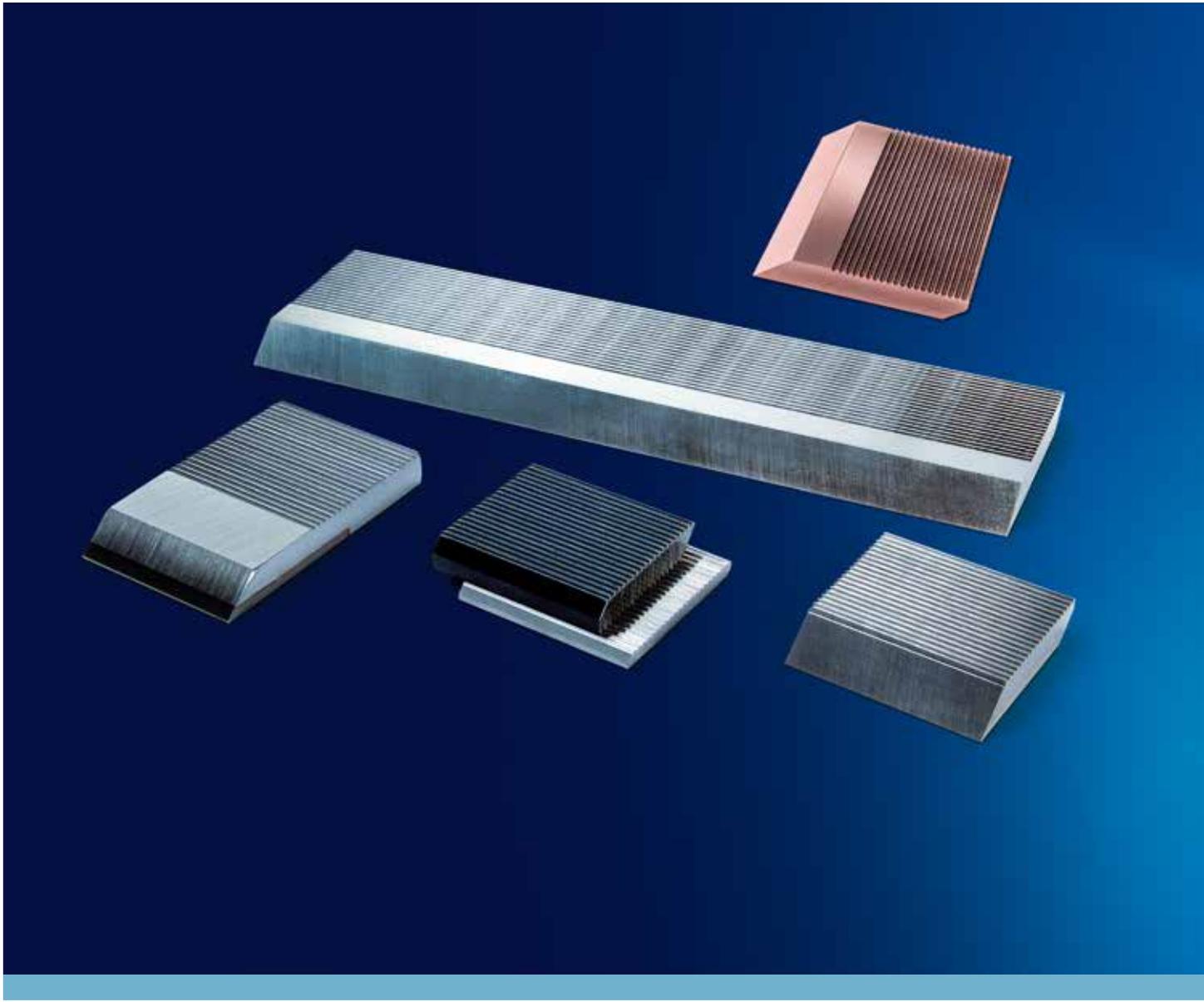
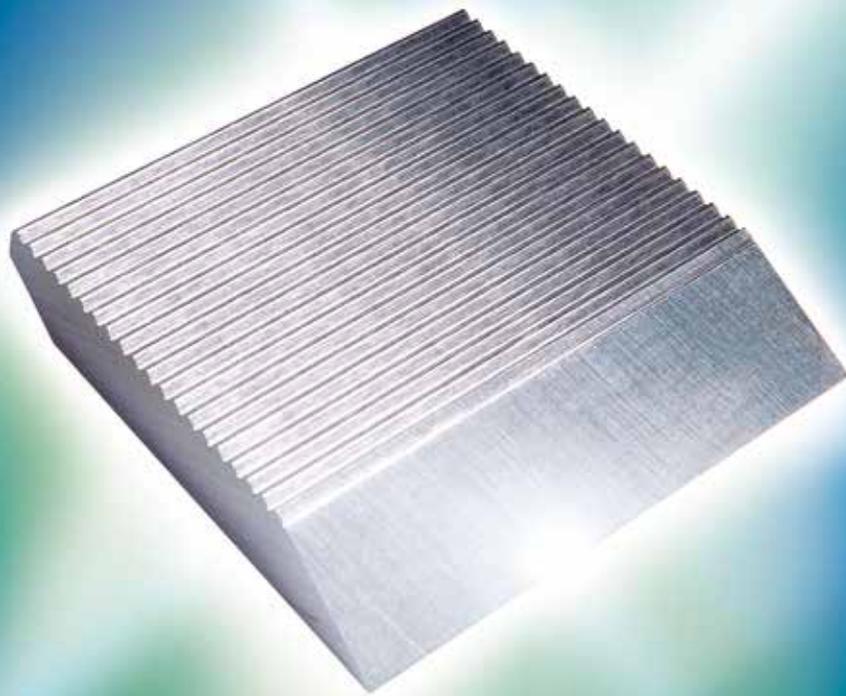




