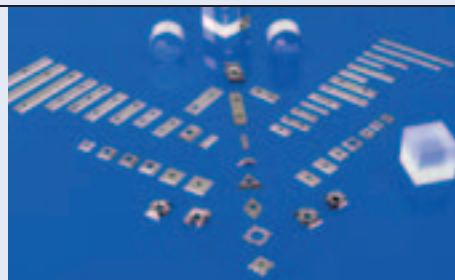




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1



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



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



Knives for back corrugated cutterheads
Messer für rückenverzahnte Messerköpfe
Couteaux pour outils crantés
Coltelli per teste con rigatura
Cuchillas corrugadas



Knives for planing systems
Messer für Hobelsysteme
Couteaux pour outils à raboter
Coltelli per sistemi da pialla
Cuchillas para cepillar



Strips, preforms, router bit tips, drill bits, finger joint tips, saw tips
Fräserplatten, Formplatten, Oberfräserplatten, Zylinderkopfböhrer, Sägezähne
Plaquettes à braser, ebauches pour mèches à défoncer, mèches à façonner et fraises, dents de scie
Placchette per frese, placchette sagomate per punte, punte per cerniere, dentelli per lame
Placas para equipar fresas, placas para herramientas soldadas, brocas estrella, dientes de sierra



Rods
Rundstäbe
Barreaux cylindriques
Cilindri
Barras redondas



TIGRA alloy blanks, strips and saw tips
TIGRA alloy Blanketts, Fräserplatten und Sägezähne
TIGRA alloy plaquettes à profiler, plaquettes à braser et dents de scie
TIGRA alloy placchette da profilare, placchette per frese e dentelli per lame
TIGRA alloy placas para perfilar, placas para equipar fresas y dientes de sierra

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TIGRA - A family owned company with the tradition of putting your needs first ...

Since its foundation 25 years ago, TIGRA has expanded at a rapid pace. We have been recognized with prestigious Economic Awards for being the most innovative regional company in Bavaria and obtained certification to become a training enterprise. We are very proud of this honor we achieved by using the resources of being a medium-sized company and our model character that has always been a part of our company. From our inception, TIGRA has specialized in the production of tungsten carbide for tools in the woodworking industry. Due to our method of business using our comprehensive knowledge of tungsten carbide production, innovative self-developments, and the latest technologies in manufacturing today, we have captivated the market.



Helge H. Motzer and Bernd Motzer

While constantly striving to meet the requests of our customers, we continue to effectively exhibit the most modern, highly automated pressing, sintering, and packaging equipment with built in camera systems for quality control. Presently an efficient, organized, and talented sales and service team supply customers in over 70 countries with an extremely extensive and world-wide unique product program of precision cutting inserts and wear parts. Headquartered in Bavaria, with reliable international partners and daughter companies in the USA, Brazil, and China, the company underlines its constant demand for expansion. The two Managing Directors, Helge Motzer and son Bernd Motzer, are in complete agreement, if it concerns the further development of their enterprise: "Individuality, quality and speed with favorable prices are the decisive factors keeping competitors more than in check in the future and belonging to the best ones in the industry. Further more, we will do everything in order to satisfy our customer's needs world-wide."

TIGRA – ein Familienunternehmen mit Tradition

Seit Firmengründung vor 25 Jahren führt TIGRA's Weg ständig nach oben. Auszeichnungen als innovativstes Wirtschaftsunternehmen der Region und als ein Ausbildungsbetrieb mit Vorbildfunktion heben den besonderen Charakter des mittelständischen Unternehmens hervor. Schon von Beginn an hat sich TIGRA auf die Herstellung und Bearbeitung von Hartmetall für die Werkzeugindustrie der Holzverarbeitung spezialisiert. Dank des umfassenden Know how auf dem Gebiet der Hartmetallherstellung und -bearbeitung besticht das Unternehmen heute durch innovative Eigenentwicklungen und neueste Technologien in der Fertigung. Immer mit dem Streben, Kundenwünsche noch effektiver umsetzen zu können, weist TIGRA heute die modernsten, hoch automatisierten Press-, Sinter-, Bearbeitungs- und Verpackungseinrichtungen auf. Inzwischen versorgt ein weltweit effizient organisiertes Serviceteam Kunden in über 70 Ländern mit einem äußerst umfangreichen und weltweit einmaligen Produktprogramm an hochwertigen Präzisions-Schneideinsätzen und Verschleißteilen. Mit Stammsitz in Bayern, international zuverlässigen Partnern und Tochterunternehmen in den USA, Brasilien und China unterstreicht das Unternehmen seinen steten Willen zur Expansion. Und die beiden Geschäftsführer, Helge Motzer und Sohn Bernd Motzer, sind sich absolut einig, wenn es um die weitere Entwicklung des Unternehmens geht: „Individualität, Qualität und Schnelligkeit bei günstigen Preisen sind die entscheidenden Faktoren, um auch künftig den Wettbewerb mehr als in Schach zu halten und zu den Besten der Branche zu gehören. Wir werden alles dafür tun, um weltweit unsere Kunden weiter zufrieden zu stellen.“



LIGNA 2005, Hannover, Germany



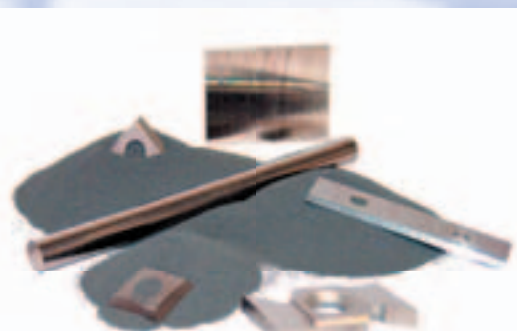
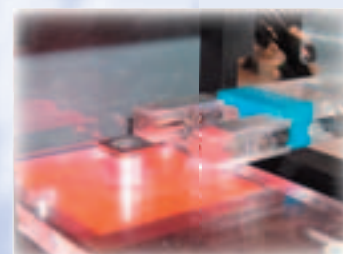
TIGRA – une tradition familiale

Depuis sa création il y a un quart de siècle, TIGRA n'a cessé de gravir les échelons de la qualité et de la renommée. Les nombreuses récompenses qu'elle a remportées – elle a été couronnée entreprise la plus innovante de la région et centre de formation modèle – sont autant de preuves du caractère d'exception de cette entreprise de taille moyenne. Dès ses débuts, TIGRA s'est spécialisée dans la fabrication et l'usinage de carbures destinés aux outilleurs de l'industrie du bois. Grâce à son vaste savoir-faire dans ce domaine, l'entreprise séduit aujourd'hui par ses innovations et ses technologies de pointe en matière de fabrication. La sophistication de son parc de machines - presses, fours à frittage, centres d'usinage et machines à emballer - illustre la volonté de TIGRA de répondre avec toujours plus d'efficacité aux attentes de ses clients. Dans l'intervalle, l'entreprise s'est enrichie à l'échelon international d'un service clientèle hautement efficace et organisé, qui lui permet de fournir ses clients en pièces d'usure et en plaquettes de coupe de très grande précision dans plus de 70 pays. Avec son siège social en Bavière, ses partenaires internationaux et ses filiales aux Etats-Unis, au Brésil et en Chine, TIGRA affirme sa volonté permanente d'expansion. Et les deux directeurs, Helge Motzer et son fils Bernd, mus par le même désir de développer l'entreprise, affirment à l'unisson: „Individualité, qualité et rapidité à prix modéré - qui ont assis notre réputation d'excellence – resteront les valeurs essentielles qui nous permettront encore et toujours de tenir la concurrence en échec. Nous n'aurons cessé de mettre tout en oeuvre pour continuer à satisfaire tous nos clients à travers le monde.“



TIGRA – una società a conduzione familiare dalla lunga tradizione

Sin dalla sua fondazione, 25 anni or sono, la strada percorsa da TIGRA ha sempre puntato in alto. Riconoscimenti come azienda più innovativa della regione e come società formativa dal carattere esemplare sottolineano perfettamente la personalità di questa impresa medio-piccola. Da subito, TIGRA si è specializzata nella produzione e nel trattamento di metalli duri destinati all'industria degli utensili per la lavorazione del legno. Grazie al vasto know-how nel campo della produzione e del trattamento di metalli duri, l'azienda si contraddistingue oggi per innovazioni proprie e tecnologie d'avanguardia nell'ambito della fabbricazione. Aspirando continuamente a soddisfare in modo sempre più efficace le esigenze dei propri clienti, TIGRA vanta le tecnologie di stampaggio, sinterizzazione, lavorazione e confezionamento più moderne e automatizzate. Con un programma di inserti di precisione e pezzi di usura straordinariamente ampio e unico nel suo genere, il gruppo di assistenza TIGRA, organizzato con efficienza in tutto il mondo, offre supporto ai suoi clienti in oltre 70 paesi diversi. La volontà di espansione dell'azienda viene dimostrata attraverso una sede in Baviera, così come partner e consociate affidabili a livello internazionale negli USA, in Brasile e in Cina. E i due amministratori – Helge Motzer e il figlio Bernd Motzer – sono assolutamente d'accordo quando si parla dell'ulteriore sviluppo aziendale: “Individualità, qualità e rapidità abbinate a prezzi vantaggiosi rappresentano i fattori decisivi per tenere a bada anche in futuro la concorrenza ed essere annoverati fra i migliori del settore. Faremo il possibile per continuare a soddisfare i nostri clienti in tutto il mondo.”

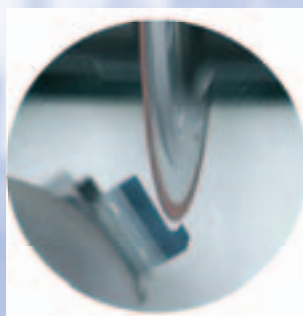
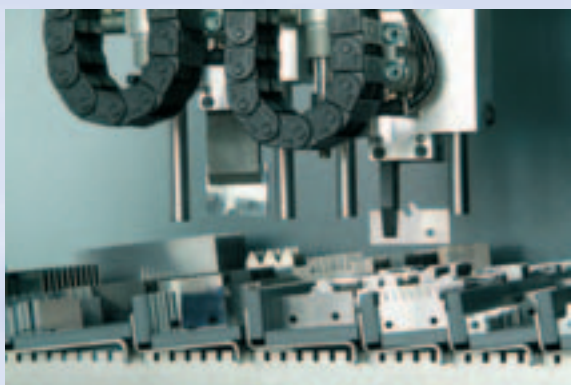


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TIGRA, una empresa familiar con tradición.

Desde su fundación hace 25 años, el ascenso de TIGRA por la vía del éxito ha sido imparable. Las menciones obtenidas como empresa más innovadora de la región y como centro modélico para la capacitación de profesionales vienen a resaltar la especial forma de ser de ésta empresa. TIGRA se ha especializado, desde el principio en la fabricación y elaboración de metal duro para la industria de herramientas de mecanizado de la madera, sector en el cual sobresale, además de por sus profundos conocimientos técnicos, por el desarrollo de creaciones propias y la aplicación de las más avanzadas tecnologías en el proceso de fabricación. TIGRA dispone de los más modernos y automatizados equipos de prensado, sintetizado, elaboración y empaquetado para poder llevar a la realidad, de forma cada vez más efectiva, los deseos de sus clientes. A través de su eficaz red mundial de servicio proporciona a sus clientes, repartidos en más de 70 países, un amplísimo y exclusivo catálogo de productos, en el que se encuentran piezas de corte de precisión y de desgaste de gran calidad. Una red de socios y filiales

de primer orden extendida por los Estados Unidos, Brasil y China da fe de la permanente voluntad de expansión de esta empresa cuya sede principal se encuentra en Baviera. Los dos directores de la empresa, Helge Motzer y su hijo Bernd Motzer, coinciden en señalar que, tratándose del desarrollo futuro de la misma, "individualidad, calidad, rapidez y precios asequibles son factores decisivos a la hora de mantener más que a raya, hoy y mañana, a la competencia y pertenecer a los mejores del sector. Haremos todo lo necesario para seguir satisfaciendo a nuestros clientes en todo el mundo."





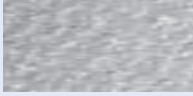


TIGRA carbide grades and their applications
TIGRA Hartmetallsorten und ihre Anwendungen
Les nuances de carbures TIGRA et leurs applications
I tipi di metallo duro TIGRA e le loro applicazioni
Calidades de metal duro TIGRA y sus aplicaciones

The modern carbide technology classifies tungsten carbide in grain size and binder content (included in the name).
 In der modernen Hartmetall-Technologie werden die Hartmetalle nach Korngrößen und Bindergehalt klassifiziert (im Namen enthalten).

La technologie moderne classifie les carbures en fonction de la grosseur du grain et de la teneur en liant de sa composition.

La moderna tecnologia dei metalli duri li classifica in base alla grossenza del grano e al percentuale di legante.
 La tecnologia moderna de metal duro lo clasifica según el tamaño el grano y la proporción de ligante.

Shortform Abkürzung Abréviation Abbreviazione Abreviatura	Explanation Erklärung Explication Spiegazione Spiegazione	Grain size (µm) Korngröße (µm) Grosseur du grain (µm) Grossezza del grano (µm) Tamaño del grano (µm)	
NG	N ano G rain	0.2	SMG 
UMG	U ltra M icro G rain	0.2 - 0.5	MG 
SMG	S ub M icro G rain	0.5 - 0.7	F 
MG	M icro G rain	0.7 - 1.0	MF 
F	F ine Grain	1.0 - 1.4	M 
MF	M edium F ine Grain	1.4 - 2.5	
M	M edium Grain	2.5 - 4.0	
C	C oarse Grain	4.0 - 10.0	
EC	E xtra C oarse	10	

Technical Data - Technische Daten - Caractéristiques techniques - Dati tecnici - Datos técnicos

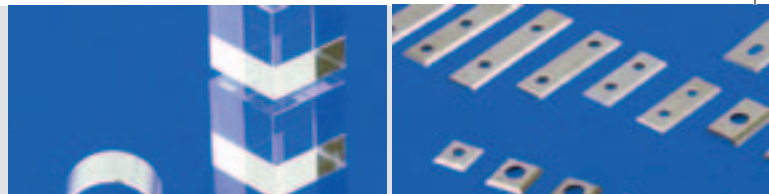
TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA	US-Code	ISO-Code	Binder % Binder % Liant % % di legante Composicion %	Hardness Härte Dureté Durezza Dureza (HV 10)	Hardness Härte Dureté Durezza Dureza (HRA) ± 0.2	Breakage resistance Biegebruchfestigkeit Resistance à la flexion Resistenza flessionale Resistencia a la flexión (N/mm²) psi	
T02SMG	C4 +++	K01	2.5	2450	96.5	2000	284.400
T03SMG	C4 ++	K01	3.5	2100	94.6	2400	341.280
T06CR *	C4 +	K01	3.5	1950	93.8	2300	327.060
T08CR *	C4 +	K05-K30	4.0	1900	93.6	2300	327.060
T04F	C4	K05	4.0	1750	92.8	2350	334.170
T04MG	C4 +	K01	4.0	1940	93.8	2600	369.720
T06M	C3 -	K20	6.0	1350	89.8	2400	341.280
T06MF	C3	K20	6.5	1600	92.0	2500	355.500
T06MG	C3 ++	K01-K20	6.0	1800	93.0	2700	383.940
T08MF	C2	K30	8.5	1470	90.8	2700	383.940
T08SMG	C2 +++	K05-K30	9.0	1780	92.9	3400	483.480
T10MF	C1	K40	10.0	1400	90.3	2900	412.380
T10MG	C1 ++	K20-K40	10.0	1650	92.3	3600	511.920
T12SMG	C1 ++		12.0	1630	92.2	4000	568.800
TL15 *			13.5	1450	90.7	3800	540.360
TL20 *			20.0	1400	90.3	3800	540.360

* Special binder - Spezialbinder - Liant special - Legante speciale - Composicion especial



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Grade Sorte Nuance Tipo Calidad	HDF, MDF HDF, MDF HDF, MDF HDF, MDF HDF, MDF	Chipboard Spanplatte Panneaux de particule Truciolare Panel de aglomerado	Hardwood Hartholz Bois dur Legno duro Madera dura	Softwood Weichholz Bois tendre Legno tenero Madera blanda	Glued-up Wood Verleimholz Bois collé Legno incollato Madera encolada
T02SMG	+++	+++	-	--	--
T03SMG	++	+++	+	--	-
T06CR	++	++	++	0	+
T08CR	++	++	++	+	+
T04F	+	++	+	+	+
T04MG	++	++	+	0	+
T06M	--	-	0	0	0
T06MF	0	0	+	+	+
T06MG	+	++	++	+	++
T08MF	--	-	+	+	0
T08SMG	0	+	++	+	++
T10MF	--	--	0	+	0
T10MG	0	0	++	++	+
T12SMG	-	0	++	+++	+
TL15	--	--	++	+++	+
TL20	--	--	+++	+++	+
	+++ Excellent ++ Very Good + Good 0 Acceptable - Not too good -- Poor	Hervorragend Sehr gut Gut Akzeptabel Weniger gut Schlecht geeignet	Parfaitement Très bien Bien Acceptable Moins bien Mal adapté	Perfettamente Molto idone Idoneo Accettabile Meno idoneo Poco idoneo	Perfectamente Muy Algo Aceptable Mal Nada apropiado

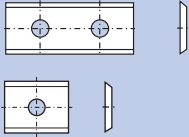
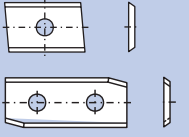
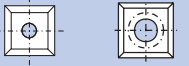


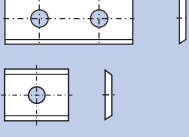
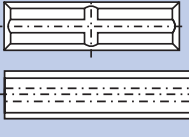
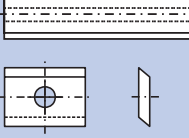
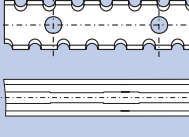
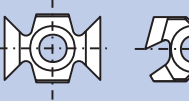


Reversible knives and edge rounding knives
Wendeschneidplatten und Kantenrunder
Plaquettes reversibles et couteaux brise-arrête
Coltelli reversibili e spigolatori
Cuchillas reversibles y cuchillas para aristas

2

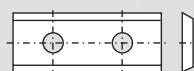
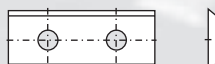
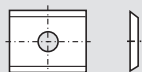
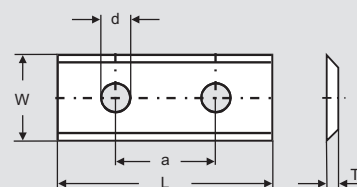


Reversible knives and edge rounding knives
Wendeschnidplatten und Kantenrunder
Plaquettes reversibles et couteaux brise-arrête
Coltelli reversibili e spigolatori
Cuchillas reversibles y cuchillas para aristas

	<p>Standard reversible knives 35° Standard Wendeschneidplatten 35° Plaquettes reversibles standard 35° Coltelli reversibili standard 35° Cuchillas reversibles standard 35°</p>	<p>9 - 10</p>
	<p>Reversible knives Wendeschnidplatten Plaquettes reversibles Coltelli reversibili Cuchillas reversibles</p>	<p>11</p>
	<p>Square knives Quadratische Wendeschneidplatten Plaquettes reversibles à quatre coupes Coltelli reversibili quadrati Cuchillas reversibles cuadradas</p>	<p>12 - 14</p>
	<p>Spurs, grooving knives Vorschneider, Nuter Arasseur, couteaux pour rainures Rasanti, coltelli per incastri Incisores, cuchillas para ranura</p>	<p>15</p>
	<p>Standard reversible knives - 4 cutting edges Standard Wendeschneidplatten - 4 Schneidkanten Plaquettes reversibles standard - 4 tranchants Coltelli reversibili standard - 4 taglienti Cuchillas reversibles standard - 4 filos de corté</p>	<p>16</p>
	<p>Reversible knives 45° Wendeschnidplatten 45° Plaquettes reversibles 45° Coltelli reversibili 45° Cuchillas reversibles 45°</p>	<p>17</p>
	<p>Mini reversible knives Mini-Wendeschnidplatten Mini plaquettes reversibles Mini coltelli reversibili Mini cuchillas reversibles</p>	<p>18</p>
	<p>Reversible knives for Systems Leitz, Oertli, KWO/Versofix, Kanefusa Wendeschnidpl. für Systeme Leitz, Oertli, KWO/Versofix, Kanefusa Plaquettes rev. pour Systèmes Leitz, Oertli, KWO/Versofix, Kanefusa Coltelli reversibili per sistemi Leitz, Oertli, KWO/Versofix, Kanefusa Cuchillas rev. para sistemas Leitz, Oertli, KWO/Versofix, Kanefusa</p>	<p>19 - 20</p>
	<p>Reversible knives with chip breakers and for portable planers Wendeplatten mit Spanbrechernuten und für Handhobel Plaquettes avec brise copeaux et pour rabots electro portatifs Coltelli con incastro rompitruciolo e piallatrici portatili Cuchillas con rompevirutas y para acepilladoras electricas</p>	<p>21</p>
	<p>Edge rounding knives Kantenrunder Couteaux brise-arrête Spigolatori Cuchillas para aristas</p>	<p>22</p>

Standard reversible knives
Standard Wendeschneidplatten
Plaquettes reversibles standard
Coltelli reversibili standard
Cuchillas reversibles standard

35°

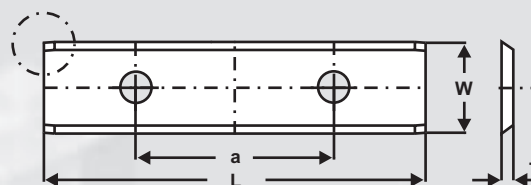
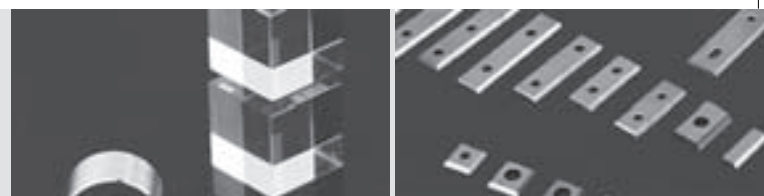


L mm	W mm	T mm	a mm	T04F	T02SMG	T03SMG	T10MG	T08CR
7.5	12.0	1.5		012001		013811	013963	106822
8.6	12.0	1.5		013182				
9.0	12.0	1.5		012043				
9.6	12.0	1.5		012015		013850	014010	106823
10.0	12.0	1.5		013165				
10.5	12.0	1.5		013167				
11.0	12.0	1.5		013168				
11.6	12.0	1.5		013183				
13.0	12.0	1.5		013170				
13.6	12.0	1.5		013185				
14.6	12.0	1.5		013186				
15.0	12.0	1.5		012003		013819	013972	106824
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	013977	104796
25.0	12.0	1.5		012025		013853	014013	106826
25.0	12.0	1.5	14.0	012011		013843	014001	106827
30.0	12.0	1.5	14.0	012005	037750	013828	013982	104795
35.0	12.0	1.5	26.0	013208				
40.0	12.0	1.5	26.0	012014	052278	013847	014006	106828
50.0	12.0	1.5	26.0	012006	037901	013834	013987	106829
60.0	12.0	1.5	26.0	012007	054882	013839	013994	106830

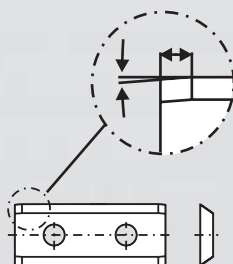
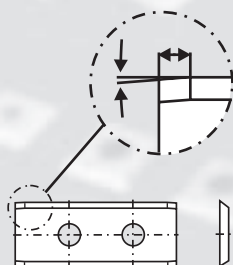
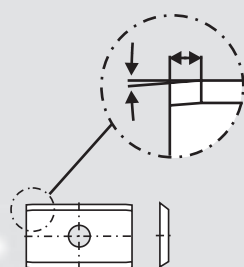
L mm	W mm	T mm	a mm	T08MF	T02SMG	T03SMG	T10MG	T08CR
80.0	13.0	2.2	60.0	012008		013841	013997	106831
100.0	13.0	2.2	60.0	012009		030831	013998	106832
120.0	13.0	2.2	60.0	012010		030832	013999	106833

L mm	W mm	T mm		T04F		T03SMG		
20.0	12.0	2.5		100686		101037		
30.0	12.0	2.5		054259		101038		
50.0	12.0	2.5		100687		101039		

Standard reversible knives
 Standard Wendeschneidplatten
 Plaquettes reversibles standard
 Coltelli reversibili standard
 Cuchillas reversibles standard

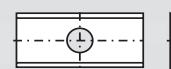
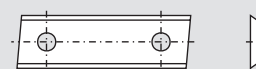
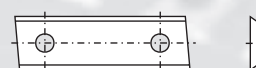
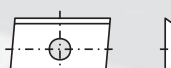
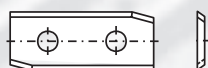
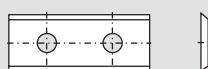
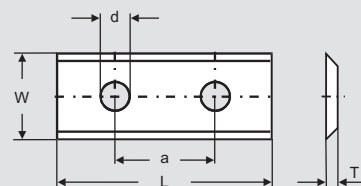


Also for use in planer heads!
 Auch für Hobelköpfe!



L	W	T		T04F	T10MG	T08CR
mm	mm	mm				
20.0	12.0	1.5	35°		013979	106674
24.0	12.0	1.5	40°	104119	041060	106675
24.7	12.0	1.5	35°	104120		106676
30.0	12.0	1.5	35°		013984	106677
40.0	12.0	1.5	35°		014008	106678
50.0	12.0	1.5	35°		013989	106679
60.0	12.0	1.5	35°		013996	106680
30.0	12.0	2.5	35°	102283		

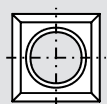
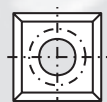
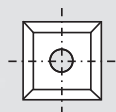
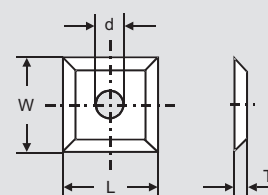
Reversible knives
Wendeschneidplatten
Plaquettes reversibles
Coltelli reversibili
Cuchillas reversibles



L mm	W mm	T mm	a mm	T04F	T03SMG	T10MG
20.0	14.3	2.5		013730	033492	033491
44.5	15.0	1.5	25.0	013447		
30.0	12.0	1.5	16.0	013449	033490	033477
24.0	12.0	1.5		013241		
30.0	12.0	1.5	14.0	013430	013924	033466
50.0	12.0	1.5	26.0	013432	033470	033468
30.0	12.0	1.5	14.0	013431	013925	033467
50.0	12.0	1.5	26.0	013433	033471	033469
20.0	12.0	1.5		013436	033480	033479
20.0	12.0	1.5		013441	033481	033482
30.0	12.0	1.5	14.0	013437	013926	033489
40.0	12.0	1.5	26.0	013440		
50.0	12.0	1.5	26.0	013438	013927	014038
30.0	12.0	1.5	14.0	013442	013928	033484
40.0	12.0	1.5	26.0	013445		
50.0	12.0	1.5	26.0	013443	013929	014039

L mm	W mm	T mm	a mm	T04F	T03SMG	T10MG
20.0	9.0	1.5		013195		
24.0	9.0	1.5	14.0	013197		
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		

Square knives
Quadratische Wendeschneidplatten
Plaquettes reversibles à quatre coupes
Coltelli reversibili quadrati
Cuchillas reversibles cuadradas



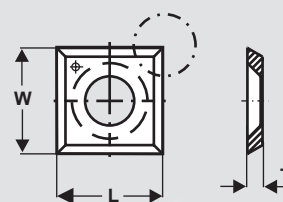
For Holz-Her system*



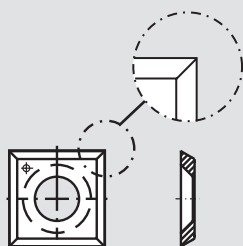
L mm	W mm	T mm		d mm	T08MF	T04F	T02SMG	T03SMG	T10MG	T08CR
9.0	9.0	1.5	35°	4.0		100744				
10.5	10.5	1.5	35°	4.0		013259		013863	014027	106834
12.0	12.0	1.5	35°	4.0		012002	048357	013815	013968	106835
13.0	13.0	2.5	35°	4.0	013328					
17.0	17.0	2.0	35°	3.0	016565	016564				
17.0	17.0	2.0	35°	4.0	013266	013265		013864	030830	106836
19.0	19.0	2.0	35°	4.0		013264		030838	030827	106837
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	014028	102558
14.0	14.0	1.2	30°		013303					
15.0	15.0	2.0			013322				014029	

Square knives
Quadratische Wendeschneidplatten
Plaquettes reversibles à quatre coupes
Coltelli reversibili quadrati
Cuchillas reversibles cuadradas

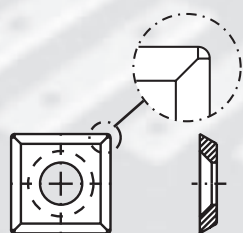
Also for use in planer heads!
Auch für Hobelköpfe!



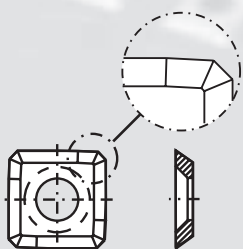
Straight with sharp edges



Straight with rounded edges

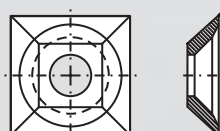
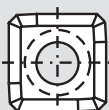


left



For System Ledinek *

right



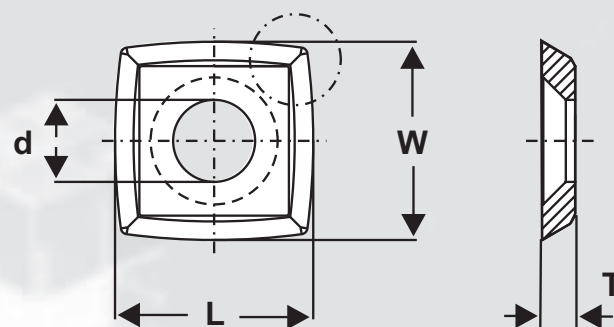
L mm	W mm	T mm		T08MF	T04F	T10MG	T08CR	TL15
10.5	10.5	1.5	35°				106682	040343
14.0	14.0	2.0	30°	013273	013260	014028	102558	013771
14.3	14.3	2.5	35°			013329	106683	
14.6	14.6	2.5	30°			013314	106684	
15.0	15.0	2.5	30°			013315	106685	
14.0	14.0	2.0	30°	013276		104117		
14.3	14.3	2.5	30°			104208		
14.6	14.6	2.5	30°			013316		
15.0	15.0	2.5	30°			104118		
14.3	14.3	2.5	35°			053589		
14.3	14.3	2.5	35°			053590		
21.0	21.0	5.5	40°			022695		

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

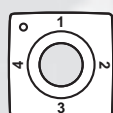
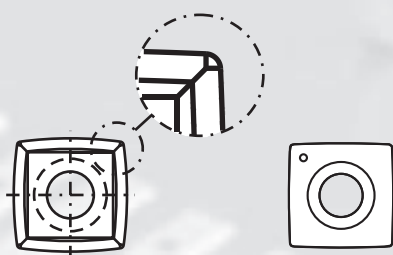


Square knives
Quadratische Wendeschneidplatten
Plaquettes reversibles à quatre coupes
Coltelli reversibili quadrati
Cuchillas reversibles cuadradas

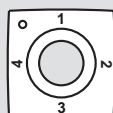
Also for use in planer heads!
Auch für Hobelköpfe!



