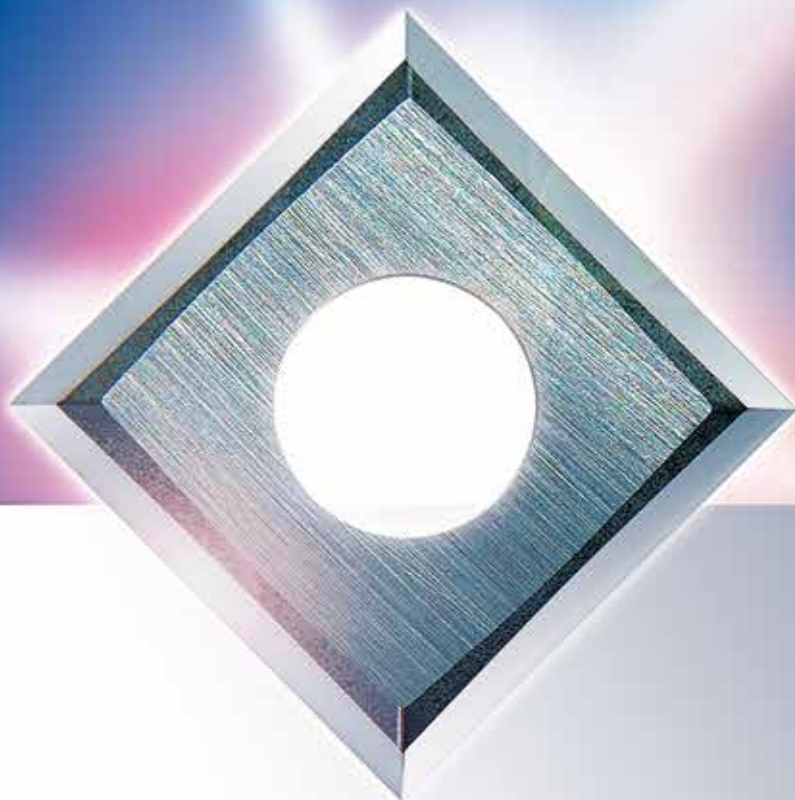




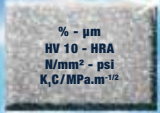
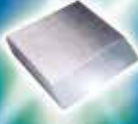
TOOLS CUT BETTER WITH TIGRA



WOODWORKING  
HOLZBEARBEITUNG  
TRAVAIL DU BOIS  
LAVORAZIONE DEL LEGNO  
TRABAJO DE MADERA

**2017**



|                                                                                     |                                                                                                                                                                      |                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|    | <b>EN</b> Technical data<br><b>DE</b> Technische Daten<br><b>FR</b> Caractéristiques techniques                                                                      | <b>IT</b> Dati tecnici<br><b>ES</b> Datos técnicos                                                       |
|    | <b>EN</b> Reversible knives and edge rounding knives<br><b>DE</b> Wendeschneidplatten und Kantenrunder<br><b>FR</b> Plaquettes réversibles et couteaux brise-arrête  | <b>IT</b> Coltelli reversibili e spigolatori<br><b>ES</b> Cuchillas reversibles y cuchillas para aristas |
|    | <b>EN</b> Blanks for profiling and radius knives<br><b>DE</b> Blanketts zum Profilieren und Radienplatten<br><b>FR</b> Plaquettes à profiler et plaquettes profilées | <b>IT</b> Placchette da profilare e placchette profilate<br><b>ES</b> Placas para perfilar y perfiladas  |
|    | <b>EN</b> Saw tips and strobe blanks<br><b>DE</b> Sägezähne und Wischerblätter<br><b>FR</b> Dents de scie et racleurs                                                | <b>IT</b> Dentelli per lame e barrette per rasanti<br><b>ES</b> Dientes de sierra y rasuradores          |
|  | <b>EN</b> Carbide for brazed tools<br><b>DE</b> Hartmetall für gelötete Fräser<br><b>FR</b> Plaquettes en carbure à braser                                           | <b>IT</b> Metallo duro per frese saldobrasate<br><b>ES</b> Metal duro para herramienta soldada           |
|  | <b>EN</b> Planer knives<br><b>DE</b> Hobelmesser<br><b>FR</b> Couteaux à raboter                                                                                     | <b>IT</b> Coltelli da pialla<br><b>ES</b> Cuchillas para cepilar                                         |
|  | <b>EN</b> Knives for back corrugated cutterheads<br><b>DE</b> Messer für rückenverzahnte Messerköpfe<br><b>FR</b> Couteaux pour outils crantés                       | <b>IT</b> Coltelli per teste con zigrinatura<br><b>ES</b> Cuchillas corrugadas                           |
|  | <b>EN</b> Rods<br><b>DE</b> Rundstäbe<br><b>FR</b> Barreaux cylindriques                                                                                             | <b>IT</b> Cilindri<br><b>ES</b> Barras redondas                                                          |
|  | <b>EN</b> TIGRALLOY products<br><b>DE</b> TIGRALLOY Produkte<br><b>FR</b> Produits TIGRALLOY                                                                         | <b>IT</b> Prodotti TIGRALLOY<br><b>ES</b> Productos TIGRALLOY                                            |
|  | <b>EN</b> PCD – Polycrystalline diamond<br><b>DE</b> PKD – Polykristalliner Diamant<br><b>FR</b> PCD – Diamant policristallin                                        | <b>IT</b> PCD – Diamante policristallino<br><b>ES</b> PCD – Diamante policristalino                      |





EN Technical data  
DE Technische Daten  
FR Caractéristiques techniques  
IT Dati tecnici  
ES Datos técnicos

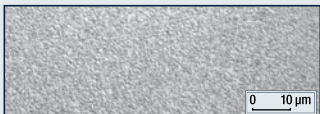
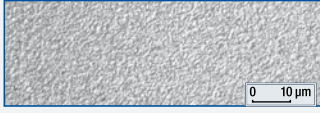
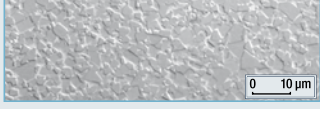
EN TIGRA carbide grades – Technical Data  
DE TIGRA Hartmetallsorten – Technische Daten  
FR Nuances carbure TIGRA – Caractéristiques techniques  
IT I tipi di metallo duro TIGRA – Dati tecnici  
ES Calidades de metal duro TIGRA – Datos técnicos

| EN<br>DE<br>FR<br>IT<br>ES | TIGRA grade<br>TIGRA - Sorte<br>Nuance TIGRA<br>Tipo TIGRA<br>Calidad TIGRA | Binder<br>Binder<br>Liant<br>Legante<br>Composicion | Hardness<br>Härte<br>Dureté<br>Durezza<br>Dureza |        | Bending strength<br>Biegebruchfestigkeit<br>Résistance à la flexion<br>Resistenza flessionale<br>Resistencia a la flexión |         | Toughness<br>Zähigkeit<br>Ténacité<br>Tenacità<br>Tenacidad |
|----------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------------|
|                            |                                                                             | %                                                   | HV 10                                            | HRA    | N/mm <sup>2</sup>                                                                                                         | psi     | MPa * m <sup>1/2</sup>                                      |
|                            | <b>T02MG-CR</b> ISO: K01<br>USA: C4 +++                                     | 2.0                                                 | > 2.400                                          | > 95.5 | 2300                                                                                                                      | 334.000 | 7.0                                                         |
|                            | <b>T02SMG</b> ISO: K01<br>USA: C4 +++                                       | 2.5                                                 | 2350                                             | 95.3   | 2300                                                                                                                      | 334.000 | 7.7                                                         |
|                            | <b>T03SMG</b> ISO: K01<br>USA: C4 ++                                        | 3.5                                                 | 2100                                             | 94.6   | 2600                                                                                                                      | 377.000 | 7.5                                                         |
|                            | <b>T03MG-CR</b> ISO: K01<br>USA: C4 ++                                      | 3.0                                                 | 2050                                             | 94.5   | 2500                                                                                                                      | 363.000 | 7.5                                                         |
|                            | <b>T03F-CR</b> ISO: K01<br>USA: C4 +                                        | 3.0                                                 | 1950                                             | 94.1   | 2300                                                                                                                      | 334.000 | 8.0                                                         |
|                            | <b>T04MG-CR</b> ISO: K01<br>USA: C4 +                                       | 4.3                                                 | 1900                                             | 93.8   | 2350                                                                                                                      | 341.000 | 8.6                                                         |
|                            | <b>T04F-CR</b> ISO: K05<br>USA: C4                                          | 4.2                                                 | 1800                                             | 93.3   | 2350                                                                                                                      | 341.000 | 9.0                                                         |
|                            | <b>T05UMG</b> ISO: K01-K10<br>USA: C3 ++                                    | 5.0                                                 | 2050                                             | 94.5   | 2450                                                                                                                      | 355.000 | 7.8                                                         |
|                            | <b>T06MG</b> ISO: K01-K20<br>USA: C3 ++                                     | 6.0                                                 | 1800                                             | 93.3   | 2700                                                                                                                      | 392.000 | 8.4                                                         |
|                            | <b>T06F-CR</b> ISO: K10<br>USA: C3                                          | 6.0                                                 | 1740                                             | 92.9   | 2350                                                                                                                      | 341.000 | 8.9                                                         |
|                            | <b>T06MF</b> ISO: K20<br>USA: C3                                            | 6.5                                                 | 1600                                             | 92.0   | 2500                                                                                                                      | 363.000 | 9.4                                                         |
|                            | <b>T07MF-CR</b> ISO: K20-K30<br>USA: C2-C3                                  | 7.5                                                 | 1580                                             | 91.8   | 2600                                                                                                                      | 377.000 | 10.1                                                        |
|                            | <b>T08MF</b> ISO: K30<br>USA: C2                                            | 8.5                                                 | 1510                                             | 91.3   | 2700                                                                                                                      | 392.000 | 10.4                                                        |
|                            | <b>T10MG-E</b> ISO: K10-K40<br>USA: C3 +                                    | 10.0                                                | 1600                                             | 92.0   | 3600                                                                                                                      | 522.000 | 9.8                                                         |
|                            | <b>T10MG</b> ISO: K10-K40<br>USA: C3 +                                      | 10.0                                                | 1650                                             | 92.3   | 3700                                                                                                                      | 537.000 | 10.0                                                        |
|                            | <b>T12SMG</b> USA: C1 ++                                                    | 12.0                                                | 1700                                             | 92.7   | 4000                                                                                                                      | 580.000 | 9.5                                                         |
|                            | <b>T12M</b> ISO: > K40<br>USA: C1                                           | 12.0                                                | 1250                                             | 88.8   | 2800                                                                                                                      | 406.000 | 14.0                                                        |
|                            | <b>T12M-CR</b> ISO: > K40<br>USA: C1                                        | 12.0                                                | 1200                                             | 88.3   | 2700                                                                                                                      | 392.000 | 13.9                                                        |
|                            | <b>T15C</b> ISO: > K40<br>USA: Nail Cut                                     | 15.0                                                | 890                                              | 84.5   | 3000                                                                                                                      | 435.000 | > 20                                                        |
|                            | <b>TL15*</b> ISO: K10-K40<br>USA: C3 +                                      | 13.5                                                | 1450                                             | 90.8   | 3800                                                                                                                      | 551.000 | 10.8                                                        |
|                            | <b>TL20*</b> ISO: K10-K40<br>USA: C2 +                                      | 20.0                                                | 1350                                             | 89.8   | 3800                                                                                                                      | 551.000 | > 20                                                        |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif - inossidabile - anticorrosivo

\* Special binder - Spezialbinder - Liant spécial - Legante speciale - Composición especial

- EN TIGRA carbide grades – Grain sizes and binder content  
 DE TIGRA Hartmetallsorten – Korngrößen und Bindergehalt  
 FR Nuances carbure TIGRA – Grosseur du grain et contingent de liant  
 IT I tipi di metallo duro TIGRA – Grossezza del grano e quota di legante  
 ES Calidades de metal duro TIGRA – Tamaño del grano y cuota de la composición

| EN<br>DE<br>FR<br>IT<br>ES | Shortform<br>Abkürzung<br>Abréviation<br>Abbreviazione<br>Abreviatura | Explanation<br>Erklärung<br>Explication<br>Spiegazione<br>Explicación | Grain size<br>Korngröße<br>Grosseur du grain<br>Grossezza del grano<br>Tamaño del grano<br>( $\mu\text{m}$ ) |                                                                                       |
|----------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                            | <b>NG</b>                                                             | <b>Nano Grain</b>                                                     | <b>0.2</b>                                                                                                   |    |
|                            | <b>UMG</b>                                                            | <b>Ultra Micro Grain</b>                                              | <b>0.2 - 0.5</b>                                                                                             |    |
|                            | <b>SMG</b>                                                            | <b>Sub Micro Grain</b>                                                | <b>0.5 - 0.7</b>                                                                                             |   |
|                            | <b>MG</b>                                                             | <b>Micro Grain</b>                                                    | <b>0.7 - 1.0</b>                                                                                             |  |
|                            | <b>F</b>                                                              | <b>Fine Grain</b>                                                     | <b>1.0 - 1.4</b>                                                                                             |  |
|                            | <b>MF</b>                                                             | <b>Medium Fine Grain</b>                                              | <b>1.4 - 2.5</b>                                                                                             |  |
|                            | <b>M</b>                                                              | <b>Medium Grain</b>                                                   | <b>2.5 - 4.0</b>                                                                                             |  |
|                            | <b>C</b>                                                              | <b>Coarse Grain</b>                                                   | <b>4.0 - 10.0</b>                                                                                            |  |
|                            | <b>EC</b>                                                             | <b>Extra Coarse</b>                                                   | <b>&gt; 10</b>                                                                                               |  |

- EN Detailed application recommendations can be found in the individual chapters.  
 DE Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.  
 FR Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants.  
 IT Suggestimenti di impiego dettagliati si trovano nei singoli capitoli.  
 ES Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.



- EN TIGRALLOY – Technical Data  
 DE TIGRALLOY – Technische Daten  
 FR TIGRALLOY – Caractéristiques techniques  
 IT TIGRALLOY – Dati tecnici  
 ES TIGRALLOY – Datos técnicos

**EN** TIGRALLOY, a cutting material, consisting of a mixture of hard chromium and tungsten carbide that are embedded in a tough cobalt matrix. This results in an ideal combination of high hardness and high toughness. Therefore TIGRALLOY is an ideal cutting material for many kinds of solid wood. In addition to the good wear resistance, there is a high heat resistance. Very good brazability and the opportunity to grind extremely sharp cutting edges.

**Characteristics:**

Heat resistance: up to 800°C / 1500°F - Highly corrosion resistant - Extremely shock proof

Hardness: TL48: 48HRC - TL60: 60 HRC

**DE** TIGRALLOY besteht aus harten Chrom- und Wolframkarbiden, die in einer zähen Kobaltmatrix eingelagert sind. Daraus entsteht eine ideale Kombination von hoher Härte und besonders guter Zähigkeit. TIGRALLOY ist damit ein idealer Schneidstoff für die Bearbeitung vieler Massivhölzer. Zu einer hohen Verschleißfestigkeit kommt eine hohe Hitzebeständigkeit, eine sehr gute Lötbarkeit und die Möglichkeit, mit sehr scharfen Schneidkanten zu arbeiten.

**Eigenschaften:**

Hitzebeständigkeit: bis 800°C - Sehr korrosionsbeständig - Hohe Bruchfestigkeit

Härte: TL48: 48HRC - TL60: 60 HRC

**FR** TIGRALLOY est constitué de carbures de chrome et de tungstène durs qui sont logés dans une matrice de cobalt résistante. TIGRALLOY est ainsi un matériau de coupe idéal pour l'usinage de nombreux bois massifs. Outre une grande résistance à l'usure, il présente également une forte résistance à l'échauffement, une excellente brasabilité et la possibilité de travailler avec des arêtes de coupe très vives.

**Propriétés:**

Résistance à la chaleur: jusqu'à 800°C - Très résistant à la corrosion - Grande résistance à la rupture

Dureté: TL48: 48HRC - TL60: 60 HRC

**IT** TIGRALLOY è composta da carburo duro di cromo e tungsteno, incastonati in una matrice di cobalto tenace. Una combinazione ideale di durezza e di resistenza.

TIGRALLOY è oltretutto materiale ideale al taglio di molti tipi particolari di legno. La buona resistenza all'usura nonché la grande resistenza termica e una buona saldobrasatura permettono l'uso di taglienti molto affilati.

**Caratteristiche:**

Resistenza termica: fino a 800°C - Alta resistenza alla corrosione - Alta resistenza flessionale

Durezza: TL48: 48HRC - TL60: 60 HRC

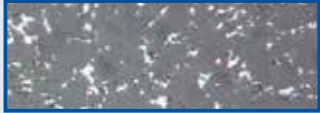
**ES** TIGRALLOY se compone de carburos duros de cromo y volframio que están depositados en una matriz de cobalto resistente. Así se consigue una combinación ideal de alta dureza y de resistencia especialmente buena. Por lo tanto, TIGRALLOY es un material de corte ideal para el labrado de muchas maderas macizas. A esa alta resistencia de desgaste se añade una alta resistencia refractaria, una buena soldadura y la posibilidad de trabajar con aristas cortantes muy vivas.

**Propiedades:**

Resistencia a calor hasta 800°C - Alta resistencia a la corrosión - Alte resistencia a la rotura

Dureza: TL48: 48HRC - TL60: 60 HRC

- EN TIGRA PCD grades – Grain sizes and binder  
 DE TIGRA PKD-Sorten – Korngrößen und Binder  
 FR Nuances PCD TIGRA – Grosseur du grain et liant  
 IT I tipi di PCD TIGRA – Grossezza del grano e legante  
 ES Calidades de PCD TIGRA – Tamaño del grano y composición

| EN<br>DE<br>FR<br>IT<br>ES | Shortform<br>Abkürzung<br>Abréviation<br>Abbreviazione<br>Abreviatura | Binder<br>Binder<br>Liant<br>Legante<br>Composición | Diamond content<br>Diamantgehalt<br>Teneur en diamond<br>Contenuti diamante<br>Contenido de diamante | Grain size<br>Korngröße<br>Grosseur du grain<br>Grossezza del grano<br>Tamaño del grano |                                                                                       |
|----------------------------|-----------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                            |                                                                       |                                                     |                                                                                                      | (µm)                                                                                    |                                                                                       |
|                            | <b>FS</b>                                                             | Standard                                            | Standard                                                                                             | 2 - 4                                                                                   |    |
|                            | <b>MS-W</b>                                                           | Standard                                            | Standard                                                                                             | 8 - 10                                                                                  |    |
|                            | <b>MS</b>                                                             | Standard                                            | Standard                                                                                             | 8 - 10                                                                                  |   |
|                            | <b>MX</b>                                                             | Special                                             | Reduced                                                                                              | 8 - 10                                                                                  |  |
|                            | <b>MU+</b>                                                            | Ultrahard                                           | Very high                                                                                            | 2 - 4<br>+<br>8 - 10                                                                    |  |
|                            | <b>CS</b>                                                             | Standard                                            | Standard                                                                                             | 20 - 35                                                                                 |  |
|                            | <b>CU+</b>                                                            | Ultrahard                                           | Very high                                                                                            | 2 - 4<br>+<br>20 - 35                                                                   |  |

- EN Detailed application recommendations can be found in the individual chapters.  
 DE Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.  
 FR Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants.  
 IT Suggestimenti di impiego dettagliati si trovano nei singoli capitoli.  
 ES Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.

|    |                                                   |
|----|---------------------------------------------------|
| EN | TIGRA HSS materials – Technical Data              |
| DE | TIGRA HSS-Materialien – Technische Daten          |
| FR | Matériaux HSS TIGRA – Caractéristiques techniques |
| IT | I materiali di HSS TIGRA – Dati tecnici           |
| ES | Materiales de HSS TIGRA – Datos técnicos          |

| EN<br>DE<br>FR<br>IT<br>ES | Name<br>Name<br>Nom<br>Nome<br>Nombre       | Main usage<br>Hauptverwendung<br>Usage principal<br>Main uso<br>Uso principal                                                                                                                                                                                     |
|----------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | <b>HSS</b>                                  | EN Universal grade for soft and hardwood<br>DE Universalsorte für Weich- und Hartholz<br>FR Nuance universelle pour des bois tendres et durs<br>IT Qualità universale per legni teneri e duri<br>ES Calidad universal para maderas duras y blandas                |
|                            | <b>HSS 18%</b>                              | EN Abrasive and very hard woods<br>DE Abrasive und sehr harte Hölzer<br>FR Bois abrasifs et très durs<br>IT Legni abrasivi e molto duri<br>ES Maderas abrasivas y muy duras                                                                                       |
|                            | <b>HSS M42</b>                              | EN Abrasive applications<br>DE Abrasive Anwendungen<br>FR Applications abrasives<br>IT Applicazioni abrasive<br>ES Aplicaciones para materiales apasivos                                                                                                          |
|                            | <b>High Performance Steel</b>               | EN Softwood, low price demands<br>DE Weichholz, niedriger Preis<br>FR Bois tendre, prix bas<br>IT Legni teneri, prezzo ridotto<br>ES Madera blanda, precio economico                                                                                              |
|                            | <b>T.C.T.<br/>(Tungsten carbide tipped)</b> | EN Higher lifetime demands<br>DE Höhere Standzeitanprüche<br>FR Applications de durabilité<br>IT Per richiesta di alta durata<br>ES Para aplicaciones de durabilidad                                                                                              |
|                            | <b>Solid carbide</b>                        | EN Highest lifetime demands<br>DE Höchste Standzeitanprüche<br>FR Applications de durabilité maximisé<br>IT Per richiesta di massima durata<br>ES Para aplicaciones de maxima durabilidad                                                                         |
|                            | <b>Matrix<br/>coating technology</b>        | EN Very long lifetime with multiple resharpening<br>DE Sehr lange Standwege bei bester Nachschärfbarkeit<br>FR Très longue durée de vie et nombreux affûtages<br>IT Lunghissima durata e buonissima riaffilatura<br>ES Vida útil muy prolongada y varios afilados |

|    |                                                                                          |
|----|------------------------------------------------------------------------------------------|
| EN | Detailed application recommendations can be found in the individual chapters.            |
| DE | Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.                |
| FR | Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants. |
| IT | Suggerimenti di impiego dettagliati si trovano nei singoli capitoli.                     |
| ES | Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.   |



- EN TIGRA coatings – Technical Data  
 DE TIGRA Beschichtungen – Technische Daten  
 FR Les revêtements TIGRA – Caractéristiques techniques  
 IT I rivestimenti TIGRA – Dati tecnici  
 ES Los revestimientos TIGRA – Datos técnicos



**EN Matrix - coating technology:**

Unique coating for maximum lifetime requirements

- Tool life is on average 3-5 times longer
- Coating penetrates into the material
- Still significantly longer tool life after resharpening
- Smoother surface

**DE Matrix - coating technology:**

Einzigartige Beschichtung für höchste Standwegansprüche

- Durchschnittlich 3-5-facher Standweg
- Beschichtung dringt in das Material ein
- Auch nach dem Nachschärfen noch deutlich längere Standwege
- Glattere Oberfläche

**FR Matrix - coating technology:**

Un revêtement unique pour une tenue d'outil inégalée

- En moyenne la tenue d'outil est multipliée par 3-5
- Le revêtement pénètre le matériau
- Des tenues d'outil nettement plus longues, même après le réaffûtage
- Surface plus lisse

**IT Matrix - coating technology:**

Rivestimento unico per esigenze di massima durata

- Una durata media 3-5 volte più lunga
- Il rivestimento penetra nel materiale
- Anche dopo la riaffilatura la durata è considerevolmente più lunga
- Superficie più liscia

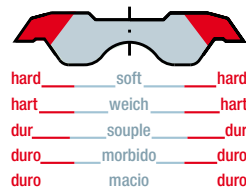
**ES Matrix - coating technology:**

Recubrimiento exclusivo para un máximo rendimiento

- Ratio de vida de la herramienta 3-5 veces
- Recubrimiento se adhiere al material
- Duracion de vida significativamente superior después de reafileado
- Superficie más lisa



- EN TIGRA HSS Black Oxide – Technical Data  
 DE TIGRA HSS-Black Oxide – Technische Daten  
 FR HSS TIGRA Black Oxide – Caractéristiques techniques  
 IT HSS TIGRA Black Oxide – Dati tecnici  
 ES HSS TIGRA Black Oxide – Datos técnicos



#### EN Optimized distribution of hardness

The unique manufacturing process maneuvers hardness to where it belongs: the cutting edge. The core of the knife remains soft to help protect against breakage and to also increase the ease of an eventual straightening.

##### Polished cutting edge

For an extra-aggressive cut in the wood, the cutting edge has a second, partial polish grind.

##### Black Oxide Surface

The thin black surface layer of ferric oxide, only nanometers thick, runs across the top and bottom. This improves corrosion resistance and prevents early rusting.

#### DE Optimierte Härteverteilung

Durch das spezielle Herstellungsverfahren wird die Härte genau dort hin gebracht, wo sie auch benötigt wird: in die Schneidkante. Der Kern des Messers bleibt weich und flexibel, was Bruch vorbeugt und das eventuelle Richten nach dem Nachschärfen vereinfacht.

##### Polierte Schneidkante

Für einen besonders giftigen Eingriff im Holz und eine sehr gute Holzoberfläche hat die Schneidkante einen zweiten, polierten Schliff.

##### Black Oxide Surface

Die wenige Nanometer starke, schwarze Schicht aus Eisenoxyd auf Ober- und Unterseite macht das Messer beständiger gegen Korrosion und verhindert frühzeitiges Rosten.

#### FR Répartition optimale de la dureté

Grâce au procédé de fabrication spécial, la dureté est là où besoin en est: au niveau du tranchant. Le noyau du couteau reste souple et flexible, ce qui prévient la rupture et simplifie l'ajustement après le réaffûtage.

##### Tranchant poli

Le tranchant bénéficie d'un deuxième polissage, pour une coupe particulièrement nette et une très bonne surface de bois.

##### Surface Black Oxide

La couche noire en oxyde de fer, d'une épaisseur de quelques nanomètres sur le dessus et le dessous rend le couteau plus résistant contre la corrosion et la rouille anticipée.

#### IT Migliorata distribuzione della durezza

Grazie ad un particolare metodo di produzione, la durezza del coltello è là dove è maggiormente richiesta, sul tagliente. La parte centrale del coltello rimane più morbida e flessibile, si evitano così rotture e la riaffilatura è più semplice.

##### Tagliente parzialmente lappato

Per un taglio su legno più preciso e affilato, il tagliente è parzialmente lappato.

##### Superficie „Black Oxide“

La sottile superficie di ossido di ferro nera, rende il coltello più resistente alla corrosione e alla ruggine.

#### ES Distribucion optimizada de la Dureza

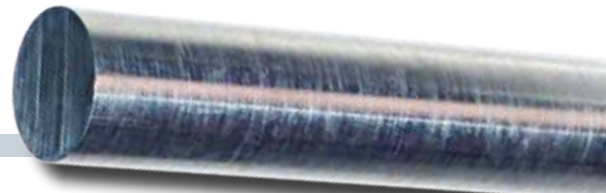
El exclusivo proceso permite distribuir la dureza en el filo de corte. El nucleo de la cuchilla permanece tenaz ayudando a evitar la rotura así como permitiendo la planitud del cuerpo de la placa.

##### Lapeado del flanco de corte

Para condiciones severas de corte en la madera, el filo de corte dispone de un doble acabado lapeado.

##### Recubrimiento superficial-„Black Oxide“

La superficie exterior permanece recubierta de oxido ferrico con espesores de nanómetros, mejorando la resistencia a la corrosion.



- EN TIGRAMet - Heavy alloy tool body blanks – Technical Data  
 DE TIGRAMet - Grundkörperrohlinge aus Schwermetall – Technische Daten  
 FR TIGRAMet - Ébauches en métal lourd - Caractéristiques techniques  
 IT TIGRAMet - Corpo utensile grezzo in metallo pesante - Dati tecnici  
 ES TIGRAMet - Cuerpos de metal pesado - Datos técnicos

**EN** TIGRAMet is a high density tungsten heavy alloy which is ideally suited for high stiffness tooling. TIGRA supplies pre-peeled heavy alloy rods with a high Young's modulus (elasticity). This also leads to a high absorption of vibration. Despite the high density (17g/cm<sup>3</sup>), it is still easy to machine. TIGRAMet has 40% less tendency to bend when compared to steel tool bodies. TIGRAMet is available from stock in many dimensions.

**Your benefits:**

- high stiffness
- less vibrations
- cut-to-size available
- large stock
- favorable pricing
- special dimensions upon request

**DE** TIGRAMet ist ein hochdichtes Schwermetall auf Wolframbasis, welches ideal für Werkzeuge mit großen Steifigkeitsansprüchen geeignet ist. TIGRA liefert vorgeschälte Schwermetall-Rundstäbe mit hohem Elastizitätsmodul. Dies führt zu stark gedämpften Schwingungen. Trotz der Dichte von 17 g/cm<sup>3</sup> lässt sich TIGRAMet noch gut zerspanen und reduziert die Durchbiegung im Vergleich zu Stahlgrundkörpern um 40%. TIGRAMet ist in vielen Abmessungen ab Lager verfügbar.

**Ihre Vorteile:**

- hohe Steifigkeit
- geringe Vibrationen
- Fixlängen lieferbar
- großes Lager
- günstige Preise
- Sonderabmessungen auf Anfrage

**FR** TIGRAMet est un métal lourd haute densité à base de tungstène, qui convient idéalement aux outils à exigences élevées en terme de rigidité. TIGRA fournit des barreaux cylindriques pré-brasés en métal lourd à module d'élasticité élevé. Cela conduit à des oscillations fortement amorties. Malgré une densité égale à 17 g/cm<sup>3</sup>, TIGRAMet reste encore facile à usiner et réduit la flexion de 40 % comparativement à des corps de base en acier. TIGRAMet est disponible sur stock en différentes dimensions.

**Vos avantages:**

- une rigidité élevée
- des vibrations réduites
- des longueurs spécifiques sur demande
- un large stock
- des prix bas
- des dimensions spéciales disponibles sur demande

**IT** TIGRAMet è un metallo pesante ad alta densità a base di tungsteno, ideale per utensili con esigenze di rigidità. TIGRA fornisce cilindri pelati in metallo pesante con elevato modulo di elasticità. Ciò permette di avere oscillazioni estremamente attenuate. Nonostante la densità di 17 g/cm<sup>3</sup>, TIGRAMet è facilmente lavorabile e riduce la flessione del 40% rispetto alle basi in acciaio. TIGRAMet è disponibile franco magazzino in molte misure.

**I vostri vantaggi:**

- elevata rigidità
- vibrazioni minime
- disponibile in lunghezze fisse
- ampia disponibilità
- prezzi vantaggiosi
- misure particolari su richiesta

**ES** TIGRAMet es una aleación de tungsteno pesado de alta densidad , especialmente adecuada para herramientas de alta rigidez. TIGRA proporciona barras de aleación pesada ya peladas con módulo de Young (módulo elástico) con las que se consigue una gran absorción de la vibración. A pesar de su gran densidad (17g/cm<sup>3</sup>), TIGRAMet es fácil de mecanizar y su tendencia a la flexión es un 40% inferior a la de las herramientas de acero. TIGRAMet está disponible en stock y se ofrece en muchos tamaños.

**Sus beneficios:**

- gran rigidez
- mínimas vibraciones
- corte a medida disponible
- gran stock
- precios competitivos
- tamaños especiales bajo pedido



TOOLS CUT BETTER WITH TIGRA



### EN TIGRA – Quality Leader worldwide

TIGRA's self-designed, highly automated production machines guarantee 100% optically controlled precision products that are delivered to the customer at an optimal price-performance ratio in a short time. In close co-operation with the tool manufacturers, TIGRA develops optimally coordinated cutting geometries and grades resulting in long tool life and significant cost reductions. No matter if it's about standard or special products: TIGRA is the competent partner for versatile solutions of carbide and ultra-hard cutting materials for a variety of woodworking tools. In order to always meet the application requirements of the customer and to optimize the tool efficiency in the best possible way, TIGRA is placing special emphasis on innovation and continuous improvement in the production of the various cutting inserts.

### DE TIGRA – Weltweiter Qualitätsführer

TIGRA's selbst konstruierte, hoch automatisierte Fertigungsmaschinen garantieren 100% optisch kontrollierte Präzisionsprodukte, die zu einem optimalen Preis-Leistungsverhältnis in kurzer Zeit dem Kunden geliefert werden. In enger Zusammenarbeit mit den Werkzeugherstellern entwickelt TIGRA optimal abgestimmte Schneidgeometrien und -güten, die lange Werkzeugstandwege und erhebliche Kostenreduzierungen mit sich bringen. Ob Standard- oder Sonderartikel: TIGRA ist der kompetente Partner für vielseitige Lösungen aus Hartmetall und ultraharten Schneidstoffen für die verschiedensten Werkzeuge der Holzbearbeitung. Um den Anwendungsbedürfnissen der Kunden stets gerecht zu werden und die Werkzeugeffizienz möglichst zu optimieren, werden Innovation und permanente Verbesserung bei der Fertigung der unterschiedlichsten Schneideinsätze im Hause TIGRA groß geschrieben.

### FR TIGRA - leader mondial en terme de qualité

La société TIGRA conçoit elle-même ses machines de production hautement automatisées. Celles-ci sont le gage de produits de précision faisant l'objet de contrôles visuels 100 %, pour un rapport qualité-prix optimal et un délai de livraison court. En étroite collaboration avec des fabricants d'outils, TIGRA développe des géométries et des qualités de coupe parfaitement ajustées, qui garantissent la longue durée de vie des outils et des réductions considérables des coûts. Produits standards ou spéciaux: TIGRA est votre partenaire compétent pour des solutions de coupe polyvalentes en carbure (métal dur) et en matériaux de coupe ultra-durs pour les outils les plus divers dédiés au travail du bois. Afin de répondre aux exigences d'application du client et optimiser le plus possible l'efficacité de l'outil, TIGRA place au premier plan l'innovation et l'amélioration continue lors de la fabrication des plaquettes de coupe les plus diverses.



## IT TIGRA – Leader mondiale della qualità

Le apparecchiature di produzione costruite dall'azienda stessa ed altamente automatizzate, garantiscono prodotti di precisione controllati al 100% a livello ottico, consegnati al cliente con un ottimo rapporto qualità prezzo e in breve tempo. Collaborando a stretto contatto con i produttori di utensili, TIGRA sviluppa geometrie di taglio e qualità di metallo duro perfettamente sintonizzate l'uno all'altro permettendo agli utensili di durare nel tempo e riducendo notevolmente i costi. Articoli standard o particolari, non c'è differenza: TIGRA è il partner competente per molteplici soluzioni in metallo duro e per materiali da taglio ultraduri per i diversi utensili per la lavorazione del legno. Per soddisfare costantemente le esigenze di applicazione dei clienti e ottimizzare quanto più possibile l'efficienza degli utensili, l'innovazione e il miglioramento nella produzione della vasta gamma di placchette assumono un ruolo di primaria importanza nell'azienda TIGRA.

## ES TIGRA - Líder mundial de calidad

Máquinas TIGRA de diseño propio, altamente automatizadas, garantizan al cliente productos de absoluta precisión controlados ópticamente, una buena relación precio-rendimiento y entregas extraordinariamente rápidas. En estrecha cooperación con los fabricantes de herramientas, TIGRA desarrolla geometrías y calidades de corte que destacan por su prolongada vida útil y que reducen los costes significativamente. TIGRA es el socio competente para las más versátiles soluciones de útiles cortantes en material duro y ultraduro para todo tipo de aplicaciones en el mecanizado de la madera. Para satisfacer las necesidades del cliente y optimizar la eficiencia de las herramientas, TIGRA apuesta por la innovación tecnológica y la mejora continua de sus útiles de corte.





### EN TIGRA – Short portrait of a forward-looking company

TIGRA is a leading supplier of cutting inserts made of tungsten carbide, HSS, TIGRALLOY, PCD and PCBN for wood and metal working tools as well as for tungsten carbide special knives and wear parts. Thanks to the highly automated production and an internationally structured distribution network TIGRA today offers the most extensive product range for woodworking in the global market. No matter if it is chipboard, MDF / HDF or all types of natural woods, TIGRA products made of specially developed carbide grades as well as of other materials such as HSS, PCD, TIGRALLOY ensure optimum tool life, break resistance and best cutting results.

### DE TIGRA – Kurzporträt eines zukunftsorientierten Unternehmens

TIGRA ist ein führender Lieferant von Schneideinsätzen aus Hartmetall, HSS, TIGRALLOY, PKD und PcBN für Holz- und Metallbearbeitungswerkzeuge sowie für Hartmetall-Spezialmesser und -Verschleißteile. Dank der hochautomatisierten Fertigung und einem international strukturierten Vertriebsnetz bietet TIGRA heute das umfangreichste Produktprogramm für die Holzbearbeitung am Weltmarkt an. Ob Spanplatte, MDF/HDF oder alle Arten von natürlichen Hölzern, TIGRAs Produkte aus speziell entwickelten Hartmetallsorten sowie aus weiteren Werkstoffen wie HSS, PKD, TIGRALLOY sorgen für optimale Standwege, Bruchsicherheit und beste Schnittergebnisse.

### FR TIGRA – Court portrait d'une entreprise tournée vers l'avenir

TIGRA est un fournisseur leader de plaquettes de coupe en métal dur, HSS, TIGRALLOY, PCD et PcBN destinées aux outils de travail du bois et du métal et aux couteaux spéciaux et pièces d'usure en carbure. Grâce à une production automatisée high-tech et un réseau de vente présent à l'international, TIGRA propose aujourd'hui sur le marché mondial une vaste gamme de produits dédiée au travail du bois. Pour les panneaux à particules, MDF/HDF ou d'autres essences de bois naturels, TIGRA développe des produits de coupe en carbure spécial ou autres matériaux tels que le HSS, PCD, TIGRALLOY qui assurent une excellente tenue d'outil, une résistance élevée à la rupture et des résultats de coupe parfaits.



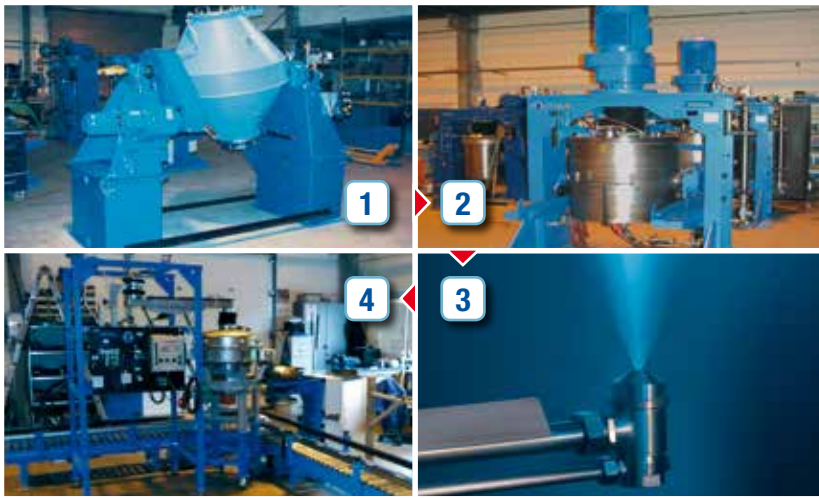
## IT TIGRA - Breve ritratto di un'azienda orientata al futuro

TIGRA è tra i fornitori leader di placchette in metallo duro, HSS, TIGRALLOY, PCD e PcBN per utensili per la lavorazione del legno e del metallo, per coltelli speciali in metallo duro e per il settore usura. Grazie all'elevata automazione nella produzione e ad una rete di vendita internazionale, TIGRA offre oggi la gamma più completa sul mercato mondiale di prodotti per la lavorazione del legno. Sia che si tratti di truciolare, MDF/HDF o di tutte le varietà di legni naturali, i prodotti TIGRA in diversi tipi di metallo duro sviluppati per le specifiche produttive o in altri materiali come HSS, PCD, TIGRALLOY, garantiscono longevità ottimale, resistenza alla rottura e le migliori performance di taglio.

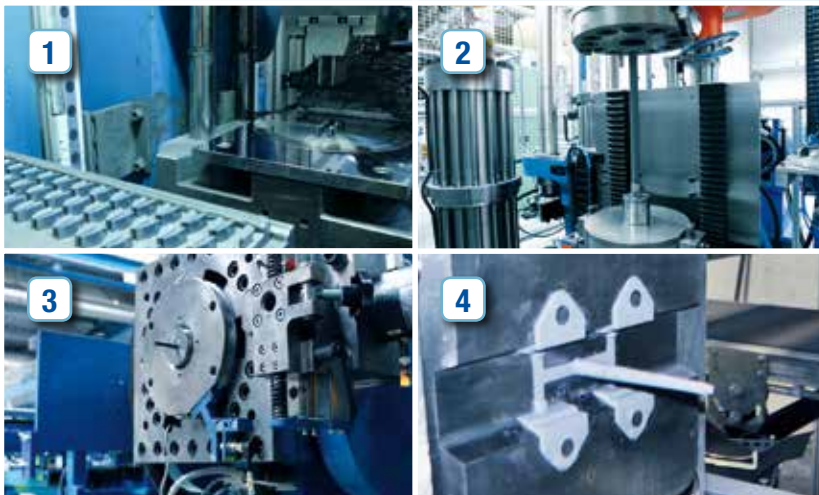
## ES TIGRA – Breve retrato de una empresa con visión de futuro

TIGRA es un proveedor líder de útiles cortantes en metal duro, HSS, TIGRALLOY, PCD y PcBN para el mecanizado del metal y la madera, así como para cuchillas especiales y piezas de desgaste de metal duro. Gracias a la producción altamente automatizada y a una red de distribución internacional, TIGRA ofrece en la actualidad el programa de productos para el mecanizado de la madera más amplio del mercado. Los productos TIGRA, tanto de metal duro especialmente desarrollados como de HSS, PCD y TIGRALLOY aseguran una prolongada vida útil de la herramienta, una excelente resistencia a la rotura y óptimos resultados de corte, sea con aglomerados, como con MDF/HDF o cualquier tipo de madera natural.

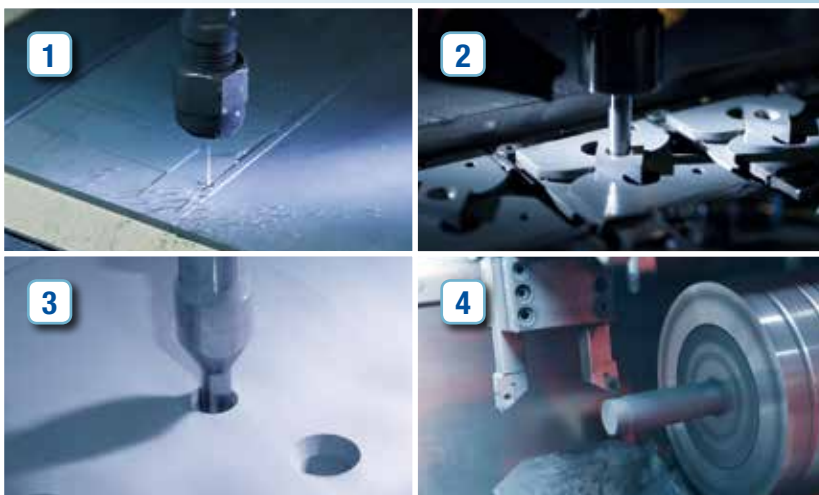
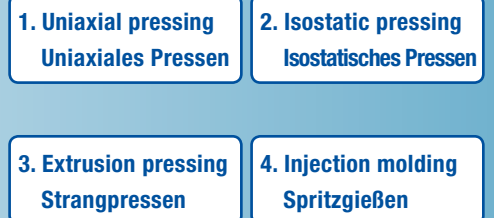
EN Tungsten carbide manufacturing  
DE Hartmetallherstellung



### Powder manufacturing Pulverherstellung



### Pressing Pressen



### Green carbide processing Grünlingsbearbeitung



## Sintering Sintern

1. Pressure sintering  
Drucksintern

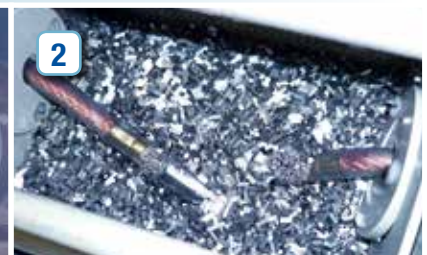
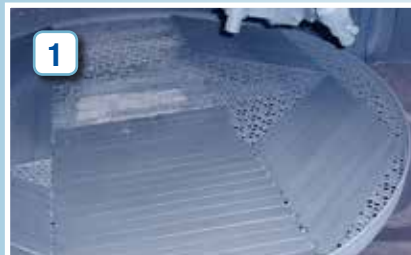
2. Vacuum sintering  
Vakuumsintern



## Surface treatment Oberflächenbehandlung

1. Sand blasting  
Sandstrahlen

2. Coating  
Beschichten



## Grinding Schleifen

1. Flat grinding  
Flatschleifen

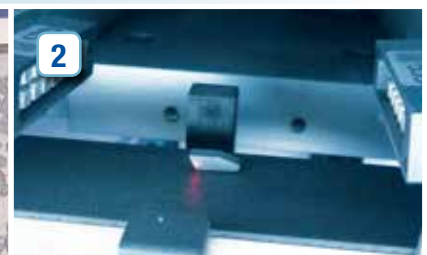
2. Edge grinding  
Umfangschleifen



## Quality control Qualitätskontrolle

1. Analysis  
Analyse

2. Dimensional control  
Maßkontrolle



## Packing and shipping Verpacken und Versenden

1. Packing  
Verpacken

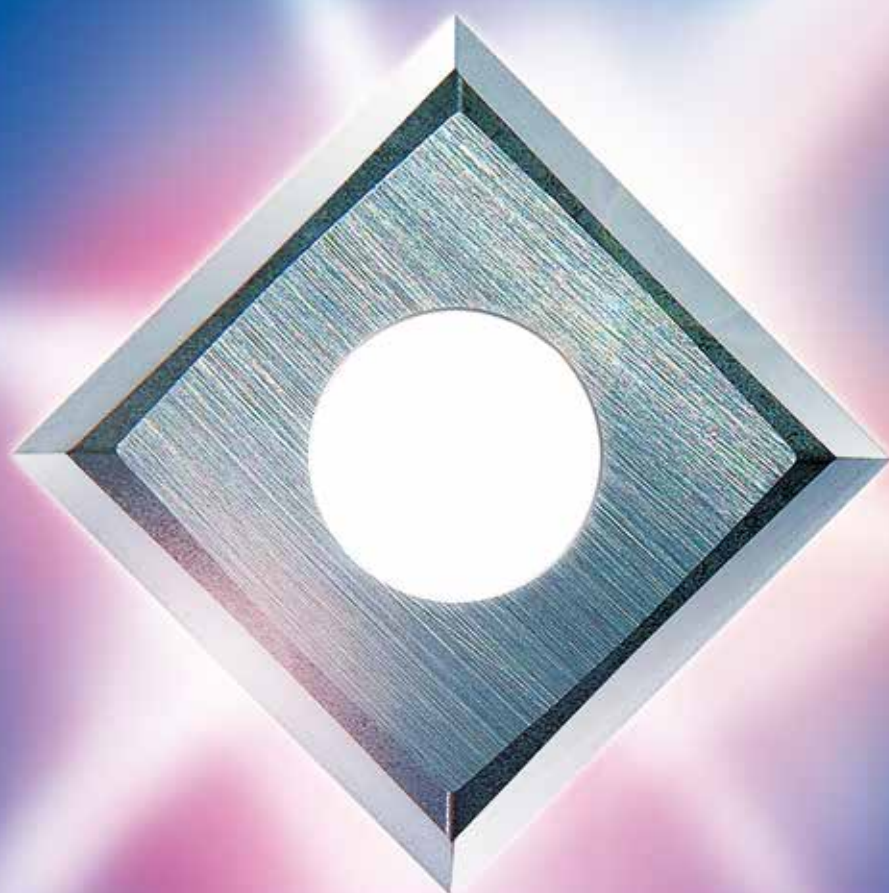
2. Shipping  
Versenden





TOOLS CUT BETTER WITH TIGRA





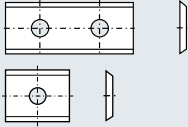
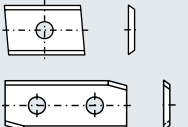
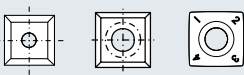
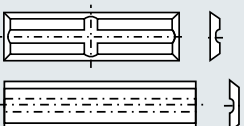
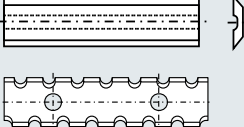
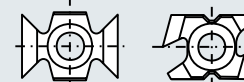
- EN Reversible knives and edge rounding knives
- DE Wendeschneidplatten und Kantenrunder
- FR Plaquettes réversibles et couteaux brise-arrête
- IT Coltelli reversibili e spigolatori
- ES Cuchillas reversibles y cuchillas para aristas



TOOLS CUT BETTER WITH TIGRA

---

- EN Reversible knives and edge rounding knives  
 DE Wendeschneidplatten und Kantenrunder  
 FR Plaquettes réversibles et couteaux brise-arrêt  
 IT Coltelli reversibili e spigolatori  
 ES Cuchillas reversibles y cuchillas para aristas

|                                                                                     |                                                                                                                                                                                                                                                                                              |                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|    | <p>EN Standard reversible knives 35° + 45°<br/>         DE Standard Wendeschneidplatten 35° + 45°<br/>         FR Plaquettes réversibles standard 35° + 45°<br/>         IT Coltelli reversibili standard 35° + 45°<br/>         ES Cuchillas reversibles standard 35° + 45°</p>             | <p>24 - 26</p> |
|    | <p>EN Reversible knives<br/>         DE Wendeschneidplatten<br/>         FR Plaquettes réversibles<br/>         IT Coltelli reversibili<br/>         ES Cuchillas reversibles</p>                                                                                                            | <p>27</p>      |
|    | <p>EN Square knives<br/>         DE Quadratische Wendeschneidplatten<br/>         FR Plaquettes réversibles à quatre coupes<br/>         IT Coltelli reversibili quadrati<br/>         ES Cuchillas reversibles cuadradas</p>                                                                | <p>28 - 30</p> |
|   | <p>EN Spurs, grooving knives<br/>         DE Vorschneider, Nuter<br/>         FR Araseur, couteaux pour rainures<br/>         IT Rasanti, coltelli per incastri<br/>         ES Incisores, cuchillas para ranura</p>                                                                         | <p>31</p>      |
|  | <p>EN 4 cutting edges / special knives<br/>         DE 4 Schneidkanten / Sondermesser<br/>         FR 4 tranchants / couteaux spéciaux<br/>         IT 4 taglienti / coltelli speciali<br/>         ES 4 filos de corté / cuchillas especiales</p>                                           | <p>32</p>      |
|  | <p>EN Face groove, back groove and crossgroove<br/>         DE Brust-, Rücken- und Quernut<br/>         FR Rainure sur grande face, sur petite face et transversal<br/>         IT Scanalatura frontale, posteriore e di sicurezza<br/>         ES Ranura frontal, de lomo y transversal</p> | <p>33</p>      |
|  | <p>EN Systems Leitz, Oertli, KWO/Versofix<br/>         DE Systeme Leitz, Oertli, KWO/Versofix<br/>         FR Systèmes Leitz, Oertli, KWO/Versofix<br/>         IT Sistemi Leitz, Oertli, KWO/Versofix<br/>         ES Sistemas Leitz, Oertli, KWO/Versofix</p>                              | <p>34 - 35</p> |
|  | <p>EN Edge rounding knives<br/>         DE Kantenrunder<br/>         FR Couteaux brise-arrêt<br/>         IT Spigolatori<br/>         ES Cuchillas para aristas</p>                                                                                                                          | <p>36</p>      |

|    |                        |                                                 |
|----|------------------------|-------------------------------------------------|
| EN | Reversible knives      | - Carbide grades and their applications         |
| DE | Wendeschneidplatten    | - Hartmetallsorten und ihre Anwendungen         |
| FR | Plaquettes réversibles | - Les nuances de carbures et leurs applications |
| IT | Coltelli reversibili   | - I tipi di metallo duro e le loro applicazioni |
| ES | Cuchillas reversibles  | - Calidades de metal duro y sus aplicaciones    |

| EN<br>DE<br>FR<br>IT<br>ES | TIGRA grade<br>TIGRA - Sorte<br>Nuance TIGRA<br>Tipo TIGRA<br>Calidad TIGRA | ISO<br>ISO<br>ISO<br>ISO<br>ISO | USA<br>USA<br>USA<br>Stati Uniti<br>EE.UU. | Hardness<br>Härte<br>Dureté<br>Durezza<br>Dureza                                    | Toughness<br>Zähigkeit<br>Ténacité<br>Tenacità<br>Tenacidad                           | Bending strength<br>Biegebruchfestigkeit<br>Résistance à la flexion<br>Resistenza flessionale<br>Resistencia a la flexión |
|----------------------------|-----------------------------------------------------------------------------|---------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                            | <b>T02MG-CR</b>                                                             | <b>K01</b>                      | <b>C4+++</b>                               |    |    |                                        |
|                            | <b>T02SMG</b>                                                               | <b>K01</b>                      | <b>C4+++</b>                               |    |    |                                        |
|                            | <b>T03SMG</b>                                                               | <b>K01</b>                      | <b>C4++</b>                                |    |    |                                        |
|                            | <b>T04MG-CR</b>                                                             | <b>K01</b>                      | <b>C4+</b>                                 |  |  |                                      |
|                            | <b>T04F-CR</b><br>UNIVERSAL                                                 | <b>K05</b>                      | <b>C4</b>                                  |  |  |                                      |
|                            | <b>T05UMG</b>                                                               | <b>K01 - K10</b>                | <b>C3++</b>                                |  |  |                                      |
|                            | <b>T08MF</b>                                                                | <b>K30</b>                      | <b>C2</b>                                  |  |  |                                      |
|                            | <b>T10MG-E</b>                                                              | <b>K10 - K40</b>                | <b>C3+</b>                                 |  |  |                                      |
|                            | <b>T10MG</b>                                                                | <b>K10 - K40</b>                | <b>C3+</b>                                 |  |  |                                      |
|                            | <b>T12SMG</b>                                                               |                                 | <b>C1++</b>                                |  |  |                                      |
|                            | <b>TL15*</b>                                                                | <b>K10 - K40</b>                | <b>C3+</b>                                 |  |  |                                      |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif -  
inossidabile - anticorrosivo

\* Special binder - Spezialbinder - Liant spécial - Legante speciale -  
Composición especial

EN For technical data, please refer to the pages 4-5.

DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.

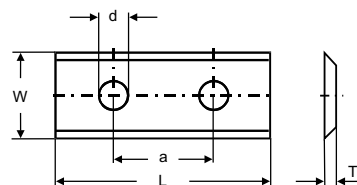
FR Pour les données techniques, veuillez voir aux pages 4-5.

| Plastics<br>Plastik<br>Plastiques<br>Plastica<br>Plásticos | HDF<br>HDF<br>HDF<br>HDF<br>HDF | MDF<br>MDF<br>MDF<br>MDF<br>MDF | Chipboard<br>Spanplatte<br>Panneaux de particule<br>Truciolare<br>Panel de aglomerado | Hardwood<br>Hartholz<br>Bois dur<br>Legno duro<br>Madera dura | Softwood<br>Weichholz<br>Bois tendre<br>Legno tenero<br>Madera blanda | Main usage<br>Hauptverwendung<br>Usage principal<br>Uso principale<br>Uso principal                                                                                                                                                                                                                        |
|------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓                                                          | ✓                               | ✓                               | ○                                                                                     | ■                                                             | ■                                                                     | EN MDF, HDF<br>DE MDF, HDF<br>FR MDF, HDF<br>IT MDF, HDF<br>ES MDF, HDF                                                                                                                                                                                                                                    |
| ✓                                                          | ✓                               | ✓                               | ○                                                                                     | ■                                                             | ■                                                                     | EN Chipboard, MDF, HDF<br>DE Spanplatte, MDF, HDF<br>FR Panneaux, MDF, HDF<br>IT Truciolare, MDF, HDF<br>ES Aglomerados, MDF, HDF                                                                                                                                                                          |
| ✓                                                          | ✓                               | ✓                               | ✓                                                                                     | ■                                                             | ■                                                                     | EN Chipboard, MDF<br>DE Spanplatte, MDF<br>FR Panneaux, MDF<br>IT Truciolare, MDF<br>ES Aglomerados, MDF                                                                                                                                                                                                   |
| ✓                                                          | ○                               | ✓                               | ✓                                                                                     | ✓                                                             | ○                                                                     | EN Tropical wood, very hard wood, chipboard, MDF<br>DE Tropenholz, sehr hartes Holz, Spanplatte, MDF<br>FR Bois tropical, bois très dur, panneaux, MDF<br>IT Legni tropicali, legni molto duri, truciolare, MDF<br>ES Madera tropical, madera muy dura, aglomerado, MDF                                    |
| ✓                                                          | ○                               | ✓                               | ✓                                                                                     | ✓                                                             | ✓                                                                     | EN Universal use<br>DE Universeller Einsatz<br>FR Utilisation universelle<br>IT Uso universale<br>ES Uso universal                                                                                                                                                                                         |
| ✓                                                          | ■                               | ○                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN Special reversible knives<br>DE Spezial-Wendeschnidplatten<br>FR Plaquettes réversibles spéciales<br>IT Coltelli reversibili speciali<br>ES Cuchillas reversibles especiales                                                                                                                            |
| ■                                                          | ■                               | ■                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN Grooving knives<br>DE Nuter<br>FR Couteaux pour rainures<br>IT Coltelli per incastri<br>ES Cuchillas para ranura                                                                                                                                                                                        |
| ■                                                          | ■                               | ■                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN Wood, low price demands<br>DE Holz, niedriger Preis<br>FR Bois, prix bas<br>IT Legno, prezzo ridotto<br>ES Madera, precio economico                                                                                                                                                                     |
| ○                                                          | ■                               | ■                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN 45° reversible knives, planer knives, softwood<br>DE 45°-Wendeschnidplatten, Hobelkopfplatten, Weichholz<br>FR Plaquettes 45°, couteaux pour outils à raboter, bois tendre<br>IT Coltelli a 45°, coltelli per teste da pialla, legni teneri<br>ES Cuchillas 45°, cuchillas para cepillar, madera blanda |
| ■                                                          | ■                               | ■                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN Best surface, high speed cutting (HSC)<br>DE Beste Oberfläche, HSC<br>FR Meilleure surface, HSC<br>IT Migliore superficie, HSC<br>ES Mejor superficie, HSC                                                                                                                                              |
| ○                                                          | ■                               | ■                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN 45° reversible knives, wood with knots<br>DE 45°-Wendeschnidplatten, Holz mit Ästen<br>FR Plaquettes 45°, bois avec des noeuds<br>IT Coltelli a 45°, legni nodosi<br>ES Cuchillas 45°, madera con nudos                                                                                                 |

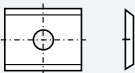
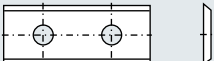
IT Per i dati tecnici, fare riferimento alle pagine 4-5.  
ES Para los datos técnicos, consulte las páginas 4-5.

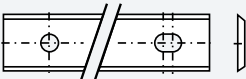
✓ best performance  
✓ very good performance  
○ acceptable  
■ not suitable

EN Standard reversible knives  
 DE Standard-Wendeschneidplatten  
 FR Plaquettes réversibles standard  
 IT Coltelli reversibili standard  
 ES Cuchillas reversibles standard

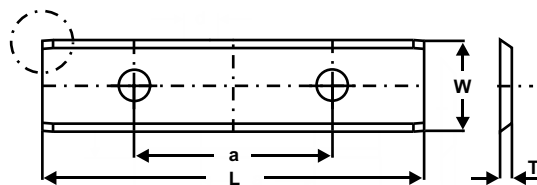


35°

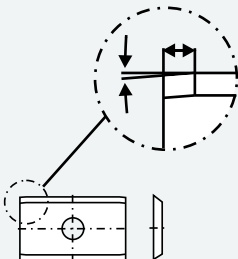
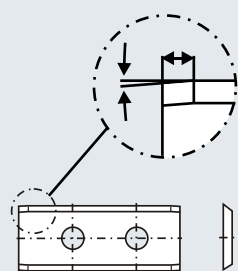
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | a<br>mm | T04F-CR | T02SMG | T03SMG | T04MG-CR | T10MG  | T10MG-E |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|--------|--------|----------|--------|---------|
|    | 7.5     | 12.0    | 1.5     |         | 012001  |        | 013811 | 106822   | 013963 | 142721  |
|                                                                                     | 8.6     | 12.0    | 1.5     |         | 013182  |        |        |          |        |         |
|                                                                                     | 9.0     | 12.0    | 1.5     |         | 012043  |        |        |          |        |         |
|                                                                                     | 9.6     | 12.0    | 1.5     |         | 012015  |        | 013850 | 106823   | 014010 | 142722  |
|                                                                                     | 10.0    | 12.0    | 1.5     |         | 013165  |        |        |          |        |         |
|                                                                                     | 10.5    | 12.0    | 1.5     |         | 013167  |        |        |          |        |         |
|                                                                                     | 11.0    | 12.0    | 1.5     |         | 013168  |        |        |          |        |         |
|                                                                                     | 11.6    | 12.0    | 1.5     |         | 013183  |        |        |          |        |         |
|                                                                                     | 13.0    | 12.0    | 1.5     |         | 013170  |        |        |          |        |         |
|                                                                                     | 13.6    | 12.0    | 1.5     |         | 013185  |        |        |          |        |         |
|                                                                                     | 14.6    | 12.0    | 1.5     |         | 013186  |        |        |          |        |         |
|                                                                                     | 15.0    | 12.0    | 1.5     |         | 012003  | 052277 | 013819 | 106824   | 013972 | 142723  |
|                                                                                     | 15.7    | 12.0    | 1.5     |         | 013172  |        |        |          |        |         |
|                                                                                     | 16.0    | 12.0    | 1.5     |         | 013203  |        |        |          |        |         |
|                                                                                     | 17.0    | 12.0    | 1.5     |         | 013173  |        |        |          |        |         |
|                                                                                     | 18.0    | 12.0    | 1.5     |         | 013174  |        |        |          |        |         |
|                                                                                     | 19.0    | 12.0    | 1.5     |         | 013175  |        |        |          |        |         |
|                                                                                     | 20.0    | 12.0    | 1.5     |         | 012004  | 041587 | 013823 | 104796   | 013977 | 127452  |
|                                                                                     | 25.0    | 12.0    | 1.5     |         | 012025  |        | 013853 | 106826   | 014013 |         |
|  | 25.0    | 12.0    | 1.5     | 14.0    | 012011  |        | 013843 | 106827   | 014001 |         |
|                                                                                     | 30.0    | 12.0    | 1.5     | 14.0    | 012005  | 037750 | 013828 | 104795   | 013982 | 125424  |
|                                                                                     | 35.0    | 12.0    | 1.5     | 26.0    | 013208  |        |        |          |        |         |
|                                                                                     | 40.0    | 12.0    | 1.5     | 26.0    | 012014  | 052278 | 013847 | 106828   | 014006 | 127453  |
|                                                                                     | 50.0    | 12.0    | 1.5     | 26.0    | 012006  | 037901 | 013834 | 106829   | 013987 | 125425  |
|                                                                                     | 60.0    | 12.0    | 1.5     | 26.0    | 012007  | 054882 | 013839 | 106830   | 013994 | 127454  |

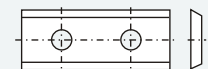
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | a<br>mm | T08MF  | T03SMG | T04MG-CR | T10MG  |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|--------|--------|----------|--------|
|  | 80.0    | 13.0    | 2.2     | 60.0    | 012008 | 013841 | 106831   | 013997 |
|                                                                                     | 100.0   | 13.0    | 2.2     | 60.0    | 012009 | 030831 | 106832   | 013998 |
|                                                                                     | 120.0   | 13.0    | 2.2     | 60.0    | 012010 | 030832 | 106833   | 013999 |

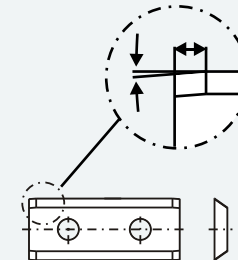
EN Reversible knives  
DE Wendeschneidplatten  
FR Plaquettes réversibles  
IT Coltelli reversibili  
ES Cuchillas reversibles



For use in planer heads!  
Für Hobelköpfe!

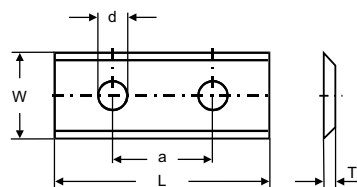
|                                                                                    | L<br>mm | W<br>mm | T<br>mm |     | T04F-CR | T04MG-CR | T10MG  |
|------------------------------------------------------------------------------------|---------|---------|---------|-----|---------|----------|--------|
|   | 20.0    | 12.0    | 1.5     | 35° |         | 106674   | 013979 |
|                                                                                    | 20.0*   | 12.0    | 1.5     | 45° |         |          | 041948 |
|                                                                                    | 24.0    | 12.0    | 1.5     | 40° | 104119  | 106675   | 041060 |
|                                                                                    | 24.7    | 12.0    | 1.5     | 35° | 104120  | 106676   |        |
|  | 30.0    | 12.0    | 1.5     | 35° | 112875  | 106677   | 013984 |
|                                                                                    | 50.0    | 12.0    | 1.5     | 35° |         |          | 013989 |

|                                                                                     | L<br>mm | W<br>mm | T<br>mm |     | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|-----|---------|
|  | 30.0    | 12.0    | 2.5     | 35° | 054259  |

|                                                                                     | L<br>mm | W<br>mm | T<br>mm |     | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|-----|---------|
|  | 30.0    | 12.0    | 2.5     | 35° | 102283  |

\* EN System Hundegger  
\* DE System Hundegger  
\* FR Système Hundegger  
\* IT Sistema Hundegger  
\* ES Sistema Hundegger

EN Reversible knives  
 DE Wendeschneidplatten  
 FR Plaquettes réversibles  
 IT Coltelli reversibili  
 ES Cuchillas reversibles



45°

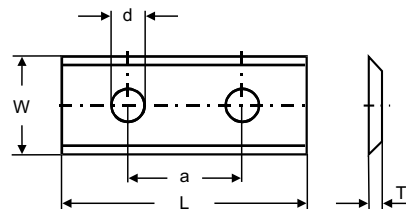
## POLISHED

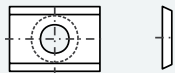
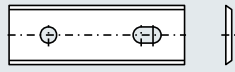
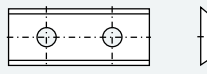
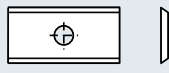
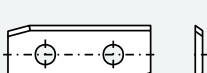
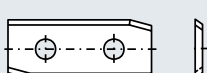
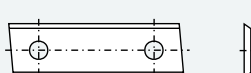
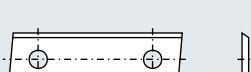
|  | L<br>mm | W<br>mm | T<br>mm | a<br>mm |     | T10MG  |
|--|---------|---------|---------|---------|-----|--------|
|  | 7.5     | 12.0    | 1.5     |         | 45° | 014093 |
|  | 9.6     | 12.0    | 1.5     |         | 45° | 014117 |
|  | 15.0    | 12.0    | 1.5     |         | 45° | 014099 |
|  | 20.0    | 12.0    | 1.5     |         | 45° | 014101 |
|  | 25.0    | 12.0    | 1.5     |         | 45° | 014124 |
|  | 25.0    | 12.0    | 1.5     | 14.0    | 45° | 014111 |
|  | 30.0    | 12.0    | 1.5     | 14.0    | 45° | 014103 |
|  | 40.0    | 12.0    | 1.5     | 26.0    | 45° | 014114 |
|  | 50.0    | 12.0    | 1.5     | 26.0    | 45° | 014106 |
|  | 60.0    | 12.0    | 1.5     | 26.0    | 45° | 014108 |
|  | 12.0    | 12.0    | 1.5     |         | 45° | 014097 |

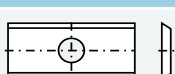
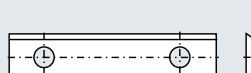
## NOT POLISHED

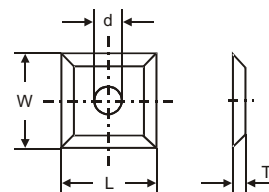
|  | L<br>mm | W<br>mm | T<br>mm | a<br>mm |     | T08MF  | T10MG  |
|--|---------|---------|---------|---------|-----|--------|--------|
|  | 7.5     | 12.0    | 1.5     |         | 45° |        | 014091 |
|  | 9.6     | 12.0    | 1.5     |         | 45° |        | 014115 |
|  | 15.0    | 12.0    | 1.5     |         | 45° |        | 014098 |
|  | 20.0    | 12.0    | 1.5     |         | 45° |        | 014100 |
|  | 25.0    | 12.0    | 1.5     |         | 45° |        | 014123 |
|  | 25.0    | 12.0    | 1.5     | 14.0    | 45° |        | 014110 |
|  | 30.0    | 12.0    | 1.5     | 14.0    | 45° |        | 014102 |
|  | 40.0    | 12.0    | 1.5     | 26.0    | 45° |        | 014113 |
|  | 50.0    | 12.0    | 1.5     | 26.0    | 45° |        | 014105 |
|  | 60.0    | 12.0    | 1.5     | 26.0    | 45° |        | 014107 |
|  | 12.0    | 12.0    | 1.5     |         | 45° |        | 014096 |
|  | 80.0    | 13.0    | 2.2     | 60.0    | 45° | 013532 | 038233 |

EN Reversible knives  
 DE Wendeschneidplatten  
 FR Plaquettes réversibles  
 IT Coltelli reversibili  
 ES Cuchillas reversibles

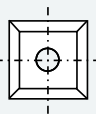
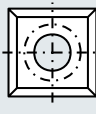
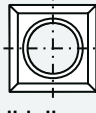


|                                                                                     | L<br>mm | W<br>mm | T<br>mm | a<br>mm | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|
|    | 20.0    | 14.3    | 2.5     |         | 013730  |
|    | 44.5    | 15.0    | 1.5     | 25.0    | 013447  |
|    | 30.0    | 12.0    | 1.5     | 16.0    | 013449  |
|    | 24.0    | 12.0    | 1.5     |         | 013241  |
|    | 30.0    | 12.0    | 1.5     | 14.0    | 013430  |
|                                                                                     | 50.0    | 12.0    | 1.5     | 26.0    | 013432  |
|  | 30.0    | 12.0    | 1.5     | 14.0    | 013431  |
|                                                                                     | 50.0    | 12.0    | 1.5     | 26.0    | 013433  |
|  | 20.0    | 12.0    | 1.5     |         | 013436  |
|  | 20.0    | 12.0    | 1.5     |         | 013441  |
|  | 30.0    | 12.0    | 1.5     | 14.0    | 013437  |
|                                                                                     | 40.0    | 12.0    | 1.5     | 26.0    | 013440  |
|                                                                                     | 50.0    | 12.0    | 1.5     | 26.0    | 013438  |
|  | 30.0    | 12.0    | 1.5     | 14.0    | 013442  |
|                                                                                     | 40.0    | 12.0    | 1.5     | 26.0    | 013445  |
|                                                                                     | 50.0    | 12.0    | 1.5     | 26.0    | 013443  |

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | a<br>mm | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|
|  | 20.0    | 9.0     | 1.5     |         | 013195  |
|  | 30.0    | 9.0     | 1.5     | 14.0    | 013199  |
|                                                                                     | 40.0    | 9.0     | 1.5     | 26.0    | 013200  |
|                                                                                     | 50.0    | 9.0     | 1.5     | 26.0    | 013201  |

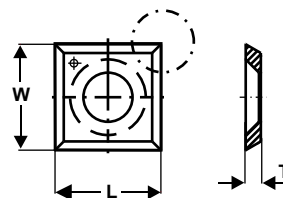


EN Square knives  
 DE Quadratische Wendeschneidplatten  
 FR Plaquettes réversibles à quatre coupes  
 IT Coltelli reversibili quadrati  
 ES Cuchillas reversibles cuadradas

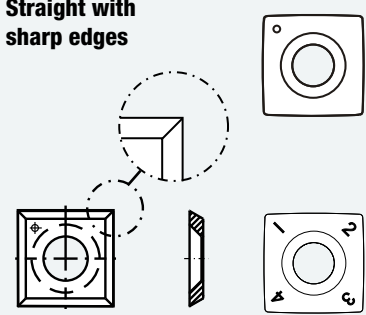
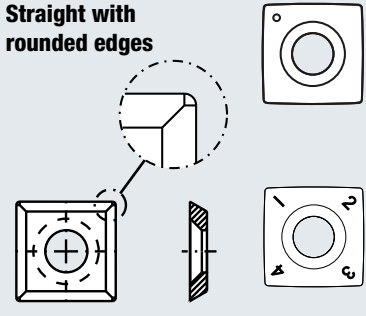
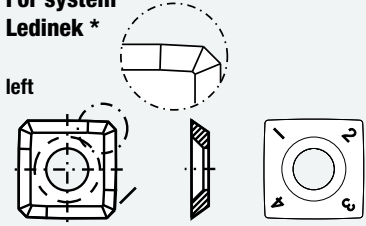
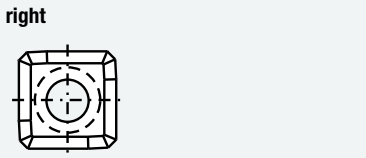
|                                                                                                             | L<br>mm | W<br>mm | T<br>mm |     | d<br>mm | T08MF  | T04F-CR | T02SMG | T03SMG | T04MG-CR | T10MG  | T10MG-E |
|-------------------------------------------------------------------------------------------------------------|---------|---------|---------|-----|---------|--------|---------|--------|--------|----------|--------|---------|
|                            | 9.0     | 9.0     | 1.5     | 35° | 4.0     |        | 100744  |        |        |          |        |         |
|                                                                                                             | 10.5    | 10.5    | 1.5     | 35° | 4.0     |        | 013259  |        | 013863 |          |        |         |
|                                                                                                             | 12.0    | 12.0    | 1.5     | 35° | 4.0     |        | 012002  | 048357 | 013815 | 106835   | 013968 | 140093  |
|                                                                                                             | 13.0    | 13.0    | 2.5     | 35° | 4.0     | 013328 |         |        |        |          |        |         |
|                                                                                                             | 17.0    | 17.0    | 2.0     | 35° | 3.0     | 016565 | 016564  |        |        |          |        |         |
|                                                                                                             | 17.0    | 17.0    | 2.0     | 35° | 4.0     | 013266 | 013265  |        | 013864 | 106836   | 030830 |         |
|                                                                                                             | 19.0    | 19.0    | 2.0     | 35° | 4.0     |        | 013264  |        |        |          |        |         |
|                          | 10.5    | 10.5    | 1.5     | 35° |         |        |         |        |        | 106682   |        |         |
|                                                                                                             | 13.0    | 13.0    | 2.5     | 30° |         | 013324 |         |        |        |          |        |         |
|                                                                                                             | 13.6    | 13.6    | 2.0     | 30° |         | 013299 |         |        |        |          |        |         |
|                                                                                                             | 13.6    | 13.6    | 2.0     | 45° |         | 037522 |         |        |        |          |        |         |
|                                                                                                             | 14.0    | 14.0    | 1.2     | 30° |         | 013295 |         |        |        |          |        |         |
|                                                                                                             | 14.0    | 14.0    | 1.7     | 22° |         | 013297 |         |        |        |          |        |         |
|                                                                                                             | 14.0    | 14.0    | 1.7     | 30° |         | 013307 |         |        |        |          |        |         |
|                                                                                                             | 14.0    | 14.0    | 2.0     | 30° |         | 013273 | 013260  | 054962 | 013865 | 102558   | 014028 | 140094  |
| <br>For Holz-Her system* | 14.0    | 14.0    | 1.2     | 30° |         | 013303 |         |        |        |          |        |         |
|                                                                                                             | 15.0    | 15.0    | 2.0     |     |         | 013322 |         |        |        |          |        |         |

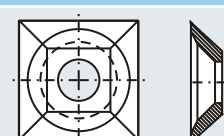
\* EN For use in Holz-Her cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Holz-Her  
 \* FR Utilisation limitée aux porte outils de l'entreprise Holz-Her  
 \* IT Da usare solo su teste portacoltelli della Holz-Her  
 \* ES Sólo para empleo con portacuchillas de la firma Holz-Her

EN Square knives  
 DE Quadratische Wendeschneidplatten  
 FR Plaquettes réversibles à quatre coupes  
 IT Coltelli reversibili quadrati  
 ES Cuchillas reversibles cuadradas



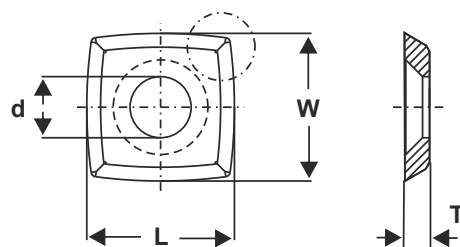
For use in planer heads!  
 Für Hobelköpfe!

|                                                                                                                                                                                                                                          |  | L    | W    | T   |     | T08MF  | T04F-CR | T10MG  | T04MG-CR | TL15   | T10MG-E |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------|------|-----|-----|--------|---------|--------|----------|--------|---------|
|                                                                                                                                                                                                                                          |  | mm   | mm   | mm  |     |        |         |        |          |        |         |
| <b>Straight with sharp edges</b><br>                                                                                                                    |  | 10.5 | 10.5 | 1.5 | 35° |        |         |        | 106682   | 040343 |         |
|                                                                                                                                                                                                                                          |  | 14.0 | 14.0 | 2.0 | 30° | 013273 | 013260  | 014028 | 102558   | 013771 | 140094  |
|                                                                                                                                                                                                                                          |  | 14.0 | 14.0 | 2.0 | 37° | 104295 |         | 104900 |          |        |         |
|                                                                                                                                                                                                                                          |  | 14.3 | 14.3 | 2.5 | 35° |        |         | 013329 | 106683   |        |         |
|                                                                                                                                                                                                                                          |  | 14.6 | 14.6 | 2.5 | 30° |        |         | 013314 | 106684   |        |         |
|                                                                                                                                                                                                                                          |  | 15.0 | 15.0 | 2.5 | 30° |        |         | 013315 | 106685   |        |         |
|                                                                                                                                                                                                                                          |  | 15.0 | 15.0 | 2.5 | 37° |        |         | 104062 |          |        |         |
|                                                                                                                                                                                                                                          |  |      |      |     |     |        |         |        |          |        |         |
|                                                                                                                                                                                                                                          |  |      |      |     |     |        |         |        |          |        |         |
|                                                                                                                                                                                                                                          |  |      |      |     |     |        |         |        |          |        |         |
| <b>Straight with rounded edges</b><br>                                                                                                                 |  | 14.0 | 14.0 | 2.0 | 30° | 013276 |         | 104117 |          |        |         |
|                                                                                                                                                                                                                                          |  |      |      |     |     |        |         |        |          |        |         |
|                                                                                                                                                                                                                                          |  | 14.6 | 14.6 | 2.5 | 30° |        |         | 013316 |          |        |         |
|                                                                                                                                                                                                                                          |  | 15.0 | 15.0 | 2.5 | 30° |        |         | 104118 |          |        |         |
|                                                                                                                                                                                                                                          |  | 15.0 | 15.0 | 2.5 | 37° |        |         | 109384 |          |        |         |
| <b>For system Ledinek *</b><br><b>left</b><br><br><b>right</b><br> |  | 14.3 | 14.3 | 2.5 | 35° |        |         | 053589 |          |        |         |
|                                                                                                                                                                                                                                          |  | 14.3 | 14.3 | 2.5 | 35° |        |         | 053590 |          |        |         |

|  |                                                                                     | L    | W    | T   |     | T08MF | T04F-CR | T10MG  | T04MG-CR | TL20   | T10MG-E |
|--|-------------------------------------------------------------------------------------|------|------|-----|-----|-------|---------|--------|----------|--------|---------|
|  |                                                                                     | mm   | mm   | mm  |     |       |         |        |          |        |         |
|  |  | 21.0 | 21.0 | 5.5 | 40° |       |         | 022695 |          | 142724 | 140092  |

\* EN For use in Ledinek-cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Ledinek  
 \* FR Utilisation limitée aux porte outils de l'entreprise Ledinek  
 \* IT Da usare solo su teste portacoltelli della Ledinek  
 \* ES Sólo para empleo con portacuchillas de la firma Ledinek

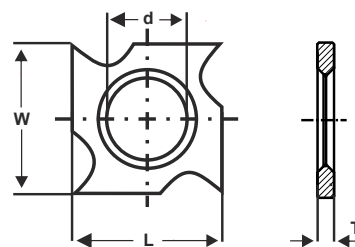
EN Square knives  
 DE Quadratische Wendeschneidplatten  
 FR Plaquettes réversibles à quatre coupes  
 IT Coltelli reversibili quadrati  
 ES Cuchillas reversibles cuadradas



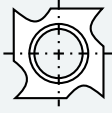
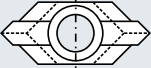
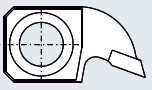
For use in planer heads!  
 Für Hobelköpfe!