TOOLS CUT BETTER WITH TIGRA



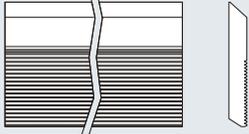
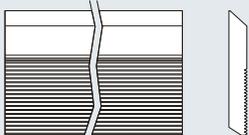
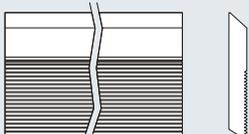
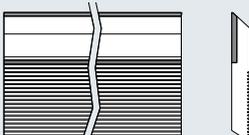
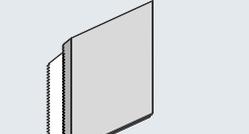


- EN Knives for back corrugated cutterheads
- DE Messer für rückenverzahnte Messerköpfe
- FR Couteaux pour outils crantés
- IT Coltelli per teste con zigrinatura
- ES Cuchillas corrugadas



TOOLS CUT BETTER WITH TIGRA

- EN Knives for back corrugated cutterheads
 DE Messer für rückenverzahnte Messerköpfe
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 ES Cuchillas corrugadas

	<p> EN HSS / High Performance Steel / Matrix blanks, back corrugated DE HSS / High Performance Steel / Matrix Blanketts, rückenverzahnt FR HSS / High Performance Steel / Matrix fers crantés IT HSS / High Performance Steel / Matrix placchette, con zigrinatura ES HSS / High Performance Steel / Matrix cuchillas corrugadas </p>	<p> 8 mm 8 mm 8 mm 8 mm 8 mm </p>	<p>146 - 147</p>
	<p> EN HSS blanks, back corrugated DE HSS Blanketts, rückenverzahnt FR HSS fers crantés IT HSS placchette, con zigrinatura ES HSS cuchillas corrugadas </p>	<p> 4-6 mm 4-6 mm 4-6 mm 4-6 mm 4-6 mm </p>	<p>148</p>
	<p> EN HSS / High Performance Steel / Matrix blanks, back corrugated DE HSS / High Performance Steel / Matrix Blanketts, rückenverzahnt FR HSS / High Performance Steel / Matrix fers crantés IT HSS / High Performance Steel / Matrix placchette, con zigrinatura ES HSS / High Performance Steel / Matrix cuchillas corrugadas </p>	<p>inch</p>	<p>149</p>
	<p> EN T.C.T. blanks, back corrugated DE HM-bestückte Blanketts, rückenverzahnt FR Fers crantés au carbure rapportée IT Placchette con metallo duro riportato, con zigrinatura ES Cuchillas metal duro, corrugadas </p>		<p>150 - 151</p>
	<p> EN SuperPac - T.C. knives and backing plates for back corrugated cutterheads DE SuperPac - HM-Messer und Stützplatten für rückenverzahnte Messerköpfe FR SuperPac - Couteaux au carbure et supports pour outils crantés IT SuperPac - Coltelli HW e supporti per teste con zigrinatura ES SuperPac - Placas de metal duro y placas de apoyo para fresas dentadas </p>		<p>152 - 153</p>

