-------------------|-----------|---|
| 0.20 | 2.40 | 3.50 | 38 | 3.00 | 2026-0.20 | ■ |
| 0.21 | 2.50 | 3.50 | 38 | 3.00 | 2026-0.21 | ■ |
| 0.22 | 2.70 | 3.50 | 38 | 3.00 | 2026-0.22 | ■ |
| 0.23 | 2.80 | 3.50 | 38 | 3.00 | 2026-0.23 | ■ |
| 0.24 | 2.90 | 4.00 | 38 | 3.00 | 2026-0.24 | ■ |
| 0.25 | 3.00 | 4.00 | 38 | 3.00 | 2026-0.25 | ■ |
| 0.26 | 3.10 | 4.00 | 38 | 3.00 | 2026-0.26 | ■ |
| 0.27 | 3.30 | 4.00 | 38 | 3.00 | 2026-0.27 | ■ |
| 0.28 | 3.40 | 4.50 | 38 | 3.00 | 2026-0.28 | ■ |
| 0.29 | 3.50 | 4.50 | 38 | 3.00 | 2026-0.29 | ■ |
| 0.30 | 3.60 | 4.50 | 38 | 3.00 | 2026-0.30 | ■ |
| 0.31 | 3.70 | 4.50 | 38 | 3.00 | 2026-0.31 | ■ |
| 0.32 | 3.90 | 5.00 | 38 | 3.00 | 2026-0.32 | ■ |
| 0.33 | 4.00 | 5.00 | 38 | 3.00 | 2026-0.33 | ■ |
| 0.34 | 4.10 | 5.00 | 38 | 3.00 | 2026-0.34 | ■ |
| 0.35 | 4.20 | 5.00 | 38 | 3.00 | 2026-0.35 | ■ |
| 0.36 | 4.30 | 5.50 | 38 | 3.00 | 2026-0.36 | ■ |
| 0.37 | 4.50 | 5.50 | 38 | 3.00 | 2026-0.37 | ■ |
| 0.38 | 4.60 | 5.50 | 38 | 3.00 | 2026-0.38 | ■ |
| 0.39 | 4.70 | 5.50 | 38 | 3.00 | 2026-0.39 | ■ |
| 0.40 | 4.80 | 6.00 | 38 | 3.00 | 2026-0.40 | ■ |
| 0.41 | 4.90 | 6.00 | 38 | 3.00 | 2026-0.41 | ■ |
| 0.42 | 5.10 | 6.00 | 38 | 3.00 | 2026-0.42 | ■ |
| 0.43 | 5.20 | 6.00 | 38 | 3.00 | 2026-0.43 | ■ |
| 0.44 | 5.30 | 6.50 | 38 | 3.00 | 2026-0.44 | ■ |
| 0.45 | 5.40 | 6.50 | 38 | 3.00 | 2026-0.45 | ■ |
| 0.46 | 5.50 | 6.50 | 38 | 3.00 | 2026-0.46 | ■ |
| 0.47 | 5.70 | 6.50 | 38 | 3.00 | 2026-0.47 | ■ |
| 0.48 | 5.80 | 7.00 | 38 | 3.00 | 2026-0.48 | ■ |
| 0.49 | 5.90 | 7.00 | 38 | 3.00 | 2026-0.49 | ■ |
| 0.50 | 6.00 | 7.00 | 38 | 3.00 | 2026-0.50 | ■ |
| 0.51 | 6.10 | 7.00 | 38 | 3.00 | 2026-0.51 | ■ |
| 0.52 | 6.30 | 7.50 | 38 | 3.00 | 2026-0.52 | ■ |
| 0.53 | 6.40 | 7.50 | 38 | 3.00 | 2026-0.53 | ■ |
| 0.54 | 6.50 | 7.50 | 38 | 3.00 | 2026-0.54 | ■ |
| 0.55 | 6.60 | 7.50 | 38 | 3.00 | 2026-0.55 | ■ |
| 0.56 | 6.70 | 8.00 | 38 | 3.00 | 2026-0.56 | ■ |
| 0.57 | 6.90 | 8.00 | 38 | 3.00 | 2026-0.57 | ■ |
| 0.58 | 7.00 | 8.00 | 38 | 3.00 | 2026-0.58 | ■ |

| D1 h ₆ | L2 | L3 | L1 | D2 h ₆ | Art. N° | Z |
|-------------------|-------|-------|----|-------------------|-----------|---|
| 0.59 | 7.10 | 8.00 | 38 | 3.00 | 2026-0.59 | ■ |
| 0.60 | 7.20 | 9.00 | 38 | 3.00 | 2026-0.60 | ■ |
| 0.61 | 7.30 | 9.00 | 38 | 3.00 | 2026-0.61 | ■ |
| 0.62 | 7.50 | 9.00 | 38 | 3.00 | 2026-0.62 | ■ |
| 0.63 | 7.60 | 9.00 | 38 | 3.00 | 2026-0.63 | ■ |
| 0.64 | 7.70 | 9.50 | 38 | 3.00 | 2026-0.64 | ■ |
| 0.65 | 7.80 | 9.50 | 38 | 3.00 | 2026-0.65 | ■ |
| 0.66 | 7.90 | 9.50 | 38 | 3.00 | 2026-0.66 | ■ |
| 0.67 | 8.10 | 9.50 | 38 | 3.00 | 2026-0.67 | ■ |
| 0.68 | 8.20 | 10.00 | 38 | 3.00 | 2026-0.68 | ■ |
| 0.69 | 8.30 | 10.00 | 38 | 3.00 | 2026-0.69 | ■ |
| 0.70 | 8.40 | 10.00 | 38 | 3.00 | 2026-0.70 | ■ |
| 0.71 | 8.50 | 10.00 | 38 | 3.00 | 2026-0.71 | ■ |
| 0.72 | 8.70 | 10.50 | 38 | 3.00 | 2026-0.72 | ■ |
| 0.73 | 8.80 | 10.50 | 38 | 3.00 | 2026-0.73 | ■ |
| 0.74 | 8.90 | 10.50 | 38 | 3.00 | 2026-0.74 | ■ |
| 0.75 | 9.00 | 10.50 | 38 | 3.00 | 2026-0.75 | ■ |
| 0.76 | 9.10 | 11.00 | 38 | 3.00 | 2026-0.76 | ■ |
| 0.77 | 9.30 | 11.00 | 38 | 3.00 | 2026-0.77 | ■ |
| 0.78 | 9.40 | 11.00 | 38 | 3.00 | 2026-0.78 | ■ |
| 0.79 | 9.50 | 11.00 | 38 | 3.00 | 2026-0.79 | ■ |
| 0.80 | 9.60 | 11.50 | 38 | 3.00 | 2026-0.80 | ■ |
| 0.81 | 9.70 | 11.50 | 38 | 3.00 | 2026-0.81 | ■ |
| 0.82 | 9.90 | 11.50 | 38 | 3.00 | 2026-0.82 | ■ |
| 0.83 | 10.00 | 11.50 | 38 | 3.00 | 2026-0.83 | ■ |
| 0.84 | 10.10 | 12.00 | 38 | 3.00 | 2026-0.84 | ■ |
| 0.85 | 10.20 | 12.00 | 38 | 3.00 | 2026-0.85 | ■ |
| 0.86 | 10.30 | 12.00 | 38 | 3.00 | 2026-0.86 | ■ |
| 0.87 | 10.50 | 12.00 | 38 | 3.00 | 2026-0.87 | ■ |
| 0.88 | 10.60 | 12.50 | 38 | 3.00 | 2026-0.88 | ■ |
| 0.89 | 10.70 | 12.50 | 38 | 3.00 | 2026-0.89 | ■ |
| 0.90 | 10.80 | 12.50 | 38 | 3.00 | 2026-0.90 | ■ |
| 0.91 | 10.90 | 12.50 | 38 | 3.00 | 2026-0.91 | ■ |
| 0.92 | 11.10 | 13.00 | 38 | 3.00 | 2026-0.92 | ■ |
| 0.93 | 11.20 | 13.00 | 38 | 3.00 | 2026-0.93 | ■ |
| 0.94 | 11.30 | 13.00 | 38 | 3.00 | 2026-0.94 | ■ |
| 0.95 | 11.40 | 13.00 | 38 | 3.00 | 2026-0.95 | ■ |
| 0.96 | 11.50 | 13.50 | 38 | 3.00 | 2026-0.96 | ■ |
| 0.97 | 11.70 | 13.50 | 38 | 3.00 | 2026-0.97 | ■ |
| 0.98 | 11.80 | 13.50 | 38 | 3.00 | 2026-0.98 | ■ |
| 0.99 | 11.90 | 13.50 | 38 | 3.00 | 2026-0.99 | ■ |
| 1.00 | 12.00 | 14.50 | 38 | 3.00 | 2026-1.00 | ■ |
| 1.01 | 12.10 | 14.50 | 38 | 3.00 | 2026-1.01 | ■ |
| 1.02 | 12.30 | 14.50 | 38 | 3.00 | 2026-1.02 | ■ |
| 1.03 | 12.40 | 14.50 | 38 | 3.00 | 2026-1.03 | ■ |
| 1.04 | 12.50 | 15.00 | 38 | 3.00 | 2026-1.04 | ■ |
| 1.05 | 12.60 | 15.00 | 38 | 3.00 | 2026-1.05 | ■ |
| 1.06 | 12.70 | 15.00 | 38 | 3.00 | 2026-1.06 | ■ |
| 1.07 | 12.90 | 15.00 | 38 | 3.00 | 2026-1.07 | ■ |
| 1.08 | 13.00 | 15.50 | 38 | 3.00 | 2026-1.08 | ■ |
| 1.09 | 13.10 | 15.50 | 38 | 3.00 | 2026-1.09 | ■ |

Micro-forets

Mikrobohrer

Micro drills

Ø 1.10 - Ø 2.00 mm

2026

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|-------|-------|-------|----|-------|-----------|---|
| 1.10 | 13.20 | 15.50 | 38 | 3.00 | 2026-1.10 | ■ |
| 1.11 | 13.30 | 15.50 | 38 | 3.00 | 2026-1.11 | ■ |
| 1.12 | 13.50 | 16.00 | 38 | 3.00 | 2026-1.12 | ■ |
| 1.13 | 13.60 | 16.00 | 38 | 3.00 | 2026-1.13 | ■ |
| 1.14 | 13.70 | 16.00 | 38 | 3.00 | 2026-1.14 | ■ |
| 1.15 | 13.80 | 16.00 | 38 | 3.00 | 2026-1.15 | ■ |
| 1.16 | 13.90 | 16.50 | 38 | 3.00 | 2026-1.16 | ■ |
| 1.17 | 14.10 | 16.50 | 38 | 3.00 | 2026-1.17 | ■ |
| 1.18 | 14.20 | 16.50 | 38 | 3.00 | 2026-1.18 | ■ |
| 1.19 | 14.30 | 16.50 | 38 | 3.00 | 2026-1.19 | ■ |
| 1.20 | 14.40 | 17.00 | 38 | 3.00 | 2026-1.20 | ■ |
| 1.21 | 14.50 | 17.00 | 38 | 3.00 | 2026-1.21 | ■ |
| 1.22 | 14.70 | 17.00 | 38 | 3.00 | 2026-1.22 | ■ |
| 1.23 | 14.80 | 17.00 | 38 | 3.00 | 2026-1.23 | ■ |
| 1.24 | 14.90 | 17.50 | 38 | 3.00 | 2026-1.24 | ■ |
| 1.25 | 15.00 | 17.50 | 38 | 3.00 | 2026-1.25 | ■ |
| 1.26 | 15.10 | 17.50 | 50 | 3.00 | 2026-1.26 | ■ |
| 1.27 | 15.30 | 17.50 | 50 | 3.00 | 2026-1.27 | ■ |
| 1.28 | 15.40 | 18.00 | 50 | 3.00 | 2026-1.28 | ■ |
| 1.29 | 15.50 | 18.00 | 50 | 3.00 | 2026-1.29 | ■ |
| 1.30 | 15.60 | 18.00 | 50 | 3.00 | 2026-1.30 | ■ |
| 1.31 | 15.70 | 18.00 | 50 | 3.00 | 2026-1.31 | ■ |
| 1.32 | 15.90 | 18.50 | 50 | 3.00 | 2026-1.32 | ■ |
| 1.33 | 16.00 | 18.50 | 50 | 3.00 | 2026-1.33 | ■ |
| 1.34 | 16.10 | 18.50 | 50 | 3.00 | 2026-1.34 | ■ |
| 1.35 | 16.20 | 18.50 | 50 | 3.00 | 2026-1.35 | ■ |
| 1.36 | 16.30 | 19.00 | 50 | 3.00 | 2026-1.36 | ■ |
| 1.37 | 16.50 | 19.00 | 50 | 3.00 | 2026-1.37 | ■ |
| 1.38 | 16.60 | 19.00 | 50 | 3.00 | 2026-1.38 | ■ |
| 1.39 | 16.70 | 19.00 | 50 | 3.00 | 2026-1.39 | ■ |
| 1.40 | 16.80 | 19.50 | 50 | 3.00 | 2026-1.40 | ■ |
| 1.41 | 16.90 | 19.50 | 50 | 3.00 | 2026-1.41 | ■ |
| 1.42 | 17.10 | 19.50 | 50 | 3.00 | 2026-1.42 | ■ |
| 1.43 | 17.20 | 19.50 | 50 | 3.00 | 2026-1.43 | ■ |
| 1.44 | 17.30 | 20.00 | 50 | 3.00 | 2026-1.44 | ■ |
| 1.45 | 17.40 | 20.00 | 50 | 3.00 | 2026-1.45 | ■ |
| 1.46 | 17.50 | 20.00 | 50 | 3.00 | 2026-1.46 | ■ |
| 1.47 | 17.70 | 20.00 | 50 | 3.00 | 2026-1.47 | ■ |
| 1.48 | 17.80 | 20.50 | 50 | 3.00 | 2026-1.48 | ■ |
| 1.49 | 17.90 | 20.50 | 50 | 3.00 | 2026-1.49 | ■ |
| 1.50 | 18.00 | 21.00 | 50 | 3.00 | 2026-1.50 | ■ |
| 1.51 | 18.10 | 21.00 | 50 | 3.00 | 2026-1.51 | ■ |
| 1.52 | 18.30 | 21.00 | 50 | 3.00 | 2026-1.52 | ■ |
| 1.53 | 18.40 | 21.00 | 50 | 3.00 | 2026-1.53 | ■ |
| 1.54 | 18.50 | 21.50 | 50 | 3.00 | 2026-1.54 | ■ |
| 1.55 | 18.60 | 21.50 | 50 | 3.00 | 2026-1.55 | ■ |
| 1.56 | 18.70 | 21.50 | 50 | 3.00 | 2026-1.56 | ■ |
| 1.57 | 18.90 | 21.50 | 50 | 3.00 | 2026-1.57 | ■ |
| 1.58 | 19.00 | 22.00 | 50 | 3.00 | 2026-1.58 | ■ |
| 1.59 | 19.10 | 22.00 | 50 | 3.00 | 2026-1.59 | ■ |
| 1.60 | 19.20 | 22.00 | 50 | 3.00 | 2026-1.60 | ■ |

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|-------|-------|-------|----|-------|-----------|---|
| 1.61 | 19.30 | 22.00 | 50 | 3.00 | 2026-1.61 | ■ |
| 1.62 | 19.40 | 22.50 | 50 | 3.00 | 2026-1.62 | ■ |
| 1.63 | 19.60 | 22.50 | 50 | 3.00 | 2026-1.63 | ■ |
| 1.64 | 19.70 | 22.50 | 50 | 3.00 | 2026-1.64 | ■ |
| 1.65 | 19.80 | 22.50 | 50 | 3.00 | 2026-1.65 | ■ |
| 1.66 | 19.90 | 23.00 | 50 | 3.00 | 2026-1.66 | ■ |
| 1.67 | 20.10 | 23.00 | 50 | 3.00 | 2026-1.67 | ■ |
| 1.68 | 20.20 | 23.00 | 50 | 3.00 | 2026-1.68 | ■ |
| 1.69 | 20.30 | 23.00 | 50 | 3.00 | 2026-1.69 | ■ |
| 1.70 | 20.40 | 23.50 | 50 | 3.00 | 2026-1.70 | ■ |
| 1.71 | 20.50 | 23.50 | 50 | 3.00 | 2026-1.71 | ■ |
| 1.72 | 20.70 | 23.50 | 50 | 3.00 | 2026-1.72 | ■ |
| 1.73 | 20.80 | 23.50 | 50 | 3.00 | 2026-1.73 | ■ |
| 1.74 | 20.90 | 24.00 | 50 | 3.00 | 2026-1.74 | ■ |
| 1.75 | 21.00 | 24.00 | 50 | 3.00 | 2026-1.75 | ■ |
| 1.76 | 21.10 | 24.00 | 50 | 3.00 | 2026-1.76 | ■ |
| 1.77 | 21.30 | 24.00 | 50 | 3.00 | 2026-1.77 | ■ |
| 1.78 | 21.40 | 24.50 | 50 | 3.00 | 2026-1.78 | ■ |
| 1.79 | 21.50 | 24.50 | 50 | 3.00 | 2026-1.79 | ■ |
| 1.80 | 21.60 | 25.00 | 50 | 3.00 | 2026-1.80 | ■ |
| 1.81 | 21.70 | 25.00 | 50 | 3.00 | 2026-1.81 | ■ |
| 1.82 | 21.90 | 25.00 | 50 | 3.00 | 2026-1.82 | ■ |
| 1.83 | 22.00 | 25.00 | 50 | 3.00 | 2026-1.83 | ■ |
| 1.84 | 22.10 | 25.50 | 50 | 3.00 | 2026-1.84 | ■ |
| 1.85 | 22.20 | 25.50 | 50 | 3.00 | 2026-1.85 | ■ |
| 1.86 | 22.30 | 25.50 | 50 | 3.00 | 2026-1.86 | ■ |
| 1.87 | 22.50 | 25.50 | 50 | 3.00 | 2026-1.87 | ■ |
| 1.88 | 22.60 | 26.00 | 50 | 3.00 | 2026-1.88 | ■ |
| 1.89 | 22.70 | 26.00 | 50 | 3.00 | 2026-1.89 | ■ |
| 1.90 | 22.80 | 26.00 | 50 | 3.00 | 2026-1.90 | ■ |
| 1.91 | 22.90 | 26.00 | 50 | 3.00 | 2026-1.91 | ■ |
| 1.92 | 23.10 | 26.50 | 50 | 3.00 | 2026-1.92 | ■ |
| 1.93 | 23.20 | 26.50 | 50 | 3.00 | 2026-1.93 | ■ |
| 1.94 | 23.30 | 26.50 | 50 | 3.00 | 2026-1.94 | ■ |
| 1.95 | 23.40 | 26.50 | 50 | 3.00 | 2026-1.95 | ■ |
| 1.96 | 23.50 | 27.00 | 50 | 3.00 | 2026-1.96 | ■ |
| 1.97 | 23.70 | 27.00 | 50 | 3.00 | 2026-1.97 | ■ |
| 1.98 | 23.80 | 27.00 | 50 | 3.00 | 2026-1.98 | ■ |
| 1.99 | 23.90 | 27.00 | 50 | 3.00 | 2026-1.99 | ■ |
| 2.00 | 24.00 | 27.00 | 50 | 3.00 | 2026-2.00 | ■ |

MICRO-LINE

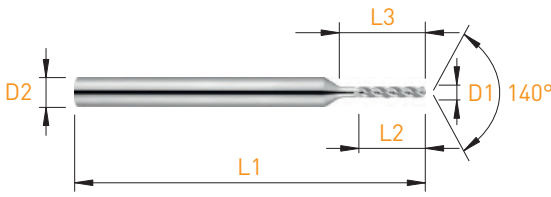
Micro-forets

Mikrobohrer

Micro drills

Ø 0.20 - Ø 1.09 mm

2030



| | | | | | |
|-----------------|----------------------|------|-----|------|--|
| MD VHM HM | λ^{35° | 5xD1 | Z=3 | 140° | |
|-----------------|----------------------|------|-----|------|--|

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|-------|------|------|----|-------|-----------|---|
| 0.20 | 1.00 | 1.50 | 38 | 3.00 | 2030-0.20 | ■ |
| 0.21 | 1.05 | 1.50 | 38 | 3.00 | 2030-0.21 | ■ |
| 0.22 | 1.10 | 1.60 | 38 | 3.00 | 2030-0.22 | ■ |
| 0.23 | 1.15 | 1.60 | 38 | 3.00 | 2030-0.23 | ■ |
| 0.24 | 1.20 | 1.70 | 38 | 3.00 | 2030-0.24 | ■ |
| 0.25 | 1.25 | 1.70 | 38 | 3.00 | 2030-0.25 | ■ |
| 0.26 | 1.30 | 1.80 | 38 | 3.00 | 2030-0.26 | ■ |
| 0.27 | 1.35 | 1.80 | 38 | 3.00 | 2030-0.27 | ■ |
| 0.28 | 1.40 | 1.90 | 38 | 3.00 | 2030-0.28 | ■ |
| 0.29 | 1.45 | 1.90 | 38 | 3.00 | 2030-0.29 | ■ |
| 0.30 | 1.50 | 2.00 | 38 | 3.00 | 2030-0.30 | ■ |
| 0.31 | 1.55 | 2.00 | 38 | 3.00 | 2030-0.31 | ■ |
| 0.32 | 1.60 | 2.10 | 38 | 3.00 | 2030-0.32 | ■ |
| 0.33 | 1.65 | 2.10 | 38 | 3.00 | 2030-0.33 | ■ |
| 0.34 | 1.70 | 2.20 | 38 | 3.00 | 2030-0.34 | ■ |
| 0.35 | 1.75 | 2.20 | 38 | 3.00 | 2030-0.35 | ■ |
| 0.36 | 1.80 | 2.30 | 38 | 3.00 | 2030-0.36 | ■ |
| 0.37 | 1.85 | 2.30 | 38 | 3.00 | 2030-0.37 | ■ |
| 0.38 | 1.90 | 2.40 | 38 | 3.00 | 2030-0.38 | ■ |
| 0.39 | 1.95 | 2.40 | 38 | 3.00 | 2030-0.39 | ■ |
| 0.40 | 2.00 | 2.50 | 38 | 3.00 | 2030-0.40 | ■ |
| 0.41 | 2.05 | 2.50 | 38 | 3.00 | 2030-0.41 | ■ |
| 0.42 | 2.10 | 2.60 | 38 | 3.00 | 2030-0.42 | ■ |
| 0.43 | 2.15 | 2.60 | 38 | 3.00 | 2030-0.43 | ■ |
| 0.44 | 2.20 | 2.70 | 38 | 3.00 | 2030-0.44 | ■ |
| 0.45 | 2.25 | 2.70 | 38 | 3.00 | 2030-0.45 | ■ |
| 0.46 | 2.30 | 2.80 | 38 | 3.00 | 2030-0.46 | ■ |
| 0.47 | 2.35 | 2.80 | 38 | 3.00 | 2030-0.47 | ■ |
| 0.48 | 2.40 | 2.90 | 38 | 3.00 | 2030-0.48 | ■ |
| 0.49 | 2.45 | 2.90 | 38 | 3.00 | 2030-0.49 | ■ |
| 0.50 | 2.50 | 3.00 | 38 | 3.00 | 2030-0.50 | ■ |
| 0.51 | 2.55 | 3.00 | 38 | 3.00 | 2030-0.51 | ■ |
| 0.52 | 2.60 | 3.10 | 38 | 3.00 | 2030-0.52 | ■ |
| 0.53 | 2.65 | 3.10 | 38 | 3.00 | 2030-0.53 | ■ |
| 0.54 | 2.70 | 3.20 | 38 | 3.00 | 2030-0.54 | ■ |
| 0.55 | 2.75 | 3.20 | 38 | 3.00 | 2030-0.55 | ■ |
| 0.56 | 2.80 | 3.30 | 38 | 3.00 | 2030-0.56 | ■ |
| 0.57 | 2.85 | 3.30 | 38 | 3.00 | 2030-0.57 | ■ |
| 0.58 | 2.90 | 3.40 | 38 | 3.00 | 2030-0.58 | ■ |