Cutting edge with radius and rounded edges



Cutting edge with radius and pointed edges



L mm	W mm	T mm	R	T10MG
14.0	14.0	2.0	R=150	100788
14.6	14.6	2.5	R=150	052673
15.0	15.0	2.5	R=150	013320
15.0	15.0	2.5	R=50	043895
15.0	15.0	2.5	R=150	101540
14.0	14.0	2.0	R=150	100789
14.6	14.6	2.5	R=150	100790
15.0	15.0	2.5	R=150	100791
15.0	15.0	2.5	R=50	101044
15.0	15.0	2.5	R=150	104115

Spurs, grooving knives
 Vorschneider, Nuter
 Arasseur, couteaux pour rainures
 Rasanti, coltelli per incastri
 Incisores, cuchillas para ranura



L mm	W mm	T mm		d mm	T08MF	T04F	T06MF	T10MG
18.0	18.0	1.95			013293			
18.0	18.0	2.45			013291			
18.0	18.0	2.95			013305			
18.0	18.0	3.70			013289			



22.9	19.8	2.5	30°		045180			
22.0	19.0	2.0	30°		013271			
(22.0)	(22.0)	(2.0)						



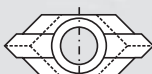
14.0	28.0	2.0	30°		013258			
16.0	16.0	3.0	32°		030829			



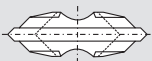
18.5		3.25	30°					017190
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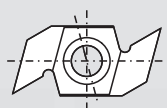
33.5				3.0	013252			
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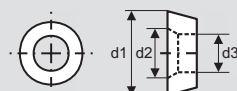
18.9	7.9	4.0			013253			
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18.0	5.7	3.5				013255		
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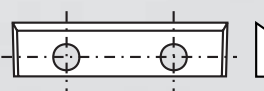
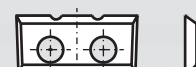
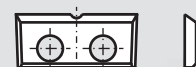
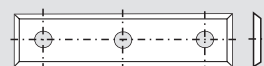
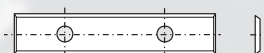
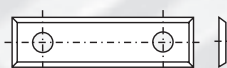
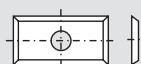
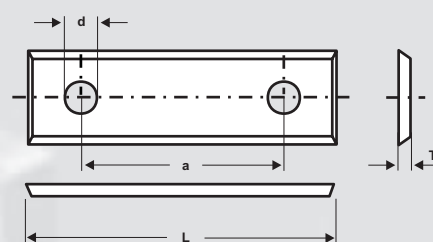
34.0	16.0	4.0					013278	
34.0	16.0	5.0					013279	
34.0	16.0	6.0					013280	
34.0	16.0	7.0					013281	



d1 mm	d2 mm	d3 mm	T mm					T03SMG
11.0	7.0	5.1	4.0					013373

Standard reversible knives
Standard Wendeschneidplatten
Plaquettes reversibles standard
Coltelli reversibili standard
Cuchillas reversibles standard

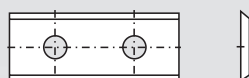
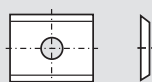
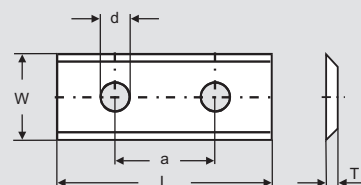
4 cutting edges
4 Schneidkanten
4 tranchants
4 taglienti
4 filos de corte



L mm	W mm	T mm	a mm	T04F	T03SMG	T10MG	TL15
19.5	7.0	1.5		013492	030874	030886	030904
19.5	7.5	1.5		013493	030875	030887	030905
19.5	8.0	1.5		013494	013945	030888	030906
19.5	9.0	1.5		013495	013946	030889	030907
19.5	10.0	1.5		013496	030876	030890	030908
19.5	11.0	1.5		013497	030877	030891	030909
19.5	12.0	1.5		013498	013947	030892	013774
29.5	7.0	1.5	14.0	013501	030878	030893	030910
29.5	7.5	1.5	14.0	013502	013948	030894	030911
29.5	8.0	1.5	14.0	013503	013949	030895	030912
29.5	9.0	1.5	14.0	013504	013950	030896	030913
29.5	10.0	1.5	14.0	013505	030879	030897	030914
29.5	11.0	1.5	14.0	013506	030880	030898	030915
29.5	12.0	1.5	14.0	013507	013952	014088	013775
39.5	9.0	1.5	26.0	013511	045134		
39.5	12.0	1.5	26.0	013512	013954	014089	030916
49.5	8.0	1.5	26.0	013516	013955	030899	030917
49.5	9.0	1.5	26.0	013517	013956	030900	030918
49.5	10.0	1.5	26.0	013518	030881	030901	030919
49.5	11.0	1.5	26.0	013519	030882	030902	030920
49.5	12.0	1.5	26.0	013520	013957	014090	013776
59.5	12.0	1.5	26.0	013523	013958	030903	030921
50.0	9.0	1.5	37.0	016950	035425		
50.0	10.0	1.7	37.0	016966	030883	030884	030885
50.0	12.0	1.7	37.0	013327	013866	014030	013772
16.0	7.0	1.5	7.0	048995	052579		
16.0	7.0	1.5	7.0	048996	052580		
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	016822		

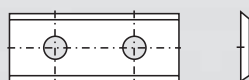
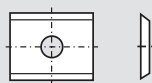
Reversible knives
Wendeschneidplatten
Plaquettes reversibles
Coltelli reversibili
Cuchillas reversibles

45°



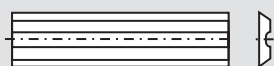
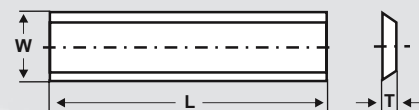
L mm	W mm	T mm	a mm	T08MF	T10MG	TL15
7.5	12.0	1.5			014091	013777
9.6	12.0	1.5			014115	030851
15.0	12.0	1.5			014098	013780
20.0	12.0	1.5			014100	013781
25.0	12.0	1.5			014123	013788
25.0	12.0	1.5	14.0		014110	013786
30.0	12.0	1.5	14.0		014102	013783
40.0	12.0	1.5	26.0		014113	013787
50.0	12.0	1.5	26.0		014105	013784
60.0	12.0	1.5	26.0		014107	013785
12.0	12.0	1.5			014096	013778
80.0	13.0	2.2	60.0	013532	038233	

>>MICROFINISH<<

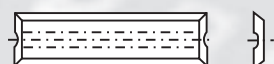
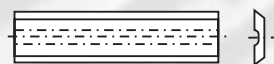
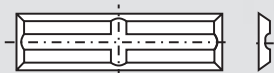


L mm	W mm	T mm	a mm		T10MG	TL15
7.5	12.0	1.5			014093	030861
9.6	12.0	1.5			014117	030864
15.0	12.0	1.5			014099	030862
20.0	12.0	1.5			014101	013782
25.0	12.0	1.5			014124	030865
25.0	12.0	1.5	14.0		014111	030863
30.0	12.0	1.5	14.0		014103	030866
40.0	12.0	1.5	26.0		014114	030870
50.0	12.0	1.5	26.0		014106	030868
60.0	12.0	1.5	26.0		014108	030869
12.0	12.0	1.5			014097	013779

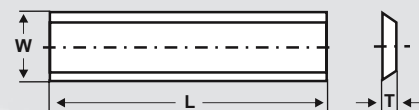
Mini reversible knives
Mini-Wendeschnidplatten
Mini plaquettes reversibles
Mini coltelli reversibili
Mini cuchillas reversibles



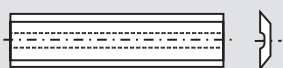
L	W	T	T04F	T03SMG	Style
mm	mm	mm			
12.0	5.5	1.1	013355	013882	Back groove
20.0	5.5	1.1	013357	013884	Rückennut
30.0	5.5	1.1	013363	013890	Rainure sur petite face
					Scanalatura posteriore
40.0	5.5	1.1	013359	013886	Ranura de lomo
50.0	5.5	1.1	013361	013888	
20.0	4.1	1.1	013403		Back and crossgrove
20.0	5.5	1.1	013394	013911	Rücken- und Quernut
25.0	5.5	1.1	013402	013920	Rainure transversal
					Scanalatura di sicurezza
30.0	5.5	1.1	013397	013914	Ranura transversal
40.0	5.5	1.1	013399	013916	
50.0	5.5	1.1	013401	013918	
12.0	5.5	1.1	013334	013870	Face groove
20.0	5.5	1.1	013336	013872	Brustnut
30.0	5.5	1.1	013345	013880	Rainure sur grande face
					Scanalatura frontale
40.0	5.5	1.1	013339	013874	Ranura frontal
50.0	5.5	1.1	013342	013877	
20.0	5.5	1.1	013378	030871	4 Cutting edges
25.0	5.5	1.1	013376	030872	4 Schneidkanten
30.0	5.5	1.1	013379	030847	4 Tranchants
35.0	5.5	1.1	013377	013893	4 Taglienti
					4 Filos de corte
40.0	5.5	1.1	013380	013898	
44.5	5.5	1.1	013375	030873	
50.0	5.5	1.1	013381	013900	



Reversible knives for systems Leitz and Oertli
Wendeschneidplatten für die Systeme Leitz und Oertli
Plaquettes reversibles pour les systèmes Leitz et Oertli
Coltelli reversibili per sistemi Leitz e Oertli
Cuchillas reversibles para sistemas Leitz y Oertli

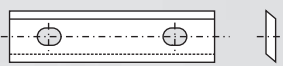
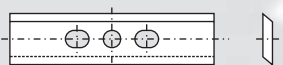


For Leitz system*



L mm	W mm	T mm	T04F	T03SMG	T10MG
7.7	8.0	1.5	013457	013930	014041
9.7	8.0	1.5	013470	013942	014065
11.7	8.0	1.5	013458	013931	014043
14.7	8.0	1.5	013459	013932	014045
19.7	8.0	1.5	013460	013933	014047
24.7	8.0	1.5	013472	013943	014068
30.0	8.0	1.5	013461	013934	014049
35.0	8.0	1.5	013462	013935	014051
40.0	8.0	1.5	013463	013936	014053
45.0	8.0	1.5	013488	049488	014081
50.0	8.0	1.5	013464	013937	014055
60.0	8.0	1.5	013466	013938	014057
70.0	8.0	1.5	013478	030927	014074
80.0	8.0	1.5	013467	013939	014059
100.0	8.0	1.5	013468	013940	014061
120.0	8.0	1.5	013469	049489	014063

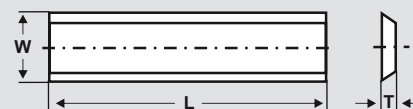
For Oertli system*



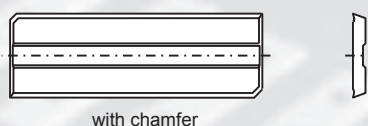
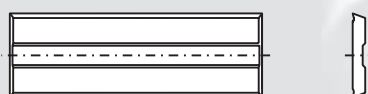
L mm	W mm	T mm	T04F	T03SMG	T10MG
8.8	8.0	1.5	030931		017193
9.0	8.0	1.5	030932		017194
10.0	8.0	1.5	030933		017195
11.0	8.0	1.5	030934		017196
12.0	8.0	1.5	030935		017197
15.0	8.0	1.5	030936		017198
20.0	8.0	1.5	030937		017200
25.0	8.0	1.5	030938		017201
28.0	8.0	1.5	030939		017202
32.0	8.0	1.5	030940		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

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

Reversible knives for systems KWO/Versofix and Kanefusa
Wendeschneidplatten für die Systeme KWO/Versofix und Kanefusa
Plaquettes reversibles pour les systèmes KWO/Versofix et Kanefusa
Coltelli reversibili per sistemi KWO/Versofix e Kanefusa
Cuchillas reversibles para sistemas KWO/Versofix y Kanefusa

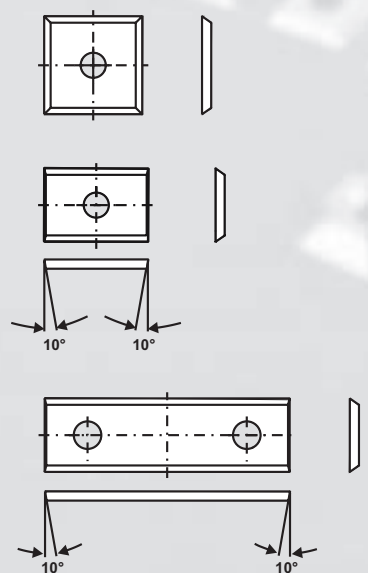


For KWO/Versofix system*



L mm	W mm	T mm	T03SMG TiN-coated	T10SMG 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
50.0	10.0	1.5	014279	030844

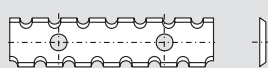
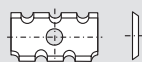
For Kanefusa system*



L mm	W mm	T mm	T04F	T08SMG
16.0	16.0	1.5	048874	038912
17.0	12.0	1.5	045625	039592
20.0	12.0	1.5	038014	039390
30.0	12.0	1.5	038259	043204
40.0	12.0	1.5	044735	041609
50.0	12.0	1.5	045966	

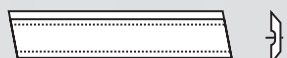
* For use in KWO/Versofix/Kanefusa-cutterheads only
* Nur zur Verwendung in Messerköpfen der Firma KWO/Versofix bzw
* Utilisation limitée aux porte-outils des entreprises KWO/Versofix et
* Da usare solo su teste portacoltelli della KWO/Versofix - Kanefusa
* Sólo para empleo con portacuchillas de la firma KWO/Versofix/Kanefusa

Reversible knives with chip breakers
Wendeplatten mit Spanbrechernuten
Plaquettes reversibles avec brise copeaux
Coltellini con incastro rompitruciolo
Cuchillas reversibles con rompevirutas



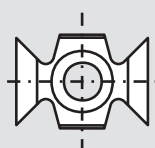
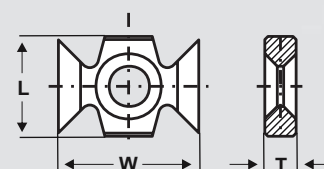
L mm	W mm	T mm	a mm	T04F	
20.0	12.0	1.5		030928	
30.0	12.0	1.5	14.0	013117	
50.0	12.0	1.5	26.0	013127	

Reversible knives for portable planers
Wendeplatten für Handhobel
Plaquettes por rabots electro portatifs
Coltelli piallatrici per portatili
Cuchillas para acepilladoras electricas

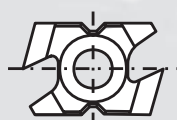


L mm	W mm	T mm	T08MF	
56.0	5.5	1.1	013041	Adler
60.0	5.5	1.1	013053	Wegoma
75.5	5.5	1.1	013001	AEG, Bosch, Festo, Haffner, Kress, Mafell, Metabo, Scheer, Skil, Holz-Her
75.7	5.5	1.2	013018	B&D
78.0	5.5	1.1	013067	Virutex
80.5	5.9	1.2	013043	ELU
80.5	5.5	1.1	013010	ELU
82.0	5.5	1.1	013020	AEG, B&D, Bosch, ALU, Fein, Felisatti, Haffner, Hitachi, Holz-Her, Mafell, Makita, Metabo, Peugeot, Ryobi, Skil
82.7	5.5	1.1	013032	B&D
92.0	5.5	1.1	013057	AEG, Hitachi, Ryobi
102.0	5.5	1.1	013061	AEG
82.0	5.5	1.1	013082	Casals
82.0	5.1	1.2	013034	Face groove, Brustnut, Rainure sur grande face, Scanalatura frontale, Ranura frontal

Edge rounding knives
Kantenrunder
Couteaux brise-arrête
Spigolatori
Cuchillas para aristas



For Leitz-system
Mechanical*



For Leitz-system
"BG-Test"***

L mm	W mm	T 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
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	9.0	TKM 12/1 R3	032307
15.0	20.0	7.3	TKM 12/3 R2	032308
15.0	18.3	7.3	TKM 12/3 R2F	032309
15.0	20.0	7.0	TKM 12/4 R1.5	032310
15.0	22.3	10.0	TKM 12/5 R3F	032311
15.0	22.3	7.3	TKM 13/0 (R1) N=5	032312
15.0	22.3	9.0	TKM 13/1 (R1) N=7	032313
15.0	22.3	7.3	TKM 16/0	032315
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	23.0	7.0	TKM 22/4 R1.5	032322
15.0	23.0	9.0	TKM 22/5 R3F	032323
15.0	23.0	9.0	TKM 22/1 R3	032319
15.0	25.7	7.3	TKM 24/0 R5	032327
15.0	25.7	7.3	TKM 24/1 R5	032326

* For use in Leitz-cutterheads only

* Nur zur Verwendung in Messerköpfen der Firma Leitz

* Utilisation limitée aux porte-outils de l'entreprise Leitz

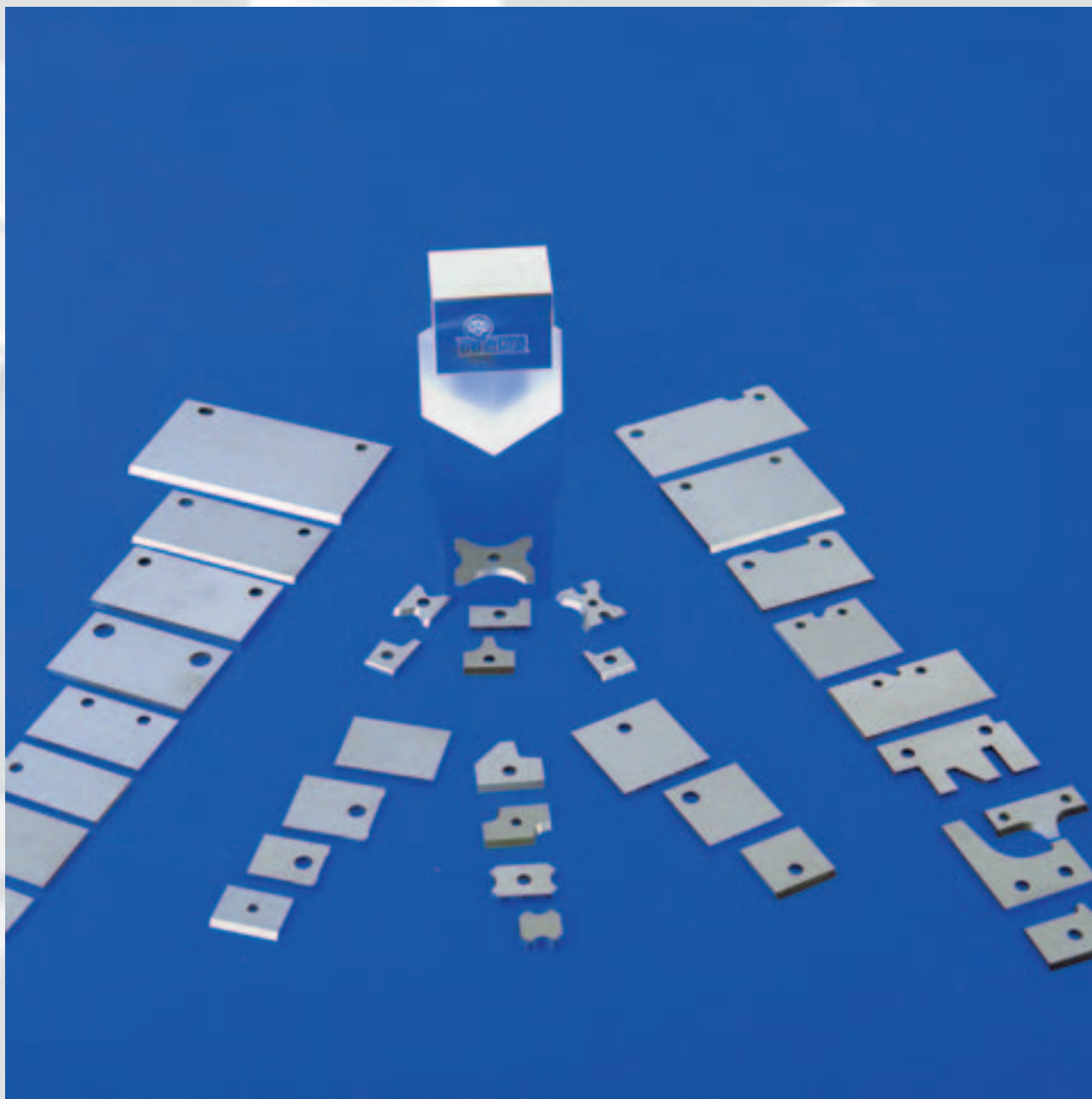
* Da usare solo su teste portacoltelli della Leitz

* Sólo para empleo con portacuchillas de la firma Leitz

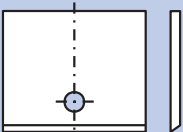
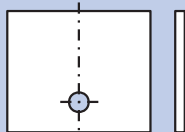
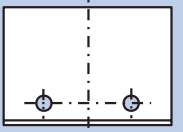
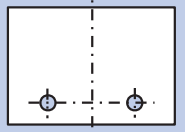
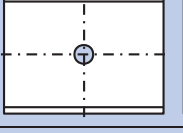
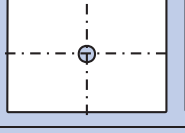
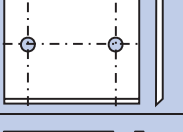
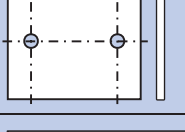
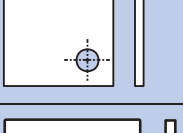
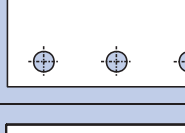
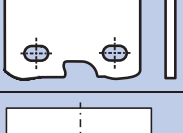
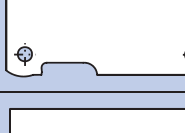
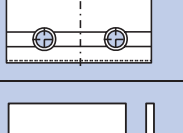
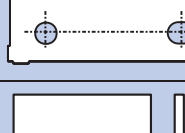
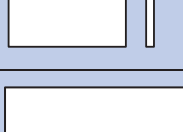

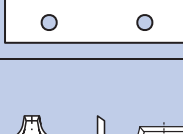
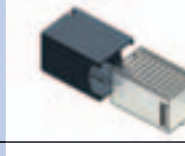




Blanks for profiling and radius knives
Blanketts zum Profilieren und Radienplatten
Plaquettes à profiler et plaquettes profilées
Placchette da profilare e placchette profilate
Placas para perfilar y perfiladas

3



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

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		Blanks with 2 bore holes at the bottom Blanketts mit 2 Bohrungen unten Plaquettes avec 2 trous en bas Placchette con 2 fori bassi Placas con 2 taladros abajo	30 - 34
		Blanks with 1 bore hole in the center Blanketts mit 1 Bohrung mittig Plaquettes avec 1 trou au centre Placchette con 1 foro nel centro Placas con 1 taladro en el centro	35
		Blanks with 2 bore holes in the center Blanketts mit 2 Bohrungen mittig Plaquettes avec 2 trous au centre Placchette con 2 fori nel centro Placas con 2 taladros en el centro	36 - 37
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		Superprofiler*	39 - 40
		Freud System* Leuco ECO-PRO System* Oertli System*, Great Lakes System* Crossgrove/Quernut/Rainure transversal/ Scanalatura/Ranura transversal+Microfinish	41 - 47
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		Backing plates & packing Stützplatten & Verpackungen Supports & emballages Supporti & imballi Placas de soporte & embalaje	50 - 51
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Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



Dimensions: The following pages represent only a small standard part of our extensive delivery program. Additionally TIGRA supplies almost any special dimension or execution upon customer request.

Abmessungen: Die folgenden Seiten stellen nur einen kleinen Ausschnitt unseres Lieferprogramms dar. Zusätzlich liefert TIGRA fast jede Art von Sonderausführung nach Kundenwunsch.

Dimensions: Les pages suivantes seulement présentent un petit extrait de notre gamme. TIGRA est également en mesure de fournir quasiment n'importe quelle exécution spéciale sur demande du client.

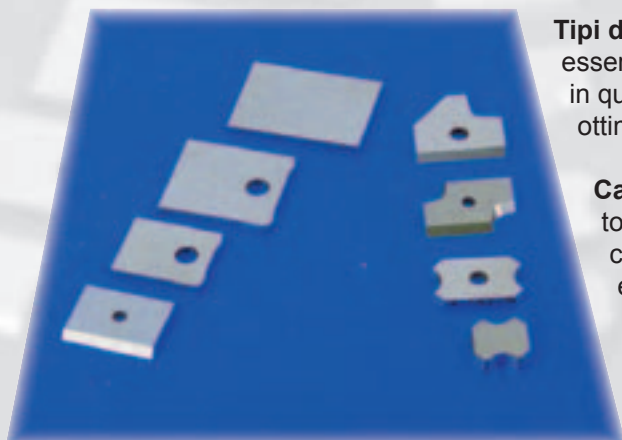
Misure: Le pagine successive contengono solo un estratto del nostro assortimento. In caso di necessità, TIGRA soddisfa ogni tipo di richiesta di produzione, anche articoli con dimensioni particolari.

Dimensiones: La páginas siguientes incluyen solamente una pequeña parte de nuestro programa de suministro. TIGRA fabrica prácticamente cualquier modelo especial a medida.

Carbide grades: The blanks are available in all required carbide grades. By using the optimum carbide grade you are able to give to your customers the optimum in lifetime and surface quality.

Hartmetallsorten: Blanketts sind in allen gewünschten Hartmetallsorten lieferbar. Durch Verwendung der optimalen Hartmetallsorte können Sie Ihren Kunden stets ein Optimum an Standzeit und Oberflächengüte bieten.

Types de carbures: Les ébauches sont disponibles dans tous les types de carbures souhaités. En utilisant des types de carbures optimaux, vous serez toujours en mesure d'offrir à vos clients le meilleur niveau de durabilité et de qualité de surface.



Tipi di metallo duro: Le placchette da profilare possono essere fornite in tutti i tipi di metallo duro desiderati. Anche in questo settore potete offrire ai vostri clienti la soluzione ottimale intermini di tecnica applicativa.

Calidades de metal duro: Disponemos de placas de todas la calidades de metal duro. Utilizando la calidad adecuada, podrá ofrecer a sus clientes rendimientos óptimos en duración y calidad superficial.

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

Preprofiled blanks: With the use of preformed blanks the time-consuming roughing or wire cutting process is not necessary any more. You can immediately start finish grinding and therefore you save the majority of the normal profiling cost.

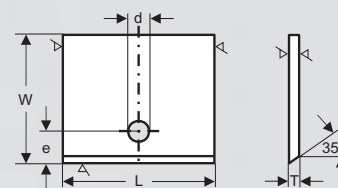
Vorprofilierte Blanketts: Mit der Verwendung vorprofiliierter Blanketts entfällt der zeitraubende Schrappvorgang bzw. das Drahtschneiden. Sie können sofort mit dem Schlichten beginnen und sparen so den größten Teil der Profilierkosten ein.

Plaquettes à profiler: L'utilisation d'ébauches préprofilées permet de supprimer les longues opération dégrossissage ou de coupe au fil. Vous pouvez immédiatement commencer la finition et économiser ainsi une grande partie des coûts de profilage.

Placchette presagomate: Con l'uso delle placchette presagomate non serve sgrossare. Potete cominciare subito con la finitura e ridurre una buona parte dei costi di profilatura.

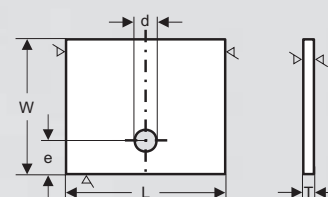
Placas preperfiladas: Las placas preperfiladas eliminan la costosa fase de desbastado resp. electroerosión a hilo. Podrá pasar directamente a la fase de acabado, eliminando así la mayor parte del coste correspondiente a la operación de perfilado.

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



L	W	T	d	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm					
15.0	15.4	2.0	4.1	6.3	014535	030949	106450	030950	014541
15.0	20.4	2.0	4.1	6.3	014553	014556	106467	014559	014561
15.0	25.4	2.0	4.1	6.3	014573	030951	106453	014577	014579
15.0	30.4	2.0	4.1	6.3	014590	030952	106454	014595	030953
15.8	30.4	2.0	4.1	6.3	014598	014599	106455	014601	014602
16.0	20.4	2.0	4.1	6.3	014609	030954	106470	030955	030956
19.8	30.4	2.0	4.1	6.3	014614	030957	106456	014616	030958
20.0	20.4	2.0	4.1	6.3	014648	014651	104857	014655	014657
20.0	25.4	2.0	4.1	6.3	014684	014688	104858	014692	014696
20.0	30.4	2.0	4.1	6.3	014723	014727	104629	014729	014733
20.0	35.4	2.0	4.1	6.3	014750	014753	104711	014756	014758
20.0	40.4	2.0	4.1	6.3	014768	030959	106457	030960	030961
25.0	20.4	2.0	4.1	6.3	014783	014786	106458	014789	014792
25.0	25.4	2.0	4.1	6.3	014812	014816	104663	014819	014824
25.0	30.4	2.0	4.1	6.3	014848	014851	105103	014856	014861
25.0	35.4	2.0	4.1	6.3	014880	014883	106095	014887	014889
30.0	20.4	2.0	4.1	6.3	014917	030962	106460	014922	014925
30.0	25.4	2.0	4.1	6.3	014970	014974	104664	014980	014986
30.0	30.4	2.0	4.1	6.3	015045	015049	105255	015054	015059
30.0	35.4	2.0	4.1	6.3	015104	015108	106461	015113	015116
30.0	40.4	2.0	4.1	6.3	015148	030963	106463	015154	015157
35.0	20.4	2.0	4.1	6.3	015261	030964	106465	015265	015267
35.0	25.4	2.0	4.1	6.3	015286	030965	104922	015290	015293
35.0	30.4	2.0	4.1	6.3	015334	030966	106466	015339	015342
35.0	35.4	2.0	4.1	6.3	015368	030967	105510	015372	015375
35.0	40.4	2.0	4.1	6.3	015398	030968	105203	015403	030969

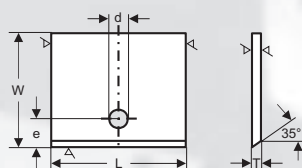
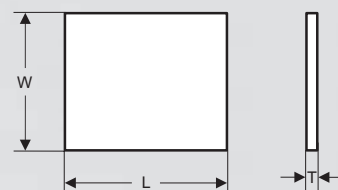
Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



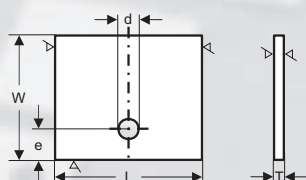
L	W	T	d	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm					
15.0	15.4	2.0	4.1	6.5	014536	030982	106468	014540	030983
15.0	20.4	2.0	4.1	6.5	014554	014557	106469	014560	030984
15.0	25.4	2.0	4.1	6.5	014574	030985	106471	014578	014580
15.0	30.4	2.0	4.1	6.5	014591	030986	106472	014596	030987
16.0	20.4	2.0	4.1	6.5	014610	030988	105221	030989	030990
18.0	18.3	2.0	3.0	6.0	018849	030991	106473	030992	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	014652	106475	014656	014659
20.0	25.4	2.0	4.1	6.5	014686	030993	106476	014694	014698
20.0	25.3	2.0	3.0	6.0	018851	030994	106477	030995	030996
20.0	30.4	2.0	4.1	6.5	014725	030997	106478	014731	014735
20.0	35.4	2.0	4.1	6.5	014751	030998	106479	014757	030999
20.0	40.4	2.0	4.1	6.5	031018	031019	106480	031020	012954
24.0	28.3	2.0	3.0	6.0	018852	031000	106481	031001	018853
25.0	25.4	2.0	4.1	6.5	014813	014817	106482	014820	014827
25.0	30.4	2.0	4.1	6.5	014849	014852	106483	014858	014863
25.0	30.4	2.0	5.8	6.5	019470				032399
25.0	35.4	2.0	4.1	6.5	014881	014884	106485	014888	014890
30.0	20.4	2.0	4.1	6.5	014918	031002	106486	014923	014927
30.0	25.4	2.0	4.1	6.5	014972	031003	106487	014982	014988
30.0	30.4	2.0	4.1	6.5	015047	015050	106488	015056	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	031004	106491	015114	031005
30.0	40.4	2.0	4.1	6.5	015149	015151	106493	015155	015158
32.0	22.3	2.0	3.0	6.0	018855	031006	106494	031007	031008
35.0	20.4	2.0	4.1	6.5	015262	031009	106495	015266	031010
35.0	25.4	2.0	4.1	6.5	015287	031011	106496	015291	015294
35.0	30.4	2.0	4.1	6.5	015335	031012	106497	015340	031013
35.0	35.4	2.0	4.1	6.5	015369	031014	106498	015373	015376
35.0	40.4	2.0	4.1	6.5	015399	015401	106499	015404	015405
35.0	40.4	2.0	6.1	6.0	019731		106500		032407
40.0	30.3	2.0	3.0	6.0	018856	031015	106501	031016	031017