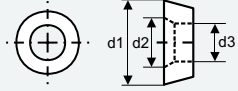
|                                                   | L<br>mm | W<br>mm | T<br>mm | R     |     | T10MG  | T10MG-E |
|---------------------------------------------------|---------|---------|---------|-------|-----|--------|---------|
| <b>Cutting edge with radius and rounded edges</b> |         |         |         |       |     |        |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=150 | 30° | 101540 | 140096  |
|                                                   | 15.0    | 15.0    | 2.5     | R=115 | 30° | 115179 |         |
|                                                   | 14.0    | 14.0    | 2.0     | R=150 | 30° | 100788 |         |
|                                                   | 14.6    | 14.6    | 2.5     | R=150 | 30° | 052673 |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=50  | 30° | 043895 | 140095  |
|                                                   | 15.0    | 15.0    | 2.5     | R=180 | 30° | 129329 |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=200 | 30° | 118997 |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=170 | 40° | 130366 |         |
| <b>Cutting edge with radius and pointed edges</b> |         |         |         |       |     |        |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=150 | 30° | 100791 |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=100 | 30° | 101180 |         |
|                                                   | 14.0    | 14.0    | 2.0     | R=150 | 30° | 100789 |         |
|                                                   | 14.6    | 14.6    | 2.5     | R=150 | 30° | 100790 |         |
|                                                   | 15.0    | 15.0    | 2.5     | R=50  | 30° | 101044 |         |

\* EN System Hundegger  
 \* DE System Hundegger  
 \* FR Système Hundegger  
 \* IT Sistema Hundegger  
 \* ES Sistema Hundegger

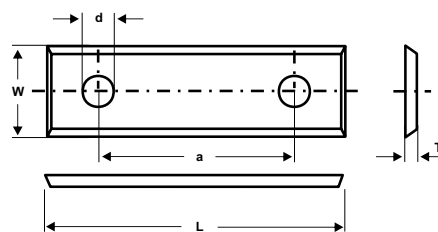


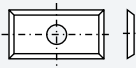
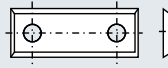
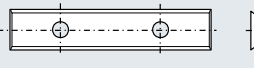
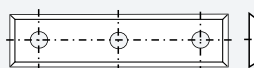
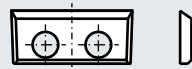
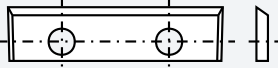
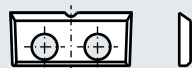
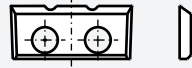
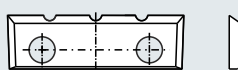
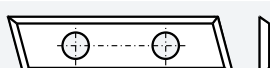
EN Spurs, grooving knives  
 DE Vorschneider, Nuter  
 FR Araseur, couteaux pour rainures  
 IT Rasanti, coltelli per scanalature  
 ES Incisores, cuchillas para ranura

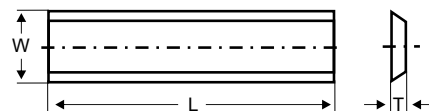
|                                                                                     | L<br>mm                      | W<br>mm                      | T<br>mm                  |            | d<br>mm | T08MF            | T04F-CR | T06MF                                | T10MG  |
|-------------------------------------------------------------------------------------|------------------------------|------------------------------|--------------------------|------------|---------|------------------|---------|--------------------------------------|--------|
|    | 18.0<br>18.0                 | 18.0<br>18.0                 | 1.95<br>2.45             |            |         | 013293<br>013291 |         |                                      |        |
|                                                                                     | 18.0<br>18.0                 | 18.0<br>18.0                 | 2.95<br>3.70             |            |         | 013305<br>013289 |         |                                      |        |
|    | 22.9<br>22.0<br>(22.0        | 19.8<br>19.0<br>22.0         | 2.5<br>2.0<br>2.0)       | 30°<br>30° |         | 045180<br>013271 |         |                                      |        |
|   | 14.0<br>16.0                 | 28.0<br>16.0                 | 2.0<br>3.0               | 30°<br>32° |         | 013258<br>030829 |         |                                      |        |
|  | 18.5                         |                              | 3.25                     | 30°        |         |                  |         |                                      | 017190 |
|  | 33.5                         |                              |                          |            | 3.0     | 013252           |         |                                      |        |
|  | 18.9                         | 7.9                          | 4.0                      |            |         | 013253           |         |                                      |        |
|  | 18.0                         | 5.7                          | 3.5                      |            |         | 013255           |         |                                      |        |
|  | 24.5<br>24.5<br>24.5         | 13.0<br>13.0<br>13.0         | 4.0<br>5.0<br>6.0        |            |         |                  |         | 053640<br>053641<br>053642           |        |
|  | 34.0<br>34.0<br>34.0<br>34.0 | 16.0<br>16.0<br>16.0<br>16.0 | 4.0<br>5.0<br>6.0<br>7.0 |            |         |                  |         | 013278<br>013279<br>013280<br>013281 |        |

|                                                                                     | d1<br>mm | d2<br>mm | d3<br>mm | T<br>mm |  | T03SMG |
|-------------------------------------------------------------------------------------|----------|----------|----------|---------|--|--------|
|  | 11.0     | 7.0      | 5.1      | 4.0     |  | 013373 |

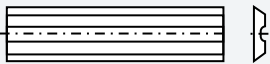
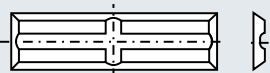
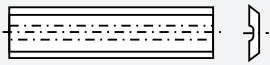
EN 4 cutting edges / special knives  
 DE 4 Schneidkanten / Sondermesser  
 FR 4 tranchants / couteaux spéciaux  
 IT 4 taglienti / coltelli speciali  
 ES 4 filos de corte / cuchillas especiales



|                                                                                     | L<br>mm | W<br>mm | T<br>mm | a<br>mm | T04F-CR | T02SMG | T03SMG | T10MG  |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|--------|--------|--------|
|    | 19.5    | 7.0     | 1.5     |         | 013492  |        |        |        |
|                                                                                     | 19.5    | 7.5     | 1.5     |         | 013493  |        |        |        |
|                                                                                     | 19.5    | 8.0     | 1.5     |         | 013494  |        |        |        |
|                                                                                     | 19.5    | 9.0     | 1.5     |         | 013495  |        |        |        |
|                                                                                     | 19.5    | 10.0    | 1.5     |         | 013496  |        |        |        |
|                                                                                     | 19.5    | 11.0    | 1.5     |         | 013497  |        |        |        |
|                                                                                     | 19.5    | 12.0    | 1.5     |         | 013498  | 054963 | 013947 |        |
|    | 29.5    | 7.0     | 1.5     | 14.0    | 013501  |        |        |        |
|                                                                                     | 29.5    | 7.5     | 1.5     | 14.0    | 013502  |        |        |        |
|                                                                                     | 29.5    | 8.0     | 1.5     | 14.0    | 013503  |        |        |        |
|                                                                                     | 29.5    | 9.0     | 1.5     | 14.0    | 013504  | 054432 |        |        |
|                                                                                     | 29.5    | 10.0    | 1.5     | 14.0    | 013505  |        |        |        |
|                                                                                     | 29.5    | 11.0    | 1.5     | 14.0    | 013506  |        |        |        |
|                                                                                     | 29.5    | 12.0    | 1.5     | 14.0    | 013507  | 047361 | 013952 | 014088 |
|  | 39.5    | 9.0     | 1.5     | 26.0    | 013511  | 121138 | 045134 |        |
|                                                                                     | 39.5    | 12.0    | 1.5     | 26.0    | 013512  | 128797 | 013954 |        |
|  | 49.5    | 8.0     | 1.5     | 26.0    | 013516  |        |        |        |
|                                                                                     | 49.5    | 9.0     | 1.5     | 26.0    | 013517  | 109052 | 013956 |        |
|                                                                                     | 49.5    | 10.0    | 1.5     | 26.0    | 013518  |        |        |        |
|                                                                                     | 49.5    | 12.0    | 1.5     | 26.0    | 013520  | 049019 | 013957 | 014090 |
|                                                                                     | 59.5    | 12.0    | 1.5     | 26.0    | 013523  |        |        |        |
|  | 50.0    | 9.0     | 1.5     | 37.0    | 016950  |        | 035425 |        |
|                                                                                     | 50.0    | 12.0    | 1.7     | 37.0    | 013327  | 054444 | 013866 | 014030 |
|  | 16.0    | 7.0     | 1.5     | 7.0     | 016934  |        | 016933 |        |
|  | 23.0    | 7.0     | 1.5     | 14.0    | 053449  |        |        |        |
|                                                                                     | 28.0    | 7.0     | 1.5     | 14.0    | 016823  | 102847 | 016822 |        |
|  | 16.0    | 7.0     | 1.5     | 7.0     | 048995  |        |        |        |
|  | 16.0    | 7.0     | 1.5     | 7.0     | 048996  |        |        |        |
|                                                                                     | 23.0    | 7.0     | 1.5     | 14.0    | 106866  |        |        |        |
|  | 23.0    | 7.0     | 1.5     | 14.0    | 106867  |        |        |        |
|  | 31.5    | 9.0     | 1.5     | 14.0    | 109149  |        |        |        |



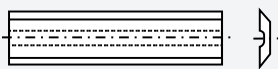
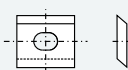
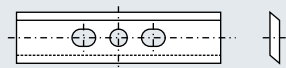
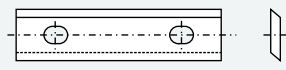
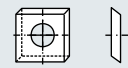
- EN Face groove, back groove and crossgroove  
 DE Brust-, Rücken- und Quernut  
 FR Rainure sur grande face, sur petite face et transversal  
 IT Scanalatura frontale, posteriore e di sicurezza  
 ES Ranura frontal, de lomo y transversal

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | T04F-CR | T03SMG | Style                       |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|--------|-----------------------------|
|    | 20.0    | 5.5     | 1.1     | 013357  |        | EN Back groove              |
|                                                                                     | 30.0    | 5.5     | 1.1     | 013363  |        | DE Rückennut                |
|                                                                                     | 40.0    | 5.5     | 1.1     | 013359  |        | FR Rainure sur petite face  |
|                                                                                     | 50.0    | 5.5     | 1.1     | 013361  |        | IT Scanalatura posteriore   |
|                                                                                     |         |         |         |         |        | ES Ranura de lomo           |
|    | 20.0    | 4.1     | 1.1     | 013403  |        | EN Back and crossgroove     |
|                                                                                     | 20.0    | 5.5     | 1.1     | 013394  | 013911 | DE Rücken- und Quernut      |
|                                                                                     | 25.0    | 5.5     | 1.1     | 013402  | 013920 | FR Rainure transversale     |
|                                                                                     | 30.0    | 5.5     | 1.1     | 013397  | 013914 | IT Scanalatura di sicurezza |
|                                                                                     | 40.0    | 5.5     | 1.1     | 013399  |        | ES Ranura transversal       |
|                                                                                     | 50.0    | 5.5     | 1.1     | 013401  | 013918 |                             |
|  | 12.0    | 5.5     | 1.1     | 013334  | 013870 | EN Face groove              |
|                                                                                     | 20.0    | 5.5     | 1.1     | 013336  |        | DE Brustnut                 |
|                                                                                     | 30.0    | 5.5     | 1.1     | 013345  | 013880 | FR Rainure sur grande face  |
|                                                                                     | 40.0    | 5.5     | 1.1     | 013339  |        | IT Scanalatura frontale     |
|                                                                                     | 50.0    | 5.5     | 1.1     | 013342  | 013877 | ES Ranura frontal           |
|  | 20.0    | 5.5     | 1.1     | 013378  |        | EN 4 Cutting edges          |
|                                                                                     | 25.0    | 5.5     | 1.1     | 013376  |        | DE 4 Schneidkanten          |
|                                                                                     | 30.0    | 5.5     | 1.1     | 013379  |        | FR 4 Tranchants             |
|                                                                                     | 35.0    | 5.5     | 1.1     | 013377  | 013893 | IT 4 Taglienti              |
|                                                                                     | 40.0    | 5.5     | 1.1     | 013380  |        | ES 4 Filos de corte         |
|                                                                                     | 44.5    | 5.5     | 1.1     | 013375  | 030873 |                             |
|                                                                                     | 50.0    | 5.5     | 1.1     | 013381  | 013900 |                             |

EN Systems Leitz, Oertli  
 DE Systeme Leitz, Oertli  
 FR Systèmes Leitz, Oertli  
 IT Sistemi Leitz, Oertli  
 ES Sistemas Leitz, Oertli

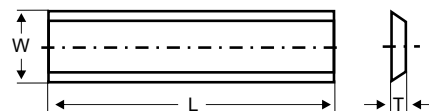


For Systems Leitz and Oertli

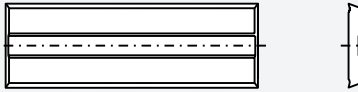
| For Leitz system*                                                                   | L<br>mm | W<br>mm | T<br>mm | T04F-CR<br>Microfinish | T10MG<br>Microfinish | T12SMG<br>Microfinish |
|-------------------------------------------------------------------------------------|---------|---------|---------|------------------------|----------------------|-----------------------|
|    | 7.7     | 8.0     | 1.5     | 142707                 | 014042               | 142648                |
|                                                                                     | 9.7     | 8.0     | 1.5     | 142708                 | 014066               | 142649                |
|                                                                                     | 11.7    | 8.0     | 1.5     | 142709                 | 014044               | 142650                |
|                                                                                     | 14.7    | 8.0     | 1.5     | 129343                 | 014046               | 142651                |
|                                                                                     | 19.7    | 8.0     | 1.5     | 142710                 | 014048               | 142653                |
|                                                                                     | 24.7    | 8.0     | 1.5     | 142711                 | 014069               | 142654                |
|                                                                                     | 30.0    | 8.0     | 1.5     | 142712                 | 014050               | 142656                |
|                                                                                     | 35.0    | 8.0     | 1.5     | 142713                 | 014052               | 142657                |
|                                                                                     | 40.0    | 8.0     | 1.5     | 142714                 | 129364               | 142658                |
|                                                                                     | 45.0    | 8.0     | 1.5     | 142715                 | 129365               | 142659                |
|                                                                                     | 50.0    | 8.0     | 1.5     | 142716                 | 014056               | 142660                |
|                                                                                     | 60.0    | 8.0     | 1.5     | 142717                 | 014058               | 142661                |
|                                                                                     | 70.0    | 8.0     | 1.5     | 142718                 | 129368               | 142662                |
|                                                                                     | 80.0    | 8.0     | 1.5     | 038329                 | 014060               | 142663                |
|                                                                                     | 100.0   | 8.0     | 1.5     | 142719                 | 014062               | 142664                |
|                                                                                     | 120.0   | 8.0     | 1.5     | 142720                 | 014064               | 142665                |
|                                                                                     | 150.0   | 8.0     | 1.5     | 137028                 | 131896               | 140017                |
|                                                                                     | 160.0   | 8.0     | 1.5     | 134774                 | 102329               | 141256                |
|                                                                                     | 180.0   | 8.0     | 1.5     | 137029                 | 129591               | 140303                |
|                                                                                     | 240.0   | 8.0     | 1.5     | 137030                 | 129593               | 140304                |
|                                                                                     | 260.0   | 8.0     | 1.5     | 134775                 | 134540               | 141257                |
| For Oertli system*                                                                  | L<br>mm | W<br>mm | T<br>mm | T04F-CR                | T10MG                |                       |
|  | 8.8     | 8.0     | 1.5     | 030931                 |                      |                       |
|                                                                                     | 9.0     | 8.0     | 1.5     | 030932                 |                      |                       |
|                                                                                     | 9.5     | 8.0     | 1.5     | 030933                 |                      |                       |
|                                                                                     | 11.0    | 8.0     | 1.5     | 030934                 |                      |                       |
|                                                                                     | 12.0    | 8.0     | 1.5     | 030935                 |                      |                       |
|  | 15.0    | 8.0     | 1.5     | 030936                 | 017198               |                       |
|                                                                                     | 20.0    | 8.0     | 1.5     | 030937                 | 017200               |                       |
|                                                                                     | 25.0    | 8.0     | 1.5     | 030938                 | 017201               |                       |
|                                                                                     | 32.0    | 8.0     | 1.5     | 030940                 | 017203               |                       |
|  | 40.0    | 8.0     | 1.5     | 030941                 | 017204               |                       |
|                                                                                     | 50.0    | 8.0     | 1.5     | 030942                 | 017206               |                       |
|                                                                                     | 60.0    | 8.0     | 1.5     | 030943                 | 017207               |                       |
|                                                                                     | 80.0    | 8.0     | 1.5     | 030944                 | 017209               |                       |
|                                                                                     | 100.0   | 8.0     | 1.5     | 030945                 | 017210               |                       |
|  | 12.0    | 12.0    | 1.5     | 034294                 | 034295               |                       |

EN For use in Leitz/Oertli-cutterheads only  
 DE Nur zur Verwendung in Messerköpfen der Firma Leitz bzw. Oertli  
 FR Utilisation limitée aux porte outils des entreprises Leitz et Oertli  
 IT Da usare solo su teste portacoltelli della Leitz - Oertli  
 ES Sólo para empleo con portacuchillas de la firma Leitz/Oertli

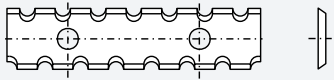
EN System KWO/Versofix  
 DE System KWO/Versofix  
 FR Système KWO/Versofix  
 IT Sistema KWO/Versofix  
 ES Sistema KWO/Versofix

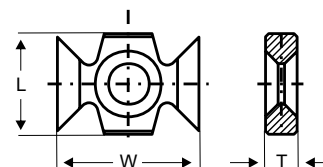


For SystemKWO/Versofix

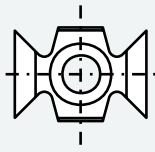
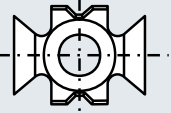
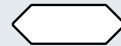
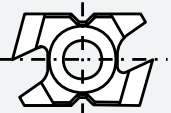
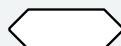
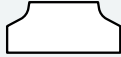
| For KWO/Versofix system*                                                          | L<br>mm | W<br>mm | T<br>mm | T03SMG<br>TiN-coated | T10MG<br>TiN-coated |
|-----------------------------------------------------------------------------------|---------|---------|---------|----------------------|---------------------|
|  | 20.0    | 5.5     | 1.1     | 049525               | 049526              |
|                                                                                   | 30.0    | 6.5     | 1.1     | 101074               | 101075              |
|                                                                                   | 50.0    | 6.5     | 1.1     | 101078               | 101079              |
|                                                                                   | 20.0    | 10.0    | 1.5     | 014273               | 030841              |
|                                                                                   | 30.0    | 10.0    | 1.5     | 014275               | 030842              |
|                                                                                   | 50.0    | 10.0    | 1.5     | 014277               | 030843              |
|                                                                                   |         |         |         |                      |                     |
|                                                                                   |         |         |         |                      |                     |
|                                                                                   |         |         |         |                      |                     |

EN Reversible knives with chip breakers  
 DE Wendeschneidplatten mit Spanbrechernuten  
 FR Plaquettes réversibles avec brise copeaux  
 IT Coltellini con rompitruciolo  
 ES Cuchillas reversibles con rompevirutas

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | a<br>mm | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|
|  | 30.0    | 12.0    | 1.5     | 14.0    | 013117  |
|                                                                                     | 50.0    | 12.0    | 1.5     | 26.0    | 013127  |
|                                                                                     | 60.0    | 12.0    | 1.5     | 26.0    | 108318  |
|                                                                                     |         |         |         |         |         |



EN Edge rounding knives  
 DE Kantenrunder  
 FR Couteaux brise-arrête  
 IT Spigolatori  
 ES Cuchillas para aristas

|                                                                                                                          |                                                                                     | L<br>mm | W<br>mm | T<br>mm | Type           | T10MG  |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|---------|---------|----------------|--------|
|                                         |    | 16.0    | 22.0    | 5.0     | TKM 45°        | 032292 |
|                                                                                                                          |    | 16.0    | 22.0    | 5.0     | TKM R 1.5      | 032294 |
|                                                                                                                          |                                                                                     | 16.0    | 22.0    | 5.0     | TKM R 2.0      | 032295 |
|                                                                                                                          |                                                                                     | 16.0    | 22.0    | 5.0     | TKM R 2.5      | 032296 |
|                                                                                                                          |                                                                                     | 16.0    | 22.0    | 5.0     | TKM R 3.0      | 032297 |
|                                                                                                                          |                                                                                     | 16.0    | 22.0    | 5.0     | TKM R 4.0      | 032299 |
|                                                                                                                          |                                                                                     | 16.0    | 22.0    | 6.0     | TKM R 5.0      | 032301 |
| <br>For Leitz-system<br>„Mechanical“ * |    | 15.0    | 20.0    | 8.0     | TKM 11/0 - 45° | 032304 |
|                                                                                                                          |  | 15.0    | 22.3    | 9.0     | TKM 12/0 R3    | 032306 |
|                                                                                                                          |                                                                                     | 15.0    | 20.0    | 7.3     | TKM 12/3 R2    | 032308 |
|                                                                                                                          |                                                                                     | 15.0    | 20.0    | 7.0     | TKM 12/4 R1.5  | 032310 |
|                                                                                                                          |                                                                                     |         |         |         |                |        |
| <br>For Leitz-system<br>„BG-Test“ *   |  | 15.0    | 23.0    | 8.0     | TKM 21/0 - 45° | 032316 |
|                                                                                                                          |  | 15.0    | 23.0    | 9.0     | TKM 22/0 R3    | 032318 |
|                                                                                                                          |                                                                                     | 15.0    | 23.0    | 7.3     | TKM 22/3 R2    | 032320 |
|                                                                                                                          |  | 15.0    | 25.7    | 7.3     | TKM 24/0 R5    | 032327 |
|                                                                                                                          |                                                                                     | 15.0    | 25.7    | 7.3     | TKM 24/1 R5    | 032326 |
|                                                                                                                          |  |         |         |         |                |        |



TOOLS CUT BETTER WITH TIGRA



TOOLS CUT BETTER WITH TIGRA





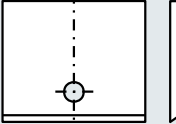
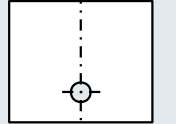
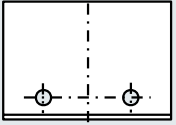
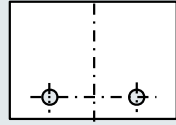
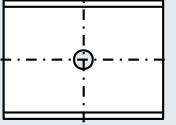
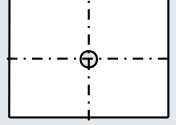
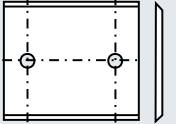
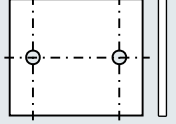
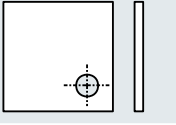
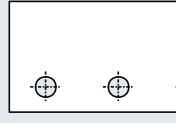
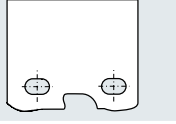
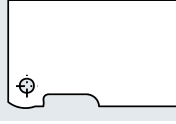
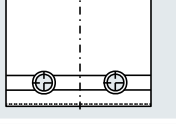
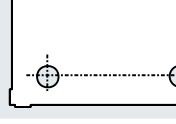
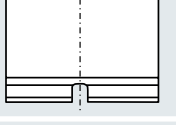
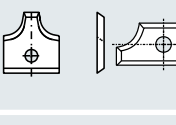
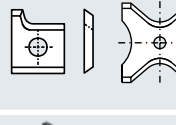
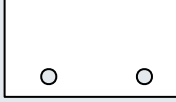
- EN Blanks for profiling and radius knives
- DE Blanketts zum Profilieren und Radiesplatten
- FR Plaquettes à profiler et plaquettes profilées
- IT Placchette da profilare e placchette profilate
- ES Placas para perfilar y perfiladas



TOOLS CUT BETTER WITH TIGRA

---

- EN Blanks for profiling and radius knives  
 DE Blanketts zum Profilieren und Radienplatten  
 FR Plaquettes à profiler et plaquettes profilées  
 IT Placchette da profilare e placchette profilate  
 ES Placas para perfilar y perfiladas

|                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                                                                           |         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    |    | <p>EN With 1 bore hole at the bottom<br/>         DE Mit 1 Bohrung unten<br/>         FR Avec 1 trou en bas<br/>         IT Con 1 foro basso<br/>         ES Con 1 taladro abajo</p>                                                                                                                                                      | 44 - 46 |
|    |    | <p>EN With 2 bore holes at the bottom<br/>         DE Mit 2 Bohrungen unten<br/>         FR Avec 2 trous en bas<br/>         IT Con 2 fori bassi<br/>         ES Con 2 taladros abajo</p>                                                                                                                                                 | 47 - 51 |
|    |    | <p>EN With 1 bore hole in the center<br/>         DE Mit 1 Bohrung mittig<br/>         FR Avec 1 trou au centre<br/>         IT Con 1 foro centrale<br/>         ES Con 1 taladro en el centro</p>                                                                                                                                        | 52      |
|   |   | <p>EN With 2 bore holes in the center<br/>         DE Mit 2 Bohrungen mittig<br/>         FR Avec 2 trous au centre<br/>         IT Con 2 fori centrali<br/>         ES Placas con 2 taladros en el centro</p>                                                                                                                            | 53 - 54 |
|  |  | <p>EN Special blanks for profiling<br/>         DE Spezial-Blanketts zum Profilieren<br/>         FR Plaquettes spéciales à profiler<br/>         IT Placchette speciali da profilare<br/>         ES Placas especiales para perfilar</p>                                                                                                 | 55      |
|  |  | <p>EN Superprofiler<br/>         DE Superprofiler<br/>         FR Superprofiler<br/>         IT Superprofiler<br/>         ES Superprofiler</p>                                                                                                                                                                                           | 56 - 57 |
|  |  | <p>EN Systems Freud / Leuco / Oertli, with crossgroove<br/>         DE Systeme Freud / Leuco / Oertli, mit Quernut<br/>         FR Systèmes Freud / Leuco / Oertli, avec rainure transversale<br/>         IT Sistemi Freud / Leuco / Oertli, con scanalatura<br/>         ES Sistemas Freud / Leuco / Oertli, con ranura transversal</p> | 58 - 60 |
|  |  | <p>EN System Profilcut, with crossgroove<br/>         DE System Profilcut, mit Quernut<br/>         FR Système Profilcut, avec rainure transversale<br/>         IT Sistema Profilcut, con scanalatura<br/>         ES Sistema Profilcut, con ranura transversal</p>                                                                      | 61 - 64 |
|  |  | <p>EN Without bores<br/>         DE Ohne Bohrung<br/>         FR Sans trous<br/>         IT Senza fori<br/>         ES Sin taladro</p>                                                                                                                                                                                                    | 64 - 65 |
|  |  | <p>EN Profiled &amp; preprofiled standard blanks<br/>         DE Profilierte und vorprofilierte Standardblanketts<br/>         FR Plaquettes standard profilées &amp; préprofilées<br/>         IT Placchette profilate &amp; presagomate standard<br/>         ES Placas perfiladas &amp; preperfiladas standard</p>                     | 66 - 70 |
|  |  | <p>EN Backing plates &amp; packing<br/>         DE Stützplatten &amp; Verpackungen<br/>         FR Supports &amp; emballages<br/>         IT Supporti &amp; imballi<br/>         ES Placas de soporte &amp; embalaje</p>                                                                                                                  | 70 - 71 |

- EN Blanks for profiling and radius knives - Carbide grades and their applications  
 DE Blanketts zum Profilieren und Radienplatten - Hartmetallsorten und ihre Anwendungen  
 FR Plaquettes à profiler et plaquettes profilées - Les nuances de carbures et leurs applications  
 IT Placchette da profilare e placchette profilate - I tipi di metallo duro e le loro applicazioni  
 ES Placas para perfilar y perfiladas - Calidades de metal duro y sus aplicaciones

| EN | TIGRA grade                 | ISO              | USA         | Hardness                                                                            | Toughness                                                                             | Bending strength                                                                      |
|----|-----------------------------|------------------|-------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DE | TIGRA - Sorte               | ISO              | USA         | Härte                                                                               | Zähigkeit                                                                             | Biegebruchfestigkeit                                                                  |
| FR | Nuance TIGRA                | ISO              | USA         | Dureté                                                                              | Ténacité                                                                              | Résistance à la flexion                                                               |
| IT | Tipo TIGRA                  | ISO              | Stati Uniti | Durezza                                                                             | Tenacità                                                                              | Resistenza flessionale                                                                |
| ES | Calidad TIGRA               | ISO              | EE.UU.      | Dureza                                                                              | Tenacidad                                                                             | Resistencia a la flexión                                                              |
|    | <b>T03SMG</b>               | <b>K01</b>       | <b>C4++</b> |    |    |    |
|    | <b>T04MG-CR</b>             | <b>K01</b>       | <b>C4+</b>  |    |    |    |
|    | <b>T04F-CR</b><br>UNIVERSAL | <b>K05</b>       | <b>C4</b>   |   |   |   |
|    | <b>T10MG</b>                | <b>K10 - K40</b> | <b>C3+</b>  |  |  |  |
|    | <b>TL15*</b>                | <b>K10 - K40</b> | <b>C3+</b>  |  |  |  |
|    | <b>TL20*</b>                | <b>K10 - K40</b> | <b>C3+</b>  |  |  |  |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif -  
 inossidabile - anticorrosivo

\* Special binder - Spezialbinder - Liant spécial - Legante speciale -  
 Composición especial

EN For technical data, please refer to the pages 4-5.

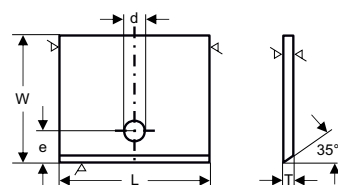
DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.

FR Pour les données techniques, veuillez voir aux pages 4-5.

| Plastics<br>Plastik<br>Plastiques<br>Plastica<br>Plásticos | HDF<br>HDF<br>HDF<br>HDF<br>HDF | MDF<br>MDF<br>MDF<br>MDF<br>MDF | Chipboard<br>Spanplatte<br>Panneaux de particule<br>Truciolare<br>Panel de aglomerado | Hardwood<br>Hartholz<br>Bois dur<br>Legno duro<br>Madera dura | Softwood<br>Weichholz<br>Bois tendre<br>Legno tenero<br>Madera blanda | Main usage<br>Hauptverwendung<br>Usage principal<br>Uso principale<br>Uso principal                                                                                                                                                           |
|------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓                                                          | ✓                               | ✓                               | ✓                                                                                     | ○                                                             | ✗                                                                     | EN Man-made materials<br>DE Künstlich hergestellte Materialien<br>FR Matériaux synthétiques<br>IT Materiali artificiali<br>ES Materiales sintéticos                                                                                           |
| ✓                                                          | ○                               | ✓                               | ✓                                                                                     | ✓                                                             | ✗                                                                     | EN Tropical, abrasive hard woods; chipboard<br>DE Tropische, abrasive Harthölzer; Spanplatte<br>FR Tropical, abrasif bois durs; panneaux<br>IT Legni duri tropicali, abrasivi; truciolare<br>ES Tropical, maderas duras abrasivas; aglomerado |
| ✓                                                          | ○                               | ✓                               | ✓                                                                                     | ✓                                                             | ✓                                                                     | EN Universal use<br>DE Universeller Einsatz<br>FR Usage universel<br>IT Uso universale<br>ES Uso universal                                                                                                                                    |
| ○                                                          | ✗                               | ✗                               | ✗                                                                                     | ✓                                                             | ✓                                                                     | EN Natural wood, window tooling<br>DE Naturholz, Fensterwerkzeuge<br>FR Bois naturel, outillage de fenêtre<br>IT Legni naturali, utensili per finestre<br>ES Madera natural, utillaje de ventana                                              |
| ✗                                                          | ✗                               | ✗                               | ✗                                                                                     | ✓                                                             | ✓                                                                     | EN Wood with knots, high clearance angles<br>DE Holz mit Ästen, große Freiwinkel<br>FR Bois avec des noeuds, grands angles de dépouille<br>IT Legni nodosi, ampi angoli di spoglia<br>ES Madera con nudos, ángulos largos                     |
| ✗                                                          | ✗                               | ✗                               | ✗                                                                                     | ✓                                                             | ✓                                                                     | EN Northern European soft woods<br>DE Nordeuropäische Weichhölzer<br>FR Bois tendre d'Europe du Nord<br>IT Legni teneri del Nord Europa<br>ES Madera blanda del norte de Europa                                                               |

- ✓ best performance
- ✓ very good performance
- acceptable
- ✗ not suitable

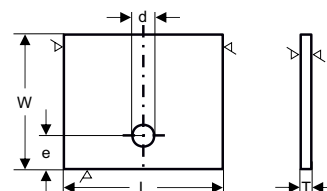
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



EN With 1 bore hole at the bottom  
 DE Mit 1 Bohrung unten  
 FR Avec 1 trou en bas  
 IT Con 1 foro basso  
 ES Con 1 taladro abajo

| L<br>mm | W<br>mm | T<br>mm | d<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|---------|---------|---------|---------|---------|---------|----------|--------|
| 15.0    | 15.4    | 2.0     | 4.1     | 6.3     | 014535  | 106450   | 014541 |
| 15.0    | 20.4    | 2.0     | 4.1     | 6.3     | 014553  | 106467   | 014561 |
| 15.0    | 25.4    | 2.0     | 4.1     | 6.3     | 014573  | 106453   | 014579 |
| 15.0    | 30.4    | 2.0     | 4.1     | 6.3     | 014590  | 106454   | 030953 |
| 15.8    | 30.4    | 2.0     | 4.1     | 6.3     | 014598  | 106455   | 014602 |
| 16.0    | 20.4    | 2.0     | 4.1     | 6.3     | 014609  | 106470   | 030956 |
| 19.8    | 30.4    | 2.0     | 4.1     | 6.3     | 014614  | 106456   | 030958 |
| 20.0    | 20.4    | 2.0     | 4.1     | 6.3     | 014648  | 104857   | 014657 |
| 20.0    | 25.4    | 2.0     | 4.1     | 6.3     | 014684  | 104858   | 014696 |
| 20.0    | 30.4    | 2.0     | 4.1     | 6.3     | 014723  | 104629   | 014733 |
| 20.0    | 35.4    | 2.0     | 4.1     | 6.3     | 014750  | 104711   | 014758 |
| 20.0    | 40.4    | 2.0     | 4.1     | 6.3     | 014768  | 106457   | 030961 |
| 25.0    | 20.4    | 2.0     | 4.1     | 6.3     | 014783  | 106458   | 014792 |
| 25.0    | 25.4    | 2.0     | 4.1     | 6.3     | 014812  | 104663   | 014824 |
| 25.0    | 30.4    | 2.0     | 4.1     | 6.3     | 014848  | 105103   | 014861 |
| 25.0    | 35.4    | 2.0     | 4.1     | 6.3     | 014880  | 106095   | 014889 |
| 30.0    | 20.4    | 2.0     | 4.1     | 6.3     | 014917  | 106460   | 014925 |
| 30.0    | 25.4    | 2.0     | 4.1     | 6.3     | 014970  | 104664   | 014986 |
| 30.0    | 30.4    | 2.0     | 4.1     | 6.3     | 015045  | 105255   | 015059 |
| 30.0    | 35.4    | 2.0     | 4.1     | 6.3     | 015104  | 106461   | 015116 |
| 30.0    | 40.4    | 2.0     | 4.1     | 6.3     | 015148  | 106463   | 015157 |
| 35.0    | 20.4    | 2.0     | 4.1     | 6.3     | 015261  | 106465   | 015267 |
| 35.0    | 25.4    | 2.0     | 4.1     | 6.3     | 015286  | 104922   | 015293 |
| 35.0    | 30.4    | 2.0     | 4.1     | 6.3     | 015334  | 106466   | 015342 |
| 35.0    | 35.4    | 2.0     | 4.1     | 6.3     | 015368  | 105510   | 015375 |
| 35.0    | 40.4    | 2.0     | 4.1     | 6.3     | 015398  | 105203   | 030969 |

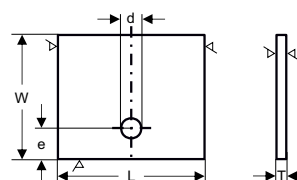
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



EN With 1 bore hole at the bottom  
 DE Mit 1 Bohrung unten  
 FR Avec 1 trou en bas  
 IT Con 1 foro basso  
 ES Con 1 taladro abajo

| L<br>mm | W<br>mm | T<br>mm | d<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|---------|---------|---------|---------|---------|---------|----------|--------|
| 15.0    | 15.4    | 2.0     | 4.1     | 6.5     | 014536  | 106468   | 030983 |
| 15.0    | 20.4    | 2.0     | 4.1     | 6.5     | 014554  | 106469   | 030984 |
| 15.0    | 25.4    | 2.0     | 4.1     | 6.5     | 014574  | 106471   | 014580 |
| 15.0    | 30.4    | 2.0     | 4.1     | 6.5     | 014591  | 106472   | 030987 |
| 16.0    | 20.4    | 2.0     | 4.1     | 6.5     | 014610  | 105221   | 030990 |
| 18.0    | 18.3    | 2.0     | 4.1     | 6.0     | 018849  | 106473   | 018850 |
| 20.0    | 20.4    | 1.5     | 4.1     | 6.5     | 040831  | 106474   | 040940 |
| 20.0    | 20.4    | 2.0     | 4.1     | 6.5     | 014649  | 106475   | 014659 |
| 20.0    | 25.4    | 2.0     | 4.1     | 6.5     | 014686  | 106476   | 014698 |
| 20.0    | 25.3    | 2.0     | 4.1     | 6.0     | 018851  | 106477   | 030996 |
| 20.0    | 30.4    | 2.0     | 4.1     | 6.5     | 014725  | 106478   | 014735 |
| 20.0    | 35.4    | 2.0     | 4.1     | 6.5     | 014751  | 106479   | 030999 |
| 20.0    | 40.4    | 2.0     | 4.1     | 6.5     | 031018  | 106480   | 012954 |
| 24.0    | 28.3    | 2.0     | 4.1     | 6.0     | 018852  | 106481   | 018853 |
| 25.0    | 25.4    | 2.0     | 4.1     | 6.5     | 014813  | 106482   | 014827 |
| 25.0    | 30.4    | 2.0     | 4.1     | 6.5     | 014849  | 106483   | 014863 |
| 25.0    | 30.4    | 2.0     | 5.8     | 6.5     | 019470  |          | 032399 |
| 25.0    | 35.4    | 2.0     | 4.1     | 6.5     | 014881  | 106485   | 014890 |
| 30.0    | 20.4    | 2.0     | 4.1     | 6.5     | 014918  | 106486   | 014927 |
| 30.0    | 25.4    | 2.0     | 4.1     | 6.5     | 014972  | 106487   | 014988 |
| 30.0    | 30.4    | 2.0     | 4.1     | 6.5     | 015047  | 106488   | 015060 |
| 30.0    | 30.4    | 2.0     | 6.0     | 6.5     | 019385  | 106490   | 032403 |
| 30.0    | 35.4    | 2.0     | 4.1     | 6.5     | 015106  | 106491   | 031005 |
| 30.0    | 40.4    | 2.0     | 4.1     | 6.5     | 015149  | 106493   | 015158 |
| 32.0    | 22.3    | 2.0     | 4.1     | 6.0     | 018855  | 106494   | 031008 |
| 35.0    | 20.4    | 2.0     | 4.1     | 6.5     | 015262  | 106495   | 031010 |
| 35.0    | 25.4    | 2.0     | 4.1     | 6.5     | 015287  | 106496   | 015294 |
| 35.0    | 30.4    | 2.0     | 4.1     | 6.5     | 015335  | 106497   | 031013 |
| 35.0    | 35.4    | 2.0     | 4.1     | 6.5     | 015369  | 106498   | 015376 |
| 35.0    | 40.4    | 2.0     | 4.1     | 6.5     | 015399  | 106499   | 015405 |
| 35.0    | 40.4    | 2.0     | 6.1     | 6.0     | 019731  | 106500   | 032407 |
| 40.0    | 30.3    | 2.0     | 4.1     | 6.0     | 018856  | 106501   | 031017 |

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



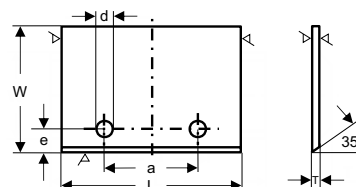
**Italian  
Style**

EN With 1 bore hole at the bottom  
 DE Mit 1 Bohrung unten  
 FR Avec 1 trou en bas  
 IT Con 1 foro basso  
 ES Con 1 taladro abajo

|  | L    | W    | T   | d   | e   | T04F-CR | T04MG-CR | TL15   |
|--|------|------|-----|-----|-----|---------|----------|--------|
|  | mm   | mm   | mm  | mm  | mm  |         |          |        |
|  | 15.0 | 15.4 | 2.0 | 4.5 | 6.5 | 031021  | 106441   | 031022 |
|  | 15.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034989  | 106503   | 031023 |
|  | 15.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034971  | 106504   | 031025 |
|  | 15.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034972  | 103432   | 031027 |
|  | 20.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034973  | 106505   | 031029 |
|  | 20.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034974  | 106506   | 031030 |
|  | 20.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034975  | 106181   | 031031 |
|  | 20.0 | 35.4 | 2.0 | 4.5 | 6.5 | 034976  | 106507   | 031032 |
|  | 25.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034977  | 106508   | 031033 |
|  | 25.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034978  | 106509   | 031034 |
|  | 25.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034979  | 106510   | 031035 |
|  | 25.0 | 35.4 | 2.0 | 4.5 | 6.5 | 034980  | 106511   | 031036 |
|  | 30.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034981  | 106512   | 031037 |
|  | 30.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034982  | 106513   | 031038 |
|  | 30.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034983  | 106514   | 031039 |
|  | 30.0 | 35.4 | 2.0 | 4.5 | 6.5 | 034984  | 106515   | 031040 |
|  | 35.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034986  | 106516   | 031042 |
|  | 35.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034987  | 106518   | 031043 |

|  | L    | W    | T   | d   | e   | T04F-CR | T04MG-CR | TL15   |
|--|------|------|-----|-----|-----|---------|----------|--------|
|  | mm   | mm   | mm  | mm  | mm  |         |          |        |
|  | 15.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034970  | 106519   | 031047 |
|  | 15.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034990  | 106520   | 014586 |
|  | 15.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034991  | 106521   | 031050 |
|  | 20.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034992  | 106522   | 014667 |
|  | 20.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034993  | 106523   | 014710 |
|  | 20.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034994  | 106525   | 014743 |
|  | 20.0 | 35.4 | 2.0 | 4.5 | 6.5 | 034995  | 106526   | 031059 |
|  | 25.0 | 20.4 | 2.0 | 4.5 | 6.5 | 041075  | 106527   | 041076 |
|  | 25.0 | 25.4 | 2.0 | 4.5 | 6.5 | 034996  | 106528   | 014836 |
|  | 25.0 | 30.4 | 2.0 | 4.5 | 6.5 | 034997  | 106529   | 031064 |
|  | 25.0 | 35.4 | 2.0 | 4.5 | 6.5 | 038344  | 106530   | 041077 |
|  | 30.0 | 20.4 | 2.0 | 4.5 | 6.5 | 034998  | 106531   | 031067 |
|  | 30.0 | 25.4 | 2.0 | 4.5 | 6.5 | 038900  | 106532   | 041079 |
|  | 30.0 | 30.4 | 2.0 | 4.5 | 6.5 | 015066  | 106533   | 031069 |
|  | 30.0 | 35.4 | 2.0 | 4.5 | 6.5 | 042107  | 106534   | 100457 |
|  | 30.0 | 40.4 | 2.0 | 4.5 | 6.5 | 042108  | 106535   | 100459 |

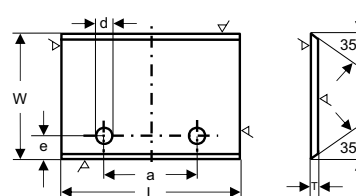
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



EN With 2 bore holes at the bottom  
 DE Mit 2 Bohrungen unten  
 FR Avec 2 trous en bas  
 IT Con 2 fori bassi  
 ES Con 2 taladros abajo

| L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|---------|---------|---------|---------|---------|---------|---------|----------|--------|
| 24.0    | 20.4    | 2.0     | 4.1     | 12.0    | 6.0     | 017436  | 106537   | 041297 |
| 30.0    | 20.4    | 2.0     | 4.1     | 14.0    | 6.0     | 017771  | 106538   | 031074 |
| 30.0    | 20.4    | 2.0     | 4.1     | 14.0    | 5.5     | 014937  | 106539   | 031071 |
| 30.0    | 20.4    | 2.0     | 4.1     | 14.0    | 6.3     | 039328  | 106584   | 041234 |
| 30.0    | 25.4    | 2.0     | 4.1     | 14.0    | 5.5     | 014999  | 106541   | 031167 |
| 30.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.3     | 015007  | 106542   | 015009 |
| 30.0    | 30.4    | 2.0     | 4.1     | 14.0    | 5.5     | 015072  | 106543   | 031078 |
| 30.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.3     | 039329  | 106547   | 041237 |
| 30.0    | 35.4    | 2.0     | 4.1     | 14.0    | 5.5     | 015125  | 106550   | 015130 |
| 30.0    | 35.4    | 2.0     | 4.1     | 14.0    | 6.3     | 019495  | 106552   | 041240 |
| 30.0    | 40.4    | 2.0     | 4.1     | 20.0    | 5.5     | 015164  | 106554   | 031083 |
| 31.8    | 25.4    | 2.0     | 4.1     | 16.0    | 6.3     | 041067  | 106556   | 041349 |
| 35.0    | 20.4    | 2.0     | 4.1     | 14.0    | 5.5     | 031085  | 106557   | 015276 |
| 35.0    | 20.4    | 2.0     | 4.1     | 20.0    | 5.5     | 031087  | 106558   | 015278 |
| 35.0    | 20.4    | 2.0     | 4.1     | 26.0    | 5.5     | 015274  | 106560   | 031092 |
| 35.0    | 25.4    | 2.0     | 4.1     | 26.0    | 5.5     | 015305  | 106561   | 015313 |
| 35.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.3     | 039575  | 106562   | 041243 |
| 35.0    | 25.4    | 2.0     | 4.1     | 18.0    | 6.3     | 019885  | 106563   | 041337 |
| 35.0    | 30.4    | 2.0     | 4.1     | 20.0    | 5.5     | 015356  | 106564   | 015357 |
| 35.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.3     | 039576  | 104828   | 041246 |
| 35.0    | 35.4    | 2.0     | 4.1     | 14.0    | 6.3     | 039577  | 106566   | 041249 |
| 35.0    | 40.4    | 2.0     | 4.1     | 20.0    | 5.5     | 015410  | 106567   | 015415 |
| 35.0    | 40.4    | 2.0     | 4.1     | 14.0    | 6.3     | 039578  | 106568   | 041252 |
| 40.0    | 20.4    | 2.0     | 4.1     | 26.0    | 5.5     | 015440  | 106569   | 015451 |
| 40.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.3     | 039566  | 105622   | 036345 |
| 40.0    | 25.4    | 2.0     | 4.1     | 20.0    | 5.5     | 015502  | 106570   | 031100 |
| 40.0    | 25.4    | 2.0     | 4.1     | 26.0    | 5.5     | 015482  | 106572   | 015497 |
| 40.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.0     | 017623  | 106573   | 031103 |
| 40.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.3     | 039330  | 106097   | 041257 |
| 50.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.3     | 039392  | 106588   | 036337 |
| 50.0    | 25.4    | 2.0     | 4.1     | 26.0    | 5.5     | 015841  | 106589   | 015852 |
| 50.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.3     | 039568  | 104829   | 036341 |

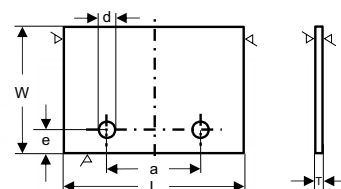
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



EN With 2 bore holes at the bottom  
 DE Mit 2 Bohrungen unten  
 FR Avec 2 trous en bas  
 IT Con 2 fori bassi  
 ES Con 2 taladros abajo

| L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|---------|---------|---------|---------|---------|---------|---------|----------|--------|
| 40.0    | 30.0    | 2.0     | 4.1     | 20.0    | 5.5     | 015542  | 106575   | 015553 |
| 40.0    | 30.0    | 2.0     | 4.1     | 26.0    | 5.5     | 015560  | 106576   | 015569 |
| 40.0    | 30.0    | 2.0     | 4.1     | 26.0    | 6.3     | 015571  | 105656   | 038185 |
| 40.0    | 35.0    | 2.0     | 4.1     | 26.0    | 5.5     | 015611  | 106577   | 015624 |
| 40.0    | 35.0    | 2.0     | 4.1     | 26.0    | 6.0     | 015629  | 106578   | 031106 |
| 40.0    | 35.0    | 2.0     | 4.1     | 20.0    | 5.5     | 015630  | 106579   | 015632 |
| 40.0    | 35.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039331  | 104665   | 041262 |
| 40.0    | 40.0    | 2.0     | 4.1     | 26.0    | 6.0     | 015646  | 106580   | 015652 |
| 40.0    | 40.0    | 2.0     | 4.1     | 20.0    | 6.0     | 015655  | 106582   | 031110 |
| 40.0    | 40.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039567  | 105990   | 038186 |
| 40.0    | 45.0    | 2.0     | 4.1     | 26.0    | 6.0     | 019372  | 106583   | 019373 |
| 50.0    | 16.0    | 2.0     | 4.1     | 26.0    | 5.5     | 017639  | 106585   | 031113 |
| 50.0    | 16.0    | 2.0     | 4.1     | 26.0    | 6.0     | 015794  | 106586   | 031115 |
| 50.0    | 20.0    | 2.0     | 4.1     | 26.0    | 5.5     | 015804  | 106587   | 015815 |
| 50.0    | 30.0    | 2.0     | 4.1     | 26.0    | 5.5     | 015871  | 106590   | 015880 |
| 50.0    | 30.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039569  | 105657   | 038188 |
| 50.0    | 35.0    | 2.0     | 4.1     | 26.0    | 6.0     | 015904  | 106592   | 031122 |
| 50.0    | 35.0    | 2.0     | 4.1     | 26.0    | 5.5     | 015905  | 106593   | 031125 |
| 50.0    | 35.0    | 2.0     | 4.1     | 26.0    | 6.3     | 018387  | 105204   | 041270 |
| 50.0    | 40.0    | 2.0     | 4.1     | 34.0    | 6.0     | 015916  | 106594   | 031128 |
| 50.0    | 40.0    | 2.0     | 4.1     | 26.0    | 6.3     | 019030  | 105989   | 035746 |
| 50.0    | 45.0    | 2.0     | 4.1     | 34.0    | 6.0     | 015940  | 106595   | 031130 |
| 50.0    | 45.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039579  | 106596   | 041275 |
| 50.0    | 50.0    | 2.0     | 4.1     | 34.0    | 6.0     | 015953  | 106597   | 031133 |
| 60.0    | 20.0    | 2.0     | 4.1     | 26.0    | 5.5     | 016001  | 106599   | 031136 |
| 60.0    | 25.0    | 2.0     | 4.1     | 26.0    | 5.5     | 016031  | 106601   | 016040 |
| 60.0    | 25.0    | 2.0     | 4.1     | 44.0    | 5.5     | 016046  | 106602   | 031142 |
| 60.0    | 30.0    | 2.0     | 4.1     | 26.0    | 6.0     | 016068  | 106603   | 016074 |
| 60.0    | 30.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039571  | 104861   | 038189 |
| 60.0    | 30.0    | 2.0     | 4.1     | 44.0    | 6.0     | 016076  | 106604   | 016077 |
| 60.0    | 35.0    | 2.0     | 4.1     | 26.0    | 6.0     | 016114  | 106605   | 016123 |
| 60.0    | 35.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039572  | 104859   | 038190 |
| 60.0    | 35.0    | 2.0     | 4.1     | 44.0    | 6.0     | 016126  | 106606   | 031150 |
| 60.0    | 40.0    | 2.0     | 4.1     | 26.0    | 6.3     | 039573  | 106098   | 036782 |
| 60.0    | 40.0    | 2.0     | 4.1     | 44.0    | 6.0     | 016158  | 106607   | 016175 |
| 60.0    | 45.0    | 2.0     | 4.1     | 44.0    | 6.0     | 019375  | 106609   | 019376 |
| 75.0    | 30.0    | 2.0     | 4.1     | 44.0    | 6.0     | 016258  | 106610   | 031154 |
| 80.0    | 30.0    | 2.0     | 4.1     | 60.0    | 6.3     | 039580  | 106003   | 041285 |
| 80.0    | 35.0    | 2.0     | 4.1     | 60.0    | 6.3     | 041286  | 106273   | 041289 |
| 80.0    | 40.0    | 2.0     | 4.1     | 60.0    | 6.3     | 041292  | 106612   | 035745 |
| 80.0    | 45.0    | 2.5     | 4.1     | 60.0    | 6.0     | 016321  | 106613   | 016324 |
| 100.0   | 45.0    | 2.5     | 4.2     | 80.0    | 6.0     | 014519  | 105295   | 031161 |
| 120.0   | 45.0    | 2.5     | 4.2     | 80.0    | 6.0     | 014528  | 106615   | 014529 |

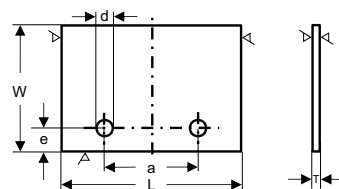
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



EN With 2 bore holes at the bottom  
 DE Mit 2 Bohrungen unten  
 FR Avec 2 trous en bas  
 IT Con 2 fori bassi  
 ES Con 2 taladros abajo

| L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|---------|---------|---------|---------|---------|---------|---------|----------|--------|
| 19.0    | 30.0    | 2.0     | 3.6     | 8.0     | 4.75    | 017790  | 106616   | 031965 |
| 25.4    | 30.6    | 2.0     | 3.6     | 14.3    | 4.75    | 017791  | 106617   | 031968 |
| 30.0    | 20.4    | 2.0     | 4.1     | 14.0    | 6.5     | 014938  | 106621   | 014943 |
| 30.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015000  | 106622   | 015005 |
| 30.0    | 25.4    | 2.0     | 4.1     | 19.0    | 4.75    | 017603  | 106623   | 017604 |
| 30.0    | 25.4    | 2.0     | 4.1     | 19.0    | 6.5     | 019428  | 106624   | 031973 |
| 30.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015073  | 106625   | 015078 |
| 30.0    | 30.2    | 2.0     | 4.1     | 19.0    | 4.75    | 017605  | 106626   | 031976 |
| 30.0    | 30.0    | 2.0     | 3.6     | 19.0    | 4.75    | 017785  | 106627   | 017787 |
| 30.0    | 35.4    | 2.0     | 5.5     | 12.0    | 6.0     | 033964  | 106628   | 041329 |
| 30.0    | 35.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015126  | 106629   | 015132 |
| 30.0    | 40.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015165  | 106630   | 031981 |
| 35.0    | 20.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015275  | 106631   | 031990 |
| 35.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015306  | 106632   | 015314 |
| 35.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015351  | 106633   | 031992 |
| 35.0    | 35.4    | 2.0     | 4.1     | 20.0    | 4.8     | 019831  | 106634   | 041332 |
| 35.0    | 35.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015383  | 106635   | 015386 |
| 35.0    | 40.4    | 2.0     | 4.1     | 14.0    | 6.5     | 015411  | 106636   | 015416 |
| 40.0    | 20.4    | 2.0     | 5.5     | 26.0    | 5.5     | 037885  | 106637   | 041340 |
| 40.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015441  | 106638   | 015452 |
| 40.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015484  | 106639   | 015499 |
| 40.0    | 30.2    | 2.0     | 5.0     | 27.0    | 6.3     | 035290  | 106640   | 039325 |
| 40.0    | 30.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015544  | 106642   | 015554 |
| 40.0    | 30.4    | 2.0     | 6.0     | 26.0    | 5.5     | 019253  | 106643   | 032414 |
| 40.0    | 35.4    | 2.0     | 5.0     | 27.0    | 6.3     | 018955  | 106644   | 041302 |
| 40.0    | 35.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015612  | 106645   | 015625 |
| 40.0    | 35.4    | 2.0     | 6.0     | 26.0    | 5.5     | 019471  | 106646   | 032415 |
| 40.0    | 40.2    | 2.0     | 5.0     | 27.0    | 6.3     | 019002  | 106647   | 041305 |
| 40.0    | 40.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015647  | 106648   | 015654 |
| 40.0    | 40.4    | 2.0     | 6.0     | 26.0    | 5.5     | 019254  | 106649   | 032416 |
| 40.0    | 45.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015676  | 106650   | 031997 |

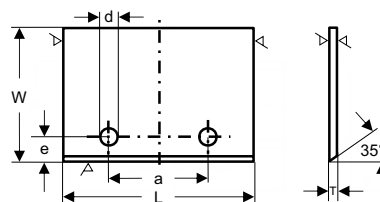
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



EN With 2 bore holes at the bottom  
 DE Mit 2 Bohrungen unten  
 FR Avec 2 trous en bas  
 IT Con 2 fori bassi  
 ES Con 2 taladros abajo

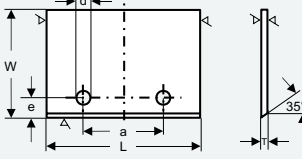
| L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|---------|---------|---------|---------|---------|---------|---------|----------|--------|
| 50.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015805  | 106651   | 015817 |
| 50.0    | 20.4    | 2.0     | 4.1     | 24.0    | 6.0     | 019600  | 106652   | 041343 |
| 50.0    | 25.2    | 2.0     | 5.0     | 26.0    | 6.5     | 019065  | 106653   | 041308 |
| 50.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015843  | 106654   | 015854 |
| 50.0    | 30.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015872  | 106655   | 032001 |
| 50.0    | 30.4    | 2.0     | 6.0     | 26.0    | 6.5     | 019382  | 106656   | 032422 |
| 50.0    | 32.4    | 2.0     | 4.1     | 24.0    | 6.0     | 018857  | 106657   | 032000 |
| 50.0    | 35.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015897  | 106658   | 032002 |
| 50.0    | 40.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015917  | 106659   | 015922 |
| 50.0    | 40.4    | 2.0     | 6.0     | 26.0    | 6.5     | 019383  | 106660   | 032424 |
| 50.0    | 45.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015941  | 106661   | 032006 |
| 50.0    | 50.4    | 2.0     | 4.1     | 26.0    | 6.5     | 015954  | 106663   | 032007 |
| 60.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016002  | 106664   | 032009 |
| 60.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016033  | 106665   | 016042 |
| 60.0    | 30.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016069  | 106666   | 032011 |
| 60.0    | 35.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016116  | 106667   | 016125 |
| 60.0    | 40.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016160  | 106668   | 016177 |
| 80.0    | 25.2    | 2.0     | 4.1     | 60.0    | 6.5     | 035291  | 106669   | 041311 |
| 80.0    | 30.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016276  | 106670   | 016281 |
| 80.0    | 35.4    | 2.0     | 4.1     | 26.0    | 6.5     | 016290  | 106672   | 032016 |

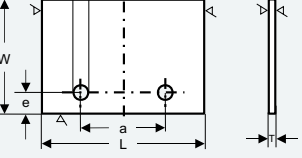
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



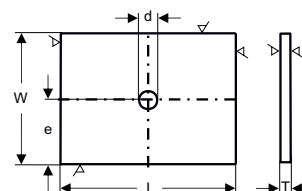
Italian  
Style

EN With 2 bore holes at the bottom  
 DE Mit 2 Bohrungen unten  
 FR Avec 2 trous en bas  
 IT Con 2 fori bassi  
 ES Con 2 taladros abajo

|                                                                                   | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|-----------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|----------|--------|
|  | 30.0    | 25.4    | 2.0     | 4.5     | 14.0    | 6.5     | 035066  | 106686   | 031590 |
|                                                                                   | 30.0    | 30.4    | 2.0     | 4.5     | 14.0    | 6.5     | 012981  | 106687   | 031591 |
|                                                                                   | 30.0    | 35.4    | 2.0     | 4.5     | 14.0    | 6.5     | 035069  | 106688   | 031592 |
|                                                                                   | 40.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 012982  | 106689   | 031597 |
|                                                                                   | 40.0    | 25.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035073  | 106690   | 031598 |
|                                                                                   | 40.0    | 30.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035075  | 106691   | 031599 |
|                                                                                   | 50.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035078  | 106692   | 031600 |
|                                                                                   | 50.0    | 35.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035082  | 106693   | 031601 |
|                                                                                   | 60.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035084  | 106694   | 031603 |
|                                                                                   | 60.0    | 30.4    | 2.0     | 4.5     | 26.0    | 6.5     | 016084  | 106695   | 041090 |
|                                                                                   | 60.0    | 35.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035086  | 106696   | 031604 |
|                                                                                   | 80.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035089  | 106697   | 031608 |
|                                                                                   | 80.0    | 25.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035090  | 106698   | 031609 |

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|----------|--------|
|  | 30.0    | 20.4    | 2.0     | 4.5     | 14.0    | 6.5     | 014947  | 106699   | 050285 |
|                                                                                     | 30.0    | 25.4    | 2.0     | 4.5     | 14.0    | 6.5     | 035067  | 106700   | 015016 |
|                                                                                     | 30.0    | 30.4    | 2.0     | 4.5     | 14.0    | 6.5     | 015085  | 106701   | 015089 |
|                                                                                     | 30.0    | 35.4    | 2.0     | 4.5     | 14.0    | 6.5     | 035070  | 106703   | 015137 |
|                                                                                     | 35.0    | 25.4    | 2.0     | 4.5     | 14.0    | 6.5     | 015320  | 106704   | 015321 |
|                                                                                     | 35.0    | 30.4    | 2.0     | 4.5     | 14.0    | 6.5     | 042115  | 106705   | 050288 |
|                                                                                     | 35.0    | 35.4    | 2.0     | 4.5     | 14.0    | 6.5     | 015389  | 106706   | 015390 |
|                                                                                     | 40.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 015458  | 106707   | 041094 |
|                                                                                     | 40.0    | 25.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035074  | 106708   | 031643 |
|                                                                                     | 40.0    | 30.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035076  | 106709   | 015579 |
|                                                                                     | 40.0    | 35.4    | 2.0     | 4.5     | 26.0    | 6.5     | 012980  | 106710   | 015638 |
|                                                                                     | 40.0    | 40.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035077  | 106711   | 015668 |
|                                                                                     | 50.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035079  | 106712   | 015860 |
|                                                                                     | 50.0    | 25.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035080  | 106713   | 012974 |
|                                                                                     | 50.0    | 30.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035081  | 106714   | 015890 |
|                                                                                     | 50.0    | 35.4    | 2.0     | 4.5     | 26.0    | 6.5     | 042117  | 106715   | 050291 |
|                                                                                     | 50.0    | 40.4    | 2.0     | 4.5     | 26.0    | 6.5     | 042118  | 106716   | 050292 |
|                                                                                     | 60.0    | 20.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035085  | 106717   | 031632 |
|                                                                                     | 60.0    | 25.4    | 2.0     | 4.5     | 26.0    | 6.5     | 041095  | 106718   | 041096 |
|                                                                                     | 60.0    | 30.4    | 2.0     | 4.5     | 26.0    | 6.5     | 042121  | 106719   | 050283 |
|                                                                                     | 60.0    | 35.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035087  | 106720   | 031636 |
|                                                                                     | 60.0    | 40.4    | 2.0     | 4.5     | 26.0    | 6.5     | 042122  | 106721   | 050294 |
|                                                                                     | 80.0    | 30.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035091  | 106722   | 031639 |
|                                                                                     | 80.0    | 35.4    | 2.0     | 4.5     | 26.0    | 6.5     | 035092  | 106723   | 031640 |
|                                                                                     | 80.0    | 40.4    | 2.0     | 4.5     | 26.0    | 6.5     | 042124  | 106724   | 100335 |

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar

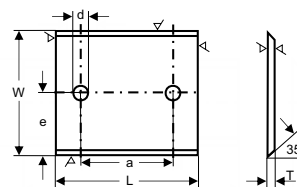


EN With 1 bore hole in the center  
 DE Mit 1 Bohrung mittig  
 FR Avec 1 trou au centre  
 IT Con 1 foro centrale  
 ES Con 1 taladro en el centro

|  | L<br>mm | W<br>mm | T<br>mm | d<br>mm | T04F-CR |
|--|---------|---------|---------|---------|---------|
|  | 13.0    | 14.0    | 1.5     | 3.2     | 015189  |
|  | 20.0    | 12.0    | 2.0     | 4.1     | 014618  |
|  | 13.0    | 16.0    | 2.0     | 3.0     | 017504  |
|  | 13.0    | 16.0    | 2.0     | 4.0     | 018566  |
|  | 20.0    | 16.0    | 2.0     | 3.0     | 014631  |
|  | 20.0    | 20.0    | 2.0     | 4.1     | 014636  |
|  | 20.0    | 24.0    | 2.0     | 3.5     | 014674  |
|  | 25.0    | 16.0    | 2.0     | 4.1     | 014776  |
|  | 25.0    | 25.0    | 2.0     | 4.1     | 014805  |
|  | 30.0    | 20.0    | 2.0     | 4.1     | 014913  |
|  | 30.0    | 26.0    | 2.0     | 4.1     | 015020  |
|  | 40.0    | 25.0    | 2.0     | 4.1     | 015469  |

|  | L<br>mm | W<br>mm | T<br>mm | d<br>mm | T04F-CR |
|--|---------|---------|---------|---------|---------|
|  | 15.0    | 15.0    | 2.0     | 4.1     | 014532  |
|  | 20.0    | 12.0    | 2.0     | 4.1     | 014619  |
|  | 20.0    | 20.0    | 2.0     | 4.1     | 014637  |
|  | 24.0    | 22.0    | 2.0     | 4.1     | 018841  |
|  | 28.0    | 24.0    | 2.0     | 4.1     | 018842  |
|  | 30.0    | 20.0    | 2.0     | 4.1     | 014914  |
|  | 32.0    | 24.0    | 2.0     | 4.1     | 018843  |
|  | 35.0    | 30.0    | 2.0     | 4.1     | 015328  |
|  | 36.0    | 28.0    | 2.0     | 4.1     | 018844  |