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | Z |
|-------|------|------|----|-------|-----------|---|
| 0.59 | 2.95 | 3.40 | 38 | 3.00 | 2030-0.59 | ■ |
| 0.60 | 3.00 | 3.50 | 38 | 3.00 | 2030-0.60 | ■ |
| 0.61 | 3.05 | 3.50 | 38 | 3.00 | 2030-0.61 | ■ |
| 0.62 | 3.10 | 3.60 | 38 | 3.00 | 2030-0.62 | ■ |
| 0.63 | 3.15 | 3.60 | 38 | 3.00 | 2030-0.63 | ■ |
| 0.64 | 3.20 | 3.70 | 38 | 3.00 | 2030-0.64 | ■ |
| 0.65 | 3.25 | 3.70 | 38 | 3.00 | 2030-0.65 | ■ |
| 0.66 | 3.30 | 3.80 | 38 | 3.00 | 2030-0.66 | ■ |
| 0.67 | 3.35 | 3.80 | 38 | 3.00 | 2030-0.67 | ■ |
| 0.68 | 3.40 | 3.90 | 38 | 3.00 | 2030-0.68 | ■ |
| 0.69 | 3.45 | 3.90 | 38 | 3.00 | 2030-0.69 | ■ |
| 0.70 | 3.50 | 4.00 | 38 | 3.00 | 2030-0.70 | ■ |
| 0.71 | 3.55 | 4.00 | 38 | 3.00 | 2030-0.71 | ■ |
| 0.72 | 3.60 | 4.10 | 38 | 3.00 | 2030-0.72 | ■ |
| 0.73 | 3.65 | 4.10 | 38 | 3.00 | 2030-0.73 | ■ |
| 0.74 | 3.70 | 4.20 | 38 | 3.00 | 2030-0.74 | ■ |
| 0.75 | 3.75 | 4.20 | 38 | 3.00 | 2030-0.75 | ■ |
| 0.76 | 3.80 | 4.30 | 38 | 3.00 | 2030-0.76 | ■ |
| 0.77 | 3.85 | 4.30 | 38 | 3.00 | 2030-0.77 | ■ |
| 0.78 | 3.90 | 4.40 | 38 | 3.00 | 2030-0.78 | ■ |
| 0.79 | 3.95 | 4.40 | 38 | 3.00 | 2030-0.79 | ■ |
| 0.80 | 4.00 | 4.50 | 38 | 3.00 | 2030-0.80 | ■ |
| 0.81 | 4.05 | 4.50 | 38 | 3.00 | 2030-0.81 | ■ |
| 0.82 | 4.10 | 4.60 | 38 | 3.00 | 2030-0.82 | ■ |
| 0.83 | 4.15 | 4.60 | 38 | 3.00 | 2030-0.83 | ■ |
| 0.84 | 4.20 | 4.70 | 38 | 3.00 | 2030-0.84 | ■ |
| 0.85 | 4.25 | 4.70 | 38 | 3.00 | 2030-0.85 | ■ |
| 0.86 | 4.30 | 4.80 | 38 | 3.00 | 2030-0.86 | ■ |
| 0.87 | 4.35 | 4.80 | 38 | 3.00 | 2030-0.87 | ■ |
| 0.88 | 4.40 | 4.90 | 38 | 3.00 | 2030-0.88 | ■ |
| 0.89 | 4.45 | 4.90 | 38 | 3.00 | 2030-0.89 | ■ |
| 0.90 | 4.50 | 5.00 | 38 | 3.00 | 2030-0.90 | ■ |
| 0.91 | 4.55 | 5.00 | 38 | 3.00 | 2030-0.91 | ■ |
| 0.92 | 4.60 | 5.10 | 38 | 3.00 | 2030-0.92 | ■ |
| 0.93 | 4.65 | 5.10 | 38 | 3.00 | 2030-0.93 | ■ |
| 0.94 | 4.70 | 5.20 | 38 | 3.00 | 2030-0.94 | ■ |
| 0.95 | 4.75 | 5.20 | 38 | 3.00 | 2030-0.95 | ■ |
| 0.96 | 4.80 | 5.30 | 38 | 3.00 | 2030-0.96 | ■ |
| 0.97 | 4.85 | 5.30 | 38 | 3.00 | 2030-0.97 | ■ |
| 0.98 | 4.90 | 5.40 | 38 | 3.00 | 2030-0.98 | ■ |
| 0.99 | 4.95 | 5.40 | 38 | 3.00 | 2030-0.99 | ■ |
| 1.00 | 5.00 | 6.50 | 38 | 3.00 | 2030-1.00 | ■ |
| 1.01 | 5.05 | 6.50 | 38 | 3.00 | 2030-1.01 | ■ |
| 1.02 | 5.10 | 6.50 | 38 | 3.00 | 2030-1.02 | ■ |
| 1.03 | 5.15 | 6.50 | 38 | 3.00 | 2030-1.03 | ■ |
| 1.04 | 5.20 | 6.50 | 38 | 3.00 | 2030-1.04 | ■ |
| 1.05 | 5.25 | 6.50 | 38 | 3.00 | 2030-1.05 | ■ |
| 1.06 | 5.30 | 6.50 | 38 | 3.00 | 2030-1.06 | ■ |
| 1.07 | 5.35 | 7.50 | 38 | 3.00 | 2030-1.07 | ■ |
| 1.08 | 5.40 | 7.50 | 38 | 3.00 | 2030-1.08 | ■ |
| 1.09 | 5.45 | 7.50 | 38 | 3.00 | 2030-1.09 | ■ |

Micro-forets

Mikrobohrer

Micro drills

Ø 1.10 - Ø 2.11 mm

2030

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|-------|------|-------|----|-------|-----------|---|
| 1.10 | 5.50 | 7.50 | 38 | 3.00 | 2030-1.10 | ■ |
| 1.11 | 5.55 | 7.50 | 38 | 3.00 | 2030-1.11 | ■ |
| 1.12 | 5.60 | 7.50 | 38 | 3.00 | 2030-1.12 | ■ |
| 1.13 | 5.65 | 7.50 | 38 | 3.00 | 2030-1.13 | ■ |
| 1.14 | 5.70 | 7.50 | 38 | 3.00 | 2030-1.14 | ■ |
| 1.15 | 5.75 | 7.50 | 38 | 3.00 | 2030-1.15 | ■ |
| 1.16 | 5.80 | 7.50 | 38 | 3.00 | 2030-1.16 | ■ |
| 1.17 | 5.85 | 7.50 | 38 | 3.00 | 2030-1.17 | ■ |
| 1.18 | 5.90 | 8.50 | 38 | 3.00 | 2030-1.18 | ■ |
| 1.19 | 5.95 | 8.50 | 38 | 3.00 | 2030-1.19 | ■ |
| 1.20 | 6.00 | 8.50 | 38 | 3.00 | 2030-1.20 | ■ |
| 1.21 | 6.05 | 8.50 | 38 | 3.00 | 2030-1.21 | ■ |
| 1.22 | 6.10 | 8.50 | 38 | 3.00 | 2030-1.22 | ■ |
| 1.23 | 6.15 | 8.50 | 38 | 3.00 | 2030-1.23 | ■ |
| 1.24 | 6.20 | 8.50 | 38 | 3.00 | 2030-1.24 | ■ |
| 1.25 | 6.25 | 8.50 | 38 | 3.00 | 2030-1.25 | ■ |
| 1.26 | 6.30 | 8.50 | 38 | 3.00 | 2030-1.26 | ■ |
| 1.27 | 6.35 | 8.50 | 38 | 3.00 | 2030-1.27 | ■ |
| 1.28 | 6.40 | 8.50 | 38 | 3.00 | 2030-1.28 | ■ |
| 1.29 | 6.45 | 8.50 | 38 | 3.00 | 2030-1.29 | ■ |
| 1.30 | 6.50 | 8.50 | 38 | 3.00 | 2030-1.30 | ■ |
| 1.31 | 6.55 | 8.50 | 38 | 3.00 | 2030-1.31 | ■ |
| 1.32 | 6.60 | 8.50 | 38 | 3.00 | 2030-1.32 | ■ |
| 1.33 | 6.65 | 9.50 | 38 | 3.00 | 2030-1.33 | ■ |
| 1.34 | 6.70 | 9.50 | 38 | 3.00 | 2030-1.34 | ■ |
| 1.35 | 6.75 | 9.50 | 38 | 3.00 | 2030-1.35 | ■ |
| 1.36 | 6.80 | 9.50 | 38 | 3.00 | 2030-1.36 | ■ |
| 1.37 | 6.85 | 9.50 | 38 | 3.00 | 2030-1.37 | ■ |
| 1.38 | 6.90 | 9.50 | 38 | 3.00 | 2030-1.38 | ■ |
| 1.39 | 6.95 | 9.50 | 38 | 3.00 | 2030-1.39 | ■ |
| 1.40 | 7.00 | 9.50 | 38 | 3.00 | 2030-1.40 | ■ |
| 1.41 | 7.05 | 9.50 | 38 | 3.00 | 2030-1.41 | ■ |
| 1.42 | 7.10 | 9.50 | 38 | 3.00 | 2030-1.42 | ■ |
| 1.43 | 7.15 | 9.50 | 38 | 3.00 | 2030-1.43 | ■ |
| 1.44 | 7.20 | 9.50 | 38 | 3.00 | 2030-1.44 | ■ |
| 1.45 | 7.25 | 9.50 | 38 | 3.00 | 2030-1.45 | ■ |
| 1.46 | 7.30 | 9.50 | 38 | 3.00 | 2030-1.46 | ■ |
| 1.47 | 7.35 | 9.50 | 38 | 3.00 | 2030-1.47 | ■ |
| 1.48 | 7.40 | 9.50 | 38 | 3.00 | 2030-1.48 | ■ |
| 1.49 | 7.45 | 9.50 | 38 | 3.00 | 2030-1.49 | ■ |
| 1.50 | 7.50 | 9.50 | 38 | 3.00 | 2030-1.50 | ■ |
| 1.51 | 7.55 | 10.50 | 38 | 3.00 | 2030-1.51 | ■ |
| 1.52 | 7.60 | 10.50 | 38 | 3.00 | 2030-1.52 | ■ |
| 1.53 | 7.65 | 10.50 | 38 | 3.00 | 2030-1.53 | ■ |
| 1.54 | 7.70 | 10.50 | 38 | 3.00 | 2030-1.54 | ■ |
| 1.55 | 7.75 | 10.50 | 38 | 3.00 | 2030-1.55 | ■ |
| 1.56 | 7.80 | 10.50 | 38 | 3.00 | 2030-1.56 | ■ |
| 1.57 | 7.85 | 10.50 | 38 | 3.00 | 2030-1.57 | ■ |
| 1.58 | 7.90 | 10.50 | 38 | 3.00 | 2030-1.58 | ■ |
| 1.59 | 7.95 | 10.50 | 38 | 3.00 | 2030-1.59 | ■ |
| 1.60 | 8.00 | 10.50 | 38 | 3.00 | 2030-1.60 | ■ |

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|-------|-------|-------|----|-------|-----------|---|
| 1.61 | 8.05 | 10.50 | 38 | 3.00 | 2030-1.61 | ■ |
| 1.62 | 8.10 | 10.50 | 38 | 3.00 | 2030-1.62 | ■ |
| 1.63 | 8.15 | 10.50 | 38 | 3.00 | 2030-1.63 | ■ |
| 1.64 | 8.20 | 10.50 | 38 | 3.00 | 2030-1.64 | ■ |
| 1.65 | 8.25 | 10.50 | 38 | 3.00 | 2030-1.65 | ■ |
| 1.66 | 8.30 | 10.50 | 38 | 3.00 | 2030-1.66 | ■ |
| 1.67 | 8.35 | 10.50 | 38 | 3.00 | 2030-1.67 | ■ |
| 1.68 | 8.40 | 10.50 | 38 | 3.00 | 2030-1.68 | ■ |
| 1.69 | 8.45 | 10.50 | 38 | 3.00 | 2030-1.69 | ■ |
| 1.70 | 8.50 | 10.50 | 38 | 3.00 | 2030-1.70 | ■ |
| 1.71 | 8.55 | 11.50 | 38 | 3.00 | 2030-1.71 | ■ |
| 1.72 | 8.60 | 11.50 | 38 | 3.00 | 2030-1.72 | ■ |
| 1.73 | 8.65 | 11.50 | 38 | 3.00 | 2030-1.73 | ■ |
| 1.74 | 8.70 | 11.50 | 38 | 3.00 | 2030-1.74 | ■ |
| 1.75 | 8.75 | 11.50 | 38 | 3.00 | 2030-1.75 | ■ |
| 1.76 | 8.80 | 11.50 | 38 | 3.00 | 2030-1.76 | ■ |
| 1.77 | 8.85 | 11.50 | 38 | 3.00 | 2030-1.77 | ■ |
| 1.78 | 8.90 | 11.50 | 38 | 3.00 | 2030-1.78 | ■ |
| 1.79 | 8.95 | 11.50 | 38 | 3.00 | 2030-1.79 | ■ |
| 1.80 | 9.00 | 11.50 | 38 | 3.00 | 2030-1.80 | ■ |
| 1.81 | 9.05 | 11.50 | 38 | 3.00 | 2030-1.81 | ■ |
| 1.82 | 9.10 | 11.50 | 38 | 3.00 | 2030-1.82 | ■ |
| 1.83 | 9.15 | 11.50 | 38 | 3.00 | 2030-1.83 | ■ |
| 1.84 | 9.20 | 11.50 | 38 | 3.00 | 2030-1.84 | ■ |
| 1.85 | 9.25 | 11.50 | 38 | 3.00 | 2030-1.85 | ■ |
| 1.86 | 9.30 | 11.50 | 38 | 3.00 | 2030-1.86 | ■ |
| 1.87 | 9.35 | 11.50 | 38 | 3.00 | 2030-1.87 | ■ |
| 1.88 | 9.40 | 11.50 | 38 | 3.00 | 2030-1.88 | ■ |
| 1.89 | 9.45 | 11.50 | 38 | 3.00 | 2030-1.89 | ■ |
| 1.90 | 9.50 | 11.50 | 38 | 3.00 | 2030-1.90 | ■ |
| 1.91 | 9.55 | 12.50 | 38 | 3.00 | 2030-1.91 | ■ |
| 1.92 | 9.60 | 12.50 | 38 | 3.00 | 2030-1.92 | ■ |
| 1.93 | 9.65 | 12.50 | 38 | 3.00 | 2030-1.93 | ■ |
| 1.94 | 9.70 | 12.50 | 38 | 3.00 | 2030-1.94 | ■ |
| 1.95 | 9.75 | 12.50 | 38 | 3.00 | 2030-1.95 | ■ |
| 1.96 | 9.80 | 12.50 | 38 | 3.00 | 2030-1.96 | ■ |
| 1.97 | 9.85 | 12.50 | 38 | 3.00 | 2030-1.97 | ■ |
| 1.98 | 9.90 | 12.50 | 38 | 3.00 | 2030-1.98 | ■ |
| 1.99 | 9.95 | 12.50 | 38 | 3.00 | 2030-1.99 | ■ |
| 2.00 | 10.00 | 12.50 | 38 | 3.00 | 2030-2.00 | ■ |
| 2.01 | 10.05 | 12.50 | 38 | 3.00 | 2030-2.01 | ■ |
| 2.02 | 10.10 | 12.50 | 38 | 3.00 | 2030-2.02 | ■ |
| 2.03 | 10.15 | 12.50 | 38 | 3.00 | 2030-2.03 | ■ |
| 2.04 | 10.20 | 12.50 | 38 | 3.00 | 2030-2.04 | ■ |
| 2.05 | 10.25 | 12.50 | 38 | 3.00 | 2030-2.05 | ■ |
| 2.06 | 10.30 | 12.50 | 38 | 3.00 | 2030-2.06 | ■ |
| 2.07 | 10.35 | 12.50 | 38 | 3.00 | 2030-2.07 | ■ |
| 2.08 | 10.40 | 12.50 | 38 | 3.00 | 2030-2.08 | ■ |
| 2.09 | 10.45 | 12.50 | 38 | 3.00 | 2030-2.09 | ■ |
| 2.10 | 10.50 | 12.50 | 38 | 3.00 | 2030-2.10 | ■ |
| 2.11 | 10.55 | 12.50 | 38 | 3.00 | 2030-2.11 | ■ |

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|-------|-------|-------|----|-------|------------------|---|
| 2.12 | 10.60 | 12.50 | 38 | 3.00 | 2030-2.12 | ■ |
| 2.13 | 10.65 | 13.50 | 38 | 3.00 | 2030-2.13 | ■ |
| 2.14 | 10.70 | 13.50 | 38 | 3.00 | 2030-2.14 | ■ |
| 2.15 | 10.75 | 13.50 | 38 | 3.00 | 2030-2.15 | ■ |
| 2.16 | 10.80 | 13.50 | 38 | 3.00 | 2030-2.16 | ■ |
| 2.17 | 10.85 | 13.50 | 38 | 3.00 | 2030-2.17 | ■ |
| 2.18 | 10.90 | 13.50 | 38 | 3.00 | 2030-2.18 | ■ |
| 2.19 | 10.95 | 13.50 | 38 | 3.00 | 2030-2.19 | ■ |
| 2.20 | 11.00 | 13.50 | 38 | 3.00 | 2030-2.20 | ■ |
| 2.21 | 11.05 | 13.50 | 38 | 3.00 | 2030-2.21 | ■ |
| 2.22 | 11.10 | 13.50 | 38 | 3.00 | 2030-2.22 | ■ |
| 2.23 | 11.15 | 13.50 | 38 | 3.00 | 2030-2.23 | ■ |
| 2.24 | 11.20 | 13.50 | 38 | 3.00 | 2030-2.24 | ■ |
| 2.25 | 11.25 | 13.50 | 38 | 3.00 | 2030-2.25 | ■ |
| 2.26 | 11.30 | 13.50 | 38 | 3.00 | 2030-2.26 | ■ |
| 2.27 | 11.35 | 13.50 | 38 | 3.00 | 2030-2.27 | ■ |
| 2.28 | 11.40 | 13.50 | 38 | 3.00 | 2030-2.28 | ■ |
| 2.29 | 11.45 | 13.50 | 38 | 3.00 | 2030-2.29 | ■ |
| 2.30 | 11.50 | 13.50 | 38 | 3.00 | 2030-2.30 | ■ |
| 2.31 | 11.55 | 13.50 | 38 | 3.00 | 2030-2.31 | ■ |
| 2.32 | 11.60 | 13.50 | 38 | 3.00 | 2030-2.32 | ■ |
| 2.33 | 11.65 | 13.50 | 38 | 3.00 | 2030-2.33 | ■ |
| 2.34 | 11.70 | 13.50 | 38 | 3.00 | 2030-2.34 | ■ |
| 2.35 | 11.75 | 13.50 | 38 | 3.00 | 2030-2.35 | ■ |
| 2.36 | 11.80 | 13.50 | 38 | 3.00 | 2030-2.36 | ■ |
| 2.37 | 11.85 | 14.50 | 38 | 3.00 | 2030-2.37 | ■ |
| 2.38 | 11.90 | 14.50 | 38 | 3.00 | 2030-2.38 | ■ |
| 2.39 | 11.95 | 14.50 | 38 | 3.00 | 2030-2.39 | ■ |
| 2.40 | 12.00 | 14.50 | 38 | 3.00 | 2030-2.40 | ■ |
| 2.41 | 12.05 | 14.50 | 38 | 3.00 | 2030-2.41 | ■ |
| 2.42 | 12.10 | 14.50 | 38 | 3.00 | 2030-2.42 | ■ |
| 2.43 | 12.15 | 14.50 | 38 | 3.00 | 2030-2.43 | ■ |
| 2.44 | 12.20 | 14.50 | 38 | 3.00 | 2030-2.44 | ■ |
| 2.45 | 12.25 | 14.50 | 38 | 3.00 | 2030-2.45 | ■ |
| 2.46 | 12.30 | 14.50 | 38 | 3.00 | 2030-2.46 | ■ |
| 2.47 | 12.35 | 14.50 | 38 | 3.00 | 2030-2.47 | ■ |
| 2.48 | 12.40 | 14.50 | 38 | 3.00 | 2030-2.48 | ■ |
| 2.49 | 12.45 | 14.50 | 38 | 3.00 | 2030-2.49 | ■ |
| 2.50 | 12.50 | 14.50 | 38 | 3.00 | 2030-2.50 | ■ |
| 2.51 | 12.55 | 14.50 | 38 | 3.00 | 2030-2.51 | ■ |
| 2.52 | 12.60 | 14.50 | 38 | 3.00 | 2030-2.52 | ■ |
| 2.53 | 12.65 | 14.50 | 38 | 3.00 | 2030-2.53 | ■ |
| 2.54 | 12.70 | 14.50 | 38 | 3.00 | 2030-2.54 | ■ |
| 2.55 | 12.75 | 14.50 | 38 | 3.00 | 2030-2.55 | ■ |
| 2.56 | 12.80 | 14.50 | 38 | 3.00 | 2030-2.56 | ■ |
| 2.57 | 12.85 | 14.50 | 38 | 3.00 | 2030-2.57 | ■ |
| 2.58 | 12.90 | 14.50 | 38 | 3.00 | 2030-2.58 | ■ |
| 2.59 | 12.95 | 14.50 | 38 | 3.00 | 2030-2.59 | ■ |
| 2.60 | 13.00 | 14.50 | 38 | 3.00 | 2030-2.60 | ■ |
| 2.61 | 13.05 | 14.50 | 38 | 3.00 | 2030-2.61 | ■ |
| 2.62 | 13.10 | 14.50 | 38 | 3.00 | 2030-2.62 | ■ |

| D1 h6 | L2 | L3 | L1 | D2 h6 | Art. N° | z |
|-------|-------|-------|----|-------|------------------|---|
| 2.63 | 13.15 | 14.50 | 38 | 3.00 | 2030-2.63 | ■ |
| 2.64 | 13.20 | 14.50 | 38 | 3.00 | 2030-2.64 | ■ |
| 2.65 | 13.25 | 14.50 | 38 | 3.00 | 2030-2.65 | ■ |
| 2.66 | 13.30 | 16.50 | 38 | 3.00 | 2030-2.66 | ■ |
| 2.67 | 13.35 | 16.50 | 38 | 3.00 | 2030-2.67 | ■ |
| 2.68 | 13.40 | 16.50 | 38 | 3.00 | 2030-2.68 | ■ |
| 2.69 | 13.45 | 16.50 | 38 | 3.00 | 2030-2.69 | ■ |
| 2.70 | 13.50 | 16.50 | 38 | 3.00 | 2030-2.70 | ■ |
| 2.71 | 13.55 | 16.55 | 38 | 3.00 | 2030-2.71 | ■ |
| 2.72 | 13.60 | 16.50 | 38 | 3.00 | 2030-2.72 | ■ |
| 2.73 | 13.65 | 16.50 | 38 | 3.00 | 2030-2.73 | ■ |
| 2.74 | 13.70 | 16.50 | 38 | 3.00 | 2030-2.74 | ■ |
| 2.75 | 13.75 | 16.50 | 38 | 3.00 | 2030-2.75 | ■ |
| 2.76 | 13.80 | 16.50 | 38 | 3.00 | 2030-2.76 | ■ |
| 2.77 | 13.85 | 16.50 | 38 | 3.00 | 2030-2.77 | ■ |
| 2.78 | 13.90 | 16.50 | 38 | 3.00 | 2030-2.78 | ■ |
| 2.79 | 13.95 | 16.50 | 38 | 3.00 | 2030-2.79 | ■ |
| 2.80 | 14.00 | 16.50 | 38 | 3.00 | 2030-2.80 | ■ |
| 2.81 | 14.05 | 16.50 | 38 | 3.00 | 2030-2.81 | ■ |
| 2.82 | 14.10 | 16.50 | 38 | 3.00 | 2030-2.82 | ■ |
| 2.83 | 14.15 | 16.50 | 38 | 3.00 | 2030-2.83 | ■ |
| 2.84 | 14.20 | 16.50 | 38 | 3.00 | 2030-2.84 | ■ |
| 2.85 | 14.25 | 16.50 | 38 | 3.00 | 2030-2.85 | ■ |
| 2.86 | 14.30 | 16.50 | 38 | 3.00 | 2030-2.86 | ■ |
| 2.87 | 14.35 | 16.50 | 38 | 3.00 | 2030-2.87 | ■ |
| 2.88 | 14.40 | 16.50 | 38 | 3.00 | 2030-2.88 | ■ |
| 2.89 | 14.45 | 16.50 | 38 | 3.00 | 2030-2.89 | ■ |
| 2.90 | 14.50 | 16.50 | 38 | 3.00 | 2030-2.90 | ■ |
| 2.91 | 14.55 | 16.50 | 38 | 3.00 | 2030-2.91 | ■ |
| 2.92 | 14.60 | 16.50 | 38 | 3.00 | 2030-2.92 | ■ |
| 2.93 | 14.65 | 16.50 | 38 | 3.00 | 2030-2.93 | ■ |
| 2.94 | 14.70 | 16.50 | 38 | 3.00 | 2030-2.94 | ■ |
| 2.95 | 14.75 | 16.50 | 38 | 3.00 | 2030-2.95 | ■ |
| 2.96 | 14.80 | 16.50 | 38 | 3.00 | 2030-2.96 | ■ |
| 2.97 | 14.85 | 16.50 | 38 | 3.00 | 2030-2.97 | ■ |
| 2.98 | 14.90 | 16.50 | 38 | 3.00 | 2030-2.98 | ■ |
| 2.99 | 14.95 | 16.50 | 38 | 3.00 | 2030-2.99 | ■ |



MICRO-LINE




Informations techniques et symboles


Technische Informationen und Symbole

Technical information and symbols


60° Angle
90° Winkel
120° Angle

 Sharp Corner
Coins vifs
Scharfkantige Ecken
Sharp corners


λ 25° Angle d'hélice
Spiralwinkel
Helix angle

 Fraises hémisphériques
Radiusfräser
End mills with ball nose


λ 36° Hélice différente
 λ 38° Verschiedene Spirale
 λ 40° Different propeller

 Radius Corner
Rayon de coin
Eckradius
Corner radius

λ Hélice progressive
Progressive Spirale
35°/38° Progressiv propeller


 Dents avec coupe centrale
Zähne Zentrumschnitt
Teeth center cutting

Z Nombre de dents
Anzahl der Zähne
Number of teeth


 Denture décalée
Versetzte Verzahnung
Alternated teeth


2xD1 Rapport longueur-diamètre
Länge-Durchmesser Verhältnis
Length to diameter ratio


DHD Denture décalée hélice différente
Versetzte Verzahnung unterschiedliche Spirale
Alternated teeth different helix


 Lèvres, affûtage à facettes
Schneiden, Facettenschärfen
Flutes, sharpening with facets

DHP Denture décalée hélice progressive
Versetzte Verzahnung progressive Spirale
Alternated teeth progressive helix

 Taillage demi-lune
Kanonenbohrer Spitze
Gundrills tip

 Taillage renforcé 3/4
3/4 genuteter Fräser
3/4 straight fluted

 Usinage radial, diagonal et axial
Radiale, diagonale und axiale Bearbeitung
Radial, diagonal and axial machining

 Usinage radial et axial
Radiale und axiale Bearbeitung
Radial and axial machining

Informations techniques et symboles

Technische Informationen und Symbole

Technical information and symbols

| | | | |
|---|------------------------|-------------|---------------------------------------|
| Diamètre outil Werkzeugdurchmesser Tool diameter | D (mm) | | |
| Nombre de dents Zähnezahl Number of teeth | Z | | |
| Profondeur de coupe Schnitttiefe Cutting depth | ap (mm) | | |
| Largeur de coupe Schnittbreite Cutting width | ae (mm) | | |
| Vitesse de coupe Schnittgeschwindigkeit Cutting speed | (m/min) | Vc = | $\frac{D \times \pi \times n}{1000}$ |
| Nombre de tours Umdrehungen Rotations | (U/min) | n = | $\frac{Vc \times 1000}{\pi \times D}$ |
| Avance par dent Vorschub pro Zahn Cutting feed per tooth | (mm/tooth) | fz = | $\frac{Vf}{n \times Z}$ |
| Vitesse d'avance Vorschubgeschwindigkeit Cutting feed | (mm/min) | Vf = | fz x Z x n |
| Débit d'enlèvement de copeaux Spanvolumen Removal of cutting up shaving | (mm ³ /min) | Q = | ap x ae x Vf |
| Avance par tour Vorschub pro Umdrehung Cutting feed per rotation | (mm/U) | f = | $\frac{Vf}{n}$ |

Nos propositions techniques s'appliquent à la plupart des utilisations courantes.

N'hésitez pas à nous contacter pour des conseils plus précis.

Diese technische Empfehlungen gelten für die Mehrzahl der Standardanwendungen.