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

Italian Style

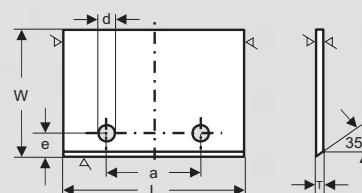


L	W	T	d	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm					
15.0	15.4	2.0	4.5	6.5	031021	014545	106441	014547	031022
15.0	20.4	2.0	4.5	6.5	034989	014566	106503	014569	031023
15.0	25.4	2.0	4.5	6.5	034971	014584	106504	014585	031025
15.0	30.4	2.0	4.5	6.5	034972	014604	103432	014606	031027
20.0	20.4	2.0	4.5	6.5	034973	014664	106505	014665	031029
20.0	25.4	2.0	4.5	6.5	034974	014706	106506	014708	031030
20.0	30.4	2.0	4.5	6.5	034975	014739	106181	014741	031031
20.0	35.4	2.0	4.5	6.5	034976	014762	106507	014764	031032
25.0	20.4	2.0	4.5	6.5	034977	014797	106508	014799	031033
25.0	25.4	2.0	4.5	6.5	034978	014832	106509	014834	031034
25.0	30.4	2.0	4.5	6.5	034979	014869	106510	014871	031035
25.0	35.4	2.0	4.5	6.5	034980	014893	106511	014895	031036
30.0	20.4	2.0	4.5	6.5	034981	014932	106512	014935	031037
30.0	25.4	2.0	4.5	6.5	034982	014993	106513	014995	031038
30.0	30.4	2.0	4.5	6.5	034983	015064	106514	015068	031039
30.0	35.4	2.0	4.5	6.5	034984	015122	106515	015124	031040
35.0	25.4	2.0	4.5	6.5	034986	015299	106516	015301	031042
35.0	30.4	2.0	4.5	6.5	034987	015345	106518	015347	031043



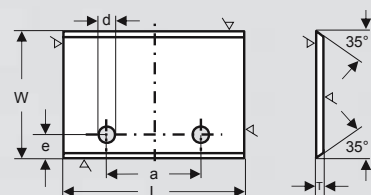
L	W	T	d	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm					
15.0	20.4	2.0	4.5	6.5	034970	012955	106519	014570	031047
15.0	25.4	2.0	4.5	6.5	034990	031045	106520	031046	014586
15.0	30.4	2.0	4.5	6.5	034991	031049	106521	014607	031050
20.0	20.4	2.0	4.5	6.5	034992	031051	106522	014666	014667
20.0	25.4	2.0	4.5	6.5	034993	031053	106523	014709	014710
20.0	30.4	2.0	4.5	6.5	034994	031056	106525	014742	014743
20.0	35.4	2.0	4.5	6.5	034995	031058	106526	014765	031059
25.0	20.4	2.0	4.5	6.5	041075	100453	106527	014800	041076
25.0	25.4	2.0	4.5	6.5	034996	031061	106528	014835	014836
25.0	30.4	2.0	4.5	6.5	034997	031063	106529	014872	031064
25.0	35.4	2.0	4.5	6.5	038344	100454	106530	014896	041077
30.0	20.4	2.0	4.5	6.5	034998	014933	106531	031066	031067
30.0	25.4	2.0	4.5	6.5	038900	100455	106532	014996	041079
30.0	30.4	2.0	4.5	6.5	015066	015065	106533	015069	031069
30.0	35.4	2.0	4.5	6.5	042107	100458	106534	100456	100457
30.0	40.4	2.0	4.5	6.5	042108	100460	106535	015163	100459

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



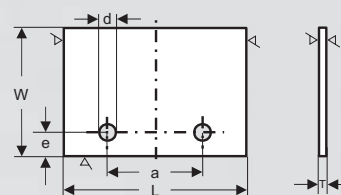
L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T08CR	T10MG	TL15
24.0	20.4	2.0	4.1	12.0	6.0	017436	041295	106537	041296	041297
30.0	20.4	2.0	4.1	14.0	6.0	017771	031072	106538	031073	031074
30.0	20.4	2.0	4.1	14.0	5.5	014937	031070	106539	014940	031071
30.0	20.4	2.0	4.1	14.0	6.3	039328	041232	106584	041233	041234
30.0	25.4	2.0	4.1	14.0	5.5	014999	012956	106541	012957	031167
30.0	25.4	2.0	4.1	14.0	6.3	015007	015008	106542	031075	015009
30.0	30.4	2.0	4.1	14.0	5.5	015072	031076	106543	031077	031078
30.0	30.4	2.0	4.1	14.0	6.3	039329	041235	106547	041236	041237
30.0	35.4	2.0	4.1	14.0	5.5	015125	031079	106550	031080	015130
30.0	35.4	2.0	4.1	14.0	6.3	019495	041238	106552	041239	041240
30.0	40.4	2.0	4.1	20.0	5.5	015164	031081	106554	031082	031083
31.8	25.4	2.0	4.1	16.0	6.3	041067	041348	106556	036909	041349
35.0	20.4	2.0	4.1	14.0	5.5	031085	031084	106557	031086	015276
35.0	20.4	2.0	4.1	20.0	5.5	031087	031088	106558	031089	015278
35.0	20.4	2.0	4.1	26.0	5.5	015274	031090	106560	031091	031092
35.0	25.4	2.0	4.1	26.0	5.5	015305	031093	106561	015311	015313
35.0	25.4	2.0	4.1	14.0	6.3	039575	041241	106562	041242	041243
35.0	25.4	2.0	4.1	18.0	6.3	019885	041335	106563	041336	041337
35.0	30.4	2.0	4.1	20.0	5.5	015356	031094	106564	031095	015357
35.0	30.4	2.0	4.1	14.0	6.3	039576	041244	104828	041245	041246
35.0	35.4	2.0	4.1	14.0	6.3	039577	041247	106566	041248	041249
35.0	40.4	2.0	4.1	20.0	5.5	015410	031096	106567	031097	015415
35.0	40.4	2.0	4.1	14.0	6.3	039578	041250	106568	041251	041252
40.0	20.4	2.0	4.1	26.0	5.5	015440	015443	106569	015447	015451
40.0	20.4	2.0	4.1	26.0	6.3	039566	041253	105622	041254	036345
40.0	25.4	2.0	4.1	20.0	5.5	015502	031098	106570	031099	031100
40.0	25.4	2.0	4.1	26.0	5.5	015482	015486	106572	015492	015497
40.0	25.4	2.0	4.1	26.0	6.0	017623	031101	106573	031102	031103
40.0	25.4	2.0	4.1	26.0	6.3	039330	041255	106097	041256	041257
50.0	20.4	2.0	4.1	26.0	6.3	039392	015821	106588	041265	036337
50.0	25.4	2.0	4.1	26.0	5.5	015841	015846	106589	015849	015852
50.0	25.4	2.0	4.1	26.0	6.3	039568	041266	104829	041267	036341

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



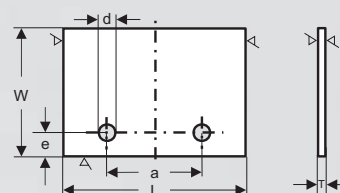
L	W	T	d	a	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm	mm					
40.0	30.0	2.0	4.1	20.0	5.5	015542	015545	106575	015548	015553
40.0	30.0	2.0	4.1	26.0	5.5	015560	015563	106576	015566	015569
40.0	30.0	2.0	4.1	26.0	6.3	015571	041258	105656	041259	038185
40.0	35.0	2.0	4.1	26.0	5.5	015611	015613	106577	015620	015624
40.0	35.0	2.0	4.1	26.0	6.0	015629	031104	106578	031105	031106
40.0	35.0	2.0	4.1	20.0	5.5	015630	031107	106579	031108	015632
40.0	35.0	2.0	4.1	26.0	6.3	039331	041260	104665	041261	041262
40.0	40.0	2.0	4.1	26.0	6.0	015646	031109	106580	015649	015652
40.0	40.0	2.0	4.1	20.0	6.0	015655	015658	106582	015659	031110
40.0	40.0	2.0	4.1	26.0	6.3	039567	041263	105990	041264	038186
40.0	45.0	2.0	4.1	26.0	6.0	019372	041333	106583	041334	019373
50.0	16.0	2.0	4.1	26.0	5.5	017639	031111	106585	031112	031113
50.0	16.0	2.0	4.1	26.0	6.0	015794	031114	106586	015796	031115
50.0	20.0	2.0	4.1	26.0	5.5	015804	031116	106587	031117	015815
50.0	30.0	2.0	4.1	26.0	5.5	015871	015874	106590	015878	015880
50.0	30.0	2.0	4.1	26.0	6.3	039569	038369	105657	015884	038188
50.0	35.0	2.0	4.1	26.0	6.0	015904	031120	106592	031121	031122
50.0	35.0	2.0	4.1	26.0	5.5	015905	031123	106593	031124	031125
50.0	35.0	2.0	4.1	26.0	6.3	018387	041268	105204	041269	041270
50.0	40.0	2.0	4.1	34.0	6.0	015916	031126	106594	031127	031128
50.0	40.0	2.0	4.1	26.0	6.3	019030	041271	105989	041272	035746
50.0	45.0	2.0	4.1	34.0	6.0	015940	015942	106595	031129	031130
50.0	45.0	2.0	4.1	26.0	6.3	039579	041273	106596	041274	041275
50.0	50.0	2.0	4.1	34.0	6.0	015953	031131	106597	031132	031133
60.0	20.0	2.0	4.1	26.0	5.5	016001	031134	106599	031135	031136
60.0	25.0	2.0	4.1	26.0	5.5	016031	031140	106601	016037	016040
60.0	25.0	2.0	4.1	44.0	5.5	016046	031141	106602	016047	031142
60.0	30.0	2.0	4.1	26.0	6.0	016068	031143	106603	031144	016074
60.0	30.0	2.0	4.1	26.0	6.3	039571	041276	104861	016082	038189
60.0	30.0	2.0	4.1	44.0	6.0	016076	031145	106604	031146	016077
60.0	35.0	2.0	4.1	26.0	6.0	016114	031147	106605	016119	016123
60.0	35.0	2.0	4.1	26.0	6.3	039572	041277	104859	041278	038190
60.0	35.0	2.0	4.1	44.0	6.0	016126	031148	106606	031149	031150
60.0	40.0	2.0	4.1	26.0	6.3	039573	041279	106098	041280	036782
60.0	40.0	2.0	4.1	44.0	6.0	016158	016164	106607	016170	016175
60.0	45.0	2.0	4.1	44.0	6.0	019375	019374	106609	031151	019376
75.0	30.0	2.0	4.1	44.0	6.0	016258	031152	106610	031153	031154
80.0	30.0	2.0	4.1	60.0	6.3	039580	041283	106003	041284	041285
80.0	35.0	2.0	4.1	60.0	6.3	041286	041287	106273	041288	041289
80.0	40.0	2.0	4.1	60.0	6.3	041292	041293	106612	041294	035745
80.0	45.0	2.5	4.1	60.0	6.0	016321	031155	106613	016323	016324
100.0	45.0	2.5	4.2	80.0	6.0	014519	031159	105295	031160	031161
120.0	45.0	2.5	4.2	80.0	6.0	014528	031165	106615	031166	014529

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



L	W	T	d	a	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm	mm					
19.0	30.0	2.0	3.6	8.0	4.75	017790	031963	106616	031964	031965
25.4	30.6	2.0	3.6	14.3	4.75	017791	031966	106617	031967	031968
30.0	20.4	2.0	4.1	14.0	6.5	014938	014939	106621	014941	014943
30.0	25.4	2.0	4.1	14.0	6.5	015000	015001	106622	015003	015005
30.0	25.4	2.0	4.1	19.0	4.75	017603	031969	106623	031970	017604
30.0	25.4	2.0	4.1	19.0	6.5	019428	031971	106624	031972	031973
30.0	30.4	2.0	4.1	14.0	6.5	015073	015074	106625	015077	015078
30.0	30.2	2.0	4.1	19.0	4.75	017605	031974	106626	031975	031976
30.0	30.0	2.0	3.6	19.0	4.75	017785	031977	106627	031978	017787
30.0	35.4	2.0	6.0	12.0	6.0	033964	041327	106628	041328	041329
30.0	35.4	2.0	4.1	14.0	6.5	015126	015127	106629	015129	015132
30.0	40.4	2.0	4.1	14.0	6.5	015165	015166	106630	031979	031981
35.0	20.4	2.0	4.1	14.0	6.5	015275	031988	106631	031989	031990
35.0	25.4	2.0	4.1	14.0	6.5	015306	015308	106632	015312	015314
35.0	30.4	2.0	4.1	14.0	6.5	015351	031991	106633	015354	031992
35.0	35.4	2.0	4.1	20.0	4.8	019831	041330	106634	041331	041332
35.0	35.4	2.0	4.1	14.0	6.5	015383	031993	106635	015385	015386
35.0	40.4	2.0	4.1	14.0	6.5	015411	015412	106636	015414	015416
40.0	20.4	2.0	5.5	26.0	5.5	037885	041338	106637	041339	041340
40.0	20.4	2.0	4.1	26.0	6.5	015441	015444	106638	015448	015452
40.0	25.4	2.0	4.1	26.0	6.5	015484	015487	106639	015493	015499
40.0	30.2	2.0	5.0	27.0	6.3	035290	041298	106640	041299	039325
40.0	30.4	2.0	4.1	26.0	6.5	015544	031994	106642	015550	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	041300	106644	041301	041302
40.0	35.4	2.0	4.1	26.0	6.5	015612	015614	106645	015622	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	041303	106647	041304	041305
40.0	40.4	2.0	4.1	26.0	6.5	015647	031995	106648	015650	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	031996	106650	015677	031997

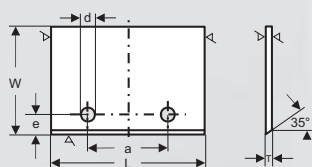
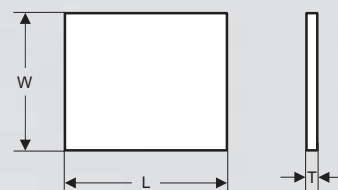
Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar



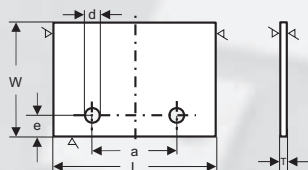
L	W	T	d	a	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm	mm					
50.0	20.4	2.0	4.1	26.0	6.5	015805	015808	106651	015813	015817
50.0	20.4	2.0	4.1	24.0	6.0	019600	041341	106652	041342	041343
50.0	25.2	2.0	5.0	26.0	6.5	019065	041306	106653	041307	041308
50.0	25.4	2.0	4.1	26.0	6.5	015843	015847	106654	015850	015854
50.0	30.4	2.0	4.1	26.0	6.5	015872	015875	106655	015879	032001
50.0	30.4	2.0	6.0	26.0	6.5	019382		106656		032422
50.0	32.4	2.0	3.0	24.0	6.0	018857	031998	106657	031999	032000
50.0	35.4	2.0	4.1	26.0	6.5	015897	015898	106658	015902	032002
50.0	40.4	2.0	4.1	26.0	6.5	015917	032003	106659	015920	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	032004	106661	032005	032006
50.0	50.4	2.0	4.1	26.0	6.5	015954	015955	106663	015956	032007
60.0	20.4	2.0	4.1	26.0	6.5	016002	016003	106664	016007	032009
60.0	25.4	2.0	4.1	26.0	6.5	016033	032010	106665	016038	016042
60.0	30.4	2.0	4.1	26.0	6.5	016069	016070	106666	016072	032011
60.0	35.4	2.0	4.1	26.0	6.5	016116	032012	106667	016121	016125
60.0	40.4	2.0	4.1	26.0	6.5	016160	032013	106668	016172	016177
80.0	25.2	2.0	4.1	60.0	6.5	035291	041309	106669	041310	041311
80.0	30.4	2.0	4.1	26.0	6.5	016276	032014	106670	016279	016281
80.0	35.4	2.0	4.1	26.0	6.5	016290	032015	106672	016292	032016

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

Italian Style

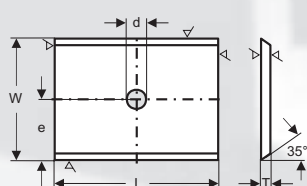


L	W	T	d	a	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm	mm					
30.0	25.4	2.0	4.5	14.0	6.5	035066	015013	106686	015015	031590
30.0	30.4	2.0	4.5	14.0	6.5	012981	015084	106687	015088	031591
30.0	35.4	2.0	4.5	14.0	6.5	035069	015134	106688	015136	031592
40.0	20.4	2.0	4.5	26.0	6.5	012982	015457	106689	015460	031597
40.0	25.4	2.0	4.5	26.0	6.5	035073	015504	106690	015508	031598
40.0	30.4	2.0	4.5	26.0	6.5	035075	015574	106691	015577	031599
50.0	20.4	2.0	4.5	26.0	6.5	035078	015823	106692	015826	031600
50.0	35.4	2.0	4.5	26.0	6.5	035082	015907	106693	015909	031601
60.0	20.4	2.0	4.5	26.0	6.5	035084	016010	106694	016012	031603
60.0	30.4	2.0	4.5	26.0	6.5	016084	043981	106695	016086	041090
60.0	35.4	2.0	4.5	26.0	6.5	035086	016130	106696	016132	031604
80.0	20.4	2.0	4.5	26.0	6.5	035089	016264	106697	031607	031608
80.0	25.4	2.0	4.5	26.0	6.5	035090	016270	106698	016272	031609

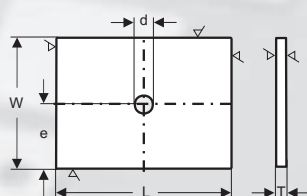


L	W	T	d	a	e	T04F	T03SMG	T08CR	T10MG	TL15
mm	mm	mm	mm	mm	mm					
30.0	20.4	2.0	4.5	14.0	6.5	014947	100044	106699	050284	050285
30.0	25.4	2.0	4.5	14.0	6.5	035067	031610	106700	031612	015016
30.0	30.4	2.0	4.5	14.0	6.5	015085	033517	106701	015086	015089
30.0	35.4	2.0	4.5	14.0	6.5	035070	031615	106703	031616	015137
35.0	25.4	2.0	4.5	14.0	6.5	015320	040122	106704	050286	015321
35.0	30.4	2.0	4.5	14.0	6.5	042115	054676	106705	050287	050288
35.0	35.4	2.0	4.5	14.0	6.5	015389	100326	106706	050289	015390
40.0	20.4	2.0	4.5	26.0	6.5	015458	100327	106707	015461	041094
40.0	25.4	2.0	4.5	26.0	6.5	035074	031617	106708	015509	031643
40.0	30.4	2.0	4.5	26.0	6.5	035076	015575	106709	015578	015579
40.0	35.4	2.0	4.5	26.0	6.5	012980	015635	106710	031621	015638
40.0	40.4	2.0	4.5	26.0	6.5	035077	031623	106711	015667	015668
50.0	20.4	2.0	4.5	26.0	6.5	035079	015824	106712	015827	015860
50.0	25.4	2.0	4.5	26.0	6.5	035080	031626	106713	031627	012974
50.0	30.4	2.0	4.5	26.0	6.5	035081	031629	106714	015889	015890
50.0	35.4	2.0	4.5	26.0	6.5	042117	040132	106715	050290	050291
50.0	40.4	2.0	4.5	26.0	6.5	042118	040133	106716	015927	050292
60.0	20.4	2.0	4.5	26.0	6.5	035085	031630	106717	016013	031632
60.0	25.4	2.0	4.5	26.0	6.5	041095	040135	106718	036875	041096
60.0	30.4	2.0	4.5	26.0	6.5	042121	100765	106719	050282	050283
60.0	35.4	2.0	4.5	26.0	6.5	035087	031633	106720	016133	031636
60.0	40.4	2.0	4.5	26.0	6.5	042122	100332	106721	050293	050294
80.0	30.4	2.0	4.5	26.0	6.5	035091	031637	106722	016286	031639
80.0	35.4	2.0	4.5	26.0	6.5	035092	031641	106723	016300	031640
80.0	40.4	2.0	4.5	26.0	6.5	042124	100333	106724	100334	100335

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

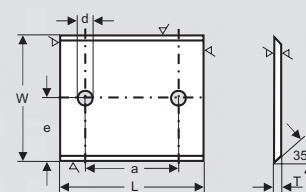


L	W	T	d	a	e	T04F	T03SMG	T10MG	TL15
mm	mm	mm	mm	mm	mm				
13.0	14.0	1.5	3.2			015189	033193	033194	033195
12.0	20.0	2.0	4.1			014618		052454	014620
13.0	16.0	2.0	3.0			017504	031647	031648	031649
13.0	16.0	2.0	4.0			018566			
20.0	16.0	2.0	3.0			014631	031650	031651	031652
20.0	20.0	2.0	4.1			014636	031653	014638	014640
20.0	24.0	2.0	3.5			014674	031654	031655	031656
25.0	16.0	2.0	4.1			014776	031657	031658	031659
25.0	25.0	2.0	4.1			014805	031660	031661	031662
30.0	20.0	2.0	4.1			014913	031663	031664	031665
30.0	26.0	2.0	4.1			015020	031666	031667	031668
40.0	25.0	2.0	4.1			015469	031672	031673	031674



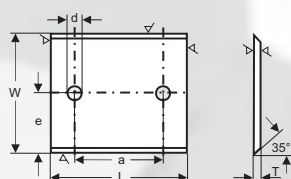
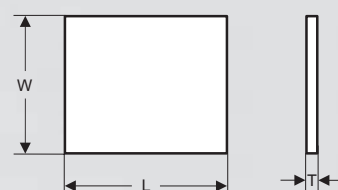
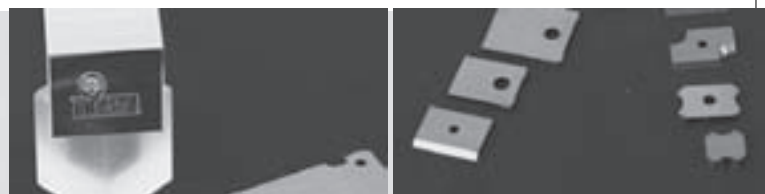
L	W	T	d	a	e	T04F	T03SMG	T10MG	TL15
mm	mm	mm	mm	mm	mm				
15.0	15.0	2.0	4.1			014532	031675	031676	031677
20.0	12.0	2.0	4.1			014619	031678	031679	031680
20.0	20.0	2.0	4.1			014637	031681	014639	014641
24.0	22.0	2.0	3.0			018841	031688	031689	031690
28.0	24.0	2.0	3.0			018842	031692	031693	031694
30.0	20.0	2.0	4.1			014914	031682	031683	031684
32.0	24.0	2.0	3.0			018843	031695	031696	031697
35.0	30.0	2.0	4.1			015328	031685	031686	031687
36.0	28.0	2.0	3.0			018844	031700	031699	031698

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

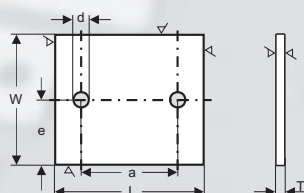


L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T10MG	TL15
30.0	16.0	2.0	4.0	20.0		014906	031706	014907	031707
30.0	25.0	2.0	3.5	20.0		014956	014958	014962	014965
30.0	25.0	2.0	3.0	20.0		017496	031708	031709	031710
30.0	26.0	2.0	3.5	20.0		015022	031711	031712	031713
30.0	35.0	2.0	4.1	20.0		015098	031714	031715	031716
40.0	16.0	2.0	4.1	26.0		015429	031717	031718	015430
40.0	20.0	2.0	4.1	20.0		015434	015435	031719	031720
40.0	20.0	2.0	4.1	26.0		015436	015437	031721	031722
40.0	25.0	2.0	4.1	20.0		015473	031723	031724	031725
40.0	25.0	2.0	4.1	26.0		015475	015476	031726	031727
40.0	30.0	2.0	3.5	20.0		015518	015521	015523	015526
40.0	30.0	2.0	4.1	20.0		015530	031728	031729	031730
40.0	30.0	2.0	4.1	26.0		015529	031731	031732	031733
40.0	32.62	2.0	3.5	20.0		015583	031734	031735	015587
40.0	35.0	2.0	4.1	20.0		015590	031736	031737	015592
40.0	35.0	2.0	4.1	26.0		015595	015596	015600	015603
40.0	37.82	2.0	3.5	20.0		015639	031738	031739	031740
40.0	40.0	2.0	4.1	20.0		015641	031741	031742	031743
40.0	40.0	2.0	3.5	20.0		015643	031744	031745	031746
40.0	42.86	2.0	3.5	20.0		015671	031747	031748	031749
45.0	30.0	2.0	4.1	26.0		015781	031750	031751	031752
50.0	16.0	2.0	4.1	26.0		015788	015789	031753	031754
50.0	20.0	2.0	4.1	26.0		015800	031755	031756	031757
50.0	25.0	2.0	4.1	26.0		015838	031758	031759	015836
50.0	30.0	2.0	4.1	26.0		015867	031760	031761	031762
50.0	45.0	2.0	4.1	34.0		015931	015933	015935	031766

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

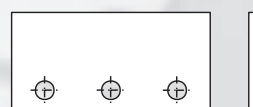
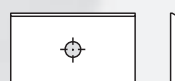
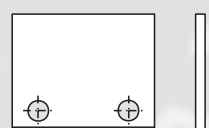
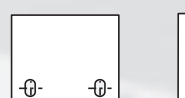
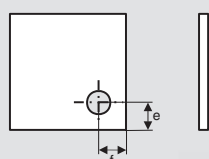
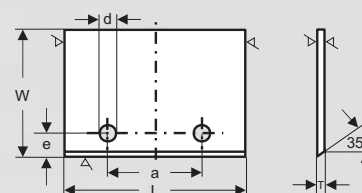


L	W	T	d	a	e	T04F	T03SMG	T10MG	TL15
mm	mm	mm	mm	mm	mm				
60.0	20.0	2.0	4.1	26.0		015992	031770	015995	015996
60.0	25.0	2.0	4.1	26.0		016022	031771	031772	016024
60.0	24.0	2.0	4.1	36.0		016027	031773	031774	031775
60.0	32.62	2.0	3.5	20.0		016089	031776	031777	031778
60.0	35.0	2.0	4.1	26.0		016091	016092	031779	016095
60.0	35.0	2.0	4.1	44.0		016098	016102	016104	016107
60.0	37.82	2.0	3.5	20.0		016137	031780	031781	031782
60.0	39.0	2.0	3.5	20.0		016138	031783	031784	016140
60.0	40.0	2.0	4.1	44.0		016145	016148	016149	016151
60.0	42.86	2.0	3.5	20.0		016184	031785	031786	031787
80.0	24.0	2.0	4.1	60.0		016265			
80.0	45.0	2.5	4.1	60.0		016317	016318	031794	031795



L	W	T	d	a	e	T04F	T03SMG	T10MG	TL15
mm	mm	mm	mm	mm	mm				
30.0	25.0	2.0	4.1	14.0		014957	031798	031799	031800
30.0	30.0	2.0	4.1	14.0		015035	031801	031802	031803
30.0	35.0	2.0	4.1	14.0		015099	031804	031805	031806
40.0	30.0	2.0	4.1	26.0		015519	031807	031808	031809
50.0	40.0	2.0	4.1	26.0		015913	031822	031823	031824
60.0	30.0	2.0	4.1	26.0		016061	016062	031825	031826
60.0	40.0	2.0	4.1	26.0		016147	031827	016150	031828

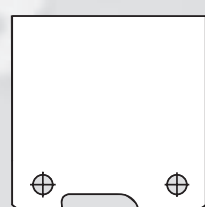
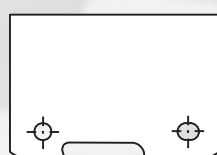
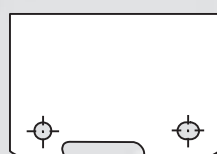
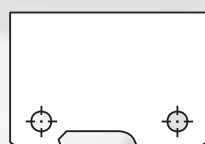
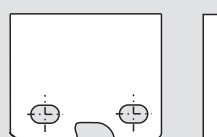
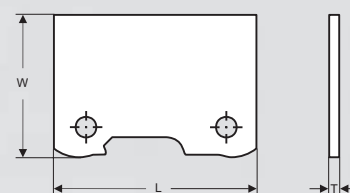
Special blanks for profiling
Spezial-Blanketts zum Profilieren
Plaquettes spéciales à profiler
Placchette speciali da profilare
Placas especiais para perfilar



L	W	T	d	a	e	f	T04F
mm	mm	mm	mm	mm	mm	mm	
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	50.2	2.0	4.5x7.0	27.0	7.5		035289
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
30.0	25.0	2.0	4.1	19.0	4.6		018068
30.0	27.0	2.0	4.1	19.0	4.6		018467
30.0	40.5	2.0	4.1	19.0	4.5		018602
35.0	27.0	2.0	4.1	19.0	4.6		018074
40.0	27.5	2.0	4.1	27.5	4.6		018367
40.0	27.5	2.0	4.1	19.0	4.6		018453
40.0	40.5	2.0	4.1	19.0	4.6		018605
50.0	20.5	2.0	4.1	26.0	6.0		019113
50.0	27.5	2.0	4.1	26.0	4.6		018364
50.0	27.5	2.0	4.1	26.0	6.0		018277
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
80.0	27.0	2.0	4.1	67.0			032388
37.5	25.4	1.5					019140
50.0	25.4	1.5					018343

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Leuco Superprofiler system*



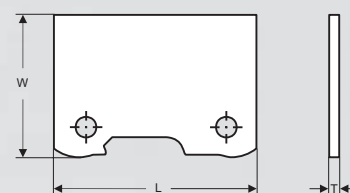
L mm	W mm	T mm	T04F	T03SMG	T08CR	T10MG	TL15
31.0	26.0	1.5	015207	015210	106725	015211	015214
41.0	28.0	1.5	015701	015708	102763	015722	015727
41.0	28.0	2.0	015695	031835	106726	031837	031839
41.0	35.0	1.5	015748	015750	106727	015751	015753
41.0	35.0	2.0	015744	031840	106728	015745	015746
51.0	35.0	1.5	015973	031841	106729	015975	015978
51.0	45.0	2.0	015981	015984	106730	031842	031843
60.8	30.6	1.5	016209	016214	106731	016225	016229
60.8	30.6	2.0	016206	031844	106732	031846	016208
61.0	45.0	2.0	016234	016238	106733	016239	016242
81.0	45.0	2.0	016334	031847	106734	016336	016339

L mm	W mm	T mm	d mm	e mm	T04F	T03SMG	T08CR	T10MG	TL15
40.4	41.2	2.0	4.1	6.0	015756		106735		
40.4	41.2	2.0	5.1	8.0	033424	053741	106736	033503	042598

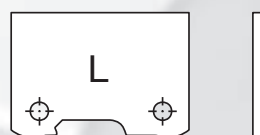
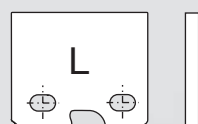
* For use in Leuco-cutterheads only
 * Nur zur Verwendung in Messerköpfen der Firma Leuco
 * Utilisation limitée aux porte-outils de l'entreprise Leuco
 * Da usare solo su teste portacoltelli della Leuco
 * Sólo para empleo con portacuchillas de la firma Leuco

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Leuco Superprofiler system*



>>>MICROFINISH<<<



	L	W	T	T04F	T03SMG	T10MG	TL15
	mm	mm	mm				
L	31.0	26.0	1.5	032077	032076	015212	032074
R	31.0	26.0	1.5	015208	032072	015213	032073
L	41.0	28.0	1.5	015707	015711	015724	015730
R	41.0	28.0	1.5	015702	015709	015723	015728
L	41.0	28.0	2.0	031848	031849	031852	031854
R	41.0	28.0	2.0	015696	031850	031853	031855
L	41.0	35.0	1.5	032028	032029	032027	032030
R	41.0	35.0	1.5	032031	032032	015752	032033
L	41.0	35.0	2.0	032034	032037	032038	032041
R	41.0	35.0	2.0	032035	032036	032039	032040
L	51.0	35.0	1.5	034084	034085	034086	034087
R	51.0	35.0	1.5	032043	032044	032045	032046
L	51.0	45.0	2.0	034088	034089	034090	034091
R	51.0	45.0	2.0	015982	032047	032048	032049
L	60.8	30.6	1.5	032051	032053	032054	032055
R	60.8	30.6	1.5	032050	032052	016226	032056
L	60.8	30.6	2.0	032058	032059	032063	032062
R	60.8	30.6	2.0	032057	032060	032064	032061
L	61.0	45.0	2.0	034092	034093	034094	034095
R	61.0	45.0	2.0	016235	032065	032066	016243
L	81.0	45.0	2.0	034096	034097	034098	034099
R	81.0	45.0	2.0	032067	032068	032069	032070

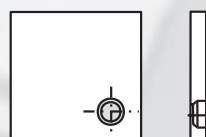
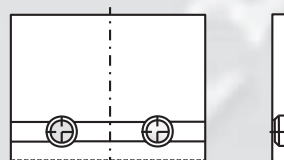
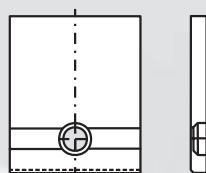
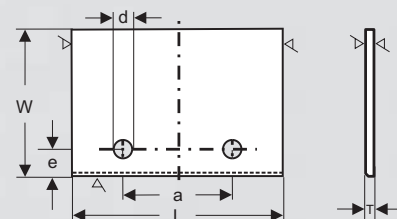
L: Left, links, gauche, sinistra, izqjerda
R: Right, rechts, droite, destra, derecha