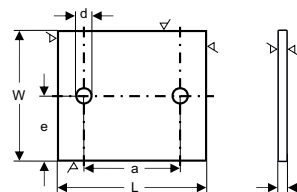
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



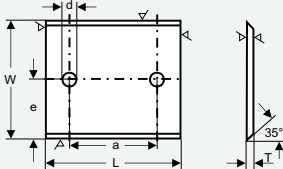
EN With 2 bore holes in the center  
 DE Mit 2 Bohrungen mittig  
 FR Avec 2 trous au centre  
 IT Con 2 fori centrali  
 ES Placas con 2 taladros en el centro

| L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | T04F-CR | TL15   |
|---------|---------|---------|---------|---------|---------|--------|
| 30.0    | 16.0    | 2.0     | 4.0     | 20.0    | 014906  | 031707 |
| 30.0    | 25.0    | 2.0     | 3.5     | 20.0    | 014956  | 014965 |
| 30.0    | 25.0    | 2.0     | 3.0     | 20.0    | 017496  | 031710 |
| 30.0    | 26.0    | 2.0     | 3.5     | 20.0    | 015022  | 031713 |
| 30.0    | 35.0    | 2.0     | 4.1     | 20.0    | 015098  | 031716 |
| 40.0    | 16.0    | 2.0     | 4.1     | 26.0    | 015429  | 015430 |
| 40.0    | 20.0    | 2.0     | 4.1     | 20.0    | 015434  | 031720 |
| 40.0    | 20.0    | 2.0     | 4.1     | 26.0    | 015436  | 031722 |
| 40.0    | 25.0    | 2.0     | 4.1     | 20.0    | 015473  | 031725 |
| 40.0    | 25.0    | 2.0     | 4.1     | 26.0    | 015475  | 031727 |
| 40.0    | 30.0    | 2.0     | 3.5     | 20.0    | 015518  | 015526 |
| 40.0    | 30.0    | 2.0     | 4.1     | 20.0    | 015530  | 031730 |
| 40.0    | 30.0    | 2.0     | 4.1     | 26.0    | 015529  | 031733 |
| 40.0    | 32.62   | 2.0     | 3.5     | 20.0    | 015583  | 015587 |
| 40.0    | 35.0    | 2.0     | 4.1     | 20.0    | 015590  | 015592 |
| 40.0    | 35.0    | 2.0     | 4.1     | 26.0    | 015595  | 015603 |
| 40.0    | 37.82   | 2.0     | 3.5     | 20.0    | 015639  | 031740 |
| 40.0    | 40.0    | 2.0     | 4.1     | 20.0    | 015641  | 031743 |
| 40.0    | 40.0    | 2.0     | 3.5     | 20.0    | 015643  | 031746 |
| 40.0    | 42.86   | 2.0     | 3.5     | 20.0    | 015671  | 031749 |
| 45.0    | 30.0    | 2.0     | 4.1     | 26.0    | 015781  | 031752 |
| 50.0    | 16.0    | 2.0     | 4.1     | 26.0    | 015788  | 031754 |
| 50.0    | 20.0    | 2.0     | 4.1     | 26.0    | 015800  | 031757 |
| 50.0    | 25.0    | 2.0     | 4.1     | 26.0    | 015838  | 015836 |
| 50.0    | 30.0    | 2.0     | 4.1     | 26.0    | 015867  | 031762 |
| 50.0    | 45.0    | 2.0     | 4.1     | 34.0    | 015931  | 031766 |

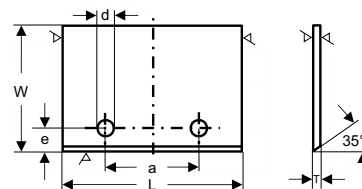
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar

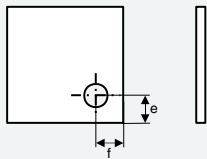
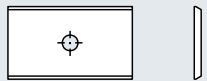
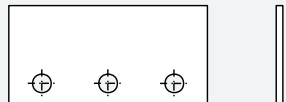
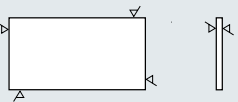


EN With 2 bore holes in the center  
 DE Mit 2 Bohrungen mittig  
 FR Avec 2 trous au centre  
 IT Con 2 fori centrali  
 ES Placas con 2 taladros en el centro

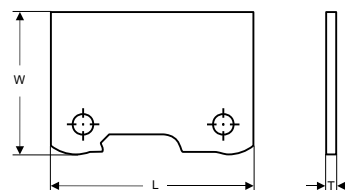
|                                                                                   | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | T04F-CR | TL15   |
|-----------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|--------|
|  | 60.0    | 20.0    | 2.0     | 4.1     | 26.0    | 015992  | 015996 |
|                                                                                   | 60.0    | 25.0    | 2.0     | 4.1     | 26.0    | 016022  | 016024 |
|                                                                                   | 60.0    | 24.0    | 2.0     | 4.1     | 36.0    | 016027  | 031775 |
|                                                                                   | 60.0    | 32.62   | 2.0     | 3.5     | 20.0    | 016089  | 031778 |
|                                                                                   | 60.0    | 35.0    | 2.0     | 4.1     | 26.0    | 016091  | 016095 |
|                                                                                   | 60.0    | 35.0    | 2.0     | 4.1     | 44.0    | 016098  | 016107 |
|                                                                                   | 60.0    | 37.82   | 2.0     | 3.5     | 20.0    | 016137  | 031782 |
|                                                                                   | 60.0    | 39.0    | 2.0     | 3.5     | 20.0    | 016138  | 016140 |
|                                                                                   | 60.0    | 40.0    | 2.0     | 4.1     | 44.0    | 016145  | 016151 |
|                                                                                   | 60.0    | 42.86   | 2.0     | 3.5     | 20.0    | 016184  | 031787 |
|                                                                                   | 80.0    | 24.0    | 2.0     | 4.1     | 60.0    | 016265  |        |
|                                                                                   | 80.0    | 45.0    | 2.5     | 4.1     | 60.0    | 016317  | 031795 |

EN Special blanks for profiling  
 DE Spezial-Blanketts zum Profilieren  
 FR Plaquettes spéciales à profiler  
 IT Placchette speciali da profilare  
 ES Placas especiales para perfilar

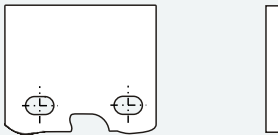
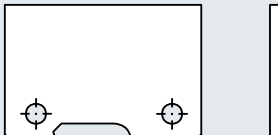
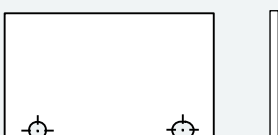
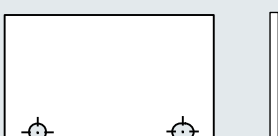


|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | f<br>mm | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|    | 20.4    | 20.4    | 1.5     | 4.2     |         | 6.3     | 6.3     | 019915  |
|                                                                                     | 20.4    | 27.6    | 1.5     | 4.2     |         | 6.3     | 6.3     | 019916  |
|                                                                                     | 20.5    | 20.5    | 2.0     | 5.0     |         | 5.0     | 5.0     | 018084  |
|                                                                                     | 25.5    | 20.5    | 2.0     | 5.0     |         | 6.0     | 6.0     | 018434  |
|                                                                                     | 25.5    | 25.0    | 2.0     | 5.0     |         | 6.0     | 6.0     | 018546  |
|                                                                                     | 25.5    | 25.5    | 2.0     | 5.0     |         | 6.0     | 6.0     | 018086  |
|                                                                                     | 28.0    | 32.2    | 2.0     | 5.0     |         | 6.0     | 6.0     | 018536  |
|    | 40.0    | 60.2    | 2.0     | 4.5x7.0 | 27.0    | 7.5     |         | 019068  |
|   | 60.0    | 25.2    | 2.0     | 7.0x4.5 | 45.5    | 6.3     |         | 037415  |
|                                                                                     | 60.0    | 30.2    | 2.0     | 7.0x4.5 | 45.5    | 6.3     |         | 035292  |
|                                                                                     | 60.0    | 40.2    | 2.0     | 7.0x4.5 | 45.5    | 6.3     |         | 035293  |
|  | 36.0    | 21.0    | 2.0     | 4.4     |         |         |         | 017583  |
|  | 60.0    | 30.4    | 2.0     | 5.6     | 20.0    | 7.0     |         | 019162  |
|                                                                                     | 60.0    | 35.4    | 2.0     | 5.6     | 20.0    | 7.0     |         | 019472  |
|                                                                                     | 60.0    | 40.4    | 2.0     | 5.6     | 20.0    | 7.0     |         | 019163  |
|                                                                                     | 80.0    | 30.4    | 2.0     | 5.6     | 20.0    | 7.0     |         | 019164  |
|                                                                                     | 80.0    | 35.4    | 2.0     | 5.6     | 20.0    | 7.0     |         | 019473  |
|                                                                                     | 80.0    | 40.4    | 2.0     | 5.6     | 20.0    | 7.0     |         | 019165  |
|                                                                                     |         |         |         |         |         |         |         |         |
|  | 37.5    | 25.4    | 1.5     |         |         |         |         | 019140  |
|                                                                                     | 50.0    | 25.4    | 1.5     |         |         |         |         | 018343  |

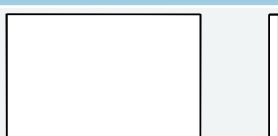
EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



For Leuco Superprofiler System\*

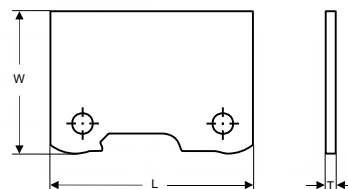
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | T04F-CR | T04MG-CR | TL15   |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|----------|--------|
|    | 31.0    | 26.0    | 1.5     | 015207  | 106725   | 015214 |
|    | 41.0    | 28.0    | 1.5     | 015701  | 102763   | 015727 |
|                                                                                     | 41.0    | 28.0    | 2.0     | 015695  | 106726   | 031839 |
|                                                                                     | 41.0    | 35.0    | 1.5     | 015748  | 106727   | 015753 |
|                                                                                     | 41.0    | 35.0    | 2.0     | 015744  | 106728   | 015746 |
|  | 51.0    | 35.0    | 1.5     | 015973  | 106729   | 015978 |
|                                                                                     | 51.0    | 45.0    | 2.0     | 015981  | 106730   | 031843 |
|                                                                                     | 60.8    | 30.6    | 1.5     | 016209  | 106731   | 016229 |
|                                                                                     | 60.8    | 30.6    | 2.0     | 016206  | 106732   | 016208 |
|                                                                                     | 61.0    | 45.0    | 2.0     | 016234  | 106733   | 016242 |
|  | 81.0    | 45.0    | 2.0     | 016334  | 106734   | 016339 |

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | e<br>mm | T04F-CR | T04MG-CR | TL15   |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|----------|--------|
|  | 40.4    | 41.2    | 2.0     | 4.1     | 6.0     | 015756  | 106735   |        |
|                                                                                     | 40.4    | 41.2    | 2.0     | 5.1     | 8.0     | 033424  | 106736   | 042598 |

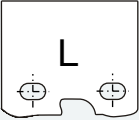
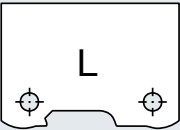
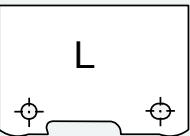
\* EN For use in Leuco-cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Leuco  
 \* FR Utilisation limitée aux porte outils de l'entreprise Leuco  
 \* IT Da usare solo su teste portacottelli della Leuco  
 \* ES Sólo para empleo con portacuchillas de la firma Leuco

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



For Leuco Superprofiler System\*

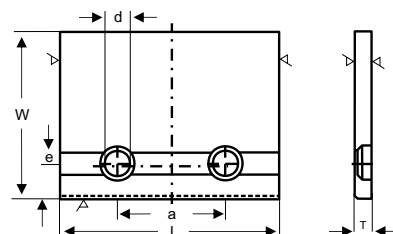
### >>> MICROFINISH <<<

|                                                                                     |   | L<br>mm | W<br>mm | T<br>mm | T04F-CR | TL15   |
|-------------------------------------------------------------------------------------|---|---------|---------|---------|---------|--------|
|    | L | 31.0    | 26.0    | 1.5     | 032077  | 032074 |
|                                                                                     | R | 31.0    | 26.0    | 1.5     | 015208  | 032073 |
|    | L | 41.0    | 28.0    | 1.5     | 015707  | 015730 |
|                                                                                     | R | 41.0    | 28.0    | 1.5     | 015702  | 015728 |
|                                                                                     | L | 41.0    | 28.0    | 2.0     | 031848  | 031854 |
|                                                                                     | R | 41.0    | 28.0    | 2.0     | 015696  | 031855 |
|                                                                                     | L | 41.0    | 35.0    | 1.5     | 032028  | 032030 |
|                                                                                     | R | 41.0    | 35.0    | 1.5     | 032031  | 032033 |
|                                                                                     | L | 41.0    | 35.0    | 2.0     | 032034  | 032041 |
|                                                                                     | R | 41.0    | 35.0    | 2.0     | 032035  | 032040 |
|  | L | 51.0    | 35.0    | 1.5     | 034084  | 034087 |
|                                                                                     | R | 51.0    | 35.0    | 1.5     | 032043  | 032046 |
|                                                                                     | L | 51.0    | 45.0    | 2.0     | 034088  | 034091 |
|                                                                                     | R | 51.0    | 45.0    | 2.0     | 015982  | 032049 |
|  | L | 60.8    | 30.6    | 1.5     | 032051  | 032055 |
|                                                                                     | R | 60.8    | 30.6    | 1.5     | 032050  | 032056 |
|                                                                                     | L | 60.8    | 30.6    | 2.0     | 032058  | 032062 |
|                                                                                     | R | 60.8    | 30.6    | 2.0     | 032057  | 032061 |
|  | L | 61.0    | 45.0    | 2.0     | 034092  | 034095 |
|                                                                                     | R | 61.0    | 45.0    | 2.0     | 016235  | 016243 |
|                                                                                     | L | 81.0    | 45.0    | 2.0     | 034096  | 034099 |
|                                                                                     | R | 81.0    | 45.0    | 2.0     | 032067  | 032070 |

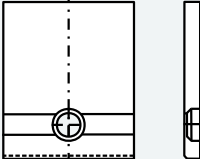
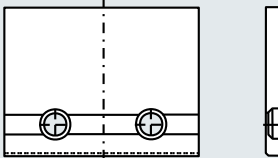
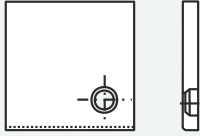
L =            R =  
 EN left        EN right  
 DE links       DE rechts  
 FR gauche     FR droite  
 IT sinistra    IT destra  
 ES izqierda   ES derecha

\* EN For use in Leuco-cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Leuco  
 \* FR Utilisation limitée aux porte outils de l'entreprise Leuco  
 \* IT Da usare solo su teste portacoltelli della Leuco  
 \* ES Sólo para empleo con portacuchillas de la firma Leuco

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



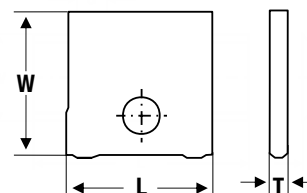
For Freud System\*

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | T10MG  |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|--------|
|    | 20.0    | 25.0    | 3.0     | 4.5     |         | 7.0     | 031880 |
|                                                                                     | 25.0    | 25.0    | 3.0     | 4.5     |         | 7.0     | 031884 |
|                                                                                     | 25.0    | 30.0    | 3.0     | 4.5     |         | 7.0     | 031887 |
|                                                                                     | 25.0    | 35.0    | 3.0     | 4.5     |         | 7.0     | 031890 |
|                                                                                     | 25.0    | 40.0    | 3.0     | 4.5     |         | 7.0     | 031893 |
|                                                                                     | 30.0    | 40.0    | 3.0     | 4.5     |         | 7.0     | 031959 |
|                                                                                     | 35.0    | 25.0    | 3.0     | 4.5     |         | 7.0     | 031897 |
|                                                                                     | 35.0    | 30.0    | 3.0     | 4.5     |         | 7.0     | 031901 |
|                                                                                     | 35.0    | 35.0    | 3.0     | 4.5     |         | 7.0     | 031904 |
|                                                                                     |         |         |         |         |         |         |        |
|  | 45.0    | 25.0    | 3.0     | 4.5     | 28.0    | 7.0     | 031908 |
|                                                                                     | 45.0    | 30.0    | 3.0     | 4.5     | 28.0    | 7.0     | 031912 |
|                                                                                     | 45.0    | 35.0    | 3.0     | 4.5     | 28.0    | 7.0     | 031916 |
|                                                                                     | 55.0    | 25.0    | 3.0     | 4.5     | 41.0    | 6.0     | 031920 |
|                                                                                     | 55.0    | 30.0    | 3.0     | 4.5     | 41.0    | 6.0     | 031923 |
|                                                                                     | 55.0    | 35.0    | 3.0     | 4.5     | 41.0    | 6.0     | 031928 |
|                                                                                     | 55.0    | 40.0    | 3.0     | 4.5     | 41.0    | 6.0     | 031932 |
|                                                                                     | 65.0    | 20.0    | 3.0     | 4.5     | 28.0    | 6.0     | 031936 |
|                                                                                     | 65.0    | 25.0    | 3.0     | 4.5     | 28.0    | 6.0     | 018826 |
|                                                                                     | 70.0    | 25.0    | 3.0     | 4.5     | 41.0    | 6.0     | 031940 |
|                                                                                     | 80.0    | 30.0    | 3.0     | 4.5     | 66.0    | 6.0     | 031944 |
|                                                                                     | 80.0    | 35.0    | 3.0     | 4.5     | 66.0    | 6.0     | 031948 |
|                                                                                     |         |         |         |         |         |         |        |
|                                                                                     |         |         |         |         |         |         |        |
|  | 40.0    | 40.0    | 3.0     | 4.5     |         | 11/11   | 031952 |
|                                                                                     |         |         |         |         |         |         |        |

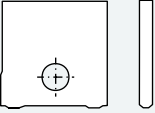
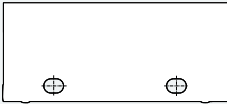
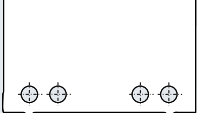
EN Other grades available upon request!  
 DE Andere Sorten auf Anfrage erhältlich!  
 FR Autres nuances disponibles sur demande!  
 IT Altre gradazioni disponibili su richiesta!  
 ES Otros grados disponibles a petición!

\* EN For use in Freud-cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Freud  
 \* FR Utilisation limitée aux porte outils de l'entreprise Freud  
 \* IT Da usare solo su teste portacoltelli della Freud  
 \* ES Sólo para empleo con portacuchillas de la firma Freud

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



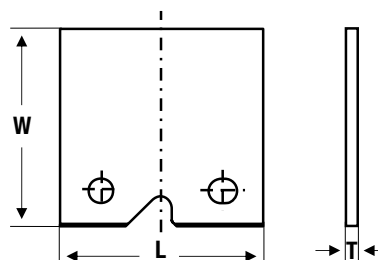
For Leuco 3P-System\*

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | T04F-CR | T10MG  |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|--------|
|    | 12.5    | 20.5    | 2.0     | 032346  | 032386 |
|                                                                                     | 15.5    | 20.5    | 2.0     | 032347  | 032456 |
|                                                                                     | 15.5    | 25.5    | 2.0     | 032352  | 032457 |
|                                                                                     | 16.4    | 20.5    | 2.0     | 032353  | 032458 |
|                                                                                     | 16.7    | 25.9    | 2.0     | 032354  | 032459 |
|                                                                                     | 18.4    | 25.9    | 2.0     | 032356  | 032461 |
|                                                                                     | 18.4    | 36.3    | 2.0     | 032357  | 032462 |
|                                                                                     | 20.3    | 20.5    | 2.0     | 032358  | 032463 |
|                                                                                     | 20.3    | 25.5    | 2.0     | 032359  | 032464 |
|                                                                                     | 20.3    | 30.4    | 2.0     | 032360  | 032465 |
|                                                                                     | 22.3    | 25.5    | 2.0     | 032361  | 032466 |
|                                                                                     | 24.3    | 20.9    | 2.0     | 032362  | 032467 |
|                                                                                     | 25.3    | 25.9    | 2.0     | 032363  | 032468 |
|                                                                                     | 25.3    | 35.3    | 2.0     | 032364  | 032469 |
|                                                                                     | 28.2    | 25.5    | 2.0     | 032365  | 032470 |
|                                                                                     | 28.2    | 35.3    | 2.0     | 032366  | 032471 |
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | T04F-CR | T10MG  |
|  | 30.2    | 25.5    | 2.0     | 032348  | 032350 |
|                                                                                     | 30.2    | 30.4    | 2.0     | 032367  | 032478 |
|                                                                                     | 32.2    | 22.8    | 2.0     | 032368  | 032479 |
|                                                                                     | 32.2    | 35.4    | 2.0     | 032369  | 032480 |
|                                                                                     | 32.8    | 26.0    | 2.0     | 032370  | 032481 |
|                                                                                     | 35.2    | 26.0    | 2.0     | 032371  | 032482 |
|                                                                                     | 40.1    | 20.9    | 2.0     | 032372  | 032483 |
|                                                                                     | 40.1    | 30.4    | 2.0     | 032373  | 032484 |
|                                                                                     | 40.8    | 36.0    | 2.0     | 032374  | 032485 |
|                                                                                     | 42.8    | 31.0    | 2.0     | 032375  | 032486 |
|                                                                                     | 42.8    | 36.0    | 2.0     | 032376  | 032487 |
|                                                                                     | 45.8    | 36.0    | 2.0     | 032377  | 032488 |
|                                                                                     | 49.9    | 20.9    | 2.0     | 032378  | 032489 |
|                                                                                     | 49.9    | 33.0    | 2.0     | 032379  | 032490 |
|                                                                                     | 49.9    | 40.2    | 2.0     | 032380  | 032491 |
|                                                                                     | 60.6    | 25.8    | 2.0     | 032382  | 032493 |
|                                                                                     | 80.6    | 35.8    | 2.0     | 032384  | 032494 |
|  | 59.6    | 35.4    | 2.0     | 032381  | 032492 |

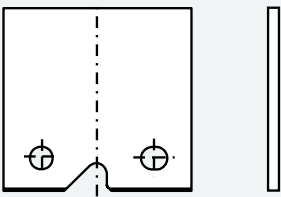
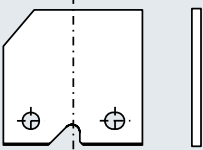
\* EN For use in Leuco-cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Leuco  
 \* FR Utilisation limitée aux porte outils de l'entreprise Leuco  
 \* IT Da usare solo su teste portacoltelli della Leuco  
 \* ES Sólo para empleo con portacuchillas de la firma Leuco

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar

Also available with Microfinish!  
 Auch mit Microfinish erhältlich!



For Oertli System\*

|                                                                                     | L<br>mm | W<br>mm  | T<br>mm | T04F-CR | T10MG  |
|-------------------------------------------------------------------------------------|---------|----------|---------|---------|--------|
|  | 20.0    | 20.3     | 2.0     | 032078  | 032080 |
|                                                                                     | 20.0    | 24.3     | 2.0     | 022563  | 022565 |
|                                                                                     | 20.0    | 29.3     | 2.0     | 022567  | 022568 |
|                                                                                     | 20.0    | 34.3     | 2.0     | 032083  | 022571 |
|                                                                                     | 25.0    | 19.3     | 2.0     | 032085  | 032086 |
|                                                                                     | 25.0    | 24.3     | 2.0     | 022577  | 022578 |
|                                                                                     | 25.0    | 29.3     | 2.0     | 022581  | 022583 |
|                                                                                     | 25.0    | 34.3     | 2.0     | 022558  | 022559 |
|                                                                                     | 30.0    | 19.3     | 2.0     | 032098  | 032100 |
|                                                                                     | 30.0    | 24.3     | 2.0     | 022586  | 032093 |
|                                                                                     | 30.0    | 29.3     | 2.0     | 032094  | 032095 |
|                                                                                     | 30.0    | 34.3     | 2.0     | 022611  | 022612 |
|                                                                                     | 35.0    | 24.3     | 2.0     | 022588  | 022589 |
|                                                                                     | 35.0    | 29.3     | 2.0     | 022592  | 022594 |
|                                                                                     | 35.0    | 34.3     | 2.0     | 032103  | 032104 |
|                                                                                     | 45.0    | 19.3     | 2.0     | 022575  | 022576 |
|                                                                                     | 45.0    | 24.3     | 2.0     | 022596  | 022597 |
|                                                                                     | 45.0    | 29.3     | 2.0     | 022600  | 022602 |
|                                                                                     | 45.0    | 33.3     | 2.0     | 032108  | 022604 |
|                                                                                     | 45.0    | 34.3     | 2.0     | 032110  | 032111 |
|                                                                                     | 55.0    | 19.3     | 2.0     | 032116  | 032118 |
|                                                                                     | 55.0    | 22.3     | 2.0     | 032113  | 035199 |
|                                                                                     | 55.0    | 27.8     | 2.0     | 032119  | 032120 |
|                                                                                     | 55.0    | 29.3     | 2.0     | 032122  | 035204 |
|                                                                                     | 55.0    | 33.3     | 2.0     | 022605  | 022606 |
|  | 65.0    | 22.3     | 2.0     | 032125  | 032126 |
|                                                                                     | 65.0    | 27.8     | 2.0     | 032128  | 032130 |
|                                                                                     | 65.0    | 33.3     | 2.0     | 022609  | 032131 |
|                                                                                     | 80.0    | 22.3     | 2.0     | 032133  | 032134 |
|                                                                                     | 80.0    | 27.8     | 2.0     | 032136  | 032137 |
|                                                                                     | 80.0    | 33.3     | 2.0     | 032141  | 032140 |
|                                                                                     | 25.0    | 29.0-50° | 2.0     | 022617  | 022620 |
|                                                                                     | 25.0    | 29.0-70° | 2.0     | 022624  | 022628 |

\* EN For use in Oertli-cutterheads only

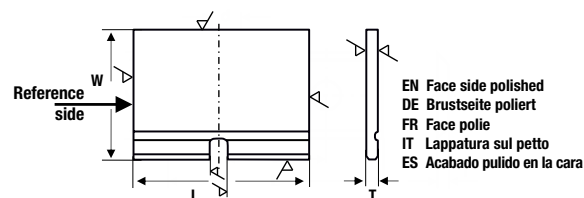
\* DE Nur zur Verwendung in Messerköpfen der Firma Oertli

\* FR Utilisation limitée aux porte outils de l'entreprise Oertli

\* IT Da usare solo su teste portacottelli della Oertli

\* ES Sólo para empleo con portacuchillas de la firma Oertli

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar



For System Profilcut\*

| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T10MG  |
|---------|---------|---------|---------|--------|
| 15.2    | 14.5    | 2.0     | 130066  | 130567 |
| 15.2    | 16.5    | 2.0     | 130125  | 130124 |
| 15.2    | 22.5    | 2.0     | 130122  | 130123 |
| 20.2    | 16.5    | 2.0     | 032168  | 129131 |
| 20.2    | 22.5    | 2.0     | 032171  | 038011 |
| 20.2    | 25.5    | 2.0     | 023036  | 129132 |
| 20.2    | 27.9    | 2.0     | 032174  | 023039 |
| 20.2    | 30.6    | 2.0     | 032176  | 129133 |
| 20.2    | 32.6    | 2.0     | 032178  | 129134 |
| 20.2    | 34.0    | 2.0     | 032180  | 129135 |
| 25.2    | 16.5    | 2.0     | 032183  | 129136 |
| 25.2    | 22.5    | 2.0     | 032186  | 129137 |
| 25.2    | 25.5    | 2.0     | 032189  | 129138 |
| 25.2    | 27.9    | 2.0     | 032191  | 129139 |
| 25.2    | 30.6    | 2.0     | 032194  | 129140 |
| 25.2    | 32.6    | 2.0     | 032198  | 129141 |
| 25.2    | 34.0    | 2.0     | 032201  | 129142 |
| 30.2    | 16.5    | 2.0     | 032204  | 129143 |
| 30.2    | 22.5    | 2.0     | 032206  | 129144 |
| 30.2    | 25.5    | 2.0     | 032209  | 129145 |
| 30.2    | 27.9    | 2.0     | 032212  | 023057 |
| 30.2    | 30.6    | 2.0     | 032216  | 129146 |
| 30.2    | 32.6    | 2.0     | 032220  | 129147 |
| 30.2    | 34.0    | 2.0     | 032222  | 129148 |
| 35.2    | 16.5    | 2.0     | 129697  | 129698 |
| 35.2    | 22.5    | 2.0     | 129226  | 129222 |
| 35.2    | 25.5    | 2.0     | 129227  | 129223 |
| 35.2    | 32.5    | 2.0     | 129228  | 129225 |
| 40.2    | 16.5    | 2.0     | 032225  | 129149 |
| 40.2    | 22.5    | 2.0     | 032228  | 129150 |
| 40.2    | 25.5    | 2.0     | 032230  | 129151 |
| 40.2    | 27.9    | 2.0     | 032232  | 129152 |
| 40.2    | 30.6    | 2.0     | 032234  | 129153 |
| 40.2    | 32.6    | 2.0     | 032236  | 129155 |
| 40.2    | 34.0    | 2.0     | 032238  | 129156 |
| 50.2    | 22.5    | 2.0     | 032241  | 129157 |
| 50.2    | 25.5    | 2.0     | 032243  | 129158 |
| 50.2    | 27.9    | 2.0     | 032245  | 129159 |
| 50.2    | 30.6    | 2.0     | 032247  | 129160 |
| 50.2    | 32.6    | 2.0     | 032250  | 129161 |
| 50.2    | 34.0    | 2.0     | 032251  | 129162 |

\* EN For use in Leitz-cutterheads only

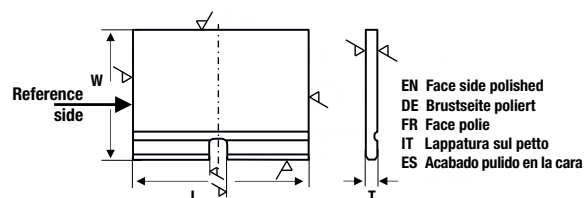
\* DE Nur zur Verwendung in Messerköpfen der Firma Leitz

\* FR Utilisation limitée aux porte outils de l'entreprise Leitz

\* IT Da usare solo su teste portacottelli della Leitz

\* ES Sólo para empleo con portacuchillas de la firma Leitz

EN Blanks for profiling  
 DE Blanketts zum Profilieren  
 FR Plaquettes à profiler  
 IT Placchette da profilare  
 ES Placas para perfilar

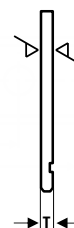
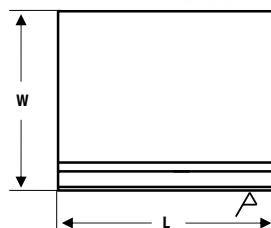


For System Profilcut\*

| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T10MG  |
|---------|---------|---------|---------|--------|
| 60.2    | 22.5    | 2.0     | 032254  | 129163 |
| 60.2    | 25.5    | 2.0     | 032256  | 129166 |
| 60.2    | 27.9    | 2.0     | 032258  | 129167 |
| 60.2    | 30.6    | 2.0     | 032260  | 129168 |
| 60.2    | 32.6    | 2.0     | 032262  | 129170 |
| 60.2    | 34.0    | 2.0     | 032264  | 129171 |
| 80.2    | 16.5    | 2.0     | 129218  | 129217 |
| 80.2    | 22.5    | 2.0     | 032267  | 129172 |
| 80.2    | 25.5    | 2.0     | 032270  | 129173 |
| 80.2    | 27.9    | 2.0     | 032273  | 129174 |
| 80.2    | 30.6    | 2.0     | 032276  | 129175 |
| 80.2    | 32.6    | 2.0     | 032279  | 129176 |
| 80.2    | 34.0    | 2.0     | 032282  | 129177 |

\* EN For use in Leitz-cutterheads only  
 \* DE Nur zur Verwendung in Messerköpfen der Firma Leitz  
 \* FR Utilisation limitée aux porte outils de l'entreprise Leitz  
 \* IT Da usare solo su teste portacoltelli della Leitz  
 \* ES Sólo para empleo con portacuchillas de la firma Leitz

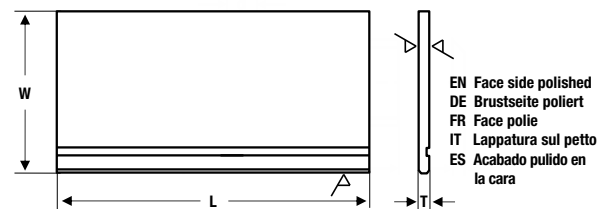
- EN Knives with crossgroove and microfinish  
 DE Blanketts mit Quernut und Microfinish  
 FR Plaquettes avec rainure transversale et microfinish  
 IT Placchette con scanalatura e microfinish  
 ES Placas con ranura transversal y microfinish



EN Face side polished  
 DE Brustseite poliert  
 FR Face polie  
 IT Lappatura sul petto  
 ES Acabado pulido en la cara

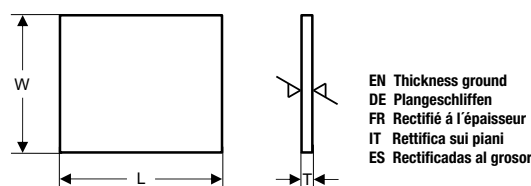
| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T10MG  |
|---------|---------|---------|---------|--------|
| 20.5    | 16.5    | 2.0     | 037193  | 038523 |
| 20.5    | 22.5    | 2.0     | 037996  | 022939 |
| 20.5    | 25.5    | 2.0     | 041099  | 022943 |
| 20.5    | 27.9    | 2.0     | 041102  | 022946 |
| 20.5    | 30.6    | 2.0     | 041103  | 022949 |
| 20.5    | 34.0    | 2.0     | 041108  | 041110 |
| 25.5    | 25.5    | 2.0     | 041204  | 041206 |
| 25.5    | 27.9    | 2.0     | 041209  | 041207 |
| 25.5    | 30.6    | 2.0     | 041210  | 041212 |
| 25.5    | 34.0    | 2.0     | 041217  | 041219 |
| 30.5    | 22.5    | 2.0     | 036089  | 022957 |
| 30.5    | 25.5    | 2.0     | 041112  | 022960 |
| 30.5    | 27.9    | 2.0     | 041121  | 022962 |
| 30.5    | 30.6    | 2.0     | 041122  | 022965 |
| 30.5    | 34.0    | 2.0     | 041127  | 041128 |
| 35.5    | 22.5    | 2.0     | 041522  | 041524 |
| 35.5    | 25.5    | 2.0     | 041526  | 041527 |
| 35.5    | 32.5    | 2.0     | 041529  | 041530 |
| 40.25   | 16.5    | 2.0     | 040673  | 041130 |
| 40.25   | 22.5    | 2.0     | 041131  | 022973 |
| 40.25   | 25.5    | 2.0     | 041133  | 022976 |
| 40.25   | 27.9    | 2.0     | 041135  | 022979 |
| 40.25   | 30.6    | 2.0     | 041138  | 022983 |
| 40.25   | 32.6    | 2.0     | 041139  | 022986 |
| 40.25   | 34.0    | 2.0     | 039717  | 041142 |
| 50.25   | 22.5    | 2.0     | 039716  | 022990 |
| 50.25   | 25.5    | 2.0     | 041145  | 022993 |
| 50.25   | 27.9    | 2.0     | 040864  | 022996 |
| 50.25   | 30.6    | 2.0     | 041149  | 022999 |
| 60.25   | 22.5    | 2.0     | 041158  | 023007 |

- EN Knives with crossgroove and microfinish  
 DE Blanketts mit Quernut und Microfinish  
 FR Plaquettes avec rainure transversale et microfinish  
 IT Placchette con scanalatura e microfinish  
 ES Placas con ranura transversal y microfinish



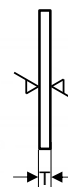
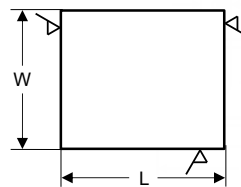
| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T10MG  |
|---------|---------|---------|---------|--------|
| 165.0   | 16.5    | 2.0     | 032154  | 041225 |
| 165.0   | 22.5    | 2.0     | 032162  | 041226 |
| 165.0   | 25.5    | 2.0     | 032163  | 041227 |
| 165.0   | 27.9    | 2.0     | 032164  | 041228 |
| 165.0   | 30.6    | 2.0     | 032165  | 041229 |
| 165.0   | 34.0    | 2.0     | 032167  | 041231 |

- EN Blanks for profiling - Without bores  
 DE Blanketts zum Profilieren - Ohne Bohrung  
 FR Plaquettes à profiler - Sans trous  
 IT Placchette da profilare - Senza fori  
 ES Placas para perfilar - Sin taladros



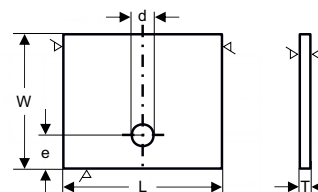
| L<br>mm | W<br>mm | T<br>mm | T04F-CR |
|---------|---------|---------|---------|
| 40.0    | 15.0    | 2.0     | 018651  |
| 40.0    | 25.0    | 2.0     | 018620  |
| 40.0    | 30.0    | 2.0     | 018633  |
| 40.0    | 35.0    | 2.0     | 018623  |
| 48.0    | 15.0    | 2.0     | 018655  |
| 48.0    | 20.0    | 2.0     | 018636  |
| 48.0    | 25.0    | 2.0     | 018640  |
| 50.0    | 45.0    | 2.0     | 018659  |
| 50.0    | 25.4    | 1.5     | 018343  |

- EN Blanks for profiling - Without bores  
 DE Blanketts zum Profilieren - Ohne Bohrung  
 FR Plaquettes à profiler - Sans trous  
 IT Placchette da profilare - Senza fori  
 ES Placas para perfilar - Sin taladros

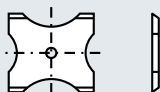
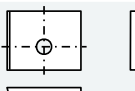
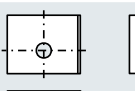
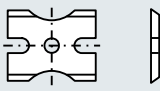
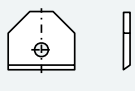
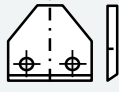


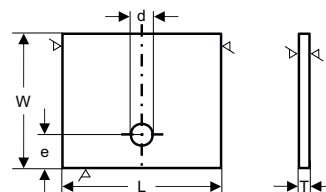
EN 3 sides ground  
 DE 3 Seiten geschliffen  
 FR Rectifié à 3 côtés  
 IT Rettificati su 3 lati  
 ES Rectificadas en 3 lados

| L<br>mm | W<br>mm | T<br>mm | T04MG-CR | T10MG  |
|---------|---------|---------|----------|--------|
| 15.0    | 15.5    | 2.0     | 107755   | 107795 |
| 15.0    | 20.5    | 2.0     | 107756   | 107796 |
| 20.0    | 20.5    | 2.0     | 107757   | 107797 |
| 20.0    | 25.5    | 2.0     | 107758   | 107798 |
| 20.0    | 30.5    | 2.0     | 107759   | 107799 |
| 20.0    | 35.5    | 2.0     | 107760   | 107800 |
| 25.0    | 20.5    | 2.0     | 107761   | 107801 |
| 25.0    | 25.5    | 2.0     | 107762   | 107802 |
| 25.0    | 30.5    | 2.0     | 107763   | 107803 |
| 25.0    | 35.5    | 2.0     | 107764   | 107804 |
| 30.0    | 20.5    | 2.0     | 107765   | 107805 |
| 30.0    | 25.5    | 2.0     | 107766   | 107806 |
| 30.0    | 30.5    | 2.0     | 107767   | 107807 |
| 30.0    | 35.5    | 2.0     | 107768   | 107808 |
| 30.0    | 40.5    | 2.0     | 107769   | 107809 |
| 35.0    | 20.5    | 2.0     | 107770   | 107810 |
| 35.0    | 25.5    | 2.0     | 107771   | 107811 |
| 35.0    | 30.5    | 2.0     | 107772   | 107812 |
| 35.0    | 35.5    | 2.0     | 107773   | 107813 |
| 35.0    | 40.5    | 2.0     | 107774   | 107814 |
| 40.0    | 20.5    | 2.0     | 107775   | 107815 |
| 40.0    | 25.5    | 2.0     | 107776   | 107816 |
| 40.0    | 30.5    | 2.0     | 107777   | 107817 |
| 40.0    | 35.5    | 2.0     | 107778   | 107818 |
| 40.0    | 40.5    | 2.0     | 107779   | 107819 |
| 45.0    | 30.5    | 2.0     | 107780   | 107820 |
| 45.0    | 35.5    | 2.0     | 107781   | 107821 |
| 50.0    | 20.5    | 2.0     | 107782   | 107822 |
| 50.0    | 25.5    | 2.0     | 107783   | 107823 |
| 50.0    | 30.5    | 2.0     | 107784   | 107824 |
| 50.0    | 35.5    | 2.0     | 107785   | 107826 |
| 50.0    | 40.5    | 2.0     | 107786   | 107827 |
| 60.0    | 20.5    | 2.0     | 107787   | 107828 |
| 60.0    | 25.5    | 2.0     | 107788   | 107829 |
| 60.0    | 30.5    | 2.0     | 107789   | 107830 |
| 60.0    | 40.5    | 2.0     | 107790   | 107831 |
| 60.0    | 45.5    | 2.0     | 107791   | 107832 |
| 80.0    | 25.5    | 2.0     | 107792   | 107833 |
| 80.0    | 35.5    | 2.0     | 107793   | 107835 |
| 80.0    | 45.5    | 2.0     | 107794   | 107836 |

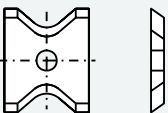
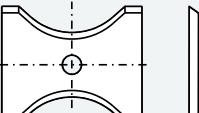


EN Preprofiled blanks  
 DE Vorprofilierter Blanketts  
 FR Plaquettes préprofilées  
 IT Placchette presagomate  
 ES Cuchillas preperfiladas

|                                                                                     | L    | W    | T   | d   | e   | R    | T04F-CR | T04MG-CR | T10MG  |
|-------------------------------------------------------------------------------------|------|------|-----|-----|-----|------|---------|----------|--------|
|                                                                                     | mm   | mm   | mm  | mm  | mm  | mm   |         |          |        |
|    | 13.0 | 16.0 | 2.0 | 3.0 |     | 2-4  | 015176  | 033175   | 033176 |
|                                                                                     | 13.0 | 16.0 | 2.0 | 4.0 |     | 2-4  | 015177  | 033178   | 033179 |
|    | 20.0 | 21.0 | 2.0 | 3.0 |     | 5-8  | 015180  |          |        |
|                                                                                     | 20.0 | 21.0 | 2.0 | 4.0 |     | 5-8  | 015181  |          |        |
|                                                                                     | 26.0 | 24.0 | 2.0 | 3.0 |     | 9-13 | 015183  |          |        |
|                                                                                     | 26.0 | 24.0 | 2.0 | 4.0 |     | 9-13 | 015185  |          |        |
|    | 12.0 | 14.5 | 2.0 | 4.0 | 6.0 |      | 017731  | 034072   |        |
|   | 12.0 | 18.0 | 2.0 | 4.0 | 6.0 |      | 019815  | 034075   | 034076 |
|                                                                                     | 12.0 | 18.0 | 2.0 | 5.0 | 5.5 |      | 037116  | 040950   | 040952 |
|  | 19.6 | 15.5 | 2.0 | 4.0 | 6.0 |      | 035156  | 040942   |        |
|  | 19.6 | 15.5 | 2.0 | 4.0 | 6.0 |      | 035157  | 040943   |        |
|  | 13.0 | 14.0 | 1.5 | 3.2 |     | 2-4  | 015189  |          |        |
|  | 20.0 | 16.0 | 2.0 | 3.2 |     | 5-8  | 015191  | 033203   | 033204 |
|                                                                                     | 26.0 | 18.0 | 2.0 | 3.2 |     | 9-13 | 015193  | 033206   | 033207 |
|  | 16.0 | 17.5 | 2.0 | 3.0 | 5.0 | 2-6  | 017550  | 034059   | 034060 |
|                                                                                     | 16.0 | 17.5 | 2.0 | 3.5 | 5.0 | 2-6  | 015235  | 033227   | 033228 |
|                                                                                     | 16.0 | 17.5 | 2.0 | 4.0 | 5.0 | 2-6  | 015242  | 033233   | 033234 |
|                                                                                     | 16.0 | 17.5 | 2.0 | 4.4 | 5.0 | 2-6  | 051310  | 051311   | 051341 |
|                                                                                     | 20.0 | 17.5 | 2.0 | 4.0 | 6.0 | 2-8  | 015239  |          |        |
|                                                                                     | 20.0 | 20.5 | 2.0 | 4.0 | 6.3 | 2-6  | 015245  |          |        |
|  | 16.0 | 17.5 | 2.0 | 4.4 | 5.4 | 2-6  | 015243  | 033230   | 033231 |
|  | 24.0 | 20.4 | 2.0 | 4.2 | 6.3 | 2-6  | 015247  |          |        |
|  | 15.0 | 15.0 | 2.0 | 4.0 | 6.0 |      | 022306  | 034081   | 034082 |
|  | 16.0 | 14.6 | 2.0 | 5.0 | 6.0 |      | 046698  |          |        |

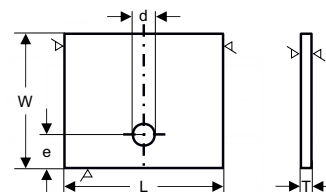


EN Profiled standard blanks  
 DE Profilierte Standardblanketts  
 FR Plaquettes standard profilées  
 IT Placchette profilate standard  
 ES Cuchillas perfiladas standard

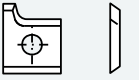
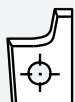
| For Leuco system*                                                                  | L<br>mm | W<br>mm | T<br>mm | d<br>mm | R<br>mm | T04F-CR |
|------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|
|   | 13.0    | 16.0    | 2.0     | 4.0     | 2.0     | 032836  |
|                                                                                    | 13.0    | 16.0    | 2.0     | 4.0     | 3.0     | 032837  |
|                                                                                    | 13.0    | 16.0    | 2.0     | 4.0     | 4.0     | 032838  |
|   | 20.0    | 21.0    | 2.0     | 4.0     | 5.0     | 032839  |
|                                                                                    | 20.0    | 21.0    | 2.0     | 4.0     | 6.0     | 032840  |
|                                                                                    | 20.0    | 21.0    | 2.0     | 4.0     | 8.0     | 032842  |
|                                                                                    | 26.0    | 24.0    | 2.0     | 4.0     | 10.0    | 032844  |
|                                                                                    | 26.0    | 24.0    | 2.0     | 4.0     | 12.0    | 032846  |
|  | 30.0    | 25.0    | 2.0     | 4.0     | 14.0    | 032848  |
|                                                                                    | 30.0    | 25.0    | 2.0     | 4.0     | 16.0    | 032850  |

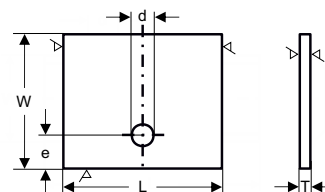
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | R<br>mm | T04F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|
|  | 12.0    | 12.0    | 1.5     | 4.0     | 2.0     | 016426  |
|                                                                                     | 12.0    | 12.0    | 1.5     | 4.0     | 3.0     | 016427  |
|  | 12.0    | 13.0    | 2.0     | 4.0     | 2.0     | 020990  |
|                                                                                     | 12.0    | 13.0    | 2.0     | 4.0     | 2.5     | 022185  |
|                                                                                     | 12.0    | 13.0    | 2.0     | 4.0     | 3.0     | 020853  |
|                                                                                     | 16.0    | 14.0    | 2.0     | 4.0     | 3.0     | 039045  |
|  | 16.0    | 17.5    | 2.0     | 3.0     | 3.0     | 016516  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 3.0     | 5.0     | 016519  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 3.5     | 2.0     | 016469  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 3.5     | 3.0     | 016470  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 3.5     | 4.0     | 016472  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 3.5     | 5.0     | 016473  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 3.5     | 6.0     | 016474  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.0     | 2.0     | 016477  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.0     | 3.0     | 016478  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.0     | 4.0     | 016479  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.0     | 5.0     | 016480  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.4     | 2.0     | 016510  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.4     | 3.0     | 016511  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.4     | 4.0     | 016512  |
|                                                                                     | 16.0    | 17.5    | 2.0     | 4.4     | 5.0     | 016513  |

EN \* For use in Leuco-cutterheads only  
 DE \* Nur zur Verwendung in Messerköpfen der Firma Leuco  
 FR \* Utilisation limitée aux porte outils de Leuco  
 IT \* Da usare solo su teste portacoltelli della Leuco  
 ES \* Sólo para empleo con portacuchillas de la firma Leuco

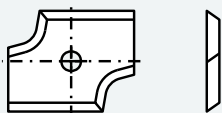


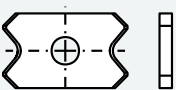
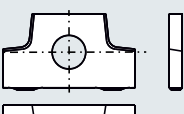
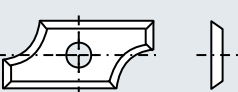
EN Profiled standard blanks  
 DE Profilierte Standardblanketts  
 FR Plaquettes standard profilées  
 IT Placchette profilate standard  
 ES Cuchillas perfiladas standard

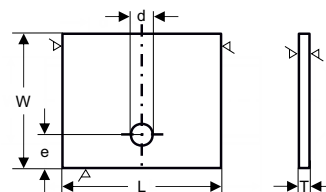
|                                                                                            |           | L<br>mm | W<br>mm | T<br>mm | d<br>mm | R<br>mm | T04F-CR | T04MG-CR |
|--------------------------------------------------------------------------------------------|-----------|---------|---------|---------|---------|---------|---------|----------|
|           |           | 15.0    | 14.5    | 2.0     | 4.0     | 2.0     | 022305  | 033941   |
|                                                                                            |           | 15.0    | 14.5    | 2.0     | 4.0     | 2.5     | 033939  | 033947   |
|                                                                                            |           | 15.0    | 14.5    | 2.0     | 4.0     | 3.0     | 022308  | 033953   |
|                                                                                            |           | 16.1    | 14.0    | 2.0     | 5.0     | 2.0     | 046693  |          |
|                                                                                            |           | 16.1    | 14.0    | 2.0     | 5.0     | 3.0     | 049986  |          |
|                                                                                            |           |         |         |         |         |         |         |          |
|           |           | 15.0    | 14.5    | 2.0     | 4.0     | 2.0     | 022307  | 033944   |
|                                                                                            |           | 15.0    | 14.5    | 2.0     | 4.0     | 2.5     | 033940  | 033950   |
|                                                                                            |           | 15.0    | 14.5    | 2.0     | 4.0     | 3.0     | 022309  | 033956   |
|                                                                                            |           | 16.1    | 14.0    | 2.0     | 5.0     | 2.0     | 046694  |          |
|                                                                                            |           | 16.1    | 14.0    | 2.0     | 5.0     | 3.0     | 049987  |          |
|                                                                                            |           |         |         |         |         |         |         |          |
|         |           | 12.0    | 14.5    | 2.0     | 4.0     | 2.0     | 021044  | 033973   |
|                                                                                            |           | 12.0    | 14.5    | 2.0     | 4.0     | 2.5     | 020397  | 034109   |
|                                                                                            |           | 12.0    | 14.5    | 2.0     | 4.0     | 3.0     | 020620  | 034100   |
|         |           | 19.6    | 15.2    | 2.0     | 4.0     | 2.0     | 033963  | 033997   |
|                                                                                            |           | 19.6    | 15.2    | 2.0     | 4.0     | 3.0     | 033967  | 034003   |
|         |           | 12.0    | 14.5    | 2.0     | 4.0     | 2.0     | 021045  | 033981   |
|                                                                                            |           | 12.0    | 14.5    | 2.0     | 4.0     | 2.5     | 020396  | 034106   |
|                                                                                            |           | 12.0    | 14.5    | 2.0     | 4.0     | 3.0     | 020619  | 034103   |
|         |           | 19.6    | 15.2    | 2.0     | 4.0     | 2.0     | 033966  | 034000   |
|                                                                                            |           | 19.6    | 15.2    | 2.0     | 4.0     | 3.0     | 033968  |          |
| <br>IMA | Quadromat | 12.0    | 18.0    | 2.0     | 4.0     | 2.0     | 033969  |          |
|                                                                                            |           | 12.0    | 18.0    | 2.0     | 4.0     | 3.0     | 033970  |          |
|                                                                                            | MFA       | 12.0    | 18.0    | 2.0     | 4.0     | 2.0     | 034024  |          |
|                                                                                            |           | 12.0    | 18.0    | 2.0     | 4.0     | 3.0     | 034031  |          |
|                                                                                            | Quadromat | 12.0    | 18.0    | 2.0     | 4.0     | 2.0     | 033971  |          |
|                                                                                            |           | 12.0    | 18.0    | 2.0     | 4.0     | 3.0     | 033972  |          |
|                                                                                            | MFA       | 12.0    | 18.0    | 2.0     | 4.0     | 2.0     | 034025  | 041378   |
|                                                                                            |           | 12.0    | 18.0    | 2.0     | 4.0     | 3.0     | 034032  |          |



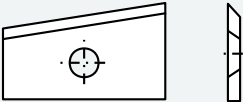
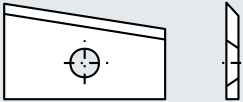
EN Profiled standard blanks  
 DE Profilierte Standardblanketts  
 FR Plaquettes standard profilées  
 IT Placchette profilate standard  
 ES Cuchillas perfiladas standard

|                                                                                    | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | R<br>mm | T04F-CR |
|------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|
|   | 20.0    | 16.0    | 2.0     | 3.0     |         | 3.0     | 033311  |
|                                                                                    | 30.0    | 14.0    | 2.0     | 4.0     |         | 2.0     | 033312  |
|                                                                                    | 30.0    | 14.0    | 2.0     | 4.0     |         | 2.5     | 033313  |
|                                                                                    | 30.0    | 14.0    | 2.0     | 4.0     |         | 3.0     | 033314  |
|   | 20.0    | 16.0    | 2.0     | 3.0     |         | 3.0     | 033315  |
|                                                                                    | 30.0    | 14.0    | 2.0     | 4.0     |         | 2.0     | 033316  |
|                                                                                    | 30.0    | 14.0    | 2.0     | 4.0     |         | 2.5     | 033317  |
|                                                                                    | 30.0    | 14.0    | 2.0     | 4.0     |         | 3.0     | 033318  |
|  | 12.0    | 12.0    | 1.5     | 4.0     |         | 45°     | 033319  |
|                                                                                    | 16.0    | 17.5    | 2.0     | 4.0     |         | 45°     | 032964  |
|                                                                                    | 16.0    | 17.5    | 2.0     | 4.4     |         | 45°     | 033324  |
|                                                                                    | 16.0    | 17.5    | 2.0     | 3.5     |         | 45°     | 015237  |

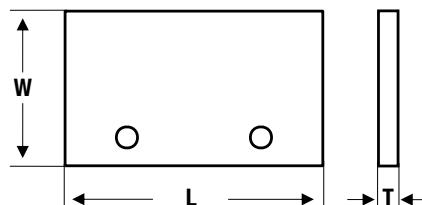
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | R<br>mm | A°  | T04F-CR | T04MG-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|-----|---------|----------|
|  | 20.0    | 12.0    | 2.0     | 4.0     | 1.0     | 6°  | 032984  |          |
|                                                                                     | 20.0    | 12.0    | 2.0     | 4.0     | 1.0     | 15° | 050309  |          |
|                                                                                     | 20.0    | 12.0    | 2.0     | 4.0     | 2.0     | 6°  | 016419  |          |
|                                                                                     | 20.0    | 12.0    | 2.0     | 4.0     | 2.0     | 15° | 050311  |          |
|                                                                                     | 20.0    | 12.0    | 2.0     | 4.0     | 3.0     | 6°  | 016420  |          |
|                                                                                     | 20.0    | 12.0    | 2.0     | 4.0     | 3.0     | 15° | 050313  |          |
|  | 20.0    | 11.5    | 2.0     | 4.5     | 1.5     |     | 050088  |          |
|                                                                                     | 20.0    | 11.5    | 2.0     | 4.5     | 2.0     |     | 050089  |          |
|                                                                                     | 20.0    | 11.5    | 2.0     | 4.5     | 2.5     |     | 050090  |          |
|                                                                                     | 20.0    | 11.5    | 2.0     | 4.5     | 3.0     |     | 050091  |          |
|  | 12.7    | 12.7    | 3.2     |         | 2.0     |     | 035041  |          |
|                                                                                     | 12.7    | 12.7    | 3.2     |         | 3.0     |     | 037922  |          |
|  | 19.5    | 9.0     | 1.5     | 4.0     | 2.0     |     | 033117  | 033142   |
|                                                                                     | 19.5    | 9.0     | 1.5     | 4.0     | 3.0     |     | 033097  | 033146   |
|                                                                                     | 19.5    | 9.0     | 1.5     | 4.0     | 4.0     |     | 033098  | 033149   |
|                                                                                     | 19.5    | 9.0     | 1.5     | 4.0     | 5.0     |     | 033099  | 033152   |
|  | 39.5    | 12.0    | 1.5     | 4.0     |         |     |         | 033401   |

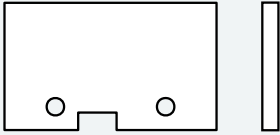


- EN Profiled standard blanks  
 DE Profilierte Standardblanketts  
 FR Plaquettes standard profilées  
 IT Placchette profilate standard  
 ES Cuchillas perfiladas standard

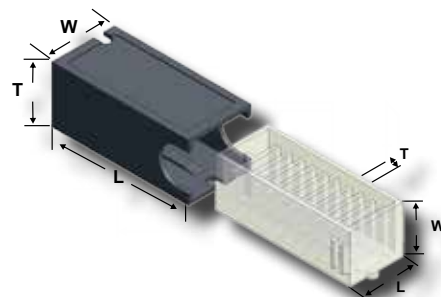
|                                                                                   | L<br>mm | W<br>mm | T<br>mm | T04F-CR |
|-----------------------------------------------------------------------------------|---------|---------|---------|---------|
|  | 30.0    | 22.5    | 3.0     | 020272  |
|                                                                                   | 55.0    | 25.0    | 3.0     | 020502  |
|  | 30.0    | 22.5    | 3.0     | 020273  |
|                                                                                   | 55.0    | 25.0    | 3.0     | 020503  |

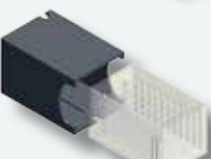
- EN Backing plates  
 DE Stützplatten  
 FR Supports  
 IT Supporti  
 ES Placas de soporte



|                                                                                     | L<br>mm | W<br>mm | T<br>mm | L<br>mm           | W<br>mm | T<br>mm | Art-No. |
|-------------------------------------------------------------------------------------|---------|---------|---------|-------------------|---------|---------|---------|
|                                                                                     |         |         |         | for Superprofiler |         |         |         |
|  | 40.0    | 26.0    | 4.0     | 41.0              | 28.0    | 1.5     | 015705  |
|                                                                                     | 50.0    | 33.0    | 4.0     | 51.0              | 35.0    | 1.5     | 015974  |
|                                                                                     | 60.0    | 28.0    | 4.0     | 61.0              | 31.0    | 1.5     | 016212  |
|                                                                                     | 60.0    | 45.0    | 6.0     | 61.0              | 45.0    | 2.0     | 016237  |
|                                                                                     | 80.0    | 43.0    | 6.0     | 81.0              | 45.0    | 2.0     | 016335  |

EN Packing boxes  
 DE Verpackungsschachteln  
 FR Caisses d'emballage  
 IT Contenitori per imballo  
 ES Cajas de embalaje



| EN in anthracite<br>DE in anthrazit<br>FR en anthracite<br>IT in antracite<br>ES en Antracita | External dimension box<br>Außenmaß Schachtel<br>Dimension externe de boîte<br>Dimensione esterna<br>Dimensión externa |         |         |         | Maximum knife dimension<br>Maximales Messermaß<br>Dimension maximum de couteau<br>Dimensione massima della lama<br>Dimensión máxima del cuchillo |         |         | Pieces<br>Stück<br>Unités<br>Unità<br>Unidades |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------|---------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|------------------------------------------------|
|                                                                                               | L<br>mm                                                                                                               | W<br>mm | T<br>mm | Art-No. | L<br>mm                                                                                                                                          | W<br>mm | T<br>mm |                                                |
|              | 69                                                                                                                    | 31.8    | 29.2    | 106393  | 23                                                                                                                                               | 23      | 4       | 10                                             |
|             | 69                                                                                                                    | 41.8    | 39.2    | 114845  | 33                                                                                                                                               | 33      | 4       | 10                                             |
|            | 69                                                                                                                    | 46.8    | 44.2    | 106404  | 38                                                                                                                                               | 38      | 4       | 10                                             |
|            | 69                                                                                                                    | 54.8    | 52.2    | 106856  | 46                                                                                                                                               | 46      | 4       | 10                                             |
|            | 69                                                                                                                    | 61.8    | 49.2    | 114844  | 53                                                                                                                                               | 43      | 4       | 10                                             |
|            | 69                                                                                                                    | 73.6    | 49.2    | 114843  | 65                                                                                                                                               | 43      | 4       | 10                                             |
|            | 69                                                                                                                    | 73.6    | 71.2    | 106858  | 65                                                                                                                                               | 65      | 4       | 10                                             |



TOOLS CUT BETTER WITH TIGRA





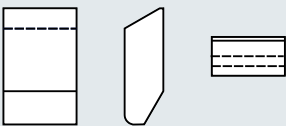
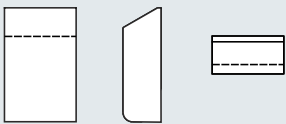
- EN Saw tips and strobe blanks
- DE Sägezähne und Wischerblätter
- FR Dents de scie et racleurs
- IT Dentelli per lame e barrette per rasanti
- ES Dientes de sierra y rasuradores



TOOLS CUT BETTER WITH TIGRA

---

EN Saw tips and strobe blanks  
 DE Sägezähne und Wischerblätter  
 FR Dents de scie et racleurs  
 IT Dentelli per lame e barrette per rasanti  
 ES Dientes de sierra y rasuradores

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                    |                |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|                    | <p>EN Carbide saw tips for circular saws<br/>         DE Hartmetallsägezähne für Kreissägen<br/>         FR Dents de scie pour scies circulaires<br/>         IT Dentelli per lame circolari<br/>         ES Dientes de sierra para sierras circulares</p> <p><i>metric<br/>metrisch<br/>métrique<br/>metrico<br/>métrico</i></p>                  | <p>78 - 83</p> |
|                    | <p>EN Carbide saw tips for circular saws<br/>         DE Hartmetallsägezähne für Kreissägen<br/>         FR Dents de scie pour scies circulaires<br/>         IT Dentelli per lame circolari<br/>         ES Dientes de sierra para sierras circulares</p> <p><i>"CW Style"<br/>inch</i></p>                                                       | <p>84 - 89</p> |
|                    | <p>EN Carbide saw tips for circular saws<br/>         DE Hartmetallsägezähne für Kreissägen<br/>         FR Dents de scie pour scies circulaires<br/>         IT Dentelli per lame circolari<br/>         ES Dientes de sierra para sierras circulares</p> <p><i>"W Style"<br/>inch</i></p>                                                        | <p>90 - 92</p> |
|                   | <p>EN Strobe blanks - as sintered and pretinned<br/>         DE Wischerblätter - roh und lotbeschichtet<br/>         FR Racleurs - bruts et pre-brasés<br/>         IT Barrette per rasanti - grezzo e saldo-brasato<br/>         ES Rasuradores - en bruto y con solda</p> <p><i>metric<br/>metrisch<br/>métrique<br/>metrico<br/>métrico</i></p> | <p>93</p>      |
|                  | <p>EN Strobe blanks - as sintered and pretinned<br/>         DE Wischerblätter - roh und lotbeschichtet<br/>         FR Racleurs - bruts et pre-brasés<br/>         IT Barrette per rasanti - grezzo e saldo-brasato<br/>         ES Rasuradores - en bruto y con solda</p> <p><i>inch</i></p>                                                     | <p>94</p>      |
| <p>BrazeTec </p> | <p>EN Brazing alloys and fluxes<br/>         DE Lot und Flussmittel<br/>         FR Alliages et flux de brasage<br/>         IT Leghe brasanti e disossidanti<br/>         ES Aleaciones y fundentes para soldadura fuerte</p>                                                                                                                     | <p>95</p>      |

EN For sawtips in metalworking grades please refer to our catalog "Metal and composite material working".  
 DE Für Sägezähne in Metallbearbeitungsarten beachten Sie bitte unseren Katalog "Metall- und Verbundwerkstoffbearbeitung".  
 FR Pour les dents de scie en nuances d'usinage de métaux s.v.p. consultez notre catalogue "Usinage de métaux et de matériaux composites".  
 IT Per i dentelli per lame per la meccanica, consultare il nostro catalogo "Lavorazione di metalli e materiali compositi".  
 ES Para dientes de sierra en las calidades de metal, consulte nuestro catalogo "Trabajo de metal y de materiales compuestos".

|    |                     |                                                 |
|----|---------------------|-------------------------------------------------|
| EN | Carbide saw tips    | - Carbide grades and their applications         |
| DE | Hartmetallsägezähne | - Hartmetallsorten und ihre Anwendungen         |
| FR | Dents de scie       | - Les nuances de carbures et leurs applications |
| IT | Dentelli per lame   | - I tipi di metallo duro e le loro applicazioni |
| ES | Dientes de sierra   | - Calidades de metal duro y sus aplicaciones    |

| EN<br>DE<br>FR<br>IT<br>ES | TIGRA grade<br>TIGRA - Sorte<br>Nuance TIGRA<br>Tipo TIGRA<br>Calidad TIGRA | ISO<br>ISO<br>ISO<br>ISO<br>ISO | USA<br>USA<br>USA<br>Stati Uniti<br>EE.UU. | Hardness<br>Härte<br>Dureté<br>Durezza<br>Dureza                                    | Toughness<br>Zähigkeit<br>Ténacité<br>Tenacità<br>Tenacidad                           | Bending strength<br>Biegebruchfestigkeit<br>Résistance à la flexion<br>Resistenza flessionale<br>Resistencia a la flexión |
|----------------------------|-----------------------------------------------------------------------------|---------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                            | <b>T02MG-CR</b>                                                             | <b>K01</b>                      | <b>C4+++</b>                               |    |    |                                        |
|                            | <b>T03MG-CR</b>                                                             | <b>K01</b>                      | <b>C4++</b>                                |    |    |                                        |
|                            | <b>T03F-CR</b>                                                              | <b>K01</b>                      | <b>C4+</b>                                 |    |    |                                        |
|                            | <b>T06F-CR</b><br>UNIVERSAL                                                 | <b>K10</b>                      | <b>C3</b>                                  |  |  |                                      |
|                            | <b>T06MF</b><br>UNIVERSAL                                                   | <b>K20</b>                      | <b>C3</b>                                  |  |  |                                      |
|                            | <b>T08MF</b>                                                                | <b>K30</b>                      | <b>C2</b>                                  |  |  |                                      |
|                            | <b>T10MG</b>                                                                | <b>K10 - K40</b>                | <b>C3+</b>                                 |  |  |                                      |
|                            | <b>T10MG-E</b>                                                              | <b>K10 - K40</b>                | <b>C3+</b>                                 |  |  |                                      |
|                            | <b>T12M</b>                                                                 | <b>&gt; K40</b>                 | <b>C1</b>                                  |  |  |                                      |
|                            | <b>T12M-CR</b>                                                              | <b>&gt; K40</b>                 | <b>C1</b>                                  |  |  |                                      |
|                            | <b>T15C</b>                                                                 | <b>&gt; K40</b>                 | <b>Nail Cut</b>                            |  |  |                                      |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif -  
inossidabile - anticorrosivo

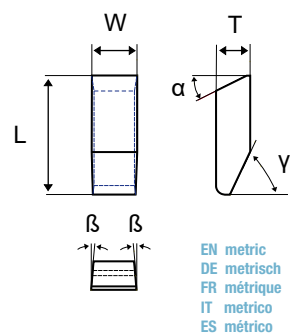
EN For technical data, please refer to the pages 4-5.  
DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.  
FR Pour les données techniques, veuillez voir aux pages 4-5.

| Aluminum<br>Aluminium<br>Aluminium<br>Alluminio<br>Aluminio                         | HDF<br>HDF<br>HDF<br>HDF<br>HDF                                                     | MDF<br>MDF<br>MDF<br>MDF<br>MDF                                                     | Chipboard<br>Spanplatte<br>Panneaux de particule<br>Truciolare<br>Panel de aglomerado | Hardwood<br>Hartholz<br>Bois dur<br>Legno duro<br>Madera dura                       | Softwood<br>Weichholz<br>Bois tendre<br>Legno tenero<br>Madera blanda               | Main usage<br>Hauptverwendung<br>Usage principal<br>Uso principale<br>Uso principal                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |    |    |      |    |    | EN HDF, Laminate<br>DE HDF, Laminat<br>FR HDF, stratifié<br>IT HDF, laminato<br>ES HDF, laminado                                                                                                                                                                 |
|    |    |    |      |    |    | EN MDF, HDF<br>DE MDF, HDF<br>FR MDF, HDF<br>IT MDF, HDF<br>ES MDF, HDF                                                                                                                                                                                          |
|    |    |    |      |    |    | EN MDF, chipboard, aluminum<br>DE MDF, Spanplatte, Aluminium<br>FR MDF, panneaux , aluminium<br>IT MDF, truciolare, alluminio<br>ES MDF, aglomerado, aluminio                                                                                                    |
|  |  |  |    |  |  | EN Universal use<br>DE Universeller Einsatz<br>FR Utilisation universelle<br>IT Uso universale<br>ES Uso universal                                                                                                                                               |
|  |  |  |    |  |  | EN Universal use (US)<br>DE Universeller Einsatz (US)<br>FR Utilisation universelle (US)<br>IT Uso universale (US)<br>ES Uso universal (US)                                                                                                                      |
|  |  |  |    |  |  | EN Wood, saw mills<br>DE Holz, Sägewerke<br>FR Bois, scieries<br>IT Legno, segherie<br>ES Madera, aserraderos                                                                                                                                                    |
|  |  |  |    |  |  | EN Softwood and hardwood<br>DE Weich- und Hartholz<br>FR Bois tendre et dur<br>IT Legni teneri e duri<br>ES Madera blanda y dura                                                                                                                                 |
|  |  |  |    |  |  | EN Softwood and hardwood, inexpensive saw blades<br>DE Weich- und Hartholz, preiswerte Sägeblätter<br>FR Bois tendre et dur, lames de scie peu coûteuses<br>IT Legni teneri e duri, lame a basso costo<br>ES Madera blanda y dura, hojas de sierra de bajo costo |
|  |  |  |    |  |  | EN Saw mills, frozen wood<br>DE Sägewerke, gefrorenes Holz<br>FR Scieries, bois congelé<br>IT Segherie, legno congelato<br>ES Fresa-disco, madera congelada                                                                                                      |
|  |  |  |    |  |  | EN Saw mills, frozen wood<br>DE Sägewerke, gefrorenes Holz<br>FR Scieries, bois congelé<br>IT Segherie, legno congelato<br>ES Fresa-disco, madera congelada                                                                                                      |
|  |  |  |    |  |  | EN Nail cutting, recycling<br>DE Holz mit Nägeln, Recycling<br>FR Couper ongles, recyclage<br>IT Legno con chiodi, riciclato<br>ES Viruta de madera reciclada                                                                                                    |

IT Per i dati tecnici, fare riferimento alle pagine 4-5.  
ES Para los datos técnicos, consulte las páginas 4-5.

 best performance  
 very good performance  
 acceptable  
 not suitable

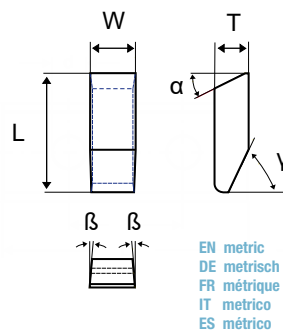
EN Carbide saw tips for circular saws  
 DE Hartmetallsägezähne für Kreissägen  
 FR Dents de scie pour scies circulaires  
 IT Dentelli per lame circolari  
 ES Dientes de sierra para sierras circulares