Unsere Techniker beraten Sie gerne für spezifische Anliegen.

These technical propositions apply to the majority of standard usages.

Do not hesitate to contact us for more specific advices.


CIRCO-LINE


APPLITEC





Définition du nombre de dents
Empfohlene Zähnezahl
Recommended number of teeth > **15.02**


Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations > **15.03**


Fraises circulaires en métal dur – denture fine
VHM-Kreissägeblätter – feine Verzahnung
Solid carbide slitting saws – fine teeth
Type 1101  > **15.04**

Fraises circulaires en métal dur – denture grossière
VHM-Kreissägeblätter – grobe Verzahnung
Solid carbide slitting saws – large teeth
Type 1102  > **15.06**

Fraises circulaires en métal dur – denture extra-fine
VHM-Kreissägeblätter – extra feine Verzahnung
Solid carbide slitting saws – extra fine teeth
Type 1103  > **15.08**

Fraises circulaires en métal dur - denture INOX
VHM-Kreissägeblätter - INOX Verzahnung
Solid carbide slitting saws - INOX teeth
Type 1104  > **15.10**

Exécutions spéciales
Sonderanfertigungen
Special executions  > **15.11**

Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs
Type 1106  > **15.12**

Tasseaux porte-fraise avec serrage avant
Fräsdorne mit Spannung von vorne
Milling arbors with front clamping
Type 2810 / 2811 / 2815  > **15.16**

Tasseaux porte-fraise avec serrage arrière
Fräsdorne mit Spannung von hinten
Milling arbors with rear clamping
Type 2820 / 1820  > **15.17**

Définition du nombre de dents

Empfohlene Zähnezahl

Recommended number of teeth

OK

KO

Idéalement 2-3 dents en contact

Im Idealfall 2-3 Zähne im Einsatz

Ideally 2-3 teeth in contact

Trop de dents = avance trop faible par dent / pas assez de place pour le copeau

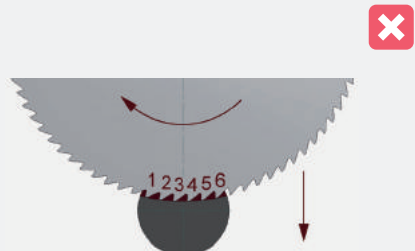
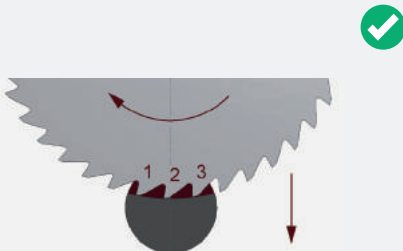
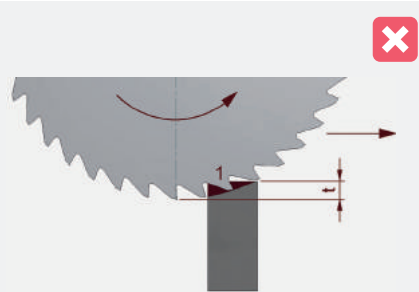
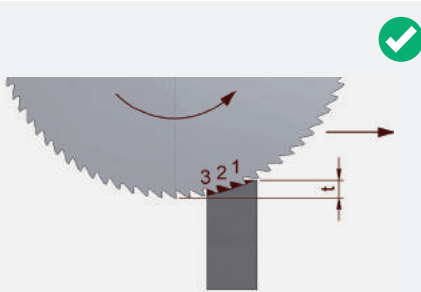
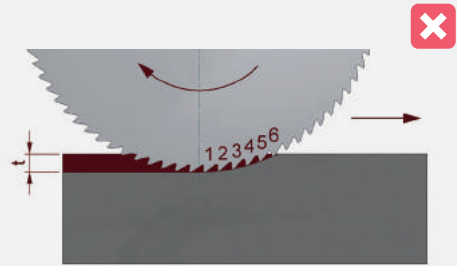
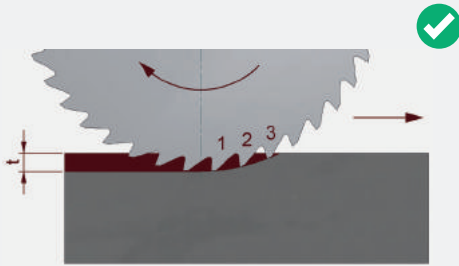
Trop peu de dents = risque de vibration / usure prématurée

Zu viele Zähne = zu geringer Vorschub pro Zahn / zu kleiner Spanraum

Zu wenig Zähne = Vibrationen / Verschleissrisiko

Too many teeth = feed too low per tooth / not enough place for the chips

Not enough teeth = vibration / risk of quick wearout



Conseils d'utilisation

Anwendungsempfehlungen

Application recommendations

| | | Fraises circulaires en métal dur VHM-Kreissägeblätter Solid carbide slitting saws | | |
|--|----------|---|---------------|---|
| Matière Werkstoff Material | | Lubrifiant* Kühlung* Coolant* | VC (m/min) | Choix de la denture / avance Verzahnungswahl / Vorschub Teeth selection / cutting feed |
| Acier de décolletage Automatenstahl Free-cutting steel | P | O / E | 120 - 240 | <p>Type 1101 + 1104</p> <ul style="list-style-type: none"> • Pour usinage peu profond ou longueur à fendre faible. Avance par dent: 0.005-0.05** • Für geringe Bearbeitungstiefen oder kurze Schlitzlängen. Vorschub pro Zahn: 0.005-0.05** • For low machining depth or short slots. Feed per tooth: 0.005-0.05** <p>Type 1102</p> <ul style="list-style-type: none"> • Pour usinage profond ou grande longueur à fendre. Avance par dent: 0.01-0.1** • Für grosse Bearbeitungstiefen oder grosse Schlitzlängen. Vorschub pro Zahn: 0.01-0.1** • For deep machining or long slots. Feed per tooth: 0.01-0.1** <p>Type 1103</p> <ul style="list-style-type: none"> • Pour usinage de pièces fragiles ou fines. Avance par dent: 0.002-0.02** • Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken. Vorschub pro Zahn: 0.002-0.02** • For machining of fragile or thin workpieces. Feed per tooth: 0.002-0.02** <p>** selon la matière, l'épaisseur ainsi que la rigidité globale ** je nach Werkstoff, Dicke und Gesamtstarrheit ** according to material, thickness and global rigidity</p> |
| Acier Stahl Steel < 600 N/mm ² | P | O / E | 100 - 200 | |
| Acier Stahl Steel < 800 N/mm ² | P | O / E | 80 - 160 | |
| Acier Stahl Steel < 1000 N/mm ² | P | O / E | 60 - 120 | |
| Acier Stahl Steel > 1000 N/mm ² | P | O / E | 40 - 80 | |
| Fonte Gusseisen Cast iron | K | A / E | 60 - 120 | |
| Acier inoxydable Rostfreistahl Stainless steel | M | O / E | 50 - 100 | |
| Aluminium Si < 12% | N | O / E | 150 - 600 | |
| Aluminium Si > 12% | N | O / E | 80 - 300 | |
| Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze | N | A / O / E | 80 - 300 | |
| Thermoplastique Thermoplaste Thermoplastics | N | A | 200 - 700 | |
| Duroplastique Duroplaste Duroplastics | N | A | 150 - 600 | |
| Acier réfractaire Warmfester Stahl Heat resistant steel | S | O / E | 25 - 60 | |
| Titane Titan Titanium | S | O / E | 30 - 60 | |

* O = huile de coupe /Schneidöl / cutting oil

* E = Emulsion

* A = sec (air comprimé) / Trocken (Presluft) / dry (air)

avec revêtement TiN / TiCN / TiAlN, augmenter les valeurs de 20%

mit TiN / TiCN / TiAlN Beschichtung, Daten um 20% erhöhen

with TiN / TiCN / TiAlN coating, increase data by 20%

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- For low machining depth or short slots
- Avance par dent: 0.005 - 0.05 mm
- Vorschub pro Zahn: 0.005 - 0.05 mm
- Feed per tooth: 0.005 - 0.05 mm
- Revêtement sur demande
- Beschichtung auf Anfrage
- Coating on request



Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

Type 1101

| Denture fine Feine Verzahnung Fine teeth | | | | | | | | | | | | DIN 1837 |
|--|---|----|----|-----|-----|-----|-----|-----|-----|-----|--|----------|
| D js12 | 15 | 20 | 25 | 30 | 40 | 50 | 63 | 80 | 100 | 125 | 160 | D js12 |
| d H7 | 5 | 5 | 8 | 8 | 10 | 13 | 16 | 22 | 22 | 22 | 32 | d H7 |
| Epaisseur Dicke Thickness E ±0.01 | Z = Nombre de dents Zähnezahl Number of teeth | | | | | | | | | | Epaisseur Dicke Thickness E ±0.01 | |
| 0.10 | 64 | 80 | 80 | 100 | 128 | | | | | | | 0.10 |
| 0.15 | 64 | 80 | 80 | 100 | 128 | | | | | | | 0.15 |
| 0.20 | 64 | 80 | 80 | 100 | 128 | 128 | 160 | | | | | 0.20 |
| 0.25 | 64 | 64 | 80 | 100 | 100 | 128 | 128 | | | | | 0.25 |
| 0.30 | 64 | 64 | 80 | 80 | 100 | 128 | 128 | 160 | | | | 0.30 |
| 0.35 | 64 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | | | | 0.35 |
| 0.40 | 64 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | | | | 0.40 |
| 0.45 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | | | | 0.45 |
| 0.50 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | 160 | | | 0.50 |
| 0.60 | 48 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | 160 | | 0.60 |
| 0.70 | 48 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | 160 | | 0.70 |
| 0.80 | 40 | 40 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | 160 | | 0.80 |
| 0.90 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | | 0.90 |
| 1.00 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | 160 | 1.00 |
| 1.10 | 40 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | | 1.10 |
| 1.20 | 40 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | 160 | 1.20 |
| 1.30 | 40 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | | | 1.30 |
| 1.40 | 40 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | | 1.40 |
| 1.50 | 40 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | 1.50 |
| 1.60 | 40 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | 160 | 1.60 |
| 1.70 | 40 | 32 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | | | 1.70 |
| 1.80 | 40 | 32 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | 1.80 |
| 1.90 | 40 | 32 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | | | 1.90 |
| 2.00 | 40 | 32 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 128 | 2.00 |
| 2.50 | 40 | 32 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | 100 | 128 | 2.50 |
| 3.00 | 40 | 32 | 32 | 40 | 48 | 48 | 64 | 80 | 80 | 100 | 128 | 3.00 |
| 3.50 | 24 | 24 | 32 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | | 3.50 |
| 4.00 | 24 | 24 | 32 | 40 | 40 | 48 | 64 | 64 | 80 | 100 | | 4.00 |
| 5.00 | 24 | 24 | 32 | 32 | 40 | 48 | 48 | 64 | 80 | 100 | | 5.00 |
| 6.00 | 24 | 24 | 24 | 32 | 40 | 40 | 48 | 64 | 64 | 100 | | 6.00 |

**Denture grossière
Grobe Verzahnung
Large teeth****DIN 1838**

- Pour usinage profond ou grande longueur à fendre
- Für grosse Bearbeitungstiefen oder grosse Schlitzlängen
- For deep machining or long slots
- Avance par dent: 0.01 - 0.1 mm
- Vorschub pro Zahn: 0.01 - 0.1 mm
- Feed per tooth: 0.01 - 0.1 mm
- Revêtement sur demande
- Beschichtung auf Anfrage
- Coating on request



Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

Type 1102

| Denture grossière Grobe Verzahnung Large teeth | | | | | | | | | | | | DIN 1838 |
|--|---|----|----|----|----|----|----|----|-----|-----|--|----------|
| D js12 | 15 | 20 | 25 | 30 | 40 | 50 | 63 | 80 | 100 | 125 | 160 | D js12 |
| d H7 | 5 | 5 | 8 | 8 | 10 | 13 | 16 | 22 | 22 | 22 | 32 | d H7 |
| Epaisseur Dicke Thickness E ±0.01 | Z = Nombre de dents Zähnezahl Number of teeth | | | | | | | | | | Epaisseur Dicke Thickness E ±0.01 | |
| 0.20 | 20 | 20 | 20 | 30 | 40 | | | | | | | 0.20 |
| 0.25 | 20 | 20 | 20 | 30 | 40 | | | | | | | 0.25 |
| 0.30 | 20 | 20 | 20 | 30 | 40 | | | | | | | 0.30 |
| 0.40 | 20 | 20 | 20 | 30 | 40 | 48 | 64 | | | | | 0.40 |
| 0.50 | 20 | 20 | 20 | 30 | 40 | 48 | 64 | | | | | 0.50 |
| 0.60 | 20 | 20 | 20 | 30 | 40 | 48 | 48 | 64 | 80 | | | 0.60 |
| 0.70 | 20 | 20 | 20 | 30 | 40 | 40 | 48 | 64 | 64 | | | 0.70 |
| 0.80 | 20 | 20 | 20 | 24 | 32 | 40 | 48 | 64 | 64 | 80 | | 0.80 |
| 0.90 | 20 | 20 | 20 | 24 | 32 | 40 | 48 | 48 | 64 | 80 | | 0.90 |
| 1.00 | 20 | 20 | 20 | 24 | 32 | 40 | 48 | 48 | 64 | 80 | 80 | 1.00 |
| 1.20 | 20 | 20 | 20 | 24 | 32 | 40 | 40 | 48 | 64 | 64 | 80 | 1.20 |
| 1.50 | 20 | 20 | 20 | 24 | 32 | 32 | 40 | 48 | 48 | 64 | 80 | 1.50 |
| 1.60 | 20 | 20 | 20 | 24 | 32 | 32 | 40 | 48 | 48 | 64 | | 1.60 |
| 1.80 | 20 | 20 | 20 | 24 | 24 | 32 | 40 | 40 | 48 | 64 | | 1.80 |
| 2.00 | 20 | 20 | 20 | 24 | 24 | 32 | 40 | 40 | 48 | 64 | 80 | 2.00 |
| 2.50 | 20 | 20 | 20 | 24 | 24 | 32 | 32 | 40 | 48 | 48 | 80 | 2.50 |
| 3.00 | 20 | 20 | 20 | 24 | 24 | 24 | 32 | 40 | 40 | 48 | 64 | 3.00 |
| 4.00 | 20 | 20 | 20 | 24 | 20 | 24 | 32 | 32 | 40 | 48 | | 4.00 |
| 5.00 | 20 | 20 | 20 | 24 | 20 | 24 | 24 | 32 | 40 | 40 | | 5.00 |
| 6.00 | 20 | 20 | 20 | 24 | 20 | 20 | 24 | 32 | 32 | 40 | | 6.00 |

Denture extra-fine
 Extra feine Verzahnung
 Extra fine teeth

- Pour usinage de pièces fragiles ou fines
- Avance par dent: 0.002 - 0.03 mm
- Idéal pour le décolletage
- Revêtement sur demande
- Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken
- Vorschub pro Zahn: 0.002 - 0.03 mm
- Für Langdrehautomaten besonders empfehlenswert
- Beschichtung auf Anfrage
- For machining of fragile or thin workpieces
- Feed per tooth: 0.002 - 0.03 mm
- Recommended on automatic lathes
- Coating on request



| Denture extra-fine Extra feine Verzahnung Extra fine teeth | | | | | |
|--|---|----|----|----|---|
| D js12 | 8 | 10 | 12 | 15 | D js12 |
| d H7 | 3 | 3 | 5 | 5 | d H7 |
| Epaisseur Dicke Thickness E ±0.005 | $Z = \frac{\text{Nombre de dents}}{\text{Zähnezahl}} = \frac{\text{Number of teeth}}{\text{Number of teeth}}$ | | | | Epaisseur Dicke Thickness E ±0.005 |
| 0.10 | 48 | 64 | 64 | 80 | 0.10 |
| 0.11 | 48 | 64 | 64 | 80 | 0.11 |
| 0.12 | 48 | 64 | 64 | 80 | 0.12 |
| 0.13 | 48 | 64 | 64 | 80 | 0.13 |
| 0.14 | 48 | 64 | 64 | 80 | 0.14 |
| 0.15 | 48 | 64 | 64 | 80 | 0.15 |
| 0.16 | 48 | 64 | 64 | 80 | 0.16 |
| 0.17 | 48 | 64 | 64 | 80 | 0.17 |
| 0.18 | 48 | 64 | 64 | 80 | 0.18 |
| 0.19 | 48 | 64 | 64 | 80 | 0.19 |
| 0.20 | 48 | 64 | 64 | 80 | 0.20 |

Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

Type 1103

| Denture extra-fine Extra feine Verzahnung Extra fine teeth | | | | | | | | | | | | | |
|--|---|----|----|----|----|-----|----|----|-----|-----|-----|--|-------------|
| D js12 | 8 | 10 | 12 | 15 | 20 | 20 | 20 | 25 | 25 | 25 | 30 | 32 | D js12 |
| d H7 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 5 | 6 | 8 | 8 | 8 | d H7 |
| Epaisseur Dicke Thickness E ±0.01 | $Z =$ Nombre de dents Zähnezahl Number of teeth | | | | | | | | | | | Epaisseur Dicke Thickness E ±0.01 | |
| 0.10 | ** | ** | ** | ** | * | 100 | 80 | 80 | | | | | 0.10 |
| 0.15 | ** | ** | ** | ** | * | 100 | 80 | 80 | 100 | 100 | | 80 | 0.15 |
| 0.20 | ** | ** | ** | ** | * | 100 | 80 | 80 | 100 | 100 | * | 80 | 0.20 |
| 0.25 | 48 | 64 | 64 | 80 | 80 | 100 | 80 | 80 | 100 | 100 | * | 80 | 0.25 |
| 0.30 | 48 | 64 | 64 | 80 | 80 | 100 | 80 | 80 | 100 | 100 | 100 | 80 | 0.30 |
| 0.35 | 48 | 64 | 64 | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 0.35 |
| 0.40 | 48 | 64 | 64 | 80 | 80 | 100 | 80 | 80 | 100 | 100 | 100 | 80 | 0.40 |
| 0.50 | 48 | 64 | 64 | 80 | 80 | 100 | 80 | 80 | 100 | 100 | 100 | 80 | 0.50 |
| 0.60 | 48 | 64 | 64 | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 0.60 |
| 0.70 | 48 | 64 | 64 | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 0.70 |
| 0.80 | 48 | 64 | 64 | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 0.80 |
| 0.90 | 48 | 64 | 64 | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 0.90 |
| 1.00 | 48 | 64 | 64 | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 1.00 |
| 1.20 | | | | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 1.20 |
| 1.50 | | | | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 1.50 |
| 2.00 | | | | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 2.00 |
| 2.50 | | | | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 2.50 |
| 3.00 | | | | 80 | 80 | | 80 | 80 | 100 | 100 | 100 | 80 | 3.00 |

| D js12 | 35 | 40 | 40 | 40 | 40 | 45 | 45 | 50 | 50 | 63 | 80 | D js12 |
|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| d H7 | 8 | 8 | 8 | 10 | 10 | 8 | 8 | 10 | 13 | 16 | 16 | d H7 |
| 0.10 | | | | | | | | | | | | 0.10 |
| 0.15 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | | | | | 0.15 |
| 0.20 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | | | | 0.20 |
| 0.25 | 96 | 100 | 160 | * | 160 | 100 | 160 | 100 | 120 | 120 | | 0.25 |
| 0.30 | 96 | 100 | 160 | * | 160 | 100 | 160 | 100 | 120 | 120 | | 0.30 |
| 0.35 | 96 | 100 | 160 | * | 160 | 100 | 160 | 100 | 120 | 120 | | 0.35 |
| 0.40 | 96 | 100 | 160 | * | 160 | 100 | 160 | 100 | 120 | 120 | | 0.40 |
| 0.50 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 0.50 |
| 0.60 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 0.60 |
| 0.70 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 0.70 |
| 0.80 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 0.80 |
| 0.90 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 0.90 |
| 1.00 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 1.00 |
| 1.20 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 1.20 |
| 1.50 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 1.50 |
| 2.00 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 2.00 |
| 2.50 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 2.50 |
| 3.00 | 96 | 100 | 160 | 100 | 160 | 100 | 160 | 100 | 120 | 120 | 128 | 3.00 |

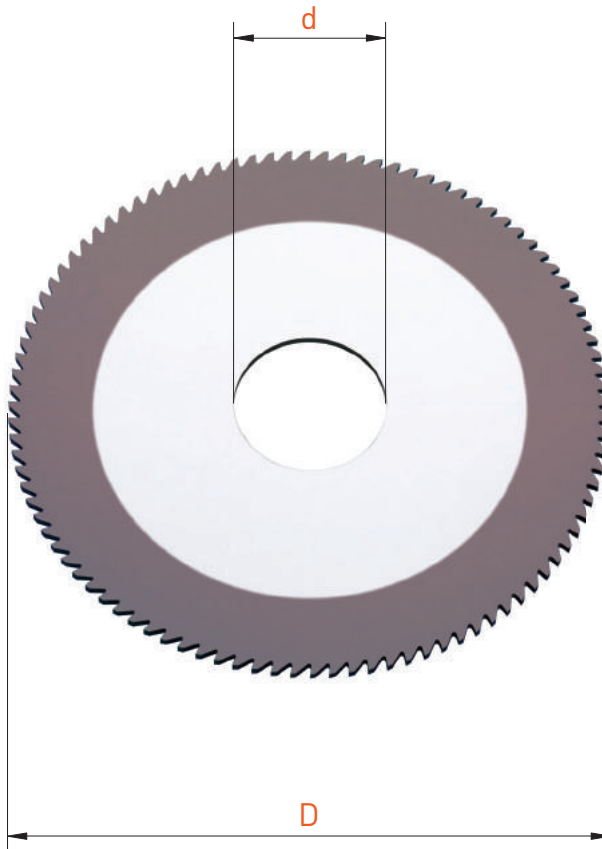
** voir page 15.08 / siehe Seite 15.08 / see page 15.08

* voir type 1101 / siehe Typ 1101 / see type 1101

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- For low machining depth or short slots
- Avance par dent: 0.005 - 0.05 mm
- Vorschub pro Zahn: 0.005 - 0.05 mm
- Feed per tooth: 0.005 - 0.05 mm



Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

Type 1104

| Denture INOX INOX Verzahnung INOX teeth | | | | DIN 1837 | |
|---|---|-----|-----|---|---------|
| D js12 | 63 | 80 | 100 | D js12 | MAXINOX |
| d H7 | 16 | 22 | 22 | d H7 | |
| Epaisseur Dicke Thickness E ±0.01 | Z = Nombre de dents Zähnezahl Number of teeth | | | Epaisseur Dicke Thickness E ±0.01 | |
| 0.80 | 80 | 100 | 120 | 0.80 | ■ |
| 1.00 | 80 | 100 | 120 | 1.00 | ■ |

Exécutions spéciales

Sonderanfertigungen

Special executions

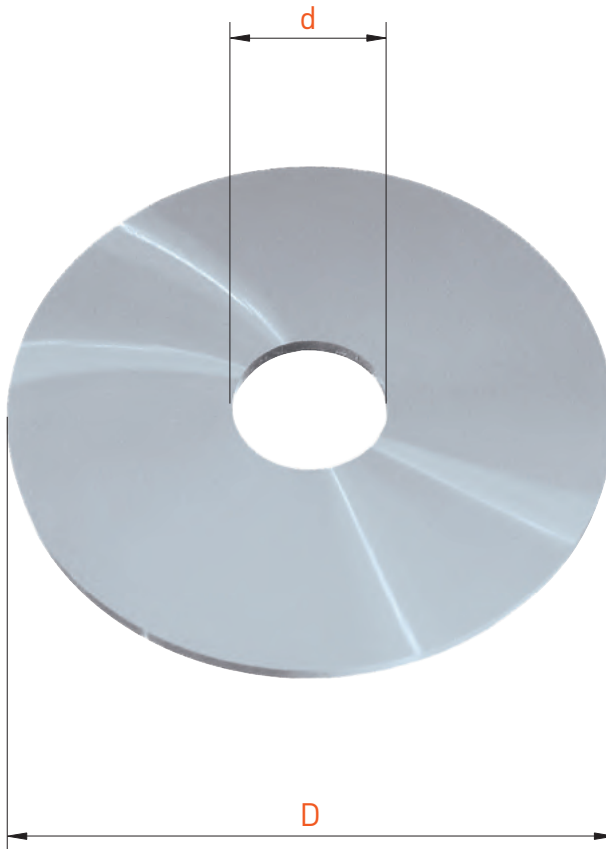
- Denture forme B
- Denture forme W
- Train de fraises
- Alésage avec entrée de clavette
- Autres exécutions spéciales sur demande
- Revêtement sur demande

- B Zahnform
- W Zahnform
- Spezielle Kreissägeblätter im Satz
- Bohrung mit Keilnute
- Andere Sonderanfertigungen auf Anfrage
- Beschichtung auf Anfrage

- Tooth form B
- Tooth form W
- Special slitting saws in set
- Bore with keyway
- Other special executions on request
- Coating on request

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm
- Hochglanz Seiten mit Hohlchliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass
- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés

Fertig geschliffene VHM-Ronden

Fully ground solid carbide discs

Ø 8-35 mm

Type 1106

| Prêt pour le taillage de la denture Bereit zum Verzahnen Ready for teeth grinding | | | | | | | | | | | | | |
|---|--|----|----|----|----|----|----|----|----|----|----|--|---------|
| D +0.15/0 | 8 | 10 | 12 | 15 | 20 | 20 | 25 | 25 | 25 | 30 | 32 | 35 | D ±0.15 |
| d H7 | 3 | 3 | 5 | 5 | 5 | 6 | 5 | 6 | 8 | 8 | 8 | 8 | d H7 |
| Epaisseur Dicke Thickness E ±0.01 | Epaisseurs et alésages spéciaux sur demande Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request | | | | | | | | | | | Epaisseur Dicke Thickness E ±0.01 | |
| 0.10 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | 0.10 |
| 0.15 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.15 |
| 0.20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.20 |
| 0.25 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.25 |
| 0.30 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.30 |
| 0.35 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.35 |
| 0.40 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.40 |
| 0.45 | □ | □ | □ | ■ | ■ | ■ | ■ | □ | ■ | ■ | □ | ■ | 0.45 |
| 0.50 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.50 |
| 0.60 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.60 |
| 0.70 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.70 |
| 0.80 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.80 |
| 0.90 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 0.90 |
| 1.00 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 1.00 |
| 1.10 | | | □ | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.10 |
| 1.20 | | | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 1.20 |
| 1.30 | | | □ | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.30 |
| 1.40 | | | □ | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.40 |
| 1.50 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 1.50 |
| 1.60 | | | | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.60 |
| 1.70 | | | | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.70 |
| 1.80 | | | | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.80 |
| 1.90 | | | | ■ | ■ | □ | □ | □ | ■ | ■ | □ | □ | 1.90 |
| 2.00 | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 2.00 |
| 2.50 | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 2.50 |
| 3.00 | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 3.00 |
| 3.50 | | | | □ | □ | | | | □ | □ | | | 3.50 |
| 4.00 | | | | □ | □ | | | | □ | □ | | | 4.00 |
| 5.00 | | | | □ | □ | | | | □ | □ | | | 5.00 |
| 6.00 | | | | □ | □ | | | | □ | □ | | | 6.00 |