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Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Freud system*



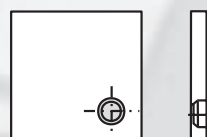
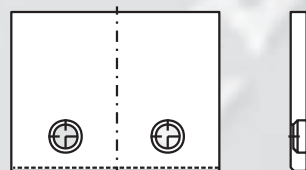
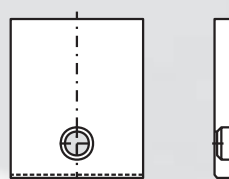
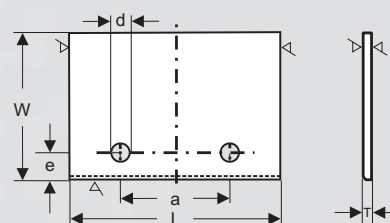
L	W	T	d	a	e	T04F	T03SMG	T10MG	TL15
mm	mm	mm	mm	mm	mm				
20.0	25.0	3.0	4.5		7.0	018786	031879	031880	031881
25.0	25.0	3.0	4.5		7.0	031882	031883	031884	018790
25.0	30.0	3.0	4.5		7.0	031886	031885	031887	031888
25.0	35.0	3.0	4.5		7.0	018798	031889	031890	018801
25.0	40.0	3.0	4.5		7.0	031892	031891	031893	031894
30.0	40.0	3.0	4.5		7.0	031958	031957	031959	031960
35.0	25.0	3.0	4.5		7.0	031896	031895	031897	031898
35.0	30.0	3.0	4.5		7.0	031900	031899	031901	031902
35.0	35.0	3.0	4.5		7.0	018810	031903	031904	031905
45.0	25.0	3.0	4.5	28.0	7.0	031907	031906	031908	031909
45.0	30.0	3.0	4.5	28.0	7.0	031911	031910	031912	031913
45.0	35.0	3.0	4.5	28.0	7.0	031915	031914	031916	031917
55.0	25.0	3.0	4.5	41.0	6.0	031919	031918	031920	031921
55.0	30.0	3.0	4.5	41.0	6.0	031924	031925	031923	031922
55.0	35.0	3.0	4.5	41.0	6.0	031927	031926	031928	031929
55.0	40.0	3.0	4.5	41.0	6.0	031931	031930	031932	031933
65.0	20.0	3.0	4.5	28.0	6.0	031935	031934	031936	031937
65.0	25.0	3.0	4.5	28.0	6.0	031955	031954	018826	031956
70.0	25.0	3.0	4.5	41.0	6.0	031939	031938	031940	031941
80.0	30.0	3.0	4.5	66.0	6.0	031943	031942	031944	031945
80.0	35.0	3.0	4.5	66.0	6.0	031947	031946	031948	031949
40.0	40.0	3.0	4.5		11/11	031951	031950	031952	031953

* For use in Freud-cutterheads only
 * Nur zur Verwendung in Messerköpfen der Firma Freud
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 * Da usare solo su teste portacoltelli della Freud
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Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Freud system*



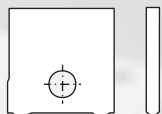
L	W	T	d	a	e	T04F	T03SMG	T10MG	TL15
mm	mm	mm	mm	mm	mm				
20.0	25.0	3.0	4.5		7.0	052171	052172	052173	052174
25.0	25.0	3.0	4.5		7.0	052044	052175	052176	052177
25.0	30.0	3.0	4.5		7.0	052178	052179	052180	052181
25.0	35.0	3.0	4.5		7.0	052182	052183	052184	052185
25.0	40.0	3.0	4.5		7.0	051951	052189	052190	052191
30.0	40.0	3.0	4.5		7.0	052192	052193	052194	052195
35.0	25.0	3.0	4.5		7.0	052196	052197	052198	052199
35.0	30.0	3.0	4.5		7.0	052200	052201	052202	052203
35.0	35.0	3.0	4.5		7.0	052204	052205	052206	052207
45.0	25.0	3.0	4.5	28.0	7.0	052208	052209	052210	052211
45.0	30.0	3.0	4.5	28.0	7.0	052213	052212	052214	052215
45.0	35.0	3.0	4.5	28.0	7.0	052216	052217	052218	052219
55.0	25.0	3.0	4.5	41.0	6.0	052220	052221	052222	052223
55.0	30.0	3.0	4.5	41.0	6.0	051712	052224	052225	052226
55.0	35.0	3.0	4.5	41.0	6.0	052227	052228	052229	052230
55.0	40.0	3.0	4.5	41.0	6.0	052231	052232	052235	052234
65.0	20.0	3.0	4.5	28.0	6.0	052236	052237	052238	052239
65.0	25.0	3.0	4.5	28.0	6.0	052240	052241	052242	052243
70.0	25.0	3.0	4.5	41.0	6.0	052244	052245	052246	052247
80.0	30.0	3.0	4.5	66.0	6.0	052248	052249	052250	051576
85.0	35.0	3.0	4.5	66.0	6.0	052251	052252	052253	052254
40.0	40.0	3.0	4.5		11/11	031951	031950	031952	031953

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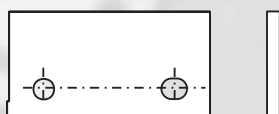


Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Leuco ECO-PRO system*



L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
10.6	20.8	2.0	032288	032343	032344	032345
12.5	20.5	2.0	032346	032385	032386	032387
15.5	20.5	2.0	032347	032390	032456	032495
15.5	25.5	2.0	032352	032393	032457	032496
16.4	20.5	2.0	032353	032406	032458	032497
16.7	25.9	2.0	032354	032408	032459	032498
18.4	18.9	2.0	032355	032409	032460	032499
18.4	25.9	2.0	032356	032410	032461	032500
18.4	36.3	2.0	032357	032412	032462	032501
20.3	20.5	2.0	032358	032421	032463	032502
20.3	25.5	2.0	032359	032423	032464	032503
20.3	30.4	2.0	032360	032425	032465	032504
22.3	25.5	2.0	032361	032433	032466	032505
24.3	20.9	2.0	032362	032434	032467	032506
25.3	25.9	2.0	032363	032435	032468	032507
25.3	35.3	2.0	032364	032436	032469	032508
28.2	25.5	2.0	032365	032437	032470	032509
28.2	35.3	2.0	032366	032438	032471	032511



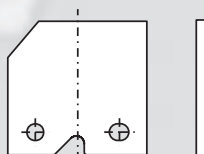
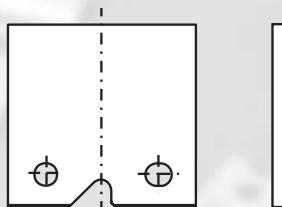
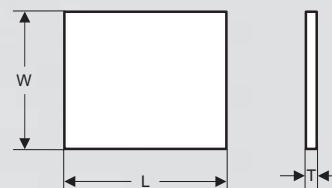
L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
30.2	25.5	2.0	032348	032349	032350	032351
30.2	30.4	2.0	032367	032439	032478	032523
32.2	22.8	2.0	032368	032440	032479	032524
32.2	35.4	2.0	032369	032441	032480	032525
32.8	26.5	2.0	032370	032442	032481	032526
35.2	26.0	2.0	032371	032443	032482	032527
40.1	20.9	2.0	032372	032444	032483	032528
40.1	30.4	2.0	032373	032445	032484	032529
40.8	36.0	2.0	032374	032446	032485	032530
42.8	31.0	2.0	032375	032447	032486	032531
42.8	36.0	2.0	032376	032448	032487	032532
45.8	36.0	2.0	032377	032449	032488	032533
49.9	20.9	2.0	032378	032450	032489	032534
49.9	33.0	2.0	032379	032451	032490	032535
49.9	40.2	2.0	032380	032452	032491	032536
59.6	35.4	2.0	032381	032453	032492	032537
60.6	25.8	2.0	032382	032454	032493	032538
80.6	35.8	2.0	032384	032455	032494	032539

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Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Oertli system*

Auch mit Microfinish erhältlich!
 Also available with Microfinish!



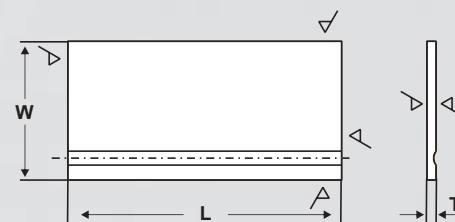
L	W	T	T04F	T10MG
mm	mm	mm		
20.0	20.0	2.0	032078	032080
20.0	24.0	2.0	022563	022565
20.0	29.0	2.0	022567	022568
20.0	34.0	2.0	032083	022571
25.0	19.0	2.0	032085	032086
25.0	24.0	2.0	022577	022578
25.0	29.0	2.0	022581	022583
25.0	34.0	2.0	022558	022559
30.0	19.0	2.0	032098	032100
30.0	24.0	2.0	022586	032093
30.0	29.0	2.0	032094	032095
30.0	34.0	2.0	022611	022612
35.0	24.0	2.0	022588	022589
35.0	29.0	2.0	022592	022594
35.0	34.0	2.0	032103	032104
45.0	19.0	2.0	022575	022576
45.0	24.0	2.0	022596	022597
45.0	29.0	2.0	022600	022602
45.0	33.0	2.0	032108	022604
45.0	34.0	2.0	032110	032111
55.0	19.0	2.0	032116	032118
55.0	22.0	2.0	032113	035199
55.0	27.5	2.0	032119	032120
55.0	29.6	2.0	032122	032123
55.0	33.0	2.0	022605	022606
65.0	22.0	2.0	032125	032126
65.0	27.5	2.0	032128	032130
65.0	33.0	2.0	022609	032131
80.0	22.0	2.0	032133	032134
80.0	27.5	2.0	032136	032137
80.0	33.0	2.0	032141	032140
25.0	29.0-50°	2.0	022617	022620
25.0	29.0-70°	2.0	022624	022628
35.0	29.0-50°	2.0	032142	032143
35.0	29.0-70°	2.0	032145	032146

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



Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

For Great Lakes System*

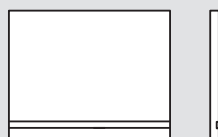


L	W	T	T04F	T08CR	T10MG
mm	mm	mm			
15.0	15.5	2.0	107590	107630	107671
15.0	20.5	2.0	107591	107631	107672
20.0	20.5	2.0	105979	107632	107673
20.0	25.5	2.0	107593	107633	103176
20.0	30.5	2.0	107594	107634	107675
20.0	35.5	2.0	107595	107635	107676
25.0	20.5	2.0	107596	107636	107677
25.0	25.5	2.0	107597	107637	103174
25.0	30.5	2.0	104567	107638	107679
25.0	35.5	2.0	106502	107639	107680
30.0	20.5	2.0	107600	107640	107681
30.0	25.5	2.0	053071	107641	103032
30.0	30.5	2.0	104581	107642	103177
30.0	35.5	2.0	103932	107643	107683
30.0	40.5	2.0	107604	107644	105107
35.0	20.5	2.0	107605	107645	107685
35.0	25.5	2.0	104028	107646	107687
35.0	30.5	2.0	107607	107647	104582
35.0	35.5	2.0	103429	107648	107127
35.0	40.5	2.0	107609	107649	107690
40.0	20.5	2.0	107610	107650	107691
40.0	25.5	2.0	107611	107651	107693
40.0	30.5	2.0	107612	107652	107694
40.0	35.5	2.0	107613	107653	107695
40.0	40.5	2.0	107614	107654	107696
45.0	30.5	2.0	107615	107655	107697
45.0	35.5	2.0	107616	107656	107698
50.0	20.5	2.0	107617	107657	107699
50.0	25.5	2.0	107618	107658	107700
50.0	30.5	2.0	107619	107659	107701
50.0	35.5	2.0	104960	107660	107702
50.0	40.5	2.0	107621	107661	107703
60.0	20.5	2.0	107622	107662	107704
60.0	25.5	2.0	107623	107663	107705
60.0	30.5	2.0	107624	107664	103448
60.0	40.5	2.0	107625	107665	107707
60.0	45.5	2.0	107626	107666	107708
80.0	25.5	2.0	107627	107667	107709
80.0	35.5	2.0	107628	107669	107711
80.0	45.5	2.0	107629	107670	107712

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

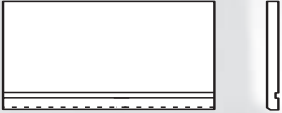
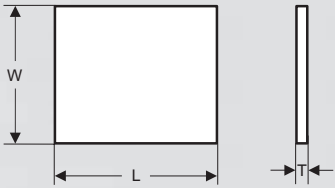


Knives with crossgrove and microfinish
 Blanketts mit Quernut und Microfinish
 Plaquettes avec rainure transversal et microfinish
 Placchette con scanalatura e microfinish
 Placas con ranura transversal y microfinish



L	W	T	T04F	T08SMG	T10MG	TL15
mm	mm	mm				
20.5	16.5	2.0	037193	022937	038523	041097
20.5	22.5	2.0	037996	022941	022939	041098
20.5	25.5	2.0	041099	022944	022943	041100
20.5	27.9	2.0	041102	022947	022946	041101
20.5	30.6	2.0	041103	022950	022949	041104
20.5	34.0	2.0	041108	022953	041110	041109
25.5	25.5	2.0	041204	034517	041206	041205
25.5	27.9	2.0	041209	039427	041207	041208
25.5	30.6	2.0	041210	039425	041212	041211
25.5	34.0	2.0	041217	035621	041219	041218
30.5	22.5	2.0	036089	022958	022957	041111
30.5	25.5	2.0	041112	035435	022960	041113
30.5	27.9	2.0	041121	022963	022962	041118
30.5	30.6	2.0	041122	022966	022965	041123
30.5	34.0	2.0	041127	022969	041128	039072
35.5	22.5	2.0	041522	041523	041524	041525
35.5	25.5	2.0	041526	023023	041527	041528
35.5	32.5	2.0	041529	023025	041530	023024
40.25	16.5	2.0	040673	022971	041130	041129
40.25	22.5	2.0	041131	022974	022973	041132
40.25	25.5	2.0	041133	022977	022976	041134
40.25	27.9	2.0	041135	022981	022979	041136
40.25	30.6	2.0	041138	022984	022983	041137
40.25	32.6	2.0	041139	022987	022986	041140
40.25	34.0	2.0	039717	041143	041142	041141
50.25	22.5	2.0	039716	022991	022990	041144
50.25	25.5	2.0	041145	022994	022993	041146
50.25	27.9	2.0	040864	022997	022996	041147
50.25	30.6	2.0	041149	023000	022999	041148
50.25	32.6	2.0	041150	023003	023002	041151
50.25	34.0	2.0	041152	023004	041153	041154
60.25	22.5	2.0	041158	023008	023007	040666
60.25	25.5	2.0	037638	041159	023010	041160
60.25	27.9	2.0	036846	023013	023012	041161
60.25	30.6	2.0	041162	041164	023015	041163
60.25	32.6	2.0	041166	041165	023017	041167
80.25	16.5	2.0	041172	023022	041173	041174

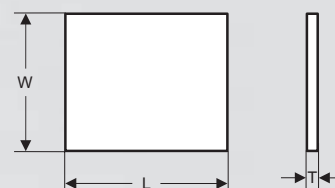
Strips with crossgroove and microfinish
Leisten mit Quernut und Microfinish
Plaquettes avec rainure transversal et microfinish
Placchette con scanalatura e microfinish
Placas con ranura transversal y microfinish



L	W	T	T04F	T08SMG	T10MG	TL15
mm	mm	mm				
165.0	16.5	2.0	032154	032153	041225	032155
165.0	22.5	2.0	032162	023100	041226	032156
165.0	25.5	2.0	032163	023102	041227	032157
165.0	27.9	2.0	032164	023104	041228	032158
165.0	30.6	2.0	032165	023106	041229	032159
165.0	32.6	2.0	032166	023108	041230	032160
165.0	34.0	2.0	032167	032152	041231	032161

Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

Without bores
Ohne Bohrung
Sans trous
Senza fori
Sin taladros



Thickness ground * Plangeschliffen * Rectifié * Rettificati sui piani * Rectificadas en el grosor

L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
30.0	15.0	2.0	018644	018643	018646	031856
40.0	15.0	2.0	018651	018650	018653	018654
40.0	20.0	2.0	018628	031857	018630	018631
40.0	25.0	2.0	018620	031858	018621	031859
40.0	30.0	2.0	018633	018632	031860	018635
40.0	35.0	2.0	018623	018622	018624	031861
48.0	15.0	2.0	018655	031863	018656	031862
48.0	20.0	2.0	018636	031864	018638	018639
48.0	25.0	2.0	018640	018641	018642	031865
50.0	45.0	2.0	018659	018660	018661	031866
50.0	25.4	1.5	018343	031867	031868	031869
60.0	20.0	2.0	018626	031870	031871	031872
60.0	40.0	2.0	018664	018663	018665	031875
80.0	35.0	2.0	018658	031876	031877	031878

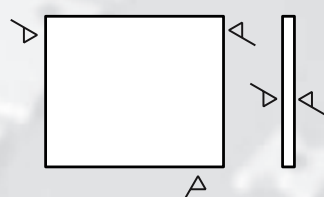


Blanks for profiling
Blanketts zum Profilieren
Plaquettes à profiler
Placchette da profilare
Placas para perfilar

Without bores
Ohne Bohrung
Sans trous
Senza fori
Sin taladros

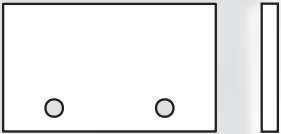
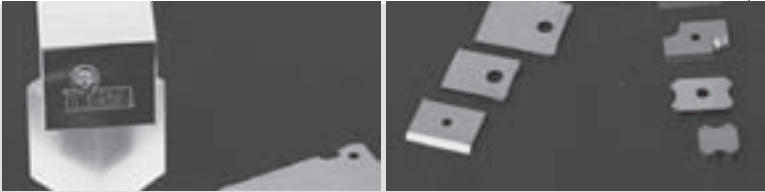


3 sides ground * 3 Seiten geschliffen * Rectifié à 3 côtés * Rettificati 3 lati * Rectificadas en 3 lados

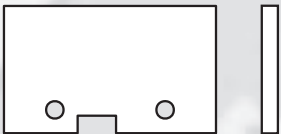


L mm	W mm	T mm	T04F	T08CR	T10MG
15.0	15.5	2.0	107714	107755	107795
15.0	20.5	2.0	107715	107756	107796
20.0	20.5	2.0	107717	107757	107797
20.0	25.5	2.0	107718	107758	107798
20.0	30.5	2.0	107719	107759	107799
20.0	35.5	2.0	107720	107760	107800
25.0	20.5	2.0	107721	107761	107801
25.0	25.5	2.0	107722	107762	107802
25.0	30.5	2.0	107723	107763	107803
25.0	35.5	2.0	107724	107764	107804
30.0	20.5	2.0	107725	107765	107805
30.0	25.5	2.0	107726	107766	107806
30.0	30.5	2.0	107727	107767	107807
30.0	35.5	2.0	107728	107768	107808
30.0	40.5	2.0	107729	107769	107809
35.0	20.5	2.0	107730	107770	107810
35.0	25.5	2.0	107731	107771	107811
35.0	30.5	2.0	107732	107772	107812
35.0	35.5	2.0	107733	107773	107813
35.0	40.5	2.0	107734	107774	107814
40.0	20.5	2.0	107735	107775	107815
40.0	25.5	2.0	107736	107776	107816
40.0	30.5	2.0	107737	107777	107817
40.0	35.5	2.0	107738	107778	107818
40.0	40.5	2.0	107739	107779	107819
45.0	30.5	2.0	107740	107780	107820
45.0	35.5	2.0	107741	107781	107821
50.0	20.5	2.0	107742	107782	107822
50.0	25.5	2.0	107743	107783	107823
50.0	30.5	2.0	107744	107784	107824
50.0	35.5	2.0	107745	107785	107826
50.0	40.5	2.0	107746	107786	107827
60.0	20.5	2.0	107747	107787	107828
60.0	25.5	2.0	107748	107788	107829
60.0	30.5	2.0	107749	107789	107830
60.0	40.5	2.0	107750	107790	107831
60.0	45.5	2.0	107751	107791	107832
80.0	25.5	2.0	107752	107792	107833
80.0	35.5	2.0	107753	107793	107835
80.0	45.5	2.0	107754	107794	107836

Backing plates
 Stützplatten
 Supports
 Supporti
 Placas de soporte

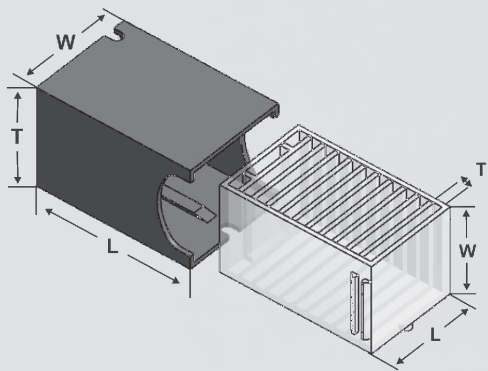


L mm	W mm	T mm	L mm	W mm	T mm	Prod.-No.
			for Blanks			
38.0	27.0	4.0	40.0	30.0	2.0	015520
48.0	45.0	4.0	50.0	45.0	2.0	015932
58.0	32.0	4.0	60.0	35.0	2.0	016100
58.0	38.0	4.0	60.0	40.0	2.0	016162

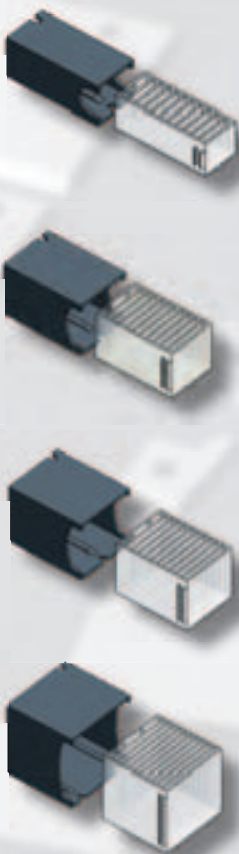


L mm	W mm	T mm	L mm	W mm	T mm	Prod.-No.
			for Superprofiler*			
40.0	26.0	4.0	41.0	28.0	1.5	015705
50.0	33.0	4.0	51.0	35.0	1.5	015974
60.0	28.0	4.0	61.0	31.0	1.5	016212
60.0	45.0	6.0	61.0	45.0	2.0	016237
80.0	43.0	6.0	81.0	45.0	2.0	016335

Packing boxes
 Verpackungsschachteln
 Caisses d'emballage
 Contenitori di imballaggio
 Cajas de embalaje

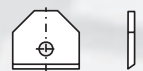
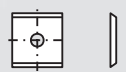
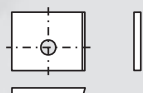
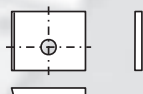
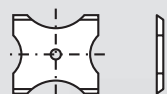
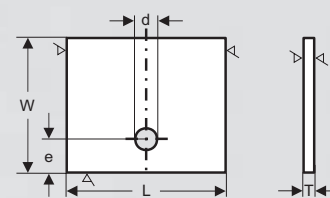


in anthracite
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 en Antracita



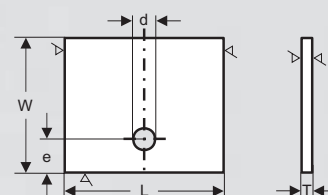
External dimension box Außenmaß Schachtel Dimension externe de boîte Dimensione esterna Dimensión externa				Maximum knife dimension Maximales Messermaß Dimension maximum de couteau Dimensione massima della lama Dimensión máxima del cuchillo			Pieces Stück Unités Unità Unidades
L mm	W mm	T mm	Art.	L mm	W mm	T mm	
69	29.2	31.8	106393	23	23	4	10
69	44.2	46.8	106404	38	38	4	10
68	54.8	52.2	106856	46	46	4	10
69	73.8	71.2	106858	65	65	4	10

Preprofiled Blanks
Vorprofilierte Blanketts
Plaquettes préprofilées
Placchette presagomate
Cuchillas preperfiladas

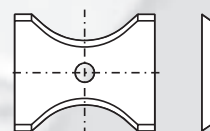
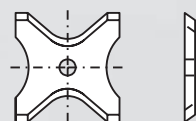


L	W	T	d	e	R	T04F	T03SMG	T10MG
mm	mm	mm	mm	mm	mm			
13.0	16.0	2.0	3.0		2-4	015176	033175	033176
13.0	16.0	2.0	4.0		2-4	015177	033178	033179
20.0	21.0	2.0	3.0		5-8	015180	033181	033182
20.0	21.0	2.0	4.0		5-8	015181	033184	033185
26.0	24.0	2.0	3.0		9-13	015183	033187	033188
26.0	24.0	2.0	4.0		9-13	015185	033190	033191
12.0	14.5	2.0	4.0	6.0		017731	034072	034073
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	040947
19.6	15.5	2.0	4.0	6.0		035157	040943	040945
13.0	14.0	1.5	3.2		2-4	015189	033193	033194
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
30.0	20.0	2.0	3.2		14-16	015195	033213	033214
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	033236	033237
20.0	20.5	2.0	4.0	6.3	2-6	015245	033239	033240
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		

Profiled standard blanks
Profilierte Standardblanketts
Plaquettes standard profilées
Placchette profilate standard
Cuchillas perfiladas standard

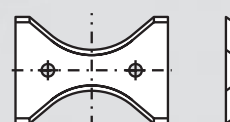
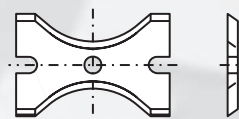


For Leuco system*



L	W	T	d	R	T04F	T03SMG	T10MG
mm	mm	mm	mm	mm			
13.0	16.0	2.0	4.0	2.0	032836	032876	032904
13.0	16.0	2.0	4.0	3.0	032837	032877	032909
13.0	16.0	2.0	4.0	4.0	032838	032878	032908
20.0	21.0	2.0	4.0	5.0	032839	032911	032910
20.0	21.0	2.0	4.0	6.0	032840	032879	032913
20.0	21.0	2.0	4.0	7.0	032841	032880	032914
20.0	21.0	2.0	4.0	8.0	032842	032881	032915
26.0	24.0	2.0	4.0	9.0	032843	032882	032919
26.0	24.0	2.0	4.0	10.0	032844	032883	032920
26.0	24.0	2.0	4.0	11.0	032845	052559	032921
26.0	24.0	2.0	4.0	12.0	032846	032885	032922
26.0	24.0	2.0	4.0	13.0	032847	032886	032923
30.0	25.0	2.0	4.0	14.0	032848	033782	033783
30.0	25.0	2.0	4.0	15.0	032849	033785	033786
30.0	25.0	2.0	4.0	16.0	032850	033788	033789

For Howema system*



L	W	T	d	R	T04F	T03SMG	T10MG
mm	mm	mm	mm	mm			
13.0	14.0	1.5	3.2	2.0	016376	033809	033810
13.0	14.0	1.5	3.2	3.0	016377	033812	033813
13.0	14.0	1.5	3.2	4.0	016378	033815	033816
20.0	16.0	2.0	3.2	5.0	016379	033818	033819
20.0	16.0	2.0	3.2	6.0	016380	033821	033822
20.0	16.0	2.0	3.2	7.0	016381	033824	033825
20.0	16.0	2.0	3.2	8.0	016382	033827	033828
26.0	18.0	2.0	3.2	9.0	016383	033830	033831
26.0	18.0	2.0	3.2	10.0	016384	033833	033834
26.0	18.0	2.0	3.2	11.0	016385	033836	033837
26.0	18.0	2.0	3.2	12.0	016386	033839	033840
26.0	18.0	2.0	3.2	12.5	016391	033867	033868
30.0	20.0	2.0	3.2	13.0	016387	033842	033843
30.0	20.0	2.0	3.2	14.0	016388	033845	033846
30.0	20.0	2.0	3.2	15.0	016389	033848	033849
30.0	20.0	2.0	3.2	16.0	016390	033851	033852
40.0	28.0	2.0	3.2	17.0	016371	033854	033855
40.0	28.0	2.0	3.2	18.0	016372	033857	033858
40.0	28.0	2.0	3.2	19.0	016373	033860	033861
40.0	28.0	2.0	3.2	20.0	016374	033863	033864

* For use in Leuco/Howema-cutterheads only

* Nur zur Verwendung in Messerköpfen der Firma Leuco bzw. Howema

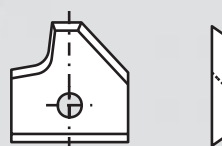
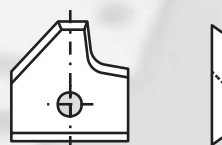
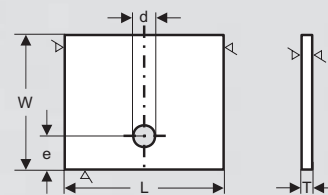
* Utilisation limitée aux porte-outils de l'entreprises Leuco et Howema

* Da usare solo su teste portacoltelli della Leuco - Howema

* Sólo para empleo con portacuchillas de la firma Leuco/Howema

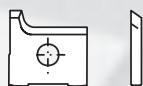
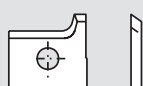
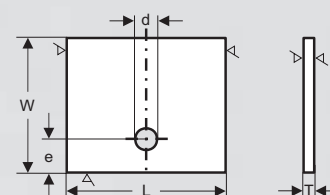


Profiled standard blanks
Profilierte Standardblanketts
Plaquettes standard profilées
Placchette profilate standard
Cuchillas perfiladas standard



L	W	T	d	R	T04F	T03SMG	T10MG
mm	mm	mm	mm	mm			
12.0	12.0	1.5	4.0	2.0	016426	033022	033024
12.0	12.0	1.5	4.0	3.0	016427	033021	033025
12.0	12.0	1.5	4.0	4.0	016428	033023	033026
12.0	13.0	2.0	4.0	2.0	020990	033877	033878
12.0	13.0	2.0	4.0	2.5	022185	033874	033875
12.0	13.0	2.0	4.0	3.0	020853	033871	033872
16.0	14.0	2.0	4.0	3.0	039045		
16.0	17.5	2.0	3.0	2.0	016515	033880	033881
16.0	17.5	2.0	3.0	3.0	016516	033883	033884
16.0	17.5	2.0	3.0	4.0	016518	033886	033887
16.0	17.5	2.0	3.0	5.0	016519	033889	033890
16.0	17.5	2.0	3.5	2.0	016469	033892	033893
16.0	17.5	2.0	3.5	3.0	016470	033895	033896
16.0	17.5	2.0	3.5	4.0	016472	033898	033899
16.0	17.5	2.0	3.5	5.0	016473	033901	033902
16.0	17.5	2.0	3.5	6.0	016474	033904	033905
16.0	17.5	2.0	4.0	2.0	016477	032968	032973
16.0	17.5	2.0	4.0	3.0	016478	032969	032974
16.0	17.5	2.0	4.0	4.0	016479	032970	032975
16.0	17.5	2.0	4.0	5.0	016480	032971	032976
16.0	17.5	2.0	4.4	2.0	016510	033907	033908
16.0	17.5	2.0	4.4	3.0	016511	033910	033911
16.0	17.5	2.0	4.4	4.0	016512	033913	033914
16.0	17.5	2.0	4.4	5.0	016513	033916	033917
24.0	20.0	2.0	4.4	6.0	033919	033924	033925
24.0	20.0	2.0	4.4	7.0	033920	033927	033928
24.0	20.0	2.0	4.4	8.0	033921	033930	033931
24.0	20.0	2.0	4.4	9.0	033922	033933	033934
24.0	20.0	2.0	4.4	10.0	033923	033936	033937
20.0	20.5	2.0	4.0	2.0	016495	032991	032996
20.0	20.5	2.0	4.0	3.0	016496	032992	032997
20.0	20.5	2.0	4.0	4.0	016497	032993	032998
20.0	20.5	2.0	4.0	5.0	016498	032994	032999
20.0	20.5	2.0	4.0	6.0	016499	032995	033000
20.0	20.5	2.0	4.0	2.0	016500	033007	033011
20.0	20.5	2.0	4.0	3.0	016501	033006	033012
20.0	20.5	2.0	4.0	4.0	016502	033008	033013
20.0	20.5	2.0	4.0	5.0	016503	033009	033014
20.0	20.5	2.0	4.0	6.0	016504	033010	033015

Profiled standard blanks
Profilierte Standardblanketts
Plaquettes standard profilées
Placchette profilate standard
Cuchillas perfiladas standard



IMA



IMA

Quadromat

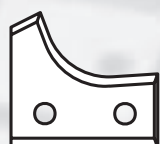
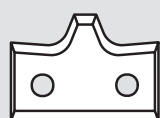
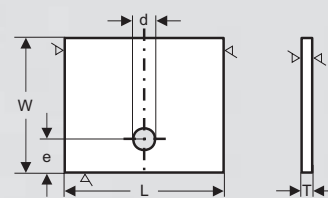
MFA