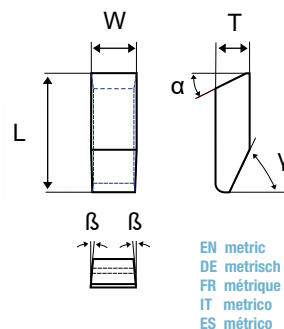
| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06F-CR |
|---------|---------|---------|----|---|----|----------|---------|---------|
| 6.5     | 1.8     | 2.0     | 27 | 5 | 56 |          |         | 120956  |
| 6.5     | 2.0     | 2.0     | 27 | 5 | 56 | 128977   | 111681  | 111686  |
| 6.5     | 2.5     | 2.0     | 27 | 5 | 56 |          | 111682  | 111687  |
| 6.5     | 2.6     | 2.0     | 27 | 5 | 56 | 116374   |         |         |
| 6.5     | 3.0     | 2.0     | 27 | 5 | 56 |          | 111683  | 111688  |
| 6.5     | 3.2     | 2.0     | 27 | 5 | 56 | 116373   |         | 118303  |
| 6.5     | 3.5     | 2.0     | 27 | 5 | 56 |          | 111684  | 111689  |
| 6.5     | 3.8     | 2.0     | 27 | 5 | 56 |          | 111685  | 111690  |
| 6.5     | 4.0     | 2.0     | 27 | 5 | 56 |          |         | 120254  |
| 6.5     | 4.5     | 2.0     | 27 | 5 | 56 |          |         | 120255  |

| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06F-CR | T10MG-E |
|---------|---------|---------|----|---|----|----------|---------|---------|---------|
| 8.0     | 2.3     | 2.3     | 27 | 5 | 70 | 138381   |         |         |         |
| 8.0     | 2.5     | 2.3     | 27 | 5 | 70 | 126370   | 121627  | 121535  | 142625  |
| 8.0     | 2.8     | 2.3     | 27 | 5 | 70 | 114012   | 111632  | 111649  | 142626  |
| 8.0     | 2.9     | 2.3     | 27 | 5 | 70 | 114013   | 111633  | 111650  |         |
| 8.0     | 3.0     | 2.3     | 27 | 5 | 70 | 114014   | 111634  | 111651  |         |
| 8.0     | 3.1     | 2.3     | 27 | 5 | 70 | 121828   | 115551  | 115550  | 142627  |
| 8.0     | 3.2     | 2.3     | 27 | 5 | 70 |          |         | 122162  |         |
| 8.0     | 3.3     | 2.3     | 27 | 5 | 70 | 114015   | 111635  | 111652  |         |
| 8.0     | 3.4     | 2.3     | 27 | 5 | 70 | 121831   | 121832  | 116207  |         |
| 8.0     | 3.5     | 2.3     | 27 | 5 | 70 | 114016   | 111636  | 111653  | 126018  |
| 8.0     | 3.6     | 2.3     | 27 | 5 | 70 | 114017   | 111637  | 111654  | 142630  |
| 8.0     | 3.7     | 2.3     | 27 | 5 | 70 |          |         |         | 142644  |
| 8.0     | 3.8     | 2.3     | 27 | 5 | 70 | 114018   | 111638  | 111655  | 142631  |
| 8.0     | 3.9     | 2.3     | 27 | 5 | 70 |          | 133903  |         |         |
| 8.0     | 4.0     | 2.3     | 27 | 5 | 70 | 114019   | 111639  | 111656  | 142632  |
| 8.0     | 4.1     | 2.3     | 27 | 5 | 70 |          |         | 124214  | 142633  |
| 8.0     | 4.2     | 2.3     | 27 | 5 | 70 |          | 125953  |         |         |
| 8.0     | 4.3     | 2.3     | 27 | 5 | 70 | 114020   | 111640  | 111657  | 142634  |
| 8.0     | 4.4     | 2.3     | 27 | 5 | 70 | 114021   | 111641  | 111658  | 142635  |
| 8.0     | 4.5     | 2.3     | 27 | 5 | 70 | 114022   | 111642  | 111659  | 142636  |
| 8.0     | 4.8     | 2.3     | 27 | 5 | 70 | 114023   | 111643  | 111660  |         |
| 8.0     | 5.0     | 2.3     | 27 | 5 | 70 | 114024   | 111644  | 111661  | 142637  |
| 8.0     | 5.2     | 2.3     | 27 | 5 | 70 | 114025   | 111645  | 111662  |         |
| 8.0     | 5.5     | 2.3     | 27 | 5 | 70 | 114026   | 111646  | 111663  |         |
| 8.0     | 6.0     | 2.3     | 27 | 5 | 70 | 124528   |         |         |         |

EN Carbide saw tips for circular saws  
 DE Hartmetallsägezähne für Kreissägen  
 FR Dents de scie pour scies circulaires  
 IT Dentelli per lame circolari  
 ES Dientes de sierra para sierras circulares



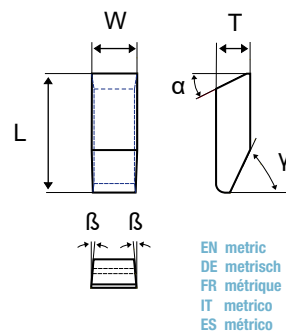
| L<br>mm | W<br>mm | T<br>mm | α  | β  | γ | T03MG-CR | T03F-CR |
|---------|---------|---------|----|----|---|----------|---------|
| 8.0     | 4.3     | 3.0     | 30 | 60 | 5 | 142730   | 142743  |
| 8.0     | 4.5     | 3.0     | 30 | 60 | 5 | 142731   | 142742  |
| 8.0     | 4.8     | 3.0     | 30 | 60 | 5 | 142732   | 142741  |
| 8.0     | 5.0     | 3.0     | 30 | 60 | 5 | 142733   | 142738  |
| 8.0     | 5.5     | 3.0     | 30 | 60 | 5 | 142734   | 142737  |
| 8.0     | 6.0     | 3.0     | 30 | 60 | 5 | 140482   | 133718  |
| 8.0     | 6.5     | 3.0     | 30 | 60 | 5 | 142735   | 133719  |



EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T06F-CR | T10MG-E |
|---------|---------|---------|----|---|----|----------|---------|---------|
| 8.5     | 2.2     | 2.5     | 27 | 5 | 70 |          | 130208  |         |
| 8.5     | 2.5     | 2.5     | 27 | 5 | 70 | 114027   | 111621  |         |
| 8.5     | 3.0     | 2.5     | 27 | 5 | 70 | 114028   | 111622  |         |
| 8.5     | 3.3     | 2.5     | 27 | 5 | 70 | 114029   | 111623  |         |
| 8.5     | 3.4     | 2.5     | 27 | 5 | 70 | 124609   | 128510  | 142638  |
| 8.5     | 3.5     | 2.5     | 27 | 5 | 70 | 120964   | 120961  |         |
| 8.5     | 3.6     | 2.5     | 27 | 5 | 70 | 114030   | 111624  | 142639  |
| 8.5     | 3.8     | 2.5     | 27 | 5 | 70 | 114032   | 111626  | 142640  |
| 8.5     | 4.0     | 2.5     | 27 | 5 | 70 | 114033   | 111627  |         |
| 8.5     | 4.2     | 2.5     | 27 | 5 | 70 | 128976   | 119323  | 142641  |
| 8.5     | 4.3     | 2.5     | 27 | 5 | 70 | 124204   | 124694  |         |
| 8.5     | 4.5     | 2.5     | 27 | 5 | 70 | 114034   | 111628  | 142642  |
| 8.5     | 4.6     | 2.5     | 27 | 5 | 70 |          | 119324  |         |
| 8.5     | 5.0     | 2.5     | 27 | 5 | 70 | 114035   | 111629  | 142643  |
| 8.5     | 5.5     | 2.5     | 27 | 5 | 70 | 120972   | 120403  |         |

| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06F-CR |
|---------|---------|---------|----|---|----|----------|---------|---------|
| 9.0     | 3.2     | 2.7     | 27 | 5 | 70 |          |         | 125444  |
| 9.0     | 3.3     | 2.7     | 27 | 5 | 70 | 114036   | 111603  | 111612  |
| 9.0     | 3.5     | 2.7     | 27 | 5 | 70 | 114037   | 111604  | 111613  |
| 9.0     | 3.8     | 2.7     | 27 | 5 | 70 | 114039   | 111606  | 111615  |
| 9.0     | 4.2     | 2.7     | 27 | 5 | 70 | 114042   | 111609  | 111618  |
| 9.0     | 4.3     | 2.7     | 27 | 5 | 70 | 114043   | 111610  | 111619  |
| 9.0     | 4.7     | 2.7     | 27 | 5 | 70 | 114044   | 111611  | 111620  |
| 9.0     | 5.2     | 2.7     | 27 | 5 | 70 |          |         | 129638  |
| 9.0     | 5.3     | 2.7     | 27 | 5 | 70 | 129939   |         |         |
| 9.0     | 5.5     | 2.7     | 27 | 5 | 70 |          |         | 126860  |
| 9.0     | 6.0     | 2.7     | 27 | 5 | 70 |          |         | 140846  |

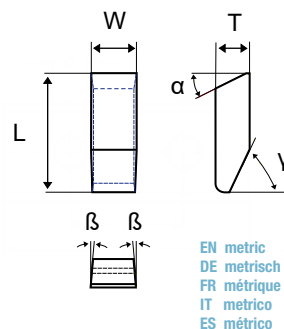


EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06F-CR | T10MG-E |
|---------|---------|---------|----|---|----|----------|---------|---------|---------|
| 10.5    | 3.0     | 2.5     | 27 | 5 | 70 | 114046   | 111565  | 111578  |         |
| 10.5    | 3.3     | 2.5     | 27 | 5 | 70 | 114047   | 112436  | 112437  |         |
| 10.5    | 3.5     | 2.5     | 27 | 5 | 70 | 114049   | 111567  | 111580  | 142666  |
| 10.5    | 3.6     | 2.5     | 27 | 5 | 70 | 114050   | 111568  | 111581  | 142668  |
| 10.5    | 3.8     | 2.5     | 27 | 5 | 70 | 114052   | 111570  | 111583  | 142669  |
| 10.5    | 4.0     | 2.5     | 27 | 5 | 70 | 114053   | 111571  | 111584  | 142670  |
| 10.5    | 4.1     | 2.5     | 27 | 5 | 70 | 141374   |         | 134345  |         |
| 10.5    | 4.3     | 2.5     | 27 | 5 | 70 | 114054   | 111572  | 111585  |         |
| 10.5    | 4.5     | 2.5     | 27 | 5 | 70 | 114055   | 111573  | 111586  | 142672  |
| 10.5    | 4.6     | 2.5     | 27 | 5 | 70 |          |         | 119905  |         |
| 10.5    | 4.8     | 2.5     | 27 | 5 | 70 |          |         | 126184  |         |
| 10.5    | 5.0     | 2.5     | 27 | 5 | 70 | 114056   | 111574  | 111587  | 142673  |
| 10.5    | 5.5     | 2.5     | 27 | 5 | 70 | 114057   | 111575  | 111588  |         |
| 10.5    | 6.0     | 2.5     | 27 | 5 | 70 | 121835   | 121836  | 119953  |         |
| 10.5    | 6.5     | 2.5     | 27 | 5 | 70 | 114058   | 111576  | 111589  |         |

| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06F-CR | T08MF  | T10MG-E |
|---------|---------|---------|----|---|----|----------|---------|---------|--------|---------|
| 10.5    | 3.3     | 3.0     | 27 | 5 | 65 |          |         | 121536  |        |         |
| 10.5    | 3.5     | 3.0     | 27 | 5 | 65 | 114060   | 111489  | 111508  | 111546 |         |
| 10.5    | 3.6     | 3.0     | 27 | 5 | 65 | 114061   | 111490  | 111509  | 111547 | 142674  |
| 10.5    | 3.8     | 3.0     | 27 | 5 | 65 | 114062   | 111491  | 111510  | 111548 |         |
| 10.5    | 3.9     | 3.0     | 27 | 5 | 65 |          |         | 121540  |        |         |
| 10.5    | 4.1     | 3.0     | 27 | 5 | 65 | 114063   | 111492  | 111511  | 111549 |         |
| 10.5    | 4.3     | 3.0     | 27 | 5 | 65 | 114064   | 111493  | 111512  | 111550 | 142675  |
| 10.5    | 4.5     | 3.0     | 27 | 5 | 65 | 114065   | 111494  | 111513  | 111551 | 142676  |
| 10.5    | 4.6     | 3.0     | 27 | 5 | 65 | 114066   | 111495  | 111514  | 111552 |         |
| 10.5    | 4.7     | 3.0     | 27 | 5 | 65 | 114067   | 111496  | 111515  | 111553 |         |
| 10.5    | 4.8     | 3.0     | 27 | 5 | 65 | 114068   | 111497  | 111516  | 111554 | 142677  |
| 10.5    | 5.0     | 3.0     | 27 | 5 | 65 | 114069   | 111498  | 111517  | 111555 | 142678  |
| 10.5    | 5.3     | 3.0     | 27 | 5 | 65 | 114070   | 111499  | 111518  | 111556 | 142679  |
| 10.5    | 5.5     | 3.0     | 27 | 5 | 65 | 114071   | 111500  | 111519  | 111557 |         |
| 10.5    | 5.6     | 3.0     | 27 | 5 | 65 | 114072   | 111501  | 111520  | 111558 |         |
| 10.5    | 6.0     | 3.0     | 27 | 5 | 65 | 114073   | 111502  | 111521  | 111559 |         |
| 10.5    | 6.5     | 3.0     | 27 | 5 | 65 | 114074   | 111503  | 111522  | 111560 |         |
| 10.5    | 7.0     | 3.0     | 27 | 5 | 65 | 114075   | 111504  | 111523  | 111561 |         |
| 10.5    | 7.5     | 3.0     | 27 | 5 | 65 | 124193   |         | 118655  |        |         |
| 10.5    | 8.0     | 3.0     | 27 | 5 | 65 |          |         | 118879  |        |         |
| 10.5    | 8.5     | 3.0     | 27 | 5 | 65 | 114076   | 111505  | 111524  | 111562 |         |
| 10.5    | 10.5    | 3.0     | 27 | 5 | 65 | 114077   | 111506  | 111525  | 111563 |         |

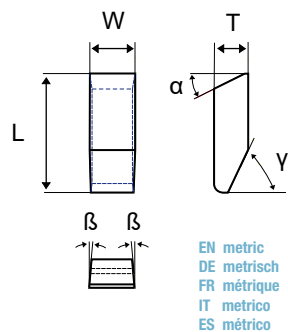
EN Carbide saw tips for circular saws  
 DE Hartmetallsägezähne für Kreissägen  
 FR Dents de scie pour scies circulaires  
 IT Dentelli per lame circolari  
 ES Dientes de sierra para sierras circulares

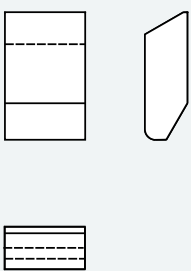


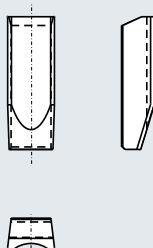
| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06MF  | T06F-CR | T08MF  | T10MG-E |
|---------|---------|---------|----|---|----|----------|---------|--------|---------|--------|---------|
| 10.5    | 3.5     | 3.5     | 27 | 5 | 60 |          | 111429  | 111469 | 111449  | 112414 |         |
| 10.5    | 4.0     | 3.5     | 27 | 5 | 60 |          | 111430  | 111470 | 111450  | 112415 | 142680  |
| 10.5    | 4.1     | 3.5     | 27 | 5 | 60 |          | 111431  | 111471 | 111451  | 112416 |         |
| 10.5    | 4.3     | 3.5     | 27 | 5 | 60 |          | 111432  | 111472 | 111452  | 112417 |         |
| 10.5    | 4.4     | 3.5     | 27 | 5 | 60 |          |         |        |         | 131206 | 142681  |
| 10.5    | 4.5     | 3.5     | 27 | 5 | 60 |          | 111433  | 111473 | 111453  | 112418 | 142682  |
| 10.5    | 4.7     | 3.5     | 27 | 5 | 60 |          | 111434  | 111474 | 111454  | 112419 |         |
| 10.5    | 4.8     | 3.5     | 27 | 5 | 60 | 122004   | 111435  | 111475 | 111455  | 112420 | 142683  |
| 10.5    | 5.0     | 3.5     | 27 | 5 | 60 | 126206   | 111436  | 111476 | 111456  | 112421 | 142684  |
| 10.5    | 5.3     | 3.5     | 27 | 5 | 60 | 126913   | 111437  | 111477 | 111457  | 112422 | 142685  |
| 10.5    | 5.5     | 3.5     | 27 | 5 | 60 | 130113   | 111438  | 111478 | 111458  | 112423 | 142686  |
| 10.5    | 5.8     | 3.5     | 27 | 5 | 60 |          | 111439  | 111479 | 111459  | 112424 |         |
| 10.5    | 6.0     | 3.5     | 27 | 5 | 60 | 122005   | 111440  | 111480 | 111460  | 112425 | 142687  |
| 10.5    | 6.5     | 3.5     | 27 | 5 | 60 |          | 111441  | 111481 | 111461  | 112426 | 142688  |
| 10.5    | 7.0     | 3.5     | 27 | 5 | 60 |          | 111442  | 111482 | 111462  | 112427 |         |
| 10.5    | 7.5     | 3.5     | 27 | 5 | 60 |          | 111443  | 111483 | 111463  | 112428 |         |
| 10.5    | 8.0     | 3.5     | 27 | 5 | 60 |          | 111444  | 111484 | 111464  | 112429 |         |
| 10.5    | 8.5     | 3.5     | 27 | 5 | 60 |          | 111445  | 111485 | 111465  | 112430 |         |
| 10.5    | 9.0     | 3.5     | 27 | 5 | 60 |          | 111446  | 111486 | 111466  | 112431 |         |
| 10.5    | 10.0    | 3.5     | 27 | 5 | 60 |          | 111447  | 111487 | 111467  | 112432 |         |
| 10.5    | 11.5    | 3.5     | 27 | 5 | 60 |          |         |        | 118891  |        |         |

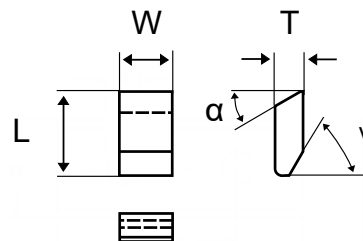
| L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR | T06MF  | T08MF  | T12M   | T10MG-E |
|---------|---------|---------|----|---|----|----------|---------|--------|--------|--------|---------|
| 13.0    | 3.8     | 4.0     | 30 | 5 | 60 |          | 121838  |        | 116278 |        | 142689  |
| 13.0    | 4.2     | 4.0     | 30 | 5 | 60 |          |         |        |        | 126246 |         |
| 13.0    | 4.9     | 4.0     | 30 | 5 | 60 |          | 111410  |        | 111419 |        |         |
| 13.0    | 5.2     | 4.0     | 30 | 5 | 60 |          |         |        |        | 126247 | 142690  |
| 13.0    | 5.4     | 4.0     | 30 | 5 | 60 | 124194   | 111411  | 115895 | 111420 |        | 142692  |
| 13.0    | 5.8     | 4.0     | 30 | 5 | 60 |          | 111412  | 125717 | 111421 | 119611 | 142693  |
| 13.0    | 6.0     | 4.0     | 30 | 5 | 60 | 127248   | 111413  | 126282 | 111422 |        | 142694  |
| 13.0    | 6.3     | 4.0     | 30 | 5 | 60 | 124100   | 111414  |        | 111423 | 126248 | 142695  |
| 13.0    | 6.5     | 4.0     | 30 | 5 | 60 | 120620   | 111415  | 104898 | 111424 |        | 142696  |
| 13.0    | 6.7     | 4.0     | 30 | 5 | 60 | 123406   | 111416  |        | 111425 |        | 142697  |
| 13.0    | 6.9     | 4.0     | 30 | 5 | 60 |          |         | 125718 |        |        |         |
| 13.0    | 7.0     | 4.0     | 30 | 5 | 60 |          | 111417  |        | 111426 |        | 142698  |
| 13.0    | 7.5     | 4.0     | 30 | 5 | 60 |          | 111418  | 121580 | 111427 |        | 142699  |
| 13.0    | 8.5     | 4.0     | 30 | 5 | 60 |          |         | 104897 |        |        |         |
| 13.0    | 9.2     | 4.0     | 30 | 5 | 60 |          | 126566  |        |        |        |         |

- EN Carbide saw tips for circular saws  
 DE Hartmetallsägezähne für Kreissägen  
 FR Dents de scie pour scies circulaires  
 IT Dentelli per lame circolari  
 ES Dientes de sierra para sierras circulares



|                                                                                   | L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T06MF  |
|-----------------------------------------------------------------------------------|---------|---------|---------|----|---|----|--------|
|  | 14.5    | 5.0     | 4.0     | 30 | 0 | 70 | 111390 |
|                                                                                   | 14.5    | 6.0     | 4.0     | 30 | 0 | 70 | 111392 |
|                                                                                   | 14.5    | 7.0     | 4.0     | 30 | 0 | 70 | 111394 |
|                                                                                   | 14.5    | 8.0     | 4.0     | 30 | 0 | 70 | 111396 |
|                                                                                   | 14.5    | 9.0     | 4.0     | 30 | 0 | 70 | 111397 |
|                                                                                   | 14.5    | 10.0    | 4.0     | 30 | 0 | 70 | 111398 |
|                                                                                   | 14.5    | 10.5    | 4.0     | 30 | 0 | 70 | 111399 |
|                                                                                   | 14.5    | 11.0    | 4.0     | 30 | 0 | 70 | 111400 |
|                                                                                   | 14.5    | 12.0    | 4.0     | 30 | 0 | 70 | 111401 |
|                                                                                   | 14.5    | 13.0    | 4.0     | 30 | 0 | 70 | 111402 |
|                                                                                   | 14.5    | 14.0    | 4.0     | 30 | 0 | 70 | 111403 |
|                                                                                   | 14.5    | 15.0    | 4.0     | 30 | 0 | 70 | 111404 |
|                                                                                   | 14.5    | 16.0    | 4.0     | 30 | 0 | 70 | 111405 |
|                                                                                   | 14.5    | 17.0    | 4.0     | 30 | 0 | 70 | 111406 |
|                                                                                   | 14.5    | 20.0    | 4.0     | 30 | 0 | 70 | 111409 |

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | α  | β | γ  | T03MG-CR | T03F-CR |
|-------------------------------------------------------------------------------------|---------|---------|---------|----|---|----|----------|---------|
|  | 10.5    | 3.7     | 2.6     | 25 | 7 | 77 | 124256   | 124257  |

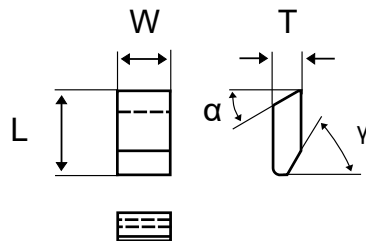


**CW Style**  
inch

EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| CWB  | L     |     | W     |     | T     |     | $\alpha$ | $\beta$ | $\gamma$ | T06MF  | T10MG  |
|------|-------|-----|-------|-----|-------|-----|----------|---------|----------|--------|--------|
|      | inch  | mm  | inch  | mm  | inch  | mm  |          |         |          |        |        |
| 7100 | 0.281 | 7.1 | 0.100 | 2.5 | 0.078 | 2.0 | 30       | 0       | 60       | 113848 | 113836 |
| 7120 | 0.281 | 7.1 | 0.120 | 3.0 | 0.078 | 2.0 | 30       | 0       | 60       | 113850 | 113838 |
| 7135 | 0.281 | 7.1 | 0.135 | 3.4 | 0.078 | 2.0 | 30       | 0       | 60       | 113851 | 113839 |
| 7150 | 0.281 | 7.1 | 0.150 | 3.8 | 0.078 | 2.0 | 30       | 0       | 60       | 113852 | 113840 |
| 7165 | 0.281 | 7.1 | 0.165 | 4.2 | 0.078 | 2.0 | 30       | 0       | 60       | 113853 | 113841 |
| 7180 | 0.281 | 7.1 | 0.180 | 4.6 | 0.078 | 2.0 | 30       | 0       | 60       | 113855 | 113843 |
| 7195 | 0.281 | 7.1 | 0.195 | 5.0 | 0.078 | 2.0 | 30       | 0       | 60       | 113856 | 113844 |
| 7200 | 0.281 | 7.1 | 0.200 | 5.1 | 0.078 | 2.0 | 30       | 0       | 60       | 113857 | 113845 |

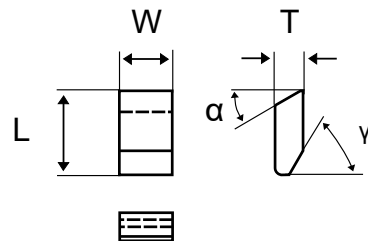
| CWD  | L     |     | W     |     | T     |     | $\alpha$ | $\beta$ | $\gamma$ | T03F-CR | T06MF  | T10MG  | T15C   |
|------|-------|-----|-------|-----|-------|-----|----------|---------|----------|---------|--------|--------|--------|
|      | inch  | mm  | inch  | mm  | inch  | mm  |          |         |          |         |        |        |        |
| 7100 | 0.312 | 7.9 | 0.100 | 2.5 | 0.093 | 2.4 | 30       | 0       | 60       | 111288  | 111311 | 112629 | 111334 |
| 7110 | 0.312 | 7.9 | 0.110 | 2.8 | 0.093 | 2.4 | 30       | 0       | 60       | 111289  | 111312 | 112630 | 111335 |
| 7120 | 0.312 | 7.9 | 0.120 | 3.0 | 0.093 | 2.4 | 30       | 0       | 60       | 111291  | 111314 | 112632 | 111337 |
| 7125 | 0.312 | 7.9 | 0.125 | 3.2 | 0.093 | 2.4 | 30       | 0       | 60       | 111292  | 111315 | 112633 | 111338 |
| 7135 | 0.312 | 7.9 | 0.135 | 3.4 | 0.093 | 2.4 | 30       | 0       | 60       | 111294  | 111317 | 112635 | 111340 |
| 7140 | 0.312 | 7.9 | 0.140 | 3.6 | 0.093 | 2.4 | 30       | 0       | 60       | 111295  | 111318 | 112636 | 111341 |
| 7150 | 0.312 | 7.9 | 0.150 | 3.8 | 0.093 | 2.4 | 30       | 0       | 60       | 111296  | 111319 | 112637 | 111342 |
| 7165 | 0.312 | 7.9 | 0.165 | 4.2 | 0.093 | 2.4 | 30       | 0       | 60       | 111298  | 111321 | 112639 | 111344 |
| 7170 | 0.312 | 7.9 | 0.170 | 4.3 | 0.093 | 2.4 | 30       | 0       | 60       | 111299  | 111322 | 112640 | 111345 |
| 7180 | 0.312 | 7.9 | 0.180 | 4.6 | 0.093 | 2.4 | 30       | 0       | 60       | 111301  | 111324 | 112642 | 111347 |
| 7185 | 0.312 | 7.9 | 0.185 | 4.7 | 0.093 | 2.4 | 30       | 0       | 60       | 111302  | 111325 | 112643 | 111348 |
| 7200 | 0.312 | 7.9 | 0.200 | 5.1 | 0.093 | 2.4 | 30       | 0       | 60       | 111304  | 111327 | 112645 | 111350 |
| 7215 | 0.312 | 7.9 | 0.215 | 5.5 | 0.093 | 2.4 | 30       | 0       | 60       | 111305  | 111328 | 112646 | 111351 |
| 7220 | 0.312 | 7.9 | 0.220 | 5.6 | 0.093 | 2.4 | 30       | 0       | 60       | 111306  | 111329 | 112647 | 111352 |
| 7230 | 0.312 | 7.9 | 0.230 | 5.8 | 0.093 | 2.4 | 30       | 0       | 60       | 111307  | 111330 | 112648 | 111353 |
| 7250 | 0.312 | 7.9 | 0.250 | 6.4 | 0.093 | 2.4 | 30       | 0       | 60       | 111309  | 111332 | 112650 | 111355 |
| 7280 | 0.312 | 7.9 | 0.280 | 7.1 | 0.093 | 2.4 | 30       | 0       | 60       | 112653  | 112654 | 112651 | 112655 |
| 7312 | 0.312 | 7.9 | 0.312 | 7.9 | 0.093 | 2.4 | 30       | 0       | 60       | 111310  | 111333 | 112652 | 111356 |



**CW Style**  
inch

- EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

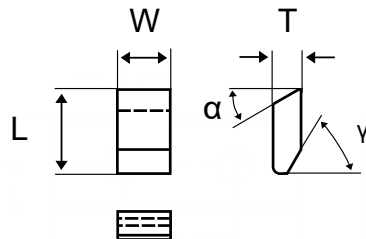
| CWE         | L            |     | W            |     | T            |     | $\alpha$  | $\beta$  | $\gamma$  | T03F-CR       | T06MF         | T10MG         |
|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|---------------|---------------|
|             | inch         | mm  | inch         | mm  | inch         | mm  |           |          |           |               |               |               |
| <b>7140</b> | <b>0.375</b> | 9.5 | <b>0.140</b> | 3.6 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111358</b> | <b>111380</b> | <b>111369</b> |
| <b>7150</b> | <b>0.375</b> | 9.5 | <b>0.150</b> | 3.8 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111359</b> | <b>111381</b> | <b>111370</b> |
| <b>7165</b> | <b>0.375</b> | 9.5 | <b>0.165</b> | 4.2 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111360</b> | <b>111382</b> | <b>111371</b> |
| <b>7185</b> | <b>0.375</b> | 9.5 | <b>0.185</b> | 4.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111361</b> | <b>111383</b> | <b>111372</b> |
| <b>7200</b> | <b>0.375</b> | 9.5 | <b>0.200</b> | 5.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111362</b> | <b>111384</b> | <b>111373</b> |
| <b>7215</b> | <b>0.375</b> | 9.5 | <b>0.215</b> | 5.5 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111363</b> | <b>111385</b> | <b>111374</b> |
| <b>7225</b> | <b>0.375</b> | 9.5 | <b>0.225</b> | 5.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>112658</b> | <b>112660</b> | <b>112659</b> |
| <b>7230</b> | <b>0.375</b> | 9.5 | <b>0.230</b> | 5.8 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111364</b> | <b>111386</b> | <b>111375</b> |
| <b>7250</b> | <b>0.375</b> | 9.5 | <b>0.250</b> | 6.4 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111365</b> | <b>111387</b> | <b>111376</b> |
| <b>7281</b> | <b>0.375</b> | 9.5 | <b>0.281</b> | 7.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111366</b> | <b>111388</b> | <b>111377</b> |
| <b>7312</b> | <b>0.375</b> | 9.5 | <b>0.312</b> | 7.9 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111367</b> | <b>111389</b> | <b>111378</b> |



**CW Style**  
inch

EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

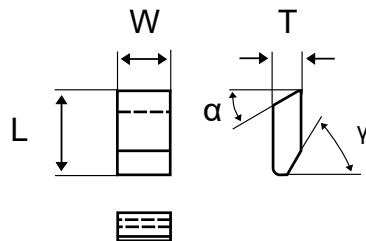
| CWF         | L            |      | W            |     | T            |     | α         | β        | γ         | T08MF         | T10MG         | T12M          |
|-------------|--------------|------|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|---------------|---------------|
|             | inch         | mm   | inch         | mm  | inch         | mm  |           |          |           |               |               |               |
| <b>7130</b> | <b>0.500</b> | 12.7 | <b>0.130</b> | 3.3 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>142736</b> | <b>111229</b> | <b>109395</b> |
| <b>7140</b> | <b>0.500</b> | 12.7 | <b>0.140</b> | 3.6 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>142740</b> | <b>111230</b> | <b>109397</b> |
| <b>7150</b> | <b>0.500</b> | 12.7 | <b>0.150</b> | 3.8 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132509</b> | <b>111231</b> | <b>109399</b> |
| <b>7160</b> | <b>0.500</b> | 12.7 | <b>0.160</b> | 4.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132510</b> | <b>111232</b> | <b>109400</b> |
| <b>7165</b> | <b>0.500</b> | 12.7 | <b>0.165</b> | 4.2 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>120712</b> | <b>111233</b> | <b>109401</b> |
| <b>7170</b> | <b>0.500</b> | 12.7 | <b>0.170</b> | 4.3 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132511</b> | <b>111234</b> | <b>109402</b> |
| <b>7180</b> | <b>0.500</b> | 12.7 | <b>0.180</b> | 4.6 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>119087</b> | <b>111235</b> | <b>109403</b> |
| <b>7190</b> | <b>0.500</b> | 12.7 | <b>0.190</b> | 4.8 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132512</b> | <b>111236</b> | <b>109405</b> |
| <b>7200</b> | <b>0.500</b> | 12.7 | <b>0.200</b> | 5.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132513</b> | <b>111237</b> | <b>109406</b> |
| <b>7210</b> | <b>0.500</b> | 12.7 | <b>0.210</b> | 5.3 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>121234</b> | <b>111238</b> | <b>109407</b> |
| <b>7215</b> | <b>0.500</b> | 12.7 | <b>0.215</b> | 5.5 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>134401</b> | <b>111239</b> | <b>109408</b> |
| <b>7220</b> | <b>0.500</b> | 12.7 | <b>0.220</b> | 5.6 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>133974</b> | <b>111240</b> | <b>109409</b> |
| <b>7230</b> | <b>0.500</b> | 12.7 | <b>0.230</b> | 5.8 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132514</b> | <b>111241</b> | <b>109410</b> |
| <b>7240</b> | <b>0.500</b> | 12.7 | <b>0.240</b> | 6.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>134548</b> | <b>111242</b> | <b>109412</b> |
| <b>7250</b> | <b>0.500</b> | 12.7 | <b>0.250</b> | 6.4 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132515</b> | <b>111243</b> | <b>109413</b> |
| <b>7260</b> | <b>0.500</b> | 12.7 | <b>0.260</b> | 6.6 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>133976</b> | <b>111244</b> | <b>109414</b> |
| <b>7270</b> | <b>0.500</b> | 12.7 | <b>0.270</b> | 6.9 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>133975</b> | <b>111245</b> | <b>109416</b> |
| <b>7275</b> | <b>0.500</b> | 12.7 | <b>0.275</b> | 7.0 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>142846</b> | <b>111246</b> | <b>109417</b> |
| <b>7280</b> | <b>0.500</b> | 12.7 | <b>0.280</b> | 7.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>132516</b> | <b>111247</b> | <b>109418</b> |
| <b>7290</b> | <b>0.500</b> | 12.7 | <b>0.290</b> | 7.4 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>134549</b> | <b>111248</b> | <b>109419</b> |
| <b>7310</b> | <b>0.500</b> | 12.7 | <b>0.310</b> | 7.9 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>142744</b> | <b>111250</b> | <b>109421</b> |
| <b>7312</b> | <b>0.500</b> | 12.7 | <b>0.312</b> | 7.9 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>133979</b> | <b>111251</b> | <b>109422</b> |
| <b>7330</b> | <b>0.500</b> | 12.7 | <b>0.330</b> | 8.4 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>70</b> | <b>134550</b> | <b>111252</b> | <b>109424</b> |



**CW Style**  
inch

EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

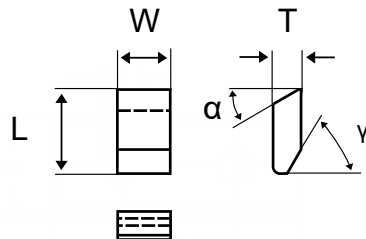
| CWG         | L<br>inch    | mm  | W<br>inch    | mm   | T<br>inch    | mm  | $\alpha$  | $\beta$  | $\gamma$  | T03F-CR       | T08MF         | T10MG         | T12M          | T15C          |
|-------------|--------------|-----|--------------|------|--------------|-----|-----------|----------|-----------|---------------|---------------|---------------|---------------|---------------|
| <b>7120</b> | <b>0.375</b> | 9.5 | <b>0.120</b> | 3.0  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107350</b> | <b>142748</b> | <b>111260</b> | <b>109438</b> | <b>107418</b> |
| <b>7130</b> | <b>0.375</b> | 9.5 | <b>0.130</b> | 3.3  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107352</b> | <b>142749</b> | <b>111261</b> | <b>109440</b> | <b>107420</b> |
| <b>7140</b> | <b>0.375</b> | 9.5 | <b>0.140</b> | 3.6  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107354</b> | <b>141383</b> | <b>111262</b> | <b>109442</b> | <b>107422</b> |
| <b>7150</b> | <b>0.375</b> | 9.5 | <b>0.150</b> | 3.8  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107355</b> | <b>134736</b> | <b>111263</b> | <b>109443</b> | <b>107423</b> |
| <b>7160</b> | <b>0.375</b> | 9.5 | <b>0.160</b> | 4.1  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107356</b> | <b>135199</b> | <b>111264</b> | <b>109444</b> | <b>107424</b> |
| <b>7165</b> | <b>0.375</b> | 9.5 | <b>0.165</b> | 4.2  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107357</b> | <b>135534</b> | <b>111265</b> | <b>109445</b> | <b>107425</b> |
| <b>7170</b> | <b>0.375</b> | 9.5 | <b>0.170</b> | 4.3  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107358</b> | <b>142750</b> | <b>111266</b> | <b>109446</b> | <b>107426</b> |
| <b>7180</b> | <b>0.375</b> | 9.5 | <b>0.180</b> | 4.6  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107359</b> | <b>135351</b> | <b>111268</b> | <b>109447</b> | <b>107427</b> |
| <b>7185</b> | <b>0.375</b> | 9.5 | <b>0.185</b> | 4.7  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107360</b> | <b>132517</b> | <b>111269</b> | <b>109448</b> | <b>107428</b> |
| <b>7190</b> | <b>0.375</b> | 9.5 | <b>0.190</b> | 4.8  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107361</b> | <b>142751</b> | <b>111270</b> | <b>109449</b> | <b>107429</b> |
| <b>7200</b> | <b>0.375</b> | 9.5 | <b>0.200</b> | 5.1  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107363</b> | <b>132518</b> | <b>111271</b> | <b>109451</b> | <b>107431</b> |
| <b>7215</b> | <b>0.375</b> | 9.5 | <b>0.215</b> | 5.5  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107365</b> | <b>132519</b> | <b>111273</b> | <b>109453</b> | <b>107433</b> |
| <b>7220</b> | <b>0.375</b> | 9.5 | <b>0.220</b> | 5.6  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107366</b> | <b>134880</b> | <b>111274</b> | <b>109454</b> | <b>107434</b> |
| <b>7225</b> | <b>0.375</b> | 9.5 | <b>0.225</b> | 5.7  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>142758</b> | <b>142757</b> | <b>142782</b> | <b>140490</b> |               |
| <b>7230</b> | <b>0.375</b> | 9.5 | <b>0.230</b> | 5.8  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107368</b> | <b>132520</b> | <b>111275</b> | <b>109456</b> | <b>107436</b> |
| <b>7240</b> | <b>0.375</b> | 9.5 | <b>0.240</b> | 6.1  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107369</b> | <b>135352</b> | <b>111276</b> | <b>109457</b> | <b>107437</b> |
| <b>7245</b> | <b>0.375</b> | 9.5 | <b>0.245</b> | 6.2  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>142784</b> | <b>142783</b> | <b>142785</b> | <b>140489</b> |               |
| <b>7250</b> | <b>0.375</b> | 9.5 | <b>0.250</b> | 6.4  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107370</b> | <b>132521</b> | <b>111277</b> | <b>109458</b> | <b>107438</b> |
| <b>7260</b> | <b>0.375</b> | 9.5 | <b>0.260</b> | 6.6  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107371</b> | <b>135200</b> | <b>111278</b> | <b>109459</b> | <b>107439</b> |
| <b>7270</b> | <b>0.375</b> | 9.5 | <b>0.270</b> | 6.9  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107373</b> | <b>134402</b> | <b>111279</b> | <b>109461</b> | <b>107441</b> |
| <b>7280</b> | <b>0.375</b> | 9.5 | <b>0.280</b> | 7.1  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107375</b> | <b>132522</b> | <b>111281</b> | <b>109463</b> | <b>107443</b> |
| <b>7300</b> | <b>0.375</b> | 9.5 | <b>0.300</b> | 7.6  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107376</b> | <b>134881</b> | <b>111282</b> | <b>109464</b> | <b>107444</b> |
| <b>7312</b> | <b>0.375</b> | 9.5 | <b>0.312</b> | 7.9  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107377</b> | <b>135777</b> | <b>111284</b> | <b>109465</b> | <b>107445</b> |
| <b>7335</b> | <b>0.375</b> | 9.5 | <b>0.335</b> | 8.5  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>142788</b> | <b>136559</b> | <b>140925</b> | <b>142787</b> |               |
| <b>7350</b> | <b>0.375</b> | 9.5 | <b>0.350</b> | 8.9  | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107380</b> | <b>135969</b> | <b>111285</b> | <b>109468</b> | <b>111218</b> |
| <b>7400</b> | <b>0.375</b> | 9.5 | <b>0.400</b> | 10.2 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107379</b> | <b>142795</b> | <b>111286</b> | <b>109467</b> | <b>107447</b> |
| <b>7500</b> | <b>0.375</b> | 9.5 | <b>0.500</b> | 12.7 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>107381</b> | <b>142796</b> | <b>111287</b> | <b>109469</b> | <b>107449</b> |



**CW Style**  
inch

EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| CWH         | L            |     | W            |     | T            |     | $\alpha$  | $\beta$  | $\gamma$  | T03F-CR       | T04F-CR       | T06MF         |
|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|---------------|---------------|
|             | inch         | mm  | inch         | mm  | inch         | mm  |           |          |           |               |               |               |
| <b>7135</b> | <b>0.344</b> | 8.7 | <b>0.135</b> | 3.4 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114413</b> | <b>114412</b> | <b>114411</b> |
| <b>7150</b> | <b>0.344</b> | 8.7 | <b>0.150</b> | 3.8 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114419</b> | <b>114418</b> | <b>114417</b> |
| <b>7165</b> | <b>0.344</b> | 8.7 | <b>0.165</b> | 4.2 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114425</b> | <b>114424</b> | <b>114423</b> |
| <b>7185</b> | <b>0.344</b> | 8.7 | <b>0.185</b> | 4.7 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114431</b> | <b>114430</b> | <b>114429</b> |
| <b>7200</b> | <b>0.344</b> | 8.7 | <b>0.200</b> | 5.1 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114438</b> | <b>114436</b> | <b>114435</b> |
| <b>7215</b> | <b>0.344</b> | 8.7 | <b>0.215</b> | 5.5 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114446</b> | <b>114445</b> | <b>114443</b> |
| <b>7220</b> | <b>0.344</b> | 8.7 | <b>0.220</b> | 5.6 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114447</b> | <b>114448</b> | <b>114449</b> |
| <b>7230</b> | <b>0.344</b> | 8.7 | <b>0.230</b> | 5.8 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114453</b> | <b>114452</b> | <b>114451</b> |
| <b>7250</b> | <b>0.344</b> | 8.7 | <b>0.250</b> | 6.4 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>114459</b> | <b>114458</b> | <b>114457</b> |



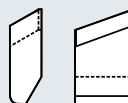
**CW Style**  
inch

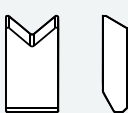
EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

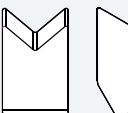
|                                                                                   | CWD<br>Right | L<br>inch    | mm  | W<br>inch    | mm  | T<br>inch    | mm  | α         | β        | γ         | T06MF         |
|-----------------------------------------------------------------------------------|--------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|
|  | <b>7165</b>  | <b>0.312</b> | 7.9 | <b>0.165</b> | 4.2 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111711</b> |
|                                                                                   | <b>7185</b>  | <b>0.312</b> | 7.9 | <b>0.185</b> | 4.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111713</b> |
|                                                                                   | <b>7200</b>  | <b>0.312</b> | 7.9 | <b>0.200</b> | 5.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111715</b> |
|                                                                                   | <b>7215</b>  | <b>0.312</b> | 7.9 | <b>0.215</b> | 5.5 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111717</b> |
|                                                                                   | <b>7250</b>  | <b>0.312</b> | 7.9 | <b>0.250</b> | 6.4 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111719</b> |

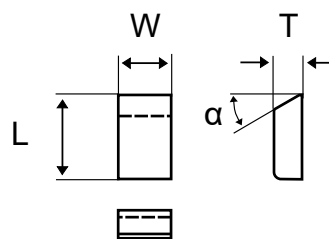
|                                                                                   | CWD<br>Left | L<br>inch    | mm  | W<br>inch    | mm  | T<br>inch    | mm  | α         | β        | γ         | T06MF         |
|-----------------------------------------------------------------------------------|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|
|  | <b>7165</b> | <b>0.312</b> | 7.9 | <b>0.165</b> | 4.2 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111712</b> |
|                                                                                   | <b>7185</b> | <b>0.312</b> | 7.9 | <b>0.185</b> | 4.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111714</b> |
|                                                                                   | <b>7200</b> | <b>0.312</b> | 7.9 | <b>0.200</b> | 5.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111716</b> |
|                                                                                   | <b>7215</b> | <b>0.312</b> | 7.9 | <b>0.215</b> | 5.5 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111718</b> |
|                                                                                   | <b>7250</b> | <b>0.312</b> | 7.9 | <b>0.250</b> | 6.4 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>60</b> | <b>111720</b> |

|                                                                                     | CWG<br>Right | L            |     | W            |     | T            |     | $\alpha$  | $\beta$  | $\gamma$  | T08MF         |
|-------------------------------------------------------------------------------------|--------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|
|                                                                                     |              | inch         | mm  | inch         | mm  | inch         | mm  |           |          |           |               |
|  | <b>7230</b>  | <b>0.375</b> | 9.5 | <b>0.230</b> | 5.8 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>134882</b> |
|                                                                                     | <b>7250</b>  | <b>0.375</b> | 9.5 | <b>0.250</b> | 6.4 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>132524</b> |
|                                                                                     | <b>7265</b>  | <b>0.375</b> | 9.5 | <b>0.265</b> | 6.7 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>136381</b> |

|                                                                                     | CWG<br>Left | L            |     | W            |     | T            |     | α         | β        | γ         | T08MF         |
|-------------------------------------------------------------------------------------|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|-----------|---------------|
|                                                                                     |             | inch         | mm  | inch         | mm  | inch         | mm  |           |          |           |               |
|  | <b>7230</b> | <b>0.375</b> | 9.5 | <b>0.230</b> | 5.8 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>134883</b> |
|                                                                                     | <b>7250</b> | <b>0.375</b> | 9.5 | <b>0.250</b> | 6.4 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>132523</b> |
|                                                                                     | <b>7265</b> | <b>0.375</b> | 9.5 | <b>0.265</b> | 6.7 | <b>0.125</b> | 3.2 | <b>30</b> | <b>0</b> | <b>60</b> | <b>136382</b> |

|                                                                                     | CWEV | L     |     | W     |     | T     |     | $\alpha$ | $\beta$ | $\gamma$ | T06MF  |
|-------------------------------------------------------------------------------------|------|-------|-----|-------|-----|-------|-----|----------|---------|----------|--------|
|                                                                                     |      | inch  | mm  | inch  | mm  | inch  | mm  |          |         |          |        |
|  | 7200 | 0.375 | 9.5 | 0.200 | 5.1 | 0.093 | 2.4 | 30       | 0       | 60       | 119868 |

|                                                                                     | CWGV | L     |     | W     |     | T     |     | $\alpha$ | $\beta$ | $\gamma$ | T06MF  |
|-------------------------------------------------------------------------------------|------|-------|-----|-------|-----|-------|-----|----------|---------|----------|--------|
|                                                                                     |      | inch  | mm  | inch  | mm  | inch  | mm  |          |         |          |        |
|  | 7200 | 0.375 | 9.5 | 0.230 | 5.8 | 0.125 | 3.2 | 30       | 0       | 60       | 115352 |

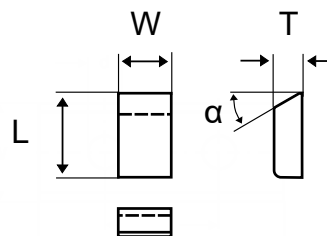


**W Style**  
inch

EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| WB          | L            |     | W            |     | T            |     | $\alpha$  | $\beta$  | $\gamma$ | T06MF         | T10MG         |
|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|----------|---------------|---------------|
|             | inch         | mm  | inch         | mm  | inch         | mm  |           |          |          |               |               |
| <b>7100</b> | <b>0.281</b> | 7.1 | <b>0.100</b> | 2.5 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114161</b> | <b>114162</b> |
| <b>7120</b> | <b>0.281</b> | 7.1 | <b>0.120</b> | 3.0 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114165</b> | <b>114166</b> |
| <b>7135</b> | <b>0.281</b> | 7.1 | <b>0.135</b> | 3.4 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114168</b> | <b>114167</b> |
| <b>7150</b> | <b>0.281</b> | 7.1 | <b>0.150</b> | 3.8 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114169</b> | <b>114170</b> |
| <b>7165</b> | <b>0.281</b> | 7.1 | <b>0.165</b> | 4.2 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114172</b> | <b>114171</b> |
| <b>7180</b> | <b>0.281</b> | 7.1 | <b>0.180</b> | 4.6 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114173</b> | <b>114174</b> |
| <b>7185</b> | <b>0.281</b> | 7.1 | <b>0.185</b> | 4.7 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114176</b> | <b>114175</b> |
| <b>7195</b> | <b>0.281</b> | 7.1 | <b>0.195</b> | 5.0 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114177</b> | <b>114178</b> |
| <b>7200</b> | <b>0.281</b> | 7.1 | <b>0.200</b> | 5.1 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114180</b> | <b>114179</b> |
| <b>7250</b> | <b>0.281</b> | 7.1 | <b>0.250</b> | 6.4 | <b>0.078</b> | 2.0 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114184</b> | <b>114183</b> |

| WD          | L            |     | W            |     | T            |     | $\alpha$  | $\beta$  | $\gamma$ | T03F-CR       | T04F-CR       | T06MF         | T10MG         |
|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|----------|---------------|---------------|---------------|---------------|
|             | inch         | mm  | inch         | mm  | inch         | mm  |           |          |          |               |               |               |               |
| <b>7120</b> | <b>0.312</b> | 7.9 | <b>0.120</b> | 3.0 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114210</b> | <b>114209</b> | <b>114208</b> | <b>114207</b> |
| <b>7135</b> | <b>0.312</b> | 7.9 | <b>0.135</b> | 3.4 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114211</b> | <b>114212</b> | <b>114213</b> | <b>114214</b> |
| <b>7150</b> | <b>0.312</b> | 7.9 | <b>0.150</b> | 3.8 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114219</b> | <b>114220</b> | <b>114221</b> | <b>114222</b> |
| <b>7165</b> | <b>0.312</b> | 7.9 | <b>0.165</b> | 4.2 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114227</b> | <b>114228</b> | <b>114229</b> | <b>114230</b> |
| <b>7185</b> | <b>0.312</b> | 7.9 | <b>0.185</b> | 4.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114235</b> | <b>114237</b> | <b>114238</b> | <b>114239</b> |
| <b>7200</b> | <b>0.312</b> | 7.9 | <b>0.200</b> | 5.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114244</b> | <b>114245</b> | <b>114246</b> | <b>114247</b> |
| <b>7215</b> | <b>0.312</b> | 7.9 | <b>0.215</b> | 5.5 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114251</b> | <b>114250</b> | <b>114249</b> | <b>114248</b> |
| <b>7230</b> | <b>0.312</b> | 7.9 | <b>0.230</b> | 5.8 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114252</b> | <b>114253</b> | <b>114254</b> | <b>114255</b> |
| <b>7250</b> | <b>0.312</b> | 7.9 | <b>0.250</b> | 6.4 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114260</b> | <b>114261</b> | <b>114262</b> | <b>114263</b> |
| <b>7280</b> | <b>0.312</b> | 7.9 | <b>0.280</b> | 7.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114267</b> | <b>114266</b> | <b>114265</b> | <b>114264</b> |
| <b>7312</b> | <b>0.312</b> | 7.9 | <b>0.312</b> | 7.9 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114268</b> | <b>114269</b> | <b>114270</b> | <b>114271</b> |

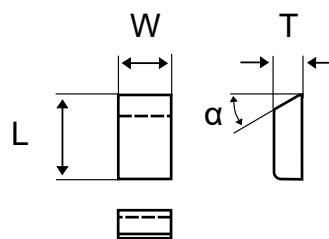


**W Style**  
inch

EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| WE          | L            |     | W            |     | T            |     | α         | β        | γ        | T03F-CR       | T06MF         | T10MG         |
|-------------|--------------|-----|--------------|-----|--------------|-----|-----------|----------|----------|---------------|---------------|---------------|
|             | inch         | mm  | inch         | mm  | inch         | mm  |           |          |          |               |               |               |
| <b>7185</b> | <b>0.375</b> | 9.5 | <b>0.185</b> | 4.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114294</b> | <b>114295</b> | <b>114296</b> |
| <b>7200</b> | <b>0.375</b> | 9.5 | <b>0.200</b> | 5.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114299</b> | <b>114298</b> | <b>114297</b> |
| <b>7215</b> | <b>0.375</b> | 9.5 | <b>0.215</b> | 5.5 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114300</b> | <b>114301</b> | <b>114302</b> |
| <b>7225</b> | <b>0.375</b> | 9.5 | <b>0.225</b> | 5.7 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114305</b> | <b>114304</b> | <b>114303</b> |
| <b>7250</b> | <b>0.375</b> | 9.5 | <b>0.250</b> | 6.4 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114311</b> | <b>114310</b> | <b>114309</b> |
| <b>7281</b> | <b>0.375</b> | 9.5 | <b>0.281</b> | 7.1 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114317</b> | <b>114316</b> | <b>114315</b> |
| <b>7312</b> | <b>0.375</b> | 9.5 | <b>0.312</b> | 7.9 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114318</b> | <b>114319</b> | <b>114320</b> |
| <b>7350</b> | <b>0.375</b> | 9.5 | <b>0.350</b> | 8.9 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114323</b> | <b>114322</b> | <b>114321</b> |
| <b>7375</b> | <b>0.375</b> | 9.5 | <b>0.375</b> | 9.5 | <b>0.093</b> | 2.4 | <b>30</b> | <b>0</b> | <b>0</b> | <b>114324</b> | <b>114325</b> | <b>114326</b> |

| WF          | L            |      | W            |     | T            |     | α         | β        | γ        | T08MF         | T10MG         |
|-------------|--------------|------|--------------|-----|--------------|-----|-----------|----------|----------|---------------|---------------|
|             | inch         | mm   | inch         | mm  | inch         | mm  |           |          |          |               |               |
| <b>7160</b> | <b>0.500</b> | 12.7 | <b>0.160</b> | 4.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>142793</b> | <b>114330</b> |
| <b>7165</b> | <b>0.500</b> | 12.7 | <b>0.165</b> | 4.2 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>120433</b> | <b>114334</b> |
| <b>7180</b> | <b>0.500</b> | 12.7 | <b>0.180</b> | 4.6 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>135778</b> | <b>114338</b> |
| <b>7190</b> | <b>0.500</b> | 12.7 | <b>0.190</b> | 4.8 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>136191</b> | <b>114342</b> |
| <b>7200</b> | <b>0.500</b> | 12.7 | <b>0.200</b> | 5.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>142796</b> | <b>114343</b> |
| <b>7230</b> | <b>0.500</b> | 12.7 | <b>0.230</b> | 5.8 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>142797</b> | <b>114351</b> |
| <b>7240</b> | <b>0.500</b> | 12.7 | <b>0.240</b> | 6.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>142798</b> | <b>114354</b> |
| <b>7250</b> | <b>0.500</b> | 12.7 | <b>0.250</b> | 6.4 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>134546</b> | <b>114355</b> |
| <b>7275</b> | <b>0.500</b> | 12.7 | <b>0.275</b> | 7.0 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>135353</b> | <b>114362</b> |
| <b>7280</b> | <b>0.500</b> | 12.7 | <b>0.280</b> | 7.1 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>134547</b> | <b>114363</b> |
| <b>7300</b> | <b>0.500</b> | 12.7 | <b>0.300</b> | 7.6 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>134884</b> | <b>114366</b> |
| <b>7312</b> | <b>0.500</b> | 12.7 | <b>0.312</b> | 7.9 | <b>0.125</b> | 3.2 | <b>35</b> | <b>0</b> | <b>0</b> | <b>142799</b> | <b>114367</b> |



**W Style**  
inch

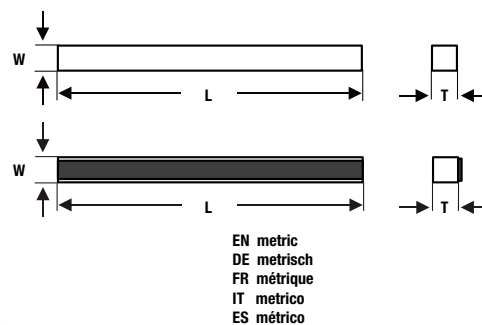
EN Carbide saw tips for circular saws  
DE Hartmetallsägezähne für Kreissägen  
FR Dents de scie pour scies circulaires  
IT Dentelli per lame circolari  
ES Dientes de sierra para sierras circulares

| WF   | L     |      | W     |      | T     |     | α  | β | γ | T08MF  | T10MG  |
|------|-------|------|-------|------|-------|-----|----|---|---|--------|--------|
|      | inch  | mm   | inch  | mm   | inch  | mm  |    |   |   |        |        |
| 7350 | 0.500 | 12.7 | 0.350 | 8.9  | 0.125 | 3.2 | 35 | 0 | 0 | 136192 | 114370 |
| 7375 | 0.500 | 12.7 | 0.375 | 9.5  | 0.125 | 3.2 | 35 | 0 | 0 | 142800 | 114371 |
| 7400 | 0.500 | 12.7 | 0.400 | 10.2 | 0.125 | 3.2 | 35 | 0 | 0 | 135354 | 114374 |
| 7437 | 0.500 | 12.7 | 0.437 | 11.1 | 0.125 | 3.2 | 35 | 0 | 0 | 135970 | 114375 |
| 7500 | 0.500 | 12.7 | 0.500 | 12.7 | 0.125 | 3.2 | 35 | 0 | 0 | 137431 | 114378 |
| 7625 | 0.500 | 12.7 | 0.625 | 15.9 | 0.125 | 3.2 | 35 | 0 | 0 | 134885 | 114379 |

| WG   | L     |     | W     |      | T     |     | α  | β | γ | T08MF  | T10MG  |
|------|-------|-----|-------|------|-------|-----|----|---|---|--------|--------|
|      | inch  | mm  | inch  | mm   | inch  | mm  |    |   |   |        |        |
| 7150 | 0.375 | 9.5 | 0.150 | 3.8  | 0.125 | 3.2 | 30 | 0 | 0 | 142801 | 138350 |
| 7165 | 0.375 | 9.5 | 0.165 | 4.2  | 0.125 | 3.2 | 30 | 0 | 0 | 142802 | 138351 |
| 7185 | 0.375 | 9.5 | 0.185 | 4.7  | 0.125 | 3.2 | 30 | 0 | 0 | 142803 | 138352 |
| 7200 | 0.375 | 9.5 | 0.200 | 5.1  | 0.125 | 3.2 | 30 | 0 | 0 | 135535 | 115371 |
| 7215 | 0.375 | 9.5 | 0.215 | 5.5  | 0.125 | 3.2 | 30 | 0 | 0 | 134738 | 115372 |
| 7230 | 0.375 | 9.5 | 0.230 | 5.8  | 0.125 | 3.2 | 30 | 0 | 0 | 134739 | 115337 |
| 7250 | 0.375 | 9.5 | 0.250 | 6.4  | 0.125 | 3.2 | 30 | 0 | 0 | 134886 | 115373 |
| 7265 | 0.375 | 9.5 | 0.265 | 6.7  | 0.125 | 3.2 | 30 | 0 | 0 | 142804 | 138353 |
| 7280 | 0.375 | 9.5 | 0.280 | 7.1  | 0.125 | 3.2 | 30 | 0 | 0 | 135202 | 128767 |
| 7312 | 0.375 | 9.5 | 0.312 | 7.9  | 0.125 | 3.2 | 30 | 0 | 0 | 135779 | 115374 |
| 7335 | 0.375 | 9.5 | 0.335 | 8.5  | 0.125 | 3.2 | 30 | 0 | 0 | 142807 | 140921 |
| 7350 | 0.375 | 9.5 | 0.350 | 8.9  | 0.125 | 3.2 | 30 | 0 | 0 | 142805 | 138354 |
| 7375 | 0.375 | 9.5 | 0.375 | 9.5  | 0.125 | 3.2 | 30 | 0 | 0 | 142808 | 140922 |
| 7400 | 0.375 | 9.5 | 0.400 | 10.2 | 0.125 | 3.2 | 30 | 0 | 0 | 135780 | 140924 |
| 7500 | 0.375 | 9.5 | 0.500 | 12.7 | 0.125 | 3.2 | 30 | 0 | 0 | 142806 | 138447 |

| WQ   | L     |     | W     |      | T     |     | α  | β | γ | T10MG  |
|------|-------|-----|-------|------|-------|-----|----|---|---|--------|
|      | inch  | mm  | inch  | mm   | inch  | mm  |    |   |   |        |
| 7200 | 0.375 | 9.5 | 0.200 | 5.1  | 0.156 | 4.0 | 30 | 0 | 0 | 114400 |
| 7265 | 0.375 | 9.5 | 0.265 | 6.7  | 0.156 | 4.0 | 30 | 0 | 0 | 114401 |
| 7300 | 0.375 | 9.5 | 0.300 | 7.6  | 0.156 | 4.0 | 30 | 0 | 0 | 114402 |
| 7335 | 0.375 | 9.5 | 0.335 | 8.5  | 0.156 | 4.0 | 30 | 0 | 0 | 114403 |
| 7400 | 0.375 | 9.5 | 0.400 | 10.2 | 0.156 | 4.0 | 30 | 0 | 0 | 114404 |
| 7460 | 0.375 | 9.5 | 0.460 | 11.7 | 0.156 | 4.0 | 30 | 0 | 0 | 114405 |
| 7500 | 0.375 | 9.5 | 0.500 | 12.7 | 0.156 | 4.0 | 30 | 0 | 0 | 114406 |
| 7530 | 0.375 | 9.5 | 0.530 | 13.5 | 0.156 | 4.0 | 30 | 0 | 0 | 140931 |
| 7625 | 0.375 | 9.5 | 0.625 | 15.9 | 0.156 | 4.0 | 30 | 0 | 0 | 114407 |
| 7640 | 0.375 | 9.5 | 0.640 | 16.3 | 0.156 | 4.0 | 30 | 0 | 0 | 140932 |
| 7765 | 0.375 | 9.5 | 0.765 | 19.4 | 0.156 | 4.0 | 30 | 0 | 0 | 140933 |

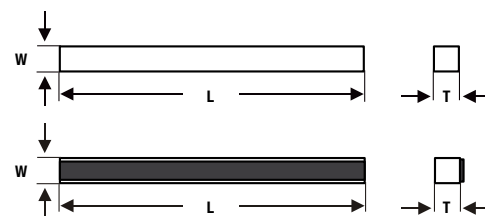
EN Strobe blanks for circular saws  
 DE Wischerblätter für Kreissägen  
 FR Racleurs pour scies circulaires  
 IT Barrette per rasanti di lame circolari  
 ES Rasuradores para sierras circulares



| L<br>mm | W<br>mm | T<br>mm | T06MF  |
|---------|---------|---------|--------|
| 25      | 2       | 2       | 111033 |
| 30      | 2       | 2       | 111034 |
| 35      | 2       | 2       | 113524 |
| 310     | 2       | 2       | 113525 |
| 30      | 2.3     | 2       | 113526 |
| 40      | 2.3     | 2       | 111040 |
| 310     | 2.3     | 2       | 113527 |
| 25      | 2.5     | 2       | 113529 |
| 30      | 2.5     | 2       | 111035 |
| 35      | 2.5     | 2       | 113531 |
| 45      | 2.5     | 2       | 111044 |
| 310     | 2.5     | 2       | 113532 |
| 25      | 3       | 2       | 109812 |
| 30      | 3       | 2       | 043520 |
| 35      | 3       | 2       | 113533 |
| 40      | 3       | 2       | 043522 |
| 50      | 3       | 2       | 113541 |
| 310     | 3       | 2       | 113542 |
| 30      | 3.3     | 2       | 049602 |
| 35      | 3.3     | 2       | 113544 |
| 40      | 3.3     | 2       | 113546 |
| 50      | 3.3     | 2       | 113549 |
| 55      | 3.3     | 2       | 113551 |
| 60      | 3.3     | 2       | 113553 |
| 310     | 3.3     | 2       | 113555 |
| 30      | 3.5     | 2       | 043514 |
| 40      | 3.5     | 2       | 043516 |
| 45      | 3.5     | 2       | 113557 |
| 50      | 3.5     | 2       | 109811 |
| 310     | 3.5     | 2       | 113564 |
| 30      | 3.7     | 2       | 036174 |
| 40      | 3.7     | 2       | 113565 |
| 50      | 3.7     | 2       | 113566 |
| 55      | 3.7     | 2       | 113567 |
| 70      | 3.7     | 2       | 113568 |
| 310     | 3.7     | 2       | 113569 |
| 20      | 4       | 2       | 111032 |
| 30      | 4       | 2       | 043521 |
| 35      | 4       | 2       | 113572 |
| 40      | 4       | 2       | 043523 |
| 45      | 4       | 2       | 113574 |
| 50      | 4       | 2       | 111046 |
| 55      | 4       | 2       | 113576 |
| 60      | 4       | 2       | 111049 |

| L<br>mm | W<br>mm | T<br>mm | T06MF  |
|---------|---------|---------|--------|
| 65      | 4       | 2       | 113577 |
| 310     | 4       | 2       | 113578 |
| 50      | 4.2     | 2       | 036811 |
| 60      | 4.2     | 2       | 113582 |
| 70      | 4.2     | 2       | 113583 |
| 310     | 4.2     | 2       | 113584 |
| 30      | 4.5     | 2       | 111037 |
| 40      | 4.5     | 2       | 111041 |
| 45      | 4.5     | 2       | 111045 |
| 50      | 4.5     | 2       | 111047 |
| 55      | 4.5     | 2       | 113585 |
| 60      | 4.5     | 2       | 111050 |
| 65      | 4.5     | 2       | 113590 |
| 70      | 4.5     | 2       | 113591 |
| 310     | 4.5     | 2       | 113592 |
| 310     | 4.7     | 2       | 113593 |
| 40      | 5       | 2       | 043525 |
| 45      | 5       | 2       | 113594 |
| 50      | 5       | 2       | 113595 |
| 55      | 5       | 2       | 113596 |
| 60      | 5       | 2       | 111051 |
| 65      | 5       | 2       | 113597 |
| 310     | 5       | 2       | 113598 |
| 30      | 5.2     | 2       | 111038 |
| 30      | 5.5     | 2       | 111039 |
| 40      | 5.5     | 2       | 111042 |
| 50      | 5.5     | 2       | 111048 |
| 60      | 5.5     | 2       | 113599 |
| 65      | 5.5     | 2       | 113600 |
| 310     | 5.5     | 2       | 113773 |
| 40      | 5.8     | 2       | 111043 |
| 60      | 5.8     | 2       | 111052 |
| 310     | 5.8     | 2       | 113601 |
| 60      | 6       | 2       | 113602 |
| 65      | 6       | 2       | 113603 |
| 310     | 6       | 2       | 113604 |
| 60      | 6.2     | 2       | 111053 |
| 310     | 6.5     | 2       | 113605 |
| 310     | 7       | 2       | 113606 |
| 310     | 7.5     | 2       | 113607 |

EN Strobe blanks for circular saws  
 DE Wischerblätter für Kreissägen  
 FR Racleurs pour scies circulaires  
 IT Barrette per rasanti di lame circolari  
 ES Rasuradores para sierras circulares



inch

| ST     | L     |      | W     |     | T     |     | T12M   |
|--------|-------|------|-------|-----|-------|-----|--------|
|        | inch  | mm   | inch  | mm  | inch  | mm  |        |
| ST1120 | 1.000 | 25.4 | 0.120 | 3.0 | 0.125 | 3.2 | 113528 |
| ST1130 | 1.000 | 25.4 | 0.130 | 3.3 | 0.125 | 3.2 | 113530 |
| ST1140 | 1.000 | 25.4 | 0.140 | 3.6 | 0.125 | 3.2 | 113534 |
| ST1150 | 1.000 | 25.4 | 0.150 | 3.8 | 0.125 | 3.2 | 113535 |
| ST1160 | 1.000 | 25.4 | 0.160 | 4.1 | 0.125 | 3.2 | 113536 |
| ST1170 | 1.000 | 25.4 | 0.170 | 4.3 | 0.125 | 3.2 | 113537 |
| ST1180 | 1.000 | 25.4 | 0.180 | 4.6 | 0.125 | 3.2 | 113538 |
| ST1190 | 1.000 | 25.4 | 0.190 | 4.8 | 0.125 | 3.2 | 113539 |
| ST1200 | 1.000 | 25.4 | 0.200 | 5.1 | 0.125 | 3.2 | 113540 |
| ST1210 | 1.000 | 25.4 | 0.210 | 5.3 | 0.125 | 3.2 | 113543 |
| ST1220 | 1.000 | 25.4 | 0.220 | 5.6 | 0.125 | 3.2 | 113545 |
| ST1230 | 1.000 | 25.4 | 0.230 | 5.8 | 0.125 | 3.2 | 113547 |
| ST1240 | 1.000 | 25.4 | 0.240 | 6.1 | 0.125 | 3.2 | 113548 |
| ST1250 | 1.000 | 25.4 | 0.250 | 6.4 | 0.125 | 3.2 | 113550 |
| ST1260 | 1.000 | 25.4 | 0.260 | 6.6 | 0.125 | 3.2 | 113552 |
| ST1270 | 1.000 | 25.4 | 0.270 | 6.9 | 0.125 | 3.2 | 114089 |
| ST1280 | 1.000 | 25.4 | 0.280 | 7.1 | 0.125 | 3.2 | 113554 |
| ST1290 | 1.000 | 25.4 | 0.290 | 7.4 | 0.125 | 3.2 | 113556 |

| ST     | L     |      | W     |     | T     |     | T12M   |
|--------|-------|------|-------|-----|-------|-----|--------|
|        | inch  | mm   | inch  | mm  | inch  | mm  |        |
| ST2120 | 1.250 | 31.8 | 0.120 | 3.0 | 0.125 | 3.2 | 113558 |
| ST2130 | 1.250 | 31.8 | 0.130 | 3.3 | 0.125 | 3.2 | 113559 |
| ST2140 | 1.250 | 31.8 | 0.140 | 3.6 | 0.125 | 3.2 | 113560 |
| ST2150 | 1.250 | 31.8 | 0.150 | 3.8 | 0.125 | 3.2 | 113561 |
| ST2160 | 1.250 | 31.8 | 0.160 | 4.1 | 0.125 | 3.2 | 113562 |
| ST2170 | 1.250 | 31.8 | 0.170 | 4.3 | 0.125 | 3.2 | 113563 |
| ST2180 | 1.250 | 31.8 | 0.180 | 4.6 | 0.125 | 3.2 | 113570 |
| ST2190 | 1.250 | 31.8 | 0.190 | 4.8 | 0.125 | 3.2 | 113571 |
| ST2200 | 1.250 | 31.8 | 0.200 | 5.1 | 0.125 | 3.2 | 113573 |
| ST2210 | 1.250 | 31.8 | 0.210 | 5.3 | 0.125 | 3.2 | 113575 |
| ST2220 | 1.250 | 31.8 | 0.220 | 5.6 | 0.125 | 3.2 | 113579 |
| ST2230 | 1.250 | 31.8 | 0.230 | 5.8 | 0.125 | 3.2 | 113580 |
| ST2240 | 1.250 | 31.8 | 0.240 | 6.1 | 0.125 | 3.2 | 113581 |
| ST2250 | 1.250 | 31.8 | 0.250 | 6.4 | 0.125 | 3.2 | 113586 |
| ST2260 | 1.250 | 31.8 | 0.260 | 6.6 | 0.125 | 3.2 | 113587 |
| ST2280 | 1.250 | 31.8 | 0.280 | 7.1 | 0.125 | 3.2 | 113588 |
| ST2290 | 1.250 | 31.8 | 0.290 | 7.4 | 0.125 | 3.2 | 113589 |



- EN Brazing alloys and fluxes  
DE Lot und Flussmittel  
FR Alliages et flux de brasage  
IT Leghe brasanti e disossidanti  
ES Aleaciones y fundentes para soldadura fuerte

EN BrazeTec 49/Cu sandwich brazing alloy strip, on spool  
DE BrazeTec 49/Cu Schichtlot, auf Spule  
FR BrazeTec 49/Cu alliage de brasage „sandwich“ en bande, sur bobine  
IT BrazeTec 49/Cu lega brasante nastro trimetallico, in bobina  
ES BrazeTec 49/Cu cinta tipo sandwich para soldadura fuerte, en carretes

| Art-No. | W<br>mm | T<br>mm | weight<br>kg | Features                                                                                                                                                                                 |
|---------|---------|---------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 122449  | 2.0     | 0.3     | 1.0 - 1.5    | EN Trimetal skim<br>DE Kupfer-Zwischenschicht<br>FR Trois feuilles avec le Cu en couche intermédiaire<br>IT Trilamina con strato intermedio di rame<br>ES Con la lámina de Cu intermedia |
| 122450  | 2.5     | 0.3     | 1.0 - 1.5    |                                                                                                                                                                                          |
| 122451  | 3.0     | 0.3     | 1.0 - 1.5    |                                                                                                                                                                                          |
| 122452  | 3.2     | 0.3     | 1.0 - 2.0    |                                                                                                                                                                                          |
| 122453  | 3.5     | 0.3     | 1.5 - 2.0    |                                                                                                                                                                                          |
| 122454  | 4.0     | 0.3     | 1.5 - 2.0    |                                                                                                                                                                                          |

EN BrazeTec 49/Cu13 sandwich brazing alloy strip for special applications, in coils  
DE BrazeTec 49/Cu13 Lot für Sonderanwendungen, im Bunde  
FR BrazeTec 49/Cu13 alliage de brasage „sandwich“ pour applications spéciales, en bande  
IT BrazeTec 49/Cu13 lega brasante nastro trimetallico per applicazioni speciali, in bobina  
ES BrazeTec 49/Cu13 cinta tipo sandwich para soldadura fuerte, en carretes

| Art-No. | W<br>mm | T<br>mm | weight<br>kg |  |
|---------|---------|---------|--------------|--|
| 122456  | 40      | 0.8     | 1.0          |  |
| 122457  | 50      | 0.8     | 1.0          |  |
| 122458  | 60      | 0.8     | 1.0          |  |
| 122459  | 70      | 0.8     | 1.0          |  |

EN BrazeTec h 285 brazing flux paste for automatic dispensing  
DE BrazeTec h 285 Hartlot Flussmittel-Paste für Maschinendosierung  
FR BrazeTec h 285 flux de brasage en pâte pour mise en oeuvre en automatique  
IT BrazeTec h 285 disossidante in pasta per brasatura adatto per la distribuzione automatica  
ES BrazeTec h 285 aleación en pasta con fundente para aplicar automáticamente

| Art-No. |  | weight<br>kg |  |
|---------|--|--------------|--|
| 115300  |  | 1.5          |  |

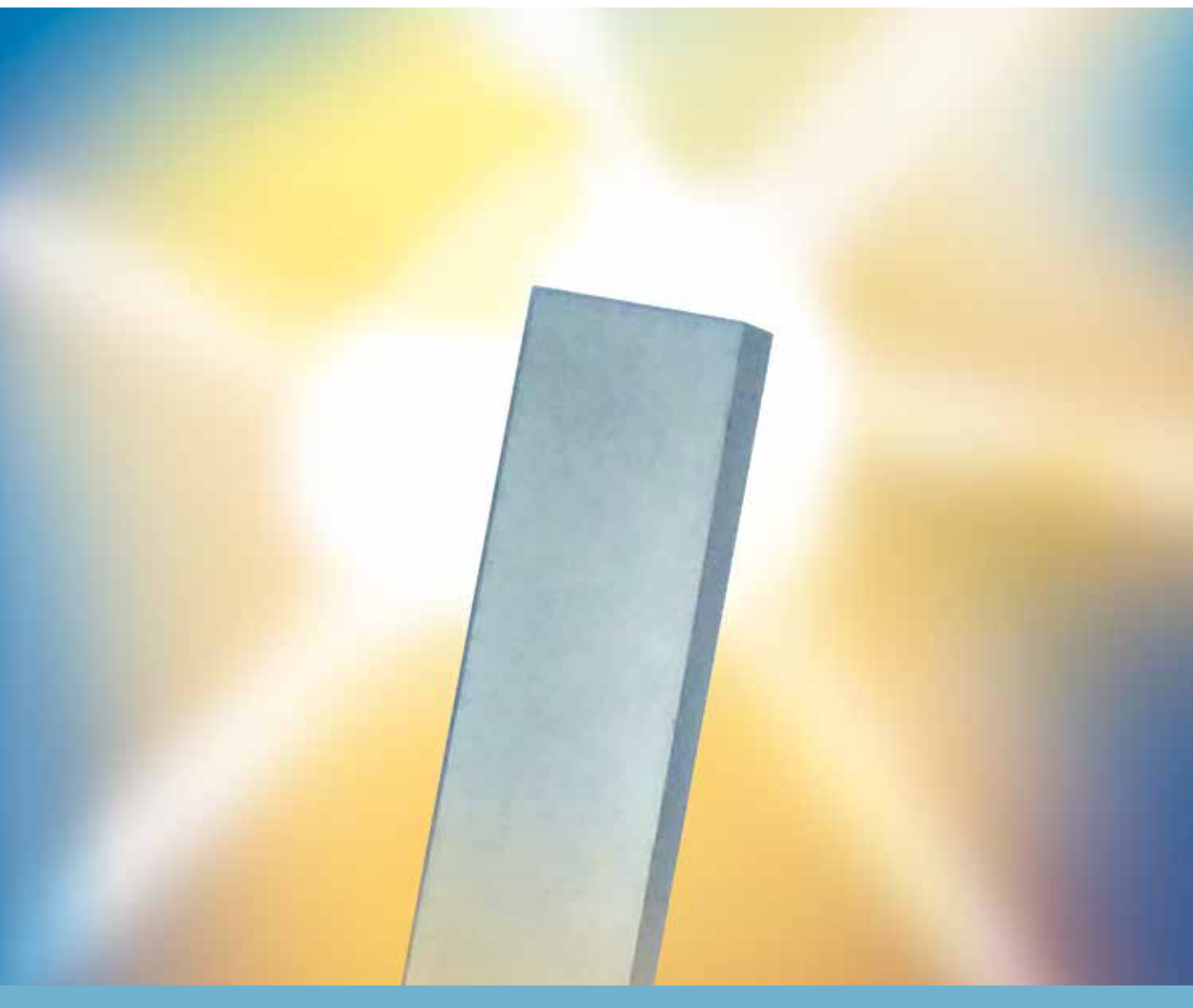
EN BrazeTec special h brazing flux paste for manual applications  
DE BrazeTec spezial h Hartlot Flussmittel-Paste für den Auftrag von Hand  
FR BrazeTec spécial h flux de brasage en pâte pour utilisation manuelle  
IT BrazeTec spezial h disossidante in pasta per brasatura per applicazione manuale  
ES BrazeTec spezial h aleación en pasta con fundente para aplicar manualmente

| Art-No. |  | weight<br>kg |  |
|---------|--|--------------|--|
| 115301  |  | 1.0          |  |



TOOLS CUT BETTER WITH TIGRA





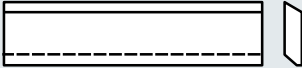
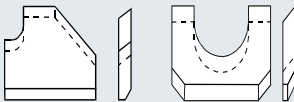
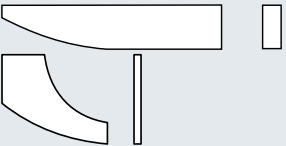
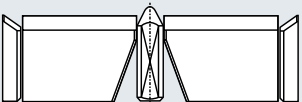
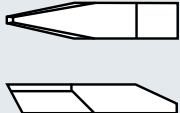
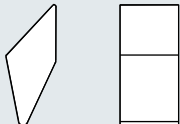
- EN Carbide for brazed tools
- DE Hartmetall für gelötete Fräser
- FR Plaquettes en carbure à braser
- IT Metallo duro per frese saldobrasate
- ES Metal duro para herramienta soldada



TOOLS CUT BETTER WITH TIGRA

---

EN Carbide for brazed tools  
 DE Hartmetall für gelötete Fräser  
 FR Plaquettes en carbure à braser  
 IT Metallo duro per frese saldobrasate  
 ES Metal duro para herramienta soldada

|                                                                                     |                                                                                                                                                                                                                                                                                      |                                                                                                        |           |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------|
|    | <p>EN Carbide strips for brazed cutters<br/>         DE Hartmetallplatten zur Fräserbestückung<br/>         FR Plaquettes en carbure à braser<br/>         IT Placchette in metallo duro per frese<br/>         ES Placas de metal duro para equipar fresas</p>                      | <p><i>metric</i><br/> <i>metrisch</i><br/> <i>métrique</i><br/> <i>metrico</i><br/> <i>métrico</i></p> | 102 - 105 |
|    | <p>EN STB strips for brazed cutters<br/>         DE Hartmetallplatten zur Fräserbestückung<br/>         FR Plaquettes en carbure à braser<br/>         IT Placchette in metallo duro per frese<br/>         ES Placas de metal duro para equipar fresas</p>                          | <i>inch</i>                                                                                            | 106       |
|    | <p>EN Preforms for brazed cutters<br/>         DE Formplatten zum Löten<br/>         FR Plaquettes en carbure à braser<br/>         IT Placchette per frese saldobrasate<br/>         ES Placas para herramientas soldadas</p>                                                       |                                                                                                        | 107       |
|   | <p>EN Carbide tips for router bits<br/>         DE HM-Rohlinge für Oberfräser<br/>         FR Ébauches pour mèches à défoncer<br/>         IT Placchette sagomate per punte<br/>         ES Placas de metal duro para equipar fresas</p>                                             |                                                                                                        | 108       |
|  | <p>EN Drill bits<br/>         DE Zylinderkopfbohrer<br/>         FR Mèches à façonner<br/>         IT Punte per cerniere<br/>         ES Brocas estrella</p>                                                                                                                         |                                                                                                        | 109 - 110 |
|  | <p>EN Finger joint cutters<br/>         DE Minizinkenfräser<br/>         FR Fraises mini-aboutages<br/>         IT Frese per giunzioni<br/>         ES Fresas para ensamblar</p>                                                                                                     |                                                                                                        | 110       |
|  | <p>EN Tips for T.C.T. knives<br/>         DE Rohlinge für HW-bestückte Messer<br/>         FR Plaquettes pour fabriquer des fers rapportées carbure<br/>         IT Placchette per fabbricare coltelli riportati HW<br/>         ES Placas para equipar cuchillas con metal duro</p> |                                                                                                        | 111       |
|  | <p>EN Tips for multicut planers<br/>         DE Zähne für Vielzahnfräser<br/>         FR Dents spéciales<br/>         IT Dentelli per frese multitaglienti<br/>         ES Dientes para fresas multicorte</p>                                                                        |                                                                                                        | 111       |

- EN Carbide for brazed tools - Carbide grades and their applications  
 DE Hartmetall für gelötete Fräser - Hartmetallsorten und ihre Anwendungen  
 FR Plaquettes en carbure à braser - Les nuances de carbures et leurs applications  
 IT Metallo duro per frese saldobrasate - I tipi di metallo duro e le loro applicazioni  
 ES Metal duro para herramienta soldada - Calidades de metal duro y sus aplicaciones

| EN | TIGRA grade                  | ISO              | USA            | Hardness                                                                            | Toughness                                                                             | Bending strength                                                                      |
|----|------------------------------|------------------|----------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DE | TIGRA - Sorte                | ISO              | USA            | Härte                                                                               | Zähigkeit                                                                             | Biegebruchfestigkeit                                                                  |
| FR | Nuance TIGRA                 | ISO              | USA            | Dureté                                                                              | Ténacité                                                                              | Résistance à la flexion                                                               |
| IT | Tipo TIGRA                   | ISO              | Stati Uniti    | Durezza                                                                             | Tenacità                                                                              | Resistenza flessionale                                                                |
| ES | Calidad TIGRA                | ISO              | EE.UU.         | Dureza                                                                              | Tenacidad                                                                             | Resistencia a la flexión                                                              |
|    | <b>T03F-CR</b>               | <b>K01</b>       | <b>C4+</b>     |    |    |    |
|    | <b>T04F-CR</b>               | <b>K05</b>       | <b>C4</b>      |    |    |    |
|    | <b>T07MF-CR</b><br>UNIVERSAL | <b>K20 - K30</b> | <b>C2 - C3</b> |   |   |   |
|    | <b>T10MG</b>                 | <b>K10 - K40</b> | <b>C3+</b>     |  |  |  |
|    | <b>TL15*</b>                 | <b>K10 - K40</b> | <b>C3+</b>     |  |  |  |
|    | <b>TL20*</b>                 | <b>K10 - K40</b> | <b>C2+</b>     |  |  |  |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif -  
 inossidabile - anticorrosivo

\* Special binder - Spezialbinder - Liant spécial - Legante speciale -  
 Composición especial

EN For technical data, please refer to the pages 4-5.