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm
- Hochglanz Seiten mit Hohlchliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass
- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés

Fertig geschliffene VHM-Ronden

Fully ground solid carbide discs

Ø 40-160 mm

Type 1106

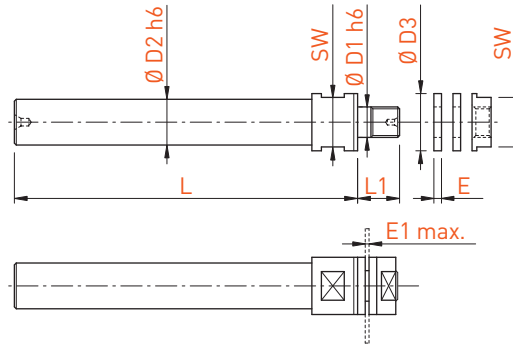
| Prêt pour le taillage de la denture Bereit zum Verzahnen Ready for teeth grinding | | | | | | | | | | | | | |
|---|--|----|----|----|----|----|----|----|-----|-----|-----|--|---------|
| D +0.15/0 | 40 | 40 | 45 | 50 | 50 | 63 | 80 | 80 | 100 | 125 | 160 | 160 | D ±0.15 |
| d H7 | 8 | 10 | 8 | 10 | 13 | 16 | 16 | 22 | 22 | 22 | 22 | 32 | d H7 |
| Epaisseur Dicke Thickness E ±0.01 | Epaisseurs et alésages spéciaux sur demande Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request | | | | | | | | | | | Epaisseur Dicke Thickness E ±0.01 | |
| 0.10 | | ■ | | | | | | | | | | | 0.10 |
| 0.15 | ■ | ■ | ■ | | | | | | | | | | 0.15 |
| 0.20 | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | 0.20 |
| 0.25 | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | 0.25 |
| 0.30 | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | | | | 0.30 |
| 0.35 | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | | | | 0.35 |
| 0.40 | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | | | | 0.40 |
| 0.45 | ■ | ■ | □ | □ | ■ | ■ | | ■ | | | | | 0.45 |
| 0.50 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | | | | 0.50 |
| 0.60 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | | | 0.60 |
| 0.70 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | | | 0.70 |
| 0.80 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | | | 0.80 |
| 0.90 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | | | 0.90 |
| 1.00 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | | □ | 1.00 |
| 1.10 | □ | ■ | □ | □ | ■ | ■ | □ | ■ | □ | □ | | □ | 1.10 |
| 1.20 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | □ | 1.20 |
| 1.30 | ■ | ■ | □ | □ | ■ | ■ | □ | ■ | □ | □ | | □ | 1.30 |
| 1.40 | ■ | ■ | □ | □ | ■ | ■ | □ | ■ | □ | □ | | □ | 1.40 |
| 1.50 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | □ | 1.50 |
| 1.60 | □ | ■ | □ | □ | ■ | ■ | □ | □ | □ | □ | | □ | 1.60 |
| 1.70 | □ | ■ | □ | □ | ■ | ■ | □ | □ | □ | □ | | □ | 1.70 |
| 1.80 | □ | ■ | □ | □ | ■ | ■ | □ | □ | □ | □ | | □ | 1.80 |
| 1.90 | □ | ■ | □ | □ | ■ | ■ | □ | □ | □ | □ | | □ | 1.90 |
| 2.00 | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | □ | | □ | 2.00 |
| 2.50 | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | □ | | □ | 2.50 |
| 3.00 | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | □ | | □ | 3.00 |
| 3.50 | | □ | | | □ | □ | | □ | □ | □ | | | 3.50 |
| 4.00 | | □ | | | □ | □ | | □ | □ | □ | | | 4.00 |
| 5.00 | | □ | | | □ | □ | | □ | □ | □ | | | 5.00 |
| 6.00 | | □ | | | □ | □ | | □ | □ | □ | | | 6.00 |

■ = disponible / verfügbar / available

□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tasseaux porte-fraise avec serrage avant
 Fräsdorne mit Spannung von vorne
 Milling arbors with front clamping

Type 2810 / 2811 / 2815



| Type 2810 | Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread) | | | | | | | | |
|-----------|--|-------|------|-----|------|-----|------|---------|------------|
| | D1 h6 | D2 h6 | D3 | L | L1 | E | SW | E1 max. | Art. N° |
| | 5.0 | 6.0 | 10.0 | 70 | 9.0 | 2.0 | 8.0 | 6.0 | 2810-5-6 |
| | 5.0 | 10.0 | 10.0 | 80 | 9.0 | 2.0 | 8.0 | 6.0 | 2810-5-10 |
| | 6.0 | 10.0 | 12.0 | 80 | 9.5 | 2.0 | 10.0 | 6.0 | 2810-6-10 |
| | 8.0 | 10.0 | 15.0 | 80 | 10.0 | 2.0 | 13.0 | 6.0 | 2810-8-10 |
| | 8.0 | 12.0 | 15.0 | 90 | 10.0 | 2.0 | 13.0 | 6.0 | 2810-8-12 |
| | 10.0 | 6.0 | 18.0 | 80 | 10.5 | 2.0 | 15.0 | 6.0 | 2810-10-6 |
| | 10.0 | 10.0 | 18.0 | 80 | 10.5 | 2.0 | 15.0 | 6.0 | 2810-10-10 |
| | 10.0 | 16.0 | 18.0 | 100 | 10.5 | 2.0 | 15.0 | 6.0 | 2810-10-16 |
| | 13.0 | 16.0 | 22.0 | 110 | 11.0 | 2.0 | 19.0 | 6.0 | 2810-13-16 |
| | 16.0 | 20.0 | 26.0 | 120 | 12.0 | 2.0 | 22.0 | 6.0 | 2810-16-20 |
| | 22.0 | 16.0 | 32.0 | 120 | 12.0 | 2.0 | 27.0 | 6.0 | 2810-22-16 |

| Type 2811 | Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread) | | | | | | | | |
|-----------|--|-------|------|----|-----|-----|------|---------|------------|
| | D1 h6 | D2 h6 | D3 | L | L1 | E | SW | E1 max. | Art. N° |
| | 16.0 | 10.0 | 22.0 | 80 | 8.0 | 2.0 | 19.0 | 3.0 | 2811-16-10 |

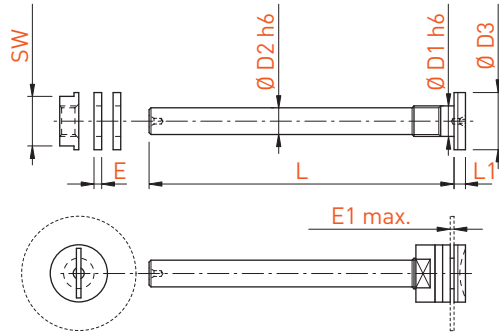
| Type 2815 | Pour petites fraises circulaires (filet à droite) Für kleine Kreissägeblätter (Rechtsgewinde) For small slitting saws (right hand thread) | | | | | | | | |
|-----------|---|-------|-----|----|-----|-----|-----|---------|----------|
| | D1 h6 | D2 h6 | D3 | L | L1 | E | SW | E1 max. | Art. N° |
| | 3.0 | 5.0 | 5.0 | 60 | 7.0 | 1.0 | 4.0 | 3.0 | 2815-3-5 |
| | 5.0 | 6.0 | 7.5 | 70 | 7.0 | 1.0 | 6.0 | 3.0 | 2815-5-6 |

Tasseaux porte-fraise avec serrage arrière

Fräsdorne mit Spannung von hinten

Milling arbors with rear clamping

Type 2820 / 1820



| Type 2820 | Rotation à droite (filet à gauche) Drehrichtung rechts (Linksgewinde) Right hand rotation (left hand thread) | | | | | | | | |
|-----------|--|-------|-----|-----|-----|-----|------|---------|------------|
| | D1 h6 | D2 h6 | D3 | L | L1 | E | SW | E1 max. | Art. N° |
| 5.0 | 4.0 | 10.0 | 50 | 3.0 | 2.0 | 2.0 | 8.0 | 6.0 | 2820-5-4 |
| 6.0 | 5.0 | 12.0 | 60 | 3.0 | 2.0 | 2.0 | 10.0 | 6.0 | 2820-6-5 |
| 8.0 | 6.0 | 15.0 | 80 | 3.0 | 2.0 | 2.0 | 13.0 | 6.0 | 2820-8-6 |
| 8.0 | 7.0 | 15.0 | 80 | 3.0 | 2.0 | 2.0 | 13.0 | 6.0 | 2820-8-7 |
| 10.0 | 6.0 | 18.0 | 70 | 3.5 | 2.0 | 2.0 | 15.0 | 6.0 | 2820-10-6 |
| 10.0 | 8.0 | 18.0 | 90 | 3.5 | 2.0 | 2.0 | 15.0 | 6.0 | 2820-10-8 |
| 13.0 | 10.0 | 22.0 | 110 | 3.5 | 2.0 | 2.0 | 19.0 | 6.0 | 2820-13-10 |
| 16.0 | 12.0 | 26.0 | 120 | 3.5 | 2.0 | 2.0 | 22.0 | 6.0 | 2820-16-12 |

| Type 1820 | Rotation à gauche (filet à droite) Drehrichtung links (Rechtsgewinde) Left hand rotation (right hand thread) | | | | | | | | |
|-----------|--|-------|----|-----|-----|-----|------|---------|-----------|
| | D1 h6 | D2 h6 | D3 | L | L1 | E | SW | E1 max. | Art. N° |
| 5.0 | 4.0 | 10.0 | 50 | 3.0 | 2.0 | 2.0 | 8.0 | 6.0 | 1820-5-4 |
| 6.0 | 5.0 | 12.0 | 60 | 3.0 | 2.0 | 2.0 | 10.0 | 6.0 | 1820-6-5 |
| 8.0 | 6.0 | 15.0 | 70 | 3.0 | 2.0 | 2.0 | 13.0 | 6.0 | 1820-8-6 |
| 10.0 | 6.0 | 18.0 | 70 | 3.5 | 2.0 | 2.0 | 15.0 | 6.0 | 1820-10-6 |

Chaque tasseau est livré avec 2 entretoises et 1 écrou

Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert

2 distance rings and 1 nut are included with each arbor

| Pièces de rechange Ersatzteile Spare parts | E | Art. N° | Art. N° |
|--|---|------------|------------|
| | | | |
| 2 | 2 | 1820-D1*-A | 1820-D1*-B |
| 2 | 2 | 2810-D1*-A | 2810-D1*-B |
| 2 | 2 | 2811-D1*-A | 2811-D1*-B |
| 1 | 2 | 2815-D1*-A | 2815-D1*-B |
| 2 | 2 | 2820-D1*-A | 2820-D1*-B |

* Diamètre D1 à spécifier * Durchmesser D1 angeben * Diameter D1 to be specified



Réduisez le temps de changement d'outil jusqu'à 75%!
Reduzieren Sie die Wechselzeit Ihrer IK-Halter um bis zu 75%!
Reduce tool change time by up to 75%!

Le système de distribution de réfrigérant Applitec JET-LINE est conçu pour tirer parti de tous les avantages offerts par le refroidissement à haute pression jusqu'à 220 bar. Associé à nos porte-outils, il permet des préparations rapides et flexibles tout en garantissant l'orientation et la quantité correcte de débit de l'agent de refroidissement directement sur l'outil de coupe!

Mit dem Applitec Hochdruckkühlmittelsystem JET-LINE profitieren Sie von einer effizienten Kühlmittelversorgung Ihrer IK-Werkzeuge bis zu 220 bar. In Verbindung mit den IK-Haltern von Applitec wird ein schneller, und flexibler Werkzeugwechsel ermöglicht!

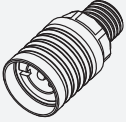
Applitec JET-LINE coolant distribution system is designed to maximise the benefits and advantages offered by high pressure coolant up to 220 bar. Associated to our holders with intergrated coolant, the quick change and flexible system reduces set up times without compromising the correct orientation and quantity of coolant flow directly to the cutting tool!

Les avantages

Die Vorteile

The advantages

Changement rapide Schnellwechselsystem Quick change



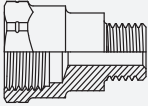
Réduit le temps de préparation et garantit le repositionnement des sorties de liquide de refroidissement
Verkürzung der Rüstzeiten bei gleicher Position der Kühlmittelauslässe
Reduces set up times with coolant outlets remain in the same position

Refroidissement à haute pression Hochdruck abgekühlt High pressure



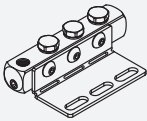
Tuyaux flexibles renforcés garantis jusqu'à 220 bar !
Hochdruck verstärkten Schläuchen bis 220 bar !
High pressure flexible reinforced hoses up to 220 bar!

Facilité d'adaptation Einfache Anpassungsmöglichkeiten Easy to adapt



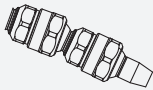
Adaptateur disponible pour filetage M5, M6, M8X1 and BSP1/8
Adapter für M5, M6, M8X1 und BSP1/8 erhältlich
Adaptors available for M5, M6, M8X1, and BSP1/8 thread

Multiples possibilités de connexion Vielfältige Anschlussoptionen Large range of connection possibilities



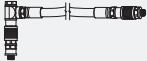













Vaste gamme de connecteurs pour tous les types de machines
Grosse Auswahl von Anschlüsse für alle Machinentypen
Huge range of possible coolant connections to suit all machine types

Système articulé Gelenksystem Articulated system



Module flexible d'arrosage en acier pour une meilleure stabilité
Flexibler Stahlkühlmittelmodul für eine bessere Stabilität
Flexible steel coolant unit for better stability






Augmentation de la durée de vie et une meilleure efficacité de l'outil dû au contrôle des copeaux
JET-LINE steigert die Lebensdauer der Werkzeuge und verbessert die Spankontrolle
Increased tool life with better swarf control

| | | | |
|--------------------|--|---|----------------|
| JKIT | |  | > 16.04 |
| STARTER-KIT | | | > 16.12 |
| JS | Raccords rapides Schnellkupplungen Quick connectors |  | > 16.14 |
| JO | Joints d'étanchéité en cuivre Kupferdichtungsringe Copper sealing gaskets |  | > 16.15 |
| JTX-AC | Tubes de distribution flexibles en acier inoxydable tressé Rostfreier Stahlflex-Schlauch Flexible distribution tubes of stainless steel braiding |  | > 16.16 |
| JT-CU | Tubes de distribution en cuivre Kupferrohre Copper distribution tubes |  | > 16.17 |
| JRMF | Connecteurs mâle/femelle Gewindeadapter Innen und Außengewinde Male/female connectors |  | > 16.18 |
| JRFF | Connecteurs femelle/femelle Gewindeadapter Innengewinde Female connectors |  | > 16.20 |
| JRMM | Connecteurs mâle/mâle Gewindeadapter Außengewinde Male connectors |  | > 16.21 |
| JN | Écrous d'étanchéité Dichtungsmutter Sealing nuts |  | > 16.22 |
| JNG | Bague d'étanchéité Dichtungsring Sealing ring |  | > 16.23 |
| JCBF | Banjos courts femelle Kurzer Innengewindeadapter Short female Banjo |  | > 16.24 |
| JCBM | Banjos courts mâle Kurzer Aussengewindeadapter Short Banjo |  | > 16.25 |
| JABF | Banjos longs droits femelle Langer Innengewindeadapter Long straight female banjos |  | > 16.26 |
| JABF-45° | Banjos longs coudés femelle Adapter lang 45° Innengewinde Long curved female banjos |  | > 16.27 |

| | | | |
|----------------|--|---|----------------|
| JEB | Vis banjo Hohlschrauben einfach Banjo screws |  | > 16.28 |
| JEB-DUO | Vis banjo double Hohlschrauben doppelt Double banjo screws |  | > 16.29 |
| JVB | Fiches de verrouillage Verschlußstecker Sealing connecting plugs |  | > 16.30 |
| JVF | Fiches de connexion Innengewindestecker Connecting plugs |  | > 16.31 |
| JWF | Fiches de connexion fixes femelle Innengewindestecker mit Verdrehsicherung Female positioning connection plugs |  | > 16.32 |
| JWM | Fiches de connexion fixes mâle Aussengewindestecker mit Verdrehsicherung Male positioning connection plugs |  | > 16.33 |
| JK | Blocs de distribution Kühlmittelverteiler Distribution blocks |  | > 16.34 |
| JBB | Bouchons d'étanchéité Verschlußstopfen Sealing plugs |  | > 16.35 |

Système articulé avec arrosage / Gelenksystem mit Kühlung / Articulated system with coolant



| | | | |
|--------------------|---|--|----------------|
| JKIT-AR | Kit articulé avec buse d'arrosage Gelenkkit mit Kühlungsdüse Articulated kit with coolant nozzle |  | > 16.36 |
| JKIT-CU | Kit tube en cuivre avec buse d'arrosage Kit Kupferrohr mit Kühlungsdüse Kit copper tube with coolant nozzle |  | > 16.38 |
| JAR | Système articulé Gelenksystem Articulated system |  | > 16.39 |
| JRMM-AR | Connecteurs mâle/mâle Anschlüsse Aussengewinde Male connectors |  | > 16.40 |
| JJ-AR | Buses Düse Nozzle |  | > 16.41 |
| ACCESSOIRES | | | > 16.43 |

JET-LINE

Kit de connexion

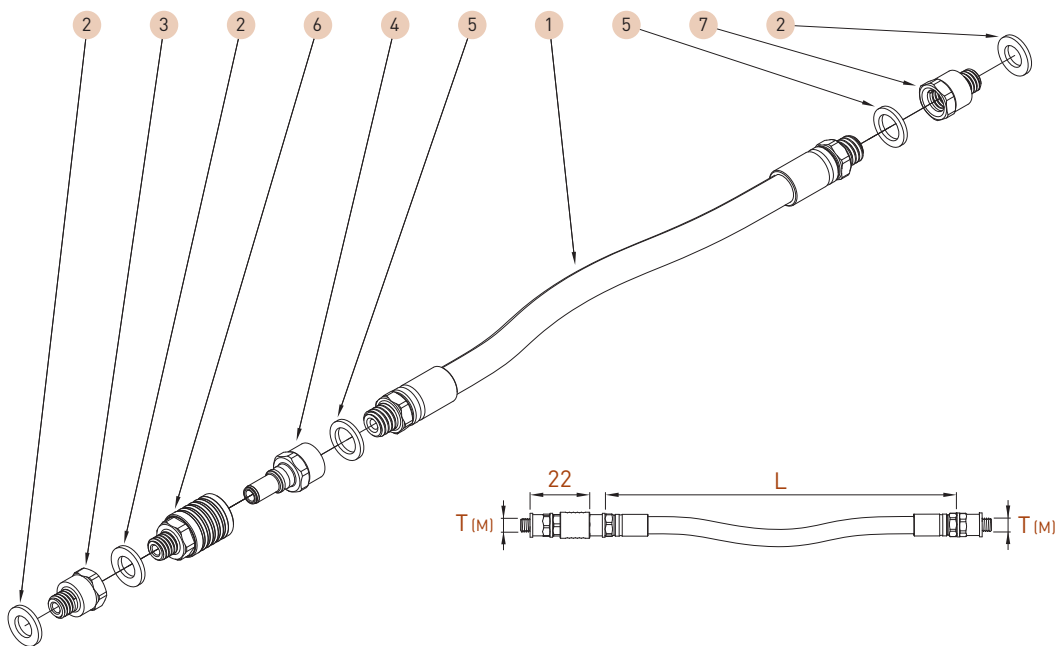
Verbindungskit

Connection kit

Quick / Fix

M5

JKIT-M5-D4-...-QF



| Ref | Qty | Kit composition |
|-----|-----|-----------------|
| 1 | 1 | JTX-AC-M6-L... |
| 2 | 3 | JO-M5 |
| 3 | 1 | JRMF-M5-M5-L6.5 |
| 4 | 1 | JVF-M6-D4 |
| 5 | 2 | JO-M6 |
| 6 | 1 | JS-M5-D4 |
| 7 | 1 | JRMF-M5-M6-L7.5 |

| D | T (M) | L | Art. N° |
|---|-------|-----|-------------------|
| 4 | M5 | 102 | JKIT-M5-D4-102-QF |
| | | 203 | JKIT-M5-D4-203-QF |
| | | 305 | JKIT-M5-D4-305-QF |
| | | 406 | JKIT-M5-D4-406-QF |

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M5

ISO-Line 8X10
MODU-Line
TOP-Line 8X10
TURN-Line 8X10

Options



Art. N°

JK-M5-1010-4T

voir page 16.34
siehe Seite 16.34
see page 16.34



Art. N°

C-SW8-E2.5

voir page 16.45
siehe Seite 16.45
see page 16.45

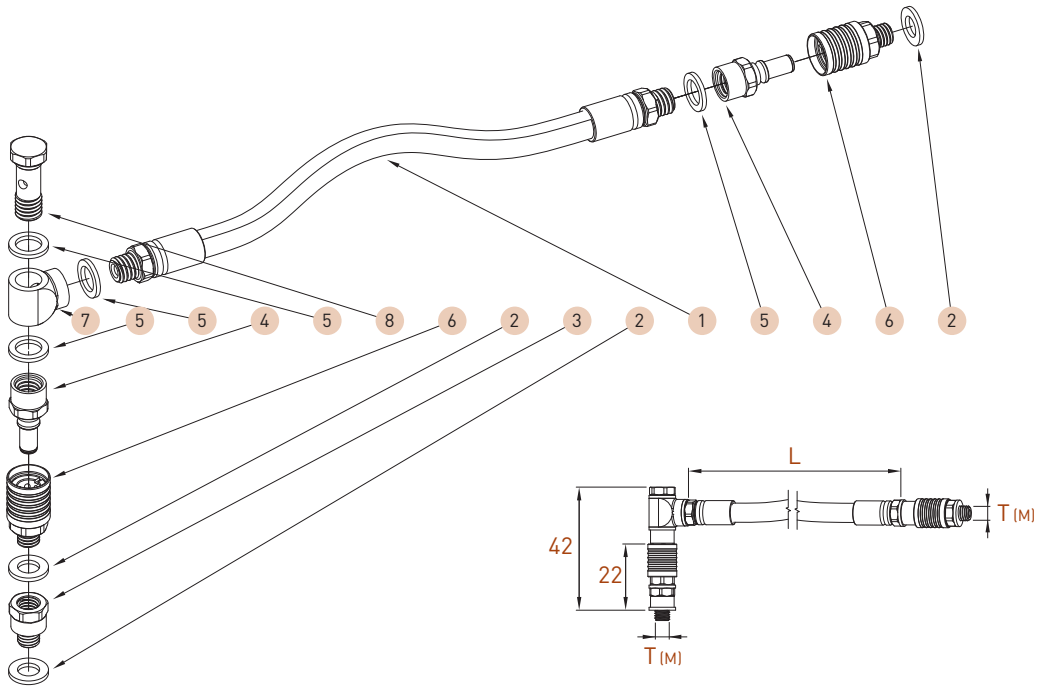
Kit de connexion

Verbindungskit Quick / Quick

Connection kit

M5

JKIT-M5-D4-...-QQ



| Ref | Qty | Kit composition |
|-----|-----|-----------------|
| 1 | 1 | JTX-AC-M6-L... |
| 2 | 3 | JO-M5 |
| 3 | 1 | JRMF-M5-M5-L6.5 |
| 4 | 2 | JVF-M6-D4 |
| 5 | 4 | JO-M6 |
| 6 | 2 | JS-M5-D4 |
| 7 | 1 | JCBF-Ø6-M6 |
| 8 | 1 | JEB-M6-L19 |

| D | T (M) | L | Art. N° |
|---|-------|-----|-------------------|
| 4 | M5 | 102 | JKIT-M5-D4-102-QQ |
| | | 203 | JKIT-M5-D4-203-QQ |
| | | 305 | JKIT-M5-D4-305-QQ |
| | | 406 | JKIT-M5-D4-406-QQ |

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M5

ISO-Line 8X10
MODU-Line
TOP-Line 8X10
TURN-Line 8X10

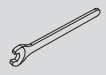
Options



Art. N°

JK-M5-1010-4T

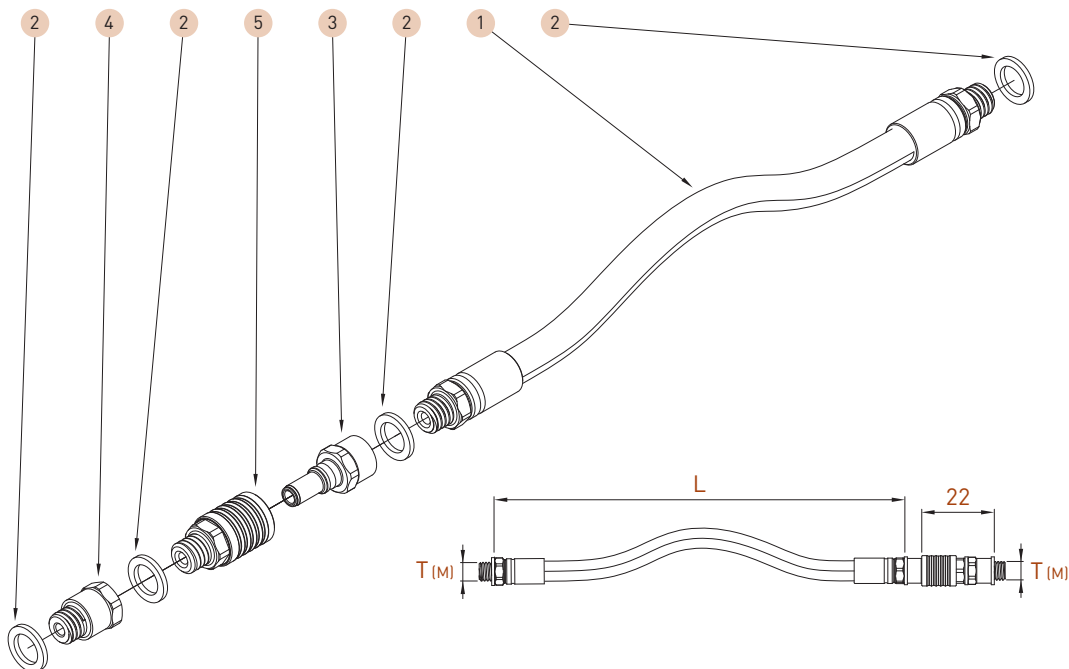
voir page 16.34
siehe Seite 16.34
see page 16.34