Quadromat

MFA

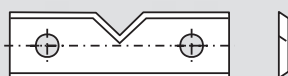
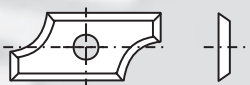
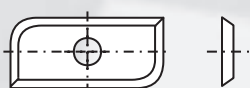
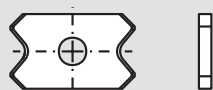
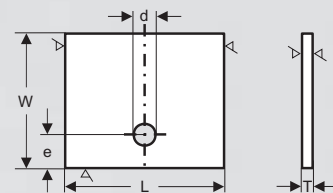
L mm	W mm	T mm	d mm	R mm	T04F	T03SMG	T10MG
15.0	14.5	2.0	4.0	2.0	022305	033941	033942
15.0	14.5	2.0	4.0	2.5	033939	033947	033948
15.0	14.5	2.0	4.0	3.0	022308	033953	033954
16.1	14.0	2.0	5.0	2.0	046693		
16.1	14.0	2.0	5.0	3.0	049986		
15.0	14.5	2.0	4.0	2.0	022307	033944	033945
15.0	14.5	2.0	4.0	2.5	033940	033950	033951
15.0	14.5	2.0	4.0	3.0	022309	033956	033957
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	033974
12.0	14.5	2.0	4.0	2.5	020397	034109	034110
12.0	14.5	2.0	4.0	3.0	020620	034100	034101
19.6	15.2	2.0	4.0	2.0	033963	033997	033998
19.6	15.2	2.0	4.0	3.0	033967	034003	034004
12.0	14.5	2.0	4.0	2.0	021045	033981	033982
12.0	14.5	2.0	4.0	2.5	020396	034106	034107
12.0	14.5	2.0	4.0	3.0	020619	034103	034104
19.6	15.2	2.0	4.0	2.0	033966	034000	034001
19.6	15.2	2.0	4.0	3.0	033968	034006	034007
12.0	18.0	2.0	4.0	2.0	033969	034009	034010
12.0	18.0	2.0	4.0	3.0	033970	034015	034017
12.0	18.0	2.0	4.0	2.0	034024	034037	034038
12.0	18.0	2.0	4.0	3.0	034031	034040	034041
12.0	18.0	2.0	4.0	2.0	033971	034012	034013
12.0	18.0	2.0	4.0	3.0	033972	034019	034020
12.0	18.0	2.0	4.0	2.0	034025	041378	041379
12.0	18.0	2.0	4.0	3.0	034032	040440	041381

Profiled standard blanks
Profilierte Standardblanketts
Plaquettes standard profilées
Placchette profilate standard
Cuchillas perfiladas standard



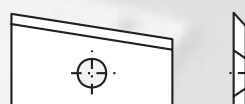
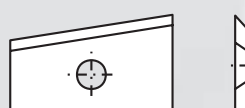
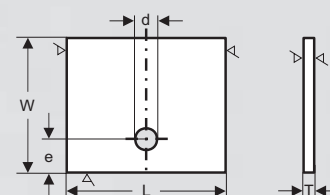
L	W	T	d	a	R	T04F	T03SMG	T10MG
mm	mm	mm	mm	mm	mm			
20.8	15.0	2.0	4.0	12.0	2.0	016429	033565	033566
20.8	15.0	2.0	4.0	12.0	3.0	016430	033568	033569
20.8	15.0	2.0	4.0	12.0	4.0	016431	033571	033572
30.0	17.0	2.0	4.0	20.0	5.0	016432	033574	033575
30.0	17.0	2.0	4.0	20.0	6.0	016433	033577	033578
30.0	17.0	2.0	4.0	20.0	7.0	016434	033580	033581
30.0	17.0	2.0	4.0	20.0	8.0	016435	033583	033584
30.5	16.5	2.0	4.0	20.0	5.0	016452	033595	033596
30.5	16.5	2.0	4.0	20.0	6.0	016453	033598	033599
30.5	16.5	2.0	4.0	20.0	7.0	016454	033601	033602
30.5	16.5	2.0	4.0	20.0	8.0	016455	033604	033605
20.0	16.0	2.0	3.0		3.0	033311	033607	033608
30.0	14.0	2.0	4.0		2.0	033312	033610	033611
30.0	14.0	2.0	4.0		2.5	033313	033613	033614
30.0	14.0	2.0	4.0		3.0	033314	033616	033617
20.0	16.0	2.0	3.0		3.0	033315	033619	033620
30.0	14.0	2.0	4.0		2.0	033316	033622	033623
30.0	14.0	2.0	4.0		2.5	033317	033625	033626
30.0	14.0	2.0	4.0		3.0	033318	033628	033629
12.0	12.0	1.5	4.0		45°	033319	033632	033633
16.0	17.5	2.0	4.0		45°	032964	032965	032966
16.0	17.5	2.0	4.4		45°	033324	041057	041058
16.0	17.5	2.0	3.5		45°	015237	034112	034113
21.8	19.5	2.0	3.0	12.0	10.0	033670	033674	033675
21.8	19.5	2.0	3.0	12.0	12.0	033671	033677	033678
21.5	20.0	2.0	3.0	12.0	9.0	016445	033657	033658
21.5	20.0	2.0	3.0	12.0	10.0	016446	033660	033661
21.5	20.0	2.0	3.0	12.0	11.0	016447	033663	033664
21.5	20.0	2.0	3.0	12.0	12.0	016448	033666	033667
21.8	19.5	2.0	3.0	12.0	10.0	033672	033680	033681
21.8	19.5	2.0	3.0	12.0	12.0	033673	033685	033686
21.5	20.0	2.0	3.0	12.0	9.0	016436	033645	033646
21.5	20.0	2.0	3.0	12.0	10.0	016437	033648	033649
21.5	20.0	2.0	3.0	12.0	11.0	016438	033651	033652
21.5	20.0	2.0	3.0	12.0	12.0	016439	033654	033655

Profiled standard blanks
Profilierte Standardblanketts
Plaquettes standard profilées
Placchette profilate standard
Cuchillas perfiladas standard



L	W	T	d	R	A°	T04F	T03SMG	T06MF
mm	mm	mm	mm	mm				
20.0	12.0	2.0	4.0	1.0	6°	032984	033031	
20.0	12.0	2.0	4.0	1.0	15°	050309	050310	
20.0	12.0	2.0	4.0	2.0	6°	016419	033033	
20.0	12.0	2.0	4.0	2.0	15°	050311	050312	
20.0	12.0	2.0	4.0	3.0	6°	016420	033034	
20.0	12.0	2.0	4.0	3.0	15°	050313	050314	
20.0	12.0	2.0	4.0	4.0	6°	016421	033043	
20.0	12.0	2.0	4.0	5.0	6°	016422	033042	
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
15.5	15.2	1.5	4.6	3.0		021377		
19.5	9.0	1.5	4.0	5x45°		033086	033118	
19.5	12.0	1.5	4.0	5x45°		034228	034229	
19.5	9.0	1.5	4.0	5.0		033090	033128	
19.5	12.0	1.5	4.0	5.0		034232	034233	
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	
19.5	12.0	1.5	4.0	2.0		034236	034240	
19.5	12.0	1.5	4.0	3.0		034237	034243	
19.5	12.0	1.5	4.0	4.0		034238	034246	
19.5	12.0	1.5	4.0	5.0		034239	034249	
39.5	12.0	1.5	4.0			033400	033401	

Profiled standard blanks
Profilierte Standardblanketts
Plaquettes standard profilées
Placchette profilate standard
Cuchillas perfiladas standard



L mm	W mm	T mm	d mm	a mm	R mm	T04F
50.0	21.6	2.0	4.1	26.0		035810
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

Oertli System*

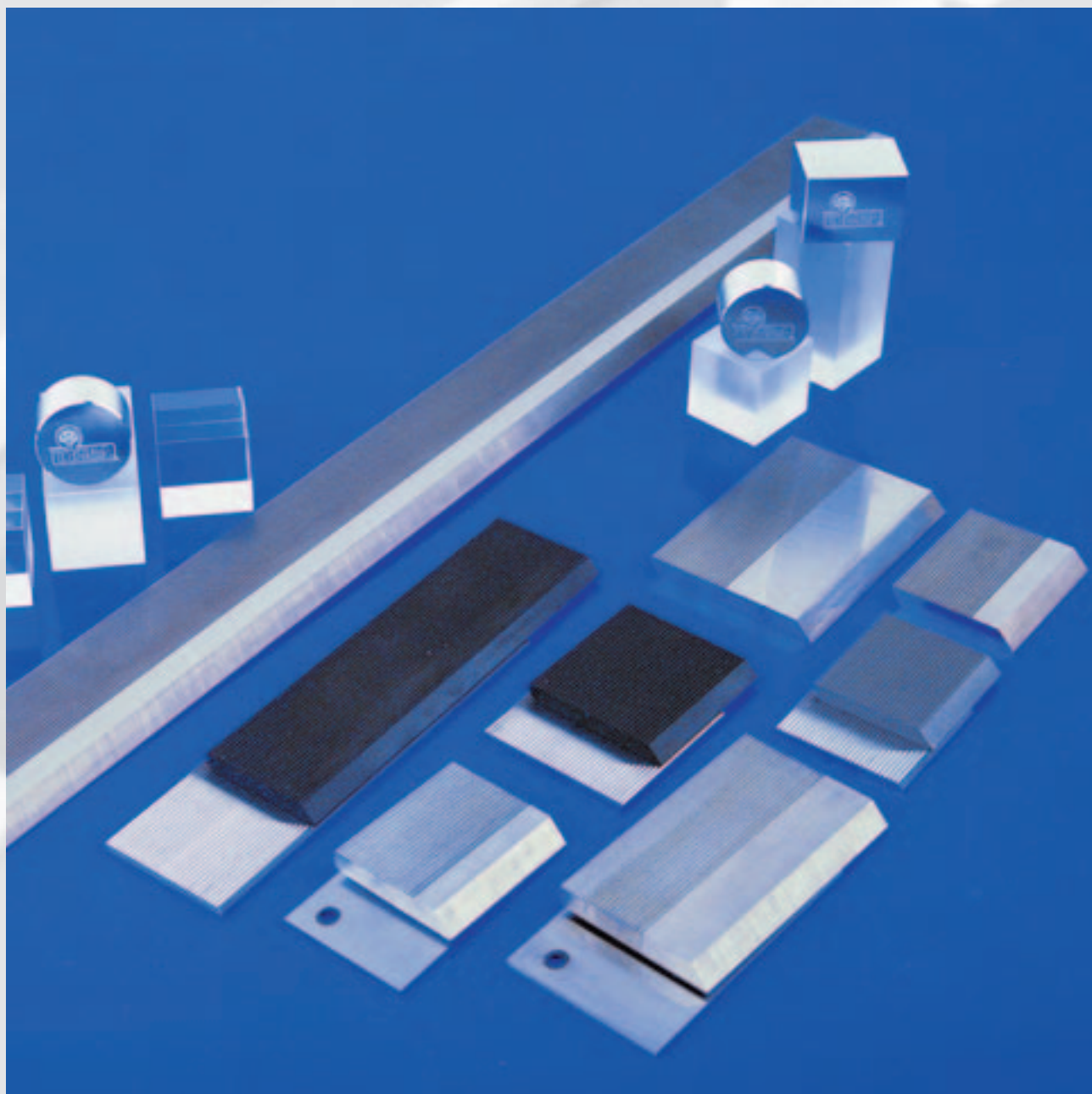


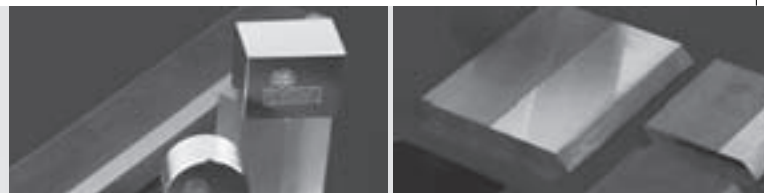
L mm	W mm	T mm	Type	T04F	T10MG
20.0	13.5	2.0	TW32-R2	033429	033430
20.0	13.5	2.0	TW32-R3	033427	033428
20.0	13.5	2.0	TW32-R4	033431	033432
20.0	13.5	2.0	TW32-R5	033433	033434
20.0	13.5	2.0	TW32-R6	033435	033436
29.0	16.5	2.5	TW32-R7	033437	033438
29.0	16.5	2.5	TW32-R8	033439	033440
29.0	16.5	2.5	TW32-R9	033441	033442
29.0	16.5	2.5	TW32-R10	033443	033444
40.0	21.0	2.5	TW32-R11	033445	033446
40.0	21.0	2.5	TW32-R11.5	033447	033448
40.0	21.0	2.5	TW32-R12	033449	033450
40.0	21.0	2.5	TW32-R13	033451	033452
40.0	21.0	2.5	TW32-R14	033453	033454
40.0	21.0	2.5	TW32-R15	033455	033456

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



Knives for back corrugated cutterheads
Messer für rückenverzahnte Messerköpfe
Couteaux pour outils crantés
Coltelli per teste con rigatura
Cuchillas corrugadas





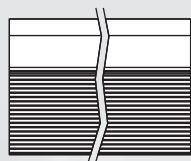
Knives for back corrugated cutterheads
Messer für rückenverzahnte Messerköpfe
Couteaux pour outils crantés
Coltelli per teste con rigatura
Cuchillas corrugadas

TIGRA is one of the leading suppliers of inserts for back corrugated cutterheads. Our wide range of blanks includes:
 TIGRA ist einer der führenden Lieferanten von Schneideinsätzen für rückenverzahnte Messerköpfe. Unser vielseitiges Programm an Blanketts umfasst:

TIGRA est l'un des plus grands fournisseurs de plaquettes de coupe pour les porte-outils crantés. Notre vaste gamme de plaquettes inclut:

TIGRA è uno dei fornitori leader di inserti per teste portafrese a coltelli dentati sul lato interno. Il nostro ampio programma di inserti greggi comprende:

TIGRA es uno de los principales fabricantes de insertos cortantes para cuchillas de lomo dentado. Nuestro exhaustivo programa de piezas en bruto comprende:



HPS (High Performance Steel): Our latest addition to this product range with the following outstanding characteristics:

- Longer lifetime than HSS in most applications
- Lower price than standard HSS
- Easier to cut and profile than HSS
- High tolerance and excellent corrugation

HPS (High Performance Steel): Unsere aktuelle Produktergänzung im Programm mit folgenden hervorragenden Eigenschaften:

- Längere Standzeit als HSS bei den meisten Anwendungen
- Günstiger als Standard-HSS
- Einfacher zu trennen und profilieren im Vergleich zu HSS
- Hohe Toleranz und präzise Verzahnung

HPS (High Performance Steel): Cette nouveauté que nous vous proposons aujourd'hui a de nombreuses qualités:

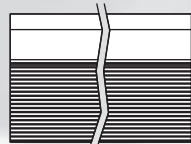
- Plus résistante que l'acier rapide (HSS) dans la majorité des applications
- Moins chère que le HSS standard
- Plus facile à couper et à profiler que le HSS
- Une tolérance élevée et un crantage précis

HPS (High Performance Steel): I prodotti attuali a integrazione del nostro programma vantano le seguenti eccezionali caratteristiche:

- Maggiore durata dei prodotti HSS per gran parte delle applicazioni
- Maggiore convenienza rispetto ai prodotti standard HSS
- Maggiore semplicità di troncatura e profilatura rispetto ai prodotti HSS
- Elevata tolleranza e dentatura precisa

Acero HPS (High Performance Steel): Nuestro programa de producción ha sido actualizado con las siguientes características:

- Vida útil más prolongada que la del acero HSS en la mayor parte de las aplicaciones
- Más económico que el acero HSS estándar
- Más fácil de cortar y perfilar que el acero HSS
- Mayor tolerancia y dentado sumamente preciso



HSS: The classic blank for corrugated cutterheads:

- High Quality German manufactured steel
- High precision
- Excellent grindability
- Available from Stock

HSS: Das klassische Blankett für rückenverzahnte Messerköpfe:

- Hohe Qualität durch deutschen Stahl
- Hohe Präzision
- Exzellente Schleifeigenschaften
- Ab Lager verfügbar

HSS: La plaquette de coupe classique pour les porte-outils crantés a de nombreux atouts :

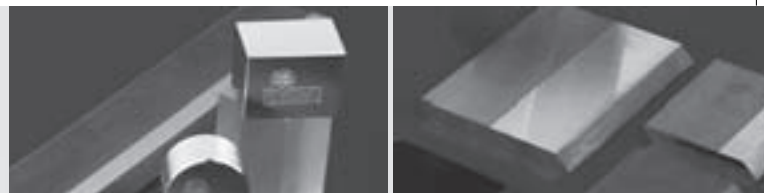
- Qualité élevée de l'acier d'origine allemande
- Haute précision
- Excellentes propriétés de rectification
- Disponible sur stock

HSS: L'inserto greggio classico per teste portafrese a coltelli dentati sul lato interno:

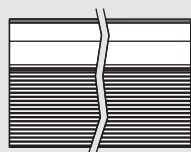
- Alta qualità grazie all'acciaio tedesco
- Alta precisione
- Eccellenti proprietà di rettifica
- Disponibili per pronta consegna

HSS: La cuchilla clásica para cuchillas de lomo dentado:

- Mejor calidad gracias al empleo de acero alemán
- Mayor precisión
- Excelentes propiedades de rectificado
- Disponible de almacén



Knives for back corrugated cutterheads
Messer für rückenverzahnte Messerköpfe
Couteaux pour outils crantés
Coltelli per teste con rigatura
Cuchillas corrugadas



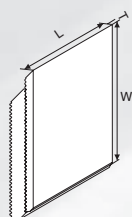
TCT: Brazed-on carbide where the lifetime of HPS / HSS is not sufficient
 - Very long lifetime - High hardness - High quality

Hartmetallbestückt: Aufgelötetes Hartmetall, wo immer die Standzeiten von HPS / HSS nicht ausreichen:
 - Sehr lange Standzeit - Hohe Härte - Top-Qualität

Outils rapportés en carbure brasé là où la durée de coupe des HPS / HSS n'est pas suffisante:
 - Très grande longévité - Dureté élevée - Qualité supérieure

HD-TCT: Metallo duro saldato per applicazioni in cui la durata utile di HPS / HSS non è sufficiente:
 - Elevatissima durata utile - Elevata durezza - Massima qualità

Con dotación de metal duro: Metal duro fijado por soldadura para aplicaciones que requieran una vida útil más prolongada que la que ofrecen las calidades HPS / HSS:
 - Vida útil muy prolongada - Máxima dureza - Óptima calidad



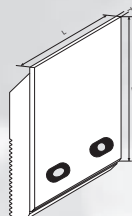
SuperPac: The high-end blank that enables multiple regrinds because of the precise corrugation in the carbide blank. SuperPac is available in many different carbide grades for longest lifetime, even in MDF. The backers are also German made steel.

SuperPac: Das Top-Blankett, das dank der hoch präzisen Verzahnung vielfach nachschleifbar ist. SuperPac ist in mehreren, verschiedenen Hartmetallsorten erhältlich und garantiert längste Standzeiten, auch in MDF. Die Stützplatten des Systems sind aus deutschem Stahl.

SuperPac: Le nec plus ultra de la plaquette de coupe que la précision de son crantage permet de réaffûter de multiples fois. SuperPac est également disponible en plusieurs qualités de métal différentes et garantit des durées de coupe plus longues, même sur des MDF. Les contrefers du système sont en acier d'origine allemande.

SuperPac: L'inserto greggio top più volte riaffilabile grazie alla dentatura altamente precisa. SuperPac è disponibile in diversi tipi di metallo duro e garantisce la massima durata, anche in MDF. Le placchette di sostegno del sistema sono in acciaio tedesco.

SuperPac: La placa de alta calidad y dentado preciso que admite múltiple rectificado. SuperPac se ofrece en diversos tipos de metal duro y avala una prolongada vida útil, también en MDF. Las placas de apoyo del sistema están fabricadas con acero alemán.



EcoPac: Has much longer lifetimes, easier profile grinding and a backing plate which can be reused many times compared to TCT blanks. Therefore EcoPac has the better price-performance-ratio.

EcoPac: Bietet längere Standzeiten, hat sehr gute Schleifeigenschaften und die Stützplatte des Systems kann immer wieder verwendet werden verglichen mit hartmetallbestückten Blanketts. Daher hat EcoPac ein besseres Preis-Leistungsverhältnis.

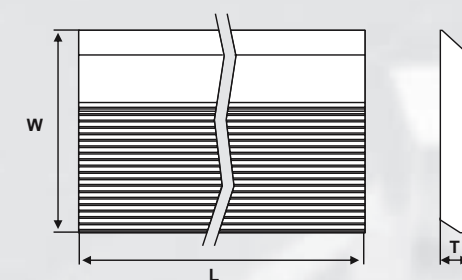
EcoPac: De plus longues durées de coupe, d'excellentes propriétés de rectification, un contrefer toujours réutilisable: comparé aux plaquettes à mises rapportées en carbure, EcoPac offre ainsi un meilleur rapport performances/prix.

EcoPac: Offre maggiore durata, vanta ottime proprietà di rettifica e la placchetta di sostegno del sistema può essere riutilizzata più volte rispetto a inserti greggi in metallo duro, consentendo un migliore rapporto prezzo-prestazione.

EcoPac: Ofrece una vida útil más prolongada y excelentes propiedades de rectificado. La placa de apoyo del sistema puede ser reutilizada una y otra vez por lo cual ofrece una mejor relación precio calidad que la de las piezas en bruto con dotación de metal duro.

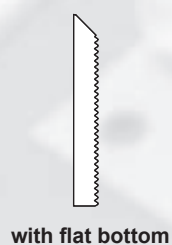
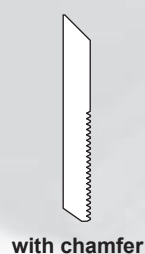
HPS blanks back corrugated
HPS Blanketts, rückenverzahnt
HPS fers crantés
HPS placchette, con zigrinatura
HPS cuchillas corrugadas

HPS - the new excellent High Performance Steel

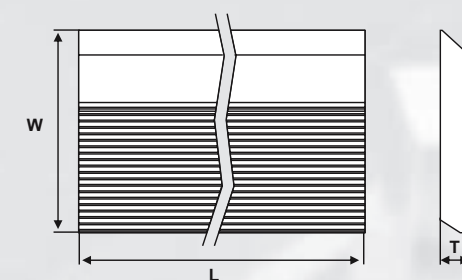


L mm	W mm				T mm
	40	50	60	70	
40.0	103456	103474	103493	103511	8.0
50.0	103457	103475	103494	103512	8.0
60.0	103458	103476	103495	103513	8.0
70.0	103459	103477	103496	103514	8.0
80.0	103460	103478	103497	103515	8.0
90.0	103461	103479	103498	103516	8.0
100.0	103462	103480	103499	103517	8.0
110.0	103463	103481	103500	103518	8.0
120.0	103464	103482	103501	103519	8.0
130.0	103465	103483	103502	103521	8.0
150.0	103466	103484	103503	103522	8.0
170.0	103467	103485	103504	103523	8.0
180.0	103468	103486	103505	103524	8.0
200.0	103469	103488	103506	103525	8.0
210.0	103470	103489	103507	103526	8.0
230.0	103471	103490	103508	103527	8.0
260.0	103472	103491	103509	103528	8.0
650.0	103473	103492	103510	103529	8.0

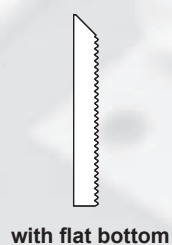
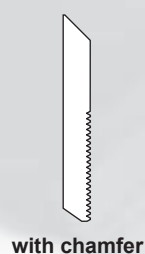
L inch	W inch	T mm	with chamfer	flat bottom
25	1 1/4	5/16	103531	103547
25	1 1/2	5/16	103532	103548
25	1 3/4	5/16	103533	103549
25	2	5/16	103534	103550
25	2 1/4	5/16	103535	103551
25	2 1/2	5/16	103536	103552
25	2 3/4	5/16	103537	103553
25	3	5/16	103538	103554
25	1 1/4	1/4	103539	103555
25	1 1/2	1/4	103540	103556
25	1 3/4	1/4	103541	103557
25	2	1/4	103542	103558
25	2 1/4	1/4	103543	103559
25	2 1/2	1/4	103544	103560
25	1 3/4	3/16	103545	103561
25	2	3/16	103546	103562



HSS blanks back corrugated
HSS Blanketts, rückenverzahnt
HSS fers crantés
HSS placchette, con zigrinatura
HSS cuchillas corrugadas

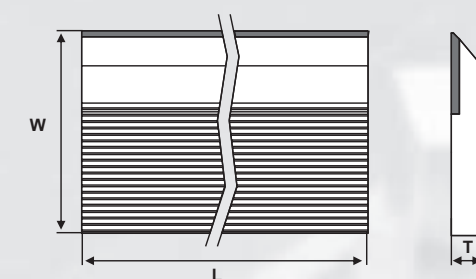


L mm	W mm				T mm
	40	50	60	70	
40.0	030289	030307	030326	030345	8.0
50.0	030290	030308	030327	030346	8.0
60.0	030291	030309	030328	030347	8.0
70.0	030292	030310	030329	030348	8.0
80.0	030293	030311	030330	030349	8.0
90.0	030294	030312	030331	030350	8.0
100.0	030295	030313	030332	030351	8.0
110.0	047397	047398	047399	047400	8.0
120.0	030296	030314	030333	030352	8.0
130.0	030297	030315	030334	030353	8.0
150.0	030298	030316	030335	030354	8.0
170.0	030299	030317	030336	030355	8.0
180.0	030300	030318	030337	030356	8.0
200.0	030301	030319	030338	030357	8.0
210.0	030302	030320	030339	030358	8.0
230.0	030303	030321	030340	030359	8.0
260.0	030304	030322	030341	030360	8.0
650.0	030306	030324	030344	030362	8.0



L inch	W inch	T mm	with chamfer	flat bottom
25	1 1/4	5/16	046364	101054
25	1 1/2	5/16	046365	101055
25	1 3/4	5/16	046366	101056
25	2	5/16	046367	101057
25	2 1/4	5/16	046368	101058
25	2 1/2	5/16	046369	101059
25	2 3/4	5/16	046370	101060
25	3	5/16	046371	101061
25	1 1/4	1/4	046372	101062
25	1 1/2	1/4	046373	101063
25	1 3/4	1/4	046374	101064
25	2	1/4	046375	101065
25	2 1/4	1/4	046376	101066
25	2 1/2	1/4	046377	101067
25	1 3/4	3/16	046378	101068
25	2	3/16	046379	101069

T.C.T. blanks back corrugated
HM-bestückte Blanketts, rückenverzahnt
Fers crantés au carbure rapportée
Placchette saldo-brasato, con zigrinatura
Cuchillas metal duro, corrugadas



L mm	W mm	T mm	Inlay 14 mm	Inlay 20 mm	Inlay 25 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	
640.0	40.0	10.0	103241	103260	
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	
640.0	50.0	10.0	103248	103272	
40.0	60.0	10.0		030267	103300
60.0	60.0	10.0		030268	103301
80.0	60.0	10.0		103273	030269
100.0	60.0	10.0		103274	030270
130.0	60.0	10.0		103275	030271
150.0	60.0	10.0		030272	103302
180.0	60.0	10.0		030273	103303
200.0	60.0	10.0		103296	103304
230.0	60.0	10.0		103297	103305
260.0	60.0	10.0		030275	103306
310.0	60.0	10.0		103298	103307
560.0	60.0	10.0		103299	103308
640.0	60.0	10.0		030277	103309



TIGRA SuperPac®

The economic system for back corrugated cutterheads

Good value precision system for significant increase of knife-lifetime in back corrugated cutterheads

It consists of:

Carbide blank, multiple moveable and regrindable and steel backing plate with precision positioning.

TIGRA SuperPac can be used in all cutterheads with 60° back corrugation.

Your advantages with TIGRA SuperPac

Long lifetime

Submicron grades help you to achieve the longest lifetimes in wood and plastic applications. TIGRA SuperPac is available in four tungsten carbide grades to satisfy all your needs: mixed - board/MDF - wood.

High security

TIGRA SuperPac can be used up to 12000 rpm, if the cutterhead is designed for this speed. This is possible due to enhanced security of our deep corrugation.

Highest precision

The positioning in the accurate corrugation results in highest precision.

Best surface qualities

Accurate positioning and submicron grades result in the best surface of the material. Especially recommended: TL15 with clearance angles like HSS and Stellite.

Profiling and regrinding

Multiple regrindings are possible and - due to the positioning system - only necessary on the carbide blank.

High price-performance-ratio

Best carbide grades, low prices and multiple regrindings guarantee a high economic efficiency.

Das wirtschaftliche System für rückenverzahnte Messerköpfe

Preiswertes Präzisionssystem zur extremen Verbesserung von Messer-Standzeiten in rückenverzahnten Messerköpfen.

Es besteht aus:

Hartmetall-Blankett, mehrfach versetzbar und nachschleifbar, und Stahl-Stützplatte mit Präzisionspositionierung.

TIGRA SuperPac ist in allen Messerköpfen mit 60° Rückenverzahnung einsetzbar.

Ihre Vorteile mit TIGRA SuperPac

Hohe Standzeiten

Submicron-Sorten garantieren beste Standzeiten in der Holz- und Kunststoffbearbeitung. TIGRA SuperPac erhalten Sie in vier HM-Sorten für all Ihre verschiedenen Anwendungen: Für gemischte Einsätze - für Spanplatte/MDF - für Vollholz.

Hohe Sicherheit

Mit TIGRA SuperPac sind bis zu 12000 U/min möglich, sofern der Messerkopf dies zulässt. Eine besonders tiefe Verzahnung erhöht die Sicherheit entscheidend.

Höchste Präzision

Durch Positionierung in einer hochgenauen Rückenverzahnung erreicht das System höchste Präzision.

Beste Oberflächengüten

Präzisionspositionierung und Submicron-Sorten bilden eine ideale Voraussetzung für beste Oberflächengüte des bearbeiteten Werkstoffes. Besonders zu empfehlen: TL15 mit Winkeln wie HSS und Stellite.

Profilieren und Nachschärfen

Vielfaches Nachschärfen ist möglich und durch das Verstellsystem nur beim Hartmetall-Blankett nötig.

Höchste Wirtschaftlichkeit

Bestmögliche HM-Sorten, Polierschliff, günstige Preise und häufiges Nachschleifen garantieren höchste Wirtschaftlichkeit.

Le système économique pour les porte-outils à fers crantés

Système de précision économique améliorant considérablement la durée de vie des fers de porte-outils à fers crantés.

Composition:

Ébauche au carbure, utilisable et réaffûtable plusieurs fois et fer de soutien en acier avec positionnement de précision.

TIGRA SuperPac peut être utilisé sur tous les porte-outils à crantage de 60°.

Vos avantages avec TIGRA SuperPac

Longue tenue de coupe

Les qualités Submicron offrent les meilleures tenues de coupe dans l'usinage du bois et des matières plastiques.

TIGRA SuperPac vous est proposé en quatre types de carbures pour toutes vos applications:

utilisations combinées, panneaux de particules/MDF, bois massif.

Haute sécurité

TIGRA SuperPac permet des vitesses jusqu'à 12000 t/mim, sous réserve que le porte-outils le tolère.

Une denture particulièrement profonde augmente la sécurité de manière décisive.



TIGRA SuperPac®

Grande précision

Le système offre une précision maximale grâce à un positionnement dans un crantage de haute précision.

Qualité de surface optimale

Le positionnement de précision et les qualités Submicron constituent la condition idéale pour l'obtention d'une surface parfaite du matériau usiné. Il faut notamment recommander la nuance TL15 avec géométrie de coupe comme l'acier rapide et le stellite.

Profilage et réaffûtage

Le système de positionnement permet de très nombreux affûtages de la plaquette carbure, le fer de soutien ne se reprofilant pas.

Rentabilité maximale

Les meilleurs types de carbures, le polissage/rodage, les prix avantageux et la grande zone de réaffûtage garantissent une rentabilité maximale.

Il sistema economicamente conveniente per le teste di fresatura a zigrinatura posteriore

Sistema di precisione a prezzi contenuti che consente un significativo miglioramento della durata dei taglienti nelle teste di fresatura a zigrinatura posteriore.

Il sistema è costituito da:

Placchetta metallica, ripetutamente riposizionabile e riaffilabile. Piastrina di supporto in acciaio con preposizionamento di precisione. *In tutte le teste con dentatura posteriore a 60° è possibile utilizzare TIGRA SuperPac.*

I vantaggi di TIGRA SuperPac

Lunga durata

I tipi Submicron garantiscono ottima durata nella lavorazione di legno e plastica. TIGRA SuperPac è disponibile in quattro versioni di metallo duro per le applicazioni più diverse: per applicazioni miste, per truciolare/MDF, per legno masello.