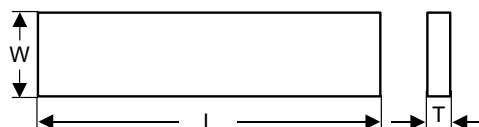
DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.

FR Pour les données techniques, veuillez voir aux pages 4-5.

| Plastics<br>Plastik<br>Plastiques<br>Plastica<br>Plásticos | HDF<br>HDF<br>HDF<br>HDF<br>HDF | MDF<br>MDF<br>MDF<br>MDF<br>MDF | Chipboard<br>Spanplatte<br>Panneaux de particule<br>Truciolare<br>Panel de aglomerado | Hardwood<br>Hartholz<br>Bois dur<br>Legno duro<br>Madera dura | Softwood<br>Weichholz<br>Bois tendre<br>Legno tenero<br>Madera blanda | Main usage<br>Hauptverwendung<br>Usage principal<br>Uso principale<br>Uso principal                                                                                                          |
|------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓                                                          | ✓                               | ✓                               | ○                                                                                     | ○                                                             | ■                                                                     | EN Board materials<br>DE Plattenmaterial<br>FR Matériaux de panneaux<br>IT Pannelli<br>ES Materiales de paneles                                                                              |
| ✓                                                          | ○                               | ✓                               | ✓                                                                                     | ✓                                                             | ○                                                                     | EN Abrasive hard woods<br>DE Abrasive Harthölzer<br>FR Bois durs abrasifs<br>IT Legni duri abrasivi<br>ES Madera dura abrasiva                                                               |
| ○                                                          | ○                               | ○                               | ✓                                                                                     | ✓                                                             | ✓                                                                     | EN Universal grade<br>DE Universelle Sorte<br>FR Nuance universelle<br>IT Tipo universale<br>ES Calidad universal                                                                            |
| ■                                                          | ■                               | ■                               | ○                                                                                     | ✓                                                             | ✓                                                                     | EN Wood<br>DE Holz<br>FR Bois<br>IT Legno<br>ES Madera                                                                                                                                       |
| ■                                                          | ■                               | ■                               | ■                                                                                     | ✓                                                             | ✓                                                                     | EN Wood, higher clearance angles<br>DE Holz, größere Freiwinkel<br>FR Bois, plus grands angles de dépouille<br>IT Legno, angoli di spoglia grandi<br>ES Madera, ángulos largos               |
| ■                                                          | ■                               | ■                               | ■                                                                                     | ○                                                             | ✓                                                                     | EN Wood, highest clearance angles<br>DE Holz, größte Freiwinkel<br>FR Bois, le plus grands angles de dépouille<br>IT Legno, angoli di spoglia molto grandi<br>ES Madera, los mayores ángulos |

- ✓ best performance
- ✓ very good performance
- acceptable
- not suitable

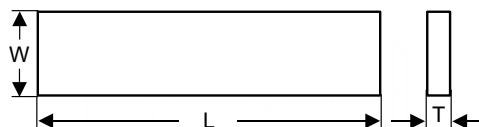
- EN Carbide strips for brazed cutters  
 DE Hartmetallplatten zur Fräserbestückung  
 FR Plaquettes en carbure à braser  
 IT Placchette in metallo duro per frese  
 ES Placas de metal duro para equipar fresas



T = 2-4 mm

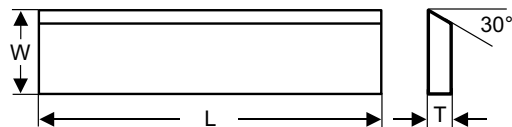
| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T07MF-CR | T10MG  |
|---------|---------|---------|---------|----------|--------|
| 310     | 2       | 2       |         |          | 110300 |
| 310     | 4       | 2       | 100307  | 131017   | 054405 |
| 310     | 5       | 2       | 100308  | 131018   | 100549 |
| 310     | 6       | 2       | 100309  | 131019   | 029130 |
| 310     | 8       | 2       | 101107  | 131020   | 029131 |
| 310     | 10      | 2       | 100710  | 131021   | 029132 |
| 310     | 12      | 2       | 100709  | 131022   | 029133 |
| 310     | 14      | 2       | 101637  | 131023   | 029136 |
| 310     | 15      | 2       | 108730  | 131024   | 054311 |
| 310     | 16      | 2       | 108731  | 131025   | 029138 |
| 310     | 18      | 2       | 108732  | 131026   | 029139 |
| 310     | 20      | 2       | 055678  | 131027   | 029140 |
| 310     | 22      | 2       | 108737  | 131028   | 038192 |
| 310     | 25      | 2       | 055679  | 131029   | 029141 |
| 310     | 30      | 2       | 055680  | 131030   | 031186 |
| 310     | 3       | 3       |         |          | 110301 |
| 310     | 5       | 3       | 121840  | 131031   | 054598 |
| 310     | 6       | 3       | 100310  | 131032   | 024511 |
| 310     | 8       | 3       | 100311  | 131033   | 024515 |
| 310     | 10      | 3       | 101638  | 131034   | 024519 |
| 310     | 12      | 3       | 100619  | 131036   | 024523 |
| 310     | 13      | 3       | 121841  | 131038   | 041839 |
| 310     | 14      | 3       | 108738  | 131040   | 024527 |
| 310     | 15      | 3       | 100312  | 131042   | 041072 |
| 310     | 16      | 3       | 105249  | 131044   | 024531 |
| 310     | 18      | 3       | 108739  | 131046   | 024535 |
| 310     | 20      | 3       | 100313  | 131048   | 024539 |
| 310     | 25      | 3       | 108740  | 131050   | 024543 |
| 310     | 30      | 3       | 108741  | 131053   | 024547 |
| 310     | 4       | 4       |         |          | 110302 |
| 310     | 8       | 4       | 100626  | 131055   | 024566 |
| 310     | 10      | 4       | 101106  | 131057   | 024570 |
| 310     | 12      | 4       | 100625  | 131060   | 024574 |
| 310     | 14      | 4       | 102820  | 131062   | 024578 |
| 310     | 15      | 4       | 100315  | 131068   | 103213 |
| 310     | 16      | 4       | 100621  | 131071   | 024582 |
| 310     | 18      | 4       | 100316  | 131074   | 024586 |
| 310     | 20      | 4       | 101729  | 131077   | 024590 |
| 310     | 22      | 4       | 100317  | 131081   | 047082 |
| 310     | 25      | 4       | 100318  | 131084   | 024594 |
| 310     | 28      | 4       | 106131  | 131086   | 103214 |
| 310     | 30      | 4       | 105525  | 131088   | 024598 |
| 310     | 35      | 4       | 108742  | 131091   | 051786 |

EN Carbide strips for brazed cutters  
 DE Hartmetallplatten zur Fräserbestückung  
 FR Plaquettes en carbure à braser  
 IT Placchette in metallo duro per frese  
 ES Placas de metal duro para equipar fresas



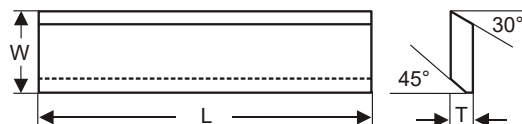
T = 5-6 mm

| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T07MF-CR | T10MG  |
|---------|---------|---------|---------|----------|--------|
| 310     | 5       | 5       |         |          | 110303 |
| 310     | 8       | 5       | 108743  | 131101   | 024627 |
| 310     | 10      | 5       | 108768  | 131102   | 024631 |
| 310     | 12      | 5       | 100319  | 131103   | 024635 |
| 310     | 14      | 5       | 102229  | 131106   | 024639 |
| 310     | 15      | 5       | 100627  | 131109   | 039582 |
| 310     | 16      | 5       | 108744  | 131112   | 024643 |
| 310     | 18      | 5       | 100321  | 131113   | 024647 |
| 310     | 20      | 5       | 100322  | 131119   | 024651 |
| 310     | 25      | 5       | 100323  | 131121   | 024655 |
| 310     | 30      | 5       | 108745  | 131123   | 024659 |
| 310     | 35      | 5       | 108746  | 131127   | 051788 |
| 170     | 40      | 5       | 108747  | 131130   | 050106 |
| 310     | 10      | 6       |         | 131133   | 024680 |
| 310     | 16      | 6       |         | 131135   | 024692 |
| 310     | 20      | 6       |         | 131137   | 024700 |
| 310     | 25      | 6       |         | 131140   | 024704 |
| 310     | 30      | 6       |         | 131142   | 024708 |



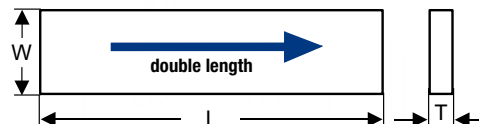
- EN Carbide strips for brazed cutters  
 DE Hartmetallplatten zur Fräßerbestückung  
 FR Plaquettes en carbure à braser  
 IT Placchette in metallo duro per frese  
 ES Placas de metal duro para equipar fresas

| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T07MF-CR | T10MG  |
|---------|---------|---------|---------|----------|--------|
| 310     | 8       | 3       | 108748  | 131035   | 024725 |
| 310     | 10      | 3       | 108749  | 131037   | 024729 |
| 310     | 12      | 3       | 108750  | 131039   | 024733 |
| 310     | 14      | 3       | 108752  | 131041   | 024737 |
| 310     | 15      | 3       | 108753  | 131043   | 041080 |
| 310     | 16      | 3       | 108754  | 131045   | 024741 |
| 310     | 18      | 3       | 108755  | 131047   | 024745 |
| 310     | 20      | 3       | 108756  | 131049   | 024749 |
| 310     | 25      | 3       | 108757  | 131051   | 024753 |
| 310     | 30      | 3       | 108758  | 131052   | 024757 |
| 310     | 8       | 4       | 108759  | 131054   | 024765 |
| 310     | 10      | 4       | 108760  | 131056   | 024769 |
| 310     | 12      | 4       | 108761  | 131058   | 024773 |
| 310     | 14      | 4       | 108762  | 131059   | 024777 |
| 310     | 15      | 4       | 108763  | 131061   | 041081 |
| 310     | 16      | 4       | 108703  | 131063   | 024781 |
| 310     | 18      | 4       | 108764  | 131064   | 024785 |
| 310     | 20      | 4       | 102884  | 131065   | 024789 |
| 310     | 22      | 4       | 102885  | 131066   | 041082 |
| 310     | 25      | 4       | 102886  | 131067   | 024793 |
| 310     | 28      | 4       | 102887  | 131069   | 041083 |
| 310     | 30      | 4       | 108765  | 131070   | 024797 |
| 310     | 35      | 4       | 108766  | 131072   | 041084 |
| 310     | 8       | 5       | 108767  | 131073   | 024805 |
| 310     | 10      | 5       | 108769  | 131075   | 024809 |
| 310     | 12      | 5       | 108771  | 131076   | 024813 |
| 310     | 14      | 5       | 108772  | 131078   | 024817 |
| 310     | 15      | 5       | 108773  | 131080   | 103218 |
| 310     | 16      | 5       | 108704  | 131082   | 024821 |
| 310     | 18      | 5       | 108774  | 131083   | 024825 |
| 310     | 20      | 5       | 108705  | 131085   | 024829 |
| 310     | 25      | 5       | 108706  | 131087   | 024833 |
| 310     | 30      | 5       | 108707  | 131089   | 024837 |
| 310     | 35      | 5       | 108775  | 131090   | 051793 |
| 170     | 40      | 5       | 115072  | 131092   | 029264 |
| 310     | 10      | 6       |         | 131093   | 024849 |
| 310     | 12      | 6       |         | 131094   | 024853 |
| 310     | 16      | 6       |         | 131096   | 024861 |
| 310     | 20      | 6       |         | 131097   | 024869 |
| 310     | 25      | 6       |         | 131098   | 024873 |
| 310     | 30      | 6       |         | 131099   | 024877 |



- EN Carbide strips for brazed cutters  
 DE Hartmetallplatten zur Fräßerbestückung  
 FR Plaquettes en carbure à braser  
 IT Placchette in metallo duro per frese  
 ES Placas de metal duro para equipar fresas

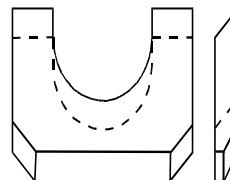
| L<br>mm | W<br>mm | T<br>mm | T04F-CR | T07MF-CR | T10MG  |
|---------|---------|---------|---------|----------|--------|
| 310     | 8       | 3       | 108777  | 131104   | 024885 |
| 310     | 10      | 3       | 108778  | 131105   | 024889 |
| 310     | 12      | 3       | 108779  | 131107   | 024893 |
| 310     | 14      | 3       | 108780  | 131108   | 024897 |
| 310     | 15      | 3       | 108781  | 131110   | 103222 |
| 310     | 16      | 3       | 108782  | 131111   | 024901 |
| 310     | 18      | 3       | 108783  | 131114   | 024905 |
| 310     | 20      | 3       | 108784  | 131115   | 024909 |
| 310     | 25      | 3       | 108785  | 131117   | 024913 |
| 310     | 30      | 3       | 108786  | 131118   | 024917 |
| 310     | 8       | 4       | 100629  | 131120   | 024931 |
| 310     | 10      | 4       | 108787  | 131122   | 024935 |
| 310     | 12      | 4       | 103853  | 131124   | 024939 |
| 310     | 14      | 4       | 102230  | 131125   | 024943 |
| 310     | 15      | 4       | 108788  | 131128   | 050690 |
| 310     | 16      | 4       | 103854  | 131129   | 024947 |
| 310     | 18      | 4       | 108789  | 131131   | 024951 |
| 310     | 20      | 4       | 108790  | 131132   | 024955 |
| 310     | 22      | 4       | 108791  | 131134   | 103223 |
| 310     | 25      | 4       | 108792  | 131136   | 024959 |
| 310     | 28      | 4       | 108793  | 131138   | 101527 |
| 310     | 30      | 4       | 108794  | 131139   | 024963 |
| 310     | 35      | 4       | 108797  | 131141   | 051797 |
| 310     | 8       | 5       | 108798  | 131151   | 024978 |
| 310     | 10      | 5       | 054402  | 131153   | 024982 |
| 310     | 12      | 5       | 055663  | 131154   | 024986 |
| 310     | 14      | 5       | 102563  | 131156   | 024990 |
| 310     | 15      | 5       | 100628  | 131158   | 035897 |
| 310     | 16      | 5       | 106180  | 131159   | 024994 |
| 310     | 18      | 5       | 004371  | 131161   | 024998 |
| 310     | 20      | 5       | 054231  | 131163   | 025002 |
| 310     | 25      | 5       | 054439  | 131165   | 025006 |
| 310     | 30      | 5       | 054677  | 131166   | 025010 |
| 310     | 35      | 5       | 056072  | 131168   | 051799 |
| 170     | 40      | 5       | 053297  | 131170   | 039094 |
| 310     | 10      | 6       | 054403  | 131171   | 025023 |
| 310     | 12      | 6       | 004372  | 131173   | 025027 |
| 310     | 16      | 6       | 108799  | 131174   | 025035 |
| 310     | 20      | 6       | 054323  | 131176   | 025043 |
| 310     | 25      | 6       | 108800  | 131177   | 025047 |
| 310     | 30      | 6       | 004375  | 131179   | 025051 |



US style - double length

- EN STB strips for brazed cutters  
 DE Hartmetallplatten zur Fräserbestückung  
 FR Plaquettes en carbure à braser  
 IT Placchette in metallo duro per frese  
 ES Placas de metal duro para equipar fresas

| Style    | L<br>inch | W<br>inch | T<br>inch | T07MF-CR | T10MG  |
|----------|-----------|-----------|-----------|----------|--------|
| DSTB 312 | 12 1/4    | 3/8       | 3/32      | 131322   | 128447 |
| DSTB 316 | 12 1/4    | 1/2       | 3/32      | 131323   | 128449 |
| DSTB 320 | 12 1/4    | 5/8       | 3/32      | 131324   | 128451 |
| DSTB 324 | 12 1/4    | 3/4       | 3/32      | 131327   | 128453 |
| DSTB 412 | 12 1/4    | 3/8       | 1/8       | 131328   | 128455 |
| DSTB 416 | 12 1/4    | 1/2       | 1/8       | 131329   | 128457 |
| DSTB 420 | 12 1/4    | 5/8       | 1/8       | 131330   | 128459 |
| DSTB 424 | 12 1/4    | 3/4       | 1/8       | 131331   | 128461 |
| DSTB 428 | 12 1/4    | 7/8       | 1/8       | 131332   | 128463 |
| DSTB 432 | 12 1/4    | 1         | 1/8       | 131333   | 128465 |
| DSTB 440 | 12 1/4    | 1 1/4     | 1/8       |          | 139794 |
| DSTB 512 | 12 1/4    | 3/8       | 5/32      | 137611   | 142726 |
| DSTB 516 | 12 1/4    | 1/2       | 5/32      | 131334   | 128467 |
| DSTB 520 | 12 1/4    | 5/8       | 5/32      | 137612   | 133132 |
| DSTB 524 | 12 1/4    | 3/4       | 5/32      | 137613   | 133133 |
| DSTB 532 | 12 1/4    | 1         | 5/32      | 137614   | 133134 |
| DSTB 540 | 12 1/4    | 1 1/4     | 5/32      | 142728   | 133135 |



- EN Preforms for brazed cutters  
DE Formplatten zum Löten  
FR Plaquettes en carbure à braser  
IT Placchette per frese saldobrasate  
ES Placas para herramientas soldadas

EN Using preformed tips for your brazed cutters you will save the expensive roughing time and grinding wheel cost. TIGRA can supply almost any kind of preformed tip according to the customer's drawing or DXF file. Small quantities for urgent special tools can be delivered by our quick delivery service within one week.

DE Durch die Verwendung vorgeformter Hartmetallplatten sparen Sie teure Schruppzeiten und Kosten für die Schleifscheiben. TIGRA liefert nahezu jede vorgeformte Platte nach Kundenzeichnung oder DXF-Datei. Kleinserien für eilige Sonderwerkzeuge liefert unser Schnelldienst innerhalb von einer Woche.

FR Grâce à l'utilisation de plaquettes en carbure préprofilées, plus besoin de coûteuses opérations de dégrossissage ni des frais élevés pour les meules. TIGRA peut fournir pratiquement n'importe quelle plaquette préprofilée d'après le dessin du client ou un fichier DXF. Notre services d'urgence livre de petites séries pour les outils spéciaux urgents en une semaine.

IT Con l'uso delle placchette presagomate risparmierete non solo la sgrossatura bensì anche i costi delle mole. TIGRA può fornire quasi ogni tipo di placchette presagomate a seconda delle Vostre richieste ed esigenze (documenti DXF; disegni). Per ordini urgenti di piccole quantità riguardanti utensili particolari siamo in grado di fornirvi la merce nell'arco di una settimana.

ES El empleo de placas de metal duro preformadas le permitirá ahorrarse la costosa fase de desbastado y reducir el consumo de muelas. TIGRA puede fabricar prácticamente cualquier tipo de placa preformada en base al plano o fichero DXF del cliente. Si necesitara una herramienta especial con urgencia, nuestro servicio rápido es capaz de fabricar un lote de pocas unidades en una semana.

EN With chamfers in the profile and/or at the bottom.

DE Mit Fasen im Profil und/oder an der Anschlagkante.

FR Avec des biseaux dans le profil et/ou au bord de butée.

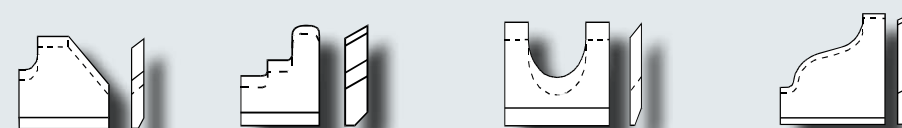
IT Con smussi nel profilo e/o nello spigolo di battuta.

ES Con tanto un perfil, como la base biselados.

EN Profile group 1  
DE Profilgruppe 1  
FR Groupe de profil 1  
IT Gruppo profilo 1  
ES Grupo de perfiles 1



EN Profile group 2  
DE Profilgruppe 2  
FR Groupe de profil 2  
IT Gruppo profilo 2  
ES Grupo de perfiles 2



EN Profile group 3  
DE Profilgruppe 3  
FR Groupe de profil 3  
IT Gruppo profilo 3  
ES Grupo de perfiles 3



EN Without any chamfers and therefore less expensive!

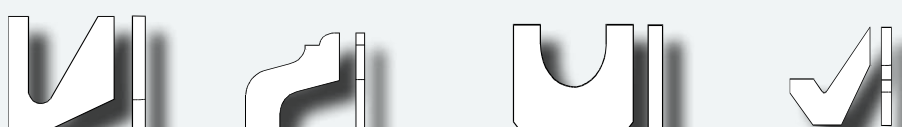
DE Keinerlei Fasen. Der Preis dafür ist deutlich günstiger!

FR Sans des biseaux. Le prix de ce modèle est de ce fait bien plus avantageux!

IT Sprovisto di smussi ha pertanto un prezzo notevolmente inferiore!

ES Ningun bisel. El precio de este modelo sera muy ventajoso para vds!

EN Profile group 4  
DE Profilgruppe 4  
FR Groupe de profil 4  
IT Gruppo profilo 4  
ES Grupo de perfiles 4



- EN Preforms for router bits
- DE Platten für Oberfräser
- FR Plaquettes pour défonceuse
- IT Placchette sagomate per punte
- ES Placas para fresas de cajeadora



**EN** Carbide tips for router bits are available preformed in almost any sizes or executions, as per customer's drawing or DXF file, also for small quantities. Your production cost for router bits will be reduced by saving the cost for cutting, wire cutting, roughing and diamond wheels. Small quantities for urgent special tools are supplied from our quick delivery service within only one week.

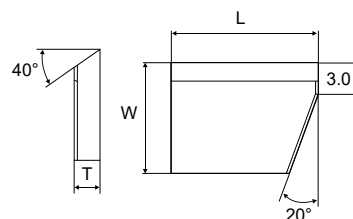
**DE** Hartmetallplatten für Oberfräser sind vorgeformt in fast allen Größen und Ausführungen nach Kundenzeichnung oder DXF-Datei lieferbar, auch für Kleinserien. So sparen Sie auch bei der Herstellung von Oberfräsern die Kosten für das Trennen, Drahtschneiden oder Schrappen sowie Kosten für Schleifscheiben. Kleinserien für eilige Sonderwerkzeuge liefert unser Schnelldienst innerhalb von einer Woche.

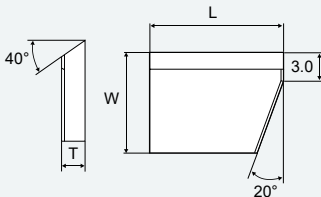
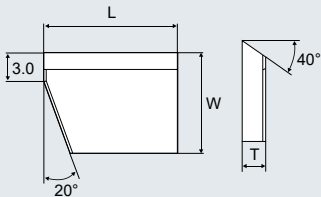
**FR** Les plaquettes en carbure pour défonceuse peuvent être livrées préfaçonnées dans pratiquement toutes les tailles et exécutions d'après le dessin du client ou un fichier DXF, même en petites séries. Vous économisez ainsi les frais de tronçonnage, de meules abrasives même lors de la fabrication d'outil pour défonceuses. Notre service d'urgence livre de petites séries pour les outils spéciaux urgents en une semaine.

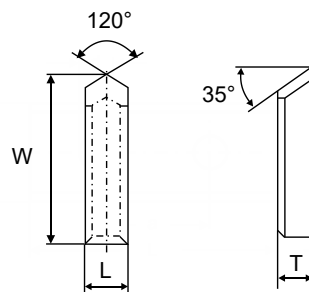
**IT** Le placchette sagomate per punte sono disponibili in quasi ogni misura secondo disegno o documento DXF, anche in quantità minime. Risparmiate i costi di tagli, sgrossatura e delle mole per la produzione delle punte. Per ordini urgenti di piccole quantità riguardanti utensili particolari siamo in grado di fornirvi la merce in una settimana.

**ES** Podemos suministrar placas de metal duro preformadas para fresas de cajeadora de cualquier tamaño y modelo en base al plano o diseño en formato DXF del cliente, incluso lotes de volumen reducido. Se ahorrará así las operaciones de corte, electroerosión o debastado y podrá reducir el consumo de muelas. Si necesitara una herramienta especial con urgencia, nuestro servicio rápido es capaz de fabricar un lote de tamaño reducido en una semana.

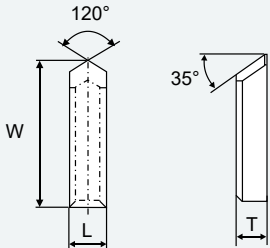
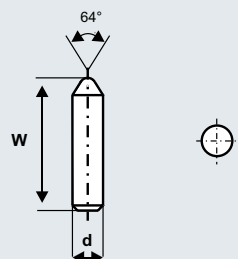
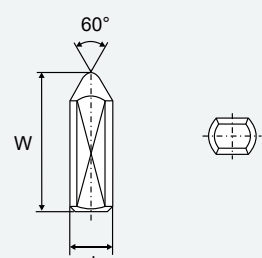
EN Drill bits  
 DE Zylinderkopfbohrer  
 FR Mèches à façonner  
 IT Punta per cerniere  
 ES Brocas estrella



|                                                                                                                                                                                                                              | diam | L<br>mm | W<br>mm | T<br>mm | T07MF-CR |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|---------|---------|----------|
|  <p>           EN left<br/>           DE links<br/>           FR gauche<br/>           IT sinistra<br/>           ES izquierda         </p> | 15.0 | 6.5     | 8.5     | 2.5     | 032657   |
|                                                                                                                                                                                                                              | 16.0 | 7.0     | 10.5    | 2.5     | 032658   |
|                                                                                                                                                                                                                              | 18.0 | 8.0     | 10.5    | 2.5     | 032659   |
|                                                                                                                                                                                                                              | 20.0 | 9.0     | 10.5    | 2.5     | 032660   |
|                                                                                                                                                                                                                              | 22.0 | 10.0    | 10.5    | 2.5     | 032661   |
|                                                                                                                                                                                                                              | 23.0 | 10.5    | 10.5    | 2.5     | 032662   |
|                                                                                                                                                                                                                              | 24.0 | 11.0    | 10.5    | 2.5     | 032663   |
|                                                                                                                                                                                                                              | 25.0 | 11.5    | 10.5    | 2.5     | 032664   |
|                                                                                                                                                                                                                              | 26.0 | 12.0    | 10.5    | 2.5     | 032665   |
|                                                                                                                                                                                                                              | 28.0 | 13.0    | 10.5    | 2.5     | 032666   |
|                                                                                                                                                                                                                              | 30.0 | 14.0    | 10.5    | 2.5     | 032667   |
|                                                                                                                                                                                                                              | 32.0 | 15.0    | 10.5    | 2.5     | 032668   |
|                                                                                                                                                                                                                              | 34.0 | 16.0    | 10.5    | 2.5     | 032669   |
|                                                                                                                                                                                                                              | 35.0 | 16.5    | 10.5    | 2.5     | 032670   |
|                                                                                                                                                                                                                              | 38.0 | 18.0    | 10.5    | 2.5     | 032671   |
|                                                                                                                                                                                                                              | 40.0 | 19.0    | 10.5    | 2.5     | 032672   |
|                                                                                                                                                                                                                              | 45.0 | 21.5    | 10.5    | 2.5     | 032151   |
|                                                                                                                                                                                                                              | 50.0 | 24.0    | 10.5    | 2.5     | 032673   |
|                                                                                                                                                                                                                              | 55.0 | 26.5    | 10.5    | 2.5     | 032674   |
|                                                                                                                                                                                                                              | 60.0 | 29.0    | 10.5    | 2.5     | 032675   |
|  <p>           EN right<br/>           DE rechts<br/>           FR droite<br/>           IT destra<br/>           ES derecha         </p> | 15.0 | 6.5     | 8.5     | 2.5     | 032676   |
|                                                                                                                                                                                                                              | 16.0 | 7.0     | 10.5    | 2.5     | 032677   |
|                                                                                                                                                                                                                              | 18.0 | 8.0     | 10.5    | 2.5     | 032678   |
|                                                                                                                                                                                                                              | 20.0 | 9.0     | 10.5    | 2.5     | 032679   |
|                                                                                                                                                                                                                              | 22.0 | 10.0    | 10.5    | 2.5     | 032680   |
|                                                                                                                                                                                                                              | 23.0 | 10.5    | 10.5    | 2.5     | 032681   |
|                                                                                                                                                                                                                              | 24.0 | 11.0    | 10.5    | 2.5     | 032682   |
|                                                                                                                                                                                                                              | 25.0 | 11.5    | 10.5    | 2.5     | 032683   |
|                                                                                                                                                                                                                              | 26.0 | 12.0    | 10.5    | 2.5     | 032684   |
|                                                                                                                                                                                                                              | 28.0 | 13.0    | 10.5    | 2.5     | 032685   |
|                                                                                                                                                                                                                              | 30.0 | 14.0    | 10.5    | 2.5     | 032686   |
|                                                                                                                                                                                                                              | 32.0 | 15.0    | 10.5    | 2.5     | 032687   |
|                                                                                                                                                                                                                              | 34.0 | 16.0    | 10.5    | 2.5     | 032688   |
|                                                                                                                                                                                                                              | 35.0 | 16.5    | 10.5    | 2.5     | 032689   |
|                                                                                                                                                                                                                              | 38.0 | 18.0    | 10.5    | 2.5     | 032690   |
|                                                                                                                                                                                                                              | 40.0 | 19.0    | 10.5    | 2.5     | 032691   |
|                                                                                                                                                                                                                              | 45.0 | 21.5    | 10.5    | 2.5     | 032692   |
|                                                                                                                                                                                                                              | 50.0 | 24.0    | 10.5    | 2.5     | 032693   |
|                                                                                                                                                                                                                              | 55.0 | 26.5    | 10.5    | 2.5     | 032694   |
|                                                                                                                                                                                                                              | 60.0 | 29.0    | 10.5    | 2.5     | 032695   |

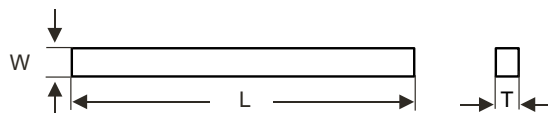


EN Drill bits  
DE Zylinderkopfbohrer  
FR Mèches à façonner  
IT Punta per cerniere  
ES Brocas estrella

|                                                                                     | d   | L<br>mm | W<br>mm | T<br>mm | T07MF-CR |
|-------------------------------------------------------------------------------------|-----|---------|---------|---------|----------|
|    |     | 3.0     | 12.0    | 2.5     | 032702   |
|                                                                                     |     | 4.0     | 13.0    | 2.5     | 032703   |
|   | 3.0 |         | 13.0    |         | 055341   |
|  | 4.0 |         | 13.0    |         | 032704   |

EN Finger joint cutters  
DE Minizinkenfräser  
FR Fraises mini-aboutages  
IT Frese per giunzioni  
ES Fresas para ensamblar

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | T07MF-CR | T10MG  |
|-------------------------------------------------------------------------------------|---------|---------|---------|----------|--------|
|  | 4.5     | 28.0    | 4.1     | 029105   | 041997 |
|                                                                                     | 5.0     | 28.0    | 4.1     | 107858   | 107859 |



- EN Tips for T.C.T. knives  
 DE Rohlinge für HW-bestückte Messer  
 FR Plaquettes pour fabriquer des fers rapportés carbure  
 IT Placchette per fabbricare coltelli riportati HW  
 ES Placas para equipar cuchillas con metal duro

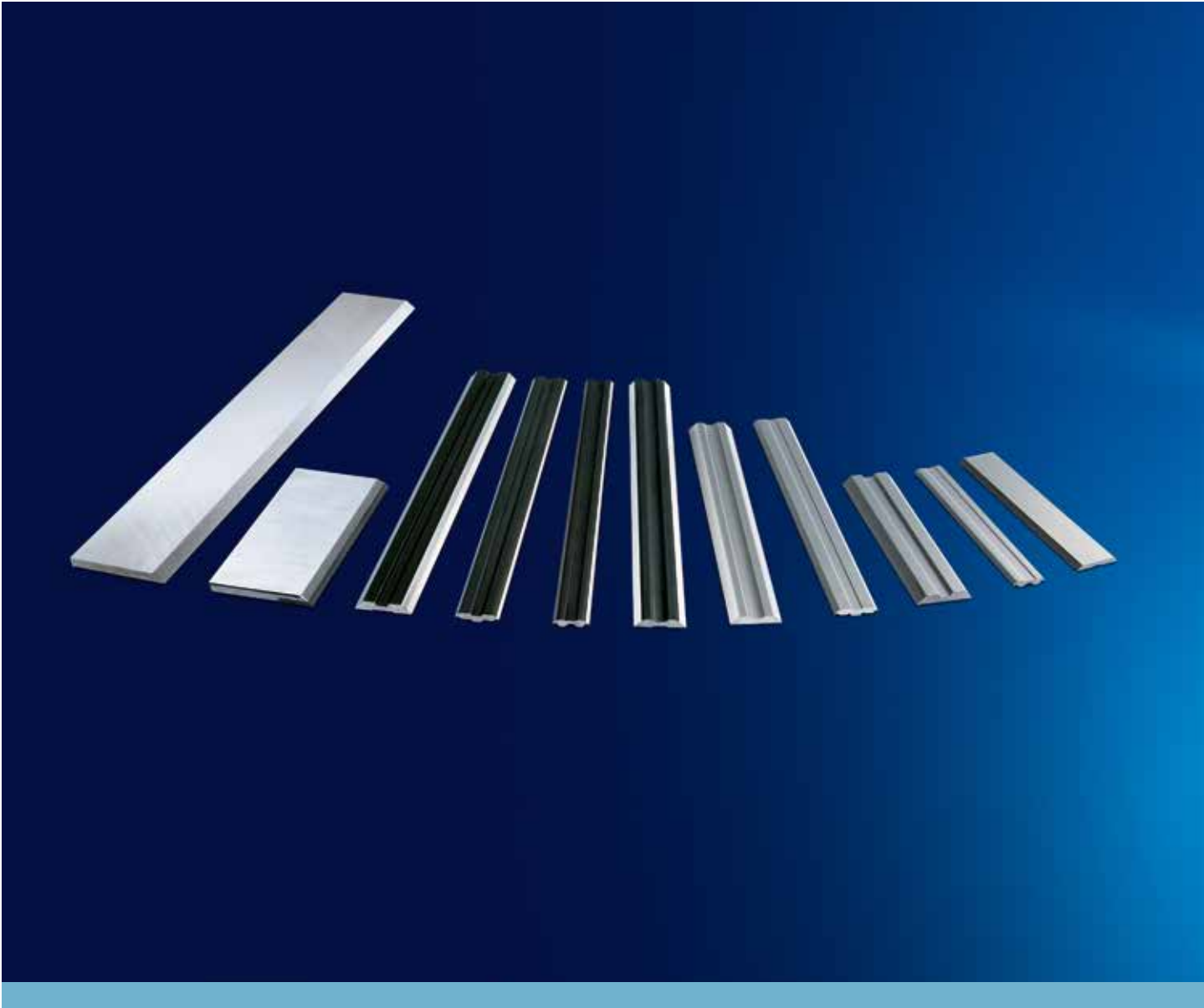
| L<br>mm | W<br>mm | T<br>mm | T10MF  |
|---------|---------|---------|--------|
| 1052    | 11.2    | 1.3     | 114832 |

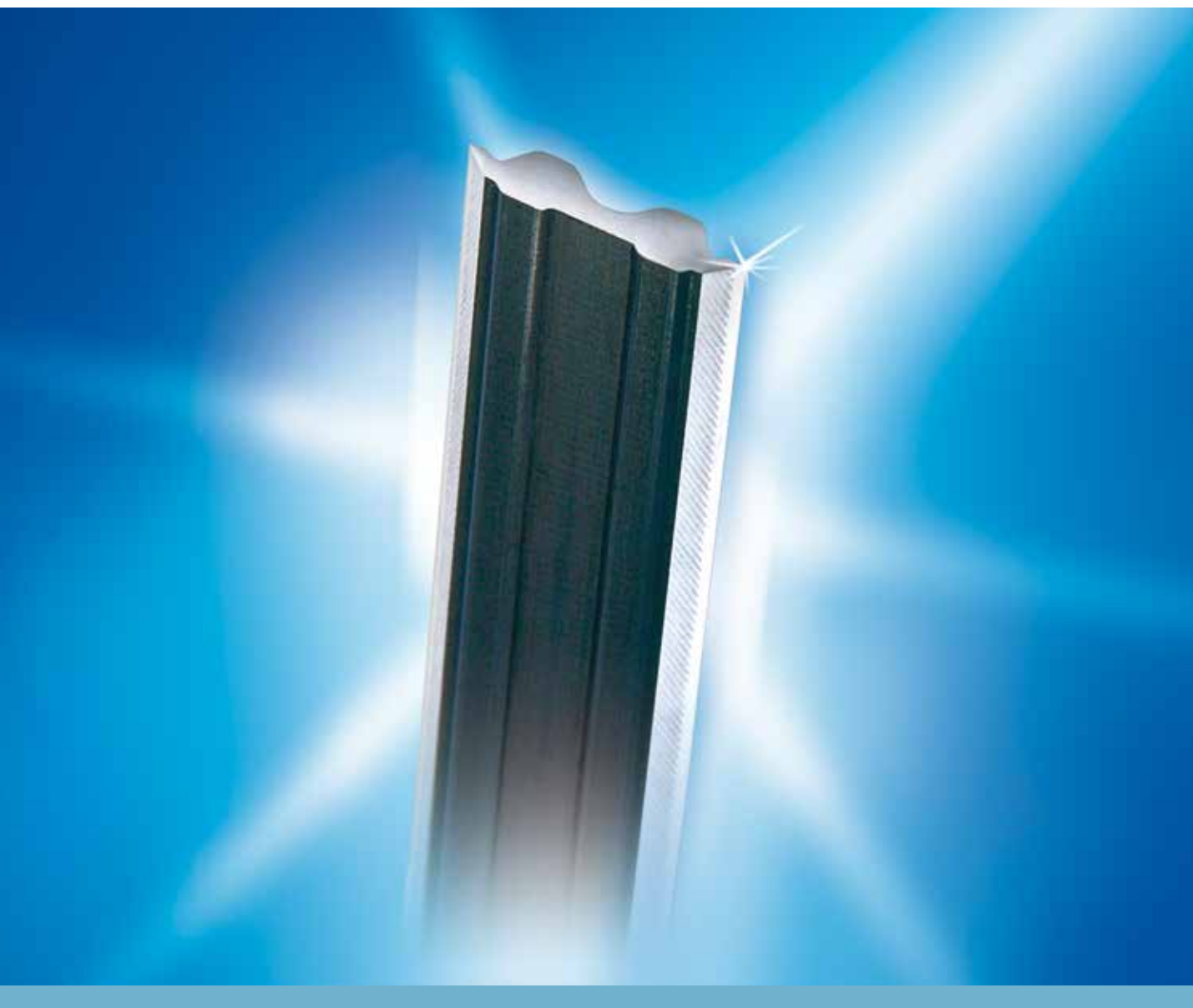
- EN Tips for multicut planers  
 DE Zähne für Vielzahnfräser  
 FR Dents spéciales  
 IT Dentelli per frese multitaglienti  
 ES Dientes para fresas multicorte

|                                                                                                                                                                         | L<br>mm | W<br>mm | T<br>mm | T10MG  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|--------|
|   | 12.8    | 6.2     | 5.3     | 029090 |
|                                                                                                                                                                         | 12.8    | 8.2     | 5.3     | 114884 |
|   | 12.8    | 6.2     | 5.3     | 112940 |



TOOLS CUT BETTER WITH TIGRA





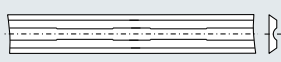
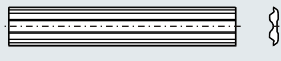
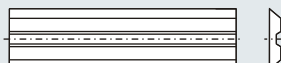
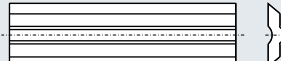
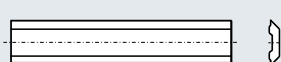
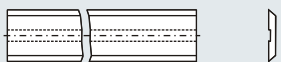
- EN Planer knives
- DE Hobelmesser
- FR Couteaux à raboter
- IT Coltelli da pialla
- ES Cuchillas para cepillar



TOOLS CUT BETTER WITH TIGRA

---

EN Planer knives  
DE Hobelmesser  
FR Couteaux à raboter  
IT Coltelli da pialla  
ES Cuchillas para cepillar

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |           |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|    | <p>EN Reversible knives for portable planers<br/>DE Wendeschneidplatten für Handhobel<br/>FR Plaquettes pour rabots électro portatifs<br/>IT Coltelli per piallatrici portatili<br/>ES Cuchillas para acepilladoras electricas</p>                                                                                                                                  | 118       |
|    | <p>EN Planer knives for system Tersa<br/>DE Hobelmesser für System Tersa<br/>FR Couteaux à raboter pour système Tersa<br/>IT Coltelli da pialla per sistema Tersa<br/>ES Cuchillas para cepillar para sistema Tersa</p>                                                                                                                                             | 119 - 120 |
|    | <p>EN Planer knives for system Centrolock<br/>DE Hobelmesser für System Centrolock<br/>FR Couteaux à raboter pour système Centrolock<br/>IT Coltelli da pialla per sistema Centrolock<br/>ES Cuchillas para cepillar para sistema Centrolock</p>                                                                                                                    | 121       |
|    | <p>EN Planer knives for system Terminus<br/>DE Hobelmesser für System Terminus<br/>FR Couteaux à raboter pour système Terminus<br/>IT Coltelli da pialla per sistema Terminus<br/>ES Cuchillas para cepillar para sistema Terminus</p>                                                                                                                              | 122       |
|  | <p>EN Planer knives for system Centrofix / Centrostar / Quickfix<br/>DE Hobelmesser für System Centrofix / Centrostar / Quickfix<br/>FR Couteaux à raboter pour système Centrofix / Centrostar / Quickfix<br/>IT Coltelli da pialla per sistema Centrofix / Centrostar / Quickfix<br/>ES Cuchillas para cepillar para sistema Centrofix / Centrostar / Quickfix</p> | 123       |
|  | <p>EN Planer knives for system Variplan<br/>DE Hobelmesser für System Variplan<br/>FR Couteaux à raboter pour système Variplan<br/>IT Coltelli da pialla per sistema Variplan<br/>ES Cuchillas para cepillar para sistema Variplan</p>                                                                                                                              | 124       |
|  | <p>EN Planer knives for system Sinus<br/>DE Hobelmesser für System Sinus<br/>FR Couteaux à raboter pour système Sinus<br/>IT Coltelli da pialla per sistema Sinus<br/>ES Cuchillas para cepillar para Sinus</p>                                                                                                                                                     | 125       |
|  | <p>EN Planer knives for system Enshin<br/>DE Hobelmesser für System Enshin<br/>FR Couteaux à raboter pour système Enshin<br/>IT Coltelli da pialla per sistema Enshin<br/>ES Cuchillas para cepillar para sistema Enshin</p>                                                                                                                                        | 126       |
|  | <p>EN Planer knives for system Bulldozer<br/>DE Hobelmesser für System Bulldozer<br/>FR Couteaux à raboter pour système Bulldozer<br/>IT Coltelli da pialla per sistema Bulldozer<br/>ES Cuchillas para cepillar para sistema Bulldozer</p>                                                                                                                         | 127       |
|  | <p>EN Planer knives for system Barke / Brück / ESTA<br/>DE Hobelmesser für System Barke / Brück / ESTA<br/>FR Couteaux à raboter pour système Barke / Brück / ESTA<br/>IT Coltelli da pialla per sistema Barke / Brück / ESTA<br/>ES Cuchillas para cepillar para sistema Barke / Brück / ESTA</p>                                                                  | 128       |
|  | <p>EN HSS / Matrix planer knives<br/>DE HSS / Matrix-Hobelmesser<br/>FR Fers de raboteuse HSS / Matrix<br/>IT Coltelli da pialla HSS / Matrix<br/>ES Cuchillas en HSS / Matrix</p>                                                                                                                                                                                  | 129 - 131 |
|  | <p>EN T.C.T. and solid carbide planer knives<br/>DE HM-bestückte und Vollhartmetall-Hobelmesser<br/>FR Couteaux à mise rapportée carbure et couteaux à raboter au carbure massif<br/>IT Coltelli da pialla con metallo duro riportato e coltelli da pialla in HM integrale<br/>ES Cuchillas con metal duro y cuchillas metal duro integral</p>                      | 132 - 133 |

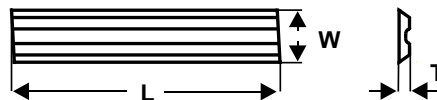
- EN Planer knives - Grades and their applications  
 DE Hobelmesser - Sorten und ihre Anwendungen  
 FR Couteaux à raboter - Les nuances et leurs applications  
 IT Coltelli da pialla - I tipi e le loro applicazioni  
 ES Cuchillas para cepillar - Calidades y sus aplicaciones

| EN TIGRA grade<br>DE TIGRA - Sorte<br>FR Nuance TIGRA<br>IT Tipo TIGRA<br>ES Calidad TIGRA | Compositon<br>Zusammensetzung<br>Composition<br>Composizione<br>Composición | Hardness<br>Härte<br>Dureté<br>Durezza<br>Dureza                                    | Toughness<br>Zähigkeit<br>Ténacité<br>Tenacità<br>Tenacidad                           | Bending strength<br>Biegebruchfestigkeit<br>Résistance à la flexion<br>Resistenza flessionale<br>Resistencia a la flexión |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| HSS                                                                                        | 6% W / M2                                                                   |    |    |                                        |
| HSS 18%                                                                                    | 18% W / T1                                                                  |    |    |                                        |
| HSS M42                                                                                    | M42                                                                         |   |   |                                       |
| High Performance Steel                                                                     | CrV                                                                         |  |  |                                      |
| T.C.T.                                                                                     | carbide tipped                                                              |  |  |                                      |
| Solid carbide                                                                              | T10MG                                                                       |  |  |                                      |
|                                                                                            | T12SMG                                                                      |  |  |                                      |
| Matrix                                                                                     | special coating                                                             |  |  |                                      |

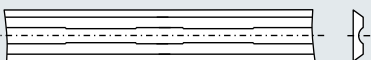
EN For technical data, please refer to the pages 8-10.  
 DE Die technischen Daten entnehmen Sie bitte den Seiten 8-10.  
 FR Pour les données techniques, veuillez voir aux pages 8-10.

| EN | HDF | MDF | Chipboard             | Hardwood    | Softwood      | Main usage                                                                                                                                                                                                                                                        |
|----|-----|-----|-----------------------|-------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DE | HDF | MDF | Spanplatte            | Hartholz    | Weichholz     | Hauptverwendung                                                                                                                                                                                                                                                   |
| FR | HDF | MDF | Panneaux de particule | Bois dur    | Bois tendre   | Usage principal                                                                                                                                                                                                                                                   |
| IT | HDF | MDF | Truciolare            | Legno duro  | Legno tenero  | Uso principale                                                                                                                                                                                                                                                    |
| ES | HDF | MDF | Panel de aglomerado   | Madera dura | Madera blanda | Uso principal                                                                                                                                                                                                                                                     |
|    | —   | —   | —                     | ✓           | ✓             | EN Standard HSS grade, wood<br>DE Standard-HSS-Sorte, Holz<br>FR Nuance HSS standard, bois<br>IT HSS standard, legno<br>ES Calidad HSS estándar, madera                                                                                                           |
|    | —   | —   | ○                     | ✓           | ✓             | EN Best HSS grade, wood<br>DE Beste HSS-Sorte, Holz<br>FR Meilleure nuance HSS, bois<br>IT Migliore HSS, legno<br>ES Mejor calidad HSS, madera                                                                                                                    |
|    | —   | —   | —                     | ✓           | ✓             | EN Special HSS grade, wood<br>DE Spezial-HSS-Sorte, Holz<br>FR Nuance HSS spéciale, bois<br>IT HSS speciale, legno<br>ES Calidad HSS especial, madera                                                                                                             |
|    | —   | —   | —                     | ○           | ✓             | EN Softwood, low price demands<br>DE Weichholz, preisgünstig<br>FR Bois tendre, pris bas<br>IT Legni teneri, costo basso<br>ES Madera blanda, bajo costo                                                                                                          |
|    | ○   | ✓   | ✓                     | ✓           | ○             | EN High lifetime demands<br>DE Hohe Standzeitanforderungen<br>FR Applications de durabilité maximisée<br>IT Elevata esigenza di durata<br>ES Para aplicaciones de máxima durabilidad                                                                              |
|    | ✓   | ✓   | ✓                     | ✓           | ✓             | EN Highest lifetime demands<br>DE Höchste Standzeitanforderungen<br>FR Très longue durée de vie et nombreux services<br>IT Massima esigenza di durata<br>ES Vida útil muy prolongada                                                                              |
|    | ✓   | ✓   | ✓                     | ✓           | ✓             | EN Highest lifetime and surface quality<br>DE Höchste Lebensdauer und Oberflächenqualität<br>FR La plus haute qualité de vie et de surface<br>IT Maggiore durata e qualità della superficie<br>ES Máxima vida útil y calidad de la superficie                     |
|    | —   | —   | —                     | ✓           | ✓             | EN Very long lifetime with multiple resharpening<br>DE Sehr lange Lebensdauer durch mehrfaches Nachschärfen<br>FR Très longue durée de vie et nombreux services<br>IT Durata molto lunga con affilatura multipla<br>ES Muy larga vida útil con múltiple reafilado |

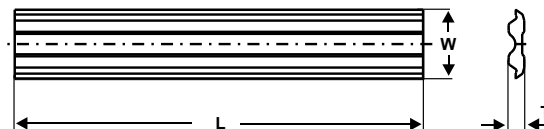
- ✓ best performance
- ✓ very good performance
- acceptable
- not suitable



EN Reversible knives for portable planers  
 DE Wendeschneidplatten für Handhobel  
 FR Plaquettes pour rabots électro portatifs  
 IT Coltelli per piallatrici portatili  
 ES Cuchillas para acepilladoras electricas

|                                                                                     | L<br>mm | W<br>mm | T<br>mm | T08MF  |                                                                                                                       |
|-------------------------------------------------------------------------------------|---------|---------|---------|--------|-----------------------------------------------------------------------------------------------------------------------|
|    | 56.0    | 5.5     | 1.1     | 013041 | Adler                                                                                                                 |
|                                                                                     | 60.0    | 5.5     | 1.1     | 013053 | Wegoma                                                                                                                |
|                                                                                     | 75.5    | 5.5     | 1.1     | 013001 | AEG, Bosch, Festo, Haffner, Kress,<br>Mafell, Metabo, Scheer, Skil, Holz-Her                                          |
|                                                                                     | 78.0    | 5.5     | 1.1     | 013067 | Virutex                                                                                                               |
|                                                                                     | 102.0   | 5.5     | 1.1     | 013061 | AEG                                                                                                                   |
|  | 80.5    | 5.5     | 1.1     | 013010 | ELU                                                                                                                   |
|                                                                                     | 80.5    | 5.9     | 1.2     | 013043 | ELU                                                                                                                   |
|                                                                                     | 82.0    | 5.5     | 1.1     | 013020 | AEG, B&D, Bosch, ALU, Fein, Felisatti,<br>Haffner, Hitachi, Holz-Her, Mafell, Makita,<br>Metabo, Peugeot, Ryobi, Skil |
|  | 82.0    | 5.1     | 1.2     | 013034 | Face groove, Brustnut,<br>Rainure sur grande face,<br>Scanalatura frontale, Ranura frontal                            |

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema

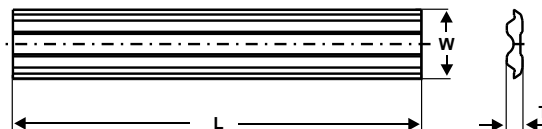


For System Tersa\*

| L<br>mm | W<br>mm | T<br>mm | T10MG  | HSS<br>Standard (M2) | HSS<br>18% (T1) | HSS<br>M42 | High<br>Performance<br>Steel |
|---------|---------|---------|--------|----------------------|-----------------|------------|------------------------------|
| 60.0    | 10.0    | 2.3     | 100847 | 100395               | 114482          | 114539     | 108320                       |
| 75.0    | 10.0    | 2.3     | 104212 | 107545               | 114483          | 114540     | 115104                       |
| 80.0    | 10.0    | 2.3     | 100848 | 100396               | 114484          | 114541     | 115105                       |
| 90.0    | 10.0    | 2.3     | 104398 | 107546               | 114485          | 114542     | 115106                       |
| 95.0    | 10.0    | 2.3     | 104211 | 107547               | 114486          | 114543     | 115107                       |
| 100.0   | 10.0    | 2.3     | 055509 | 100397               | 114487          | 114544     | 108321                       |
| 110.0   | 10.0    | 2.3     | 100849 | 100398               | 114488          | 114545     | 108322                       |
| 115.0   | 10.0    | 2.3     | 105071 | 104630               | 114489          | 114546     | 108323                       |
| 120.0   | 10.0    | 2.3     | 100851 | 100399               | 114490          | 114547     | 108324                       |
| 125.0   | 10.0    | 2.3     | 104022 | 107548               | 114491          | 114548     | 115108                       |
| 130.0   | 10.0    | 2.3     | 055510 | 100400               | 114492          | 114549     | 108325                       |
| 135.0   | 10.0    | 2.3     | 103823 | 103821               | 114493          | 114550     | 108326                       |
| 140.0   | 10.0    | 2.3     | 104766 | 104613               | 114494          | 114551     | 108327                       |
| 145.0   | 10.0    | 2.3     | 104210 | 107549               | 114495          | 114552     | 115109                       |
| 150.0   | 10.0    | 2.3     | 100852 | 100401               | 114496          | 114553     | 108328                       |
| 160.0   | 10.0    | 2.3     | 103943 | 102716               | 114497          | 114554     | 108329                       |
| 170.0   | 10.0    | 2.3     | 100853 | 100402               | 114498          | 114555     | 108330                       |
| 180.0   | 10.0    | 2.3     | 100854 | 100403               | 114499          | 114556     | 108331                       |
| 185.0   | 10.0    | 2.3     | 105070 | 102774               | 114500          | 114557     | 108332                       |
| 190.0   | 10.0    | 2.3     | 104399 | 104808               | 114501          | 114558     | 108333                       |
| 200.0   | 10.0    | 2.3     | 105698 | 104243               | 114502          | 114559     | 115121                       |
| 210.0   | 10.0    | 2.3     | 100855 | 100404               | 114503          | 114560     | 108334                       |
| 220.0   | 10.0    | 2.3     | 104589 | 104566               | 114504          | 114561     | 108335                       |
| 230.0   | 10.0    | 2.3     | 055511 | 100405               | 114505          | 114562     | 108337                       |
| 235.0   | 10.0    | 2.3     | 103824 | 101718               | 114506          | 114563     | 108338                       |
| 240.0   | 10.0    | 2.3     | 104043 | 101720               | 114507          | 114564     | 108339                       |
| 250.0   | 10.0    | 2.3     | 100856 | 100406               | 114508          | 114565     | 115110                       |
| 260.0   | 10.0    | 2.3     | 100857 | 100407               | 114509          | 114566     | 108340                       |
| 265.0   | 10.0    | 2.3     | 104573 | 104326               | 114510          | 114567     | 115111                       |
| 270.0   | 10.0    | 2.3     | 101673 | 102982               | 114511          | 114568     | 115112                       |

\* EN For use in Tersa-cutterheads only  
 \* DE Nur zur Verwendung in Tersa-Messerköpfen  
 \* FR Utilisation limitée aux porte outils de Tersa  
 \* IT Da usare solo su teste portacoltelli della Tersa  
 \* ES Sólo para empleo con portacuchillas de Tersa

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema



For System Tersa\*

| L<br>mm                                                 | W<br>mm | T<br>mm | T10MG  | HSS<br>Standard (M2) | HSS<br>18% (T1) | HSS<br>M42 | High<br>Performance<br>Steel |
|---------------------------------------------------------|---------|---------|--------|----------------------|-----------------|------------|------------------------------|
| 280.0                                                   | 10.0    | 2.3     | 100858 | 100408               | 114512          | 114569     | 115113                       |
| 300.0                                                   | 10.0    | 2.3     | 100859 | 100409               | 114513          | 114570     | 108341                       |
| 310.0                                                   | 10.0    | 2.3     | 055512 | 100410               | 114514          | 114571     | 108342                       |
| 320.0                                                   | 10.0    | 2.3     | 107550 | 104687               | 114515          | 114572     | 108343                       |
| 330.0                                                   | 10.0    | 2.3     | 100861 | 100411               | 114516          | 114573     | 108344                       |
| 350.0                                                   | 10.0    | 2.3     | 100862 | 100412               | 114517          | 114574     | 108345                       |
| 360.0                                                   | 10.0    | 2.3     | 100863 | 100413               | 114518          | 114575     | 115114                       |
| 400.0                                                   | 10.0    | 2.3     | 100864 | 100414               | 114519          | 114576     | 108346                       |
| 410.0                                                   | 10.0    | 2.3     | 055513 | 100415               | 114520          | 114577     | 108347                       |
| 415.0                                                   | 10.0    | 2.3     | 107551 | 105267               | 114521          | 114578     | 115115                       |
| 420.0                                                   | 10.0    | 2.3     | 100865 | 100416               | 114522          | 114579     | 108348                       |
| 430.0                                                   | 10.0    | 2.3     | 055514 | 100417               | 114523          | 114580     | 108349                       |
| 450.0                                                   | 10.0    | 2.3     | 100866 | 100418               | 114524          | 114581     | 108350                       |
| 500.0                                                   | 10.0    | 2.3     | 100867 | 100419               | 114525          | 114582     | 108351                       |
| 510.0                                                   | 10.0    | 2.3     | 055515 | 100420               | 114526          | 114583     | 108352                       |
| 520.0                                                   | 10.0    | 2.3     | 055516 | 100421               | 114527          | 114584     | 108353                       |
| 530.0                                                   | 10.0    | 2.3     | 100868 | 100422               | 114528          | 114585     | 108354                       |
| 540.0                                                   | 10.0    | 2.3     | 100869 | 100423               | 114529          | 114586     | 115116                       |
| 600.0                                                   | 10.0    | 2.3     | 104720 | 103994               | 114530          | 114587     | 108355                       |
| 610.0                                                   | 10.0    | 2.3     | 055517 | 100424               | 114531          | 114588     | 108356                       |
| 630.0                                                   | 10.0    | 2.3     | 055518 | 100425               | 114532          | 114589     | 108357                       |
| 635.0                                                   | 10.0    | 2.3     | 102179 | 103912               | 114533          | 114590     | 108358                       |
| 640.0                                                   | 10.0    | 2.3     | 100870 | 100426               | 114534          | 114591     | 108359                       |
| 650.0                                                   | 10.0    | 2.3     | 055519 | 100427               | 114535          | 114592     | 108361                       |
| 710.0                                                   | 10.0    | 2.3     |        | 114119               | 114536          | 114593     | 115117                       |
| 810.0                                                   | 10.0    | 2.3     |        | 113435               | 114537          | 114594     | 115118                       |
| 1050.0                                                  | 10.0    | 2.3     |        | 114599               | 114538          | 114595     | 115119                       |
| Coil 60 meters                                          |         |         |        | 115127               | 116526          | 115128     | 115129                       |
| Coil 120 meters                                         |         |         |        | 110719               | 115191          | 114791     | 115120                       |
| Packing paper coil<br>(60 meters for paired<br>packing) |         |         |        | 112874               | 112874          | 112874     | 112874                       |

\* EN For use in Tersa-cutterheads only

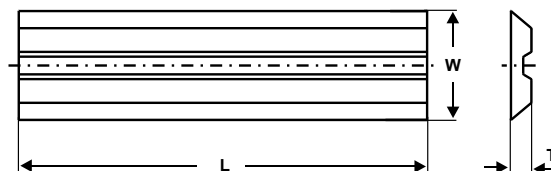
\* DE Nur zur Verwendung in Tersa-Messerköpfen

\* FR Utilisation limitée aux porte outils de Tersa

\* IT Da usare solo su teste portacoltelli della Tersa

\* ES Sólo para empleo con portacuchillas de Tersa

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema

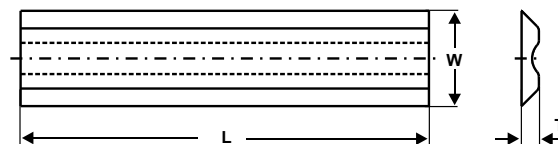


For System Centrolock\*

| L<br>mm | W<br>mm | T<br>mm | T10MG  | T12SMG<br>Microfinish | HSS<br>18% (T1) |
|---------|---------|---------|--------|-----------------------|-----------------|
| 10.0    | 16.0    | 3.0     | 102953 |                       | 114697          |
| 20.0    | 16.0    | 3.0     | 100836 |                       | 114698          |
| 30.0    | 16.0    | 3.0     | 102777 |                       | 114699          |
| 40.0    | 16.0    | 3.0     | 102954 |                       | 114700          |
| 50.0    | 16.0    | 3.0     | 102778 |                       | 114701          |
| 60.0    | 16.0    | 3.0     | 100837 | 141935                | 114702          |
| 65.0    | 16.0    | 3.0     | 107536 |                       | 114703          |
| 80.0    | 16.0    | 3.0     | 100838 |                       | 114704          |
| 100.0   | 16.0    | 3.0     | 055502 | 141937                | 114705          |
| 115.0   | 16.0    | 3.0     | 106848 |                       | 114706          |
| 130.0   | 16.0    | 3.0     | 055503 | 142745                | 114707          |
| 140.0   | 16.0    | 3.0     | 107537 |                       | 114708          |
| 150.0   | 16.0    | 3.0     | 100839 | 142840                | 114709          |
| 160.0   | 16.0    | 3.0     | 105003 |                       | 114710          |
| 170.0   | 16.0    | 3.0     | 055504 | 142746                | 114711          |
| 180.0   | 16.0    | 3.0     | 100840 |                       | 114712          |
| 190.0   | 16.0    | 3.0     | 100841 |                       | 114713          |
| 210.0   | 16.0    | 3.0     | 100842 |                       | 114714          |
| 220.0   | 16.0    | 3.0     | 107538 |                       | 114715          |
| 230.0   | 16.0    | 3.0     | 054753 | 141939                | 114716          |
| 235.0   | 16.0    | 3.0     | 100844 |                       | 114717          |
| 240.0   | 16.0    | 3.0     | 055505 | 140154                | 114718          |
| 260.0   | 16.0    | 3.0     | 100845 |                       | 114719          |
| 270.0   | 16.0    | 3.0     | 055506 | 141941                | 114720          |
| 285.0   | 16.0    | 3.0     | 125900 |                       | 122896          |
| 300.0   | 16.0    | 3.0     | 102493 |                       | 114721          |
| 310.0   | 16.0    | 3.0     | 100846 | 142850                | 114722          |
| 460.0   | 16.0    | 3.0     | 055507 |                       | 114723          |
| 650.0   | 16.0    | 3.0     | 055508 |                       | 114724          |
| 710.0   | 16.0    | 3.0     |        |                       | 114725          |
| 810.0   | 16.0    | 3.0     |        |                       | 114726          |
| 1050.0  | 16.0    | 3.0     |        |                       | 114727          |