Art. N°

C-SW8-E2.5

voir page 16.45
siehe Seite 16.45
see page 16.45



| Ref | Qty | Kit composition |
|-----|-----|-----------------|
| 1 | 1 | JTX-AC-M6-L... |
| 2 | 4 | JO-M6 |
| 3 | 1 | JVF-M6-D4 |
| 4 | 1 | JRMF-M6-M6-L7.5 |
| 5 | 1 | JS-M6-D4 |

| D | T (M) | L | Art. N° |
|---|-------|-----|-------------------|
| 4 | M6 | 102 | JKIT-M6-D4-102-QF |
| | | 203 | JKIT-M6-D4-203-QF |
| | | 305 | JKIT-M6-D4-305-QF |
| | | 406 | JKIT-M6-D4-406-QF |

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M6

Options



Art. N°

JK-M6-1010-4T

voir page 16.34
siehe Seite 16.34
see page 16.34



Art. N°

C-SW8-E2.5

voir page 16.45
siehe Seite 16.45
see page 16.45

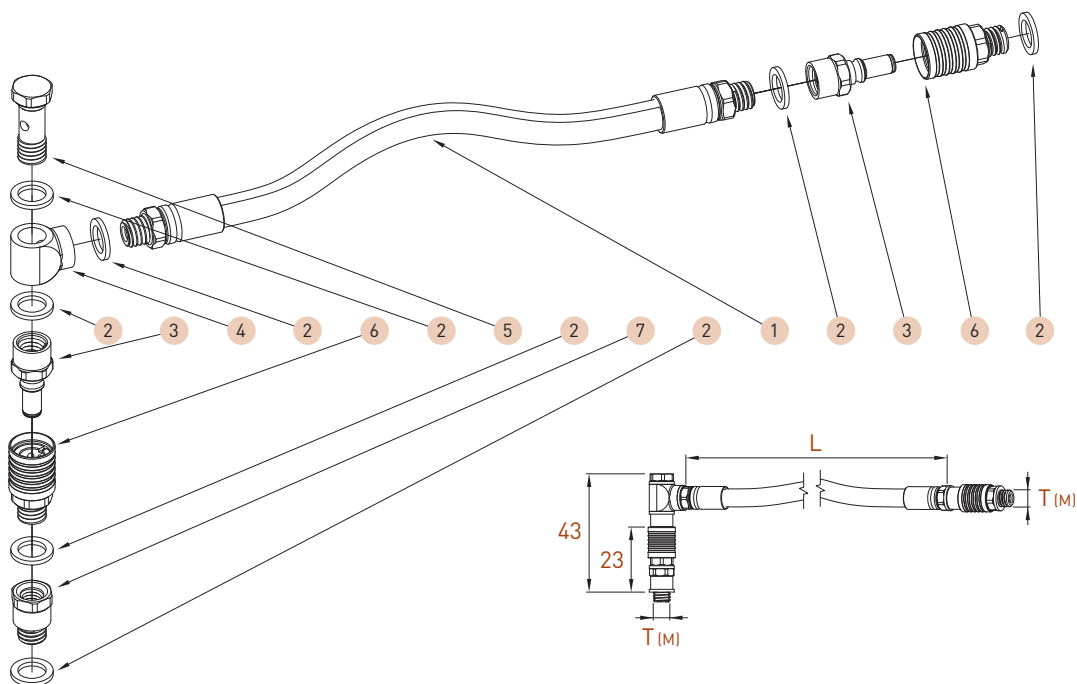
Kit de connexion

Verbindungskit Quick / Quick

Connection kit

M6

JKIT-M6-D4-...-QQ



| Ref | Qty | Kit composition |
|-----|-----|-----------------|
| 1 | 1 | JTX-AC-M6-L... |
| 2 | 7 | JO-M6 |
| 3 | 2 | JVF-M6-D4 |
| 4 | 1 | JCBF-Ø6-M6 |
| 5 | 1 | JEB-M6-L19 |
| 6 | 2 | JS-M6-D4 |
| 7 | 1 | JRMF-M6-M6-L7.5 |

| D | T (M) | L | Art. N° |
|---|-------|-----|-------------------|
| 4 | M6 | 102 | JKIT-M6-D4-102-QQ |
| | | 203 | JKIT-M6-D4-203-QQ |
| | | 305 | JKIT-M6-D4-305-QQ |
| | | 406 | JKIT-M6-D4-406-QQ |

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M6

Options



Art. N°
JK-M6-1010-4T

voir page 16.34
siehe Seite 16.34
see page 16.34



Art. N°
C-SW8-E2.5

voir page 16.45
siehe Seite 16.45
see page 16.45

JET-LINE

Kit de connexion

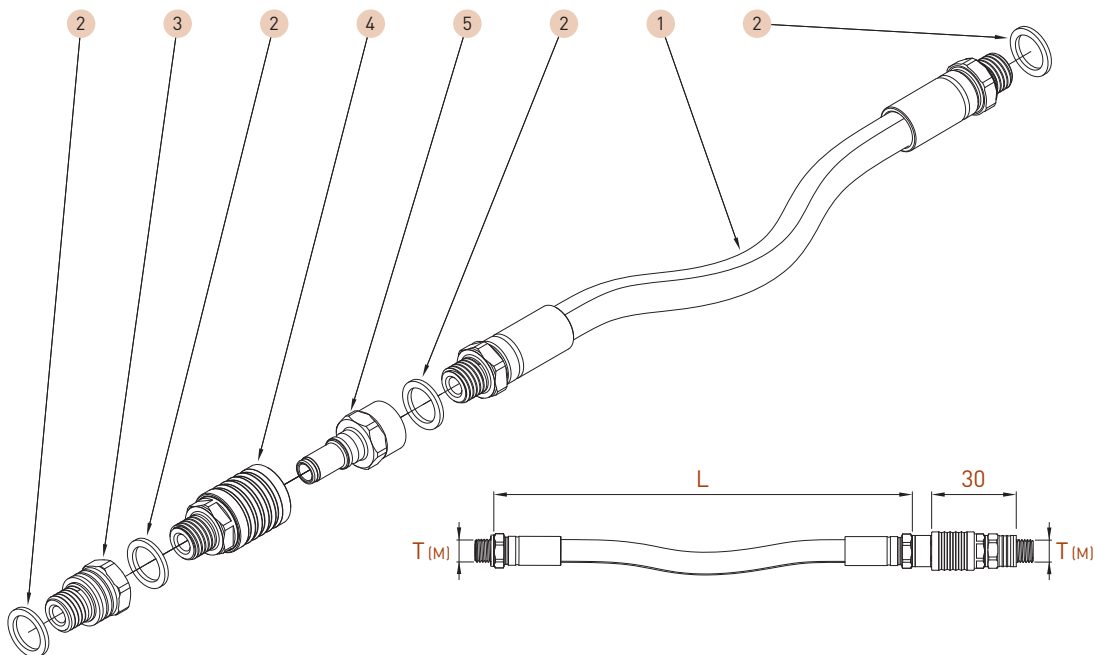
Verbindungskit

Connection kit

Quick / Fix

M8X1



JKIT-M8X1-D6-...-QF



| Ref | Qty | Kit composition |
|-----|-----|---------------------|
| 1 | 1 | JTX-AC-M8X1-L... |
| 2 | 4 | JO-M8X1 |
| 3 | 1 | JRMF-M8X1-M8X1-L9.5 |
| 4 | 1 | JS-M8X1-D6 |
| 5 | 1 | JVF-M8X1-D6 |

| D | T (M) | L | Art. N° |
|---|-------|-----|---------------------|
| 6 | M8X1 | 102 | JKIT-M8X1-D6-102-QF |
| | | 203 | JKIT-M8X1-D6-203-QF |
| | | 305 | JKIT-M8X1-D6-305-QF |
| | | 406 | JKIT-M8X1-D6-406-QF |

| Compatibilité Kompatibilität Compatibility | Porte-outil/Halter/Holder M8X1 | |
|--|---|--|
| |  <p>CUT-Line 16X16 - 25X25 ECO-Line 10X12 - 20X20 EVOCUT-Line 10X12 - 20X20 IN-Line Ø12 - Ø28 ISO-Line 10X10 - 20X20 MODU-Line PRO-Line 10X12 - 20X20 TOP-Line 10X12 - 20X20 TURN-Line 10X12 - 20X20</p> | |

| Options | Options | |
|---------|--|--|
| |  <p>Art. N° JK-M8X1-1515-4T voir page 16.34 siehe Seite 16.34 see page 16.34</p> |  <p>Art. N° C-SW11-E3.7 voir page 16.45 siehe Seite 16.45 see page 16.45</p> |

Kit de connexion

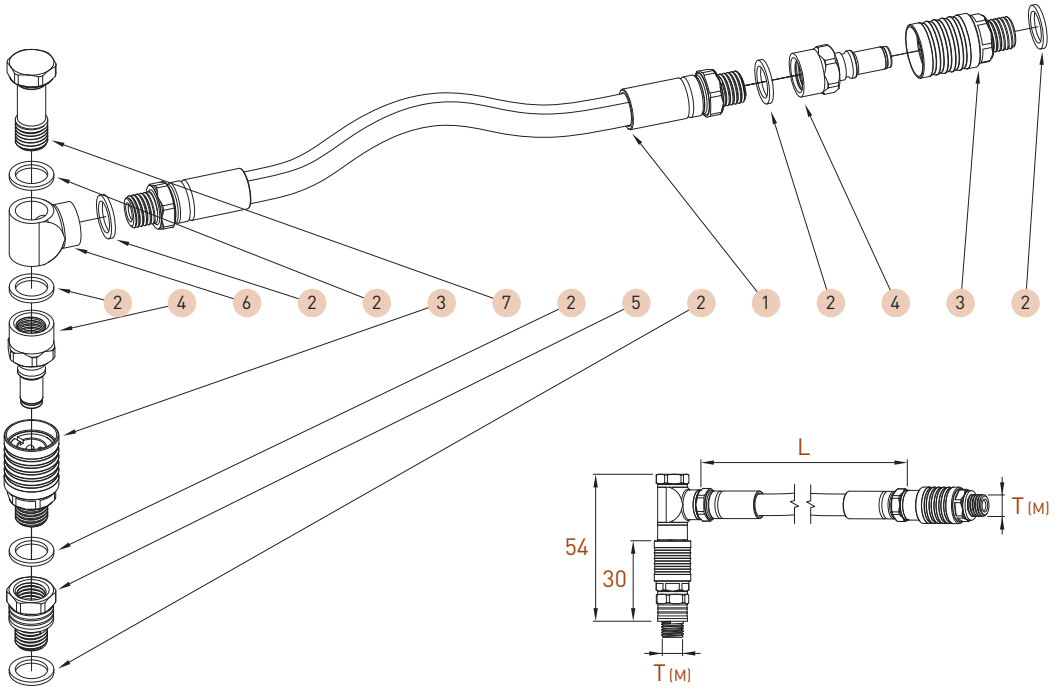
Verbindungs-kit

Quick / Quick

M8X1

JKIT-M8X1-D6-...-QQ

Connection kit



| Ref | Qty | Kit composition |
|-----|-----|---------------------|
| 1 | 1 | JTX-AC-M8X1-L... |
| 2 | 7 | JO-M8X1 |
| 3 | 2 | JS-M8X1-D6 |
| 4 | 2 | JVF-M8X1-D6 |
| 5 | 1 | JRMF-M8X1-M8X1-L9,5 |
| 6 | 1 | JCBF-Ø8-M8X1 |
| 7 | 1 | JEB-M8X1-L24 |

| D | T (M) | L | Art. N° |
|---|-------|-----|----------------------------|
| 6 | M8X1 | 102 | JKIT-M8X1-D6-102-QQ |
| | | 203 | JKIT-M8X1-D6-203-QQ |
| | | 305 | JKIT-M8X1-D6-305-QQ |
| | | 406 | JKIT-M8X1-D6-406-QQ |

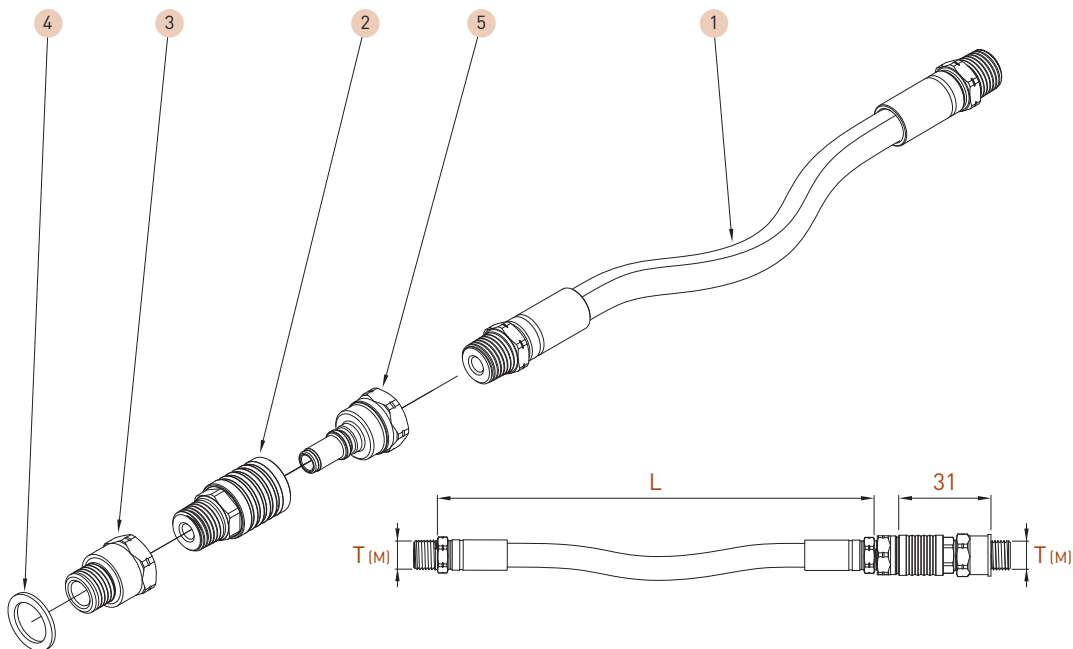
Porte-outil/Halter/Holder M8X1

Compatibilité
Kompatibilität
Compatibility

- CUT-Line 16X16 - 25X25
- ECO-Line 10X12 - 20X20
- EVO-CUT-Line 10X12 - 20X20
- IN-Line Ø12 - Ø28
- ISO-Line 10X10 - 20X20
- MODU-Line
- PRO-Line 10X12 - 20X20
- TOP-Line 10X12 - 20X20
- TURN-Line 10X12 - 20X20

Options

| Art. N° | Art. N° |
|--|--|
| JK-M8X1-1515-4T | C-SW11-E3.7 |
| voir page 16.34 siehe Seite 16.34 see page 16.34 | voir page 16.45 siehe Seite 16.45 see page 16.45 |



| Ref | Qty | Kit composition |
|-----|-----|--------------------------|
| 1 | 1 | JTX-AC-BSPT1/8-L... |
| 2 | 1 | JS-BSPT1/8-D6 |
| 3 | 1 | JRMF-BSP1/8-BSP1/8-L10.5 |
| 4 | 1 | JO-BSP1/8 |
| 5 | 1 | JVF-BSP1/8-D6 |

| D | T (M) | L | Art. N° |
|---|--------|-----|------------------------------|
| 6 | BSP1/8 | 102 | JKIT-BSP1/8-D6-102-QF |
| | | 203 | JKIT-BSP1/8-D6-203-QF |
| | | 305 | JKIT-BSP1/8-D6-305-QF |
| | | 406 | JKIT-BSP1/8-D6-406-QF |

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder BSP1/8

Options



Art. N°

JK-BSP1/8-1515-4T

voir page 16.34
siehe Seite 16.34
see page 16.34



Art. N°

C-SW11-E3.7

voir page 16.45
siehe Seite 16.45
see page 16.45

Kit de connexion

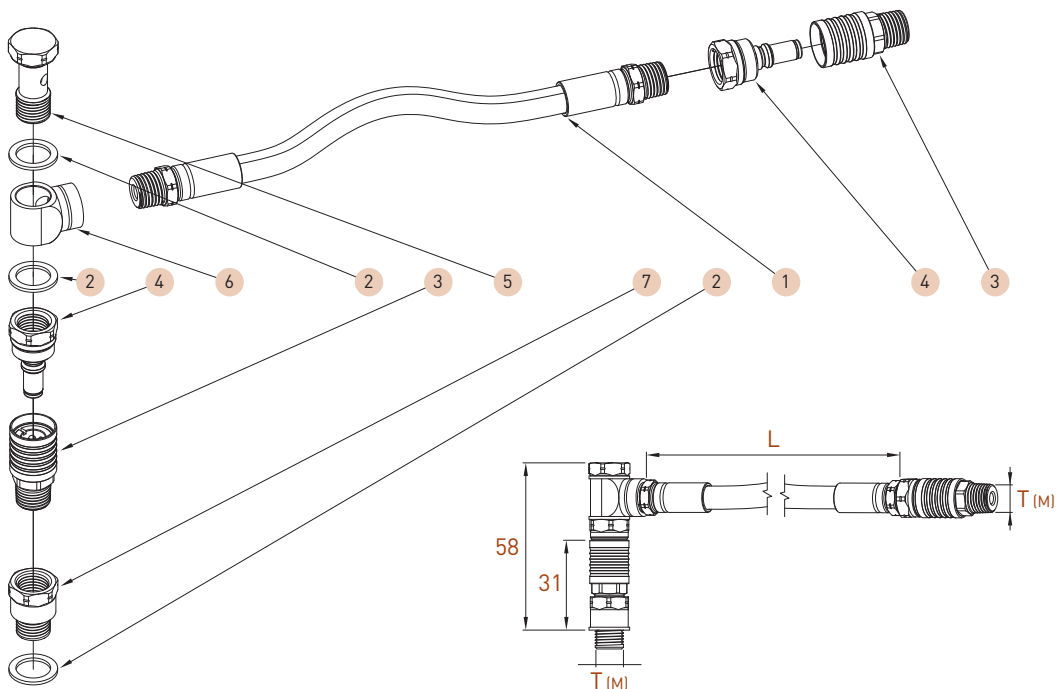
Verbindungskit

Connection kit

Quick / Quick

BSP1/8

JKIT-BSP1/8-D6-...-QQ



| Ref | Qty | Kit composition |
|-----|-----|--------------------------|
| 1 | 1 | JTX-AC-BSPT1/8-L... |
| 2 | 3 | JO-BSP1/8 |
| 3 | 2 | JS-BSPT1/8-D6 |
| 4 | 2 | JVF-BSP1/8-D6 |
| 5 | 1 | JEB-BSP1/8-L26 |
| 6 | 1 | JCBF-Ø10-BSP1/8 |
| 7 | 1 | JRMF-BSP1/8-BSP1/8-L10.5 |

| D | T (M) | L | Art. N° |
|---|--------|-----|------------------------------|
| 6 | BSP1/8 | 102 | JKIT-BSP1/8-D6-102-QQ |
| | | 203 | JKIT-BSP1/8-D6-203-QQ |
| | | 305 | JKIT-BSP1/8-D6-305-QQ |
| | | 406 | JKIT-BSP1/8-D6-406-QQ |

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder BSP1/8

Options



Art. N°

JK-BSP1/8-1515-4T

voir page 16.34
siehe Seite 16.34
see page 16.34



Art. N°

C-SW11-E3.7

voir page 16.45
siehe Seite 16.45
see page 16.45



| Qty | Kit composition | Art. N° |
|-----|------------------|------------------|
| 2 | C-SW8-E2.5 | JSTART-D4 |
| 4 | JO-M6 | |
| 2 | JO-M5 | |
| 2 | JK-M6-1010-4T | |
| 10 | JS-M6-D4 | |
| 2 | JTX-AC-M6-102 | |
| 2 | JTX-AC-M6-203 | |
| 2 | JTX-AC-M6-305 | |
| 2 | JTX-AC-M6-406 | |
| 10 | JVF-M6-D4 | |
| 2 | JVB-D4 | |
| 2 | JWF-M6-D4 | |
| 2 | JRMF-M6-M6-L7.5 | |
| 2 | JRMF-M6-M6-L12.5 | |
| 2 | JRMF-M6-M6-L17.5 | |
| 10 | JRMF-M5-M6-L7.5 | |
| 2 | JRFF-M6-L9.0 | |
| 5 | JCBF-Ø6-M6 | |
| 2 | JABF-Ø6-M6-45° | |
| 5 | JEB-M6-L19 | |
| 2 | JEB-M6-L30-DUO | |
| 1 | JT-CU-M6-102 | |
| 1 | JT-CU-M6-203 | |

Starter Kit

M8X1 (+ BSP1/8)

JSTART-D6

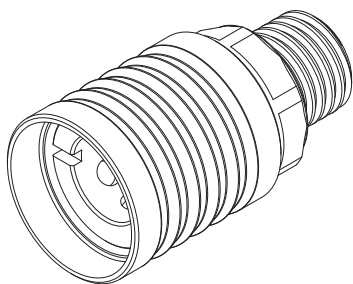
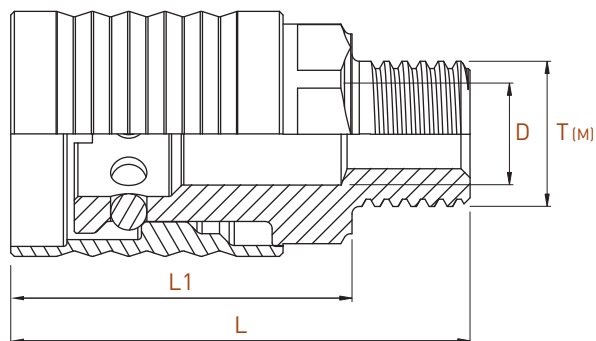
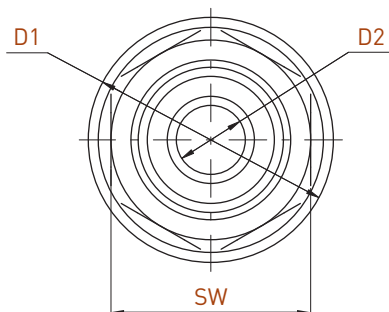


| Qty | Kit composition | Art. N° |
|-----|------------------------|------------------|
| 2 | C-SW11-E3.7 | JSTART-D6 |
| 4 | JO-M8X1 | |
| 2 | JK-M8X1-1515-4T | |
| 10 | JS-M8X1-D6 | |
| 2 | JTX-AC-M8X1-102 | |
| 2 | JTX-AC-M8X1-203 | |
| 2 | JTX-AC-M8X1-305 | |
| 2 | JTX-AC-M8X1-406 | |
| 10 | JVF-M8X1-D6 | |
| 2 | JVB-D6 | |
| 2 | JWF-M8X1-D6 | |
| 2 | JRMF-M8X1-M8X1-L9.5 | |
| 2 | JRMF-M8X1-M8X1-L14.5 | |
| 2 | JRMF-M8X1-M8X1-L19.5 | |
| 10 | JRMF-BSPT1/8-M8X1-L9.0 | |
| 2 | JRFF-M8X1-L12.0 | |
| 5 | JCBF-Ø8-M8X1 | |
| 2 | JABF-Ø8-M8X1-45° | |
| 5 | JEB-M8X1-L24 | |
| 2 | JEB-M8X1-L38-DUO | |
| 1 | JT-CU-M8X1-102 | |
| 1 | JT-CU-M8X1-203 | |

JET-LINE

Raccord rapide
Schnellkupplungen
Quick connector

JS



| T (M) | L | L1 | SW | D | D1 | D2 | Art. N° |
|---------|------|----|----|---|------|-----|---------------|
| M5 | 18 | 14 | 8 | 4 | 9.8 | 2.3 | JS-M5-D4 |
| M6 | 18 | 14 | 8 | 4 | 9.8 | 2.3 | JS-M6-D4 |
| M8X1KEG | 20 | 14 | 8 | 4 | 9.8 | 2.3 | JS-M8X1KEG-D4 |
| M8X1 | 25 | 19 | 11 | 6 | 13.5 | 3.8 | JS-M8X1-D6 |
| BSPT1/8 | 29.3 | 19 | 11 | 6 | 13.5 | 3.8 | JS-BSPT1/8-D6 |

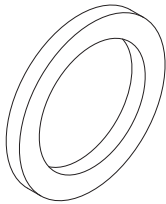
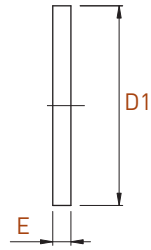
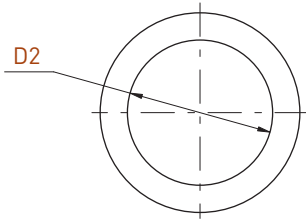
| Pression max Max. Druck max. pressure | KEG = | BSPT = |
|---|---|---|
| = 220 Bar (3.190 PSI) | filetage conique konisches Gewinde conical thread | filetage conique konisches Gewinde conical thread |

Joint d'étanchéité en cuivre

Kupferdichtungsringe

Copper sealing gasket

JO



| D1 | D2 | E | Art. N° |
|----|----|---|------------|
| 9 | 5 | 1 | JO-M5* |
| 9 | 6 | 1 | JO-M6* |
| 11 | 8 | 1 | JO-M8X1* |
| 14 | 10 | 1 | JO-BSP1/8* |