Elevata sicurezza

TIGRA SuperPac permette velocità fino a 12000 giri/min, purché esse siano compatibili con la testa di fresatura. La dentatura particolarmente profonda aumenta significativamente il livello di sicurezza.

Altissima precisione

Il posizionamento mediante la dentatura posteriore di elevata precisione garantisce al sistema prestazioni ottimali in termini di precisione.

Ottimo livello di finitura superficiale

I tipi Submicron unitamente alla precisione di posizionamento costituiscono il presupposto ideale per l'ottenimento di un elevato grado di finitura superficiale del materiale lavorato. Particolarmente raccomandabile: TL15 con angoli uguali all'HSS e alla Stellite.

Profilatura e riaffilatura

Sono possibili ripetute che, grazie al sistema di spostamento, sono necessarie solo per le placchette in metallo duro.

Ottima convenienza economica

I migliori tipi possibili in metallo duro, il livello di rettifica a specchio, i prezzi contenuti e la possibilità di numerose riaffilature assicurano un'elevata convenienza economica.

El sistema económico para cabezales de lomo dentado

El sistema de precisión económico que mejora extremadamente el tiempo de funcionamiento de las cuchillas puestas en cabezales de cuchillas de lomo dentado.

Consiste en:

Una placa de metal duro que puede alterarse varias veces y reafilearse. Una placa de soporte de acero con posicionamiento preciso. *El TIGRA SuperPac puede aplicarse en todos los cabezales de cuchillas que tienen una dentadura de lomo de 60°.*

Sus ventajas con TIGRA SuperPac

Tiempos de funcionamiento altos

Las calidades Submicron garantizan los mejores tiempos de funcionamiento para el trabajo de madera y de plástico. El TIGRA SuperPac es disponible en cuatro calidades de metal duro para cualquiera de sus aplicaciones varias: Para las aplicaciones mixtas - para los tableros de virutas/MDF - para la madera maciza.

Alta Seguridad

Con TIGRA SuperPac se permiten hasta 12000 revoluciones por minuto según cabezal de cuchillas. Un dentado especialmente profundo aumenta la seguridad considerablemente.

Alta Precisión

El sistema consigue una alta precisión mediante el posicionamiento de un dentado de lomo exacto.

Primera calidad de la superficie

El posicionamiento de precisión y las calidades Submicron ofrecen una condición ideal para la mejor calidad de la superficie del material trabajado. Se recomienda especialmente: TL15 con ángulos como HSS y Stellit.

Perfilar y reafilear

Es posible de reafilear muchas veces y, dado el sistema de alteración, eso se hace necesario solamente en la placa de metal duro.

Alta Rentabilidad

Las mejores calidades de metal duro, el afilado pulidor, los precios bajos y el reafileado múltiple garantizan la alta rentabilidad.

TIGRA SuperPac®

Cutting Edge Projection

Between carbide blank and backing plate $s=3,2$ mm
(critical dimension when regrinding).

Schneidenüberstand

Schneidenüberstand von Hartmetallplatte zu Stützplatte $s=3,2$ mm
(beim Nachschärfen bitte beachten).

Saillie des plaquettes

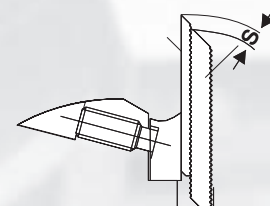
Les plaquettes carbure dépassent le support de 3,2 mm
(à prendre en compte lors du réaffûtage).

Sporgenza del tagliente

Il tagliente sporge di $s=3,2$ mm rispetto alla piastrina di supporto
(prestare attenzione in caso di riaffilatura).

Exceso de corte

El exceso de corte desde la placa de metal duro hacia la placa de soporte es $e=3,2$ mm
(obsérvelo cuando se reafile).



- 1 Carbide Blank
Hartmetall-Blankett
Plaquette carbure
Placchette in HM
Cuchilla de metal duro
- 2 Corrugated Back Support
Rückenverzahnte Stützplatte
Porte-Plaquette denté
Placchette di supporto con rigatura
Placa de soporte dentada por el lomo

Maximum Profile Depth

Maximale Profiltiefe

Profondeur de profil maximum

Massima profondità di sagoma

Profundidad máxima de perfil

W mm

P max mm

38

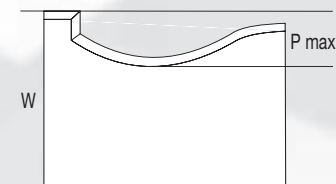
for planing only, nur zum Hobeln

50

12

60

23



Highest Precision

With the precision-ground microcorrugation, the knife cannot move which guarantees the highest finish quality.

Höchste Präzision

Durch die präzisionsgeschliffene Microverzahnung sind bei den im Einsatz befindlichen Messern keine Verschiebungen möglich, wodurch beste Produktqualität gewährleistet wird.

Grande précision

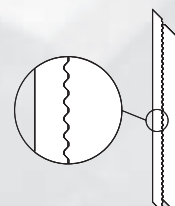
Grâce à la microdenture rectifiée avec précision, aucun décalage des plaquettes n'est possible en cours d'utilisation, ce qui garantit une qualité optimale du produit.

Altissima precisione

La microdentatura di elevata precisione impedisce ogni movimento della lame durante l'esercizio, il che garantisce una produzione di alta qualità.

Precisión exacta

La cuchillas insertadas no pueden desplazarse debido a la micro-dentadura de filo preciso, por lo cual la mejor calidad del producto es garantizada.



Warning!

Safe operation of this system is possible only if all parts are clean, undamaged and properly secured in place with gibs and screws. All safety requirements of the cutter and the machine manufacturer must be followed.

Warnung!

Eine sichere Benutzung ist nur gewährleistet, wenn alle Teile sauber, unbeschädigt und richtig montiert sind. Alle Sicherheitsbestimmungen vom Werkzeug- und Maschinenhersteller müssen beachtet werden.

Avertissement!

La sécurité d'utilisation n'est garantie que si toutes les pièces sont propres, non endommagées et montées en toute conformité. Il faut respecter toutes les consignes de sécurité du constructeur de l'outil et de la machine.

Avvertenza!

L'esercizio sicuro è garantito solo se tutti i pezzi sono puliti, non danneggiati e montati correttamente. Occorre osservare tutte le avvertenze di sicurezza indicate dal costruttore della macchina e degli utensili.

Aviso!

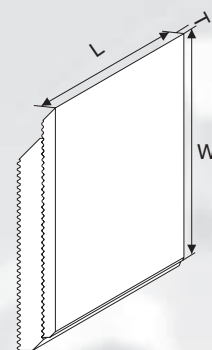
El manejo seguro sólo se garantiza, si todas las partes están limpias, en buenas condiciones y montadas correctamente. Todas las instrucciones de seguridad del constructor de herramienta y de maquinaria deben observarse.



T.C. Knives and backing plates for back corrugated cutterheads
HM-Messer und Stützplatten für rückenverzahnte Messerköpfe
Couteaux au carbure et supports pour outils crantés
Coltelli HW e tavole di supporto per teste con rigatura
Placas de metal duro y placas de apoyo para fresas dentadas

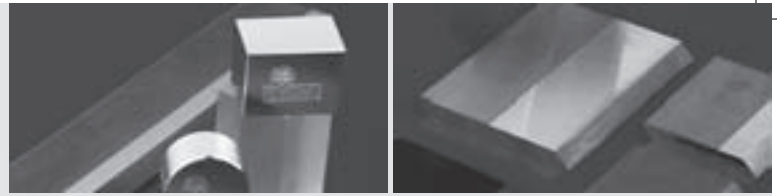
Use 38 mm height for optimized planing

SuperPac®



L	W	T	T10MG	T04F	TL15	T03SMG	L	W	T	Backing plate
mm	mm	mm	Standard	Standard	Special	Special	mm	mm	mm	Stützplatte
40	38	3.2	043933	024082	024086	024080	40	35	7.1	024090
50	38	3.2	043934	043924	043926	043925	50	35	7.1	043957
60	38	3.2	043935	024115	024119	024113	60	35	7.1	024123
80	38	3.2	043936	024148	024152	024146	80	35	7.1	024156
100	38	3.2	043937	023949	023953	023947	100	35	7.1	023957
120	38	3.2	043938	023982	023986	023980	120	35	7.1	023990
130	38	3.2	043939	024016	024020	024014	130	35	7.1	024024
150	38	3.2	043940	024049	024053	024047	150	35	7.1	024057
170	38	3.2	043962	043961	043963	043960	170	35	7.1	045837
40	50	3.2	043941	024093	024097	024091	40	47	7.1	024101
50	50	3.2	043942	043927	043929	043928	50	47	7.1	043958
60	50	3.2	043943	024126	024130	024124	60	47	7.1	024134
80	50	3.2	043944	024159	024163	024157	80	47	7.1	024167
100	50	3.2	043945	023960	023964	023985	100	47	7.1	023968
120	50	3.2	043946	023993	023997	023991	120	47	7.1	024001
130	50	3.2	043947	024027	024031	024025	130	47	7.1	024035
150	50	3.2	043948	024060	024064	024058	150	47	7.1	024068
170	50	3.2	043966	043965	043967	043964	170	47	7.1	045838
40	60	3.2	043949	024104	024108	024102	40	57	7.1	024112
50	60	3.2	043950	043931	043930	043932	50	57	7.1	043959
60	60	3.2	043951	024137	024141	024135	60	57	7.1	024145
80	60	3.2	043952	024170	024174	024168	80	57	7.1	024178
100	60	3.2	043953	023971	023975	023969	100	57	7.1	023979
120	60	3.2	043954	024004	024008	024002	120	57	7.1	024012
130	60	3.2	043955	024038	024042	024036	130	57	7.1	024046
150	60	3.2	043956	024071	024075	024069	150	57	7.1	024079
170	60	3.2	043970	043969	043971	043968	170	57	7.1	045839

TIGRA EcoPac®



The low-price easy to handle system for back corrugated cutterheads

Low priced: economic system

The price of existing double packed systems for some customers might be too expensive compared with HSS. EcoPac offers an *economic alternative* even more with the low priced packing plates.

High security

TIGRA EcoPac can be used **up to 6000 rpm**. By respecting the safety regulations EcoPac is a *very safe system* by using thick pins for holding the knives in precision holes.

Multiple Regrinds

EcoPac can be reground many times depending on the wear. Also several regrinds of the backing plate can be made.

Das günstige, einfach zu handhabende System für rückenverzahnte Messerköpfe

Niedriger Preis: wirtschaftliches System

Der Preis einiger Systeme ist für einige Kunden zu hoch im Vergleich zu HSS. EcoPac bietet eine *günstige Alternative*, auch durch den niedrigen Preis der Stützplatten.

Hohe Sicherheit

Mit TIGRA EcoPac sind **bis zu 6000 U/min** möglich. Bei Beachtung der Sicherheitsbestimmungen ist EcoPac *sicher und einfach zu benutzen*. Die Sicherheit wird durch die dicken Stifte zur Halterung in den Präzisionsbohrungen erreicht.

Vielfach nachschärfbar

EcoPac kann abhängig von der Abnutzung vielfach nachgeschärft werden. Auch die Stützplatte kann mehrfach geschliffen werden.

Le système le plus avantageux et d'utilisation simple pour les porte-outils à fers crantés

Prix réduit: Système économique

Beaucoup d'utilisateurs estiment que le coût de certain systèmes à plaquettes carbure est trop élevé par rapport aux fers d'acier rapide ou HSS. EcoPac offre une *alternative économique*, entre autre grâce au prix de revient réduit des fers de soutien.

Haute sécurité

TIGRA EcoPac permet des vitesses **jusqu'à 6000 t/min**. EcoPac *s'utilise en toute sécurité et en toute simplicité* si les consignes de sécurité sont respectées. Des grosses goupilles de maintien et des perçages de précision garantissent la sécurité.

Nombreux réaffûtages possibles

EcoPac peut être réaffûté de nombreuses fois. Le fer de soutien peut lui aussi être rectifié.

Il sistema conveniente e facile da usare per le teste di fresatura a zigrinatura posteriore

Un prezzo contenuto rende il sistema economicamente conveniente

Per molti clienti il prezzo di certi sistemi è troppo elevato rispetto alla soluzione HSS. EcoPac offre un' *alternativa vantaggiosa*, anche grazie al prezzo contenuto delle piastrine di supporto.

Elevata sicurezza

TIGRA EcoPac permette velocità fino a **6000 giri/min**. Se vengono osservate le norme di sicurezza EcoPac è *sicuro e semplice da utilizzare*. La sicurezza è garantita dalla dimensione dei perni che si accoppiano con fori di precisione al montaggio.

Possibilità di numerose riaffilature successive

A seconda dell'usura è possibile riaffilare EcoPac ripetutamente. Anche la piastrina di supporto può essere ripetutamente rettificata.

El sistema económico y de manejo simple para cabezales de cuchillas de lomo dentado

Precio barato: Sistema económico

El precio de algunos sistemas en comparación a HSS es demasiado alto para muchos clientes. EcoPac ofrece una *alternativa económica*, incluyendo también el bajo coste de las placas de soporte.

Alta Seguridad

Con TIGRA EcoPac se permiten **hasta 6000 revoluciones por minuto**. El manejo de EcoPac es *seguro y simple* observando los reglamentos de seguridad. La seguridad se consigue mediante los pasadores gruesos para el soporte en los taladros de precisión.

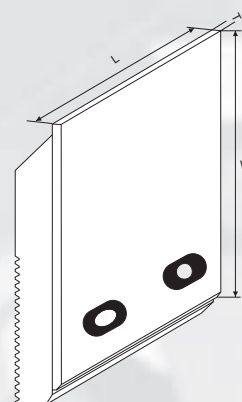
Reafilado múltiple

EcoPac puede reafilarse varias veces según desgaste. También la placa de soporte puede afilarse repetidas veces.

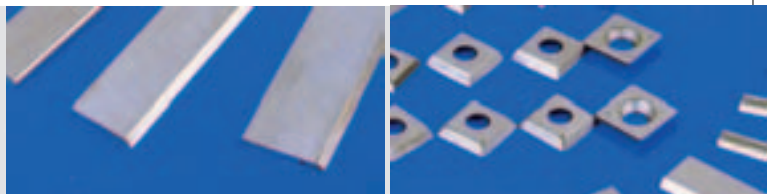


T.C. Knives and backing plates for back corrugated cutterheads
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EcoPac®




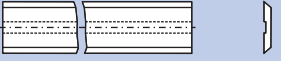




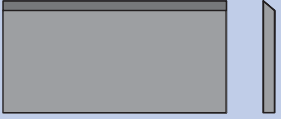


L mm	W mm	T mm	T10MG Standard	T04F Standard	Backing plate/ Stützplatte (T=8)
40	38	2	047802	047803	048171
50	38	2	047805	047804	048173
60	38	2	047807	047806	048174
80	38	2	047809	047808	048176
100	38	2	047811	047810	048177
120	38	2	047813	047812	048180
130	38	2	048168	048167	048181
150	38	2	048170	048169	048183
40	50	2	047815	047814	048185
50	50	2	047817	047816	048186
60	50	2	047819	047818	048188
80	50	2	047821	047820	048190
100	50	2	047823	047641	048191
120	50	2	047826	047825	048193
130	50	2	048175	048172	048195
150	50	2	048179	048178	048197
40	60	2	047827	047639	048200
50	60	2	047829	047828	048202
60	60	2	047831	047640	048203
80	60	2	047837	047836	048204
100	60	2	047839	047838	048205
120	60	2	047841	047840	048206
130	60	2	048184	048182	048207
150	60	2	048189	048187	048208



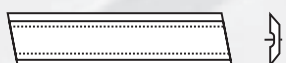
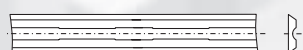
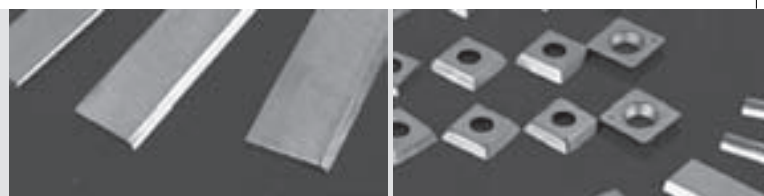
Knives for planing systems
Messer für Hobelsysteme
Couteaux pour outils à raboter
Coltelli per sistemi da pialla
Cuchillas para cepillar



Knives for planing systems
Messer für Hobelsysteme
Couteaux pour outils à raboter
Coltelli per sistemi da pialla
Cuchillas para cepillar

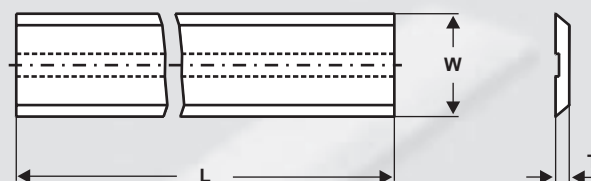
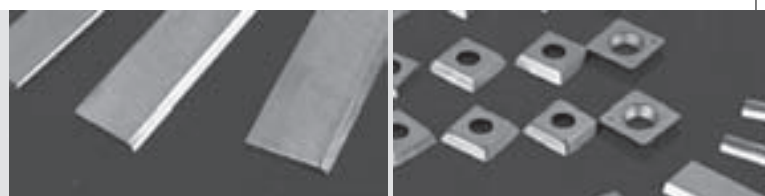
	Reversible knives for portable planers Wendeplatten für Handhobel Plaquettes pour rabots electro portatifs Coltelli piallatrici portatili Cuchillas para acepilladoras electricas	73
	Planer knives for system Bulldozer Hobelmesser für System Bulldozer Couteaux à raboter pour système Bulldozer Coltelli da pialla per sistema Bulldozer Cuchillas para cepillar para sistema Bulldozer	74
	Planer knives for system Terminus Hobelmesser für System Terminus Couteaux à raboter pour système Terminus Coltelli da pialla per sistema Terminus Cuchillas para cepillar para sistema Terminus	75
	Planer knives for system Centrolock Hobelmesser für System Centrolock Couteaux à raboter pour système Centrolock Coltelli da pialla per sistema Centrolock Cuchillas para cepillar para sistema Centrolock	76
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	Solid carbide planer knives Vollhartmetall Hobelmesser Couteaux à raboter au carbure massif Coltelli da pialla in HM integrale Cuchillas metal duro integral	79
	T.C.T. planer knives HM-bestückte Hobelmesser Couteaux à mise rapportée Coltelli da pialla con metallo duro riportato Cuchillas con metal duro	80 - 81
	HSS/HPS planer knives HSS/HPS Hobelmesser Fers de raboteuse HSS/HPS Coltelli da pialla in HSS/HPS Cuchillas en HSS/HPS	82 - 84

Reversible knives for portable planers
Wendeplatten für Handhobel
Plaquettes por rabots electro portatifs
Coltelli piallatrici portatili
Cuchillas para acepilladoras electricas



L mm	W mm	T 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, Mafell, Metabo, Scheer, Skil, Holz-Her
75.7	5.5	1.2	013018	B&D
78.0	5.5	1.1	013067	Virutex
80.5	5.9	1.2	013043	ELU
80.5	5.5	1.1	013010	ELU
82.0	5.5	1.1	013020	AEG, B&D, Bosch, ALU, Fein, Felisatti, Haffner, Hitachi, Holz-Her, Mafell, Makita, Metabo, Peugeot, Ryobi, Skil
82.7	5.5	1.1	013032	B&D
92.0	5.5	1.1	013057	AEG, Hitachi, Ryobi
102.0	5.5	1.1	013061	AEG
82.0	5.5	1.1	013082	Casals
82.0	5.1	1.2	013034	Face groove, Brustnut, Rainure sur grande face, Scanalatura frontale, Ranura frontal

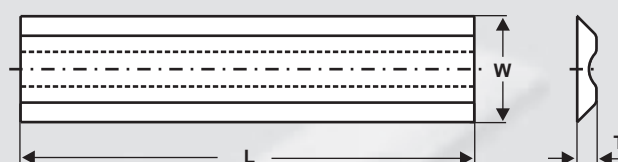
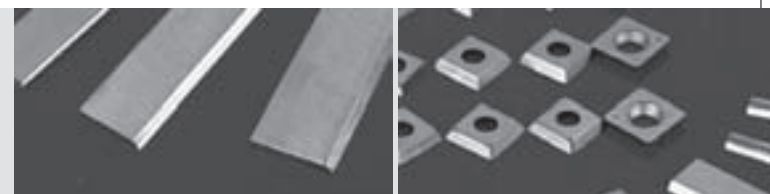
Planer knives - System Bulldozer
 Hobelmesser - System Bulldozer
 Couteaux à raboter - Système Bulldozer
 Coltelli da pialla - Sistema Bulldozer
 Cuchillas para cepillar - Sistema Bulldozer



For System Bulldozer

L	W	T	T10MG
mm	mm	mm	
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
250.0	13.6	1.8	013722
260.0	13.6	1.8	035440

Planer knives - System Terminus
Hobelmesser - System Terminus
Couteaux à raboter - Système Terminus
Coltelli da pialla - Sistema Terminus
Cuchillas para cepillar - Sistema Terminus

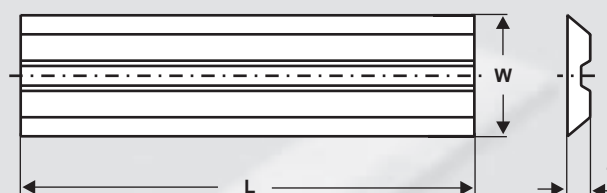


For System Terminus *

L	W	T	HW	HSS	L	W	T	HW	HSS
mm	mm	mm	T10MG		mm	mm	mm	T10MG	
50.0	14.0	2.55	100796	100348	300.0	14.0	2.55	100823	100367
60.0	14.0	2.55	100803	100350	310.0	14.0	2.55	055497	055468
80.0	14.0	2.55	100804	100349	330.0	14.0	2.55	107535	103915
100.0	14.0	2.55	100805	100297	350.0	14.0	2.55	100824	100368
110.0	14.0	2.55	100806	100351	360.0	14.0	2.55	100825	100369
120.0	14.0	2.55	100807	100352	400.0	14.0	2.55	100826	100370
130.0	14.0	2.55	055496	055461	410.0	14.0	2.55	055498	055464
136.0	14.0	2.55	107532	102090	420.0	14.0	2.55	100828	100371
140.0	14.0	2.55	100808	100353	430.0	14.0	2.55	100829	100372
150.0	14.0	2.55	100809	100354	450.0	14.0	2.55	100830	100373
160.0	14.0	2.55	100811	100355	480.0	14.0	2.55	100940	100550
170.0	14.0	2.55	100812	100356	500.0	14.0	2.55	104977	100382
180.0	14.0	2.55	100813	100357	510.0	14.0	2.55	055499	055465
190.0	14.0	2.55	100814	100358	520.0	14.0	2.55	100831	100374
200.0	14.0	2.55	100815	100359	530.0	14.0	2.55	100832	100375
210.0	14.0	2.55	100816	100360	610.0	14.0	2.55	055500	055466
220.0	14.0	2.55	100817	100361	620.0	14.0	2.55	100833	100376
230.0	14.0	2.55	054752	055462	630.0	14.0	2.55	100834	100377
240.0	14.0	2.55	100818	100362	640.0	14.0	2.55	100835	100378
250.0	14.0	2.55	100819	100363	650.0	14.0	2.55	055501	055467
255.0	14.0	2.55	107533	103455					
260.0	14.0	2.55	100820	100364					
270.0	14.0	2.55	100821	100365					
275.0	14.0	2.55	107534	103891					
280.0	14.0	2.55	100822	100366					

* For use in Terminus-cutterheads only
 * Nur zur Verwendung in Terminus-Messerköpfen
 * Utilisation limitée aux porte-outils de Terminus
 * Da usare solo su teste portacoltelli della Terminus
 * Sólo para empleo con portacuchillas de Terminus

Planer knives - System Centrolock
 Hobelmesser - System Centrolock
 Couteaux à raboter - Système Centrolock
 Coltelli da pialla - Sistema Centrolock
 Cuchillas para cepillar - Sistema Centrolock

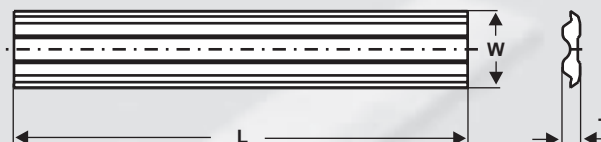
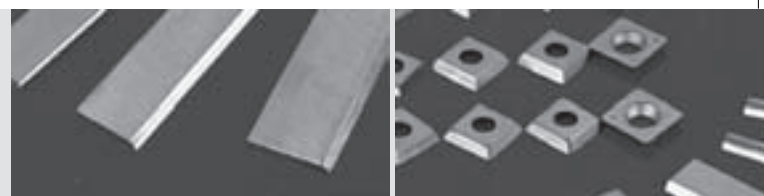


For System Centrolock *

L mm	W mm	T mm	HW T10MG	HSS
10.0	16.0	3.0	102953	102056
20.0	16.0	3.0	100836	100386
30.0	16.0	3.0	102777	107541
40.0	16.0	3.0	102954	102059
50.0	16.0	3.0	102778	107543
60.0	16.0	3.0	100837	100387
65.0	16.0	3.0	107536	103386
80.0	16.0	3.0	100838	100388
100.0	16.0	3.0	055502	055469
115.0	16.0	3.0	106848	102057
130.0	16.0	3.0	055503	055470
140.0	16.0	3.0	107537	102536
150.0	16.0	3.0	100839	100389
160.0	16.0	3.0	105003	107544
170.0	16.0	3.0	055504	055471
180.0	16.0	3.0	100840	100390
190.0	16.0	3.0	100841	055472
210.0	16.0	3.0	100842	100391
220.0	16.0	3.0	107538	102535
230.0	16.0	3.0	054753	100298
235.0	16.0	3.0	100844	100392
240.0	16.0	3.0	055505	055473
260.0	16.0	3.0	100845	100343
270.0	16.0	3.0	055506	055474
300.0	16.0	3.0	102493	102988
310.0	16.0	3.0	100846	100393
460.0	16.0	3.0	055507	055475
650.0	16.0	3.0	055508	055476

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

Planer knives - System Tersa
Hobelmesser - System Tersa
Couteaux à raboter - Système Tersa
Coltelli da pialla - Sistema Tersa
Cuchillas para cepillar - Sistema Tersa



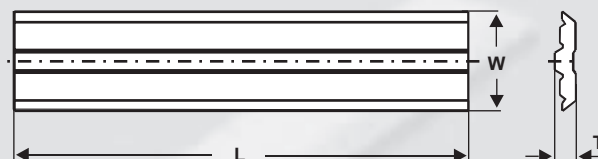
For System Tersa *

L	W	T	HW	HSS	HSS
mm	mm	mm	T10MG		Plus
60.0	10.0	2.3	100847	100395	102925
75.0	10.0	2.3	104212	107545	107837
80.0	10.0	2.3	100848	100396	102926
90.0	10.0	2.3	104398	107546	106800
95.0	10.0	2.3	104211	107547	107839
100.0	10.0	2.3	055509	100397	102927
110.0	10.0	2.3	100849	100398	102978
115.0	10.0	2.3	105071	104630	106108
120.0	10.0	2.3	100851	100399	102933
125.0	10.0	2.3	104022	107548	107841
130.0	10.0	2.3	055510	100400	102388
135.0	10.0	2.3	103823	103821	103387
140.0	10.0	2.3	104766	104613	107843
145.0	10.0	2.3	104210	107549	107844
150.0	10.0	2.3	100852	100401	102934
160.0	10.0	2.3	103943	102716	102987
170.0	10.0	2.3	100853	100402	102935
180.0	10.0	2.3	100854	100403	102936
185.0	10.0	2.3	105070	102774	104488
190.0	10.0	2.3	104399	104808	105095
200.0	10.0	2.3	105698	104243	107848
210.0	10.0	2.3	100855	100404	102937
220.0	10.0	2.3	104589	104566	107849
230.0	10.0	2.3	055511	100405	102938
235.0	10.0	2.3	103824	101718	103040
240.0	10.0	2.3	104043	101720	103041
250.0	10.0	2.3	100856	100406	102939
260.0	10.0	2.3	100857	100407	102940
265.0	10.0	2.3	104573	104326	105248
270.0	10.0	2.3	101673	102982	107853

L	W	T	HW	HSS	HSS
mm	mm	mm	T10MG		Plus
280.0	10.0	2.3	100858	100408	102941
300.0	10.0	2.3	100859	100409	102942
310.0	10.0	2.3	055512	100410	102943
320.0	10.0	2.3	107550	104687	106841
330.0	10.0	2.3	100861	100411	102944
350.0	10.0	2.3	100862	100412	102945
360.0	10.0	2.3	100863	100413	102946
400.0	10.0	2.3	100864	100414	102947
410.0	10.0	2.3	055513	100415	102962
415.0	10.0	2.3	107551	105267	107855
420.0	10.0	2.3	100865	100416	102963
430.0	10.0	2.3	055514	100417	102964
450.0	10.0	2.3	100866	100418	102965
500.0	10.0	2.3	100867	100419	102966
510.0	10.0	2.3	055515	100420	102967
520.0	10.0	2.3	055516	100421	102968
530.0	10.0	2.3	100868	100422	102969
540.0	10.0	2.3	100869	100423	102970
600.0	10.0	2.3	104720	103994	107856
610.0	10.0	2.3	055517	100424	102386
630.0	10.0	2.3	055518	100425	102971
635.0	10.0	2.3	102179	103912	103914
640.0	10.0	2.3	100870	100426	102972
650.0	10.0	2.3	055519	100427	102973

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

Planer knives - System Centrostar
 Hobelmesser - System Centrostar
 Couteaux à raboter - Système Centrostar
 Coltelli da pialla - Sistema Centrostar
 Cuchillas para cepillar - Sistema Centrostar

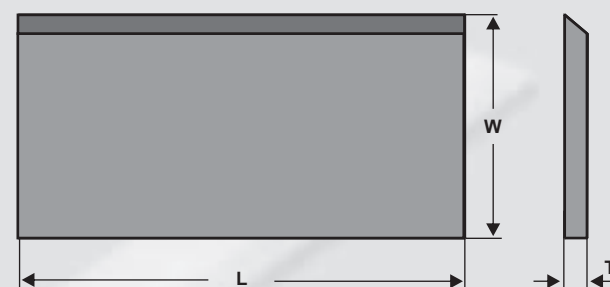


For System Centrostar / Centrofix / Quickfix *

L mm	W mm	T mm	HW T10MG	HSS
50.0	12.0	2.7	100876	100896
80.0	12.0	2.7	100879	100897
100.0	12.0	2.7	100880	100898
120.0	12.0	2.7	100881	100899
130.0	12.0	2.7	055520	055488
136.0	12.0	2.7	100883	100900
150.0	12.0	2.7	100884	100901
170.0	12.0	2.7	100885	100902
180.0	12.0	2.7	055521	055489
190.0	12.0	2.7	100886	100904
210.0	12.0	2.7	100887	100905
230.0	12.0	2.7	055522	055490
240.0	12.0	2.7	100890	100906
310.0	12.0	2.7	101675	103165
400.0	12.0	2.7	100891	100907
410.0	12.0	2.7	055523	055491
420.0	12.0	2.7	100892	100908
430.0	12.0	2.7	100893	100909
500.0	12.0	2.7	100894	100910
510.0	12.0	2.7	055524	055492
520.0	12.0	2.7	055525	055493
530.0	12.0	2.7	055526	055494
540.0	12.0	2.7	100895	100911
630.0	12.0	2.7	107553	103814
640.0	12.0	2.7	107554	107474
650.0	12.0	2.7	055527	055495

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

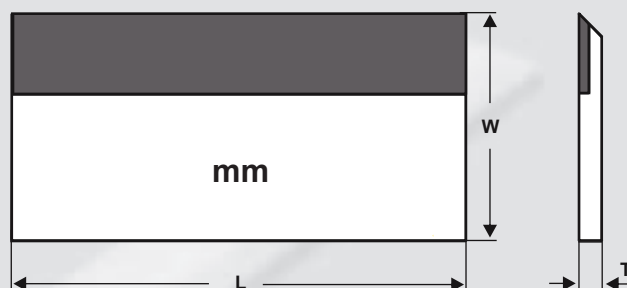
Solid carbide planer knives
Vollhartmetall Hobelmesser
Couteaux à raboter au carbure massif
Coltelli da pialla in HM integrale
Cuchillas metal duro integral



L mm	W mm	T 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
180.0	30.0	3.0	050057
210.0	30.0	3.0	050059
230.0	30.0	3.0	049223
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
180.0	35.0	3.0	050072
210.0	35.0	3.0	050074
230.0	35.0	3.0	049669
260.0	35.0	3.0	050077
310.0	35.0	3.0	050079

Only for use in special clamping systems for carbide knives, not in conventional planing heads!
Nur in Spezialklemmsystemen für Vollhartmetallhobelmesser einsetzen, nicht in herkömmlichen Hobelköpfen!