\* EN For use in Centrolock-cutterheads only  
 \* DE Nur zur Verwendung in Centrolock-Messerköpfen  
 \* FR Utilisation limitée aux porte outils de Centrolock  
 \* IT Da usare solo su teste portacoltelli della Centrolock  
 \* ES Sólo para empleo con portacuchillas de Centrolock

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema



For System Terminus\*

| L<br>mm | W<br>mm | T<br>mm | T10MG  | HSS<br>18% (T1) |
|---------|---------|---------|--------|-----------------|
| 50.0    | 14.0    | 2.55    | 100796 | 114649          |
| 60.0    | 14.0    | 2.55    | 100803 | 114650          |
| 80.0    | 14.0    | 2.55    | 100804 | 114651          |
| 100.0   | 14.0    | 2.55    | 100805 | 114652          |
| 110.0   | 14.0    | 2.55    | 100806 | 114653          |
| 120.0   | 14.0    | 2.55    | 100807 | 114654          |
| 130.0   | 14.0    | 2.55    | 055496 | 114655          |
| 136.0   | 14.0    | 2.55    | 107532 | 114656          |
| 140.0   | 14.0    | 2.55    | 100808 | 114657          |
| 150.0   | 14.0    | 2.55    | 100809 | 114658          |
| 160.0   | 14.0    | 2.55    | 100811 | 114659          |
| 170.0   | 14.0    | 2.55    | 100812 | 114660          |
| 180.0   | 14.0    | 2.55    | 100813 | 114661          |
| 190.0   | 14.0    | 2.55    | 100814 | 114662          |
| 200.0   | 14.0    | 2.55    | 100815 | 114663          |
| 210.0   | 14.0    | 2.55    | 100816 | 114664          |
| 220.0   | 14.0    | 2.55    | 100817 | 114665          |
| 230.0   | 14.0    | 2.55    | 054752 | 114666          |
| 240.0   | 14.0    | 2.55    | 100818 | 114667          |
| 250.0   | 14.0    | 2.55    | 100819 | 114668          |
| 255.0   | 14.0    | 2.55    | 107533 | 114669          |
| 260.0   | 14.0    | 2.55    | 100820 | 114670          |
| 270.0   | 14.0    | 2.55    | 100821 | 114671          |
| 275.0   | 14.0    | 2.55    | 107534 | 114672          |
| 280.0   | 14.0    | 2.55    | 100822 | 114673          |

| L<br>mm | W<br>mm | T<br>mm | T10MG  | HSS<br>18% (T1) |
|---------|---------|---------|--------|-----------------|
| 300.0   | 14.0    | 2.55    | 100823 | 114674          |
| 310.0   | 14.0    | 2.55    | 055497 | 114675          |
| 330.0   | 14.0    | 2.55    | 107535 | 114676          |
| 350.0   | 14.0    | 2.55    | 100824 | 114677          |
| 360.0   | 14.0    | 2.55    | 100825 | 114678          |
| 400.0   | 14.0    | 2.55    | 100826 | 114679          |
| 410.0   | 14.0    | 2.55    | 055498 | 114680          |
| 420.0   | 14.0    | 2.55    | 100828 | 114681          |
| 430.0   | 14.0    | 2.55    | 100829 | 114682          |
| 450.0   | 14.0    | 2.55    | 100830 | 114683          |
| 480.0   | 14.0    | 2.55    | 100940 | 114684          |
| 500.0   | 14.0    | 2.55    | 104977 | 114685          |
| 510.0   | 14.0    | 2.55    | 055499 | 114686          |
| 520.0   | 14.0    | 2.55    | 100831 | 114687          |
| 530.0   | 14.0    | 2.55    | 100832 | 114688          |
| 610.0   | 14.0    | 2.55    | 055500 | 114689          |
| 620.0   | 14.0    | 2.55    | 100833 | 114690          |
| 630.0   | 14.0    | 2.55    | 100834 | 114691          |
| 640.0   | 14.0    | 2.55    | 100835 | 114692          |
| 650.0   | 14.0    | 2.55    | 055501 | 114693          |
| 710.0   | 14.0    | 2.55    |        | 114694          |
| 810.0   | 14.0    | 2.55    |        | 114695          |
| 1050.0  | 14.0    | 2.55    |        | 114696          |

\* EN For use in Terminus-cutterheads only

\* DE Nur zur Verwendung in Terminus-Messerköpfen

\* FR Utilisation limitée aux porte outils de Terminus

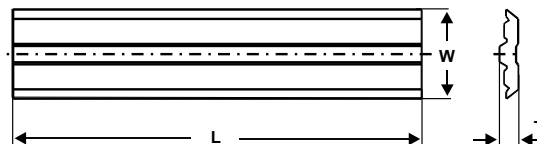
\* IT Da usare solo su teste portacoltelli della Terminus

\* ES Sólo para empleo con portacuchillas de Terminus

EN System Planer knives  
DE Systemhobelmesser  
FR Couteaux à raboter pour système  
IT Coltelli da pialla per sistema  
ES Cuchillas para cepillar para sistema



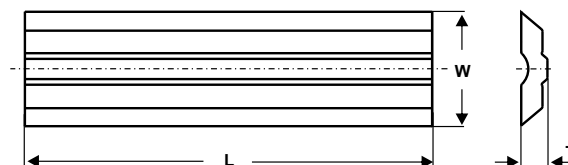
For System Centrofix/  
Centrostar/ Quickfix\*



| L<br>mm                                                 | W<br>mm | T<br>mm | T10MG  | HSS<br>Standard (M2) | HSS<br>18% (T1) |
|---------------------------------------------------------|---------|---------|--------|----------------------|-----------------|
| 50.0                                                    | 12.0    | 2.7     | 100876 | 100896               | 114762          |
| 80.0                                                    | 12.0    | 2.7     | 100879 | 100897               | 114763          |
| 100.0                                                   | 12.0    | 2.7     | 100880 | 100898               | 114764          |
| 120.0                                                   | 12.0    | 2.7     | 100881 | 100899               | 114765          |
| 130.0                                                   | 12.0    | 2.7     | 055520 | 055488               | 114766          |
| 136.0                                                   | 12.0    | 2.7     | 100883 | 100900               | 114767          |
| 150.0                                                   | 12.0    | 2.7     | 100884 | 100901               | 114768          |
| 170.0                                                   | 12.0    | 2.7     | 100885 | 100902               | 114769          |
| 180.0                                                   | 12.0    | 2.7     | 055521 | 055489               | 114770          |
| 190.0                                                   | 12.0    | 2.7     | 100886 | 100904               | 114771          |
| 210.0                                                   | 12.0    | 2.7     | 100887 | 100905               | 114772          |
| 230.0                                                   | 12.0    | 2.7     | 055522 | 055490               | 114773          |
| 240.0                                                   | 12.0    | 2.7     | 100890 | 100906               | 114774          |
| 260.0                                                   | 12.0    | 2.7     | 111091 | 110036               | 116026          |
| 310.0                                                   | 12.0    | 2.7     | 101675 | 103165               | 114775          |
| 400.0                                                   | 12.0    | 2.7     | 100891 | 100907               | 114776          |
| 410.0                                                   | 12.0    | 2.7     | 055523 | 055491               | 114777          |
| 420.0                                                   | 12.0    | 2.7     | 100892 | 100908               | 114778          |
| 430.0                                                   | 12.0    | 2.7     | 100893 | 100909               | 114779          |
| 500.0                                                   | 12.0    | 2.7     | 100894 | 100910               | 114780          |
| 510.0                                                   | 12.0    | 2.7     | 055524 | 055492               | 114781          |
| 520.0                                                   | 12.0    | 2.7     | 055525 | 055493               | 114782          |
| 530.0                                                   | 12.0    | 2.7     | 055526 | 055494               | 114783          |
| 540.0                                                   | 12.0    | 2.7     | 100895 | 100911               | 114784          |
| 630.0                                                   | 12.0    | 2.7     | 107553 | 103814               | 114785          |
| 640.0                                                   | 12.0    | 2.7     | 107554 | 107474               | 114786          |
| 650.0                                                   | 12.0    | 2.7     | 055527 | 055495               | 114787          |
| 710.0                                                   | 12.0    | 2.7     |        | 101046               | 114788          |
| 810.0                                                   | 12.0    | 2.7     |        | 108226               | 114789          |
| 1050.0                                                  | 12.0    | 2.7     |        | 114760               | 114790          |
| Coil 60 meters                                          |         |         |        | 121137               |                 |
| Coil 120 meters                                         |         |         |        | 112205               |                 |
| Packing paper coil<br>(60 meters for paired<br>packing) |         |         |        | 112877               |                 |

\* EN For use in Centrofix/Centrostar/Quickfix-cutterheads only  
\* DE Nur zur Verwendung in Centrofix/Centrostar/Quickfix-Messerköpfen  
\* FR Utilisation limitée aux porte outils de Centrofix/Centrostar/Quickfix  
\* IT Da usare solo su teste portacoltelli della Centrofix/Centrostar/Quickfix  
\* ES Sólo para empleo con portacuchillas de Centrofix/Centrostar/Quickfix

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema

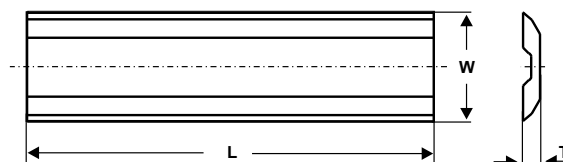


For System Variplan\*

| L<br>mm | W<br>mm | T<br>mm | T10MG  | HSS<br>18% (T1) |
|---------|---------|---------|--------|-----------------|
| 50      | 16.0    | 3.7     | 116764 | 116737          |
| 60      | 16.0    | 3.7     | 116765 | 116738          |
| 80      | 16.0    | 3.7     | 116766 | 116739          |
| 100     | 16.0    | 3.7     | 116767 | 116740          |
| 120     | 16.0    | 3.7     | 116768 | 116741          |
| 130     | 16.0    | 3.7     | 109662 | 116319          |
| 136     | 16.0    | 3.7     | 116769 | 116742          |
| 150     | 16.0    | 3.7     | 116770 | 116743          |
| 170     | 16.0    | 3.7     | 108654 | 116744          |
| 180     | 16.0    | 3.7     | 116771 | 116745          |
| 190     | 16.0    | 3.7     | 116772 | 116746          |
| 210     | 16.0    | 3.7     | 107585 | 116747          |
| 230     | 16.0    | 3.7     | 116773 | 116320          |
| 240     | 16.0    | 3.7     | 116774 | 116321          |
| 400     | 16.0    | 3.7     | 116775 | 116748          |
| 410     | 16.0    | 3.7     | 107586 | 116322          |
| 420     | 16.0    | 3.7     | 116776 | 116749          |
| 430     | 16.0    | 3.7     | 116777 | 116750          |
| 500     | 16.0    | 3.7     | 116778 | 116751          |
| 510     | 16.0    | 3.7     | 116779 | 116752          |
| 520     | 16.0    | 3.7     | 116780 | 116753          |
| 530     | 16.0    | 3.7     | 116781 | 116754          |
| 540     | 16.0    | 3.7     | 116782 | 116755          |
| 600     | 16.0    | 3.7     | 116783 | 116756          |
| 610     | 16.0    | 3.7     | 116784 | 116757          |
| 630     | 16.0    | 3.7     | 116785 | 116758          |
| 640     | 16.0    | 3.7     | 116786 | 116759          |
| 1050    | 16.0    | 3.7     |        | 115845          |

\* EN For use in Variplan-cutterheads only  
 \* DE Nur zur Verwendung in Variplan-Messerköpfen  
 \* FR Utilisation limitée aux porte outils de Variplan  
 \* IT Da usare solo su teste portacoltelli della Variplan  
 \* ES Sólo para empleo con portacuchillas de Variplan

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema



For System Sinus\*

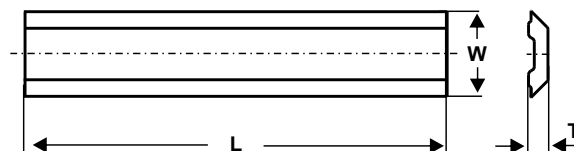
| L<br>mm | W<br>mm | T<br>mm | T10MG  | HSS<br>18% (T1) |
|---------|---------|---------|--------|-----------------|
| 80      | 16.0    | 2.5     | 116711 | 130320          |
| 100     | 16.0    | 2.5     | 116712 | 130321          |
| 120     | 16.0    | 2.5     | 116713 | 130322          |
| 130     | 16.0    | 2.5     | 116714 | 130323          |
| 140     | 16.0    | 2.5     | 116715 | 130324          |
| 150     | 16.0    | 2.5     | 116716 | 130325          |
| 160     | 16.0    | 2.5     | 116717 | 130326          |
| 180     | 16.0    | 2.5     | 116718 | 130327          |
| 190     | 16.0    | 2.5     | 116719 | 130328          |
| 200     | 16.0    | 2.5     | 116720 | 130329          |
| 210     | 16.0    | 2.5     | 116721 | 130330          |
| 220     | 16.0    | 2.5     | 116722 | 128352          |
| 230     | 16.0    | 2.5     | 116723 | 128353          |
| 235     | 16.0    | 2.5     |        | 130344          |
| 240     | 16.0    | 2.5     | 116724 | 128354          |
| 250     | 16.0    | 2.5     | 116725 | 130331          |
| 260     | 16.0    | 2.5     | 116726 | 130332          |
| 300     | 16.0    | 2.5     | 116727 | 130333          |
| 310     | 16.0    | 2.5     | 116728 | 130334          |
| 400     | 16.0    | 2.5     | 116729 | 130335          |
| 410     | 16.0    | 2.5     | 116730 | 130336          |
| 430     | 16.0    | 2.5     | 116731 | 130337          |
| 500     | 16.0    | 2.5     | 116732 | 130338          |
| 510     | 16.0    | 2.5     | 116733 | 130339          |
| 610     | 16.0    | 2.5     | 116734 | 130292          |
| 630     | 16.0    | 2.5     | 116735 | 130340          |
| 640     | 16.0    | 2.5     | 116736 | 130341          |
| 710     | 16.0    | 2.5     |        | 130342          |
| 1050    | 16.0    | 2.5     |        | 130343          |
| 1350    | 16.0    | 2.5     |        | 115486          |

\* EN For use in Sinus-cutterheads only  
 \* DE Nur zur Verwendung in Sinus-Messerköpfen  
 \* FR Utilisation limitée aux porte outils de Sinus  
 \* IT Da usare solo su teste portacoltelli della Sinus  
 \* ES Sólo para empleo con portacuchillas de Sinus

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema



For System Enshin\*



| L<br>mm | W<br>mm | T<br>mm | T10MG  |
|---------|---------|---------|--------|
| 80      | 12.7    | 2.7     | 116794 |
| 100     | 12.7    | 2.7     | 116796 |
| 130     | 12.7    | 2.7     | 116797 |
| 150     | 12.7    | 2.7     | 116798 |
| 170     | 12.7    | 2.7     | 116799 |
| 180     | 12.7    | 2.7     | 116800 |
| 190     | 12.7    | 2.7     | 116801 |
| 210     | 12.7    | 2.7     | 116802 |
| 230     | 12.7    | 2.7     | 116803 |
| 240     | 12.7    | 2.7     | 116804 |
| 640     | 12.7    | 2.7     | 116805 |

| L<br>mm | W<br>mm | T<br>mm | HSS<br>Standard (M2) |
|---------|---------|---------|----------------------|
| 80      | 12.0    | 2.7     | 116787               |
| 100     | 12.0    | 2.7     | 116788               |
| 130     | 12.0    | 2.7     | 116316               |
| 150     | 12.0    | 2.7     | 116789               |
| 170     | 12.0    | 2.7     | 116790               |
| 180     | 12.0    | 2.7     | 116317               |
| 190     | 12.0    | 2.7     | 116791               |
| 210     | 12.0    | 2.7     | 116792               |
| 230     | 12.0    | 2.7     | 116318               |
| 240     | 12.0    | 2.7     | 116793               |
| 1050    | 12.0    | 2.7     | 115846               |

\* EN For use in Enshin-cutterheads only  
 \* DE Nur zur Verwendung in Enshin-Messerköpfen  
 \* FR Utilisation limitée aux porte outils de Enshin  
 \* IT Da usare solo su teste portacoltelli della Enshin  
 \* ES Sólo para empleo con portacuchillas de Enshin

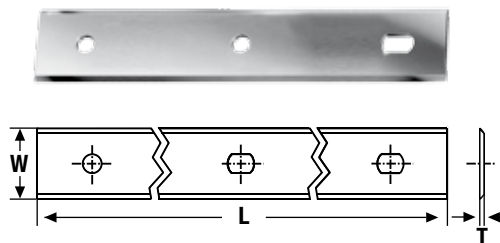
- EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema



For System Bulldozer

| L<br>mm | W<br>mm | T<br>mm | T10MG  |
|---------|---------|---------|--------|
| 60.0    | 13.6    | 1.8     | 047422 |
| 70.0    | 13.6    | 1.8     | 013728 |
| 80.0    | 13.6    | 1.8     | 046288 |
| 100.0   | 13.6    | 1.8     | 013713 |
| 110.0   | 13.6    | 1.8     | 047423 |
| 120.0   | 13.6    | 1.8     | 013715 |
| 130.0   | 13.6    | 1.8     | 013716 |
| 140.0   | 13.6    | 1.8     | 013723 |
| 150.0   | 13.6    | 1.8     | 013718 |
| 160.0   | 13.6    | 1.8     | 013726 |
| 180.0   | 13.6    | 1.8     | 013719 |
| 190.0   | 13.6    | 1.8     | 013725 |
| 200.0   | 13.6    | 1.8     | 013720 |
| 220.0   | 13.6    | 1.8     | 049247 |
| 230.0   | 13.6    | 1.8     | 013721 |
| 240.0   | 13.6    | 1.8     | 040337 |
| 245.0   | 13.6    | 1.8     | 038423 |
| 250.0   | 13.6    | 1.8     | 013722 |
| 260.0   | 13.6    | 1.8     | 035440 |

EN System Planer knives  
 DE Systemhobelmesser  
 FR Couteaux à raboter pour système  
 IT Coltelli da pialla per sistema  
 ES Cuchillas para cepillar para sistema



System Barke/Brück/ESTA

| L<br>mm | W<br>mm | T<br>mm | High<br>Performance<br>Steel | M42    | Suitable for ...             | L<br>mm | W<br>mm | T<br>mm | Backing plate |
|---------|---------|---------|------------------------------|--------|------------------------------|---------|---------|---------|---------------|
| 110.0   | 19.0    | 1.0     | 101798                       | 142053 | Mafell                       | 110.0   | 25.0    | 2.0     | 142369        |
| 115.0   | 18.6    | 1.0     | 142069                       | 142104 |                              |         |         |         |               |
| 120.0   | 19.0    | 1.0     | 051731                       | 142106 |                              | 120.0   | 25.0    | 2.0     | 142370        |
| 130.0   | 19.0    | 1.0     | 049685                       | 142107 |                              | 130.0   | 25.0    | 2.0     | 142371        |
| 150.0   | 19.0    | 1.0     | 131397                       | 142108 |                              | 150.0   | 25.0    | 2.0     | 142372        |
| 161.0   | 19.0    | 1.0     | 142074                       | 142109 | Mafell                       |         |         |         |               |
| 170.0   | 18.6    | 1.0     | 142362                       | 142363 | Mafell                       |         |         |         |               |
| 170.0   | 19.0    | 1.0     | 110648                       | 142110 |                              | 170.0   | 25.0    | 2.0     | 142373        |
| 180.0   | 19.0    | 1.0     | 109998                       | 142111 |                              | 180.0   | 25.0    | 2.0     | 142374        |
| 186.0   | 19.0    | 1.0     | 142070                       | 142112 |                              | 186.0   | 25.0    | 2.0     | 142375        |
| 190.0   | 19.0    | 1.0     | 051730                       | 142113 | HolzHer / ProTool / Festool  | 190.0   | 25.0    | 2.0     | 142376        |
| 200.0   | 19.0    | 1.0     | 130305                       | 142115 |                              | 200.0   | 25.0    | 2.0     | 142377        |
| 205.0   | 19.0    | 1.0     | 142075                       | 142116 |                              |         |         |         |               |
| 230.0   | 19.0    | 1.0     | 050210                       | 142127 | HolzHer / ProTool / Festool  | 230.0   | 25.0    | 2.0     | 142378        |
| 245.0   | 19.0    | 1.0     | 142072                       | 142128 |                              |         |         |         |               |
| 250.0   | 19.0    | 1.0     | 142073                       | 142129 |                              | 250.0   | 25.0    | 2.0     | 142379        |
| 260.0   | 17.2    | 1.0     | 142365                       | -      | Scheppach                    | 260.0   | 16.6    | 2.0     | 142380        |
| 260.0   | 19.0    | 1.0     | 127955                       | 142133 | <u>Not</u> for Felder        | 260.0   | 25.0    | 2.0     | 142381        |
| 264.0   | 24.0    | 1.0     | 142092                       | -      | Emco                         | 264.0   | 20.0    | 2.0     | 142382        |
| 280.0   | 18.6    | 1.0     | 142099                       | 142153 | Mafell                       |         |         |         |               |
| 300.0   | 19.0    | 1.0     | 142100                       | 142154 | HolzHer / ProTool / Makita   |         |         |         |               |
| 310.0   | 19.0    | 1.0     | 130306                       | 142155 | <u>Not</u> for Felder/Hammer | 310.0   | 25.0    | 2.0     | 142383        |
| 320.0   | 17.2    | 1.0     | 142366                       | -      | Scheppach                    | 320.0   | 16.6    | 2.0     | 142384        |
| 320.0   | 18.6    | 1.0     | 142367                       | 142368 | Mafell                       |         |         |         |               |
| 320.0   | 19.0    | 1.0     | 101799                       | 142156 |                              | 320.0   | 25.0    | 2.0     | 142385        |
| 350.0   | 19.0    | 1.0     | 134298                       | 142157 | HolzHer / ProTool            |         |         |         |               |
| 400.0   | 19.0    | 1.0     | 133960                       | 142158 |                              | 400.0   | 25.0    | 2.0     | 142386        |
| 410.0   | 19.0    | 1.0     | 113338                       | 142159 | <u>Not</u> for Felder/Hammer | 410.0   | 25.0    | 2.0     | 142387        |
| 500.0   | 19.0    | 1.0     | 110742                       | 142160 |                              | 500.0   | 25.0    | 2.0     | 142388        |
| 510.0   | 19.0    | 1.0     | 109381                       | 142161 | <u>Not</u> for Felder        | 510.0   | 25.0    | 2.0     | 142389        |
| 520.0   | 19.0    | 1.0     | 142101                       | 142162 |                              | 520.0   | 25.0    | 2.0     | 142390        |
| 530.0   | 19.0    | 1.0     | 133883                       | 142163 |                              | 530.0   | 25.0    | 2.0     | 142391        |
| 610.0   | 19.0    | 1.0     | 142102                       | 142164 |                              | 610.0   | 25.0    | 2.0     | 142392        |
| 630.0   | 19.0    | 1.0     | 108937                       | 142165 |                              | 630.0   | 25.0    | 2.0     | 142393        |
| 640.0   | 19.0    | 1.0     | 132415                       | 142166 |                              | 640.0   | 25.0    | 2.0     | 142394        |

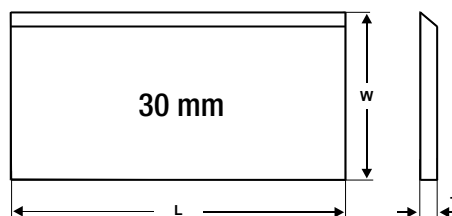
EN The backing plates are also available in W = 18 mm.

DE Stützplatten sind auch in W = 18 mm lieferbar.

FR Les porte-plaquettes sont également disponibles en W = 18 mm.

IT Le piastre di supporto sono anche disponibili in W = 18 mm.

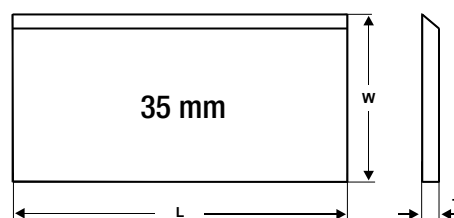
ES Las placas de soporte también están disponibles en W = 18 mm.



EN HSS/Matrix planer knives  
DE HSS/Matrix Hobelmesser  
FR Fers de raboteuse HSS/Matrix  
IT Coltelli da pialla HSS/Matrix  
ES Cuchillas en HSS/Matrix

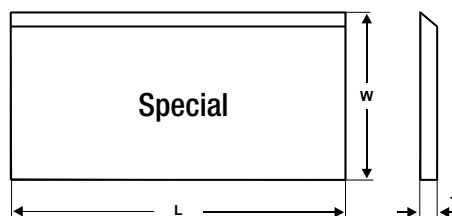
| L    | W    | T   | HSS           | HSS      |  Matrix coating technology |
|------|------|-----|---------------|----------|---------------------------------------------------------------------------------------------------------------|
| mm   | mm   | mm  | Standard (M2) | 18% (T1) |                                                                                                               |
| 60   | 30.0 | 3.0 | 030152        | 111908   | 120140                                                                                                        |
| 80   | 30.0 | 3.0 | 030153        | 111913   | 120141                                                                                                        |
| 100  | 30.0 | 3.0 | 030154        | 111914   | 120142                                                                                                        |
| 110  | 30.0 | 3.0 | 030156        | 111915   | 120143                                                                                                        |
| 120  | 30.0 | 3.0 | 030157        | 111916   | 120144                                                                                                        |
| 130  | 30.0 | 3.0 | 030159        | 111917   | 120145                                                                                                        |
| 150  | 30.0 | 3.0 | 030162        | 111918   | 120146                                                                                                        |
| 160  | 30.0 | 3.0 | 030163        | 111919   | 120147                                                                                                        |
| 170  | 30.0 | 3.0 | 030164        | 111920   | 120148                                                                                                        |
| 180  | 30.0 | 3.0 | 030165        | 111921   | 120149                                                                                                        |
| 210  | 30.0 | 3.0 | 030168        | 111922   | 120150                                                                                                        |
| 230  | 30.0 | 3.0 | 030171        | 111923   | 120151                                                                                                        |
| 240  | 30.0 | 3.0 | 030172        | 111924   | 120153                                                                                                        |
| 260  | 30.0 | 3.0 | 030174        | 111925   | 120154                                                                                                        |
| 300  | 30.0 | 3.0 | 030175        | 111926   | 120155                                                                                                        |
| 310  | 30.0 | 3.0 | 030176        | 111927   | 120156                                                                                                        |
| 350  | 30.0 | 3.0 | 030178        | 111928   | 120157                                                                                                        |
| 400  | 30.0 | 3.0 | 030182        | 111929   | 120158                                                                                                        |
| 410  | 30.0 | 3.0 | 030183        | 111930   | 120159                                                                                                        |
| 500  | 30.0 | 3.0 | 030186        | 111931   | 120160                                                                                                        |
| 510  | 30.0 | 3.0 | 030187        | 111932   | 120161                                                                                                        |
| 520  | 30.0 | 3.0 | 101376        | 111933   | 120162                                                                                                        |
| 530  | 30.0 | 3.0 | 030188        | 111934   | 120163                                                                                                        |
| 600  | 30.0 | 3.0 | 030190        | 111935   | 120164                                                                                                        |
| 610  | 30.0 | 3.0 | 030191        | 111936   | 120165                                                                                                        |
| 630  | 30.0 | 3.0 | 030192        | 111937   | 120166                                                                                                        |
| 640  | 30.0 | 3.0 | 030194        | 111938   | 120167                                                                                                        |
| 710  | 30.0 | 3.0 | 030198        | 111939   | 120168                                                                                                        |
| 810  | 30.0 | 3.0 | 030201        | 111940   | 120169                                                                                                        |
| 820  | 30.0 | 3.0 | 101051        | 111941   | 120170                                                                                                        |
| 1050 | 30.0 | 3.0 | 030249        | 111942   | 120171                                                                                                        |

EN HSS/Matrix planer knives  
 DE HSS/Matrix Hobelmesser  
 FR Fers de raboteuse HSS/Matrix  
 IT Coltelli da pialla HSS/Matrix  
 ES Cuchillas en HSS/Matrix



| L    | W    | T   | HSS           | HSS      |  Matrix coating technology |
|------|------|-----|---------------|----------|---------------------------------------------------------------------------------------------------------------|
| mm   | mm   | mm  | Standard (M2) | 18% (T1) |                                                                                                               |
| 60   | 35.0 | 3.0 | 030205        | 111944   | 120173                                                                                                        |
| 80   | 35.0 | 3.0 | 030206        | 111945   | 120174                                                                                                        |
| 100  | 35.0 | 3.0 | 030207        | 111946   | 120175                                                                                                        |
| 110  | 35.0 | 3.0 | 030208        | 111947   | 120176                                                                                                        |
| 120  | 35.0 | 3.0 | 030209        | 111948   | 120178                                                                                                        |
| 130  | 35.0 | 3.0 | 030210        | 111949   | 120179                                                                                                        |
| 150  | 35.0 | 3.0 | 030211        | 111950   | 120180                                                                                                        |
| 160  | 35.0 | 3.0 | 030212        | 111951   | 120181                                                                                                        |
| 170  | 35.0 | 3.0 | 030213        | 111952   | 120182                                                                                                        |
| 180  | 35.0 | 3.0 | 030214        | 111953   | 120183                                                                                                        |
| 210  | 35.0 | 3.0 | 030217        | 111954   | 120185                                                                                                        |
| 230  | 35.0 | 3.0 | 030218        | 111955   | 120186                                                                                                        |
| 240  | 35.0 | 3.0 | 107570        | 111956   | 120188                                                                                                        |
| 260  | 35.0 | 3.0 | 030220        | 111957   | 120189                                                                                                        |
| 300  | 35.0 | 3.0 | 048006        | 111958   | 120190                                                                                                        |
| 310  | 35.0 | 3.0 | 030222        | 111959   | 120191                                                                                                        |
| 350  | 35.0 | 3.0 | 107571        | 111960   | 120192                                                                                                        |
| 400  | 35.0 | 3.0 | 030225        | 111961   | 120193                                                                                                        |
| 410  | 35.0 | 3.0 | 030226        | 111962   | 120194                                                                                                        |
| 500  | 35.0 | 3.0 | 030230        | 111963   | 120195                                                                                                        |
| 510  | 35.0 | 3.0 | 030231        | 111964   | 120196                                                                                                        |
| 520  | 35.0 | 3.0 | 030232        | 111965   | 120197                                                                                                        |
| 530  | 35.0 | 3.0 | 030233        | 111966   | 120198                                                                                                        |
| 600  | 35.0 | 3.0 | 030234        | 111967   | 120199                                                                                                        |
| 610  | 35.0 | 3.0 | 030235        | 111968   | 120200                                                                                                        |
| 630  | 35.0 | 3.0 | 030236        | 111969   | 120201                                                                                                        |
| 640  | 35.0 | 3.0 | 030237        | 111970   | 120202                                                                                                        |
| 710  | 35.0 | 3.0 | 030240        | 111971   | 120203                                                                                                        |
| 810  | 35.0 | 3.0 | 030243        | 111972   | 120204                                                                                                        |
| 820  | 35.0 | 3.0 | 101052        | 111973   | 120207                                                                                                        |
| 1050 | 35.0 | 3.0 | 030252        | 111974   | 120208                                                                                                        |

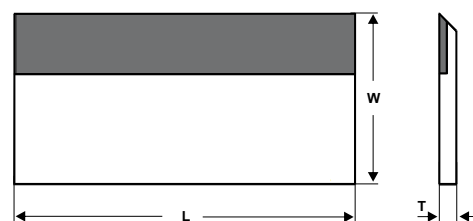
EN HSS/Matrix planer knives  
 DE HSS/Matrix Hobelmesser  
 FR Fers de raboteuse HSS/Matrix  
 IT Coltelli da pialla HSS/Matrix  
 ES Cuchillas en HSS/Matrix



EN Special dimensions  
 DE Spezialmaße  
 FR Dimensions spéciales  
 IT Dimensioni speciali  
 ES Dimensiones especiales

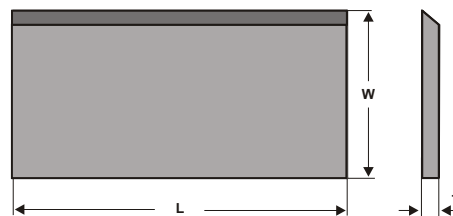
| L    | W    | T   | HSS           | HSS      |  Matrix coating technology |
|------|------|-----|---------------|----------|---------------------------------------------------------------------------------------------------------------|
| mm   | mm   | mm  | Standard (M2) | 18% (T1) |                                                                                                               |
| 1050 | 20.0 | 2.5 | 106992        | 122065   | 122071                                                                                                        |
| 1050 | 25.0 | 2.5 | 106994        | 116185   | 122072                                                                                                        |
| 1050 | 20.0 | 3.0 | 101943        | 122007   | -                                                                                                             |
| 1050 | 25.0 | 3.0 | 101030        | 111975   | 120209                                                                                                        |
| 1050 | 32.0 | 3.0 | 101938        | 111976   | 120210                                                                                                        |

EN T.C.T. planer knives  
 DE HM-bestückte Hobelmesser  
 FR Couteaux à mise rapportée carbure  
 IT Coltelli da pialla con metallo duro riportato  
 ES Cuchillas con metal duro



EN metric  
 DE metrisch  
 FR métrique  
 IT metrico  
 ES métrico

| L      | T   | W = 25 mm | W = 30 mm | W = 35 mm |
|--------|-----|-----------|-----------|-----------|
| mm     | mm  |           |           |           |
| 60.0   | 3.0 | 114850    | 029969    | 030021    |
| 80.0   | 3.0 | 114851    | 029970    | 030022    |
| 100.0  | 3.0 | 113770    | 029972    | 030024    |
| 110.0  | 3.0 | 114852    | 029973    | 030025    |
| 120.0  | 3.0 | 111723    | 029974    | 030026    |
| 130.0  | 3.0 | 103946    | 029975    | 030027    |
| 150.0  | 3.0 | 105829    | 029979    | 030029    |
| 160.0  | 3.0 | 029943    | 029980    | 030030    |
| 170.0  | 3.0 | 114853    | 029981    | 030031    |
| 180.0  | 3.0 | 105830    | 029982    | 030032    |
| 200.0  | 3.0 | 110737    | 029986    | 030034    |
| 210.0  | 3.0 | 108651    | 029987    | 030035    |
| 230.0  | 3.0 | 112774    | 029989    | 030036    |
| 240.0  | 3.0 | 114854    | 029991    | 030038    |
| 250.0  | 3.0 | 029952    | 029993    | 030039    |
| 260.0  | 3.0 | 104917    | 029994    | 030040    |
| 270.0  | 3.0 | 107022    | 101697    | 107555    |
| 300.0  | 3.0 | 112585    | 029996    | 030041    |
| 310.0  | 3.0 | 029955    | 029997    | 030042    |
| 330.0  | 3.0 | 114855    | 002238    | 055837    |
| 350.0  | 3.0 | 114856    | 029998    | 030044    |
| 400.0  | 3.0 | 029957    | 029999    | 107556    |
| 410.0  | 3.0 | 104919    | 030001    | 030047    |
| 500.0  | 3.0 | 029960    | 030006    | 030049    |
| 510.0  | 3.0 | 104920    | 030007    | 030050    |
| 520.0  | 3.0 | 109690    | 030009    | 103998    |
| 530.0  | 3.0 | 114857    | 051130    | 030051    |
| 600.0  | 3.0 | 112963    | 030011    | 030052    |
| 610.0  | 3.0 | 114858    | 030012    | 030054    |
| 630.0  | 3.0 | 114859    | 030013    | 030055    |
| 640.0  | 3.0 | 114860    | 030014    | 030057    |
| 680.0  | 3.0 | 114861    | 114849    | 106194    |
| 710.0  | 3.0 | 114862    | 030016    | 030058    |
| 810.0  | 3.0 | 029967    | 030018    | 030059    |
| 820.0  | 3.0 | 107126    | 100445    | 100446    |
| 1010.0 | 3.0 | 030128    | 030131    | 030137    |
| 1050.0 | 3.0 | 104830    | 030132    | 030138    |



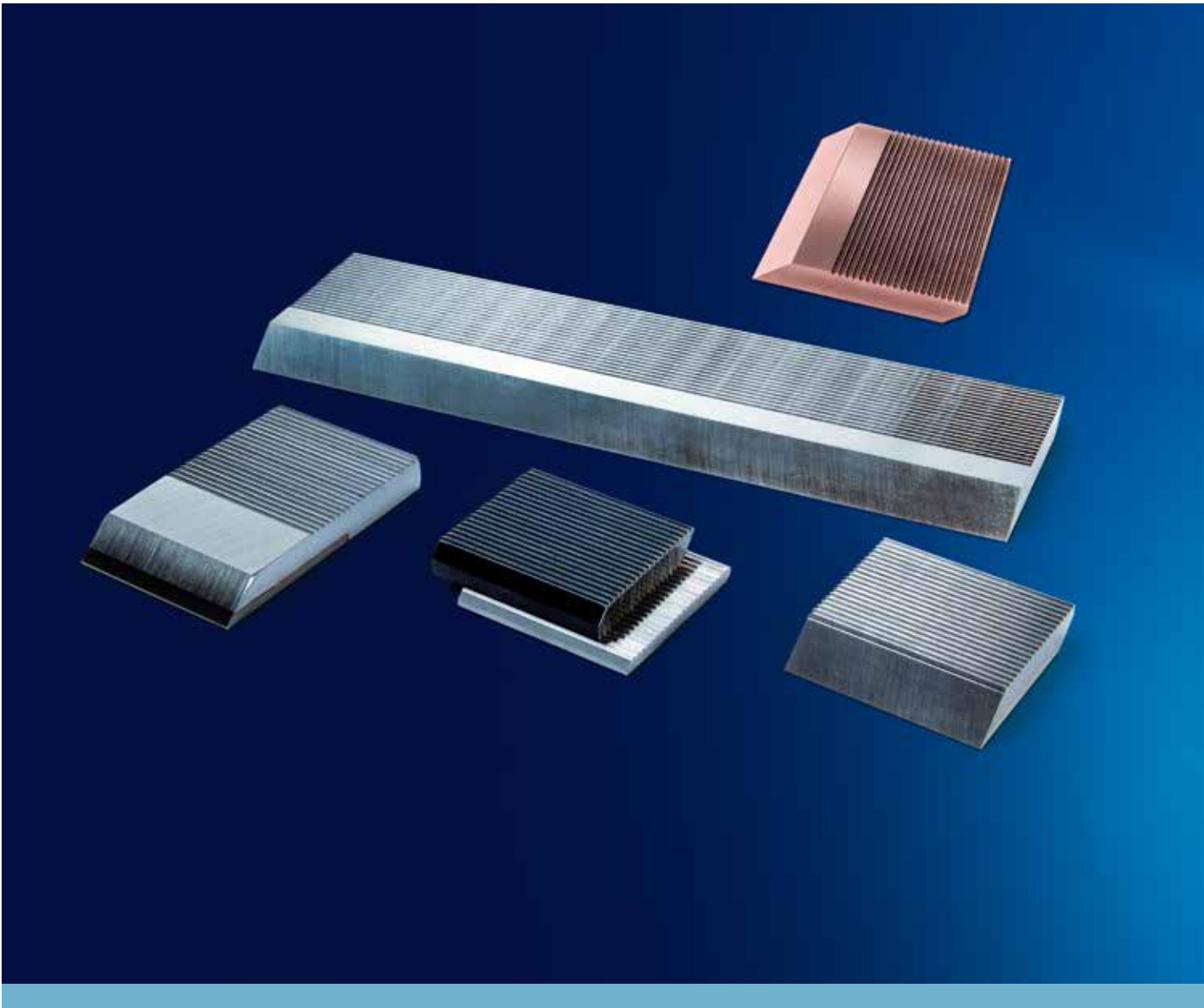
EN Solid carbide planer knives  
 DE Vollhartmetall Hobelmesser  
 FR Couteaux à raboter au carbure massif  
 IT Coltelli da pialla in HM integrale  
 ES Cuchillas metal duro integral

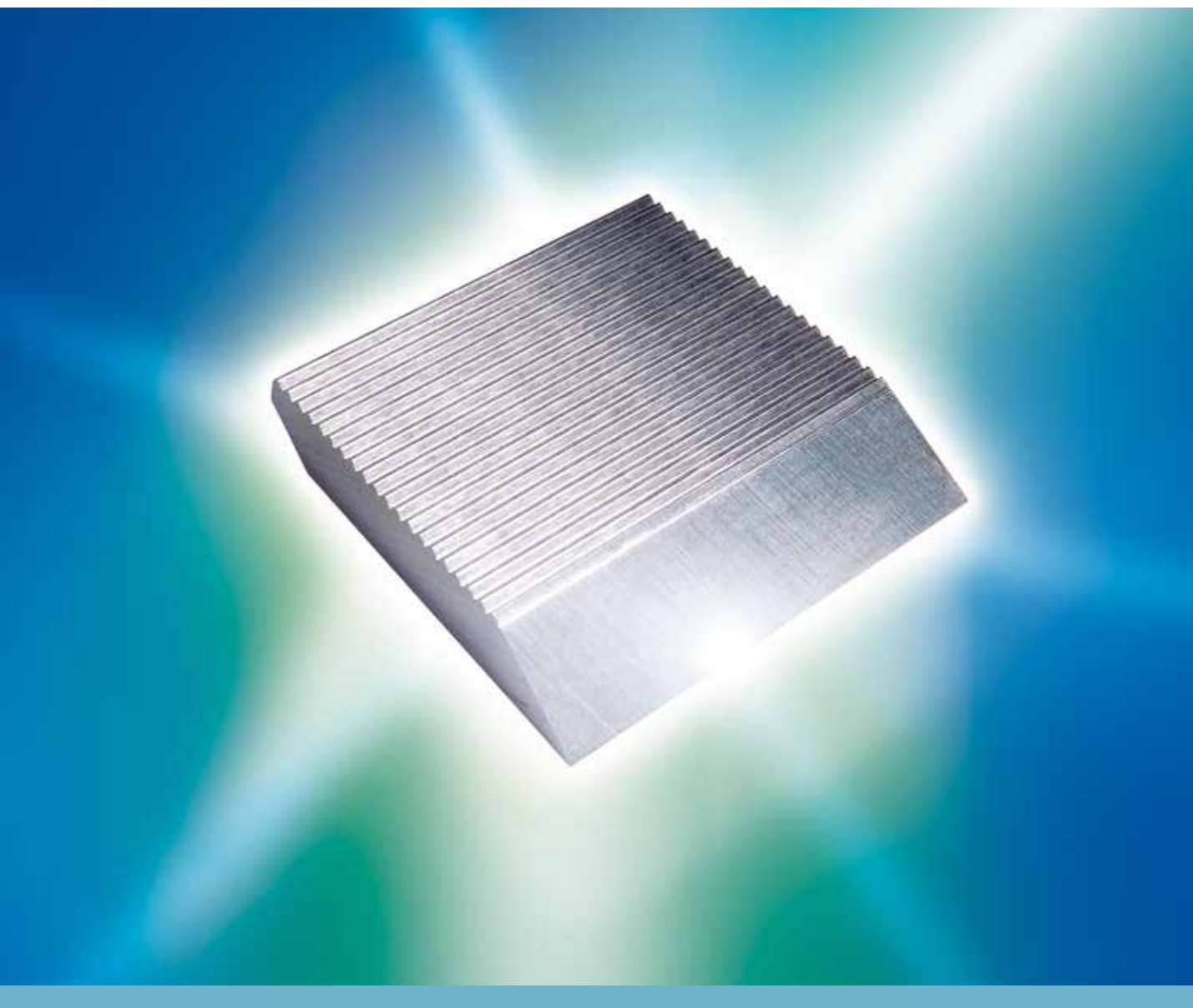
| L<br>mm | W<br>mm | T<br>mm | T10MG  |
|---------|---------|---------|--------|
| 60.0    | 30.0    | 3.0     | 050050 |
| 80.0    | 30.0    | 3.0     | 050051 |
| 100.0   | 30.0    | 3.0     | 042029 |
| 110.0   | 30.0    | 3.0     | 050053 |
| 120.0   | 30.0    | 3.0     | 050055 |
| 130.0   | 30.0    | 3.0     | 044900 |
| 150.0   | 30.0    | 3.0     | 042030 |
| 160.0   | 30.0    | 3.0     | 105941 |
| 180.0   | 30.0    | 3.0     | 050057 |
| 190.0   | 30.0    | 3.0     | 112087 |
| 210.0   | 30.0    | 3.0     | 050059 |
| 230.0   | 30.0    | 3.0     | 049223 |
| 240.0   | 30.0    | 3.0     | 106296 |
| 250.0   | 30.0    | 3.0     | 109344 |
| 260.0   | 30.0    | 3.0     | 049222 |
| 310.0   | 30.0    | 3.0     | 050061 |
| 60.0    | 35.0    | 3.0     | 047867 |
| 80.0    | 35.0    | 3.0     | 047868 |
| 100.0   | 35.0    | 3.0     | 047869 |
| 110.0   | 35.0    | 3.0     | 050065 |
| 120.0   | 35.0    | 3.0     | 050067 |
| 130.0   | 35.0    | 3.0     | 047870 |
| 150.0   | 35.0    | 3.0     | 050070 |
| 160.0   | 35.0    | 3.0     | 105954 |
| 180.0   | 35.0    | 3.0     | 050072 |
| 190.0   | 35.0    | 3.0     | 114848 |
| 210.0   | 35.0    | 3.0     | 050074 |
| 230.0   | 35.0    | 3.0     | 049669 |
| 240.0   | 35.0    | 3.0     | 114846 |
| 250.0   | 35.0    | 3.0     | 114847 |
| 260.0   | 35.0    | 3.0     | 050077 |
| 310.0   | 35.0    | 3.0     | 050079 |

EN Only for use in special clamping systems for carbide knives, not in conventional planing heads!  
 DE Nur in Spezialklemmsystemen für Vollhartmetallhobelmesser einsetzen, nicht in herkömmlichen Hobelköpfen!  
 FR Seulement pour utilisation dans des systèmes de serrage spéciaux pour les couteaux en carbure, pas dans les têtes de rabotage conventionnelles!  
 IT Solo per l'impiego in sistemi di serraggio speciali per coltelli in metallo duro, non nella testa di piallatura convenzionale!  
 ES Sólo para uso en sistemas especiales de sujeción para cuchillas de carburo, no en cabezales de cepillado convencionales.



TOOLS CUT BETTER WITH TIGRA





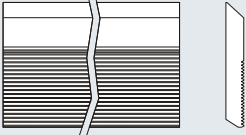
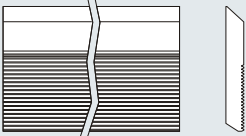
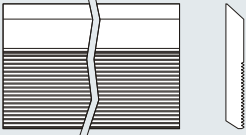
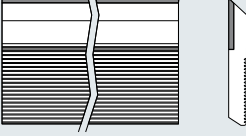
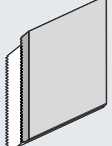
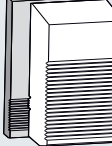
- EN Knives for back corrugated cutterheads
- DE Messer für rückenverzahnte Messerköpfe
- FR Couteaux pour outils crantés
- IT Coltelli per teste con zigrinatura
- ES Cuchillas corrugadas



TOOLS CUT BETTER WITH TIGRA

---

- EN Knives for back corrugated cutterheads  
 DE Messer für rückenverzahnte Messerköpfe  
 FR Couteaux pour outils crantés  
 IT Coltelli per teste con zigrinatura  
 ES Cuchillas corrugadas

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|    | <p>EN HSS / High Performance Steel / Matrix blanks, back corrugated <i>8 mm</i><br/>         DE HSS / High Performance Steel / Matrix Blanketts, rückenverzahnt <i>8 mm</i><br/>         FR HSS / High Performance Steel / Matrix fers crantés <i>8 mm</i><br/>         IT HSS / High Performance Steel / Matrix placchette, con zigrinatura <i>8 mm</i><br/>         ES HSS / High Performance Steel / Matrix cuchillas corrugadas <i>8 mm</i></p>              | 140 - 141 |
|    | <p>EN HSS blanks, back corrugated <i>4-6 mm</i><br/>         DE HSS Blanketts, rückenverzahnt <i>4-6 mm</i><br/>         FR HSS fers crantés <i>4-6 mm</i><br/>         IT HSS placchette, con zigrinatura <i>4-6 mm</i><br/>         ES HSS cuchillas corrugadas <i>4-6 mm</i></p>                                                                                                                                                                              | 142       |
|    | <p>EN HSS / High Performance Steel / Matrix blanks, back corrugated<br/>         DE HSS / High Performance Steel / Matrix Blanketts, rückenverzahnt<br/>         FR HSS / High Performance Steel / Matrix fers crantés <i>inch</i><br/>         IT HSS / High Performance Steel / Matrix placchette, con zigrinatura<br/>         ES HSS / High Performance Steel / Matrix cuchillas corrugadas</p>                                                              | 142       |
|   | <p>EN T.C.T. blanks, back corrugated<br/>         DE HM-bestückte Blanketts, rückenverzahnt<br/>         FR Fers crantés au carbure rapportée<br/>         IT Placchette con metallo duro riportato, con zigrinatura<br/>         ES Cuchillas metal duro, corrugadas</p>                                                                                                                                                                                        | 143 - 144 |
|  | <p>EN SuperPac - T.C. knives and backing plates for back corrugated cutterheads<br/>         DE SuperPac - HM-Messer und Stützplatten für rückenverzahnte Messerköpfe<br/>         FR SuperPac - Couteaux au carbure et supports pour outils crantés<br/>         IT SuperPac - Coltelli HW e supporti per teste con zigrinatura<br/>         ES SuperPac - Placas de metal duro y placas de apoyo para fresas dentadas</p>                                      | 145 - 146 |
|  | <p>EN For MicroSystem - T.C. knives and backing plates for back corrugated cutterheads<br/>         DE Für MicroSystem - HM-Messer und Stützplatten für rückenverzahnte Messerköpfe<br/>         FR Pour MicroSystem - Couteaux au carbure et supports pour outils crantés<br/>         IT Per MicroSystem - Coltelli HW e supporti per teste con zigrinatura<br/>         ES Para MicroSystem - Placas de metal duro y placas de apoyo para fresas dentadas</p> | 147       |

- EN Knives for back corrugated cutterheads - Grades and their applications  
 DE Messer für rückenverzahnte Messerköpfe - Sorten und ihre Anwendungen  
 FR Couteaux pour outils crantés - Les nuances et leurs applications  
 IT Coltelli per teste con zigrinatura - I tipi e le loro applicazioni  
 ES Cuchillas corrugadas - Calidades y sus aplicaciones

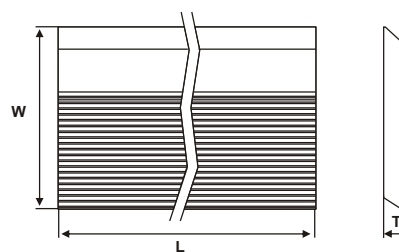
| EN<br>DE<br>FR<br>IT<br>ES | TIGRA grade<br>TIGRA - Sorte<br>Nuance TIGRA<br>Tipo TIGRA<br>Calidad TIGRA | Compositon<br>Zusammensetzung<br>Composition<br>Composizione<br>Composición | Hardness<br>Härte<br>Dureté<br>Durezza<br>Dureza                                    | Toughness<br>Zähigkeit<br>Ténacité<br>Tenacità<br>Tenacidad                           | Bending strength<br>Biegebruchfestigkeit<br>Résistance à la flexion<br>Resistenza flessionale<br>Resistencia a la flexión |
|----------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                            | <b>HSS</b>                                                                  | <b>HSS 6% (M2)</b>                                                          |    |    |                                        |
|                            | <b>High Performance Steel</b>                                               | <b>CrV</b>                                                                  |    |    |                                        |
|                            | <b>T.C.T.</b>                                                               | <b>carbide tipped</b>                                                       |   |   |                                       |
|                            | <b>Tungsten carbide</b>                                                     | <b>various grades</b>                                                       |  |  |                                      |
|                            | <b>Matrix</b>                                                               | <b>HSS with special coating</b>                                             |  |  |                                      |

EN For technical data, please refer to the pages 8-9.  
 DE Die technischen Daten entnehmen Sie bitte den Seiten 8-9.  
 FR Pour les données techniques, veuillez voir aux pages 8-9.

| EN | Plastics                                                                            | HDF                                                                                 | MDF                                                                                 | Chipboard                                                                           | Hardwood                                                                            | Softwood                                                                            | Main usage                                                                                                                                                                                                                                                                               |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DE | Plastik                                                                             | HDF                                                                                 | MDF                                                                                 | Spanplatte                                                                          | Hartholz                                                                            | Weichholz                                                                           | Hauptverwendung                                                                                                                                                                                                                                                                          |
| FR | Plastiques                                                                          | HDF                                                                                 | MDF                                                                                 | Panneaux de particule                                                               | Bois dur                                                                            | Bois tendre                                                                         | Usage principal                                                                                                                                                                                                                                                                          |
| IT | Plastica                                                                            | HDF                                                                                 | MDF                                                                                 | Truciolare                                                                          | Legno duro                                                                          | Legno tenero                                                                        | Uso principale                                                                                                                                                                                                                                                                           |
| ES | Plásticos                                                                           | HDF                                                                                 | MDF                                                                                 | Panel de aglomerado                                                                 | Madera dura                                                                         | Madera blanda                                                                       | Uso principal                                                                                                                                                                                                                                                                            |
|    |    |    |    |    |    |    | EN Universal, small and medium batches<br>DE Universell, Klein- und Mittelserien<br>FR Universel, séries petites et moyennes<br>IT Universale, lotti piccoli e medi<br>ES Universal, pequeños y medianos lotes                                                                           |
|    |    |    |    |    |    |    | EN Softwood, low price demands<br>DE Weichholz, preisgünstig<br>FR Bois tendre, prix bas<br>IT Legni teneri, costo basso<br>ES Madera blanda, bajo costo                                                                                                                                 |
|    |   |   |   |   |   |   | EN Higher lifetime demands, wood, MDF<br>DE Hohe Standzeitanforderungen, Holz, MDF<br>FR Applications de durabilité, bois, MDF<br>IT Elevata esigenza di durata, legno, MDF<br>ES Demandas altas vida de la herramienta, madera, MDF                                                     |
|    |  |  |  |  |  |  | EN Highest lifetime demands, multiple resharpening<br>DE Höchste Standzeitanforderungen, mehrfaches Nachschärfen<br>FR Applications de durabilité maximisée et nombreux affûtages<br>IT Massima esigenza di durata, affilatura multipla<br>ES Demandas más exigentes, múltiple reafilado |
|    |  |  |  |  |  |  | EN Long lifetime in wood, good resharpening<br>DE Lange Standwege in Holz, gut zum Nachschärfen<br>FR Longue durée de vie en bois, affûtage facile<br>IT Durata lunga in legno, buona affilatura<br>ES Larga vida útil de la madera, afilado fácil                                       |

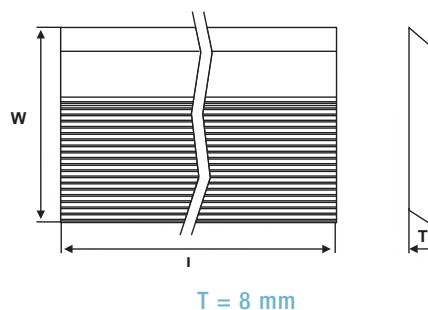
-  best performance
-  very good performance
-  acceptable
-  not suitable

EN Back corrugated blanks  
 DE Rückenverzahnte Blanketts  
 FR Fers crantés  
 IT Placchette con zigrinatura  
 ES Cuchillas corrugadas



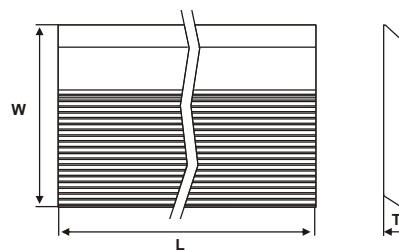
T = 8 mm

| L     | W  | T   | HSS    | High Performance Steel | Matrix coating technology |
|-------|----|-----|--------|------------------------|---------------------------|
| mm    | mm | mm  |        |                        |                           |
| 40.0  | 40 | 8.0 | 030289 | 103456                 | 120287                    |
| 50.0  | 40 | 8.0 | 030290 | 103457                 | 120269                    |
| 60.0  | 40 | 8.0 | 030291 | 103458                 | 120270                    |
| 70.0  | 40 | 8.0 | 030292 | 103459                 | 120271                    |
| 80.0  | 40 | 8.0 | 030293 | 103460                 | 120272                    |
| 90.0  | 40 | 8.0 | 030294 | 103461                 | 120273                    |
| 100.0 | 40 | 8.0 | 030295 | 103462                 | 120274                    |
| 110.0 | 40 | 8.0 | 047397 | 103463                 | 120275                    |
| 120.0 | 40 | 8.0 | 030296 | 103464                 | 120276                    |
| 130.0 | 40 | 8.0 | 030297 | 103465                 | 120277                    |
| 150.0 | 40 | 8.0 | 030298 | 103466                 | 120278                    |
| 170.0 | 40 | 8.0 | 030299 | 103467                 | 120279                    |
| 180.0 | 40 | 8.0 | 030300 | 103468                 | 120280                    |
| 200.0 | 40 | 8.0 | 030301 | 103469                 | 120281                    |
| 210.0 | 40 | 8.0 | 030302 | 103470                 | 120282                    |
| 230.0 | 40 | 8.0 | 030303 | 103471                 | 120283                    |
| 260.0 | 40 | 8.0 | 030304 | 103472                 | 120284                    |
| 650.0 | 40 | 8.0 | 030306 | 103473                 | 120285                    |
| 40.0  | 50 | 8.0 | 030307 | 103474                 | 120288                    |
| 50.0  | 50 | 8.0 | 030308 | 103475                 | 120289                    |
| 60.0  | 50 | 8.0 | 030309 | 103476                 | 120290                    |
| 70.0  | 50 | 8.0 | 030310 | 103477                 | 120291                    |
| 80.0  | 50 | 8.0 | 030311 | 103478                 | 120292                    |
| 90.0  | 50 | 8.0 | 030312 | 103479                 | 120293                    |
| 100.0 | 50 | 8.0 | 030313 | 103480                 | 120294                    |
| 110.0 | 50 | 8.0 | 047398 | 103481                 | 120295                    |
| 120.0 | 50 | 8.0 | 030314 | 103482                 | 120296                    |
| 130.0 | 50 | 8.0 | 030315 | 103483                 | 120297                    |
| 150.0 | 50 | 8.0 | 030316 | 103484                 | 120298                    |
| 170.0 | 50 | 8.0 | 030317 | 103485                 | 120299                    |
| 180.0 | 50 | 8.0 | 030318 | 103486                 | 120300                    |
| 200.0 | 50 | 8.0 | 030319 | 103488                 | 120301                    |
| 210.0 | 50 | 8.0 | 030320 | 103489                 | 120302                    |
| 230.0 | 50 | 8.0 | 030321 | 103490                 | 120303                    |
| 260.0 | 50 | 8.0 | 030322 | 103491                 | 120304                    |
| 650.0 | 50 | 8.0 | 030324 | 103492                 | 120305                    |



- EN Back corrugated blanks  
 DE Rückenverzahnte Blanketts  
 FR Fers crantés  
 IT Placchette con zigrinatura  
 ES Cuchillas corrugadas

| L     | W  | T   | HSS    | High Performance Steel | Matrix coating technology |
|-------|----|-----|--------|------------------------|---------------------------|
| mm    | mm | mm  |        |                        |                           |
| 40.0  | 60 | 8.0 | 030326 | 103493                 | 120310                    |
| 50.0  | 60 | 8.0 | 030327 | 103494                 | 120311                    |
| 60.0  | 60 | 8.0 | 030328 | 103495                 | 120312                    |
| 70.0  | 60 | 8.0 | 030329 | 103496                 | 120313                    |
| 80.0  | 60 | 8.0 | 030330 | 103497                 | 120314                    |
| 90.0  | 60 | 8.0 | 030331 | 103498                 | 120315                    |
| 100.0 | 60 | 8.0 | 030332 | 103499                 | 120316                    |
| 110.0 | 60 | 8.0 | 047399 | 103500                 | 120317                    |
| 120.0 | 60 | 8.0 | 030333 | 103501                 | 120318                    |
| 130.0 | 60 | 8.0 | 030334 | 103502                 | 120319                    |
| 150.0 | 60 | 8.0 | 030335 | 103503                 | 120320                    |
| 170.0 | 60 | 8.0 | 030336 | 103504                 | 120321                    |
| 180.0 | 60 | 8.0 | 030337 | 103505                 | 120322                    |
| 200.0 | 60 | 8.0 | 030338 | 103506                 | 120323                    |
| 210.0 | 60 | 8.0 | 030339 | 103507                 | 120324                    |
| 230.0 | 60 | 8.0 | 030340 | 103508                 | 120325                    |
| 260.0 | 60 | 8.0 | 030341 | 103509                 | 120326                    |
| 650.0 | 60 | 8.0 | 030344 | 103510                 | 120327                    |
| 40.0  | 70 | 8.0 | 030345 | 103511                 | 120328                    |
| 50.0  | 70 | 8.0 | 030346 | 103512                 | 120329                    |
| 60.0  | 70 | 8.0 | 030347 | 103513                 | 120330                    |
| 70.0  | 70 | 8.0 | 030348 | 103514                 | 120331                    |
| 80.0  | 70 | 8.0 | 030349 | 103515                 | 120332                    |
| 90.0  | 70 | 8.0 | 030350 | 103516                 | 120333                    |
| 100.0 | 70 | 8.0 | 030351 | 103517                 | 120334                    |
| 110.0 | 70 | 8.0 | 047400 | 103518                 | 120335                    |
| 120.0 | 70 | 8.0 | 030352 | 103519                 | 120336                    |
| 130.0 | 70 | 8.0 | 030353 | 103521                 | 120337                    |
| 150.0 | 70 | 8.0 | 030354 | 103522                 | 120338                    |
| 170.0 | 70 | 8.0 | 030355 | 103523                 | 120339                    |
| 180.0 | 70 | 8.0 | 030356 | 103524                 | 120340                    |
| 200.0 | 70 | 8.0 | 030357 | 103525                 | 120341                    |
| 210.0 | 70 | 8.0 | 030358 | 103526                 | 120342                    |
| 230.0 | 70 | 8.0 | 030359 | 103527                 | 120343                    |
| 260.0 | 70 | 8.0 | 030360 | 103528                 | 120344                    |
| 650.0 | 70 | 8.0 | 030362 | 103529                 | 120345                    |



T = 4-6 mm

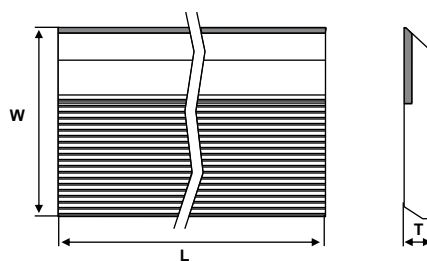
EN Back corrugated blanks  
DE Rückenverzahnte Blanketts  
FR Fers crantés  
IT Placchette con zigrinatura  
ES Cuchillas corrugadas

| L<br>mm | W<br>mm | T<br>mm | HSS    |
|---------|---------|---------|--------|
| 650.0   | 30      | 4.0     | 104735 |
| 650.0   | 27      | 5.0     | 108483 |
| 650.0   | 38      | 5.0     | 108522 |
| 650.0   | 45      | 5.0     | 108562 |
| 650.0   | 50      | 5.0     | 108604 |
| 650.0   | 30      | 6.0     | 122082 |
| 650.0   | 40      | 6.0     | 051029 |
| 650.0   | 45      | 6.0     | 122083 |
| 650.0   | 50      | 6.0     | 043807 |
| 650.0   | 60      | 6.0     | 043808 |

inch

|           |           |           | HSS (High Speed Steel) |                | Matrix coating technology |
|-----------|-----------|-----------|------------------------|----------------|---------------------------|
| L<br>inch | W<br>inch | T<br>inch | with<br>chamfer        | flat<br>bottom | flat<br>bottom            |
| 25        | 1 1/4     | 5/16      | 046364                 | 101054         | 120583                    |
| 25        | 1 1/2     | 5/16      | 046365                 | 101055         | 120584                    |
| 25        | 1 3/4     | 5/16      | 046366                 | 101056         | 120585                    |
| 25        | 2         | 5/16      | 046367                 | 101057         | 120586                    |
| 25        | 2 1/4     | 5/16      | 046368                 | 101058         | 120587                    |
| 25        | 2 1/2     | 5/16      | 046369                 | 101059         | 120588                    |
| 25        | 2 3/4     | 5/16      | 046370                 | 101060         | 120589                    |
| 25        | 3         | 5/16      | 046371                 | 101061         | 120590                    |
| 25        | 1 1/4     | 1/4       | 046372                 | 101062         | 120591                    |
| 25        | 1 1/2     | 1/4       | 046373                 | 101063         | 120592                    |
| 25        | 1 3/4     | 1/4       | 046374                 | 101064         | 120593                    |
| 25        | 2         | 1/4       | 046375                 | 101065         | 120594                    |
| 25        | 2 1/4     | 1/4       | 046376                 | 101066         | 120595                    |
| 25        | 2 1/2     | 1/4       | 046377                 | 101067         | 120596                    |
| 25        | 1 3/4     | 3/16      | 046378                 | 101068         | 120597                    |
| 25        | 2         | 3/16      | 046379                 | 101069         | 120598                    |

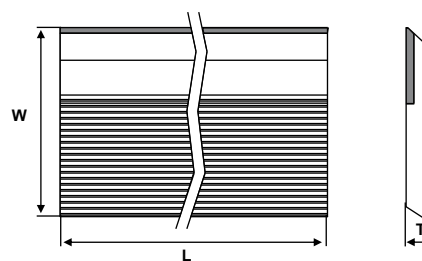
EN Back corrugated blanks  
 DE Rückenverzahnte Blanketts  
 FR Fers crantés  
 IT Placchette con zigrinatura  
 ES Cuchillas corrugadas



T.C.T.