* vendu par 10 pces
 10-facherweise verkauft
 sold by 10 pcs

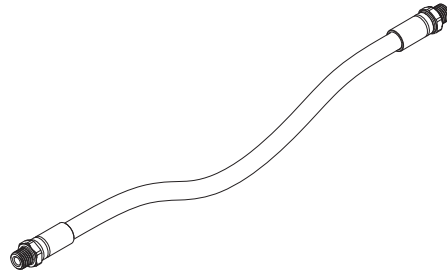
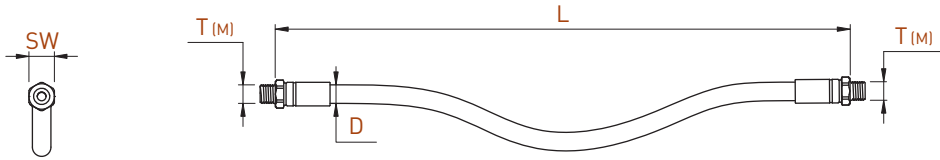
JET-LINE

Tube de distribution flexible en acier inoxydable tressé

Rostfreier Stahlflex-Schlauch

Flexible distribution tube of stainless steel braiding

JTX-AC



| T (M) | L* | SW | D | Art. N° |
|---------|-----|----|------|--------------------|
| M6 | 102 | 8 | Ø6.5 | JTX-AC-M6-102 |
| | 203 | 8 | Ø6.5 | JTX-AC-M6-203 |
| | 305 | 8 | Ø6.5 | JTX-AC-M6-305 |
| | 406 | 8 | Ø6.5 | JTX-AC-M6-406 |
| M8X1 | 102 | 11 | Ø8 | JTX-AC-M8X1-102 |
| | 203 | 11 | Ø8 | JTX-AC-M8X1-203 |
| | 305 | 11 | Ø8 | JTX-AC-M8X1-305 |
| | 406 | 11 | Ø8 | JTX-AC-M8X1-406 |
| BSPT1/8 | 102 | 11 | Ø8 | JTX-AC-BSPT1/8-102 |
| | 203 | 11 | Ø8 | JTX-AC-BSPT1/8-203 |
| | 305 | 11 | Ø8 | JTX-AC-BSPT1/8-305 |
| | 406 | 11 | Ø8 | JTX-AC-BSPT1/8-406 |

* Longueur spécifique possible sur demande
 Spezifische Länge auf Anfrage möglich
 Specific length possible on request

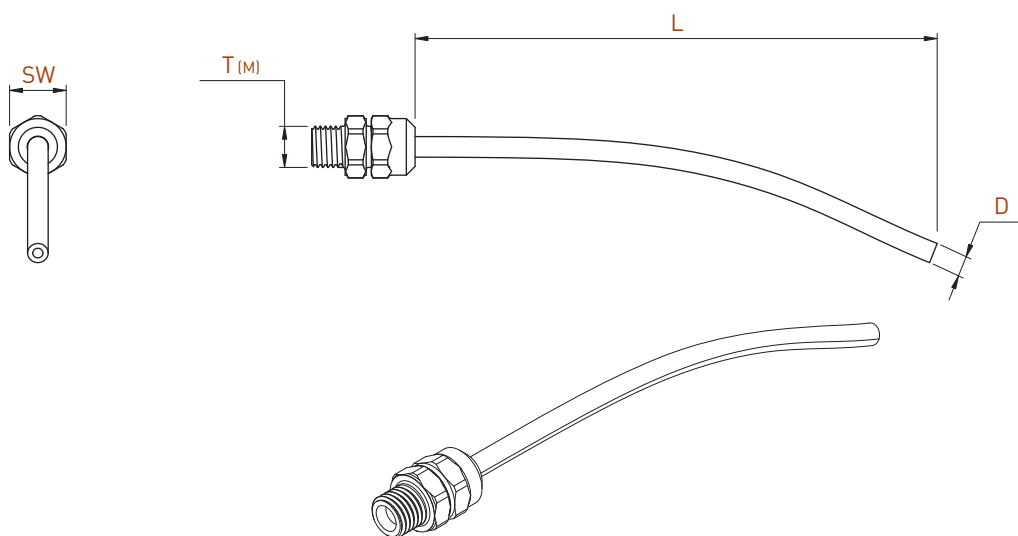
| Pression max Max. Druck max. pressure | | | Pression (bar) | Ø 6.5 (l/min) | Ø 8 (l/min) |
|---|----------------------|----------------------|-------------------|------------------|----------------|
| | KEG = | BSPT = | | | |
| = 220 Bar (3.190 PSI) | filetage conique | filetage conique | 2 | 3.5 | 9.5 |
| | konisches Gewinde | konisches Gewinde | 8 | 7.0 | 19.0 |
| | conical thread | conical thread | 15 | 9.6 | 26.0 |
| | | | 20 | 11.0 | 30.1 |
| | | | 30 | 13.5 | 36.9 |
| | | | 50 | 17.5 | 47.6 |
| | | | 80 | 22.1 | 60.3 |
| | | | 100 | 24.7 | 67.4 |
| | | 150 | 30.2 | 82.5 | |

Tube de distribution en cuivre

Kupferrohr

Copper distribution tube

JT-CU

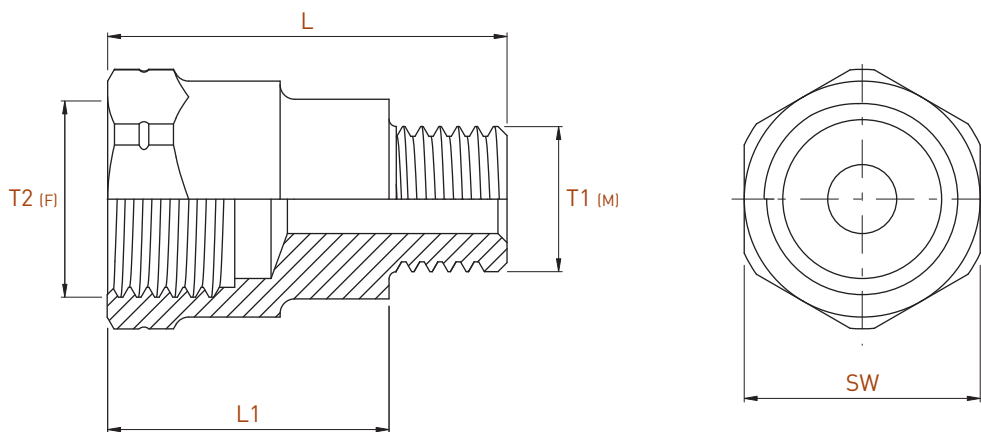


| T (M) | L* | SW | D | Art. N° |
|-------|-----|----|----|-----------------------|
| M6 | 102 | 8 | Ø3 | JT-CU-M6-102 |
| | 203 | 8 | Ø3 | JT-CU-M6-203 |
| | 305 | 8 | Ø3 | JT-CU-M6-305 |
| | 406 | 8 | Ø3 | JT-CU-M6-406 |
| M8X1 | 102 | 11 | Ø4 | JT-CU-M8X1-102 |
| | 203 | 11 | Ø4 | JT-CU-M8X1-203 |
| | 305 | 11 | Ø4 | JT-CU-M8X1-305 |
| | 406 | 11 | Ø4 | JT-CU-M8X1-406 |

* Longueur spécifique possible sur demande
 Spezifische Länge auf Anfrage möglich
 Specific length possible on request

Pression max
 Max. Druck
 max. pressure

= 220 Bar
 (3.190 PSI)



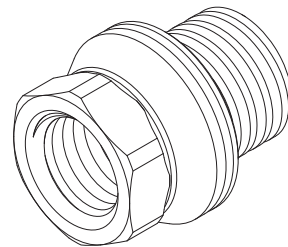
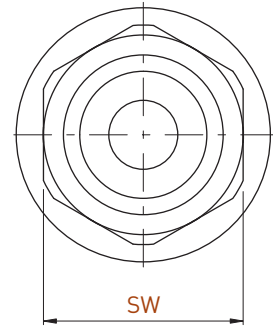
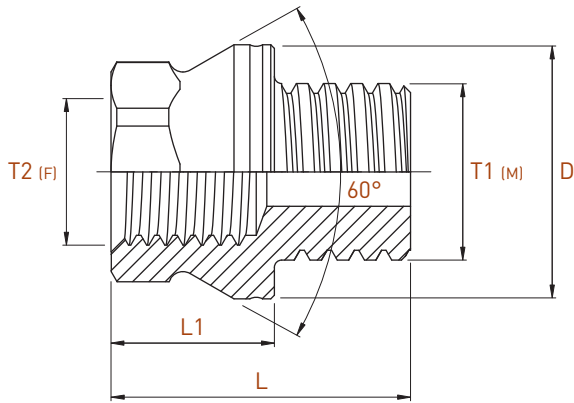
| T1 (M) | T2 (F) | L1 | L | SW | Art. N° | | |
|------------|---------|--------|---------|------|------------------------------------|------------------------------------|-----------------------------------|
| M5 | M5 | 6.5 | 11 | 8 | JRMF-M5-M5-L6.5 | | |
| | | 11.5 | 16 | 8 | JRMF-M5-M5-L11.5 | | |
| | | 16.5 | 21 | 8 | JRMF-M5-M5-L16.5 | | |
| | M6 | M6 | 7.5 | 12 | 8 | JRMF-M5-M6-L7.5 | |
| | | M8X1 | 9.5 | 14 | 11 | JRMF-M5-M8X1-L9.5 | |
| M6 | M6 | 7.5 | 12.5 | 8 | JRMF-M6-M6-L7.5 | | |
| | | 12.5 | 17.5 | 8 | JRMF-M6-M6-L12.5 | | |
| | | 17.5 | 22.5 | 8 | JRMF-M6-M6-L17.5 | | |
| | M8X1 | 9.5 | 14.5 | 11 | JRMF-M6-M8X1-L9.5 | | |
| | M8X1KEG | M6 | 6 | 12 | 8 | JRMF-M8X1KEG-M6-L6.0 | |
| M8X1 | | 9.5 | 16.5 | 11 | JRMF-M8X1KEG-M8X1-L9.5 | | |
| M5 | | 5.5 | 12 | 11 | JRMF-M8X1-M5-L5.5 | | |
| M8X1 | M6 | 7 | 13.5 | 11 | JRMF-M8X1-M6-L7.0 | | |
| | | 9.5 | 16 | 11 | JRMF-M8X1-M8X1-L9.5 | | |
| | M8X1 | M8X1 | 14.5 | 21 | 11 | JRMF-M8X1-M8X1-L14.5 | |
| | | | 19.5 | 26 | 11 | JRMF-M8X1-M8X1-L19.5 | |
| | | | 10.5 | 17 | 13 | JRMF-M8X1-BSP1/8-L10.5 | |
| | | BSP1/8 | 15.5 | 22 | 13 | JRMF-M8X1-BSP1/8-L15.5 | |
| | | | 20.5 | 27 | 13 | JRMF-M8X1-BSP1/8-L20.5 | |
| | | | NPT1/8 | 11 | 17.5 | 13 | JRMF-M8X1-NPT1/8-L11 new |
| | | | M8X1.25 | 9.5 | 16 | 11 | JRMF-M8X1.25-M8X1-L9.5 new |
| BSPT1/8 | M5 | 3.5 | 14.6 | 11 | JRMF-BSPT1/8-M5-L3.5 | | |
| | | M6 | 3.5 | 14.6 | 11 | JRMF-BSPT1/8-M6-L3.5 | |
| | M8X1 | 9 | 20.3 | 11 | JRMF-BSPT1/8-M8X1-L9.0 | | |
| BSP1/8 | BSP1/8 | 10.5 | 18 | 13 | JRMF-BSP1/8-BSP1/8-L10.5 | | |
| | | 15.5 | 23 | 13 | JRMF-BSP1/8-BSP1/8-L15.5 | | |
| | | 20.5 | 28 | 13 | JRMF-BSP1/8-BSP1/8-L20.5 | | |
| | | NPT1/8 | 7 | 17 | 13 | JRMF-NPT1/8-M8X1-L7.0 new | |
| NPT1/16 | M6 | 6 | 15 | 11 | JRMF-NPT1/16-M6-L6.0 new | | |
| | | M8X1 | 9 | 18 | 13 | JRMF-NPT1/16-M8X1-L9.0 new | |
| SAE7/16-20 | M6 | 4.5 | 12 | 13 | JRMF-SAE7/16-20-M6-L4.5 new | | |
| | | M8X1 | 7 | 14.5 | 13 | JRMF-SAE7/16-20-M8X1-L7 new | |

Connecteurs mâle/femelle avec cône 60°

Innen und Außengewinde mit 60°-Kegel

Male/female connectors with cone 60°

JRMF-A60°

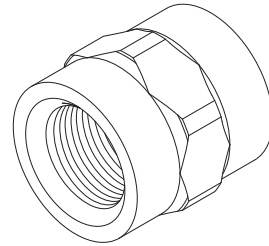
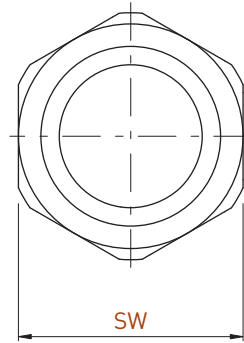
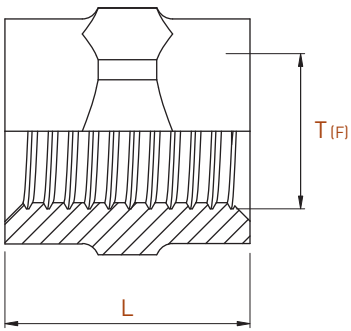


| T1 (M) | T2 (F) | L1 | L | D | SW | Art. N° |
|--------|--------|----|------|----|----|-----------------------------------|
| BSP1/8 | M8X1 | 9 | 16.5 | 14 | 11 | JRMF-BSP1/8-M8X1-A60°-L9.0 |

JET-LINE

Connecteurs femelle/femelle
Gewindeadapter Innengewinde
Female connectors

JRFF



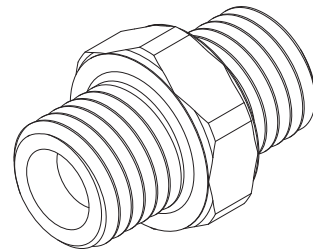
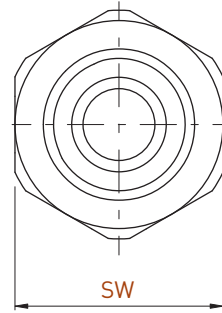
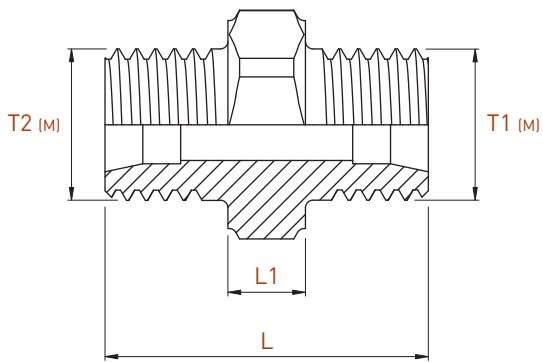
| $T_{(F)}$ | L | SW | Art. N° |
|-----------|-----|------|-----------------|
| M6 | 9 | 8 | JRFF-M6-L9.0 |
| M8X1 | 12 | 11 | JRFF-M8X1-L12.0 |

Connecteurs mâle/mâle

Gewintheadapter Außengewinde

Male connectors

JRMM



| T1 (M) | T2 (M) | L1 | L | SW | Art. N° |
|--------|--------|-----|------|----|---|
| M6 | M6 | 3 | 13 | 8 | JRMM-M6-M6-L3.0 |
| M8X1 | M8X1 | 4 | 17 | 11 | JRMM-M8X1-M8X1-L4.0 |
| M10 | M8X1 | 3.5 | 17.5 | 11 | JRMM-M10-M8X1-3.5 new |

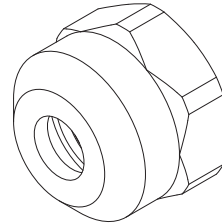
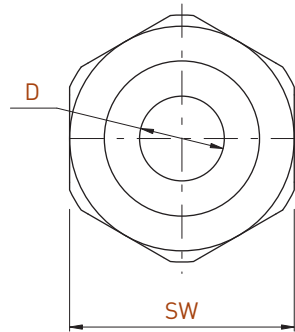
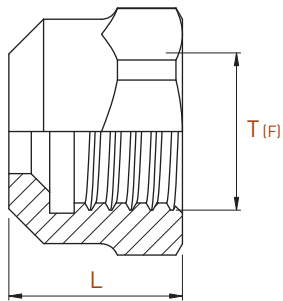
JET-LINE

Écrous d'étanchéité

Dichtungsmutter

Sealing nuts

JN



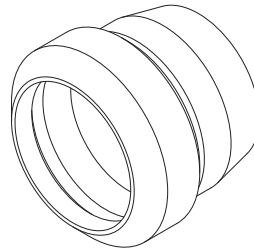
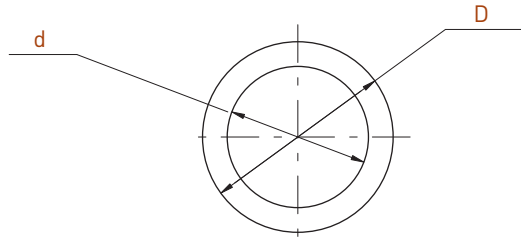
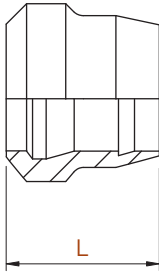
| T (F) | L | D | SW | Art. N° |
|-------|------|---|----|---|
| M6 | 6.5 | 3 | 8 | JN-M6-D3 |
| M8X1 | 8.5 | 4 | 11 | JN-M8X1-D4 |
| M10 | 11.5 | 6 | 12 | JN-M10-D6 new |

Bague d'étanchéité

Dichtungsring

Sealing ring

JNG



| d | D | L | Art. N° |
|---|-----|-----|--|
| 3 | 4 | 3.3 | JNG-D3 |
| 4 | 5.5 | 4.5 | JNG-D4 |
| 6 | 8.5 | 7 | JNG-D6 new |

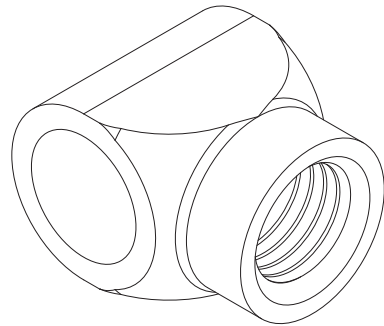
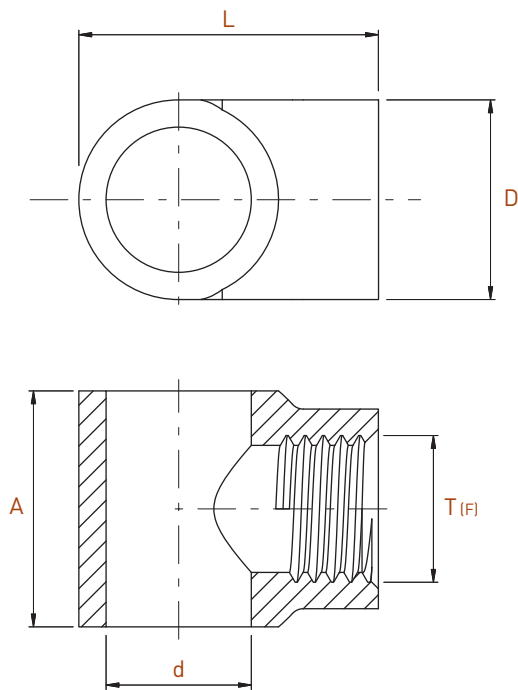
JET-LINE

Banjos courts femelle

Kurzer Innengewintheadapter

Short female banjos

JCBF



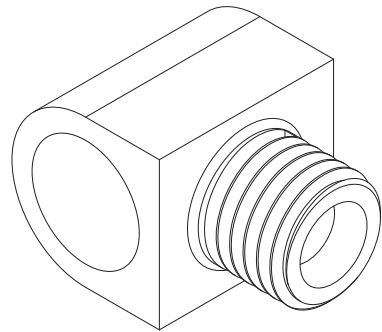
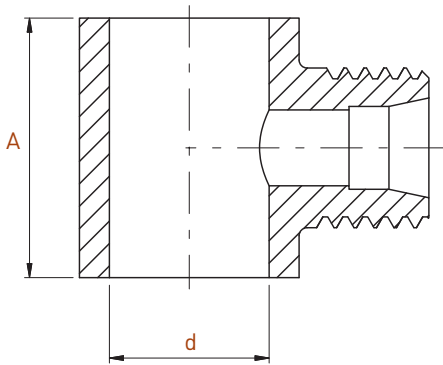
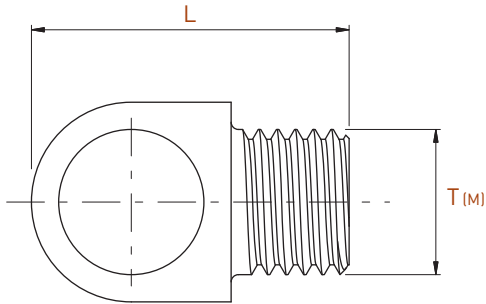
| T (F) | A | L | d | D | Art. N° |
|--------|----|------|----|----|-----------------|
| M6 | 10 | 12.5 | 6 | 9 | JCBF-06-M6 |
| M8X1 | 13 | 16.5 | 8 | 11 | JCBF-08-M8X1 |
| M8X1 | 13 | 18.5 | 10 | 11 | JCBF-010-M8X1 |
| BSP1/8 | 13 | 19.5 | 10 | 13 | JCBF-010-BSP1/8 |

Banjos courts mâle

Kurzer Aussengewindeadapter

Short male banjos

JCBM

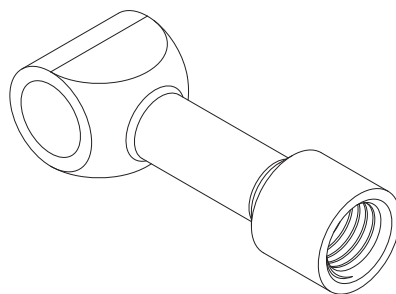
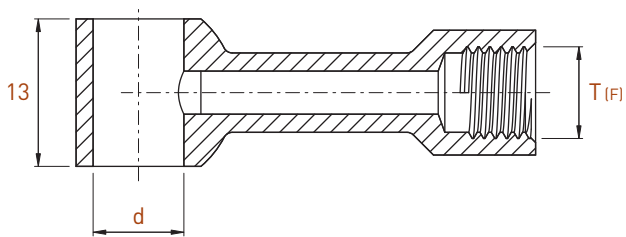
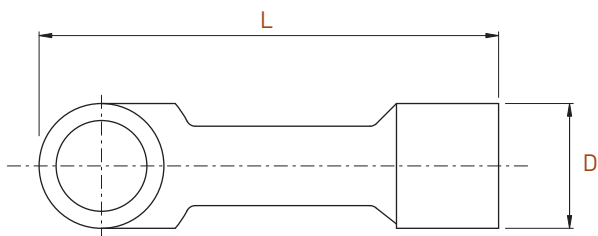


| T (M) | A | L | d | Art. N° |
|-------|----|------|----|---------------|
| M6 | 10 | 14 | 6 | JCBM-Ø6-M6 |
| M8X1 | 13 | 17.5 | 8 | JCBM-Ø8-M8X1 |
| | 13 | 19.5 | 10 | JCBM-Ø10-M8X1 |

JET-LINE

Banjos longs droits femelle
 Langer Innengewintheadapter
 Long straight female banjos

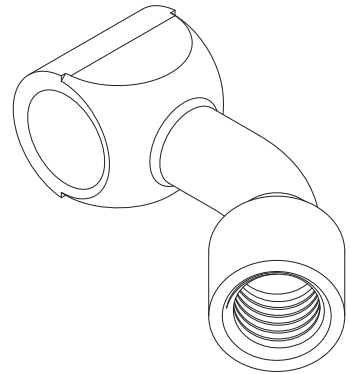
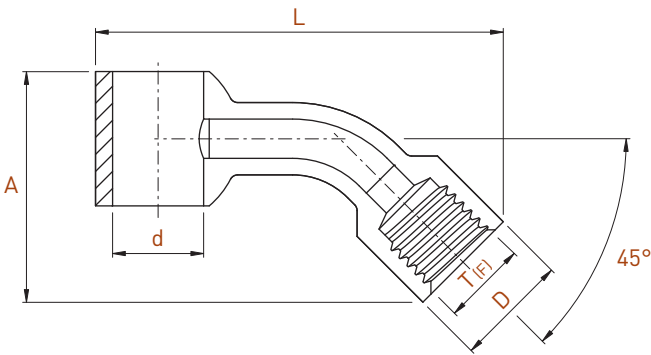
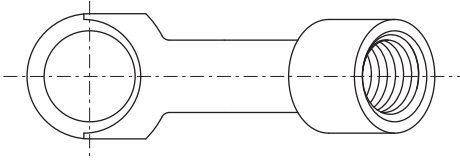
JABF



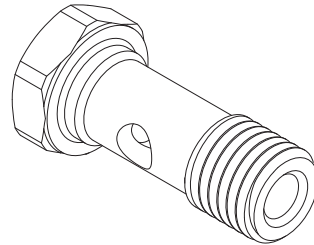
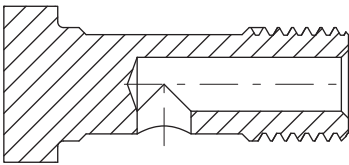
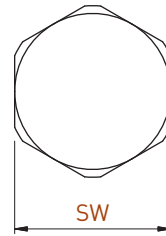
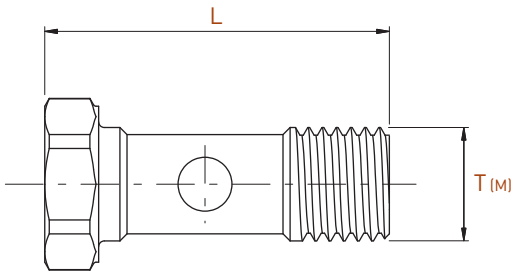
| T (F) | A | L | d | D | Art. N° |
|--------|----|------|----|----|-----------------|
| M6 | 10 | 31.5 | 6 | 9 | JABF-06-M6 |
| M8X1 | 13 | 40.5 | 8 | 11 | JABF-08-M8X1 |
| M8X1 | 13 | 42.5 | 10 | 11 | JABF-010-M8X1 |
| BSP1/8 | 13 | 42.5 | 10 | 13 | JABF-010-BSP1/8 |

- Banjos longs coudés femelle**
- Adapter lang 45° Innengewinde**
- Long curved female banjos**