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

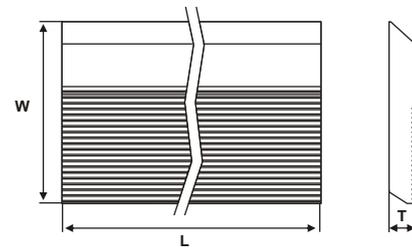
EN DE FR IT ES	TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA	Compositon Zusammensetzung Composition Composizione Composición	Hardness Härte Dureté Durezza Durezza	Toughness Zähigkeit Ténacité Tenacità Tenacidad	Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión
	HSS	HSS 6% (M2)	↓	↑	↑
	High Performance Steel	economic steel	↓	↑	↔
	T.C.T.	carbide tipped	→	↗	↖
	SuperPac	carbide, various grades	↑	→	→
	Matrix	special coating	↖	→	↗

EN For technical data, please refer to the pages 7-8.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 7-8.
 FR Pour les données techniques, veuillez voir aux pages 7-8.

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

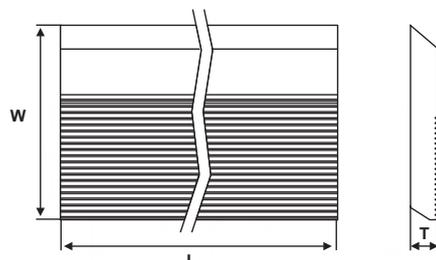
- ✓ best performance
- ✓ very good performance
- acceptable
- ▣ not suitable



T = 8 mm

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

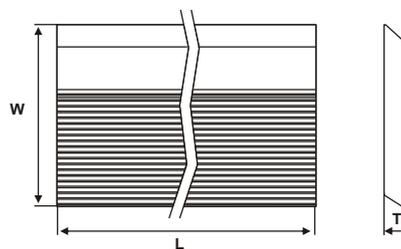
L	W	T	HSS	High Performance Steel	Matrix coating technology
mm	mm	mm			
40.0	40	8.0	030289	103456	120287
50.0	40	8.0	030290	103457	120269
60.0	40	8.0	030291	103458	120270
70.0	40	8.0	030292	103459	120271
80.0	40	8.0	030293	103460	120272
90.0	40	8.0	030294	103461	120273
100.0	40	8.0	030295	103462	120274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



T = 8 mm

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

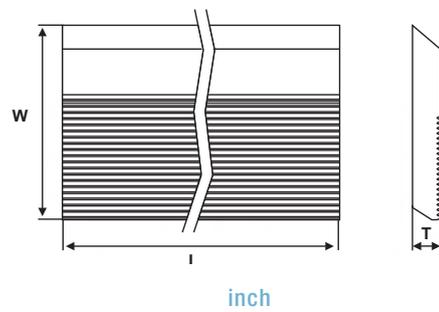
L	W	T	HSS	High Performance Steel	Matrix coating technology
mm	mm	mm			
40.0	60	8.0	030326	103493	120310
50.0	60	8.0	030327	103494	120311
60.0	60	8.0	030328	103495	120312
70.0	60	8.0	030329	103496	120313
80.0	60	8.0	030330	103497	120314
90.0	60	8.0	030331	103498	120315
100.0	60	8.0	030332	103499	120316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