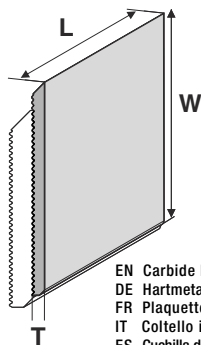
| L<br>mm | W<br>mm | T<br>mm | Inlay 14<br>mm | Inlay 20<br>mm | Inlay 25<br>mm |
|---------|---------|---------|----------------|----------------|----------------|
| 40.0    | 40.0    | 10.0    | 103230         | 103249         |                |
| 60.0    | 40.0    | 10.0    | 103231         | 103250         |                |
| 80.0    | 40.0    | 10.0    | 103232         | 103251         |                |
| 100.0   | 40.0    | 10.0    | 103233         | 103252         |                |
| 130.0   | 40.0    | 10.0    | 103234         | 103253         |                |
| 150.0   | 40.0    | 10.0    | 103235         | 103254         |                |
| 180.0   | 40.0    | 10.0    | 103236         | 103255         |                |
| 200.0   | 40.0    | 10.0    | 103237         | 103256         |                |
| 230.0   | 40.0    | 10.0    | 103238         | 103257         |                |
| 260.0   | 40.0    | 10.0    | 103239         | 103258         |                |
| 310.0   | 40.0    | 10.0    | 103240         | 103259         |                |
| 650.0   | 40.0    | 10.0    | 133292         | 101746         |                |
| 40.0    | 50.0    | 10.0    | 103242         | 030254         |                |
| 60.0    | 50.0    | 10.0    | 030255         | 103261         |                |
| 80.0    | 50.0    | 10.0    | 030256         | 103262         |                |
| 100.0   | 50.0    | 10.0    | 030257         | 103263         |                |
| 130.0   | 50.0    | 10.0    | 030258         | 103264         |                |
| 150.0   | 50.0    | 10.0    | 103243         | 103265         |                |
| 180.0   | 50.0    | 10.0    | 030260         | 103266         |                |
| 200.0   | 50.0    | 10.0    | 103244         | 103267         |                |
| 230.0   | 50.0    | 10.0    | 103245         | 103268         |                |
| 260.0   | 50.0    | 10.0    | 030262         | 103269         |                |
| 310.0   | 50.0    | 10.0    | 103246         | 103270         |                |
| 560.0   | 50.0    | 10.0    | 103247         | 103271         |                |
| 650.0   | 50.0    | 10.0    | 133291         | 030264         | 105661         |

EN Back corrugated blanks  
 DE Rückenverzahnte Blanketts  
 FR Fers crantés  
 IT Placchette con zigrinatura  
 ES Cuchillas corrugadas



T.C.T.

| L<br>mm | W<br>mm | T<br>mm | Inlay 20<br>mm | Inlay 25<br>mm | Inlay 30<br>mm | Inlay 35<br>mm |
|---------|---------|---------|----------------|----------------|----------------|----------------|
| 40.0    | 60.0    | 10.0    | 030267         | 103300         | 114867         | 114868         |
| 60.0    | 60.0    | 10.0    | 030268         | 103301         | 103797         | 109128         |
| 80.0    | 60.0    | 10.0    | 103273         | 030269         | 109133         | 109129         |
| 100.0   | 60.0    | 10.0    | 103274         | 030270         | 109134         | 109130         |
| 120.0   | 60.0    | 10.0    | 112340         | 109479         | 114865         | 114866         |
| 130.0   | 60.0    | 10.0    | 103275         | 030271         | 109135         | 109131         |
| 150.0   | 60.0    | 10.0    | 030272         | 103302         | 114869         | 114870         |
| 180.0   | 60.0    | 10.0    | 030273         | 103303         | 109136         | 109132         |
| 200.0   | 60.0    | 10.0    | 103296         | 103304         | 114871         | 114872         |
| 230.0   | 60.0    | 10.0    | 103297         | 103305         | 109137         | 109138         |
| 260.0   | 60.0    | 10.0    | 030275         | 103306         | 114873         | 105299         |
| 310.0   | 60.0    | 10.0    | 103298         | 103307         | 114874         | 114875         |
| 560.0   | 60.0    | 10.0    | 103299         | 103308         | 114876         | 114877         |
| 650.0   | 60.0    | 10.0    | 133293         | 102053         | 133925         | 133296         |
| 60.0    | 70.0    | 10.0    |                |                | 109735         |                |
| 80.0    | 70.0    | 10.0    |                |                | 030280         |                |
| 100.0   | 70.0    | 10.0    |                |                | 030281         |                |
| 650.0   | 70.0    | 10.0    |                |                | 133297         | 133298         |

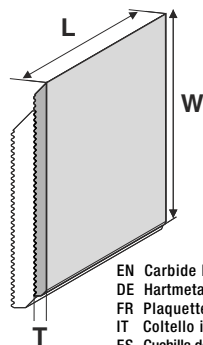


EN Carbide blank with corrugated backing plate  
DE Hartmetall-Blankett mit rückenverzahnter Stützplatte  
FR Plaquette carbure avec porte-plaquette denté  
IT Coltello in HM zigrinato con piastra di supporto zigrinata  
ES Cuchilla de metal duro con placa de soporte dentada por el lomo

EN TIGRA SuperPac  
DE TIGRA SuperPac  
FR TIGRA SuperPac  
IT TIGRA SuperPac  
ES TIGRA SuperPac

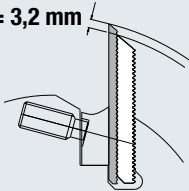
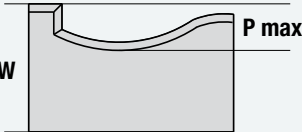
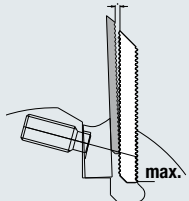
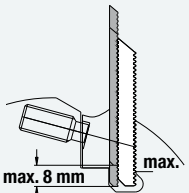
| L<br>mm | W<br>mm | T<br>mm | T10MG  | T04F-CR | T03SMG | L<br>mm | W<br>mm | T<br>mm | Backing plate<br>Stützplatte |
|---------|---------|---------|--------|---------|--------|---------|---------|---------|------------------------------|
| 40      | 38      | 3.2     | 043933 | 024082  | 024080 | 40      | 35      | 7.1     | 024090                       |
| 50      | 38      | 3.2     | 043934 | 043924  | 043925 | 50      | 35      | 7.1     | 043957                       |
| 60      | 38      | 3.2     | 043935 | 024115  | 024113 | 60      | 35      | 7.1     | 024123                       |
| 80      | 38      | 3.2     | 043936 | 024148  | 024146 | 80      | 35      | 7.1     | 024156                       |
| 100     | 38      | 3.2     | 043937 | 023949  | 023947 | 100     | 35      | 7.1     | 023957                       |
| 120     | 38      | 3.2     | 043938 | 023982  | 023980 | 120     | 35      | 7.1     | 023990                       |
| 130     | 38      | 3.2     | 043939 | 024016  | 024014 | 130     | 35      | 7.1     | 024024                       |
| 150     | 38      | 3.2     | 043940 | 024049  | 024047 | 150     | 35      | 7.1     | 024057                       |
| 170     | 38      | 3.2     | 043962 | 043961  | 043960 | 170     | 35      | 7.1     | 045837                       |
| 180     | 38      | 3.2     | 113497 |         |        | 180     | 35      | 7.1     | 113484                       |
| 200     | 38      | 3.2     | 113498 | 131214  |        | 200     | 35      | 7.1     | 113485                       |
| 210     | 38      | 3.2     | 113499 | 131216  |        | 210     | 35      | 7.1     | 113486                       |
| 230     | 38      | 3.2     | 113500 | 131217  |        | 230     | 35      | 7.1     | 113487                       |
| 310     | 38      | 3.2     | 113501 | 131219  |        | 310     | 35      | 7.1     | 112229                       |
| 330     | 38      | 3.2     | 113502 | 131220  |        | 330     | 35      | 7.1     | 113481                       |
| 40      | 50      | 3.2     | 043941 | 024093  | 024091 | 40      | 47      | 7.1     | 024101                       |
| 50      | 50      | 3.2     | 043942 | 043927  | 043928 | 50      | 47      | 7.1     | 043958                       |
| 60      | 50      | 3.2     | 043943 | 024126  | 024124 | 60      | 47      | 7.1     | 024134                       |
| 80      | 50      | 3.2     | 043944 | 024159  | 024157 | 80      | 47      | 7.1     | 024167                       |
| 100     | 50      | 3.2     | 043945 | 023960  | 023985 | 100     | 47      | 7.1     | 023968                       |
| 120     | 50      | 3.2     | 043946 | 023993  | 023991 | 120     | 47      | 7.1     | 024001                       |
| 130     | 50      | 3.2     | 043947 | 024027  | 024025 | 130     | 47      | 7.1     | 024035                       |
| 150     | 50      | 3.2     | 043948 | 024060  | 024058 | 150     | 47      | 7.1     | 024068                       |
| 170     | 50      | 3.2     | 043966 | 043965  | 043964 | 170     | 47      | 7.1     | 045838                       |
| 180     | 50      | 3.2     | 113503 |         |        | 180     | 47      | 7.1     | 113488                       |
| 200     | 50      | 3.2     | 113504 | 131221  |        | 200     | 47      | 7.1     | 113489                       |
| 210     | 50      | 3.2     | 113505 | 131222  |        | 210     | 47      | 7.1     | 113490                       |
| 230     | 50      | 3.2     | 113506 | 131223  |        | 230     | 47      | 7.1     | 113491                       |
| 310     | 50      | 3.2     | 113507 | 131224  |        | 310     | 47      | 7.1     | 112230                       |
| 330     | 50      | 3.2     | 113508 | 129927  |        | 330     | 47      | 7.1     | 113482                       |

EN TIGRA SuperPac  
DE TIGRA SuperPac  
FR TIGRA SuperPac  
IT TIGRA SuperPac  
ES TIGRA SuperPac

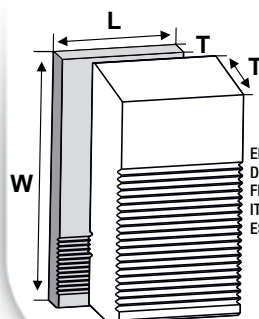


EN Carbide blank with corrugated backing plate  
DE Hartmetall-Blankett mit rückenverzahnter Stützplatte  
FR Plaquette carbure avec porte-plaquette denté  
IT Coltello in HM zigrinato con piastra di supporto zigrinata  
ES Cuchilla de metal duro con placa de soporte dentada por el lomo

| L<br>mm | W<br>mm | T<br>mm | T10MG  | T04F-CR | T03SMG | L<br>mm | W<br>mm | T<br>mm | Backing plate<br>Stützplatte |
|---------|---------|---------|--------|---------|--------|---------|---------|---------|------------------------------|
| 40      | 60      | 3.2     | 043949 | 024104  | 024102 | 40      | 57      | 7.1     | 024112                       |
| 50      | 60      | 3.2     | 043950 | 043931  | 043932 | 50      | 57      | 7.1     | 043959                       |
| 60      | 60      | 3.2     | 043951 | 024137  | 024135 | 60      | 57      | 7.1     | 024145                       |
| 80      | 60      | 3.2     | 043952 | 024170  | 024168 | 80      | 57      | 7.1     | 024178                       |
| 100     | 60      | 3.2     | 043953 | 023971  | 023969 | 100     | 57      | 7.1     | 023979                       |
| 120     | 60      | 3.2     | 043954 | 024004  | 024002 | 120     | 57      | 7.1     | 024012                       |
| 130     | 60      | 3.2     | 043955 | 024038  | 024036 | 130     | 57      | 7.1     | 024046                       |
| 150     | 60      | 3.2     | 043956 | 024071  | 024069 | 150     | 57      | 7.1     | 024079                       |
| 170     | 60      | 3.2     | 043970 | 043969  | 043968 | 170     | 57      | 7.1     | 045839                       |
| 180     | 60      | 3.2     | 113509 |         |        | 180     | 57      | 7.1     | 113493                       |
| 200     | 60      | 3.2     | 113510 | 131240  |        | 200     | 57      | 7.1     | 113494                       |
| 210     | 60      | 3.2     | 113511 | 131241  |        | 210     | 57      | 7.1     | 113495                       |
| 230     | 60      | 3.2     | 113512 | 131243  |        | 230     | 57      | 7.1     | 113496                       |
| 310     | 60      | 3.2     | 113513 | 131244  |        | 310     | 57      | 7.1     | 112231                       |
| 330     | 60      | 3.2     | 113514 | 129928  |        | 330     | 57      | 7.1     | 113483                       |

|                                                                                                                    |             | EN Security advices<br>DE Sicherheitshinweise<br>FR Conseils de sécurité                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | IT Consigli di sicurezza<br>ES Consejo de seguridad                                                                                                        |         |             |    |   |    |    |    |    |
|--------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|----|---|----|----|----|----|
|  <p>s = 3,2 mm</p>              |             | <p>EN Cutting Edge Projection<br/>Between carbide blank and backing plate s=3,2 mm (critical dimension when regrinding).</p> <p>DE Schneidenüberstand<br/>Schneidenüberstand von Hartmetallplatte zu Stützplatte s=3,2 mm (beim Nachschärfen zu beachten).</p> <p>FR Saillie des plaquettes<br/>Les plaquettes carbure dépassent le support de 3,2 mm (à prendre en compte lors du réaffûtage).</p> <p>IT Sporgenza del tagliente<br/>Sporgenza del tagliente rispetto alla piastra di supporto s= 3,2 mm (prestare attenzione in caso di riaffilatura).</p> <p>ES Exceso de corte<br/>El exceso de corte desde la placa de metal duro hacia la placa de soporte es e=3,2 mm (obsérvelo cuando se reafila).</p> |                                                                                                                                                            |         |             |    |   |    |    |    |    |
|  <p>W</p> <p>P max</p>          |             | <p>EN Maximum Profile Depth</p> <p>DE Maximale Profiltiefe</p> <p>FR Profondeur de profil maximum</p> <p>IT Profondità massima della sagomatura</p> <p>ES Profundidad máxima de perfil</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <table><tr><th>W<br/>mm</th><th>P max<br/>mm</th></tr><tr><td>38</td><td>-</td></tr><tr><td>50</td><td>12</td></tr><tr><td>60</td><td>23</td></tr></table> | W<br>mm | P max<br>mm | 38 | - | 50 | 12 | 60 | 23 |
| W<br>mm                                                                                                            | P max<br>mm |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |         |             |    |   |    |    |    |    |
| 38                                                                                                                 | -           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |         |             |    |   |    |    |    |    |
| 50                                                                                                                 | 12          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |         |             |    |   |    |    |    |    |
| 60                                                                                                                 | 23          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |         |             |    |   |    |    |    |    |
|  <p>DANGER</p>                  |             | <p>EN Warning!<br/>Specific positioning of blank and support plate; be aware of the safety regulations!</p> <p>DE Warnung!<br/>Sitzgenauer Einbau von Blankett und Stützplatte; Sicherheitsbestimmungen beachten!</p> <p>FR Avertissement!<br/>Positionnement précis de plaque et porte-plaquette; observez les règles de sécurité!</p> <p>IT Attenzione!<br/>Esatto montaggio in sede del coltello e della piastra di supporto; rispettare le norme di sicurezza!</p> <p>ES Aviso!<br/>Específicamente el posicionamiento de la placa en blanco y el apoyo, estar al tanto de las normas de seguridad!</p>                                                                                                     |                                                                                                                                                            |         |             |    |   |    |    |    |    |
|  <p>DANGER</p> <p>max. 8 mm</p> |             | <p>EN Warning!<br/>Maximum adjustment of blank = 8 mm</p> <p>DE Warnung!<br/>Maximale Verstellung des Blanketts = 8 mm</p> <p>FR Avertissement!<br/>Ajustement maximum de plaquette = 8 mm</p> <p>IT Attenzione!<br/>Regolazione massima della placchetta = 8 mm</p> <p>ES Aviso!<br/>El ajuste máximo del espacio en placa = 8 mm</p>                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                            |         |             |    |   |    |    |    |    |

EN MicroSystem  
DE MicroSystem  
FR MicroSystem  
IT MicroSystem  
ES MicroSystem



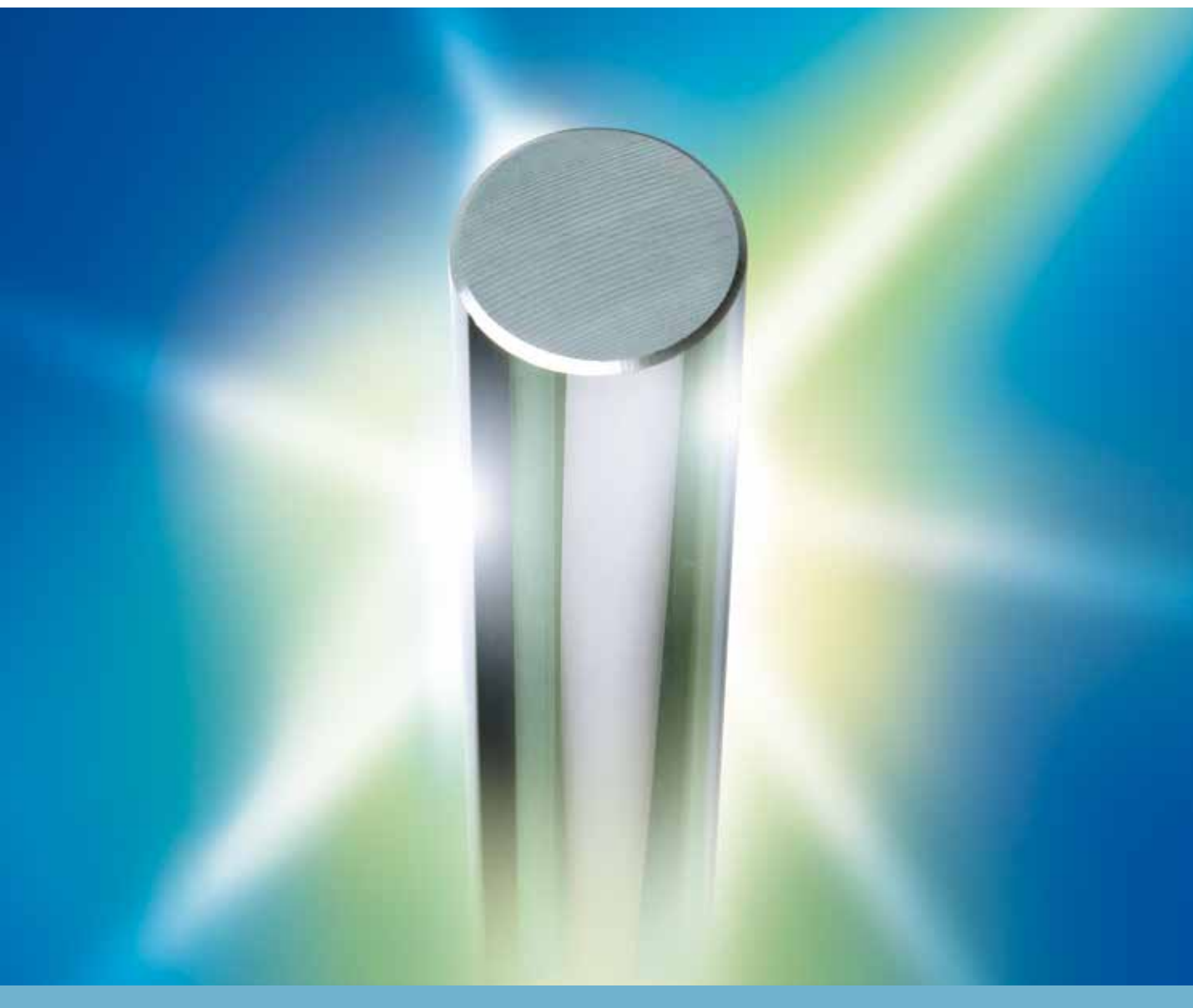
EN Carbide blank with corrugated backing plate  
DE Hartmetall-Blankett mit rückenverzahnter Stützplatte  
FR Plaquette carbure avec porte-plaquette denté  
IT Coltello in HM zigrinato con piastra di supporto zigrinata  
ES Cuchilla de metal duro con placa de soporte dentada por el lomo

| L<br>mm | W<br>mm | T<br>mm | T10MG  | T04F-CR | L<br>mm | W<br>mm | T<br>mm | EN Backing plate<br>DE Stützplatte |
|---------|---------|---------|--------|---------|---------|---------|---------|------------------------------------|
| 40      | 38      | 2.5     | 131966 | 133530  | 40      | 35      | 7.5     | 131991                             |
| 60      | 38      | 2.5     | 131967 | 133531  | 60      | 35      | 7.5     | 131992                             |
| 80      | 38      | 2.5     | 131968 | 133532  | 80      | 35      | 7.5     | 131993                             |
| 100     | 38      | 2.5     | 131969 | 133533  | 100     | 35      | 7.5     | 131994                             |
| 130     | 38      | 2.5     | 131970 | 133534  | 130     | 35      | 7.5     | 131995                             |
| 150     | 38      | 2.5     | 131971 | 133535  | 150     | 35      | 7.5     | 131996                             |
| 180     | 38      | 2.5     | 131972 | 133536  | 180     | 35      | 7.5     | 131997                             |
| 230     | 38      | 2.5     | 131973 | 133537  | 230     | 35      | 7.5     | 131998                             |
| 240     | 38      | 2.5     | 131974 | 133538  | 240     | 35      | 7.5     | 131999                             |
| 40      | 50      | 2.5     | 131975 | 133539  | 40      | 47      | 7.5     | 132000                             |
| 60      | 50      | 2.5     | 131976 | 133540  | 60      | 47      | 7.5     | 132001                             |
| 80      | 50      | 2.5     | 131977 | 133541  | 80      | 47      | 7.5     | 132002                             |
| 100     | 50      | 2.5     | 131978 | 133542  | 100     | 47      | 7.5     | 132003                             |
| 130     | 50      | 2.5     | 131979 | 133543  | 130     | 47      | 7.5     | 132004                             |
| 150     | 50      | 2.5     | 131980 | 133544  | 150     | 47      | 7.5     | 132005                             |
| 180     | 50      | 2.5     | 131981 | 133545  | 180     | 47      | 7.5     | 132006                             |
| 240     | 50      | 2.5     | 131982 | 133546  | 240     | 47      | 7.5     | 132007                             |
| 40      | 60      | 2.5     | 131983 | 133547  | 40      | 57      | 7.5     | 132008                             |
| 60      | 60      | 2.5     | 131984 | 133548  | 60      | 57      | 7.5     | 132009                             |
| 80      | 60      | 2.5     | 131985 | 133549  | 80      | 57      | 7.5     | 132010                             |
| 100     | 60      | 2.5     | 131986 | 133550  | 100     | 57      | 7.5     | 132011                             |
| 130     | 60      | 2.5     | 131987 | 133551  | 130     | 57      | 7.5     | 132012                             |
| 150     | 60      | 2.5     | 131988 | 133552  | 150     | 57      | 7.5     | 132013                             |
| 180     | 60      | 2.5     | 131989 | 133553  | 180     | 57      | 7.5     | 132014                             |
| 240     | 60      | 2.5     | 131990 | 133554  | 240     | 57      | 7.5     | 132015                             |



TOOLS CUT BETTER WITH TIGRA





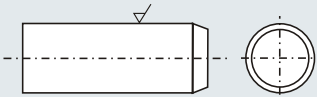
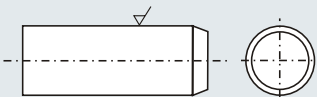
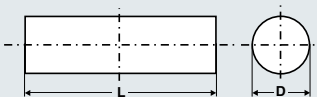
EN Rods  
DE Rundstäbe  
FR Barreaux cylindriques  
IT Cilindri  
ES Barras redondas



TOOLS CUT BETTER WITH TIGRA

---

EN Rods  
DE Rundstäbe  
FR Barreaux cylindriques  
IT Cilindri  
ES Barras redondas

|                                                                                   |                                                                                                                                                                                                                                                         |                                                                                                                     |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|  | <p>EN Rods - ground<br/>DE Rundstäbe - geschliffen<br/>FR Barreaux cylindriques - affûtés<br/>IT Cilindri - rettificati<br/>ES Barras redondas - afilado</p>                                                                                            | <p><i>metric</i><br/><i>metrisch</i><br/><i>métrique</i><br/><i>metrico</i><br/><i>métrico</i></p> <p>154 - 157</p> |
|  | <p>EN Rods - ground<br/>DE Rundstäbe - geschliffen<br/>FR Barreaux cylindriques - affûtés<br/>IT Cilindri - rettificati<br/>ES Barras redondas - afilado</p>                                                                                            | <p><i>inch</i></p> <p>158</p>                                                                                       |
|  | <p>EN TIGRAmet - Heavy alloy tool body blanks<br/>DE TIGRAmet - Grundkörperrohlinge aus Schwermetall<br/>FR TIGRAmet - Ébauches en métal lourd<br/>IT TIGRAmet - Corpo utensile grezzo in metallo pesante<br/>ES TIGRAmet - Cuerpos de metal pesado</p> | <p>159</p>                                                                                                          |

|    |                       |                                                 |
|----|-----------------------|-------------------------------------------------|
| EN | Rods                  | - Carbide grades and their applications         |
| DE | Rundstäbe             | - Hartmetallsorten und ihre Anwendungen         |
| FR | Barreaux cylindriques | - Les nuances de carbures et leurs applications |
| IT | Cilindri              | - I tipi di metallo duro e le loro applicazioni |
| ES | Barras redondas       | - Calidades de metal duro y sus aplicaciones    |

| EN                 | TIGRA grade   | ISO       | USA         | Hardness                                                                            | Toughness                                                                             | Bending strength                                                                      |
|--------------------|---------------|-----------|-------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DE                 | TIGRA - Sorte | ISO       | USA         | Härte                                                                               | Zähigkeit                                                                             | Biegebruchfestigkeit                                                                  |
| FR                 | Nuance TIGRA  | ISO       | USA         | Dureté                                                                              | Ténacité                                                                              | Résistance à la flexion                                                               |
| IT                 | Tipo TIGRA    | ISO       | Stati Uniti | Durezza                                                                             | Tenacità                                                                              | Resistenza flessionale                                                                |
| ES                 | Calidad TIGRA | ISO       | EE.UU.      | Dureza                                                                              | Tenacidad                                                                             | Resistencia a la flexión                                                              |
|                    |               |           |             |                                                                                     |                                                                                       |                                                                                       |
| T03MG-CR           |               | K01       | C4++        |    |    |    |
| T03F-CR            |               | K01       | C4+         |  |  |  |
| T06MG              |               | K01 - K10 | C3++        |  |  |  |
| T10MG<br>UNIVERSAL |               | K10 - K40 | C3+         |  |  |  |
| T12SMG             |               |           | C1++        |  |  |  |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif - inossidabile - anticorrosivo

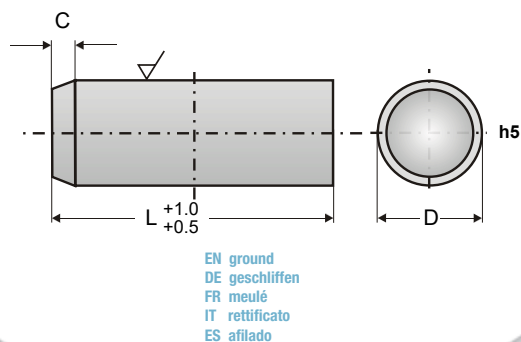
EN For technical data, please refer to the pages 4-5.  
DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.  
FR Pour les données techniques, veuillez voir aux pages 4-5.

| Plastics<br>Plastik<br>Plastiques<br>Plastica<br>Plásticos | HDF<br>HDF<br>HDF<br>HDF<br>HDF | MDF<br>MDF<br>MDF<br>MDF<br>MDF | Chipboard<br>Spanplatte<br>Panneaux de particule<br>Truciolare<br>Panel de aglomerado | Hardwood<br>Hartholz<br>Bois dur<br>Legno duro<br>Madera dura | Softwood<br>Weichholz<br>Bois tendre<br>Legno tenero<br>Madera blanda | Main usage<br>Hauptverwendung<br>Usage principal<br>Uso principale<br>Uso principal                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓                                                          | ✓                               | ✓                               | ○                                                                                     | ■                                                             | ■                                                                     | EN HDF, MDF<br>DE HDF, MDF<br>FR HDF, MDF<br>IT HDF, MDF<br>ES HDF, MDF                                                                                                                                                                                                                                                                                                                                                                                                             |
| ✓                                                          | ✓                               | ✓                               | ✓                                                                                     | ■                                                             | ■                                                                     | EN Highly abrasive materials, boards, larger tool diameters<br>DE Stark abrasive Materialien, Platten, größere Werkzeugdurchmesser<br>FR Matériaux très abrasifs, panneaux, diamètres d'outils plus grands<br>IT Materiali altamente abrasivi, pannelli, utensili di diametro maggiore<br>ES Materiales altamente abrasivos, tabla, diámetros de herramienta más grandes                                                                                                            |
| ✓                                                          | ○                               | ✓                               | ✓                                                                                     | ○                                                             | ■                                                                     | EN Harder boards and woods, plastics, graphite, aluminum, larger tool diameters<br>DE Härtere Platten und Holz, Kunststoff, Graphit, Aluminium, größere Werkzeugdurchmesser<br>FR Panneaux durs et bois durs, plastiques, graphite, aluminium, diamètres d'outils plus grands<br>IT Pannelli e legni più duri, plastica, grafite, alluminio, utensili di diametro maggiore<br>ES Tableros y maderas más duras, plásticos, grafito, diámetros de aluminio, la herramienta más grande |
| ○                                                          | ○                               | ○                               | ○                                                                                     | ✓                                                             | ✓                                                                     | EN Universal grade<br>DE Universelle Sorte<br>FR Nuance universelle<br>IT Tipo universale<br>ES Calidad universal                                                                                                                                                                                                                                                                                                                                                                   |
| ○                                                          | ○                               | ○                               | ○                                                                                     | ✓                                                             | ✓                                                                     | EN High speed cutting, smaller tool diameters<br>DE Hochgeschwindigkeitsschneiden, kleinere Werkzeugdurchmesser<br>FR Coupe à grande vitesse, diamètres d'outils plus petits<br>IT Taglio ad alta velocità, utensili di diametro più piccolo<br>ES Corte de alta velocidad, los diámetros más pequeños para herramientas                                                                                                                                                            |

IT Per i dati tecnici, fare riferimento alle pagine 4-5.  
 ES Para los datos técnicos, consulte las páginas 4-5.

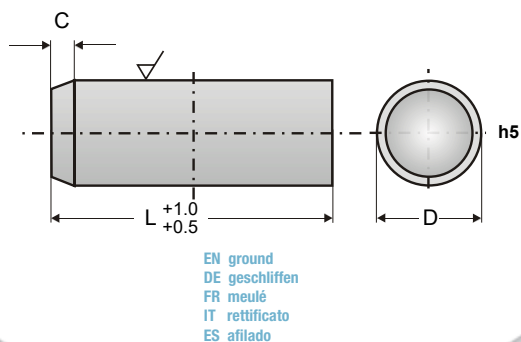
- ✓ best performance
- ✓ very good performance
- acceptable
- not suitable

EN Rods  
DE Rundstäbe  
FR Barreaux cylindriques  
IT Cilindri  
ES Barras redondas



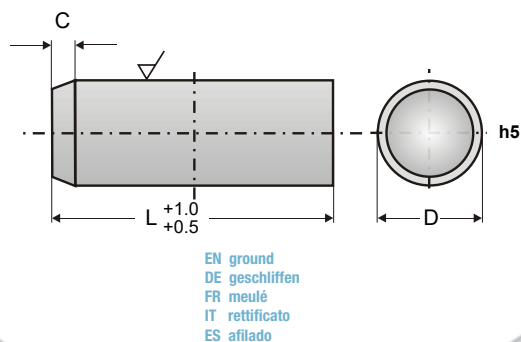
| D<br>mm | L<br>mm                           | C<br>mm                         | T10MG<br>h5                                              | T03F-CR<br>h5                                            | T06MG<br>h5                                              | T12SMG<br>h5 |
|---------|-----------------------------------|---------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|--------------|
| 1.0     | 330                               |                                 | 035517                                                   |                                                          |                                                          |              |
| 1.5     | 100<br>330                        |                                 | 036366<br>035518                                         |                                                          |                                                          |              |
| 2.0     | 100<br>330                        |                                 | 036368<br>035519                                         |                                                          |                                                          |              |
| 2.5     | 50<br>100<br>330                  |                                 | 049983<br>036370<br>035520                               |                                                          |                                                          |              |
| 3.0     | 38<br>43<br>50<br>330             |                                 | 053363<br>039162<br>034177<br>029708                     | 114916<br>114915<br>114914<br>114910                     | 100980<br>055446<br>055445<br>029707                     | 109912       |
| 3.5     | 330                               |                                 | 035521                                                   |                                                          |                                                          |              |
| 4.0     | 43<br>50<br>55<br>330             |                                 | 039161<br>034178<br>039104<br>029710                     | 114917<br>114918<br>114919<br>114911                     | 106821<br>034158<br>101012<br>029709                     | 109913       |
| 4.5     | 330                               |                                 | 035522                                                   |                                                          |                                                          |              |
| 5.0     | 43<br>50<br>330                   |                                 | 052459<br>034179<br>034802                               | 114920<br>114921<br>114912                               | 106780<br>034159<br>036541                               | 104207       |
| 5.5     | 330                               |                                 | 035523                                                   |                                                          |                                                          |              |
| 6.0     | 46<br>50<br>55<br>60<br>70<br>330 | 0.4<br>0.4<br>0.4<br>0.4<br>0.4 | 102374<br>043244<br>039107<br>034180<br>043527<br>029712 | 114922<br>114923<br>114924<br>114925<br>114926<br>114913 | 106785<br>106787<br>101016<br>034160<br>106399<br>029711 | 101390       |
| 6.5     | 330                               |                                 | 035524                                                   |                                                          |                                                          |              |
| 7.0     | 330                               |                                 | 035525                                                   | 114927                                                   | 036544                                                   | 109914       |
| 7.5     | 330                               |                                 | 035526                                                   |                                                          |                                                          |              |

EN Rods  
DE Rundstäbe  
FR Barreaux cylindriques  
IT Cilindri  
ES Barras redondas



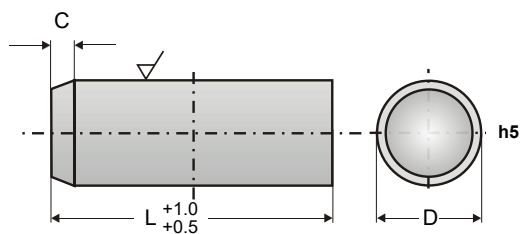
| D<br>mm | L<br>mm | C<br>mm | T10MG<br>h5 | T03F-CR<br>h5 | T06MG<br>h5 | T12SMG<br>h5 |
|---------|---------|---------|-------------|---------------|-------------|--------------|
| 8.0     | 50      | 0.6     | 045419      | 114941        | 106788      |              |
|         | 55      | 0.6     | 041602      | 114942        | 106789      |              |
|         | 56      | 0.6     | 102197      | 114943        | 106790      |              |
|         | 60      | 0.6     | 046522      | 114944        | 102018      |              |
|         | 70      | 0.6     | 038349      | 114945        | 101017      |              |
|         | 75      | 0.6     | 041481      | 114946        | 101018      |              |
|         | 80      | 0.6     | 034181      | 114947        | 034161      |              |
|         | 100     | 0.6     | 036392      | 114948        | 036391      |              |
|         | 330     | 0.6     | 029714      | 114928        | 029713      | 100702       |
| 8.5     | 330     |         | 035527      |               |             |              |
| 9.0     | 330     |         | 035528      |               |             |              |
| 9.5     | 330     |         | 035529      |               |             |              |
| 10.0    | 65      | 0.6     | 102514      | 114951        | 106791      |              |
|         | 70      | 0.6     | 038350      | 114953        | 101019      |              |
|         | 75      | 0.6     | 038351      | 114954        | 055813      |              |
|         | 80      | 0.6     | 034182      | 114955        | 106402      |              |
|         | 90      | 0.6     | 052421      | 114956        | 106792      |              |
|         | 100     | 0.6     | 034183      | 114957        | 036399      |              |
|         | 110     | 0.6     | 111134      |               |             |              |
|         | 330     | 0.6     | 029716      | 114929        | 029715      | 100701       |
| 11.0    | 330     |         | 035531      |               |             |              |
| 12.0    | 80      | 0.8     | 034184      | 114958        | 053694      |              |
|         | 90      | 0.8     | 038352      | 114959        | 101020      |              |
|         | 100     | 0.8     | 034185      | 114960        | 034165      |              |
|         | 110     | 0.8     | 052744      | 114961        | 106794      |              |
|         | 120     | 0.8     | 051331      | 114962        | 106795      |              |
|         | 155     | 0.8     | 106797      | 114963        | 106796      |              |
|         | 330     | 0.8     | 029718      | 114930        | 029717      | 100698       |
| 13.0    | 330     |         | 035534      |               |             |              |

EN Rods  
 DE Rundstäbe  
 FR Barreaux cylindriques  
 IT Cilindri  
 ES Barras redondas



| D<br>mm | L<br>mm | C<br>mm | T10MG<br>h5 | T03F-CR<br>h5 | T06MG<br>h5 | T12SMG<br>h5 |
|---------|---------|---------|-------------|---------------|-------------|--------------|
| 14.0    | 90      | 0.8     | 041482      | 114964        | 101022      | 109915       |
|         | 100     | 0.8     | 034186      | 114965        | 034166      |              |
|         | 110     | 0.8     | 038353      | 114966        | 101023      |              |
|         | 120     | 0.8     | 053659      | 114967        | 106801      |              |
|         | 330     |         | 029720      | 114931        | 029719      |              |
| 15.0    | 330     |         | 035537      |               |             |              |
| 16.0    | 80      | 0.8     | 052553      | 114972        | 106412      | 103950       |
|         | 90      | 0.8     | 038354      | 114973        | 101024      |              |
|         | 93      | 0.8     | 106803      | 114974        | 106802      |              |
|         | 100     | 0.8     | 034187      | 114975        | 034167      |              |
|         | 110     | 0.8     | 038355      | 114976        | 101025      |              |
|         | 120     | 0.8     | 034188      | 114977        | 034168      |              |
|         | 130     | 0.8     | 053858      | 114978        | 106805      |              |
|         | 140     | 0.8     | 038356      | 114979        | 101026      |              |
|         | 150     | 0.8     | 043662      | 114980        | 103951      |              |
|         | 155     | 0.8     | 041603      | 114981        | 106806      |              |
|         | 170     | 0.8     | 052410      | 114982        | 106807      |              |
|         | 175     | 0.8     | 053515      | 114983        | 106808      |              |
|         | 180     | 0.8     | 111133      |               |             |              |
|         | 330     |         | 029722      | 114932        | 029721      |              |
| 17.0    | 330     |         | 035540      |               |             |              |
| 18.0    | 93      | 0.8     | 106809      | 114984        | 106810      | 109916       |
|         | 100     | 0.8     | 034189      | 114985        | 034169      |              |
|         | 110     | 0.8     | 102817      | 114986        | 106811      |              |
|         | 115     | 0.8     | 038357      | 114987        | 101027      |              |
|         | 120     | 0.8     | 034190      | 114988        | 034170      |              |
|         | 330     |         | 029724      | 114933        | 029723      |              |
| 19.0    | 330     |         | 035541      |               |             |              |
| 20.0    | 100     | 1.0     | 034192      | 114989        | 034172      |              |
|         | 110     | 1.0     | 044472      | 114990        | 106403      |              |
|         | 115     | 1.0     | 038358      | 114991        | 101028      |              |
|         | 120     | 1.0     | 034193      | 114992        | 034173      |              |
|         | 125     | 1.0     | 100241      | 114993        | 106812      |              |

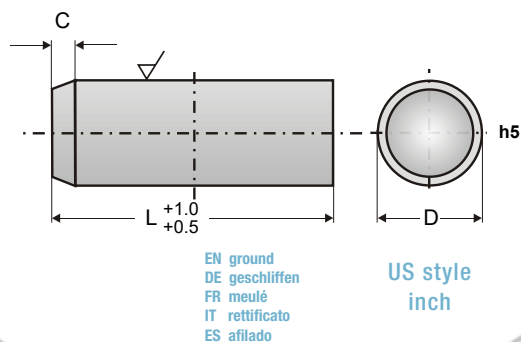
EN Rods  
DE Rundstäbe  
FR Barreaux cylindriques  
IT Cilindri  
ES Barras redondas



EN ground  
DE geschliffen  
FR meulé  
IT rettificato  
ES afilado

| D<br>mm | L<br>mm | C<br>mm | T10MG<br>h5 | T03F-CR<br>h5 | T06MG<br>h5 | T12SMG<br>h5 |
|---------|---------|---------|-------------|---------------|-------------|--------------|
| 20.0    | 130     | 1.0     | 106044      | 114994        | 106813      |              |
|         | 135     | 1.0     | 039115      | 114995        | 054819      |              |
|         | 140     | 1.0     | 038359      | 114996        | 101029      |              |
|         | 145     | 1.0     | 105702      | 114997        | 106814      |              |
|         | 150     | 1.0     | 034194      | 114998        | 034174      |              |
|         | 155     | 1.0     | 100073      | 114999        | 106815      |              |
|         | 170     | 1.0     | 055570      | 115000        | 106816      |              |
|         | 330     |         | 029726      | 114934        | 029725      | 109917       |
| 21.0    | 330     |         | 035542      |               |             |              |
| 22.0    | 330     |         | 035543      | 114935        | 036562      | 109918       |
| 23.0    | 330     |         | 035544      |               |             |              |
| 24.0    | 330     |         | 035545      |               |             |              |
| 25.0    | 110     | 1.0     | 102424      | 115005        | 104306      |              |
|         | 125     | 1.0     | 106818      | 115006        | 106817      |              |
|         | 155     | 1.0     | 102765      | 115007        | 106819      |              |
|         | 330     |         | 029728      | 114936        | 029727      | 109919       |
| 26.0    | 330     |         | 035546      |               |             |              |
| 27.0    | 330     |         | 036587      |               |             |              |
| 28.0    | 330     |         | 035547      | 114937        | 036566      | 109920       |
| 29.0    | 330     |         | 036589      |               |             |              |
| 30.0    | 330     |         | 035548      | 114938        | 036567      |              |
| 31.0    | 330     |         | 036591      |               |             |              |
| 32.0    | 330     |         | 035549      | 114939        | 036568      |              |
| 35.0    | 330     |         | 035552      | 114940        | 036569      |              |

EN Rods  
 DE Rundstäbe  
 FR Barreaux cylindriques  
 IT Cilindri  
 ES Barras redondas



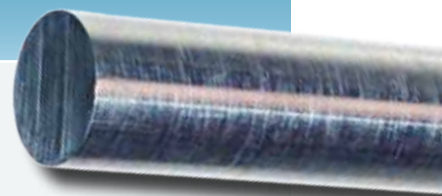
| Dia<br>inch | L<br>inch | T10MG<br>h5 | T03F-CR<br>h5 | T06MG<br>h5 |
|-------------|-----------|-------------|---------------|-------------|
| 1/8         | 1 1/2     | 049465      | 115022        | 054851      |
|             | 2         | 049466      | 115023        | 054852      |
|             | 2 1/2     | 049467      | 115024        | 054853      |
|             | 3         | 050160      | 115025        | 054854      |
|             | 4         | 049632      | 115026        | 054855      |
|             | 6         | 049469      | 115027        | 054856      |
|             | 12 1/4    | 050139      | 115008        | 054926      |
| 5/32        | 3         | 049470      | 115052        | 054857      |
|             | 12 1/4    | 050140      | 115009        | 054927      |
| 3/16        | 1 1/2     | 049471      | 115028        | 054858      |
|             | 2         | 049472      | 115029        | 054859      |
|             | 2 1/2     | 050165      | 115030        | 054860      |
|             | 3         | 100251      |               |             |
|             | 12 1/4    | 050147      | 115010        | 054929      |
| 7/32        | 12 1/4    | 050148      | 115011        | 054930      |
| 15/64       | 12 1/4    | 050149      | 115012        | 054931      |
| 1/4         | 1 1/2     | 049474      | 115031        | 054873      |
|             | 2         | 049475      | 115032        | 054861      |
|             | 2 1/2     | 049476      | 115033        | 053113      |
|             | 3         | 050169      | 115034        | 053114      |
|             | 4         | 050170      | 115035        | 054862      |
|             | 12 1/4    | 050150      | 115013        | 054821      |
| 5/16        | 2 1/2     | 054350      |               |             |
|             | 3 1/2     | 100287      |               |             |
|             | 4         | 100646      |               |             |
|             | 12 1/4    | 050151      | 115014        | 054933      |
| 3/8         | 2 1/2     | 049477      | 115036        | 054863      |
|             | 3         | 049478      | 115037        | 053115      |
|             | 4         | 049633      | 115038        | 054864      |
|             | 6         | 049480      | 115039        | 054865      |
|             | 12 1/4    | 050152      | 115015        | 054934      |
| 7/16        | 3         | 101122      |               |             |
|             | 6         | 101668      |               |             |
|             | 12 1/4    | 050153      | 115016        | 054935      |

| Dia<br>inch | L<br>inch | T10MG<br>h5 | T03F-CR<br>h5 | T06MG<br>h5 |
|-------------|-----------|-------------|---------------|-------------|
| 1/2         | 2         | 050175      | 115040        | 054866      |
|             | 2 1/2     | 050176      | 115041        | 054867      |
|             | 3         | 049481      | 115042        | 053116      |
|             | 3 1/2     | 045137      | 115043        | 053117      |
|             | 4         | 049482      | 115044        | 054868      |
|             | 6         | 101183      |               |             |
|             | 12 1/4    | 050154      | 115017        | 054936      |
| 9/16        | 12 1/4    | 050155      | 115018        | 054937      |
| 5/8         | 3         | 049483      | 115045        | 054869      |
|             | 3 1/2     | 050180      | 115046        | 054870      |
|             | 4         | 049484      | 115047        | 053118      |
|             | 5         | 050182      | 115048        | 054871      |
|             | 12 1/4    | 050156      | 115019        | 054939      |
| 3/4         | 4         | 050183      | 115049        | 053119      |
|             | 5         | 054148      |               |             |
|             | 6         | 055232      |               |             |
|             | 12 1/4    | 050157      | 115020        | 054822      |
| 1           | 5         | 050184      | 115050        | 054872      |
|             | 6         | 100224      |               |             |
|             | 12 1/4    | 050158      | 115021        | 054824      |



- EN TIGRAMet - Heavy alloy tool body blanks  
 DE TIGRAMet - Grundkörperrohlinge aus Schwermetall  
 FR TIGRAMet - Ébauches en métal lourd  
 IT TIGRAMet - Corpo utensile grezzo in metallo pesante  
 ES TIGRAMet - Cuerpos de metal pesado

| D<br>mm | L<br>mm | TIGRAMet |
|---------|---------|----------|
| 6.2     | 270     | 141103   |
| 8.2     | 270     | 132113   |
| 10.2    | 270     | 131337   |
| 12.2    | 85      | 135487   |
| 12.2    | 370     | 131338   |
| 13.2    | 370     | 131339   |
| 14.2    | 370     | 131340   |
| 15.2    | 370     | 131341   |
| 16.7    | 155     | 135488   |
| 16.7    | 270     | 131342   |
| 16.7    | 317     | 131343   |
| 16.7    | 370     | 131344   |
| 18.3    | 270     | 131345   |
| 20.2    | 105     | 135489   |
| 20.2    | 650     | 131346   |
| 21.2    | 650     | 131347   |
| 22.2    | 650     | 131348   |
| 25.2    | 650     | 135162   |
| 27.2    | 650     | 134373   |



EN Technical data  
 DE Technische Daten  
 FR Caractéristiques techniques  
 IT Dati tecnici  
 ES Datos técnicos

EN Density  
 DE Dichte  
 FR Densité  
 IT Densità  
 ES Densidad

17.1 g/cm<sup>3</sup>

0.62 lb/in<sup>3</sup>

EN Tungsten content  
 DE Wolframgehalt  
 FR Teneur en tungstène  
 IT Contenuto di tungsteno  
 ES Contenido de tungsteno

90%

90%

EN Binder  
 DE Binder  
 FR Liant  
 IT Legante  
 ES Composicion

Fe, Ni

Fe, Ni

EN Modulus of elasticity  
 DE Elastizitätsmodul  
 FR Module d'élasticité  
 IT Modulo di elasticità  
 ES Módulo de elasticidad

330 GPa

48 (10<sup>3</sup>) ksi

EN Hardness  
 DE Härte  
 FR Dureté  
 IT Durezza  
 ES Dureza

310 HV

31 HRC

EN Ultimate tensile strength  
 DE Zugfestigkeit  
 FR Résistance à la traction  
 IT Resistenza di trazione  
 ES Resistencia a la tracción

875 MPa

127 ksi

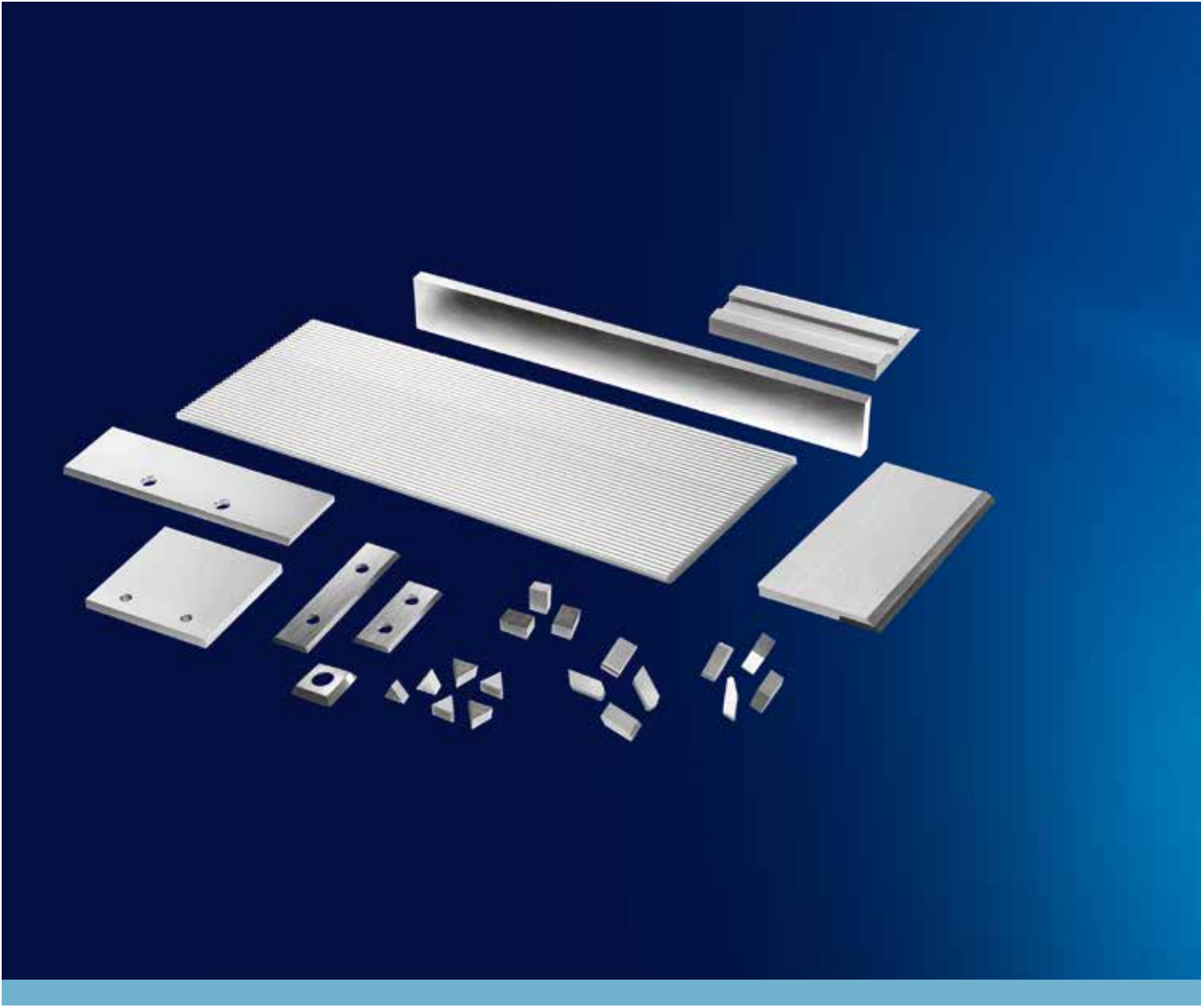
EN Other dimensions upon request.  
 DE Andere Abmessungen auf Anfrage.

FR D'autres dimensions sur demande.  
 IT Altre dimensioni su richiesta.

ES Otras dimensiones bajo demanda.



TOOLS CUT BETTER WITH TIGRA





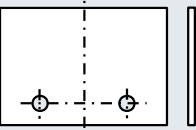
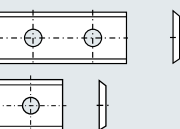
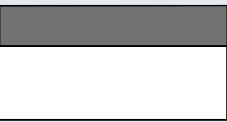
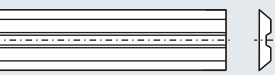
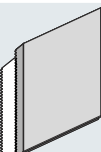
EN TIGRALLOY products  
DE TIGRALLOY Produkte  
FR Produits TIGRALLOY  
IT Prodotti TIGRALLOY  
ES Productos TIGRALLOY



TOOLS CUT BETTER WITH TIGRA

---

EN TIGRALLOY products  
 DE TIGRALLOY Produkte  
 FR Produits TIGRALLOY  
 IT Prodotti TIGRALLOY  
 ES Productos TIGRALLOY

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                  |                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|    | <p>EN TIGRALLOY - Saw tips<br/>         DE TIGRALLOY - Sägezähne<br/>         FR TIGRALLOY - Dents de scie<br/>         IT TIGRALLOY - Dentelli per lame<br/>         ES TIGRALLOY - Dientes de sierra</p>                                                                                                                                       | <p>166 - 168</p> |
|    | <p>EN TIGRALLOY - Blanks for profiling<br/>         DE TIGRALLOY - Blanketts zum Profilieren<br/>         FR TIGRALLOY - Plaquettes à profiler<br/>         IT TIGRALLOY - Placchette da profilare<br/>         ES TIGRALLOY - Placas para perfilar</p>                                                                                          | <p>169 - 171</p> |
|    | <p>EN TIGRALLOY - Reversible knives<br/>         DE TIGRALLOY - Wendeschneidplatten<br/>         FR TIGRALLOY - Plaquettes réversibles<br/>         IT TIGRALLOY - Coltelli reversibili<br/>         ES TIGRALLOY - Cuchillas reversibles</p>                                                                                                    | <p>172 - 173</p> |
|   | <p>EN TIGRALLOY - Strips and preformed tips for brazed cutters<br/>         DE TIGRALLOY - Fräserplatten und Formplatten zum Löten<br/>         FR TIGRALLOY - Plaquettes à braser<br/>         IT TIGRALLOY - Placchette per frese saldobrasate<br/>         ES TIGRALLOY - Placas para equipar fresas y herramientas soldadas</p>              | <p>174 - 175</p> |
|  | <p>EN TIGRALLOY - Planer knives<br/>         DE TIGRALLOY - Hobelmesser<br/>         FR TIGRALLOY - Couteaux à raboter<br/>         IT TIGRALLOY - Coltelli da pialla<br/>         ES TIGRALLOY - Cuchillas para cepillar</p>                                                                                                                    | <p>176</p>       |
|  | <p>EN TIGRALLOY - Planer knives for system Centrolock<br/>         DE TIGRALLOY - Hobelmesser für System Centrolock<br/>         FR TIGRALLOY - Couteaux à raboter pour système Centrolock<br/>         IT TIGRALLOY - Coltelli da pialla per sistema Centrolock<br/>         ES TIGRALLOY - Cuchillas para cepillar para sistema Centrolock</p> | <p>177</p>       |
|  | <p>EN TIGRALLOY - SuperPac<br/>         DE TIGRALLOY - SuperPac<br/>         FR TIGRALLOY - SuperPac<br/>         IT TIGRALLOY - SuperPac<br/>         ES TIGRALLOY - SuperPac</p>                                                                                                                                                               | <p>178 - 179</p> |

## EN TECHNICAL DATA AND APPLICATION RECOMMENDATIONS

(for more information please see our TIGRALLOY brochure and our technical guidebook "Carbide for cutting tools")

TIGRALLOY, an alloy which mainly consists of cobalt, chromium and tungsten, takes a special position within the cutting materials being neither tungsten carbide nor HSS.

Even though its hardness is rather low, TIGRALLOY can achieve multiple lifetimes of tungsten carbide in many applications because its wear pattern is completely different. In addition, TIGRALLOY is extremely corrosion resistant, tough and heat resistant up to around 800°C / 1500°F. The high bending strength and material composition allow steep angles and very sharp cutting edges which reduces cutting pressure and can achieve excellent surface qualities. TIGRALLOY is made by powder metallurgy and thus, compared to similar, cast materials 100% void-free.

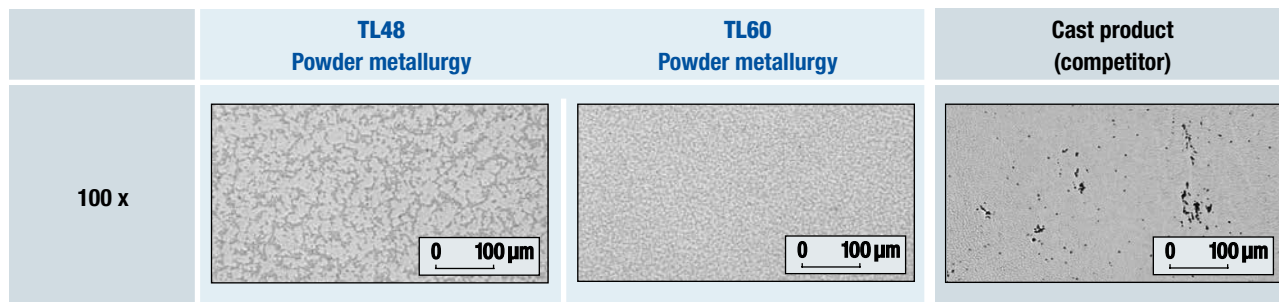


Fig. 1: Homogeneous, void-free TIGRALLOY made by powder metallurgy compared to a similarly alloyed but cast product.

### 2 grades are offered:

**TL48** (hardness 48 HRC), especially as saw tips for processing green lumber. Here, the high toughness is used to make TL48 the ideal cutting material for circular, band- and gangsaaws for the saw mill industry. Available in shapes of triangles, rectangles and typical saw tip shapes.

**TL60** (hardness 60 HRC) for indexable inserts, blanks for profiling, planer knives, back corrugated knives and STBs for brazed tools: perfect surface qualities and excellent lifetime in the described types of wood (without gluelines), compare to Fig. 2. In addition, weight of the blades is reduced by around 40%.

### TIGRALLOY provides decisive advantages in most solid woods:

- **Tool life:** in many types of wood tool life is increased substantially compared to tungsten carbide, especially in hardwoods.
- **Excellent surface quality:** The high bending strength and the composition of the material allow very sharp cutting edges, which reduce the cutting pressure.
- **Increased productivity** as TIGRALLOY makes possible to run in greater feed rates and revolution speeds.
- **Secure processing:** TIGRALLOY is required to 100% free of macropores, thus no multiple production due to porosity.

#### TL48 - for circular saw blades and band saws

##### recommended:

nearly all kinds of raw woods, frozen wood  
recycling of wood with impurities (e.g. pellets)

##### not recommended:

board materials, glued-up wood  
extremely abrasive or resinified woods

#### TL60 - for planers, indexable inserts and brazed profiling tools

##### recommended:

|                             |                         |               |
|-----------------------------|-------------------------|---------------|
| Abachi                      | Incense cedar           | Pine          |
| Afromosia                   | Larch                   | Plane         |
| Afzelia (min. 12% humidity) | Limba                   | Poplar        |
| Alder                       | Mahogany (American red) | Ramin         |
| Ash                         | Makoré                  | Redwood       |
| Avodiré                     | Maple (European)        | Sapele        |
| Beech (min. 12% humidity)   | Mengkulang              | Sipo          |
| Birch (European)            | Meranti                 | Sugar pine    |
| Cedar (Western Red)         | Oak (American Red)      | Tasmanian Oak |
| Cedar                       | Oak (European)          | Tola branca   |
| Cherry                      | Oak (Japanese)          | Walnut        |
| Chestnut (cultivated)       | Okan                    | Willow        |
| Elm                         | Okoumé                  |               |
| Fir                         | Oregon pine             |               |
| Framiré                     | Parana pine             |               |
| Hemlock                     | Pear                    |               |

##### not recommended:

|                                                                           |                    |
|---------------------------------------------------------------------------|--------------------|
| board materials, glued-up wood,<br>extremely abrasive or resinified woods |                    |
| Afzelia (dry)                                                             | Mukulungu          |
| Azobé                                                                     | Muninga            |
| Balau                                                                     | Oak American white |
| Beech (dry)                                                               | Ogea               |
| Boxwood                                                                   | Padouk             |
| Bubinga                                                                   | Panga Panga        |
| Hickory                                                                   | Purpleheart        |
| Hornbeam                                                                  | Red kabbes         |
| Keruing                                                                   | Rosewood Rio       |
| Lignum vitae                                                              | Saligna gum        |
| Maple American                                                            | Tali               |
| Merbau                                                                    | Teak               |
| Movingui                                                                  | Wengé              |

Fig.: Application recommendations for both TIGRALLOY grades.

## DE TECHNISCHE DATEN UND ANWENDUNGSEMPFEHLUNGEN

(Weitere Informationen finden Sie in unserer TIGRALLOY Broschüre und unserem technischen Ratgeber "Hartmetall für Schneidwerkzeuge")

TIGRALLOY, eine Legierung hauptsächlich aus Kobalt, Chrom und Wolfram, nimmt eine Sonderstellung in den Schneidstoffen ein, ist sie doch weder Hartmetall noch HSS.

Trotz der geringen Härte erreicht TIGRALLOY in vielen Anwendungen deutlich bessere Standwege als Hartmetall. Dies liegt an einem komplett anderen Verschleißverhalten, welches durch die Zusammensetzung erreicht wird. Zudem ist TIGRALLOY extrem korrosionsbeständig, bruchfest und bis 800°C hitzebeständig. Die hohe Biegebruchfestigkeit und die Materialzusammensetzung erlauben spitze Winkel und sehr scharfe Schneidkanten, was den Schnittdruck verringert und häufig eine herausragende Oberflächenqualität erzielt. TIGRALLOY wird pulvermetallurgisch hergestellt und ist deshalb, im Gegensatz zu gegossenen, ähnlichen Materialien, 100% frei von Makroporen (vgl. Abb. 1).

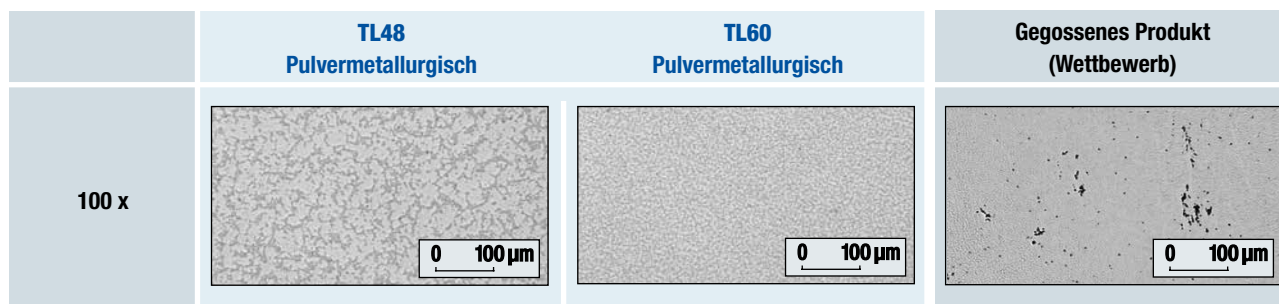


Abb. 1: Homogenes, makroporenfreies TIGRALLOY aus pulvermetallurgischer Herstellung im Vergleich mit ähnlich legiertem, aber gegossenem Produkt

### 2 Sorten sind im Angebot:

**TL48** (Härte 48 HRC), insbesondere als Sägezähne in der Rohholzbearbeitung. Hier wird die Zähigkeit voll ausgenutzt, was TL48 zum idealen Schneidstoff für Kreis-, Blockband- und Gattersägen in der Sägewerksindustrie macht. Verfügbar als Dreiecke, Rechtecke und in typischen HM-Zahngeometrien.

**TL60** (Härte 60 HRC) für Wendeplatten, Blanketts zum Profilieren, Hobelmesser, rückenverzahnte Messer und Lötplatten: perfekte Oberflächengüten und sehr gute Standwege in den beschriebenen Holzsorten (ohne Hartleimfugen). Zudem erreichen Sie eine Gewichtsersparnis der Schneiden um circa 40%.

### TIGRALLOY bietet entscheidende Vorteile in den meisten Massivhölzern:

- **Werkzeuglebensdauer:** In vielen Holzarten ist die Werkzeuglebensdauer im Vergleich zu Wolframkarbid, insbesondere bei Hartholz, deutlich erhöht.
- **Ausgezeichnete Oberflächenqualität:** Die hohe Biegefestigkeit und die Zusammensetzung des Materials erlauben sehr scharfe Schneidkanten, die den Schnittdruck reduzieren.
- **Erhöhte Produktivität,** da TIGRALLOY es ermöglicht, in größeren Vorschüben und Drehzahlen zu laufen.
- **Sichere Verarbeitung:** TIGRALLOY erfordert, 100% frei von Makroporen zu sein, also keine Mehrfachproduktion durch Porosität.

#### TL48 - für Kreissägen und Bandsägen

##### empfohlen:

nahezu alle Arten von Rohholz, gefrorene Hölzer  
Recycling von Holz mit Eisen (z.B. Paletten)

##### nicht empfohlen:

Verleimhölzer, Plattenmaterial  
Extrem abrasive Tropenhölzer

#### TL60 - zum Hobeln, für gelötete und auswechselbare Profilwerkzeuge

##### empfohlen:

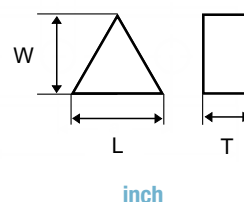
|                               |                 |                     |
|-------------------------------|-----------------|---------------------|
| Abachi                        | Framiré         | Ramin               |
| Afromosia                     | Hemlock         | Redwood             |
| Afzelia (min. 12% Feuchte)    | Kastanie (edel) | Sapelli             |
| Ahorn                         | Kiefer          | Sipo                |
| Avodire                       | Kirschbaum      | Sugar pine          |
| Birke (europäisch)            | Lärche          | Tanne               |
| Birnbaum                      | Limba           | Tasmanian Oak       |
| Bleistiftzeder (kalifornisch) | Macoré          | Tola                |
| Brasilkiefer                  | Mahagonie       | Ulme                |
| Buche (min. 12% Feuchte)      | Mengkulang      | Weide               |
| Douglasie (amerikanisch)      | Meranti         | Zeder (Western Red) |
| Eiche (europäisch)            | Nussbaum        | Zeder               |
| Eiche (japanisch)             | Okan            |                     |
| Eiche (rot)                   | Okoumé          |                     |
| Erle                          | Pappel          |                     |
| Esche                         | Platane         |                     |

##### nicht empfohlen:

|                                                             |                  |
|-------------------------------------------------------------|------------------|
| Verleimhölzer, Verleimholz,<br>Extrem abrasive Tropenhölzer |                  |
| Afzelia (trocken)                                           | Merbau           |
| Ahorn (amerikanisch)                                        | Movingui         |
| Amarant                                                     | Mukulungu        |
| Azobé                                                       | Muninga          |
| Balau                                                       | Padouk           |
| Bubinga                                                     | Palisander (Rio) |
| Buche (trocken)                                             | Panga Panga      |
| Buche (weiß)                                                | Pockholz         |
| Buchsbaum                                                   | Sidney blue gum  |
| Daniella                                                    | Sucupira         |
| Eiche (amerikanische Weißeiche)                             | Tali             |
| Hickory                                                     | Teak             |
| Keruing                                                     | Wengé            |

Fig.: Anwendungsempfehlungen für die beiden TIGRALLOY-Sorten

EN TIGRALLOY - Saw tips  
 DE TIGRALLOY - Sägezähne  
 FR TIGRALLOY - Dents de scie  
 IT TIGRALLOY - Dentelli per lame  
 ES TIGRALLOY - Dientes de sierra



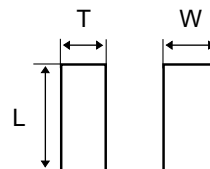
### Triangles 60°

| 60T.180     | L           |       | W            |     | T/Kerf       |     | TL48          |
|-------------|-------------|-------|--------------|-----|--------------|-----|---------------|
|             | inch        | mm    | inch         | mm  | inch         | mm  |               |
| <b>.084</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.084</b> | 2.1 | <b>139103</b> |
| <b>.103</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.103</b> | 2.6 | <b>139102</b> |
| <b>.105</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.105</b> | 2.7 | <b>139101</b> |
| <b>.110</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.110</b> | 2.8 | <b>138577</b> |
| <b>.120</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.120</b> | 3.0 | <b>138582</b> |
| <b>.130</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.130</b> | 3.3 | <b>138583</b> |
| <b>.140</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.140</b> | 3.6 | <b>138584</b> |
| <b>.150</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.150</b> | 3.8 | <b>138585</b> |
| <b>.160</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.160</b> | 4.1 | <b>138586</b> |
| <b>.170</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.170</b> | 4.3 | <b>138588</b> |
| <b>.180</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.180</b> | 4.6 | <b>141545</b> |
| <b>.190</b> | <b>0.18</b> | 4.572 | <b>0.156</b> | 4.0 | <b>0.190</b> | 4.8 | <b>141546</b> |

| 60T.250     | L           |      | W            |     | T/Kerf       |     | TL48          |
|-------------|-------------|------|--------------|-----|--------------|-----|---------------|
|             | inch        | mm   | inch         | mm  | inch         | mm  |               |
| <b>.110</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.110</b> | 2.8 | <b>132644</b> |
| <b>.120</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.120</b> | 3.0 | <b>132645</b> |
| <b>.130</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.130</b> | 3.3 | <b>132646</b> |
| <b>.140</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.140</b> | 3.6 | <b>132647</b> |
| <b>.150</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.150</b> | 3.8 | <b>132648</b> |
| <b>.160</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.160</b> | 4.1 | <b>132649</b> |
| <b>.170</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.170</b> | 4.3 | <b>132650</b> |
| <b>.180</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.180</b> | 4.6 | <b>132651</b> |
| <b>.190</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.190</b> | 4.8 | <b>132652</b> |
| <b>.200</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.200</b> | 5.1 | <b>132653</b> |
| <b>.210</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.210</b> | 5.3 | <b>132654</b> |
| <b>.220</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.220</b> | 5.6 | <b>132655</b> |
| <b>.230</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.230</b> | 5.8 | <b>132656</b> |
| <b>.240</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.240</b> | 6.1 | <b>132657</b> |
| <b>.250</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.250</b> | 6.4 | <b>132658</b> |
| <b>.260</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.260</b> | 6.6 | <b>132659</b> |
| <b>.270</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.270</b> | 6.9 | <b>132660</b> |
| <b>.280</b> | <b>0.25</b> | 6.35 | <b>0.217</b> | 5.5 | <b>0.280</b> | 7.1 | <b>132661</b> |

EN We supply all kinds of TIGRALLOY saw tips. Just give us dimensions and quantities.  
 DE Wir liefern alle Arten von TIGRALLOY Sägezähne. Bitte geben Sie uns nur Abmessungen und Mengen an.  
 FR Nous fournissons toutes sortes de dents de scie TIGRALLOY. Il suffit de nous donner des dimensions et des quantités s'il vous plaît.  
 IT Forniamo tutti i tipi di TIGRALLOY inoltre ha visto punte. Per favore basta darci le dimensioni e le quantità soddisfanno.  
 ES Suministramos todo tipo de TIGRALLOY vieron consejos. Sólo nos dan las dimensiones y cantidades por favor.

EN TIGRALLOY - Saw tips  
 DE TIGRALLOY - Sägezähne  
 FR TIGRALLOY - Dents de scie  
 IT TIGRALLOY - Dentelli per lame  
 ES TIGRALLOY - Dientes de sierra

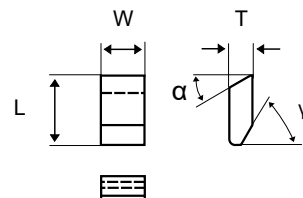


inch

## Rectangles

| L     |      | T     |      | W     |       | TL48   |
|-------|------|-------|------|-------|-------|--------|
| inch  | mm   | inch  | mm   | inch  | mm    |        |
| 0.18  | 4.57 | 0.090 | 2.29 | 0.125 | 3.18  | 141186 |
| 0.18  | 4.57 | 0.090 | 2.29 | 0.150 | 3.81  | 141187 |
| 0.205 | 5.21 | 0.105 | 2.67 | 0.165 | 4.19  | 141196 |
| 0.240 | 6.10 | 0.090 | 2.29 | 0.125 | 3.18  | 141176 |
| 0.240 | 6.10 | 0.120 | 3.05 | 0.150 | 3.81  | 132670 |
| 0.240 | 6.10 | 0.120 | 3.05 | 0.175 | 4.45  | 132672 |
| 0.240 | 6.10 | 0.120 | 3.05 | 0.187 | 4.75  | 132673 |
| 0.240 | 6.10 | 0.120 | 3.05 | 0.200 | 5.08  | 132674 |
| 0.300 | 7.62 | 0.120 | 3.05 | 0.150 | 3.81  | 141208 |
| 0.300 | 7.62 | 0.120 | 3.05 | 0.187 | 4.75  | 141212 |
| 0.300 | 7.62 | 0.125 | 3.18 | 0.150 | 3.81  | 132663 |
| 0.300 | 7.62 | 0.125 | 3.18 | 0.165 | 4.19  | 132665 |
| 0.300 | 7.62 | 0.125 | 3.18 | 0.175 | 4.45  | 132666 |
| 0.300 | 7.62 | 0.125 | 3.18 | 0.187 | 4.750 | 132667 |
| 0.300 | 7.62 | 0.125 | 3.18 | 0.200 | 5.08  | 132668 |
| 0.300 | 7.62 | 0.150 | 3.81 | 0.150 | 3.81  | 141201 |
| 0.300 | 7.62 | 0.150 | 3.81 | 0.165 | 4.19  | 141203 |
| 0.300 | 7.62 | 0.150 | 3.81 | 0.225 | 5.72  | 141207 |
| 0.300 | 7.62 | 0.150 | 3.81 | 0.250 | 6.35  | 141586 |

EN TIGRALLOY - Saw tips  
 DE TIGRALLOY - Sägezähne  
 FR TIGRALLOY - Dents de scie  
 IT TIGRALLOY - Dentelli per lame  
 ES TIGRALLOY - Dientes de sierra



## inch

| CWF  | L    |      | T     |     | W/Kerf |      | TL48   |
|------|------|------|-------|-----|--------|------|--------|
|      | inch | mm   | inch  | mm  | inch   | mm   |        |
| .100 | 0.5  | 12.7 | 0.125 | 3.2 | 0.100  | 2.5  | 137175 |
| .110 | 0.5  | 12.7 | 0.125 | 3.2 | 0.110  | 2.8  | 137176 |
| .120 | 0.5  | 12.7 | 0.125 | 3.2 | 0.120  | 3.1  | 135859 |
| .130 | 0.5  | 12.7 | 0.125 | 3.2 | 0.130  | 3.3  | 135860 |
| .140 | 0.5  | 12.7 | 0.125 | 3.2 | 0.140  | 3.6  | 135861 |
| .150 | 0.5  | 12.7 | 0.125 | 3.2 | 0.150  | 3.8  | 135862 |
| .160 | 0.5  | 12.7 | 0.125 | 3.2 | 0.160  | 4.1  | 137177 |
| .165 | 0.5  | 12.7 | 0.125 | 3.2 | 0.165  | 4.2  | 135863 |
| .170 | 0.5  | 12.7 | 0.125 | 3.2 | 0.170  | 4.3  | 135864 |
| .180 | 0.5  | 12.7 | 0.125 | 3.2 | 0.180  | 4.6  | 137178 |
| .190 | 0.5  | 12.7 | 0.125 | 3.2 | 0.190  | 4.8  | 137179 |
| .200 | 0.5  | 12.7 | 0.125 | 3.2 | 0.200  | 5.1  | 137180 |
| .210 | 0.5  | 12.7 | 0.125 | 3.2 | 0.210  | 5.3  | 137181 |
| .220 | 0.5  | 12.7 | 0.125 | 3.2 | 0.220  | 5.6  | 137182 |
| .230 | 0.5  | 12.7 | 0.125 | 3.2 | 0.230  | 5.8  | 137183 |
| .240 | 0.5  | 12.7 | 0.125 | 3.2 | 0.240  | 6.1  | 137184 |
| .250 | 0.5  | 12.7 | 0.125 | 3.2 | 0.250  | 6.4  | 137185 |
| .437 | 0.5  | 12.7 | 0.125 | 3.2 | 0.437  | 11.1 | 139104 |
| .500 | 0.5  | 12.7 | 0.125 | 3.2 | 0.500  | 12.7 | 139105 |

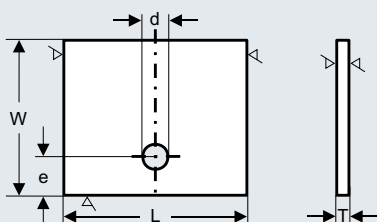
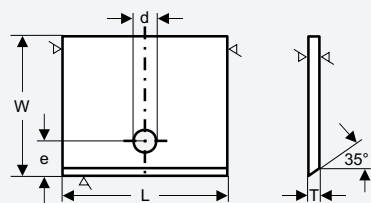
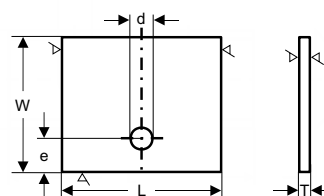
## metric

| 8.5 x 2.5 | L<br>mm | T<br>mm | W/Kerf<br>mm | TL48   |
|-----------|---------|---------|--------------|--------|
|           | 8.5     | 2.5     | 2.4          | 137420 |
|           | 8.5     | 2.5     | 2.6          | 138684 |
|           | 8.5     | 2.5     | 2.8          | 137602 |
|           | 8.5     | 2.5     | 3.0          | 138688 |
|           | 8.5     | 2.5     | 3.2          | 138707 |
|           | 8.5     | 2.5     | 3.4          | 138709 |

| 11 x 4 | L<br>mm | T<br>mm | W/Kerf<br>mm | TL48   |
|--------|---------|---------|--------------|--------|
|        | 11.0    | 4.0     | 4.0          | 137197 |
|        | 11.0    | 4.0     | 4.5          | 137198 |
|        | 11.0    | 4.0     | 5.0          | 136535 |
|        | 11.0    | 4.0     | 5.5          | 137199 |
|        | 11.0    | 4.0     | 6.0          | 137200 |
|        | 11.0    | 4.0     | 6.5          | 137201 |

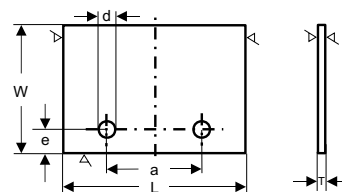
EN We supply all kinds of TIGRALLOY saw tips. Just give us dimensions and quantities.  
 DE Wir liefern alle Arten von TIGRALLOY Sägezähne. Bitte geben Sie uns nur Abmessungen und Mengen an.  
 FR Nous fournissons toutes sortes de dents de scie TIGRALLOY. Il suffit de nous donner des dimensions et des quantités s'il vous plaît.  
 IT Forniamo tutti i tipi di TIGRALLOY inoltre ha visto punte. Per favore basta darci le dimensioni e le quantità soddisfanno.  
 ES Suministramos todo tipo de TIGRALLOY vieron consejos. Sólo nos dan las dimensiones y cantidades por favor.