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

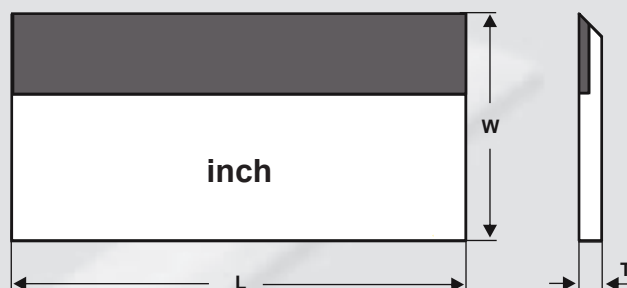


L	W	T	Art.-Nr.
mm	mm	mm	
60.0	30.0	3.0	029969
80.0	30.0	3.0	029970
100.0	30.0	3.0	029972
110.0	30.0	3.0	029973
120.0	30.0	3.0	029974
130.0	30.0	3.0	029975
150.0	30.0	3.0	029979
160.0	30.0	3.0	029980
170.0	30.0	3.0	029981
180.0	30.0	3.0	029982
210.0	30.0	3.0	029987
230.0	30.0	3.0	029989
240.0	30.0	3.0	029991
250.0	30.0	3.0	029993
260.0	30.0	3.0	029994
270.0	30.0	3.0	101697
300.0	30.0	3.0	029996
310.0	30.0	3.0	029997
330.0	30.0	3.0	002238
400.0	30.0	3.0	029999
410.0	30.0	3.0	030001
510.0	30.0	3.0	030007
610.0	30.0	3.0	030012
630.0	30.0	3.0	030013
710.0	30.0	3.0	030016
810.0	30.0	3.0	030018
820.0	30.0	3.0	100445
1010.0	30.0	3.0	030131
1050.0	30.0	3.0	030132

L	W	T	Art.-Nr.
mm	mm	mm	
60.0	35.0	3.0	030021
80.0	35.0	3.0	030022
100.0	35.0	3.0	030024
110.0	35.0	3.0	030025
120.0	35.0	3.0	030026
130.0	35.0	3.0	030027
150.0	35.0	3.0	030029
160.0	35.0	3.0	030030
170.0	35.0	3.0	030031
180.0	35.0	3.0	030032
210.0	35.0	3.0	030035
230.0	35.0	3.0	030036
240.0	35.0	3.0	030038
250.0	35.0	3.0	030039
260.0	35.0	3.0	030040
270.0	35.0	3.0	107555
300.0	35.0	3.0	030041
310.0	35.0	3.0	030042
330.0	35.0	3.0	055837
400.0	35.0	3.0	107556
410.0	35.0	3.0	030047
510.0	35.0	3.0	030050
610.0	35.0	3.0	030054
630.0	35.0	3.0	030055
710.0	35.0	3.0	030058
810.0	35.0	3.0	030059
820.0	35.0	3.0	100446
1010.0	35.0	3.0	030137
1050.0	35.0	3.0	030138

Other dimensions upon request.
 Andere Abmessungen auf Anfrage.
 D'autres dimensions sur demande.
 Altri dimensioni a richiesta.
 Otras dimensiones bajo demanda.

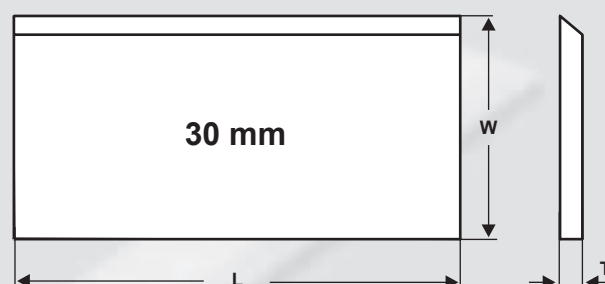
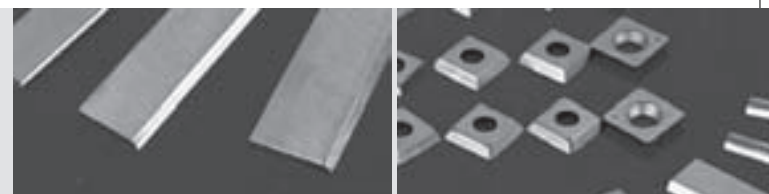
T.C.T. planer knives
HM-bestückte Hobelmesser
Couteaux à mise rapportée carbure
Coltelli da pialla con metallo duro riportato
Cuchillas con metal duro



L	W	T	Art.-Nr.
inch	inch	inch	
25	5/8	3/32	100922
25	5/8	1/8	100923
25	3/4	1/8	100924
25	1	1/8	100925
25	1 1/8	1/8	100926
25	1 1/4	1/8	100927
25	1 3/8	1/8	100928
25	1 1/2	1/8	100929
32 1/4	1 1/8	1/8	100934
32 1/4	1 1/4	1/8	100935
32 1/4	1 3/8	1/8	100936
25	1	5/32	100930
25	1 1/4	5/32	100931
25	1 3/8	5/32	100932
25	1 1/2	5/32	100933

Other dimensions upon request.
 Andere Abmessungen auf Anfrage.
 D'autres dimensions sur demande.
 Altri dimensioni a richiesta.
 Otras dimensiones bajo demanda.

Thin planer knives in HSS and HPS
Hobelmesser in HSS und HPS
Fers de raboteuse en HSS et HPS
Coltelli da pialla in HSS e HPS
Cuchillas en HSS y HPS



L	W	T	HSS	HPS
mm	mm	mm		
60.0	30.0	3.0	030152	104114
80.0	30.0	3.0	030153	104116
100.0	30.0	3.0	030154	104121
110.0	30.0	3.0	030156	104122
120.0	30.0	3.0	030157	104123
130.0	30.0	3.0	030159	104124
150.0	30.0	3.0	030162	104125
160.0	30.0	3.0	030163	107557
170.0	30.0	3.0	030164	107558
180.0	30.0	3.0	030165	104126
210.0	30.0	3.0	030168	104127
230.0	30.0	3.0	030171	104128
240.0	30.0	3.0	030172	107559
260.0	30.0	3.0	030174	104129
300.0	30.0	3.0	030175	104130
310.0	30.0	3.0	030176	104131
350.0	30.0	3.0	030178	107560
400.0	30.0	3.0	030182	107561
410.0	30.0	3.0	030183	104132
500.0	30.0	3.0	030186	107562

L	W	T	HSS	HPS
mm	mm	mm		
510.0	30.0	3.0	030187	104133
520.0	30.0	3.0	101376	107563
530.0	30.0	3.0	030188	107564
600.0	30.0	3.0	030190	107565
610.0	30.0	3.0	030191	104134
630.0	30.0	3.0	030192	104135
640.0	30.0	3.0	030194	104136
710.0	30.0	3.0	030198	104137
810.0	30.0	3.0	030201	104138
820.0	30.0	3.0	101051	104139
1050.0	30.0	3.0	030249	104140

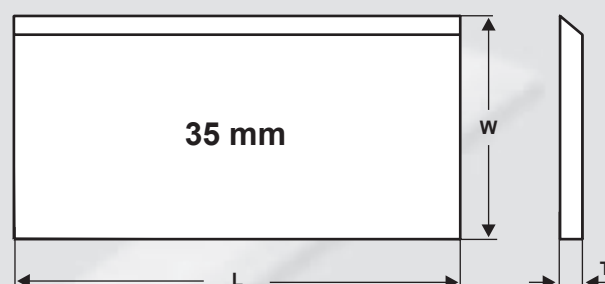
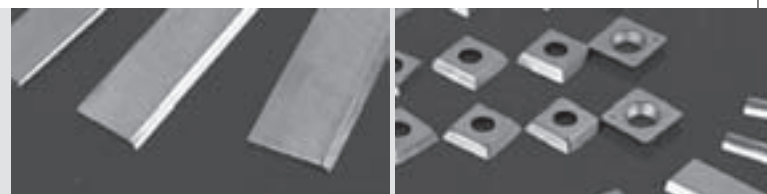
Special dimensions - Spezialmaße - Dimensions spéciales - Dimensioni speciali - Dimensiones especiales

L	W	T	HSS	HPS
mm	mm	mm		
1050.0	25.0	3.0	101030	107566
1050.0	32.0	3.0	101938	107567

Other dimensions upon request.
Andere Abmessungen auf Anfrage.
D'autres dimensions sur demande.
Altri dimensioni a richiesta.
Otras dimensiones bajo demanda.



Thin planer knives in HSS and HPS
Hobelmesser in HSS und HPS
Fers de raboteuse en HSS et HPS
Coltelli da pialla in HSS e HPS
Cuchillas en HSS y HPS

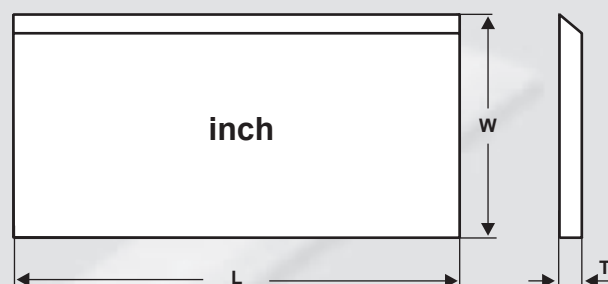


L	W	T	HSS	HPS
mm	mm	mm		
60.0	35.0	3.0	030205	104141
80.0	35.0	3.0	030206	104142
100.0	35.0	3.0	030207	104143
110.0	35.0	3.0	030208	104144
120.0	35.0	3.0	030209	104145
130.0	35.0	3.0	030210	104146
150.0	35.0	3.0	030211	104147
160.0	35.0	3.0	030212	107573
170.0	35.0	3.0	030213	107574
180.0	35.0	3.0	030214	104148
210.0	35.0	3.0	030217	104149
230.0	35.0	3.0	030218	104150
240.0	35.0	3.0	107570	107575
260.0	35.0	3.0	030220	104151
300.0	35.0	3.0	048006	104152
310.0	35.0	3.0	030222	104153
350.0	35.0	3.0	107571	107576
400.0	35.0	3.0	030225	107577
410.0	35.0	3.0	030226	104154
500.0	35.0	3.0	107572	107578

L	W	T	HSS	HPS
mm	mm	mm		
510.0	35.0	3.0	030231	104155
520.0	35.0	3.0	030232	107579
530.0	35.0	3.0	030233	107580
600.0	35.0	3.0	030234	107581
610.0	35.0	3.0	030235	104156
630.0	35.0	3.0	030236	104157
640.0	35.0	3.0	030237	104158
710.0	35.0	3.0	030240	104159
810.0	35.0	3.0	030243	104160
820.0	35.0	3.0	101052	104161
1050.0	35.0	3.0	030252	104162

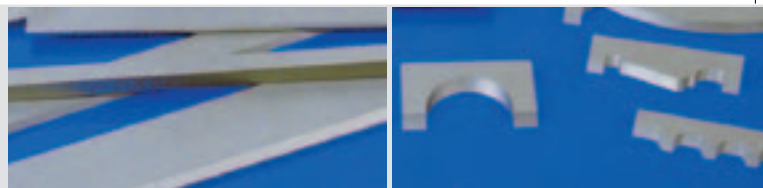
Other dimensions upon request.
Andere Abmessungen auf Anfrage.
D'autres dimensions sur demande.
Altri dimensioni a richiesta.
Otras dimensiones bajo demanda.

Thin planer knives in HSS and HPS
Hobelmesser in HSS und HPS
Fers de raboteuse en HSS et HPS
Coltelli da pialla in HSS e HPS
Cuchillas en HSS y HPS



L inch	W inch	T inch	HSS	HPS
25	5/8	3/32	100697	104163
25	5/8	1/8	100937	104164
25	3/4	1/8	100938	104165
25	1	1/8	100939	104166
25	1 1/8	1/8	100941	104167
25	1 1/4	1/8	100942	104168
25	1 3/8	1/8	100943	104169
25	1 1/2	1/8	100944	104170
25	1	5/32	100945	104171
25	1 1/4	5/32	100946	104172
25	1 3/8	5/32	100947	104173
25	1 1/2	5/32	100948	104174
25	1 3/4	5/32	100949	104175
25	2	5/32	100950	104176
32	3/4	1/8	100951	104177
32	1	1/8	100952	104178
32	1 1/4	1/8	100953	104179
32	1 3/8	1/8	100954	104180
32	1 1/2	1/8	100955	104181
32	1 1/8	5/32	100956	104182
32	1 1/4	5/32	100957	104183
32	1 3/8	5/32	100958	104184
32	1 1/2	5/32	100959	104185
32	1 3/4	5/32	100960	104186
32	2	5/32	100961	104187

Other dimensions upon request.
Andere Abmessungen auf Anfrage.
D'autres dimensions sur demande.
Altri dimensioni a richiesta.
Otras dimensiones bajo demanda.



Strips, preforms, router bit tips, drill bits, finger joint tips, saw tips
Fräserplatten, Formplatten, Oberfräserplatten, Zylinderkopfböhrer, Sägezähne
Plaquettes à braser, ebauches pour mèches à défoncer, mèches à façonner et fraises, dents de scie
Placchette per frese, placchette sagomate per punte, punte per cerniere, dentelli per lame
Placas para equipar fresas y para herramientas soldadas, brocas estrella, dientes de sierra




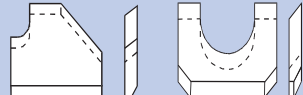
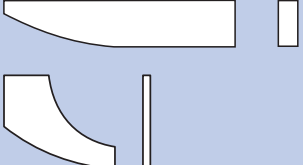
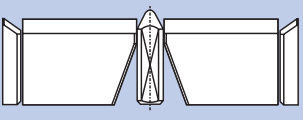
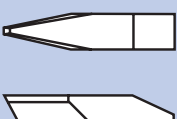

Strips, preforms, router bit tips, drill bits, finger joint tips, saw tips

Fräserplatten, Formplatten, Oberfräserplatten, Zylinderkopfböhrer, Sägezähne

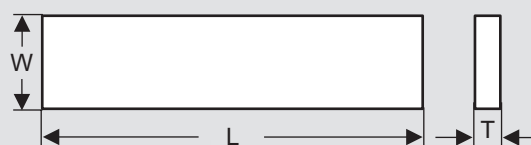
Plaquettes à braser, ébauches pour mèches à défoncer, mèches à façonner et fraises, dents de scie

Placchette per frese, placchette sagomate per punte, punte per cerniere, dentelli per lame

Placas para equipar fresas y para herramientas soldadas, brocas estrella, dientes de sierra

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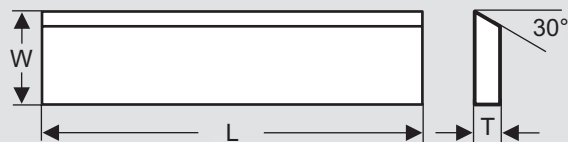
Carbide strips for brazed cutters
Hartmetallplatten zur Fräserbestückung
Plaquettes en carbure à braser
Placchette in metallo duro per frese
Placas de metal duro para equipar fresas



L	W	T	T06MF	T08MF	T10MG
mm	mm	mm			
310	8	2	039889	031190	029131
310	10	2	100785	031191	029132
310	12	2	039891	031192	029133
310	14	2	039892	031193	029136
310	15	2			054311
310	16	2	039893	031194	029138
310	18	2	039894	031195	029139
310	20	2	039895	031196	029140
310	22	2	100792	050324	038192
310	25	2	039896	031197	029141
310	8	3	039899	024513	024515
310	10	3	039900	024517	024519
310	12	3	039901	024521	024523
310	14	3	039902	024525	024527
310	15	3	100798	035892	041072
310	16	3	039903	024529	024531
310	18	3	039904	024533	024535
310	20	3	039905	024537	024539
310	25	3	039906	024541	024543
310	30	3	039907	024545	024547
310	8	4	039909	024564	024566
310	10	4	039910	024568	024570
310	12	4	039911	024572	024574
310	14	4	039912	024576	024578
310	15	4	102784	040305	103213
310	16	4	037636	024580	024582
310	18	4	037637	024584	024586
310	20	4	039913	024588	024590
310	25	4	039914	024592	024594
310	30	4	039915	024596	024598
310	8	5	039917	024625	024627
310	10	5	039918	024629	024631
310	12	5	039919	024633	024635
310	14	5	039920	024637	024639
310	15	5	103185	103205	039582
310	16	5	039921	024641	024643
310	18	5	039922	024645	024647
310	20	5	039923	024649	024651
310	25	5	039924	024653	024655
310	30	5	039925	024657	024659

Special executions, other tungsten carbide grades and further dimensions upon request.
 Sonderausfertigungen, andere Hartmetallsorten und verschiedene Abmessungen auf Anfrage.
 Exécutions spéciales, d'autres nuances de carbure et d'autres dimensions sur demande.
 Esecuzioni speciali, altri tipi ed ulteriori dimensioni su richiesta.
 Ejecuciones especiales, otras calidades y otras dimensiones a petición.

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



L mm	W mm	T mm	T06MF	T08MF	T10MG
310	8	3	039927	024723	024725
310	10	3	039928	024727	024729
310	12	3	039929	024731	024733
310	15	3	101252	038985	041080
310	20	3	039933	024747	024749
310	25	3	039934	024751	024753
310	30	3	039935	024755	024757
310	8	4	039937	024763	024765
310	10	4	039938	024767	024769
310	12	4	039939	024771	024773
310	14	4	039940	024775	024777
310	15	4	039459	049252	041081
310	16	4	039941	024779	024781
310	18	4	039942	024783	024785
310	20	4	039943	024787	024789
310	22	4	035925	049253	041082
310	25	4	039944	024791	024793
310	28	4	035926	049254	041083
310	30	4	039945	024795	024797
310	35	4	100275	051791	041084
310	8	5	039947	024803	024805
310	10	5	039948	024807	024809
310	12	5	039949	024811	024813
310	14	5	039950	024815	024817
310	15	5	103186	103206	103218
310	16	5	039951	024819	024821
310	18	5	039952	024823	024825
310	20	5	039953	024827	024829
310	25	5	039954	024831	024833
310	30	5	039955	024835	024837
310	35	5	100843	051792	051793
310	10	6	024846	024847	024849
310	12	6	039959	024851	024853
310	16	6	039961	024859	024861
310	20	6	039963	024867	024869
310	25	6	039964	024871	024873
310	30	6	039965	024875	024877

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

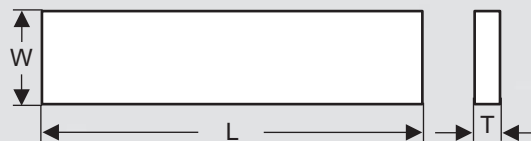


L mm	W mm	T mm	T06MF	T08MF	T10MG
310	10	3	100860	024887	024889
310	12	3	039969	024891	024893
310	14	3	039970	024895	024897
310	15	3	103178		103222
310	16	3	039971	024899	024901
310	18	3	039972	024903	024905
310	20	3	039973	024907	024909
310	25	3	039974	024911	024913
310	30	3	039975	024915	024917
310	10	4	039978	024933	024935
310	12	4	039979	024937	024939
310	14	4	039980	024941	024943
310	15	4	103175	035893	050690
310	16	4	039981	024945	024947
310	18	4	039982	024949	024951
310	20	4	039983	024953	024955
310	25	4	100875	024957	024959
310	30	4	039985	024961	024963
310	35	4	100877	050600	051797
310	8	5	039987	024976	024978
310	10	5	039988	024980	024982
310	12	5	039990	024984	024986
310	14	5	039991	024988	024990
310	15	5	100882	035894	035897
310	16	5	039992	024992	024994
310	18	5	039993	024996	024998
310	20	5	039994	025000	025002
310	25	5	039995	025004	025006
310	30	5	039996	025008	025010
310	35	5	054692	051798	051799
200	40	5	100889	040307	039094
310	10	6	039999	025021	025023
310	12	6	040000	025025	025027
310	16	6	040002	025033	025035
310	20	6	040004	025041	025043
310	25	6	040005	025045	025047
310	30	6	040006	025049	025051

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

US-Style



Style	L inch	W inch	T inch	T06MF C3	T08MF C2	T06M	T10MG	TL15
STB 310	6	5/16	3/32	025066	060188	062487	029145	060397
STB 312	6	3/8	3/32	025070	060189	062390	029149	037315
STB 316	6	1/2	3/32	025075	060190	062244	029154	038661
STB 320	6	5/8	3/32	025080	060191	062183	029159	060398
STB 324	6	3/4	3/32	025085	060371	062245	029164	060399
STB 328	6	7/8	3/32	025090	060192	062246	029169	037316
STB 332	6	1	3/32	025095	060193	062184	029174	037314
STB 336	6	1 1/8	3/32	025100	060194	062247	029179	060400
STB 340	6	1 1/4	3/32	025106	060195	062488	029184	037312
STB 344	6	1 3/8	3/32	060367	060368	062501	060369	060401
STB 348	6	1 1/2	3/32	025112	060196	062489	029190	037313
STB 410	6	5/16	1/8	025067	032651	062490	029146	029367
STB 412	6	3/8	1/8	025071	032621	061884	029150	029371
STB 416	6	1/2	1/8	025076	032622	061779	029155	029376
STB 420	6	5/8	1/8	025081	032623	061778	029160	029381
STB 424	6	3/4	1/8	025086	032624	061780	029165	029386
STB 428	6	7/8	1/8	025091	032625	061781	029170	029391
STB 432	6	1	1/8	025096	032626	061777	029175	029396
STB 436	6	1 1/8	1/8	025101	032627	061782	029180	029401
STB 440	6	1 1/4	1/8	025107	032628	062253	029185	029406
STB 444	6	1 3/8	1/8	025111	032629	062502	029189	031564
STB 448	6	1 1/2	1/8	025113	032630	061783	029191	029411
STB 510	6	5/16	5/32	025068	032631	062505	029147	029368
STB 512	6	3/8	5/32	025072	032632	062506	029151	029372
STB 516	6	1/2	5/32	025077	032633	062507	029156	029377
STB 520	6	5/8	5/32	025082	032634	062508	029161	029382
STB 524	6	3/4	5/32	025087	032635	062509	029166	029387
STB 528	6	7/8	5/32	025092	032636	062510	029171	029392
STB 532	6	1	5/32	025097	032637	062511	029176	029397
STB 536	6	1 1/8	5/32	025102	032638	062512	029181	029402
STB 540	6	1 1/4	5/32	025108	032639	062513	029186	029407
STB 544	6	1 3/8	5/32	060393	060391	062514	060395	060402
STB 548	6	1 1/2	5/32	025114	032640	062515	029192	029412
STB 610	6	5/16	3/16	025069	032641	062516	029148	029369
STB 612	6	3/8	3/16	025073	032642	062517	029152	029373
STB 616	6	1/2	3/16	025078	029663	062518	029157	029378
STB 620	6	5/8	3/16	025083	032643	062519	029162	029383
STB 624	6	3/4	3/16	025088	032644	062520	029167	029388
STB 628	6	7/8	3/16	025093	032645	062521	029172	029393
STB 632	6	1	3/16	025098	032646	062522	029177	029398
STB 636	6	1 1/8	3/16	025103	060197	062523	029182	060403
STB 640	6	1 1/4	3/16	025109	032647	062524	029187	029408
STB 644	6	1 3/8	3/16	060394	060392	062525	060396	060404
STB 648	6	1 1/2	3/16	025115	032648	062526	029193	029413

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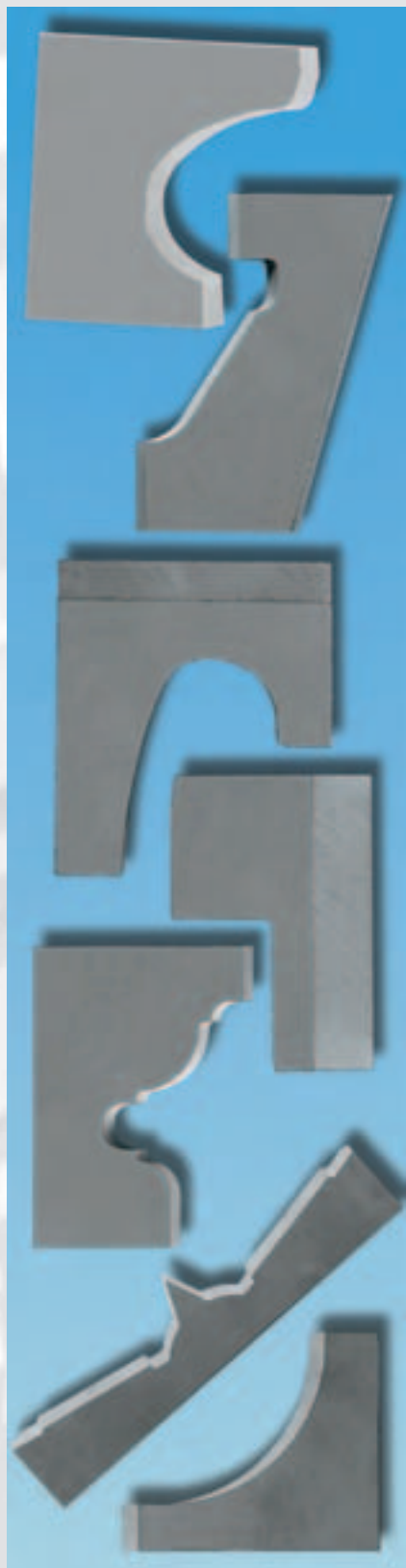
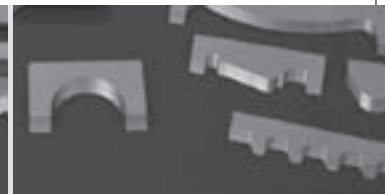
Carbide tips for brazed cutters - quick delivery service

Formplatten zum Löten - Schnelldienst

Plaquettes en carbure à braser - service rapide

Placchette per frese saldobrasate - servizio rapido

Placas para herramientas soldadas - entrega servicio rapido



Preforms for brazed cutters

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 from our quick delivery service within 2-3 working days.

Formplatten für gelötete Fräser

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 2-3 Arbeitstagen.

Plaquettes préprofilées pour fraises brasées

Grâce à l'utilisation de plaquettes en carbure préprofilées, plus besoin de coûteuses opération 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 2-3 jours ouvrés.

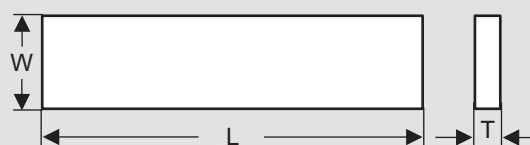
Placchette per frese saldobrasate

Con l'uso delle placchette preformate vi risparmiate non solo la sgrossatura bensì anche i costi delle mole. TIGRA può fornire quasi ogni tipo di placchette preformate secondo le vostre richieste ed esigenze (documenti DXF; schizzi). Per ordini urgenti di piccole quantità riguardanti utensili particolari siamo in grado di fornirvi la merce nel arco di 2-3 giorni lavorativi.

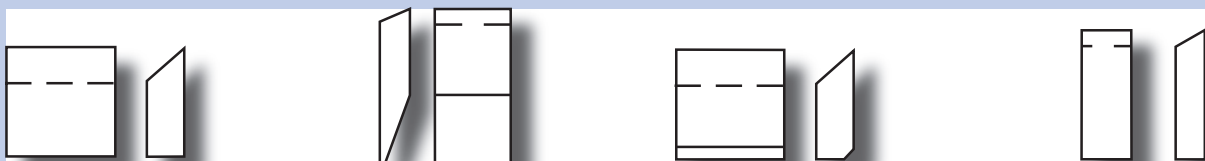
Placas de molde para fresas soldadas

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 2-3 días laborables.

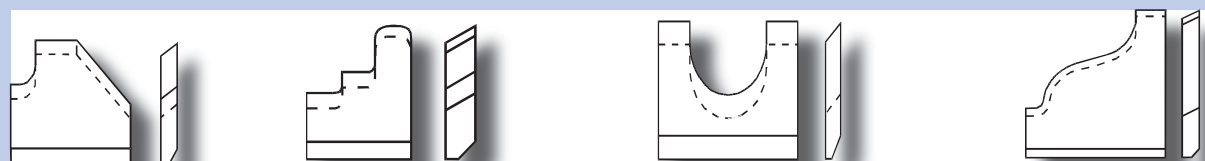
Carbide tips for brazed cutters
 Formplatten zum Löten
 Plaquettes en carbure à braser
 Placchette per frese saldobrasate
 Placas para herramientas soldadas



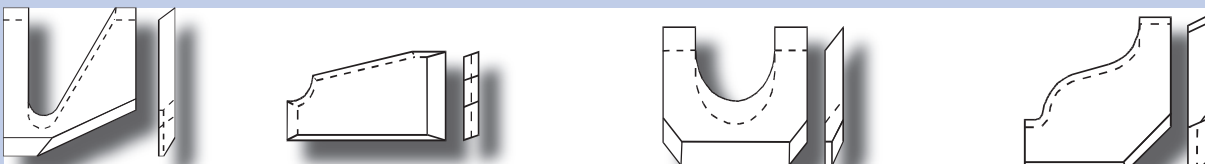
Profile - Profil - Profile - Perfil 1



Profile - Profil - Profile - Perfil 2



Profile - Profil - Profile - Perfil 3



The profile groups 1, 2 and 3 are with chamfers in the profile and/or at the bottom.
 Die Profilgruppen 1, 2 und 3 haben Fasen im Profil und/oder an der Anschlagkante.
 Les groupes de profils 1, 2 et 3 ont des biseaux dans le profil et/ou au bord de butée.
 I gruppi di profili 1, 2 e 3 sono provvisti di smussi nel profilo e/o nello spigolo di battuta.
 Los grupos de perfil tienen 1, 2 y 3 tanto un perfil, como la base biselados.

Profile - Profil - Profile - Perfil 4



Profile group 4 is without any chamfers and therefore less expensive!
 Profilgruppe 4 hat keinerlei Fasen. Der Preis dafür ist deutlich günstiger!
 Les groupe de profils 4 n'a pas de biseaux. Le prix de ce modèle est de ce fait bien plus avantageux!
 Il gruppo di profili 4 non è provvisto di smussi ed ha pertanto un prezzo notevolmente inferiore!
 El grupo de perfil 4 non tiene ningun bisel. El precio de este modelo sera muy ventajoso para vds!

Carbide tips for router bits
HM-Rohlinge für Oberfräser
Ebauches pour mèches à défoncer
Placchette sagomate per punte
Placas de metal duro para equipar fresas



Preforms for router bits

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 a few working days.

Platten für Oberfräser

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 wenigen Arbeitstagen.

Plaquettes pour défonceuse

Les plaquettes au carbure pour défonceuse peuvent être livrées préfabriquées 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 quelques jours ouvrés.

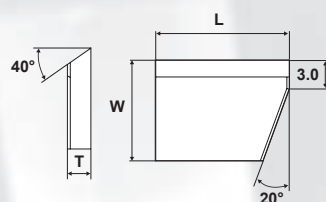
Placchette sagomate per punte

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 pochi giorni lavorativi.

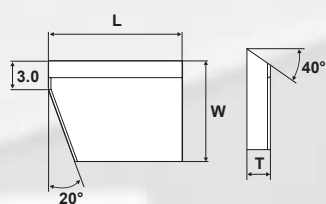
Placas para fresas de cajeadora

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 pocos días.