JABF-45°



| T (F) | A | L | d | D | Art. N° |
|-------|------|------|----|----|--------------------------|
| M6 | 10 | 33 | 6 | 9 | JABF-Ø6-M6-45° |
| M8X1 | 11.8 | 40 | 8 | 11 | JABF-Ø8-M8X1-45° |
| | 13 | 40.5 | 10 | 11 | JABF-Ø10-M8X1-45° |



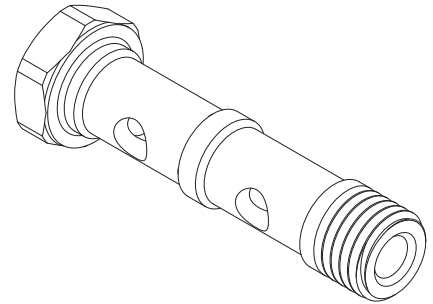
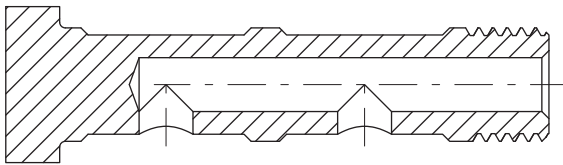
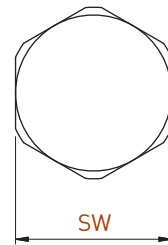
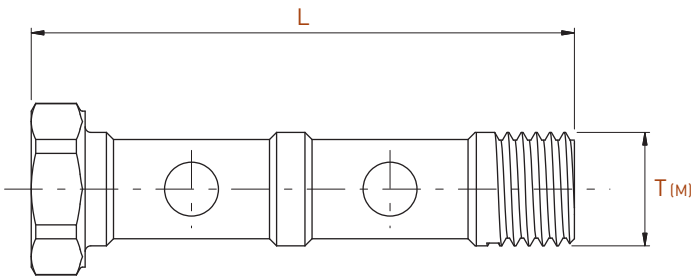
| T (M) | L | SW | Art. N° |
|--------|------|----|-----------------------|
| M5 | 18.3 | 8 | JEB-M5-L18 |
| M6 | 18.8 | 8 | JEB-M6-L19 |
| M8X1 | 24.3 | 11 | JEB-M8X1-L24 |
| BSP1/8 | 26 | 13 | JEB-BSP1/8-L26 |

Vis banjo double

Hohlschrauben doppelt

Double banjo screws

JEB-DUO



| T (M) | L | SW | Art. N° |
|--------|------|----|---------------------------|
| M6 | 29.8 | 8 | JEB-M6-L30-DUO |
| M8X1 | 38.3 | 11 | JEB-M8X1-L38-DUO |
| BSP1/8 | 40 | 13 | JEB-BSP1/8-L40-DUO |

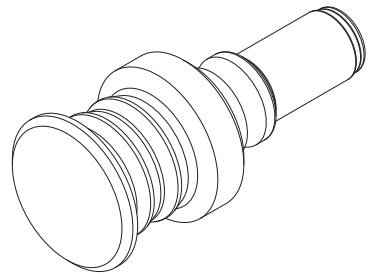
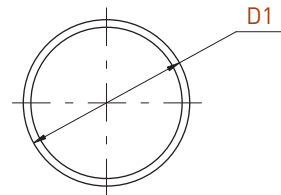
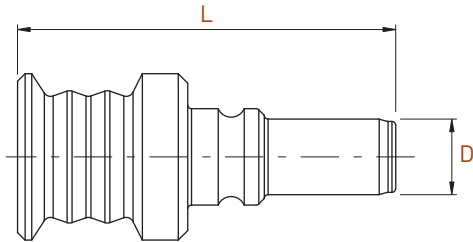
JET-LINE

Fiches de verrouillage

Verschlussstecker

Sealing connecting plugs

JVB



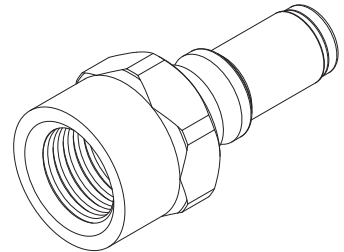
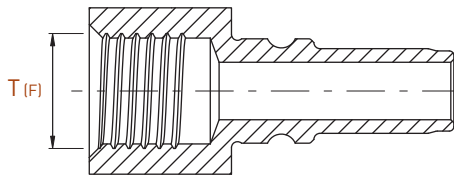
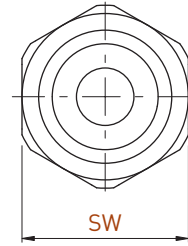
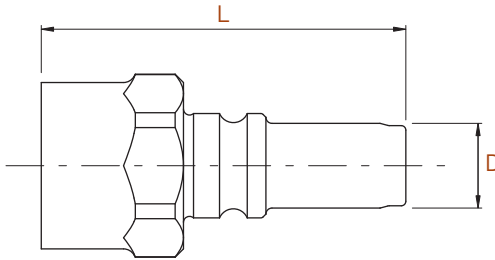
| D | D1 | L | Art. N° |
|---|-----|----|---------|
| 4 | 8.8 | 20 | JVB-D4 |
| 6 | 12 | 27 | JVB-D6 |

Fiches de connexion

Innengewindestecker

Connecting plugs

JVF

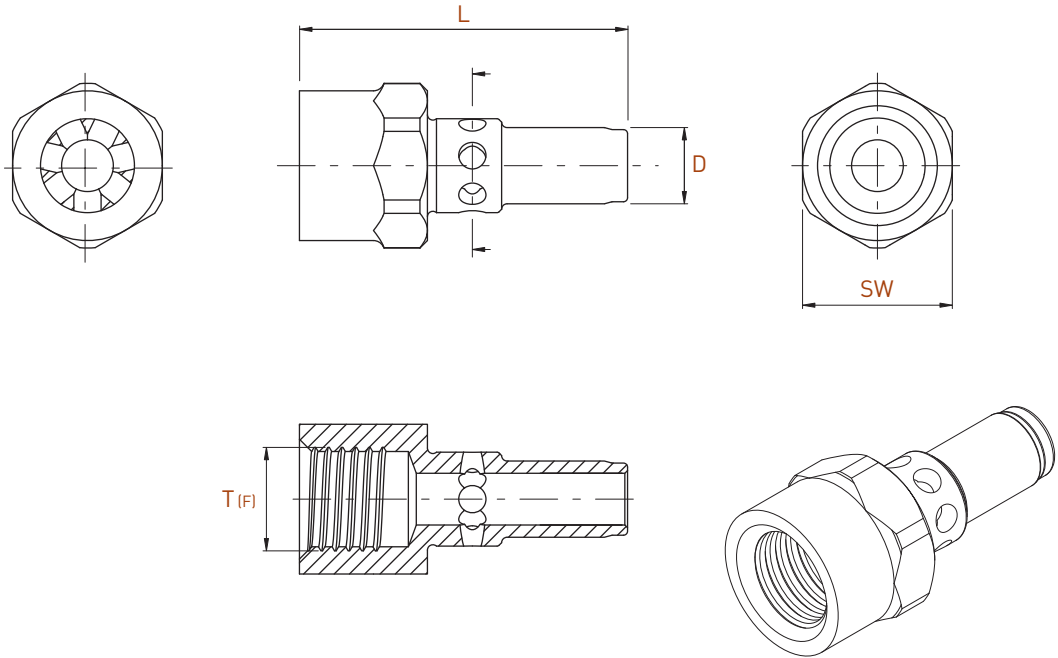


| D | T (F) | L | SW | Art. N° |
|---|--------|------|----|----------------------|
| 4 | M6 | 18.3 | 8 | JVF-M6-D4 |
| 6 | M8X1 | 24 | 11 | JVF-M8X1-D6 |
| 6 | BSP1/8 | 25.5 | 11 | JVF-BSP1/8-D6 |

JET-LINE

- Fiches de connexion fixes femelle
- Innengewindestecker mit Verdrehsicherung
- Female positioning connection plugs

JWF



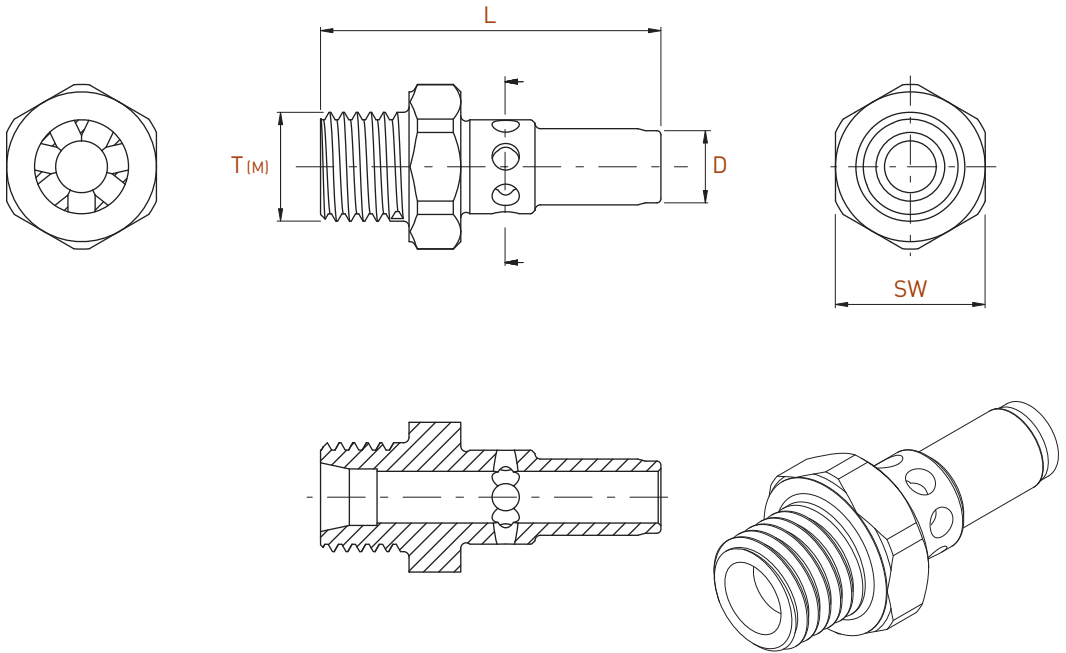
| D | T (F) | L | SW | Art. N° |
|---|-------|------|----|-------------|
| 4 | M6 | 18.3 | 8 | JWF-M6-D4 |
| 6 | M8X1 | 24 | 11 | JWF-M8X1-D6 |

Fiches de connexion fixes mâle

Aussengewindestecker mit Verdrehsicherung

Male positioning connection plugs

JWM



| D | T (M) | L | SW | Art. N° |
|---|-------|------|----|--------------------|
| 4 | M6 | 18.3 | 8 | JWM-M6-D4 |
| 6 | M8X1 | 25 | 11 | JWM-M8X1-D6 |

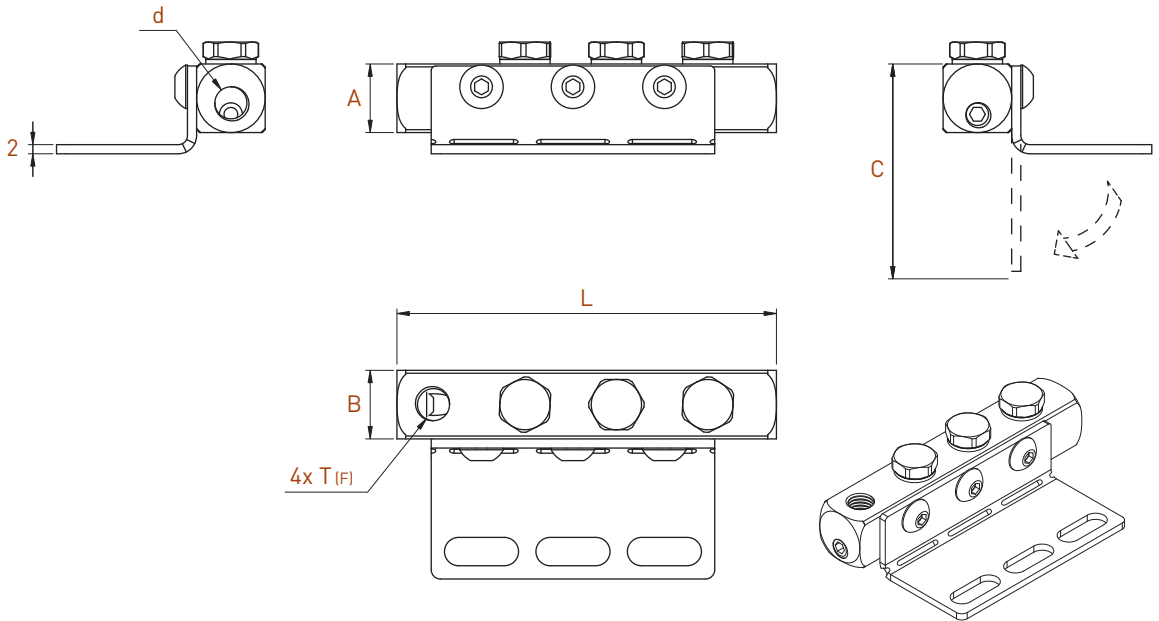
JET-LINE

Blocs de distribution

Kühlmittelverteiler

Distribution blocks

JK



| T (F) | A | B | C | d | L | Art. N° |
|--------|----|----|----|--------|----|-------------------|
| M5 | 10 | 10 | 37 | M5 | 62 | JK-M5-1010-4T |
| M6 | 10 | 10 | 37 | M6 | 62 | JK-M6-1010-4T |
| M8X1 | 15 | 15 | 47 | M8X1 | 83 | JK-M8X1-1515-4T |
| BSP1/8 | 15 | 15 | 47 | BSP1/8 | 83 | JK-BSP1/8-1515-4T |

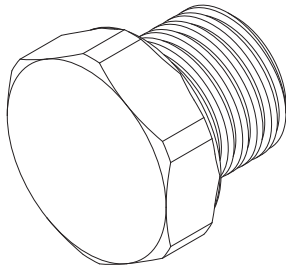
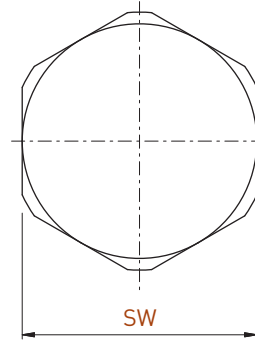
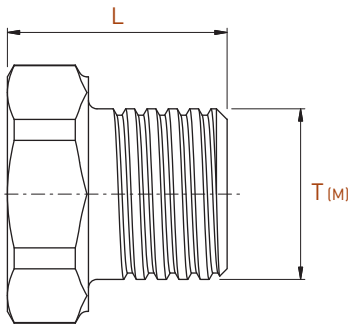
| Qty | Livré avec | Mitgeliefert | Supplied with |
|-----|------------------------------|----------------------|-------------------------|
| 1 | Plaque de serrage pliable | Faltbare Klemmplatte | Foldable clamping plate |
| 3 | Vis bombée | Linsenkopfschraube | Domed clamping Screw |
| 3 | Vis sans tête bouchon | Verschlußstopfen | Sealing screw |
| 3 | Joint d'étanchéité en cuivre | Kupferdichtungsringe | Copper sealing basket |
| 1 | Vis sans tête bouchon | Madenschraube | Grub screw |

Bouchons d'étanchéité

Verschlußstopfen

Sealing plugs

JBB



| SW | T (M) | L | Art. N° |
|----|--------|------|-------------------------|
| 8 | M5 | 7.3 | JBB-M5-L7.0 |
| 8 | M6 | 7.8 | JBB-M6-L8.0 |
| 11 | M8X1 | 10.3 | JBB-M8X1-L10.0 |
| 11 | BSP1/8 | 10.3 | JBB-BSP1/8-L10.0 |

JET-LINE

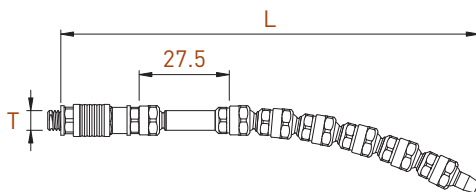
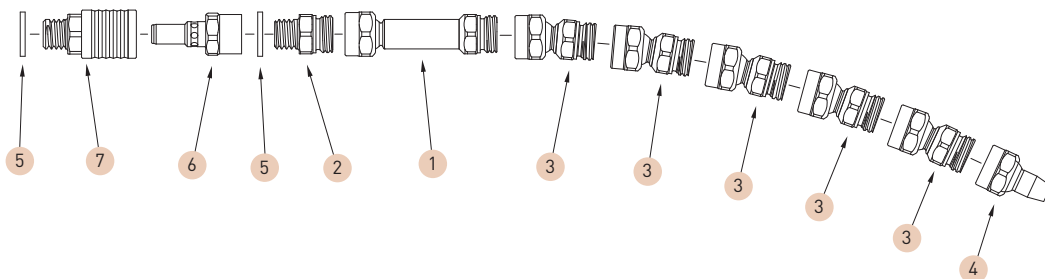
Kit articulé avec buse d'arrosage

Gelenkkit mit Kühlungsdüse

Articulated kit with coolant nozzle

JKIT-AR3


new



| Ref | Qty | Kit composition |
|-----|-----|------------------|
| 1 | 1 | JAR3-L27.5 |
| 2 | 1 | JRMM-AR3-M6-L3.0 |
| 3 | 5 | JAR3-L12.5 |
| 4 | 1 | JJ-AR3-D3-L9 |
| 5 | 2 | JO-M6 |
| 6 | 1 | JWF-M6-D4 |
| 7 | 1 | JS-M6-D4 |

| T (M) | L | Art. N° |
|-------|-----|--------------------|
| M6 | 130 | JKIT-AR3-M6-D3-130 |

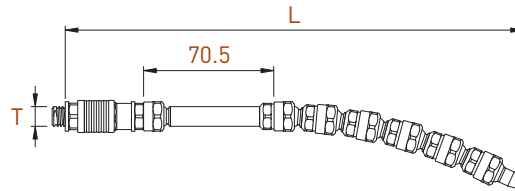
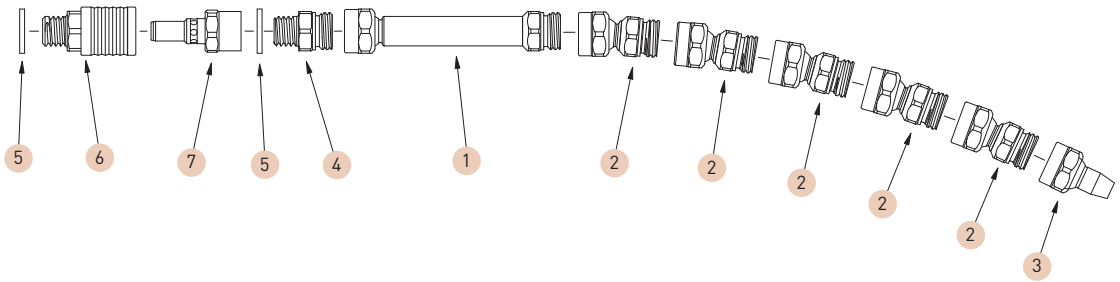
| Pression max | Couple de serrage Anzugsmoment Torque setting |
|--------------------|---|
| 150 bar (2.175psi) | 1.8 Nm |

| Option recommandée Empfohlene Option Recommended option | Page Seite Page |
|---|-----------------------|
| C-AR3  | 16.45 |

Kit articulé avec buse d'arrosage
Gelenkkit mit Kühlungsdüse
Articulated kit with coolant nozzle

JKIT-AR6

new



| Ref | Qty | Kit composition |
|-----|-----|------------------|
| 1 | 1 | JAR6-L70.5 |
| 2 | 5 | JAR6-L20.5 |
| 3 | 1 | JJ-AR6-D6-L16 |
| 4 | 1 | JRMM-AR6-M8X1-L4 |
| 5 | 2 | JO-M8X1 |
| 6 | 1 | JS-M8X1-D6 |
| 7 | 1 | JWF-M8X1-D6 |

| T (M) | L | Art. N° |
|-------|-----|-----------------------------|
| M8X1 | 225 | JKIT-AR6-M8X1-D6-225 |

| | |
|----------------------------|---|
| Pression max | Couple de serrage Anzugsmoment Torque setting |
| 100 bar (1.450 psi) | 6 Nm |

| | | |
|---|--|-----------------------|
| Option recommandée Empfohlene Option Recommended option | | Page Seite Page |
| C-AR6 | | 16.45 |

JET-LINE

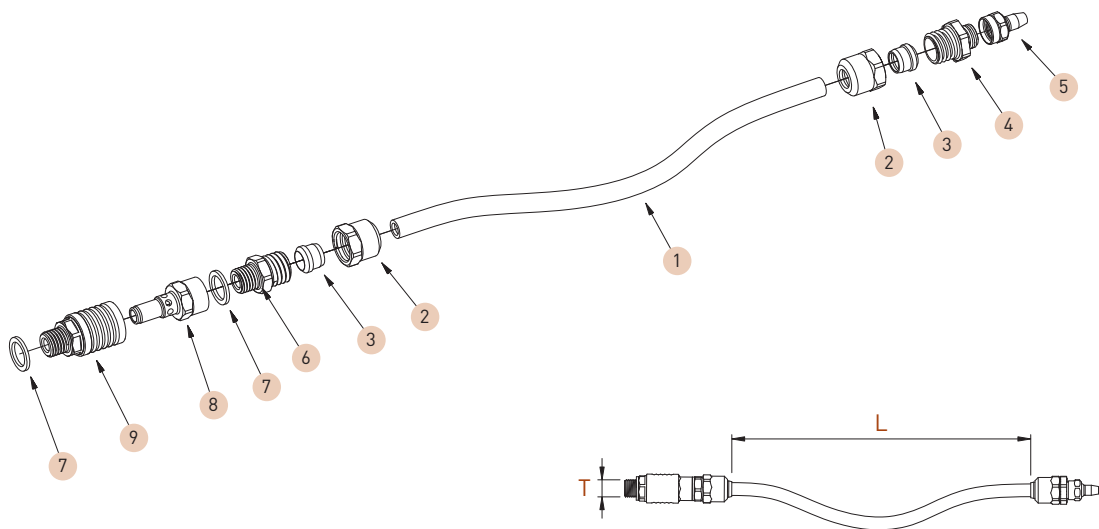
Kit tube en cuivre avec buse d'arrosage

Kit Kupferrohr mit Kühlungsdüse

Kit copper tube with coolant nozzle

JKIT-CU

new



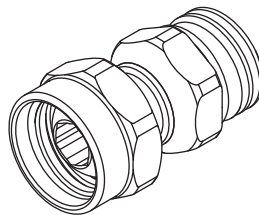
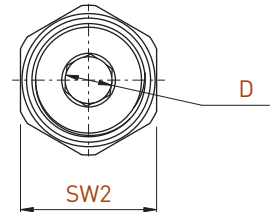
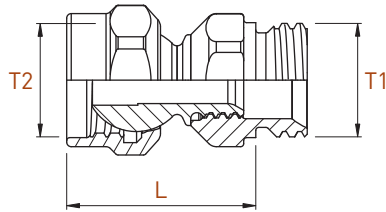
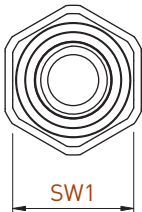
| Ref | Qty | Kit composition |
|-----|-----|--------------------|
| 1 | 1 | JT-CU |
| 2 | 2 | JN-M10-D6 |
| 3 | 2 | JNG-D6 |
| 4 | 1 | JRMM-AR3-M10-L3.0 |
| 5 | 1 | JJ-AR3-D3-L9 |
| 6 | 1 | JRMM-M10-M8X1-L3.5 |
| 7 | 2 | JO-M8X1-D6 |
| 8 | 1 | JWF-M8X1-D6 |
| 9 | 1 | JS-M8X1-D6 |

| T (M) | L | Art. N° |
|-------|-----|--------------------------------|
| M8X1 | 305 | JKIT-CU-AR3-D3-M8X1-305 |

Système articulé
 Gelenksystem
 Articulated system

JAR

new



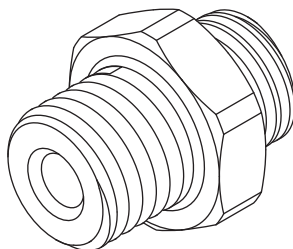
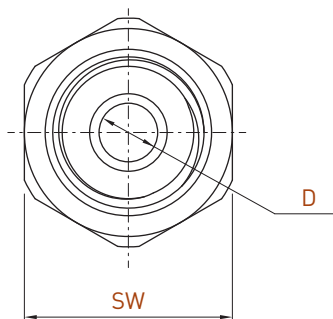
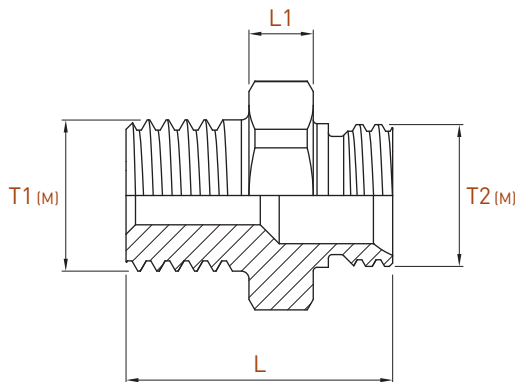
| T1 (M) | T2 (F) | L | D | SW1 | SW2 | Art. N° |
|--------|--------|------|---|-----|-----|------------|
| M7.5 | M7.5 | 12.5 | 3 | 8 | 9 | JAR3-L12.5 |
| | | 27.5 | 3 | | | JAR3-L27.5 |
| | | 42.5 | 3 | | | JAR3-L42.5 |
| M13 | M13 | 20.5 | 6 | 13 | 15 | JAR6-L20.5 |
| | | 45.5 | 6 | | | JAR6-L45.5 |
| | | 70.5 | 6 | | | JAR6-L70.5 |

JET-LINE

Connecteurs mâle/mâle
Anschlüsse Aussengewinde
Male connectors

JRMM-AR

new



| T1 (M) | T2 (M) | L | L1 | D | SW | Art. N° |
|----------|--------|----|-----|---|----|----------------------|
| M6 | M7.5 | 12 | 3 | 3 | 8 | JRMM-AR3-M6-L3.0 |
| M8X1 | M7.5 | 14 | 3.5 | 3 | 11 | JRMM-AR3-M8X1-L3.5 |
| M10 | M7.5 | 15 | 3 | 3 | 11 | JRMM-AR3-M10-L3.0 |
| M8X1 | M13 | 4 | 17 | 6 | 13 | JRMM-AR6-M8X1-L4.0 |
| M10X1 | M13 | 4 | 18 | 6 | 13 | JRMM-AR6-M10X1-L4.0 |
| BSP 1/8" | M13 | 4 | 18 | 6 | 13 | JRMM-AR6-BSP1/8-L4.0 |

