

Cerini

THE QUALITY OF EXPERIENCE



LA QUALITÀ DELL'ESPERIENZA THE QUALITY OF EXPERIENCE

CERIN ha iniziato la sua attività nel 1971 ed è oggi una delle imprese più affermate e di maggior successo in Italia nel campo degli **utensili di precisione in metallo duro**.

Nel corso degli anni Cerin è diventata leader nel settore, affermandosi nei mercati di tutto il mondo per qualità del prodotto, efficienza e flessibilità della sua struttura interna e per l'intenso impegno del suo settore ricerca e sviluppo orientato allo sviluppo di nuovi prodotti.

È sempre disponibile un servizio di assistenza tecnica e commerciale per soddisfare le esigenze dei clienti.

L'azienda è certificata
ISO 9001:2015.

*CERIN has been present on the market since 1971 and currently represents one of the most well known and well reputed **Italian manufacturer of carbide precision tools**.*

During the years CERIN has become leader in the field and have been known on the domestic and international markets as high quality manufacturer thanks, above all, to the constant commitment focused to the main purpose: total customer's satisfaction pursued through: Quality of the Products, Efficiency of the inner structure, Services available for the clientele and Research and Development engaged in new products development.

A service of technical and commercial assistance is always available to meet customer needs.

The company is UNI EN ISO 9001:2015 certified.