T = 4-6 mm

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

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

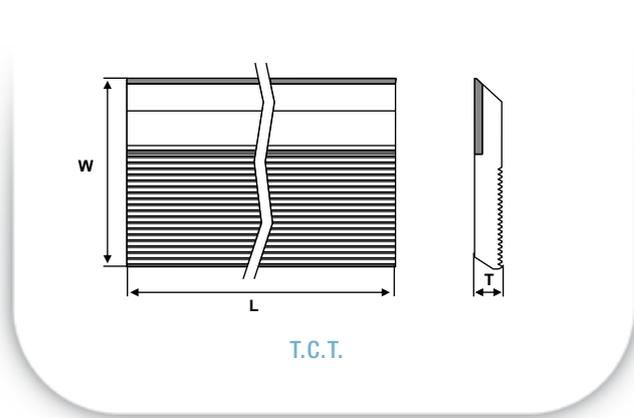


- EN Back corrugated blanks
- DE Rückenverzahnte Blanketts
- FR Fers crantés
- IT Placchette con zigrinatura
- ES Cuchillas corrugadas

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

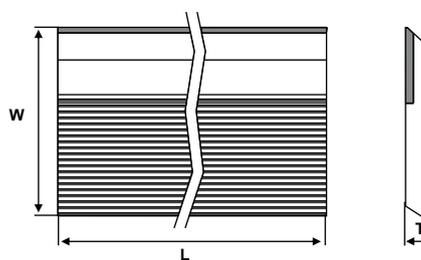
L inch	W inch	T inch	High Performance Steel	
			with chamfer	flat bottom
25	1 1/4	5/16	103531	103547
25	1 1/2	5/16	103532	103548
25	1 3/4	5/16	103533	103549
25	2	5/16	103534	103550
25	2 1/4	5/16	103535	103551
25	2 1/2	5/16	103536	103552
25	2 3/4	5/16	103537	103553
25	3	5/16	103538	103554
25	1 1/4	1/4	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

- EN Back corrugated blanks
- DE Rückenverzahnte Blanketts
- FR Fers crantés
- IT Placchette con zigrinatura
- ES Cuchillas 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		
650.0	40.0	10.0		101746	
40.0	50.0	10.0	103242	030254	
60.0	50.0	10.0	030255	103261	
80.0	50.0	10.0	030256	103262	
100.0	50.0	10.0	030257	103263	
130.0	50.0	10.0	030258	103264	
150.0	50.0	10.0	103243	103265	
180.0	50.0	10.0	030260	103266	
200.0	50.0	10.0	103244	103267	
230.0	50.0	10.0	103245	103268	
260.0	50.0	10.0	030262	103269	
310.0	50.0	10.0	103246	103270	
560.0	50.0	10.0	103247	103271	
640.0	50.0	10.0	103248		
650.0	50.0	10.0		030264	105661

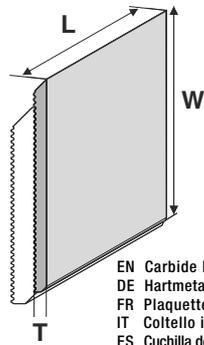
- EN Back corrugated blanks
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T.C.T.