Drill bits
Zylinderkopfbohrer
Mèches à façonner
Punte per cerniere
Brocas estrella



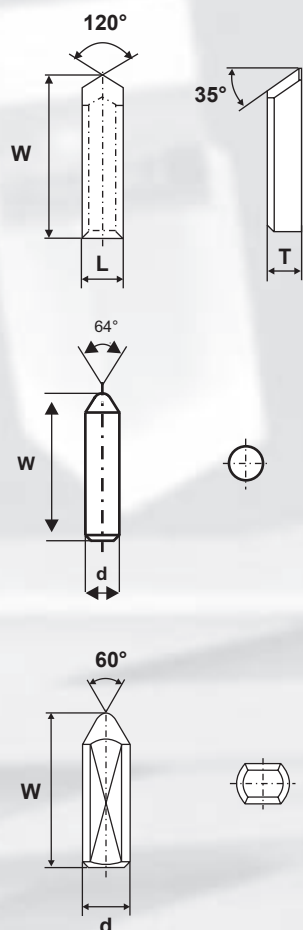
Left, links, gauche, sinistra, izqiera



Right, rechts, droite, destra, derecha

diam	L mm	W mm	T mm	T06MF
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
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

Drill bits
Zylinderkopfbohrer
Mèches à façonner
Punte per cerniere
Brocas estrella



d	L mm	W mm	T mm	T06MF
	3.0	12.0	2.5	032702
	4.0	13.0	2.5	032703
3.0		13.0		055341
4.0		13.0		032704

Finger joint cutters
Minizinkenfräser
Fraises mini-aboutages
Frese per giunzioni
Fresas para ensamblar



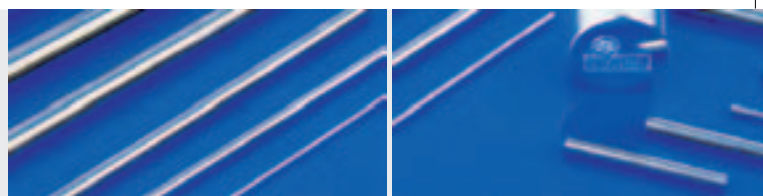
L mm	W mm	T mm	T08MF	T10MG
4.5	28.0	4.1	029105	041997
5.0	28.0	4.1	107858	107859

Tips for strobe saws
Stäbe für Wischersägen
Racleurs de scies circulaire
Barrette per rasanti di lame circolari
Plaquita barredora

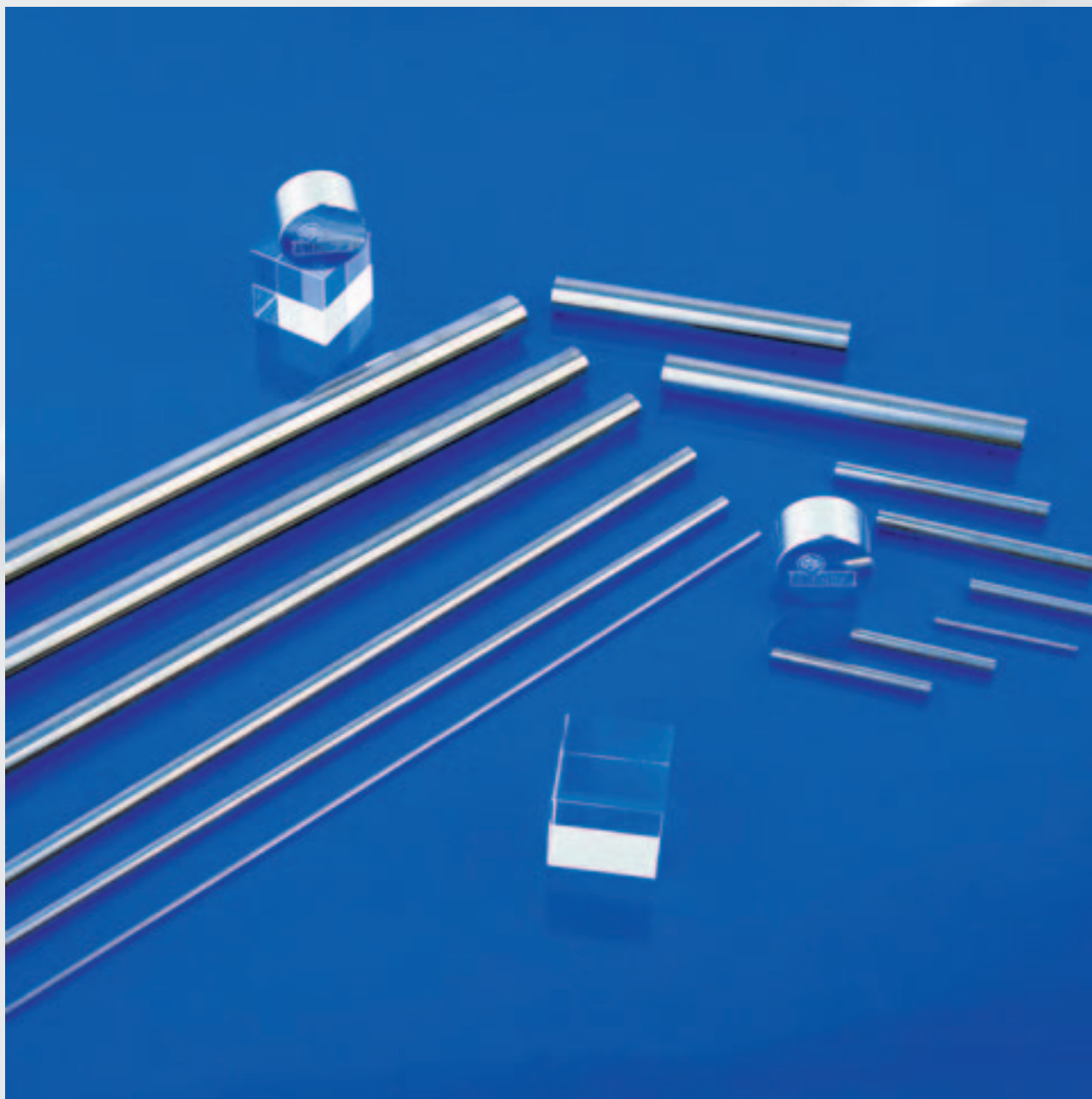
L	W	T	T06MF
mm	mm	mm	
30.0	3.0	2.0	043520
30.0	3.2	2.0	043518
30.0	3.5	2.0	043514
30.0	4.0	2.0	043521
40.0	3.0	2.0	043522
40.0	3.2	2.0	043519
40.0	3.5	2.0	043516
40.0	4.0	2.0	043523
40.0	4.4	2.0	043524
40.0	5.0	2.0	043525

Saw tips
Sägezähne
Dents de scie
Dentelli per lame
Dientes de sierra

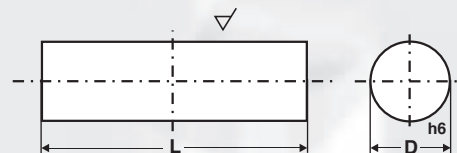
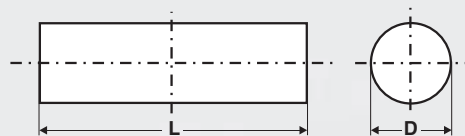
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Rods
Rundstäbe
Barreaux cylindriques
Cilindri
Barras redondas



Rods
Rundstäbe
Barreaux cylindriques
Cilindri
Barras redondas

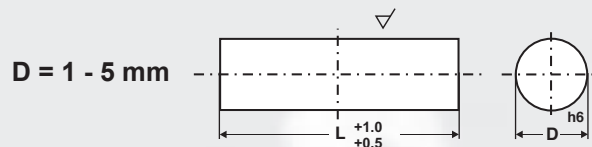


L = 325 + 5 mm as sintered / roh / brut / grezzo / en bruto					
D mm	T10MG	T06MG	D mm	T10MG	T06MG
1.2	035472		14.8	035494	
1.7	035473		15.3	035495	
2.2	035474		15.8	035496	
2.7	035475		16.3	029700	053096
3.2	029686	032541	16.8	035497	
3.7	035476		17.3	035498	
4.2	029688	032542	17.8	036511	
4.7	035477		18.3	029702	
5.2	034420	036482	18.8	036514	
5.7	035478		19.3	035500	
6.2	029690	032543	19.8	036515	
6.7	035479		20.3	029704	053098
7.2	035480	036485	21.3	035501	
7.7	035481		22.3	035503	036503
8.2	029692	032544	23.3	035504	
8.7	035482		24.3	035505	
9.3	035483		25.3	029706	
9.8	035484		25.8	036525	
10.3	029694	053093	26.3	035506	
10.8	035485		27.3	036527	
11.3	035486		28.3	035507	036507
11.8	035488		29.3	036529	
12.3	029696	053094	30.3	035508	
12.8	035490		31.3	036531	
13.3	035492		32.3	035509	
13.8	035493		35.5	036533	
14.3	029698	053095			

L = 325 + 5 mm ground / geschliffen / affutée / rettificato / afilado					
D mm	T10MG	T06MG	D mm	T10MG	T06MG
1.0	035517		16.0	029722	029721
1.5	035518		16.5	035539	
2.0	035519		17.0	035540	
2.5	035520		17.5	036571	
3.0	029708	029707	18.0	029724	029723
3.5	035521		18.5	036573	
4.0	029710	029709	19.0	035541	
4.5	035522		19.5	036575	
5.0	034802	036541	20.0	029726	029725
5.5	035523		20.5	036577	
6.0	029712	029711	21.0	035542	
6.5	035524		21.5	036579	
7.0	035525	036544	22.0	035543	036562
7.5	035526		22.5	036581	
8.0	029714	029713	23.0	035544	
8.5	035527		23.5	036583	
9.0	035528		24.0	035545	
9.5	035529		25.0	029728	029727
10.0	029716	029715	25.5	036585	
10.5	035530		26.0	035546	
11.0	035531		27.0	036587	
11.5	035532		28.0	035547	036566
12.0	029718	029717	29.0	036589	
12.5	035533		30.0	035548	
13.0	035534		31.0	036591	
13.5	035535		32.0	035549	
14.0	029720	029719	35.0	035552	
14.5	035536				
15.0	035537				
15.5	035538				

Other grades and dimensions upon request.
 Andere Sorten und Abmessungen auf Anfrage.
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 Altri tipi e dimensioni a richiesta.
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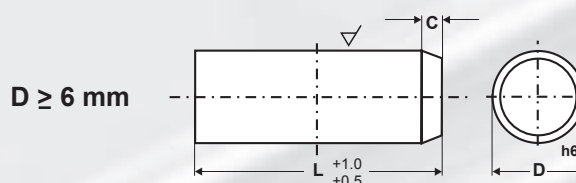
Rods
Rundstäbe
Barreaux cylindriques
Cilindri
Barras redondas



D mm	L mm	T10MG	T06MG
3.0	38	053363	100980
	43	039162	055446
	50	034177	055445
4.0	43	039161	106821
	50	034178	034158
	55	039104	101012

D mm	L mm	T10MG	T06MG
5.0	43	052459	106780
	50	034179	034159

with chamfer / mit Fase / avec chanfrein /
con smusso / con chaflan



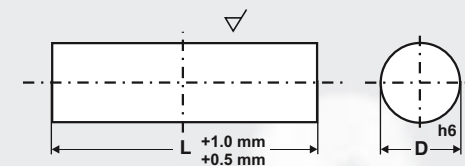
D mm	L mm	C mm	T10MG	T06MG
6.0	46	0.4	102374	106785
	50	0.4	043244	106787
	55	0.4	039107	101016
	60	0.4	034180	034160
	70	0.4	043527	106399
8.0	50	0.6	045419	106788
	55	0.6	041602	106789
	56	0.6	102197	106790
	60	0.6	046522	102018
	70	0.6	038349	101017
	75	0.6	041481	101018
	80	0.6	034181	034161
10.0	100	0.6	036392	036391
	65	0.6	102514	106791
	70	0.6	038350	101019
	75	0.6	038351	055813
	80	0.6	034182	106402
12.0	90	0.6	052421	106792
	100	0.6	034183	036399
	80	0.8	034184	053694
	90	0.8	104347	101020
	100	0.8	034185	034165
	110	0.8	052744	106794
14.0	120	0.8	051331	106795
	155	0.8	106797	106796
	90	0.8	041482	101022
	100	0.8	034186	034166
16.0	110	0.8	038353	101023
	120	0.8	053659	106801
	80	0.8	052553	106412
	90	0.8	038354	101024

D mm	L mm	C mm	T10MG	T06MG
16.0	93	0.8	106803	106802
	100	0.8	034187	034167
	110	0.8	038355	101025
	120	0.8	034188	034168
	130	0.8	053858	106805
	140	0.8	038356	101026
	150	0.8	043662	103951
	155	0.8	041603	106806
	170	0.8	052410	106807
	175	0.8	053515	106808
18.0	93	0.8	106809	106810
	100	0.8	034189	034169
	110	0.8	102817	106811
	115	0.8	038357	101027
	120	0.8	034190	034170
20.0	100	1.0	034192	034172
	110	1.0	044472	106403
	115	1.0	038358	101028
	120	1.0	034193	034173
	125	1.0	100241	106812
	130	1.0	106044	106813
	135	1.0	039115	054819
	140	1.0	038359	101029
	145	1.0	105702	106814
	150	1.0	034194	034174
25.0	155	1.0	100073	106815
	170	1.0	055570	106816
	110	1.0	102424	104306
	125	1.0	106818	106817
	155	1.0	102765	106819

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Altri tipi e dimensioni a richiesta.
Otras calidades y dimensiones bajo demanda.

Rods
Rundstäbe
Barreaux cylindriques
Cilindri
Barras redondas

US-Style



D	L	T10MG	T06MG
inch	inch		
1/8	12 1/4	050139	054926
5/32	12 1/4	050140	054927
3/16	12 1/4	050147	054929
7/32	12 1/4	050148	054930
15/64	12 1/4	050149	054931
1/4	12 1/4	050150	054821
5/16	12 1/4	050151	054933
3/8	12 1/4	050152	054934
7/16	12 1/4	050153	054935
1/2	12 1/4	050154	054936
9/16	12 1/4	050155	054937
5/8	12 1/4	050156	054939
3/4	12 1/4	050157	054822
1	12 1/4	050158	054824

D	L	T10MG	T06MG
inch	inch		
1/8	1 1/2	049465	054851
1/8	2	049466	054852
1/8	2 1/2	049467	054853
1/8	3	050160	054854
1/8	4	049632	054855
1/8	6	049469	054856
5/32	3	049470	054857
3/16	1 1/2	049471	054858
3/16	2	049472	054859
3/16	2 1/2	050165	054860
1/4	1 1/2	049474	054873
1/4	2	049475	054861
1/4	2 1/2	049476	053113
1/4	3	050169	053114
1/4	4	050170	054862
3/8	2 1/2	049477	054863
3/8	3	049478	053115
3/8	4	049633	054864
3/8	6	049480	054865
1/2	2	050175	054866
1/2	2 1/2	050176	054867
1/2	3	049481	053116
1/2	3 1/2	045137	053117
1/2	4	049482	054868
5/8	3	049483	054869
5/8	3 1/2	050180	054870
5/8	4	049484	053118
5/8	5	050182	054871
3/4	4	050183	053119
1	5	050184	054872

Applications of TIGRA carbide grades:

T10MG (ISO-Code K20-K40):

Micrograin carbide with medium abrasive resistance and high toughness.

T06MG (ISO-Code K10):

Micrograin carbide with high abrasive resistance and good toughness.

Both grades are well suited as blanks for drilling, turning, routing and reaming of alloyed steel, corrosion and heat resistant steel, non ferrous metals, plastics, foils, components for cold forming and stamping technology, powderpress technology and valve components.

Other grades and dimensions upon request.
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 Otras calidades y dimensiones bajo demanda.





TIGRAAlloy blanks, strips and saw tips
TIGRAAlloy Blanketts, Fräserplatten und Sägezähne
TIGRAAlloy plaquettes à profiler, plaquettes à braser et dents de scie
TIGRAAlloy placchette da profilare, placchette per frese e dentelli per lame
TIGRAAlloy placas para perfilar, placas para equipar fresas y dientes de sierra





TIGRAIloy

TIGRAIloy, a cutting material, consisting of a mixture of hard chromium and tungsten carbide that are embedded in a tough cobalt matrix. The grain size of the carbides is very small and they are consistently embedded in the cobalt. This results in an ideal combination of high hardness and high toughness. Therefore TIGRAIloy 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 brazeability affords the opportunity to grind extremely sharp cutting edges. TIGRAIloy can be used for the production of ground knives and blanks and for the production of brazed cutterheads.

Characteristics:

Hardness: 60 HRC
Heat resistance: upto 800°C / 1500°F
Non magnetic
Highly corrosion resistant
Extremely shock proof

TIGRAIloy besteht aus harten Chrom- und Wolframkarbiden, die in einer zähen Kobaltmatrix eingelagert sind. Die Karbide sind dabei besonders fein und gleichmäßig verteilt. Daraus entsteht eine ideale Kombination von hoher Härte und besonders guter Zähigkeit. TIGRAIloy 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. TIGRAIloy eignet sich zur Herstellung von geschliffenen Messern und Blanketts jeder Form und zur Herstellung gelöteter Fräser.

Eigenschaften:

Härte: 60 HRC
Hitzebeständigkeit: bis 800°C
Unmagnetisch
Sehr korrosionsbeständig
Hohe Bruchfestigkeit

TIGRAIloy est constitué de carbures de chrome et de tungstène durs qui sont logés dans une matrice de cobalt résistante. Les carbures sont ici répartis de manière particulièrement précise et régulière, ce qui offre une combinaison idéale de haute dureté et de résistance particulièrement élevée. TIGRAIloy 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. TIGRAIloy est bien adaptée pour la fabrication de fers et d'ébauches rectifiés de toutes formes et pour la fabrication de fraises brasées.

Propriétés:

Dureté: 60 HRC
Resistance à la chaleur: jusqu'à 800°C
Amagnétique
Très résistant à la corrosion
Grande résistance à la rupture

TIGRALloy

TIGRALloy è composta da carburo duro di cromo e tungsteno, incastonati in una matrice di cobalto tenace, fini e distribuiti costantemente che costituiscono la 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 nonchè la grande resistenza termica e alla saldobrasatura permettono l'uso di taglienti molto affilati. TIGRALloy può essere usato per la produzione delle lame, delle placchette da profilare di ogni tipo e per la produzione delle frese saldobrasate.

Caratteristiche:

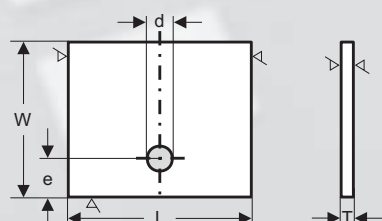
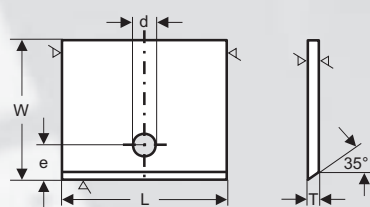
Durezza: 60 HRC
Resistenza termica: fino a 800°C
Non magnetico
Alta resistenza alla corrosione
Alta resistenza alla flessione

TIGRALloy se compone de carburos duros de cromo y volframio que están depositados en una matriz de cobalto resistente. Estos carburos están distribuidos de manera muy fina y homogénea. 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. TIGRALloy es apropiado para la fabricación de cuchillas afiladas y placas de cualquier forma y para la fabricación de fresas soldadas.

Propiedades:

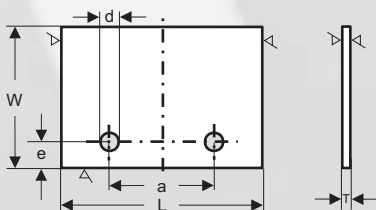
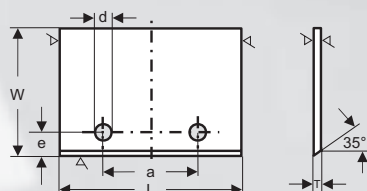
Dureza: 60 HRC
Resistencia a calor hasta 800°C
Sin magnetismo
Alta resistencia a la corrosión
Alte resistencia a la rotura

TIGRAIloy - Blanks for profiling
TIGRAIloy - Blanketts zum Profilieren
TIGRAIloy - Plaquettes à profiler
TIGRAIloy - Placchette da profilare
TIGRAIloy - Placas para perfilar



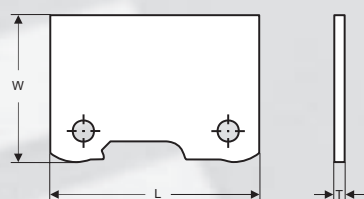
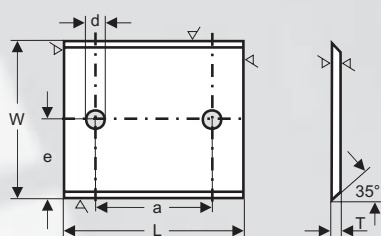
L	W	T	d	a	e	TIGRAIloy
mm	mm	mm	mm	mm	mm	
15.0	20.4	2.0	4.1		6.3	050254
15.0	25.4	2.0	4.1		6.3	062363
15.0	30.4	2.0	4.1		6.3	050432
20.0	20.4	2.0	4.1		6.3	050433
20.0	25.4	2.0	4.1		6.3	050434
20.0	30.4	2.0	4.1		6.3	050435
25.0	20.4	2.0	4.1		6.3	061898
25.0	25.4	2.0	4.1		6.3	050437
25.0	30.4	2.0	4.1		6.3	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

TIGRALloy - Blanks for profiling
TIGRALloy - Blanketts zum Profilieren
TIGRALloy - Plaquettes à profiler
TIGRALloy - Placchette da profilare
TIGRALloy - Placas para perfilar



L	W	T	d	a	e	TIGRALloy
mm	mm	mm	mm	mm	mm	
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	30.4	2.0	4.1	20.0	5.5	046483
40.0	35.4	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	16.0	2.0	4.1	26.0	5.5	050456
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
19.0	30.0	2.0	3.6	8.5	4.75	062277
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

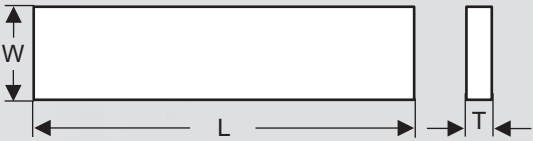
TIGRALloy - Blanks for profiling
TIGRALloy - Blanketts zum Profilieren
TIGRALloy - Plaquettes à profiler
TIGRALloy - Placchette da profilare
TIGRALloy - Placas para perfilar



L	W	T	d	a	e	TIGRALloy
mm	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	16.0	2.0	4.1	26.0		050480
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
41.0	28.0	1.5				047376
61.0	31.0	1.5				047377
61.0	45.0	2.0				047375

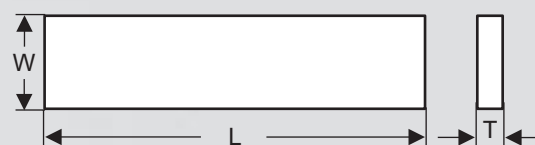
Other dimensions upon request.
 Andere Abmessungen auf Anfrage.
 D'autres dimensions sur demande.
 Altri dimensioni a richiesta.
 Otras dimensiones bajo demanda.

TIGRAIloy - Bars for brazed cutters
TIGRAIloy - Fräserplatten
TIGRAIloy - Plaquettes à braser
TIGRAIloy - Placchette per frese
TIGRAIloy - Placas para equipar fresas



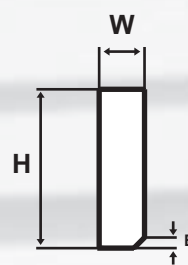
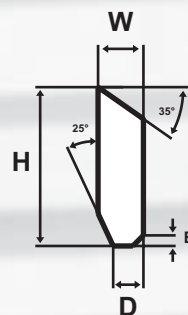
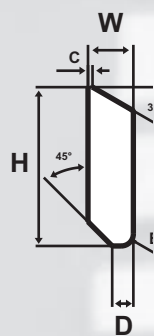
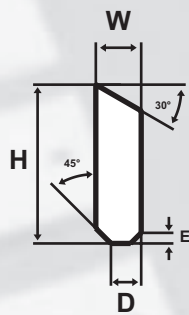
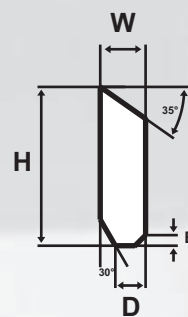
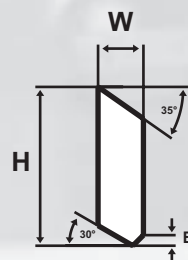
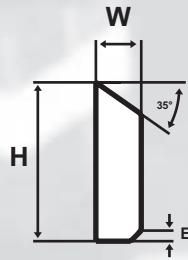
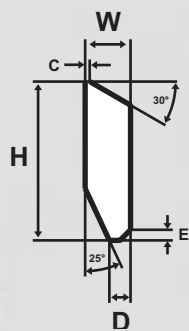
L	W	T	TIGRAIloy
mm	mm	mm	
165	10	3	050137
165	12	3	050138
165	15	3	050185
165	16	3	050186
165	18	3	050187
165	20	3	050188
165	25	3	050189
165	10	4	050190
165	12	4	050191
165	15	4	050192
165	16	4	050193
165	18	4	050194
165	20	4	050195
165	25	4	050196
165	30	4	050197
165	10	5	050199
165	12	5	050200
165	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

TIGRAloy - Bars for brazed cutters
TIGRAloy - Fräserplatten
TIGRAloy - Plaquettes a braser
TIGRAloy - Placchette per frese
TIGRAloy - Placas para equipar fresas



Style	L inch	W inch	T inch	TIGRAloy
STB 312	6	3/8	3/32	046284
STB 316	6	1/2	3/32	046290
STB 320	6	5/8	3/32	046291
STB 324	6	3/4	3/32	046292
STB 328	6	7/8	3/32	046293
STB 332	6	1	3/32	046294
STB 336	6	1 1/8	3/32	046352
STB 340	6	1 1/4	3/32	046353
STB 348	6	1 1/2	3/32	046354
STB 412	6	3/8	1/8	046295
STB 416	6	1/2	1/8	046296
STB 420	6	5/8	1/8	046297
STB 424	6	3/4	1/8	046298
STB 428	6	7/8	1/8	046299
STB 432	6	1	1/8	046300
STB 436	6	1 1/8	1/8	046454
STB 440	6	1 1/4	1/8	046301
STB 448	6	1 1/2	1/8	046302
STB 510	6	5/16	5/32	046457
STB 512	6	3/8	5/32	046459
STB 516	6	1/2	5/32	046460
STB 520	6	5/8	5/32	046461
STB 524	6	3/4	5/32	046462
STB 528	6	7/8	5/32	046463
STB 532	6	1	5/32	046464
STB 536	6	1 1/8	5/32	046465
STB 540	6	1 1/4	5/32	046466
STB 612	6	3/8	3/16	046469
STB 616	6	1/2	3/16	046470
STB 620	6	5/8	3/16	046471
STB 624	6	3/4	3/16	046472
STB 628	6	7/8	3/16	046473
STB 632	6	1	3/16	050603
STB 636	6	1 1/8	3/16	046474
STB 640	6	1 1/4	3/16	046475
STB 648	6	1 1/2	3/16	046476

TIGRALloy - Saw tips
TIGRALloy - Sägezähne
TIGRALloy - Dents de scie
TIGRALloy - Dentelli per lame
TIGRALloy - Dientes de sierra



We supply all kinds of TIGRALloy saw tips. Just give us dimensions and quantities.

Wir beliefern Sie mit allen Arten von TIGRALloy-Sägezähnen. Nennen Sie uns einfach Maße und Bestellmenge.

Nous livrons tous les types de dents de scie en TIGRALloy. Donnez-nous les dimensions et les quantités.

Forniamo tutti i tipi di dentelli per lame in TIGRALloy. Basta farci sapere misure e quantità.

Tenemos disponibles todos los tipos de dientes de sierra TIGRALloy. Pueden especificar dimensiones y cantidades.

Carbide wear parts
Verschleißteile aus Hartmetall
Pièces d'usure au carbure
Usura
Piezas de desgaste de metal duro



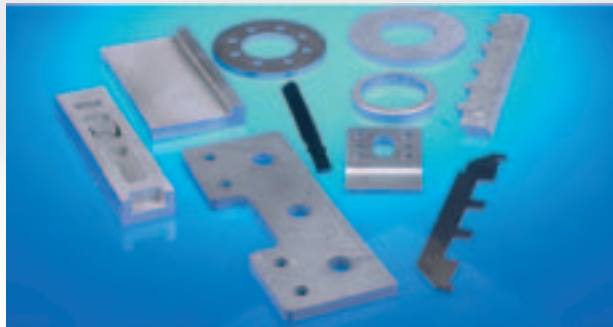
TIGRA produces almost any kind of flat parts for various wear applications, as per our customer's specification:

TIGRA produziert nach Kundenvorgabe fast alle Arten von Flachteilen für verschiedene Verschleiß-Anwendungen:

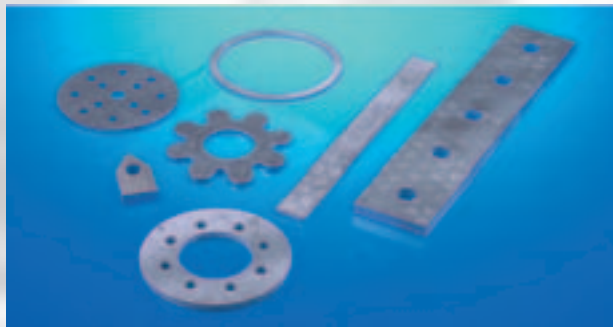
TIGRA produit pratiquement toutes le sortes de pièces plates destinées à différentes applications d'usure d'après les indications de ses clients:

TIGRA produce quasi ogni tipo di pezzo piano per le applicazioni di usura:

TIGRA fabrica sobre plano prácticamente cualquier tipo de pieza plana distintas aplicaciones:



Construction parts for machine building and
 automatisisation
 Blanks for cutting and stamping tools
 Flat and formed parts for metalworking
 Preformed knives for textile, rubber and plastic
 working
 EDM-blocks



Konstruktionsteile für Maschinenbau und
 Automatisierung
 Platten für Schnitt- und Stanzwerkzeuge
 Flach- und Formteile für die Metallbearbeitung
 Messer-Rohlinge für Textil-, Gummi- und
 Kunststoffbearbeitung
 Erodierblöcke



Éléments de construction pour machines et
 automatisisation
 Plaquettes pour outils de coupe et de matriçage
 Pièces plates et façonnées pour usinage du
 métal
 Ébauches de fers pour traitement des textiles,
 caoutchoucs et matières plastiques
 Blocs à éroder



Parti strutturale per macchine e automazioni
 Placchette per utensili da taglio e trince
 Parti piatte e speciali per la lavorazione del
 metallo
 Coltelli grezzi per lavorazioni tessili, gomma e
 plastica
 Blocchetti per erosione

Piezas especiales para construcción de
 maquinaria y automatizado
 Placas para herramientas de corte y estampado
 Piezas planas y de forma para mecanizado del
 metal
 Piezas en bruto para cuchillas utilizadas con
 materiales de tipo textil, gomas y plasticos
 Bloques para electroerosión

Terms and Conditions
Allgemeine Geschäftsbedingungen
Conditions générales de vente
Condizioni generali di contratto
Condiciones comerciales generales

You can find our current Terms and Conditions on our homepage www.tigra.de. If you choose terms and conditions in the navigation menu you can read, save or print the document.

Unsere Allgemeinen Geschäftsbedingungen finden Sie stets aktuell auf unserer TIGRA-Homepage unter www.tigra.de. Bitte wählen Sie AGB im Navigationsmenü und das Dokument steht Ihnen zum Nachlesen, Abspeichern oder als Ausdruck zur Verfügung.

Vous trouverez toujours nos conditions générales de vente (CGV) actualisées sur notre page d'accueil TIGRA sous www.tigra.de. Veuillez choisir ces CGV sur le menu de navigation, et vous pourrez lire, sauvegarder ou imprimer ce document.

Le condizioni generali di contratto da noi attualmente applicate sono disponibili sulla homepage di Tigra, all'indirizzo www.tigra.de. Il documento può essere letto, salvato o stampato selezionando la voce Condizioni generali di contratto nel menu di navigazione.

Encontrará nuestras condiciones comerciales generales siempre actualizadas en nuestro sitio web TIGRA www.tigra.de. Seleccione CGV en el menú de navegación y accederá a un documento que podrá leer, guardar e imprimir.

Security information for our customers
Sicherheitsinformationen für unsere Kunden
Information de sécurité pour nos clients
Informazioni di sicurezza per i nostri clienti
Información de seguridad para nuestros clientes

www.tigra.de - always actual

Please choose „Terms and conditions“ in the navigation menu and you will get the security information for the production and application of tungsten carbide tools for woodworking.

www.tigra.de - stets aktuell

Unter „AGB“ in der Navigation erhalten Sie dann die Sicherheitsinformationen für die Herstellung und Anwendung von Hartmetallwerkzeugen für die Holzbearbeitung.

www.tigra.de - toujours actuel

Sous „AGB“ vous trouvez des informations de sécurité pour la production et application des outils pour le travail du bois.

www.tigra.de - sempre aggiornato

Scegliete termini e condizioni di vendita („AGB“). Ivi trovate anche informazioni di sicurezza sulla produzione ed applicazione di utensili per legno.

www.tigra.de - siempre actualizado

Por favor seleccione términos y condiciones („AGB“) 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.

Warning
Warnung
Mise en garde
Avvertenza
Advertencia

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.

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.

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. Evitez 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.

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.

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.