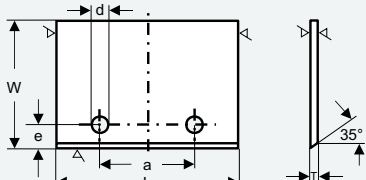
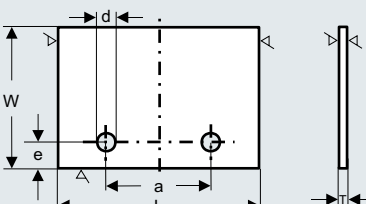
EN TIGRALLOY - Blanks for profiling  
 DE TIGRALLOY - Blanketts zum Profilieren  
 FR TIGRALLOY - Plaquettes à profiler  
 IT TIGRALLOY - Placchette da profilare  
 ES TIGRALLOY - Placas para perfilar



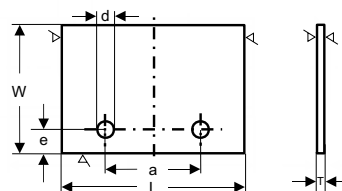
|  | L    | W    | T   | d   |  | e   | TL60   |
|--|------|------|-----|-----|--|-----|--------|
|  | mm   | mm   | mm  | mm  |  | mm  |        |
|  | 15.0 | 20.4 | 2.0 | 4.1 |  | 6.3 | 050254 |
|  | 15.0 | 25.4 | 2.0 | 4.1 |  | 6.3 | 062363 |
|  | 15.0 | 30.4 | 2.0 | 4.1 |  | 6.3 | 050432 |
|  | 20.0 | 20.4 | 2.0 | 4.1 |  | 6.3 | 050433 |
|  | 20.0 | 25.4 | 2.0 | 4.1 |  | 6.3 | 050434 |
|  | 20.0 | 30.4 | 2.0 | 4.1 |  | 6.3 | 050435 |
|  | 25.0 | 20.4 | 2.0 | 4.1 |  | 6.3 | 061898 |
|  | 25.0 | 25.4 | 2.0 | 4.1 |  | 6.3 | 050437 |
|  | 25.0 | 30.4 | 2.0 | 4.1 |  | 6.3 | 050438 |
|  | 30.0 | 25.4 | 2.0 | 4.1 |  | 6.3 | 062030 |
|  | 30.0 | 30.4 | 2.0 | 4.1 |  | 6.3 | 061982 |
|  | 30.0 | 35.4 | 2.0 | 4.1 |  | 6.3 | 062039 |
|  | 35.0 | 30.4 | 2.0 | 4.1 |  | 6.3 | 061960 |
|  | 35.0 | 35.4 | 2.0 | 4.1 |  | 6.3 | 050443 |
|  | 20.0 | 20.4 | 2.0 | 4.5 |  | 6.5 | 050255 |
|  | 20.0 | 25.4 | 2.0 | 4.5 |  | 6.5 | 050444 |
|  | 20.0 | 30.4 | 2.0 | 4.5 |  | 6.5 | 062217 |
|  | 25.0 | 25.4 | 2.0 | 4.5 |  | 6.5 | 050446 |
|  | 25.0 | 30.4 | 2.0 | 4.5 |  | 6.5 | 050447 |
|  | 30.0 | 30.4 | 2.0 | 4.5 |  | 6.5 | 050448 |

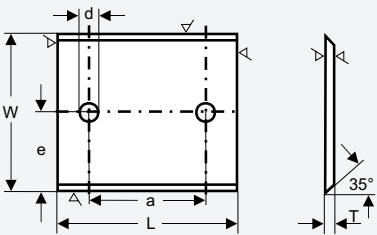
EN TIGRALLOY - Blanks for profiling  
 DE TIGRALLOY - Blanketts zum Profilieren  
 FR TIGRALLOY - Plaquettes à profiler  
 IT TIGRALLOY - Placchette da profilare  
 ES TIGRALLOY - Placas para perfilar



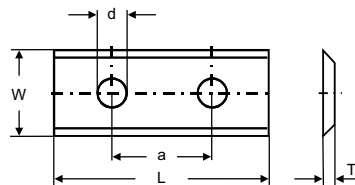
|                                                                                     | L<br>mm | W<br>mm | T<br>mm | d<br>mm | a<br>mm | e<br>mm | TL60   |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|--------|
|    | 30.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.3     | 050256 |
|                                                                                     | 30.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.3     | 062258 |
|                                                                                     | 30.0    | 35.4    | 2.0     | 4.1     | 14.0    | 6.3     | 062101 |
|                                                                                     | 40.0    | 25.4    | 2.0     | 4.1     | 26.0    | 5.5     | 062124 |
|                                                                                     | 40.0    | 30.0    | 2.0     | 4.1     | 20.0    | 5.5     | 046483 |
|                                                                                     | 40.0    | 35.0    | 2.0     | 4.1     | 26.0    | 5.5     | 046485 |
|                                                                                     | 40.0    | 35.4    | 2.0     | 4.1     | 26.0    | 6.0     | 062075 |
|                                                                                     | 40.0    | 35.4    | 2.0     | 4.1     | 26.0    | 6.3     | 050453 |
|                                                                                     | 40.0    | 40.4    | 2.0     | 4.1     | 26.0    | 6.0     | 062117 |
|                                                                                     | 40.0    | 45.4    | 2.0     | 4.1     | 26.0    | 6.0     | 062083 |
|                                                                                     | 50.0    | 20.0    | 2.0     | 4.1     | 26.0    | 5.5     | 050457 |
|                                                                                     | 50.0    | 25.4    | 2.0     | 4.1     | 26.0    | 5.5     | 062064 |
|                                                                                     | 60.0    | 25.4    | 2.0     | 4.1     | 26.0    | 5.5     | 050459 |
|                                                                                     | 60.0    | 35.4    | 2.0     | 4.1     | 44.0    | 6.0     | 062289 |
|                                                                                     | 60.0    | 40.0    | 2.0     | 4.1     | 44.0    | 6.0     | 046487 |
|                                                                                     | 30.0    | 30.4    | 3.0     | 4.1     | 14.0    | 6.5     | 105787 |
|                                                                                     | 30.0    | 35.4    | 3.0     | 4.1     | 14.0    | 6.5     | 106190 |
|                                                                                     | 40.0    | 30.0    | 3.0     | 4.1     | 20.0    | 5.5     | 046484 |
|  | 30.0    | 20.4    | 2.0     | 4.1     | 14.0    | 6.5     | 050257 |
|                                                                                     | 30.0    | 25.4    | 2.0     | 4.1     | 19.0    | 4.75    | 062063 |
|                                                                                     | 30.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.5     | 050464 |
|                                                                                     | 30.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.5     | 050465 |
|                                                                                     | 30.0    | 30.0    | 2.0     | 4.1     | 19.0    | 4.75    | 062278 |
|                                                                                     | 35.0    | 25.4    | 2.0     | 4.1     | 14.0    | 6.5     | 050467 |
|                                                                                     | 35.0    | 30.4    | 2.0     | 4.1     | 14.0    | 6.5     | 062274 |
|                                                                                     | 40.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.5     | 062105 |
|                                                                                     | 40.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.5     | 047452 |
|                                                                                     | 40.0    | 30.4    | 2.0     | 4.1     | 26.0    | 6.5     | 050470 |
|                                                                                     | 40.0    | 35.4    | 2.0     | 4.1     | 26.0    | 5.5     | 050471 |
|                                                                                     | 50.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.5     | 050472 |
|                                                                                     | 50.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.5     | 050473 |
|                                                                                     | 50.0    | 30.4    | 2.0     | 6.0     | 26.0    | 6.5     | 047593 |
|                                                                                     | 60.0    | 20.4    | 2.0     | 4.1     | 26.0    | 6.5     | 050474 |
|                                                                                     | 60.0    | 25.4    | 2.0     | 4.1     | 26.0    | 6.5     | 050475 |
|                                                                                     | 60.0    | 30.4    | 2.0     | 4.1     | 26.0    | 6.5     | 050476 |

EN TIGRALLOY - Blanks for profiling  
 DE TIGRALLOY - Blanketts zum Profilieren  
 FR TIGRALLOY - Plaquettes à profiler  
 IT TIGRALLOY - Placchette da profilare  
 ES TIGRALLOY - Placas para perfilar

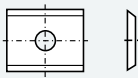
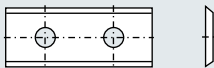
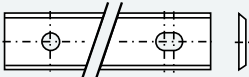


|                                                                                   | L    | W    | T   | d   | a    |  | TL60   |
|-----------------------------------------------------------------------------------|------|------|-----|-----|------|--|--------|
|                                                                                   | mm   | mm   | mm  | mm  | mm   |  |        |
|  | 40.0 | 25.0 | 2.0 | 4.1 | 20.0 |  | 050258 |
|                                                                                   | 40.0 | 30.0 | 2.0 | 3.5 | 20.0 |  | 050477 |
|                                                                                   | 40.0 | 30.0 | 2.0 | 4.1 | 20.0 |  | 050478 |
|                                                                                   | 40.0 | 35.0 | 2.0 | 4.1 | 26.0 |  | 047372 |
|                                                                                   | 40.0 | 40.0 | 2.0 | 3.5 | 26.0 |  | 050479 |
|                                                                                   | 45.0 | 35.0 | 2.0 | 4.1 | 26.0 |  | 046971 |
|                                                                                   | 50.0 | 25.0 | 2.0 | 4.1 | 26.0 |  | 050481 |
|                                                                                   | 50.0 | 45.0 | 2.0 | 4.1 | 34.0 |  | 050482 |
|                                                                                   | 60.0 | 35.0 | 2.0 | 4.1 | 26.0 |  | 046520 |
|                                                                                   | 60.0 | 35.0 | 2.0 | 4.1 | 44.0 |  | 047030 |

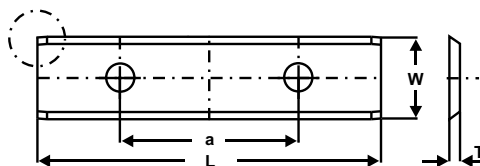
EN TIGRALLOY - Indexable knives  
 DE TIGRALLOY - Wendeschneidplatten  
 FR TIGRALLOY - Plaquettes réversibles  
 IT TIGRALLOY - Coltelli reversibili  
 ES TIGRALLOY - Cuchillas reversibles



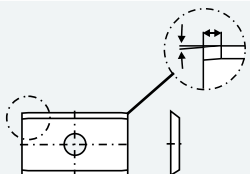
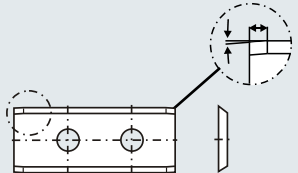
35° + 45°

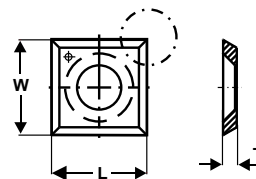
|                                                                                    | L<br>mm | W<br>mm | T<br>mm | a<br>mm |     | TL60   |
|------------------------------------------------------------------------------------|---------|---------|---------|---------|-----|--------|
|   | 20.0    | 12.0    | 1.5     |         | 35° | 131213 |
|   | 30.0    | 12.0    | 1.5     | 14.0    | 35° | 131229 |
|                                                                                    | 50.0    | 12.0    | 1.5     | 26.0    | 35° | 131238 |
|                                                                                    | 50.0    | 12.0    | 1.5     | 26.0    | 45° | 135985 |
|                                                                                    | 60.0    | 12.0    | 1.5     | 26.0    | 35° | 131239 |
|                                                                                    | 60.0    | 12.0    | 1.5     | 26.0    | 45° | 136018 |
|  | 80.0    | 13.0    | 2.2     | 60.0    | 35° | 131242 |
|                                                                                    | 80.0    | 13.0    | 2.2     | 60.0    | 45° | 138569 |
|                                                                                    | 100.0   | 13.0    | 2.2     | 60.0    | 35° | 131246 |
|                                                                                    | 100.0   | 13.0    | 2.2     | 60.0    | 45° | 138572 |
|                                                                                    | 120.0   | 13.0    | 2.2     | 60.0    | 35° | 131248 |
|                                                                                    | 120.0   | 13.0    | 2.2     | 60.0    | 45° | 138575 |

EN TIGRALLOY - Indexable knives  
 DE TIGRALLOY - Wendeschneidplatten  
 FR TIGRALLOY - Plaquettes réversibles  
 IT TIGRALLOY - Coltelli reversibili  
 ES TIGRALLOY - Cuchillas reversibles

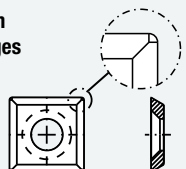
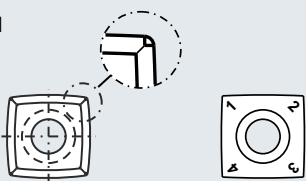


### For use in planer heads

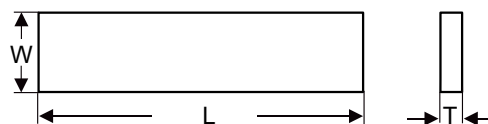
|                                                                                   | L<br>mm | W<br>mm | T<br>mm |     | TL60   |
|-----------------------------------------------------------------------------------|---------|---------|---------|-----|--------|
|  | 20.0    | 12.0    | 1.5     | 35° | 138286 |
|  | 30.0    | 12.0    | 1.5     | 35° | 138174 |



### For use in planer heads

|                                                                                                                                   | L<br>mm | W<br>mm | T<br>mm |       | TL60   |
|-----------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|-------|--------|
| Straight with rounded edges<br>                | 15.0    | 15.0    | 2.5     | 30°   | 138360 |
|                                                                                                                                   | 15.0    | 15.0    | 2.5     | 37°   | 138683 |
| Cutting edge with radius and rounded edges<br> | 15.0    | 15.0    | 2.5     | R=50  | 138686 |
|                                                                                                                                   | 15.0    | 15.0    | 2.5     | R=150 | 132918 |

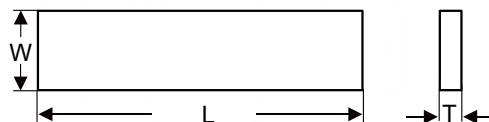
EN TIGRALLOY - Strips for brazed cutters  
 DE TIGRALLOY - Fräserplatten zum Löten  
 FR TIGRALLOY - Plaquettes à braser  
 IT TIGRALLOY - Placchette per frese saldobrasate  
 ES TIGRALLOY - Placas para equipar fresas



### Strips metric

| L<br>mm | W<br>mm | T<br>mm | TL60   |
|---------|---------|---------|--------|
| 165     | 10      | 3       | 050137 |
| 165     | 12      | 3       | 050138 |
| 165     | 15      | 3       | 050185 |
| 165     | 16      | 3       | 050186 |
| 165     | 18      | 3       | 050187 |
| 165     | 20      | 3       | 050188 |
| 165     | 25      | 3       | 050189 |
| 165     | 10      | 4       | 050190 |
| 165     | 12      | 4       | 050191 |
| 165     | 15      | 4       | 050192 |
| 165     | 16      | 4       | 050193 |
| 165     | 18      | 4       | 050194 |
| 165     | 20      | 4       | 050195 |
| 165     | 25      | 4       | 050196 |
| 165     | 30      | 4       | 050197 |
| 165     | 10      | 5       | 050199 |
| 165     | 12      | 5       | 050200 |
| 165     | 15      | 5       | 050201 |
| 165     | 16      | 5       | 050202 |
| 165     | 18      | 5       | 050203 |
| 165     | 20      | 5       | 050204 |
| 165     | 25      | 5       | 050205 |
| 165     | 30      | 5       | 050206 |
| 165     | 35      | 5       | 050207 |
| 165     | 40      | 5       | 050209 |
| 165     | 20      | 8       | 102187 |
| 165     | 25      | 8       | 119946 |
| 165     | 30      | 8       | 138563 |
| 165     | 35      | 8       | 102188 |

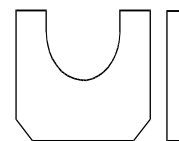
EN TIGRALLOY - Strips for brazed cutters  
 DE TIGRALLOY - Fräserplatten zum Löten  
 FR TIGRALLOY - Plaquettes à braser  
 IT TIGRALLOY - Placchette per frese saldobrasate  
 ES TIGRALLOY - Placas para equipar fresas



### STBs inch

| L    |       | W     |       | T    |      | TL60   |
|------|-------|-------|-------|------|------|--------|
| inch | mm    | inch  | mm    | inch | mm   |        |
| 6    | 152,4 | 3/8   | 9,5   | 3/32 | 2,38 | 046284 |
| 6    | 152,4 | 1/2   | 12,7  | 3/32 | 2,38 | 046290 |
| 6    | 152,4 | 5/8   | 15,88 | 3/32 | 2,38 | 046291 |
| 6    | 152,4 | 3/4   | 19,0  | 3/32 | 2,38 | 046292 |
| 6    | 152,4 | 7/8   | 22,23 | 3/32 | 2,38 | 046293 |
| 6    | 152,4 | 1     | 25,4  | 3/32 | 2,38 | 046294 |
| 6    | 152,4 | 1 1/8 | 28,58 | 3/32 | 2,38 | 046352 |
| 6    | 152,4 | 1 1/4 | 31,75 | 3/32 | 2,38 | 046353 |
| 6    | 152,4 | 1 1/2 | 38,1  | 3/32 | 2,38 | 046354 |
| 6    | 152,4 | 3/8   | 9,53  | 1/8  | 3,18 | 046295 |
| 6    | 152,4 | 1/2   | 12,7  | 1/8  | 3,18 | 046296 |
| 6    | 152,4 | 5/8   | 15,88 | 1/8  | 3,18 | 046297 |
| 6    | 152,4 | 3/4   | 19,05 | 1/8  | 3,18 | 046298 |
| 6    | 152,4 | 7/8   | 22,23 | 1/8  | 3,18 | 046299 |
| 6    | 152,4 | 1     | 25,4  | 1/8  | 3,18 | 046300 |
| 6    | 152,4 | 1 1/8 | 28,58 | 1/8  | 3,18 | 046454 |
| 6    | 152,4 | 1 1/4 | 31,75 | 1/8  | 3,18 | 046301 |
| 6    | 152,4 | 1 1/2 | 38,1  | 1/8  | 3,18 | 046302 |
| 6    | 152,4 | 3/8   | 9,53  | 5/32 | 3,97 | 046459 |
| 6    | 152,4 | 1/2   | 12,7  | 5/32 | 3,97 | 046460 |
| 6    | 152,4 | 5/8   | 15,88 | 5/32 | 3,97 | 046461 |
| 6    | 152,4 | 3/4   | 19,05 | 5/32 | 3,97 | 046462 |
| 6    | 152,4 | 7/8   | 22,23 | 5/32 | 3,97 | 046463 |
| 6    | 152,4 | 1     | 25,4  | 5/32 | 3,97 | 046464 |
| 6    | 152,4 | 1 1/8 | 28,58 | 5/32 | 3,97 | 046465 |
| 6    | 152,4 | 1 1/4 | 31,75 | 5/32 | 3,97 | 046466 |
| 6    | 152,4 | 1 1/2 | 38,1  | 5/32 | 3,97 | 046467 |
| 6    | 152,4 | 3/8   | 152,4 | 3/16 | 4,76 | 046469 |
| 6    | 152,4 | 1/2   | 152,4 | 3/16 | 4,76 | 046470 |
| 6    | 152,4 | 5/8   | 152,4 | 3/16 | 4,76 | 046471 |
| 6    | 152,4 | 3/4   | 152,4 | 3/16 | 4,76 | 046472 |
| 6    | 152,4 | 7/8   | 152,4 | 3/16 | 4,76 | 046473 |
| 6    | 152,4 | 1     | 152,4 | 3/16 | 4,76 | 050603 |
| 6    | 152,4 | 1 1/8 | 152,4 | 3/16 | 4,76 | 046474 |
| 6    | 152,4 | 1 1/4 | 152,4 | 3/16 | 4,76 | 046475 |
| 6    | 152,4 | 1 1/2 | 152,4 | 3/16 | 4,76 | 046476 |

EN TIGRALLOY - Preformed tips for brazed cutters  
 DE TIGRALLOY - Formplatten zum Löten  
 FR TIGRALLOY - Plaquettes à braser  
 IT TIGRALLOY - Placchette per frese saldobrasate  
 ES TIGRALLOY - Placas para herramientas soldadas



EN Using preformed tips for your brazed cutters you will save the expensive roughing time and grinding wheel cost. TIGRA can supply almost any kind of preformed tip according to the customer's drawing or DXF file.

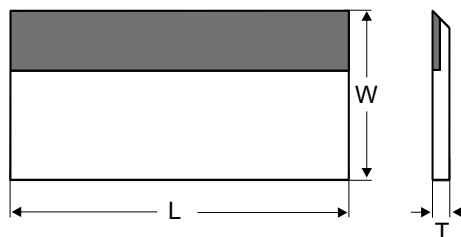
DE Mit Formteilen für Ihre gelöteten Fräser sparen Sie teure Schruppzeit und Schleifscheibekosten. TIGRA kann fast jede Art von Formteilen nach Zeichnung des Kunden oder einer DXF-Datei liefern.

FR En utilisant des plaquettes à braser préformées pour vos coupeurs brasés, vous économiserez le coût coûteux et le coût de la meule. TIGRA peut fournir presque n'importe quel type de plaquettes à braser préformées selon le dessin du client ou le fichier DXF.

IT Usando le punte preformati per le frese brasate vi farà risparmiare il tempo di sgrossatura costoso e rettifica dei costi ruota. TIGRA in grado di fornire qualsiasi tipo di punta preformata secondo le dei customer disegno o file DXF.

ES Usando las puntas preformadas para sus cortadoras soldadas usted ahorrará el costoso tiempo de desbaste y el costo de la muela abrasiva. TIGRA puede suministrar casi cualquier tipo de punta preformada según el dibujo del cliente o el archivo DXF.

EN TIGRALLOY - Planer knives  
 DE TIGRALLOY - Hobelmesser  
 FR TIGRALLOY - Couteaux à raboter  
 IT TIGRALLOY - Coltelli da pialla  
 ES TIGRALLOY - Cuchillas para cepillar

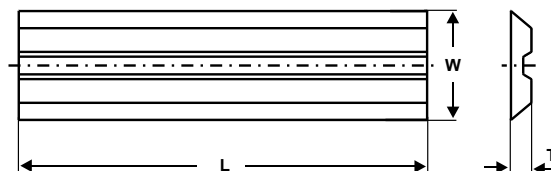


EN TIGRALLOY-tipped thin planer knives  
 DE TIGRALLOY-bestückte Streifenhobelmesser  
 FR Couteaux à mise rapportée TIGRALLOY  
 IT Coltelli da pialla con TIGRALLOY riportato  
 ES Cuchillas con TIGRALLOY

| L    | T   | W = 25 mm | W = 30 mm | W = 35 mm |
|------|-----|-----------|-----------|-----------|
| mm   | mm  |           |           |           |
| 60   | 3.0 | 138564    | 138647    | 139049    |
| 80   | 3.0 | 138566    | 138655    | 139050    |
| 100  | 3.0 | 138567    | 138658    | 139053    |
| 110  | 3.0 | 138568    | 139040    | 139054    |
| 120  | 3.0 | 138571    | 139041    | 139055    |
| 130  | 3.0 | 138573    | 139042    | 139056    |
| 150  | 3.0 | 138579    | 139043    | 139057    |
| 160  | 3.0 | 138581    | 139044    | 139058    |
| 170  | 3.0 | 138611    | 139045    | 139059    |
| 180  | 3.0 | 138613    | 139046    | 139060    |
| 200  | 3.0 | 138616    | 139047    | 139061    |
| 210  | 3.0 | 138619    | 139048    | 139062    |
| 230  | 3.0 | 138677    | 103033    | 139106    |
| 240  | 3.0 | 138679    | 138703    | 139107    |
| 250  | 3.0 | 138681    | 138704    | 139108    |
| 260  | 3.0 | 138682    | 138705    | 139109    |
| 270  | 3.0 | 138691    | 138706    | 139110    |
| 300  | 3.0 | 138432    | 138428    | 138431    |
| 310* | 3.0 | 138692    | 138708    | 139111    |
| 330  | 3.0 | 138693    | 138710    | 139112    |
| 350  | 3.0 | 138694    | 138711    | 139113    |
| 400  | 3.0 | 138695    | 138712    | 139114    |
| 410  | 3.0 | 138697    | 138713    | 139115    |
| 500  | 3.0 | 138699    | 138714    | 139116    |
| 510  | 3.0 | 138701    | 138715    | 139117    |
| 520  | 3.0 | 138739    | 139076    | 139089    |
| 530  | 3.0 | 139063    | 139077    | 139090    |
| 600  | 3.0 | 139064    | 139078    | 139091    |
| 610  | 3.0 | 139065    | 139080    | 139092    |
| 630  | 3.0 | 139066    | 139081    | 139093    |
| 640  | 3.0 | 139067    | 139082    | 139094    |
| 680  | 3.0 | 139070    | 139083    | 139095    |
| 710  | 3.0 | 139071    | 139084    | 139096    |
| 810  | 3.0 | 139072    | 139085    | 139097    |
| 820  | 3.0 | 139073    | 139086    | 139098    |
| 1010 | 3.0 | 139074    | 139087    | 139099    |
| 1050 | 3.0 | 139075    | 139088    | 139100    |

\* EN If longer than 300mm, TIGRALLOY is brazed in segments.  
 \* DE Wenn länger als 300mm ist, wird TIGRALLOY in Segmenten gelötet.  
 \* FR Si plus long de 300 mm, TIGRALLOY est brasé en segments.  
 \* IT Se più lungo di 300 mm, TIGRALLOY è brasato in segmenti.  
 \* ES Si es más largo de 300mm, TIGRALLOY está soldado en segmentos.

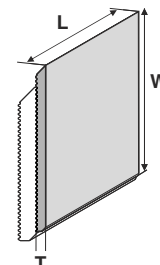
- EN TIGRALLOY - System Planer knives  
 DE TIGRALLOY - Systemhobelmesser  
 FR TIGRALLOY - Couteaux à raboter pour système  
 IT TIGRALLOY - Coltelli da pialla per sistema  
 ES TIGRALLOY - Cuchillas para cepillar para sistema



For System Centrolock\*

| L<br>mm | W<br>mm | T<br>mm | TL60   |
|---------|---------|---------|--------|
| 100.0   | 16.0    | 3.0     | 138644 |
| 130.0   | 16.0    | 3.0     | 138598 |
| 150.0   | 16.0    | 3.0     | 138596 |
| 170.0   | 16.0    | 3.0     | 138594 |
| 230.0   | 16.0    | 3.0     | 138587 |
| 240.0   | 16.0    | 3.0     | 138578 |

\* EN For use in Centrolock-cutterheads only.  
 \* DE Nur zur Verwendung in Centrolock-Messerköpfen.  
 \* FR Utilisation limitée aux porte outils de Centrolock.  
 \* IT Da usare solo su teste portacoltelli della Centrolock.  
 \* ES Sólo para empleo con portacuchillas de Centrolock.

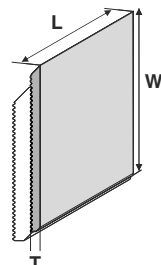


EN TIGRALLOY blank with corrugated steel backing plate  
 DE TIGRALLOY-Blankett mit rückenverzahnter Stahlstützplatte  
 FR Plaque TIGRALLOY avec porte-plaque denté en acier  
 IT Coltello in TIGRALLOY zigrinato con piastra di supporto zigrinata in acciaio  
 ES Cuchilla de TIGRALLOY con placa de soporte dentada por el lomo en el acero

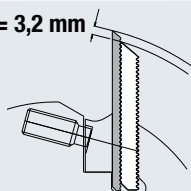
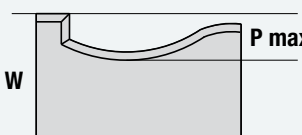
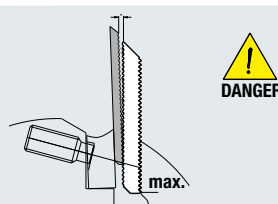
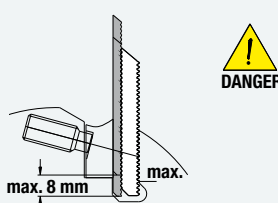
EN TIGRALLOY - SuperPac  
 DE TIGRALLOY - SuperPac  
 FR TIGRALLOY - SuperPac  
 IT TIGRALLOY - SuperPac  
 ES TIGRALLOY - SuperPac

| L<br>mm | W<br>mm | T<br>mm | TL60   | L<br>mm | W<br>mm | T<br>mm | Steel backing plate |
|---------|---------|---------|--------|---------|---------|---------|---------------------|
| 40      | 38      | 3.2     | 136986 | 40      | 35      | 7.1     | 024090              |
| 50      | 38      | 3.2     | 138592 | 50      | 35      | 7.1     | 043957              |
| 60      | 38      | 3.2     | 136987 | 60      | 35      | 7.1     | 024123              |
| 80      | 38      | 3.2     | 136988 | 80      | 35      | 7.1     | 024156              |
| 100     | 38      | 3.2     | 138600 | 100     | 35      | 7.1     | 023957              |
| 120     | 38      | 3.2     | 138601 | 120     | 35      | 7.1     | 023990              |
| 130     | 38      | 3.2     | 138602 | 130     | 35      | 7.1     | 024024              |
| 150     | 38      | 3.2     | 138603 | 150     | 35      | 7.1     | 024057              |
| 170     | 38      | 3.2     | 136985 | 170     | 35      | 7.1     | 045837              |
| 180     | 38      | 3.2     | 138604 | 180     | 35      | 7.1     | 113484              |
| 200     | 38      | 3.2     | 138605 | 200     | 35      | 7.1     | 113485              |
| 210     | 38      | 3.2     | 138607 | 210     | 35      | 7.1     | 113486              |
| 230     | 38      | 3.2     | 138608 | 230     | 35      | 7.1     | 113487              |
| 310     | 38      | 3.2     | 138609 | 310     | 35      | 7.1     | 112229              |
| 40      | 50      | 3.2     | 136989 | 40      | 47      | 7.1     | 024101              |
| 50      | 50      | 3.2     | 138612 | 50      | 47      | 7.1     | 043958              |
| 60      | 50      | 3.2     | 136990 | 60      | 47      | 7.1     | 024134              |
| 80      | 50      | 3.2     | 136991 | 80      | 47      | 7.1     | 024167              |
| 100     | 50      | 3.2     | 138615 | 100     | 47      | 7.1     | 023968              |
| 120     | 50      | 3.2     | 138618 | 120     | 47      | 7.1     | 024001              |
| 130     | 50      | 3.2     | 138620 | 130     | 47      | 7.1     | 024035              |
| 150     | 50      | 3.2     | 138621 | 150     | 47      | 7.1     | 024068              |
| 170     | 50      | 3.2     | 136984 | 170     | 47      | 7.1     | 045838              |
| 180     | 50      | 3.2     | 138624 | 180     | 47      | 7.1     | 113488              |
| 200     | 50      | 3.2     | 138625 | 200     | 47      | 7.1     | 113489              |
| 210     | 50      | 3.2     | 138627 | 210     | 47      | 7.1     | 113490              |
| 230     | 50      | 3.2     | 138629 | 230     | 47      | 7.1     | 113491              |
| 310     | 50      | 3.2     | 138631 | 310     | 47      | 7.1     | 112230              |
| 40      | 60      | 3.2     | 136992 | 40      | 57      | 7.1     | 024112              |
| 50      | 60      | 3.2     | 138633 | 50      | 57      | 7.1     | 043959              |
| 60      | 60      | 3.2     | 136993 | 60      | 57      | 7.1     | 024145              |
| 80      | 60      | 3.2     | 136994 | 80      | 57      | 7.1     | 024178              |
| 100     | 60      | 3.2     | 138635 | 100     | 57      | 7.1     | 023979              |
| 120     | 60      | 3.2     | 138637 | 120     | 57      | 7.1     | 024012              |
| 130     | 60      | 3.2     | 138638 | 130     | 57      | 7.1     | 024046              |
| 150     | 60      | 3.2     | 138640 | 150     | 57      | 7.1     | 024079              |
| 170     | 60      | 3.2     | 135349 | 170     | 57      | 7.1     | 045839              |

EN TIGRALLOY - SuperPac  
DE TIGRALLOY - SuperPac  
FR TIGRALLOY - SuperPac  
IT TIGRALLOY - SuperPac  
ES TIGRALLOY - SuperPac

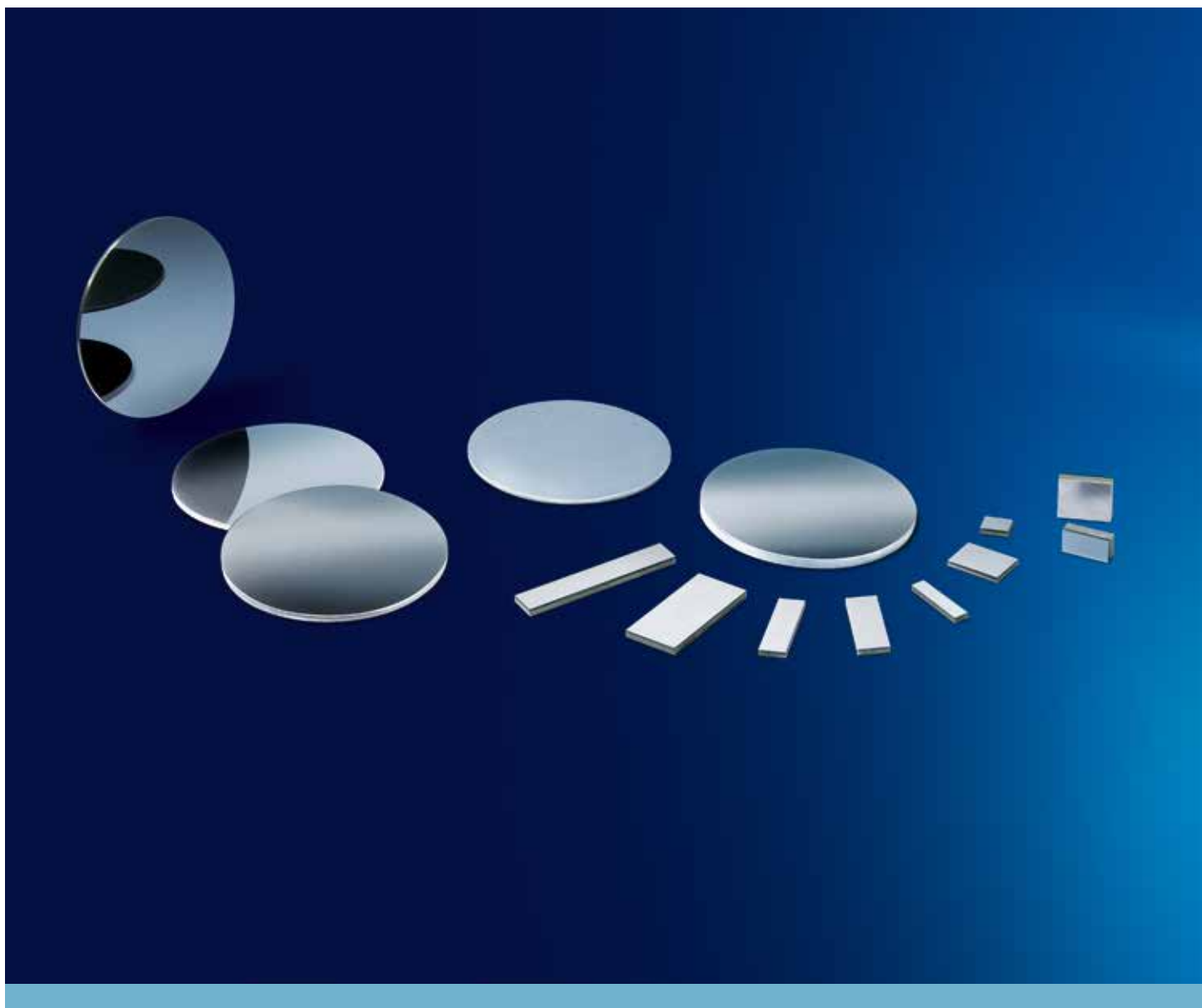


EN TIGRALLOY blank with corrugated steel backing plate  
DE TIGRALLOY-Blankett mit rückenverzahnter Stahlstützplatte  
FR Plaquette TIGRALLOY avec porte-plaquette denté en acier  
IT Coltello in TIGRALLOY zigrinato con piastra di supporto zigrinata in acciaio  
ES Cuchilla de TIGRALLOY con placa de soporte dentada por el lomo en el acero

|                                                                                                     | EN Security advices<br>DE Sicherheitshinweise<br>FR Conseils de sécurité                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | IT Consigli di sicurezza<br>ES Consejo de seguridad                                                                                                        |         |             |    |   |    |    |    |    |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|----|---|----|----|----|----|
| <p>s = 3,2 mm</p>  | <p>EN Cutting Edge Projection<br/>Between carbide blank and backing plate s=3,2 mm (critical dimension when regrinding).</p> <p>DE Schneidenüberstand<br/>Schneidenüberstand von Hartmetallplatte zu Stützplatte s=3,2 mm (beim Nachschärfen zu beachten).</p> <p>FR Saillie des plaquettes<br/>Les plaquettes carbure dépassent le support de 3,2 mm (à prendre en compte lors du réaffûtage).</p> <p>IT Sporgenza del tagliente<br/>Sporgenza del tagliente rispetto alla piastrina di supporto s= 3,2 mm (prestare attenzione in caso di riaffilatura).</p> <p>ES Exceso de corte<br/>El exceso de corte desde la placa de metal duro hacia la placa de soporte es e=3,2 mm (obsérvelo cuando se reafila).</p> |                                                                                                                                                            |         |             |    |   |    |    |    |    |
|                    | <p>EN Maximum Profile Depth</p> <p>DE Maximale Profiltiefe</p> <p>FR Profondeur de profil maximum</p> <p>IT Profondità massima della sagomatura</p> <p>ES Profundidad máxima de perfil</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <table><tr><th>W<br/>mm</th><th>P max<br/>mm</th></tr><tr><td>38</td><td>-</td></tr><tr><td>50</td><td>12</td></tr><tr><td>60</td><td>23</td></tr></table> | W<br>mm | P max<br>mm | 38 | - | 50 | 12 | 60 | 23 |
| W<br>mm                                                                                             | P max<br>mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                            |         |             |    |   |    |    |    |    |
| 38                                                                                                  | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |         |             |    |   |    |    |    |    |
| 50                                                                                                  | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                            |         |             |    |   |    |    |    |    |
| 60                                                                                                  | 23                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                            |         |             |    |   |    |    |    |    |
|                   | <p>EN Warning!<br/>Specifically positioning of blank and backing plate; be aware of the safety regulations!</p> <p>DE Warnung!<br/>Sitzgenauer Einbau von Blankett und Stützplatte; Sicherheitsbestimmungen beachten!</p> <p>FR Avertissement!<br/>Positionnement précis de plaque et porte-plaquette; observez les règles de sécurité!</p> <p>IT Attenzione!<br/>Esatto montaggio in sede del coltello e della piastrina di supporto; rispettare le norme di sicurezza!</p> <p>ES Aviso!<br/>Específicamente el posicionamiento de la placa en blanco y el apoyo, estar al tanto de las normas de seguridad!</p>                                                                                                 |                                                                                                                                                            |         |             |    |   |    |    |    |    |
|                  | <p>EN Warning!<br/>Maximum adjustment of blank = 8 mm</p> <p>DE Warnung!<br/>Maximale Verstellung des Blanketts = 8 mm</p> <p>FR Avertissement!<br/>Ajustement maximum de plaquette = 8 mm</p> <p>IT Attenzione!<br/>Regolazione massima della placchetta = 8 mm</p> <p>ES Aviso!<br/>El ajuste máximo del espacio en placa = 8 mm</p>                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                            |         |             |    |   |    |    |    |    |



TOOLS CUT BETTER WITH TIGRA





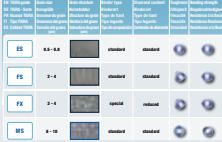
EN PCD - Blanks and segments  
DE PKD - Ronden und Segmente  
FR PCD - Rondelles et segments  
IT PCD - Dischi e settori  
ES PCD - Sectores y segmentos



TOOLS CUT BETTER WITH TIGRA

---

EN PCD - Blanks and segments  
 DE PKD - Ronden und Segmente  
 FR PCD - Rondelles et segments  
 IT PCD - Dischi e settori  
 ES PCD - Sectores y segmentos

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                          |                  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|    | <p>                             EN PCD-Grade chart<br/>                             DE PKD-Sortentabelle<br/>                             FR Tableau des nuances PCD<br/>                             IT PCD-Tabella dei tipi<br/>                             ES PCD-Tabla de calidades                         </p>                                                                    | <p>184 - 185</p> |
|    | <p>                             EN Standard and special PCD blanks<br/>                             DE Standard- und Spezial-PKD-Ronden<br/>                             FR Rondelles PCD standard et spéciales<br/>                             IT Dischi standard e speciali in PCD<br/>                             ES Rodajas PCD estándar y especiales                         </p> | <p>187- 188</p>  |
|    | <p>                             EN Sandwich PCD - half blanks<br/>                             DE Sandwich-PKD - Halbronden<br/>                             FR Demies rondelles sandwich PCD<br/>                             IT Mezzidischi in Sandwich PCD<br/>                             ES Semi-rodajas PCD en sandwich                         </p>                              | <p>189</p>       |
|  | <p>                             EN PCD segments<br/>                             DE PKD-Segmente<br/>                             FR Segments PCD<br/>                             IT Settori in PCD<br/>                             ES Segmentos PCD                         </p>                                                                                                      | <p>190 - 191</p> |

- EN PCD - Polycrystalline diamond - PCD grades and their applications  
 DE PKD - Polykristalliner Diamant - PKD-Sorten und ihre Anwendungen  
 FR PCD - Diamant policristallin - Les nuances de PCD et leurs applications  
 IT PCD - Diamante policristallino - I tipi di PCD e le loro applicazioni  
 ES PCD - Diamante policristalino - Calidades de PCD y sus aplicaciones

| EN TIGRA grade<br>DE TIGRA - Sorte<br>FR Nuance TIGRA<br>IT Tipo TIGRA<br>ES Calidad TIGRA | Grain size<br>Korngröße<br>Grosseur du grain<br>Groschezza del grano<br>Tamaño del grano (µm) | Grain structure<br>Kornstruktur<br>Structure du grain<br>Struttura del grano<br>Estructura de grano (µm) | Binder type<br>Binderart<br>Type de liant<br>Tipo legante<br>Tipo de composición | Diamond content<br>Diamantgehalt<br>Teneur en diamant<br>Contenuto di diamante<br>Contenido de diamante | Toughness<br>Zähigkeit<br>Ténacité<br>Tenacità<br>Tenacidad                           | Bending strength<br>Biegebruchfestigkeit<br>Résistance à la flexion<br>Resistenza flessionale<br>Resistencia a la flexión | Abrasion resistance<br>Verschleißfestigkeit<br>Résistance à l'abrasion<br>Resistenza all'abrasione<br>Resistencia a la abrasión |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>FS</b>                                                                                  | 2 - 4                                                                                         |                         | standard                                                                         | standard                                                                                                |    |                                        |                                              |
| <b>MS-W *</b>                                                                              | 8 - 10                                                                                        |                         | standard                                                                         | standard                                                                                                |    |                                        |                                              |
| <b>MS</b>                                                                                  | 8 - 10                                                                                        |                        | standard                                                                         | standard                                                                                                |   |                                       |                                             |
| <b>MX</b>                                                                                  | 8 - 10                                                                                        |                       | special                                                                          | reduced                                                                                                 |  |                                      |                                            |
| <b>MU+</b>                                                                                 | 2 - 4<br>+<br>8 - 10                                                                          |                       | ultrahard                                                                        | very high                                                                                               |  |                                      |                                            |
| <b>CS</b>                                                                                  | 20 - 35                                                                                       |                       | standard                                                                         | standard                                                                                                |  |                                      |                                            |
| <b>CU+</b>                                                                                 | 2 - 4<br>+<br>20 - 35                                                                         |                       | ultrahard                                                                        | very high                                                                                               |  |                                      |                                            |

- \* EN Special for woodworking  
 \* DE Speziell für die Holzbearbeitung  
 \* FR Spéciale pour le travail du bois  
 \* IT Speciale per la lavorazione del legno  
 \* ES Especial para el trabajo de la madera

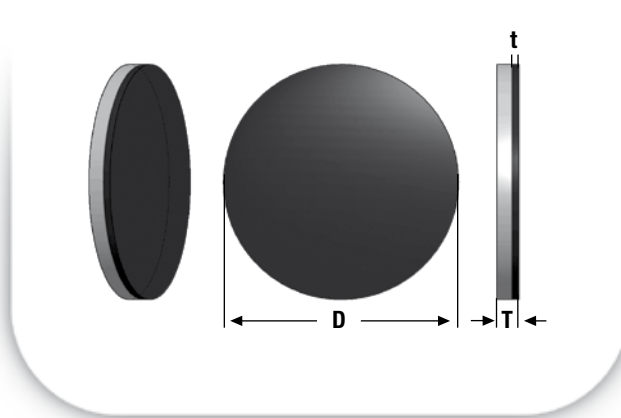
EN For technical data, please refer to page 7.  
 DE Die technischen Daten entnehmen Sie bitte der Seite 7.  
 FR Pour les données techniques, veuillez voir au page 7.

| EN Roughing<br>DE Schruppen<br>FR Dégrossissage<br>IT Sgrossatura<br>ES Desbaste | Semi-finishing<br>Semi-finishen<br>Semi-finissage<br>Semifinitura<br>Semi-acabado | Finishing<br>Finishen<br>Finissage<br>Finitura<br>Acabado | Super-finishing<br>Superfinishen<br>Super-finissage<br>Superfinitura<br>Super-acabado | AI<br><6% Si | AI<br>6-12% Si | AI<br>>12% Si | CFRP<br>GFRP | Wood-based boards<br>Platten auf Holzbasis<br>Panneaux sur base de bois<br>Pannelli a base di legno<br>Tableros de madera-base | Comment<br>Kommentar<br>Commentaire<br>Commento<br>Comentario                                                                                                                                  |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|----------------|---------------|--------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ○                                                                                | ✓                                                                                 | ✓                                                         | ✓                                                                                     | ✓            | ○              | ■             | ■            | ○                                                                                                                              | EN Universal use, small grain<br>DE Universeller Einsatz, kleines Korn<br>FR Utilisation universelle, petit grain<br>IT Uso universale, grano piccolo<br>ES Uso universal, grano pequeño       |
| ✓                                                                                | ✓                                                                                 | ✓                                                         | ○                                                                                     | ✓            | ✓              | ○             | ○            | ✓                                                                                                                              | EN Universal, economic, medium grain<br>DE Universal, wirtschaftl., mittl. Korn<br>FR Universel, écon., grain moyen<br>IT Universale, econ., grano medio<br>ES Universal, económ., grano medio |
| ✓                                                                                | ✓                                                                                 | ✓                                                         | ○                                                                                     | ✓            | ✓              | ○             | ○            | ✓                                                                                                                              | EN Universal use, medium grain<br>DE Universeller Einsatz, mittl. Korn<br>FR Utilisation universelle, grain moyen<br>IT Uso universale, grano medio<br>ES Uso universal, grano medio           |
| ✓                                                                                | ✓                                                                                 | ✓                                                         | ○                                                                                     | ✓            | ✓              | ○             | ○            | ■                                                                                                                              | EN Best for medium % Si-AI<br>DE Am besten für mittleren % Si-AI<br>FR Le mieux pour un moyen % Si-AI<br>IT Migliore per media % Si-AI<br>ES Mejor para medio % Si-AI                          |
| ✓                                                                                | ✓                                                                                 | ✓                                                         | ○                                                                                     | ✓            | ✓              | ✓             | ✓            | ✓                                                                                                                              | EN MDF, laminate, universal, CFRP<br>DE MDF, Laminat, universell, CFK<br>FR MDF, stratifié, universel, CFRP<br>IT MDF, laminato, universale, CFRP<br>ES MDF, laminado, universal, CFRP         |
| ✓                                                                                | ✓                                                                                 | ○                                                         | ■                                                                                     | ○            | ✓              | ✓             | ✓            | ✓                                                                                                                              | EN Universal use, coarse grain<br>DE Universeller Einsatz, grobes Korn<br>FR Utilisation universelle, gros grain<br>IT Uso universale, grano grosso<br>ES Uso universal, grano grueso          |
| ✓                                                                                | ✓                                                                                 | ○                                                         | ■                                                                                     | ○            | ✓              | ✓             | ✓            | ✓                                                                                                                              | EN Best for CFRP<br>DE Bestens für CFK<br>FR Le mieux pour CFRP<br>IT Migliore per CFRP<br>ES Lo mejor para CFRP                                                                               |

- ✓ best performance
- ✓ very good performance
- acceptable
- not suitable

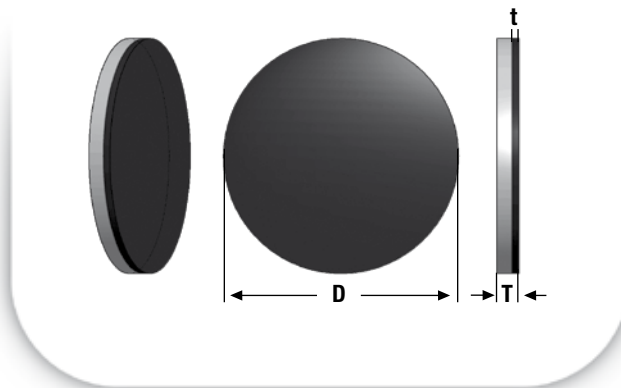
EN PCD - Further information  
 DE PKD - Weitere Informationen  
 FR PCD - Plus d'informations  
 IT PCD - Ulteriori informazioni  
 ES PCD - Más información

|                                                                                   | EN Further information<br>DE Weitere Informationen<br>FR Plus d'informations                                                                                                                                                                               | IT Ulteriori informazioni<br>ES Más información |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|  | <b>EN</b> For detailed technical information, please download from our homepage <a href="http://www.tigra.de">www.tigra.de</a> or ask for a printed copy of our technical guidebook "PCD for cutting tools".                                               |                                                 |
|                                                                                   | <b>DE</b> Detaillierte technische Informationen finden Sie auf unserer Homepage <a href="http://www.tigra.de">www.tigra.de</a> zum download oder fordern Sie ein gedrucktes Exemplar unseres technischen Ratgebers "PKD für Schneidwerkzeuge" an.          |                                                 |
|                                                                                   | <b>FR</b> Pour des informations techniques détaillées, s'il vous plaît télécharger à partir de notre page d'accueil <a href="http://www.tigra.de">www.tigra.de</a> ou demander une copie imprimée de notre guide technique "PCD pour les outils de coupe". |                                                 |
|                                                                                   | <b>IT</b> Potete scaricare le informazioni tecniche dettagliate dal nostro sito <a href="http://www.tigra.de">www.tigra.de</a> oppure richiedere una copia stampata della nostra guida tecnica "PCD per utensili da taglio".                               |                                                 |
|                                                                                   | <b>ES</b> Para obtener información técnica detallada, por favor descargue de nuestra página principal <a href="http://www.tigra.de">www.tigra.de</a> o solicitar una copia impresa de nuestro guía técnica "PCD para herramientas de corte".               |                                                 |



EN Standard PCD blanks  
 DE Standard-PKD-Ronden  
 FR Rondelles PCD standards  
 IT Dischi standard in PCD  
 ES Rodajas PCD estándar

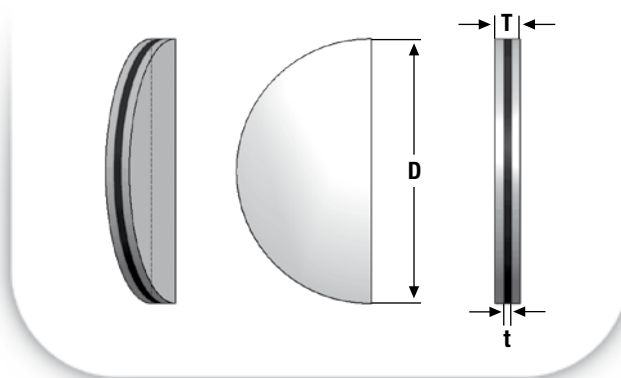
| EN Grade<br>DE Sorte<br>FR Nuance<br>IT Tipo<br>ES Calidad | Properties and dimensions (mm) |                   |           |         |         | Ø 62 mm<br>Art.No. |
|------------------------------------------------------------|--------------------------------|-------------------|-----------|---------|---------|--------------------|
|                                                            | Grain size<br>µm               |                   | Binder    | T<br>mm | t<br>mm |                    |
| FS                                                         | Fine                           | 2-4               | Standard  | 1.6     | 0.5     | 141043             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 141044             |
|                                                            |                                |                   |           | 3.2     | 0.5     | 141045             |
| MS-W                                                       | Medium                         | 8-10              | Standard  | 1.6     | 0.5     | 142725             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 142727             |
| MS                                                         | Medium                         | 8-10              | Standard  | 1.6     | 0.5     | 139351             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 139352             |
|                                                            |                                |                   |           | 3.2     | 0.5     | 141049             |
| MX                                                         | Medium                         | 8-10              | Special   | 1.6     | 0.5     | 141050             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 141051             |
|                                                            |                                |                   |           | 3.2     | 0.5     | 141052             |
| MU+                                                        | Mixed                          | 2-4<br>+<br>8-10  | Ultrahard | 1.6     | 0.5     | 139353             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 139354             |
|                                                            |                                |                   |           | 3.2     | 0.5     | 141053             |
| CS                                                         | Coarse                         | 20-35             | Standard  | 1.6     | 0.5     | 141054             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 141055             |
|                                                            |                                |                   |           | 3.2     | 0.5     | 141056             |
| CU+                                                        | Mixed                          | 2-4<br>+<br>20-35 | Ultrahard | 1.6     | 0.5     | 141061             |
|                                                            |                                |                   |           | 2.0     | 0.5     | 141062             |
|                                                            |                                |                   |           | 3.2     | 0.5     | 141063             |



EN Special PCD blanks  
 DE Spezial-PKD-Ronden  
 FR Rondelles PCD spéciales  
 IT Dischi speciali in PCD  
 ES Rodajas PCD especiales

| EN Grade<br>DE Sorte<br>FR Nuance<br>IT Tipo<br>ES Calidad | Properties and dimensions |                   |           |         |         | Ø 62 mm<br>Art.No. |
|------------------------------------------------------------|---------------------------|-------------------|-----------|---------|---------|--------------------|
|                                                            | Grain size<br>µm          |                   | Binder    | T<br>mm | t<br>mm |                    |
| FS                                                         | Fine                      | 2-4               | Standard  | 1.0     | 0.3     | 141113             |
|                                                            |                           |                   |           | 1.2     | 0.3     | 141114             |
|                                                            |                           |                   |           | 1.6     | 0.3     | 141115             |
| MS                                                         | Medium                    | 8-10              | Standard  | 1.0     | 0.3     | 141117             |
|                                                            |                           |                   |           | 1.2     | 0.3     | 141118             |
|                                                            |                           |                   |           | 1.6     | 0.3     | 141119             |
| MX                                                         | Medium                    | 8-10              | Special   | 1.0     | 0.3     | 141120             |
| MU+                                                        | Mixed                     | 2-4<br>+          | Ultrahard | 1.0     | 0.3     | 141121             |
|                                                            |                           | 8-10              |           |         |         |                    |
| CS                                                         | Coarse                    | 20-35             | Standard  | 1.0     | 0.3     | 141122             |
|                                                            |                           |                   |           | 1.2     | 0.3     | 141123             |
|                                                            |                           |                   |           | 1.6     | 0.3     | 141124             |
| CU+                                                        | Mixed                     | 2-4<br>+<br>20-35 | Ultrahard | 1.0     | 0.3     | 141126             |

EN Sandwich PCD - half blanks  
 DE Sandwich PKD - Halbronden  
 FR Demies rondelles PCD sandwich  
 IT Mezzidischi sandwich in PCD  
 ES Semi-rodajas PCD en sandwich

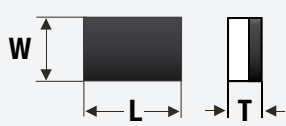
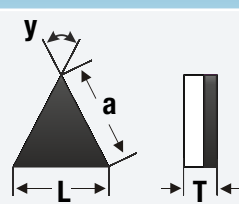
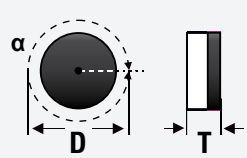
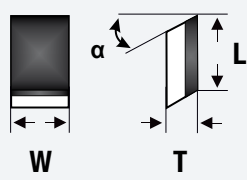


| EN Grade<br>DE Sorte<br>FR Nuance<br>IT Tipo<br>ES Calidad | Properties and dimensions (mm) |       |          |         | Ø 62 mm<br>Art.No. |
|------------------------------------------------------------|--------------------------------|-------|----------|---------|--------------------|
|                                                            | Grain size<br>µm               |       | Binder   | T<br>mm |                    |
| MX                                                         | Medium                         | 8-10  | Special  | 1.5     | 0.5                |
|                                                            |                                |       |          | 2.0     | 0.8                |
|                                                            |                                |       |          | 2.5     | 1.0                |
| MS                                                         | Medium                         | 8-10  | Standard | 1.5     | 0.5                |
|                                                            |                                |       |          | 2.0     | 0.8                |
|                                                            |                                |       |          | 2.5     | 1.0                |
| CX                                                         | Coarse                         | 20-35 | Special  | 1.5     | 0.5                |
|                                                            |                                |       |          | 2.0     | 0.8                |
|                                                            |                                |       |          | 2.5     | 1.0                |





- EN Standard PCD segments  
 DE Standard PKD-Segmente  
 FR Segments PCD standards  
 IT Settori standard in PCD  
 ES Segmentos PCD estándar

|                                                                                     |                                                                                                                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| EN Rectangle<br>DE Rechteck<br>FR Rectangle<br>IT Rettangolo<br>ES Rectángulo       |                                                                                                                                                 |
|    | $RE L \times W / T - \text{Grade}$<br><br><b>Example</b> $RE 5.5 \times 3.0 / 1.6 - MX$                                                         |
| EN Triangle<br>DE Dreieck<br>FR Triangle<br>IT Triangolo<br>ES Triángulo            |                                                                                                                                                 |
|  | $\gamma T a / T - \text{Grade}$<br><br><b>Example</b> $60 T 5.0 / 1.6 - MX$                                                                     |
| EN Round<br>DE Rund<br>FR Rond<br>IT Rotondo<br>ES Ronda                            |                                                                                                                                                 |
|  | $\alpha R D / T - \text{Grade}$<br><br><b>Example full circle</b> $360 R 20.0 / 1.6 - MX$<br><b>Example half circle</b> $180 R 22.4 / 1.6 - MX$ |
| EN With angle<br>DE Mit Winkel<br>FR Avec angle<br>IT Con angolo<br>ES Con ángulo   |                                                                                                                                                 |
|  | $RE L \times W / \alpha / T - \text{Grade}$<br><br><b>Example</b> $RE 4 \times 3 / 24^\circ / 1.6 - MX$                                         |



EN Cutting service  
DE Schneiddienst  
FR Service de coupe  
IT Servizio di taglio  
ES Servicio de corte

**EN** TIGRA offers you a quick service for laser-cut PCD: according to your drawing, we cut within 3-5 working days, with and without angle. The segments are delivered cleaned and packaged safely. Thanks to the efficient production planning and processing, our laser-cut segments are in many cases significantly less expensive than whatever is possible by wire cutting!

**DE** TIGRA bietet Ihnen einen Schnellservice für Laser geschnittenes PKD: nach Ihrer Zeichnung trennen wir innerhalb von 3-5 Arbeitstagen, mit und ohne Winkel. Die Segmente werden gereinigt und sicher verpackt ausgeliefert. Dank der effizienten Arbeitsvorbereitung und Bearbeitung sind unsere Laser geschnittenen Segmente in vielen Fällen deutlich günstiger als dies mit Drahtschneiden möglich ist!

**FR** TIGRA vous offre un service express pour PCD découpé au laser. Nous découpons avec ou sans angle et suivant votre dessin dans un délai de 3-5 jours ouvrables. Les segments sont nettoyés et livrés solidement emballés. Nos segments découpés au laser sont dans de nombreux cas nettement plus avantageux que par découpe par fil grâce à la préparation du travail et à l'usinage efficaces!

**IT** TIGRA vi offre un servizio rapido per PCD tagliato a laser: in base ai vostri disegni, eseguiamo i tagli entro 3-5 giorni lavorativi, con e senza angoli. I settori vengono puliti e spediti in imballi sicuri. Grazie all'efficienza di preparazione e lavorazione, i nostri settori tagliati a laser sono spesso più economici di quelli ottenuti con una macchina ad elettroerosione!

**ES** TIGRA ofrece un servicio rápido de corte por láser para calidades PCD: en un plazo de 3-5 días realizamos trabajos a medida, con o sin ángulo, conforme a su diseño. Los segmentos se entregan en embalaje seguro y limpios. Gracias a una eficiente preparación del trabajo y un óptimo mecanizado nuestros segmentos cortados por láser son en muchos casos sustancialmente más económicos que los de corte por hilo.

EN Warning  
DE Warnung  
FR Mise en garde  
IT Avvertenza  
ES Advertencia

**EN** This catalogue describes cemented carbide products. Grinding of these products will produce dust of potentially hazardous ingredients. Dust from grinding the products described in this catalogue can cause nose, throat, skin and eye irritation and temporary or permanent respiratory disease in a small percentage of exposed individuals. Permanent respiratory disease can lead to disability or death. Coolant mist from wet grinding may contain dust. Avoid prolonged skin contact with dust or mist. Use adequate ventilation when grinding. Maintain dust levels below OSHA and ACGIH levels. Use protective devices. Wash hand thoroughly after handling, before eating or smoking. Dispose of materials according to local, state and/or federal regulations.

**DE** Der Schleifstaub der in diesem Katalog beschriebenen Hartmetallprodukte enthält möglicherweise gesundheitsschädliche Bestandteile. Er kann Nasen-, Atmungs-, Haut- und Augenreizungen auslösen. Dauerhaftes Einatmen kann zu ernsthaften gesundheitlichen Schäden führen. Beim Schleifen mit Kühlung entsteht ein Schlamm, der diesen Staub ebenfalls enthält. Vermeiden Sie das Einatmen von Schleifstaub und Schleifschlamm sowie längeren Hautkontakt. Sorgen Sie für ausreichende Absaugung. Benutzen Sie Schutzvorrichtungen. Waschen Sie sich nach der Berührung sorgfältig die Hände, insbesondere vor dem Essen. Die Entsorgung von Rückständen muss nach den entsprechenden gesetzlichen Vorschriften erfolgen.

**FR** La poussière de meulage des produits en carbure décrits dans ce catalogue risque de contenir des éléments dangereux pour la santé. Elle peut provoquer des irritations du nez, des voies respiratoires, de la peau et des yeux. Une inhalation prolongée peut provoquer de graves problèmes de santé. Pendant le meulage avec refroidissement, il se forme du cambouis qui contient également cette poussière. Évitez d'inhaler la poussière et le cambouis de meulage, ainsi que tout contact prolongé avec la peau. Veillez à ce que leur aspiration soit suffisante. Utilisez des dispositifs de protection. Après tout contact, lavez-vous soigneusement les mains, surtout avant les repas. La mise au rebut des résidus doit se faire conformément aux prescriptions légales en vigueur.

**IT** Il pulviscolo di rettifica del prodotto in metallo duro descritto nel presente catalogo può contenere componenti dannosi per la salute. Può causare irritazione a naso, vie respiratorie, pelle e occhi. L'esposizione prolungata a queste sostanze e la conseguente inalazione possono causare seri danni alla salute. Anche in caso di profilatura a freddo si produce un residuo fangoso che contiene questo pulviscolo. Evitare l'inalazione e il contatto prolungato con la pelle del pulviscolo di rettifica e dei residui. Eseguire un'accurata pulizia e adottare idonee misure di protezione. Lavare accuratamente le mani dopo ogni contatto, soprattutto prima dei pasti. Smaltire i residui in conformità alle normative vigenti in materia.

**ES** En este catálogo se describen productos de metal duro que, durante el lijado, producen un polvo que contiene sustancias nocivas para la salud. Estas sustancias pueden provocar irritación en los ojos, la piel o la nariz y causar problemas respiratorios. Una exposición continuada puede conducir a lesiones físicas graves. Durante el lijado con refrigeración, se produce una pasta que también contiene este polvo. Evite respirar el polvo y la pasta de lijado, así como el contacto prolongado con la piel. Asegúrese de utilizar un sistema de aspiración adecuado. Utilice dispositivos de seguridad. Láve las manos minuciosamente después del contacto, en particular antes de comer. Observe las prescripciones legales correspondientes para la gestión de residuos.

- EN Terms and conditions
- DE Allgemeine Geschäftsbedingungen
- FR Conditions générales de vente
- IT Condizioni generali di vendita
- ES Condiciones comerciales generales

|    |                                                                                                                                                                                                                                                                                                        |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                                                                                                        |
| EN | You can find our current Terms and Conditions on our homepage <a href="http://www.tigra.de">www.tigra.de</a> . If you choose terms and conditions in the navigation menu you can read, save or print the document.                                                                                     |
| DE | Unsere Allgemeinen Geschäftsbedingungen finden Sie stets aktuell auf unserer TIGRA-Homepage unter <a href="http://www.tigra.de">www.tigra.de</a> . Bitte wählen Sie AGB im Navigationsmenü und das Dokument steht Ihnen zum Nachlesen, Abspeichern oder als Ausdruck zur Verfügung.                    |
| FR | Vous trouverez toujours nos conditions générales de vente CGV actualisées sur notre page d'accueil TIGRA sous <a href="http://www.tigra.de">www.tigra.de</a> . Veuillez choisir ces CGV ("Terms and conditions") sur le menu de navigation, et vous pourrez lire, sauvegarder ou imprimer ce document. |
| IT | Le condizioni generali di vendita da noi attualmente applicate sono disponibili sul nostro sito TIGRA all'indirizzo <a href="http://www.tigra.de">www.tigra.de</a> . Il documento può essere letto, salvato o stampato selezionando la voce ("Terms and conditions") nel menu di navigazione.          |
| ES | Encontrará nuestras condiciones comerciales generales siempre actualizadas en nuestro sitio web TIGRA <a href="http://www.tigra.de">www.tigra.de</a> . Seleccione CGV ("Terms and conditions") en el menú de navegación y accederá a un documento que podrá leer, guardar e imprimir.                  |

- EN Safety information for our customers
- DE Sicherheitsinformationen für unsere Kunden
- FR Information de sécurité pour nos clients
- IT Informazioni di sicurezza per i nostri clienti
- ES Información de seguridad para nuestros clientes

|    |                                                                                                                                                                                                                                                                     |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                                                                     |
| EN | <a href="http://www.tigra.de">www.tigra.de</a><br>Please choose „Safety“ in the navigation menu and you will get the safety information for the production and application of tungsten carbide tools for woodworking.                                               |
| DE | <a href="http://www.tigra.de">www.tigra.de</a><br>Unter „Sicherheit“ in der Navigation erhalten Sie die Sicherheitsinformationen für die Herstellung und Anwendung von Hartmetallwerkzeugen für die Holzbearbeitung.                                                |
| FR | <a href="http://www.tigra.de">www.tigra.de</a><br>Sous „Safety“ vous trouvez des informations de sécurité pour la production et application des outils pour le travail du bois.                                                                                     |
| IT | <a href="http://www.tigra.de">www.tigra.de</a><br>Scegliete termini e condizioni di vendita („Safety“), ivi trovate anche informazioni di sicurezza sulla produzione ed applicazione di utensili per il legno.                                                      |
| ES | <a href="http://www.tigra.de">www.tigra.de</a><br>Por favor seleccione términos y condiciones („Safety“) en el menú de navegación. La encontrará la última información relativa a la seguridad con el trabajo del metal duro, resistencia a la flexión y afiladura. |

[illegible]



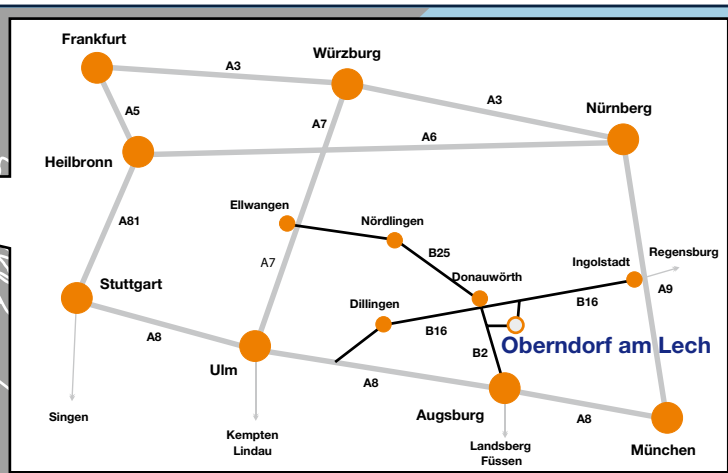
This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



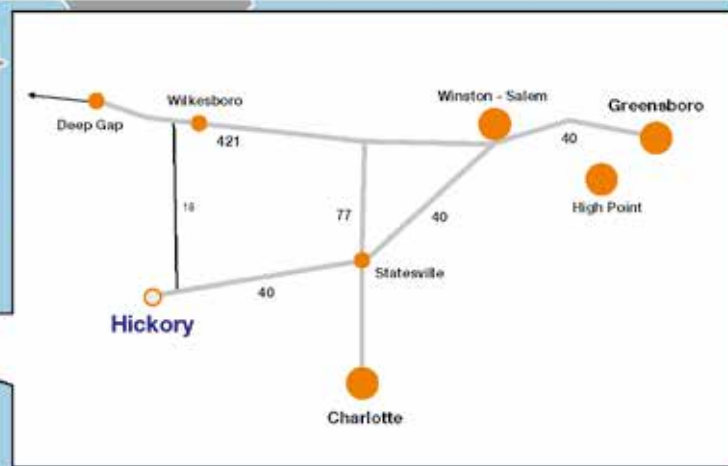
|    |         |
|----|---------|
| EN | Notes   |
| DE | Notizen |
| FR | Notes   |
| IT | Note    |
| ES | Notas   |

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

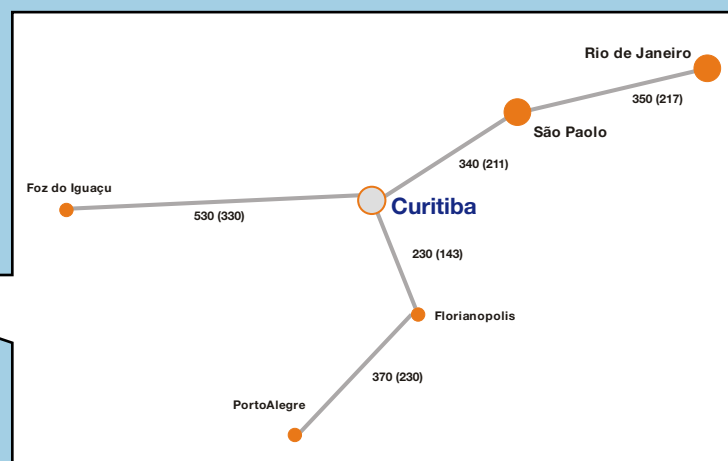
## Oberndorf a. Lech GERMANY



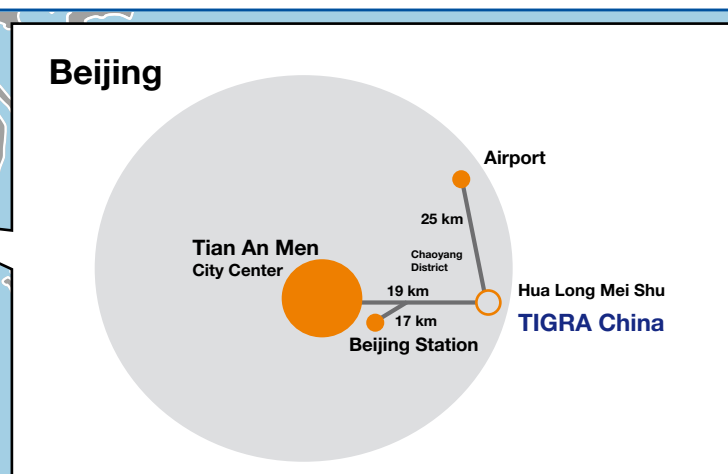
## Hickory, NC USA



## Curitiba-Paraná BRASIL



## Beijing CHINA





TOOLS CUT BETTER WITH TIGRA

[www.tigra.de](http://www.tigra.de)

#### **TIGRA GmbH**

Gewerbering 2

D-86698 Oberndorf am Lech · Germany

Phone +49 (0)9090 9680-01 · Fax +49 (0)9090 9680-50

[www.tigra.de](http://www.tigra.de) · [sales@tigra.de](mailto:sales@tigra.de)



#### **TIGRA USA, Inc.**

1106 8<sup>th</sup> ST CT SE

Hickory, NC 28602 · USA

Phone +1 828-324-8227 · Fax +1 828-324-8097

[www.tigra-usa.com](http://www.tigra-usa.com) · [sales@tigra-usa.com](mailto:sales@tigra-usa.com)



#### **TIGRA do Brasil Ltda.**

Rua das Carmelitas 586 · Hauer

81610-070 Curitiba-Paraná · Brazil

Phone +55 41 3276 3731 · Fax +55 41 3377 3075

[www.tigrado brasil.com.br](http://www.tigrado brasil.com.br) · [tigra@tigrado brasil.com.br](mailto:tigra@tigrado brasil.com.br)



#### **TIGRA China Co. Ltd.**

1-1-101 Hua Long Mei Shu · No.15 Jian Guo Road

ChaoYang District · Beijing, 100024 · P.R. China

Phone +86 10 5921 4353 · Fax +86 10 5921 4352

[www.tigra-china.com](http://www.tigra-china.com) · [sales@tigra-china.com](mailto:sales@tigra-china.com)