L mm	W mm	T mm	Inlay 20 mm	Inlay 25 mm	Inlay 30 mm	Inlay 35 mm
40.0	60.0	10.0	030267	103300	114867	114868
60.0	60.0	10.0	030268	103301	103797	109128
80.0	60.0	10.0	103273	030269	109133	109129
100.0	60.0	10.0	103274	030270	109134	109130
120.0	60.0	10.0	112340	109479	114865	114866
130.0	60.0	10.0	103275	030271	109135	109131
150.0	60.0	10.0	030272	103302	114869	114870
180.0	60.0	10.0	030273	103303	109136	109132
200.0	60.0	10.0	103296	103304	114871	114872
230.0	60.0	10.0	103297	103305	109137	109138
260.0	60.0	10.0	030275	103306	114873	105299
310.0	60.0	10.0	103298	103307	114874	114875
560.0	60.0	10.0	103299	103308	114876	114877
640.0	60.0	10.0	030277	103309	114878	108848
60.0	70.0	10.0			109735	
80.0	70.0	10.0			030280	
100.0	70.0	10.0			030281	
640.0	70.0	10.0			114879	108849

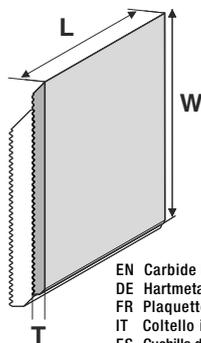
EN TIGRA SuperPac
 DE TIGRA SuperPac
 FR TIGRA SuperPac
 IT TIGRA SuperPac
 ES TIGRA SuperPac



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

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

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



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

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

	EN Security advices DE Sicherheitshinweise FR Conseils de sécurité	IT Consigli di sicurezza ES Consejo de seguridad								
<p>s = 3,2 mm</p>	<p>EN Cutting Edge Projection Between carbide blank and backing plate s=3,2 mm (critical dimension when regrinding).</p> <p>DE Schneidenüberstand Schneidenüberstand von Hartmetallplatte zu Stützplatte s=3,2 mm (beim Nachschärfen zu beachten).</p> <p>FR Saillie des plaquettes Les plaquettes carbure dépassent le support de 3,2 mm (à prendre en compte lors du réaffûtage).</p> <p>IT Sporgenza del tagliente Sporgenza del tagliente rispetto alla piastrina di supporto s= 3,2 mm (prestare attenzione in caso di riaffilatura).</p> <p>ES 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 reafi la).</p>									
	<p>EN Maximum Profile Depth</p> <p>DE Maximale Profiltiefe</p> <p>FR Profondeur de profil maximum</p> <p>IT Profondità massima della sagomatura</p> <p>ES Profundidad máxima de perfil</p>	<table border="1"> <thead> <tr> <th>W mm</th> <th>P max mm</th> </tr> </thead> <tbody> <tr><td>38</td><td>-</td></tr> <tr><td>50</td><td>12</td></tr> <tr><td>60</td><td>23</td></tr> </tbody> </table>	W mm	P max mm	38	-	50	12	60	23
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38	-									
50	12									
60	23									
<p>DANGER</p>	<p>EN Warning! Specifically positioning of blank and support plate; be aware of the safety regulations!</p> <p>DE Warnung! Sitzgenauer Einbau von Blankett und Stützplatte; Sicherheitsbestimmungen beachten!</p> <p>FR Avertissement! Positionnement précis de plaque et porte-plaquette; observez les règles de sécurité!</p> <p>IT Attenzione! Esatto montaggio in sede del coltello e della piastrina di supporto; rispettare le norme di sicurezza!</p> <p>ES Aviso! Específicamente el posicionamiento de la placa en blanco y el apoyo, estar al tanto de las normas de seguridad!</p>									
<p>DANGER</p> <p>max. 8 mm</p>	<p>EN Warning! Maximum adjustment of blank = 8 mm</p> <p>DE Warnung! Maximale Verstellung des Blanketts = 8 mm</p> <p>FR Avertissement! Ajustement maximum de plaquette = 8 mm</p> <p>IT Attenzione! Regolazione massima della placchetta = 8 mm</p> <p>ES Aviso! El ajuste máximo del espacio en placa = 8 mm</p>									