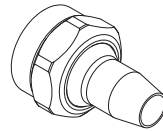
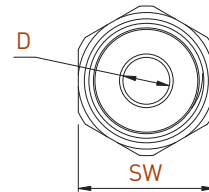
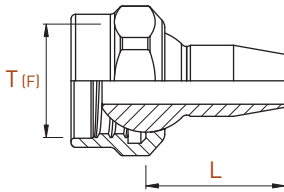
Buses

Düse

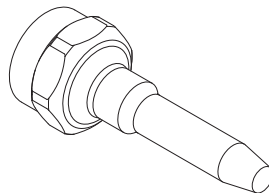
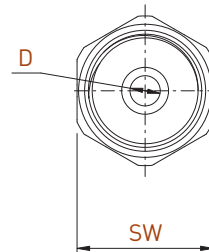
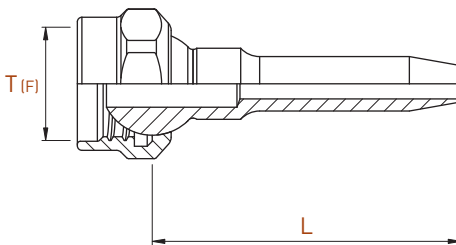
Nozzle

JJ-AR

new



| T (F) | L | D | SW | Art. N° |
|-------|----|---|----|---------------|
| M7.5 | 9 | 3 | 9 | JJ-AR3-D3-L9 |
| M13 | 16 | 6 | 15 | JJ-AR6-D6-L16 |



| T (F) | L | D | SW | Art. N° |
|-------|----|---|----|---------------|
| M7.5 | 20 | 2 | 9 | JJ-AR3-D2-L20 |
| M13 | 35 | 3 | 15 | JJ-AR6-D3-L35 |

JET-LINE

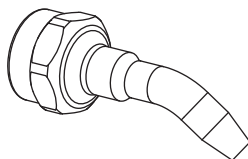
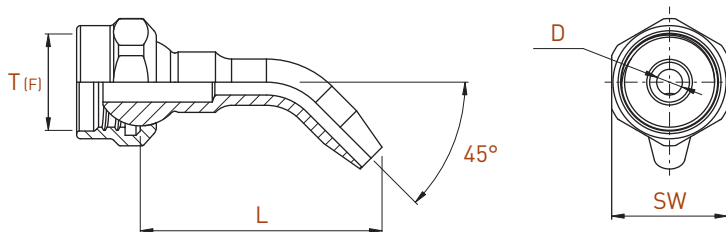
Buses

Düse

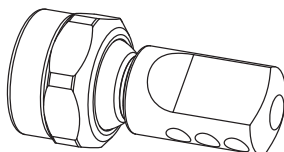
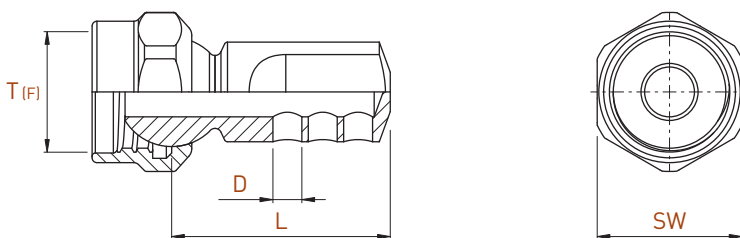
Nozzle

JJ-AR

new



| T (F) | L | D | SW | Art. N° |
|-------|------|---|----|---------------------|
| M7.5 | 19 | 2 | 9 | JJ-AR3-D2-L19-45° |
| M13 | 23,5 | 6 | 15 | JJ-AR6-D6-L23.5-45° |



| T (F) | L | D | SW | Art. N° |
|-------|----|-----|----|---------------------|
| M7.5 | 15 | 1.8 | 9 | JJ-AR3-3XD1.8-L13.5 |
| M13 | 24 | 3.4 | 15 | JJ-AR6-3XD3.4-L24 |

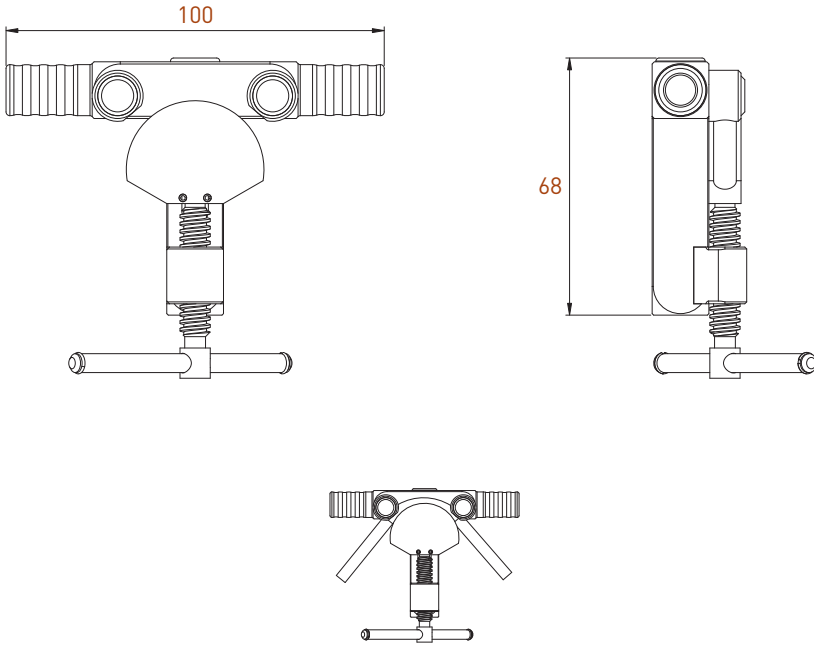
Appareil de cintrage

Biegegerät

Bending tool

JTB

new



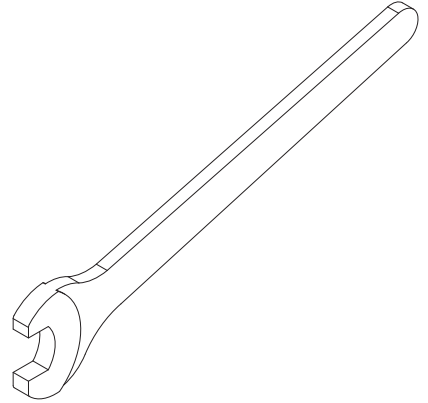
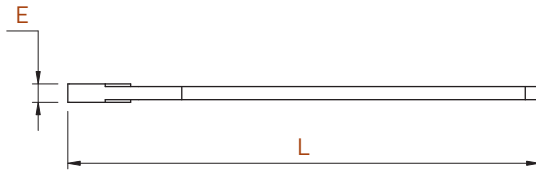
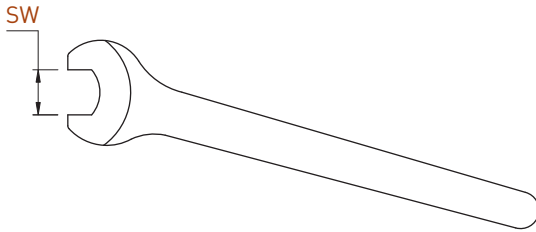
Art. N°

JTB-D6

Clés de serrage

Gabelschlüssel

Clamping keys



| SW | E | L | Art. N° |
|----|-----|-----|-------------|
| 8 | 2.5 | 90 | C-SW8-E2.5 |
| 11 | 3.7 | 110 | C-SW11-E3.7 |
| 13 | 5.8 | 130 | C-SW13-E5.8 |
| 8 | 2.5 | 55 | C-AR3 |
| 9 | 3 | | |
| 13 | 3 | 65 | C-AR6 |
| 15 | 4 | | |

new

new

INDEX

Répertoire des articles

Artikelverzeichnis

Index of items

| | Art. N° | Page |
|-----------|---------|--------|
| 10 | 1010 | 13.111 |
| 11 | 1101 | 15.04 |
| | 1102 | 15.06 |
| | 1103 | 15.08 |
| | 1104 | 15.10 |
| | 1106 | 15.12 |
| | 1107 | 13.19 |
| 12 | 1200 | 13.14 |
| 14 | 1400-J | 13.02 |
| | 1401-K | 13.03 |
| | 1402 | 13.18 |
| | 1420 | 13.04 |
| | 1460 | 13.05 |
| 15 | 1500 | 13.15 |
| | 1510 | 13.15 |
| 16 | 1600 | 13.16 |
| | 1610 | 13.17 |
| | 1680 | 14.108 |
| 18 | 1820 | 15.17 |
| 19 | 1901 | 13.97 |
| 20 | 2010 | 14.112 |
| | 2011 | 14.113 |
| | 2012 | 14.113 |
| | 2013 | 14.114 |
| | 2014 | 14.114 |
| | 2020 | 14.115 |
| | 2023 | 14.117 |
| | 2026 | 14.120 |
| | 2030 | 14.122 |
| 22 | 2200 | 13.14 |
| 24 | 2400-J | 13.02 |
| | 2401-K | 13.03 |
| | 2402 | 13.18 |
| | 2405 | 13.08 |
| | 2420 | 13.04 |
| | 2425 | 13.09 |
| | 2435 | 13.12 |
| | 2436 | 13.13 |
| | 2440 | 13.10 |
| | 2441 | 13.10 |
| | 2450 | 13.07 |
| | 2450-SP | 13.06 |
| | 2460 | 13.07 |
| | 2470 | 13.06 |
| 25 | 250 | 4.04 |
| | 251 | 4.08 |
| | 251-E | 4.17 |
| | 252 | 4.10 |
| | 2520 | 13.15 |
| | 253 | 4.12 |
| | 2530 | 13.15 |
| | 254 | 4.14 |
| | 256 | 4.16 |
| 26 | 260 | 4.04 |
| | 261 | 4.08 |
| | 261-E | 4.17 |
| | 262 | 4.10 |
| | 2620 | 13.16 |
| | 263 | 4.12 |
| | 2630 | 13.17 |

| | Art. N° | Page |
|-----------|---------|--------|
| | 264 | 4.14 |
| | 266 | 4.16 |
| | 2680 | 14.107 |
| | 2690 | 14.110 |
| 28 | 2810 | 15.16 |
| | 2811 | 15.16 |
| | 2815 | 15.16 |
| | 2820 | 15.17 |
| 31 | 310 | 6.06 |
| | 3123 | 14.58 |
| | 317 | 6.08 |
| | 3170 | 14.07 |
| | 318 | 6.08 |
| | 319 | 6.09 |
| 32 | 320 | 6.06 |
| | 3230 | 14.63 |
| | 3231 | 14.66 |
| | 3238 | 14.89 |
| | 3239T | 14.67 |
| | 327 | 6.08 |
| | 3270S | 14.18 |
| | 3271 | 14.11 |
| | 3278 | 14.44 |
| | 3279T | 14.21 |
| | 328 | 6.08 |
| | 329 | 6.09 |
| | 32xxMV | 13.60 |
| 33 | 330 | 6.10 |
| | 3330 | 14.69 |
| | 3331 | 14.72 |
| | 3336-HA | 14.73 |
| | 3337-HA | 14.73 |
| | 3338 | 14.90 |
| | 3341 | 14.74 |
| | 3345-S | 14.75 |
| | 3361 | 14.76 |
| | 337 | 6.12 |
| | 3370S | 14.33 |
| | 3371 | 13.24 |
| | 3375 | 14.30 |
| | 3379T | 14.36 |
| | 338 | 6.12 |
| | 3383 | 14.93 |
| | 339 | 6.13 |
| 34 | 340 | 6.10 |
| | 3430 | 14.78 |
| | 3431 | 14.79 |
| | 3439T | 14.84 |
| | 3441 | 14.80 |
| | 3445-S | 14.81 |
| | 3450 | 14.85 |
| | 347 | 6.12 |
| | 3471 | 14.39 |
| | 3472 | 14.42 |
| | 348 | 6.12 |
| | 349 | 6.13 |
| 35 | 3545 | 14.86 |
| | 35645 | 14.87 |
| 36 | 3611 | 14.95 |
| 38 | 3810 | 14.88 |

Répertoire des articles

Artikelverzeichnis

Index of items

| | Art. N° | Page |
|-----------|-----------------|-----------|
| | 383x | 14.94 |
| 39 | 3901 | 14.97 |
| | 3911 | 14.96 |
| 63 | 630 | 3.06 |
| | 631-EP | 3.30 |
| | 632 | 3.08 |
| | 633 | 3.12 |
| | 634 | 3.21 |
| | 635 | 3.24 |
| | 636 | 3.26 |
| | 637 | 3.28 |
| 64 | 640 | 3.06 |
| | 641-EP | 3.30 |
| | 642 | 3.08 |
| | 643 | 3.12 |
| | 644 | 3.20 |
| | 645 | 3.24 |
| | 646 | 3.26 |
| | 647 | 3.28 |
| 65 | 650 | 3.31 |
| | 651 | 3.34 |
| | 651-EP | 3.44 |
| | 660 | 3.31 |
| | 661 | 3.34 |
| | 661-EP | 3.44 |
| 70 | 701S3371 | 14.91 |
| | 7050 | 1.143 |
| | 7051 | 1.144 |
| | 7051-E | 1.148 |
| | 7060 | 1.143 |
| | 7061 | 1.144 |
| | 7061-E | 1.148 |
| 71 | 710 | 1.10/2.06 |
| | 711 | 1.16 |
| | 711-EP | 1.23 |
| | 711-ESF | 2.09 |
| | 711SF | 2.08 |
| | 712 | 1.17 |
| | 712SF | 2.08 |
| | 713 | 1.18 |
| | 713SF | 2.09 |
| | 714 | 1.21 |
| | 716 | 1.22 |
| 72 | 720 | 1.14 |
| | 721 | 1.16 |
| | 721-EP | 1.23 |
| | 722 | 1.17 |
| | 723 | 1.18 |
| | 724 | 1.21 |
| | 726 | 1.22 |
| 73 | 730 | 1.26/2.10 |
| | 730R-DECO10 | 1.157 |
| | 730-DECO10 | 1.159 |
| | 730-NOVIBRA | 1.30/2.11 |
| | 730RC | 1.29/2.20 |
| | 730R-MULTISWISS | 1.163 |
| 72 | 731 | 1.32 |
| | 731-E | 1.67 |
| | 731-ESF | 2.19 |
| | 731RSF | 2.21 |

| | Art. N° | Page |
|-----------|-----------------|-----------|
| | 732 | 1.46 |
| | 733 | 1.49 |
| | 734 | 1.56 |
| | 735 | 1.61 |
| | 736 | 1.63 |
| | 736SF | 2.17 |
| 74 | 740 | 1.26/2.10 |
| | 740-DECO10 | 1.157 |
| | 740L-DECO10 | 1.159 |
| | 740-SF | 2.11 |
| | 740Z | 1.156 |
| | 741 | 1.32 |
| | 741-E | 1.67 |
| | 741-ESF | 2.19 |
| | 741SF | 2.13 |
| | 742 | 1.46 |
| | 742SF | 2.13 |
| | 743 | 1.49 |
| | 743SF | 2.15 |
| | 744 | 1.56 |
| | 745 | 1.61 |
| | 746 | 1.63 |
| | 746SF | 2.17 |
| | 748SF | 2.18 |
| | 749SF | 2.18 |
| 75 | 750 | 1.70 |
| | 750RAS | 1.164 |
| | 750RC | 1.72/2.20 |
| | 750R-DECO10 | 1.158 |
| | 750R-MULTISWISS | 1.163 |
| | 751 | 1.78 |
| | 751-E | 1.131 |
| | 751RDSF | 2.21 |
| | 752 | 1.100 |
| | 753 | 1.106 |
| | 754 | 1.117 |
| | 756 | 1.125 |
| | 757 | 1.129 |
| 76 | 760 | 1.70 |
| | 760L-DECO10 | 1.160 |
| | 760Z | 1.156 |
| | 761 | 1.78 |
| | 761-E | 1.131 |
| | 762 | 1.100 |
| | 763 | 1.106 |
| | 764 | 1.117 |
| | 766 | 1.125 |
| | 767 | 1.129 |
| 77 | 770 | 1.133 |
| | 770R-DECO | 1.161 |
| | 770-SN-SF | 2.22 |
| | 771 | 1.136 |
| | 771-E | 1.142 |
| | 771R | 1.138 |
| | 771RVSF | 2.24 |
| 78 | 780 | 1.133 |
| | 781 | 1.136 |
| | 781-E | 1.142 |
| A | A-SC... | 7.17 |
| | A-SD... | 7.33 |

INDEX

Répertoire des articles

Artikelverzeichnis

Index of items

| | Art. N° | Page |
|----------|--------------|--------|
| | A-SV... | 7.51 |
| B | BA | 10.20 |
| | BAX | 10.22 |
| | BCX | 10.24 |
| | B-E | 10.42 |
| | BH-D | 10.10 |
| | BHKN | 10.16 |
| | BH-MASTER | 10.44 |
| | BHS | 10.18 |
| | BHS-D | 10.12 |
| | BHY-D | 10.14 |
| | BWD1 | 10.45 |
| C | C45 | 10.26 |
| | C45X | 10.28 |
| | CCGT | 7.19 |
| | CCMT | 7.23 |
| | CERMET CC... | 7.25 |
| | CERMET DC... | 7.43 |
| | CERMET VC... | 7.60 |
| | CUT-GN | 9.21 |
| | CUT-H | 9.10 |
| | CUT-HX | 9.11 |
| | CUT-HZ | 9.12 |
| | CUT-HZ-JET | 9.13 |
| | CUT-PN | 9.16 |
| | CUT-PNW | 9.18 |
| | CUT-PR | 9.17 |
| | CUT-PRW | 9.19 |
| | CUT-TN | 9.20 |
| | CUT-UL | 9.15 |
| | CUT-UN | 9.14 |
| | CUT-UR | 9.15 |
| D | DCGT | 7.37 |
| | DCMT | 7.41 |
| | DHP3336 | 14.77 |
| | DHP3371 | 14.31 |
| | DHP3436 | 14.83 |
| | DHP3471 | 14.41 |
| | DT | 1.165 |
| E | E100-P | 14.100 |
| | E300-P | 14.101 |
| | E300-R | 14.102 |
| | E900-P | 14.103 |
| | E-DHP | 14.57 |
| | E-SC... | 7.18 |
| | E-SD... | 7.34 |
| | ET UL | 8.21 |
| | ET-AN | 8.26 |
| | ET-AR | 8.27 |
| | ET-H | 8.06 |
| | ET-H-JET | 8.07 |
| | ET-HK | 8.16 |
| | ET-HK-RS | 8.17 |
| | ET-HM | 8.14 |
| | ET-HM-JET | 8.15 |
| | ET-HUK | 8.18 |
| | ET-JN | 8.22 |
| | ET-JR | 8.23 |
| | ET-TN | 8.24 |
| | ET-TR | 8.25 |

| | Art. N° | Page |
|----------|-----------------------------|-------|
| | ET-UN | 8.20 |
| | ET-UR | 8.21 |
| F | FEG | 10.41 |
| | FIG | 10.40 |
| G | GTX | 10.32 |
| | GWS02R-HM | 8.09 |
| | GWS202L-HM | 8.12 |
| | GWS41L-HM | 8.10 |
| | GWS41R-HM | 8.11 |
| | GX | 10.30 |
| H | H-HM-JET | 8.08 |
| | HSK | 1.155 |
| | HSK-LW | 11.21 |
| J | JABF | 16.26 |
| | JABF-45° | 16.28 |
| | JAR | 16.39 |
| | JBB | 16.35 |
| | JCBF | 16.24 |
| | JCBM | 16.25 |
| | JEB-DUO | 16.29 |
| | JJ-AR | 16.41 |
| | JK | 16.34 |
| | JKIT | 16.04 |
| | JKIT-AR | 16.36 |
| | JKIT-CU | 16.38 |
| | JN | 16.22 |
| | JNG | 16.23 |
| | JO | 16.15 |
| | JRFF | 16.20 |
| | JRMF | 16.18 |
| | JRMM | 16.21 |
| | JRMM-AR | 16.40 |
| | JS | 16.14 |
| | JT-CU | 16.17 |
| | JTX-AC | 16.16 |
| | JVB | 16.30 |
| | JVF | 16.31 |
| | JWF | 16.32 |
| | JWM | 16.33 |
| L | LW-3_0-JET | 11.09 |
| | LW-7_0-JET | 11.06 |
| | LW-D | 11.19 |
| | LW-E | 11.20 |
| | LW-JET | 11.05 |
| | LW-SC_-JET | 11.12 |
| | LW-SD_-JET | 11.14 |
| | LW-SV_-JET | 11.17 |
| M | ML12A | 12.64 |
| | ML12-B074-1-6T | 12.55 |
| | ML12-B075-1-8T | 12.56 |
| | ML12-CITIZEN-C16 | 12.06 |
| | ML12-CITIZEN-L12-1M7 | 12.07 |
| | ML12-CITIZEN-L12-2M10 | 12.08 |
| | ML12-CITIZEN-M16V/VIII | 12.09 |
| | ML12-CITIZEN-R04-QTF3101-3T | 12.12 |
| | ML12-CITIZEN-R04-QTF5008-4T | 12.10 |
| | ML12-CITIZEN-R04-QTF5108-4T | 12.10 |
| | ML12-CITIZEN-R07-QTF4008-5T | 12.13 |
| | ML12-CITIZEN-R07-QTF4108-6T | 12.13 |
| | ML12-CITIZEN-R07-QTF4208-3T | 12.14 |

Répertoire des articles

Artikelverzeichnis

Index of items

| Art. N° | Page |
|-----------------------------|-------|
| ML12-CITIZEN-R07-QTF4608-4T | 12.14 |
| ML12-CT20-2020019-7T | 12.43 |
| ML12-D10-3T | 12.21 |
| ML12-DECO10-DUO | 12.37 |
| ML12-DECO10-JET | 12.37 |
| ML12-DT12-2020206-9T | 12.42 |
| ML12F | 12.64 |
| ML12-GT13-390223-7T | 12.44 |
| ML12-GT13-390224-5T | 12.44 |
| ML12-HANWHA-XD20M | 12.18 |
| ML12-PO34-1-5T | 12.57 |
| ML12-PO34-1-7T | 12.58 |
| ML12-PO34-2-10T | 12.58 |
| ML12-PO34-2-4T | 12.57 |
| ML12-STAR-SB-12RG | 12.22 |
| ML12-STAR-SR-10J | 12.23 |
| ML12-STAR-SW-12-R11-2T | 12.24 |
| ML12-STAR-SW-12-R11-8T | 12.24 |
| ML12-SWISS-NANO-2T | 12.40 |
| ML12-SWISS-NANO-3T | 12.40 |
| ML12-SWISS-NANO-6T | 12.38 |
| ML12-SWISS-NANO-7-4T | 12.41 |
| ML16A | 12.64 |
| ML16-CITIZEN-K16 | 12.15 |
| ML16-CITIZEN-L20 | 12.16 |
| ML16-CITIZEN-L20E | 12.17 |
| ML16-DECO13-DUO | 12.50 |
| ML16-DECO13-JET | 12.50 |
| ML16-DECO20-DUO | 12.51 |
| ML16-DECO20-JET | 12.51 |
| ML16-DT26-2020206-7T | 12.54 |
| ML16F | 12.64 |
| ML16-GT26-386209-6T | 12.46 |
| ML16-GT26-386210-5T | 12.46 |
| ML16-GT32-386209-5T | 12.48 |
| ML16-GT32-386210-4T | 12.48 |
| ML16-HANWHA-SL12/16 | 12.19 |
| ML16-KMX26-DUO | 12.20 |
| ML16-KMX26-JET | 12.20 |
| ML16-S20-DUO | 12.52 |
| ML16-S20-JET | 12.52 |
| ML16-STAR-SA-16 | 12.25 |
| ML16-STAR-SB-16 | 12.26 |
| ML16-STAR-SB-16/20RG | 12.27 |
| ML16-STAR-SB20C/E | 12.28 |
| ML16-STAR-SR20J | 12.30 |
| ML16-STAR-SR20J11-A/B | 12.31 |
| ML16-STAR-SR-20R | 12.29 |
| ML16-STAR-SR-20R111 | 12.30 |
| ML16-STAR-SR-20R1V-2T | 12.32 |
| ML16-STAR-SR-20R1V-6T | 12.32 |
| ML16-STAR-SR-32J | 12.33 |
| ML16-STAR-SV-12/20 | 12.34 |
| ML16-STAR-SV-20R | 12.35 |
| ML16-STAR-SW-20R-2T | 12.36 |
| ML16-STAR-SW-20R-6T | 12.36 |
| ML16-SWISS-ST26-DUO | 12.53 |
| ML16-SWISS-ST26-JET | 12.53 |
| ML-AD | 12.85 |
| ML-FIX | 12.82 |

| Art. N° | Page |
|------------------------------|-------|
| ML-JET | 12.82 |
| MS-HM | 8.13 |
| P POLYGONAL INTERFACE | 1.153 |
| S SC... | 7.13 |
| SD... | 7.27 |
| STARTER-KIT | 16.12 |
| SV... | 7.45 |
| T T216-L | 5.04 |
| T216L-EP | 5.09 |
| T216L-FT | 5.06 |
| T216L-GT | 5.07 |
| T216L-GTX | 5.08 |
| T216L-GX | 5.05 |
| T216-R | 5.04 |
| T216R-EP | 5.09 |
| T216R-FT | 5.06 |
| T216R-GT | 5.07 |
| T216R-GTX | 5.08 |
| T216R-GX | 5.05 |
| TM | 10.38 |
| TP55 | 10.36 |
| TP60 | 10.34 |
| V VCGT | 7.52 |
| VCGW | 7.53 |
| VGMT | 7.58 |
| W W750 | 1.149 |
| W751-E | 1.151 |
| W760 | 1.149 |
| W761-E | 1.151 |



PERFORMANCE | PRECISION | RIGIDITY

SWISSMADE

**APPLITEC MOUTIER SA
RUE INDUSTRIELLE 95
2740 MOUTIER
CH-SWITZERLAND**

**+41 (0)32 494 60 20
INFO@APPLITEC-TOOLS.COM**

WWW.APPLITEC-TOOLS.COM