Materiali / Materials

01

Gruppo Group		Materiali Materials	Resistenza N/mm ² Strength N/mm ²
Leghe leggere Light Alloys	Alluminio - Leghe di alluminio fucinato - Leghe di alluminio fuso / Aluminium - Wrought aluminium alloys - Cast aluminium alloys		
	A 1	A 1.1 Leghe alluminio fuso <5% Si / Cast aluminium alloys <5% Si	≤ 255
		A 1.2 Leghe di alluminio fucinato / Wrought aluminium alloys	≤ 255
		A 1.3 Leghe alluminio fuso > 12% Si / Cast aluminium alloys >12% Si	≤ 255
		A 1.4 Leghe alluminio fuso >5% <12% / Cast aluminium alloys >5 % <12%	≤ 400
		A 1.5 Leghe alluminio fuso >5% <12% / Cast aluminium alloys >5 % <12%	≤ 400
		A 1.6 Leghe di alluminio fucinato / Wrought aluminium alloys	≤ 705
		A 1.7 Leghe di alluminio rinforzato / Reinforced aluminium alloys	≤ 705
	Rame - Leghe di rame - Ottone - Bronzo / Cooper - Cooper alloys - Brass - Bronze		
	A 2	A 2.1 Lega di rame basso-legate / Low alloys cooper	≤ 400
		A 2.2 Lega di rame Cu-Sn / Cu-Sn alloys (cooper)	≤ 400
		A 2.3 Lega di rame Cu-Sn / Cu-Sn alloys (cooper)	≤ 400
		A 2.4 Lega di ottone Cu-Zn (a truciolo lungo) / Cu-Zn alloys (brass) (long chipping)	≤ 705
		A 2.5 Lega di ottone Cu-Zn (a truciolo corto) / Cu-Zn alloys (brass) (short chipping)	≤ 705
		A 2.6 Lega di ottone Cu-Zn (a truciolo lungo) / Cu-Zn alloys (brass) (long chipping)	≤ 705
		A 2.7 Lega di bronzo Cu-Sn / Cu-Sn alloys (bronze)	≤ 850
	Leghe speciali di rame / Cooper special alloys		
	A 3	A 3.1 Lega speciale di rame da Q18 / Cooper special alloys from Q18	≤ 705
		A 3.2 Lega speciale di rame / Cooper special alloys	≤ 705
	Leghe di magnesio - Leghe fuse di magnesio / Magnesium alloys - Cast magnesium alloys		
	A 4	A 4.1 Leghe fucinate di magnesio / Magnesium wrought alloys	≤ 705
		A 4.2 Leghe fuse di magnesio / Cast magnesium alloys	≤ 705
Plastica e materiali compositi Plastic & Comp. Materials	Plastiche - truciolo corto e lungo / Plastics - short and long chipping		
	B 1	B 1.1 Termoplastica a truciolo corto / Duroplaste short chipping	110
		B 1.2 Termoplastica a truciolo lungo / Thermoplastic long chipping	80
		B 1.3 Policarbonato / Polycarbonate	110
		B 1.4 Plastiche rinforzate con fibre / Reinforced Plastics Fibers	800-1500
		B 1.5 Plexiglass / Plexiglass	130
		B 1.6 Kevlar / Kevlar	110
	Materiali non ferrosi - Plastiche speciali / Nonferrous metals - Special plastic		
	B 2	B 2.1 Legno duro / Hardwood	< 80
		B 2.2 Gomma dura / Hard rubber	< 80
		B 2.3 Materiali non ferrosi / Nonferrous metals	< 80
		B 2.4 Cartone pressato / Pressed carton	< 80
Acciai Steels	Acciai strutturali - Legierte Stähle / Structural Steel		
	C 1	C 1.1 Materiali per costruzioni ferroviarie / Materials for rail vehicles	≤ 400
		C 1.2 Materiali magnetici a bassa resistenza / Soft magnetic material	≤ 400
		C 1.3 Acciai automatici / Automatic steel	≤ 705
		C 1.4 Acciai strutturali (non legati, laminati a caldo) / Structural steel (unalloyed, warm-rolled)	≤ 705
		C 1.5 Acciai temprati (legati e non legati) / Hardened steel (unalloyed/alloyed)	≤ 705
		C 1.6 Acciai trattabili a caldo (acciai speciali) / Heat-treatable steel (special steel)	≤ 850
		C 1.7 Acciai estrusi a freddo, acciaio trattato termicamente / Cold upsetting and cold extrusion steel, heat-treatable steel	≤ 1125
		C 1.8 Acciai strutturali (non legati, laminati a caldo) / Structural steel (unalloyed, warm-rolled)	≤ 1125
	Acciai per cuscinetti - Acciaio per utensili per la lavorazione a caldo / Roller bearing steel - Tool steel for warm working		
	C 2	C 2.1 Acciai per cuscinetti / Roller bearing steel	≤ 1125
		C 2.2 Acciaio per utensili per lavorazioni a freddo (legati) / Tool steel for cold working (alloyed)	≤ 1125
		C 2.3 Acciaio per utensili per lavorazioni a caldo / Tool steel for warm working	≤ 1125
		C 2.4 Acciaio fuso per tempra a fiamma e ad induzione / Cast steel for flame and induction hardening	≤ 1420
	Acciai per utensili per lavorazioni a caldo / Tool Steel for warm working		
	C 3	C 3.1 Acciai per utensili per lavorazioni a caldo / Tool steel for warm working	< 44,5HRC
		C 3.2 Acciai per utensili per lavorazioni a caldo e a freddo / Tool steel for warm- and cold-working	44 - 56 HRC
		C 3.3 Acciai per utensili per lavorazioni a caldo e a freddo / Tool steel for warm- and cold-working	56 - 60 HRC
		C 3.4 Acciai per utensili per lavorazione a freddo (legati) / Tool steel for cold working (alloyed)	58 - 63 HRC
		C 3.5 Acciai per utensili per lavorazione a freddo (legati) / Tool steel for cold working (alloyed)	56 - 67 HRC
	Acciai speciali / Special Steel		
	C 4	C 4.1 Acciai speciali / Specialsteel	≤ 1125
		C 4.2 Acciai speciali / Specialsteel	≤ 1420
Acciai inossidabili Stainless Steel	Acciai resistenti al calore - Acciai inossidabili austenitici / Heat-resistant steel - Stainless austenitic steel		
	D 1	D 1.1 Acciai resistenti al calore / Heat-resistant steel	≤ 850
		D 1.2 Acciai resistenti al calore / Heat-resistant steel	≤ 850
		D 1.3 Acciai inossidabili austenitici / Austenitic stainless steel	≤ 850
		D 1.4 Acciai per valvole (resistenti al calore) / Valve materials (heat-resistant)	≤ 1125
		D 1.5 Acciai e leghe resistenti al calore / High heat-resistant steel and alloys	≤ 1420
Titanio Titanium	Titanio - Leghe di titanio / Titanium and Titanium alloys		
	E 1	E 1.1 Titanio (puro) / Titanium (pure)	≤ 705
		E 1.2 Leghe di titanio fucinato / Wrought titanium alloy	≤ 1125
		E 1.3 Leghe di titanio fucinato / Wrought titanium alloy	≤ 1420
	Fucinati di leghe al Nickel-Cromo-Rame / Wrought nickel-copper alloy		
	E 2	E 2.1 Leghe fucinate al Nickel-rame / Wrought nickel-copper alloy	≤ 705
		E 2.2 Leghe fucinate al Nickel-Cromo / Wrought nickel-chrome alloy	≤ 1420
		E 2.3 Leghe fucinate al Nickel-Cromo / Wrought nickel-chrome alloy	≤ 2030
Ghise Cast Irons	Ghise grigie - ghise dure / Grey and hard cast iron		
	F 1	F 1.1 Ghisa grigia GG 20 / Grey cast iron	< 333 HB
		F 1.2 Ghisa grigia GG 30 / Grey cast iron	< 333 HB
		F 1.3 Ghise dure / Hard cast iron	≤ 416 HB
		F 1.4 Ghisa malleabile rinvenuta decarbonizzata / Malleable cast iron, decarbonized annealed	≤ 705
		F 1.5 Ghisa malleabile non rinvenuta decarbonizzata / Malleable cast iron, non-decarbonized annealed	≤ 705
	Ghise / Cast Iron		
	F 2	F 2.1 Ghisa grafica nodulare / Nodular graphite iron	≤ 400
		F 2.2 Ghisa grafica nodulare / Nodular graphite iron	≤ 1125
		F 2.3 Ghisa vermiculare / Cast iron with vermicular	< 333 HB
		F 2.4 Ghisa vermiculare / Cast iron with vermicular	< 333 HB
Grafite Graphite	Grafite / Graphite		
	G 1	G 1.1 Grafite / Graphite	≤ 255
	Leghe di Tungsteno-Rame / Tungsten-copper alloys		
	G 2	G 2.1 Leghe di Tungsteno-Rame / Tungsten-copper alloys	≤ 255 HV 10

Descrizione dettagliata delle materie plastiche è disponibile al paragrafo 2-4 - Frese per materiali compositi / Detailed description of plastic materials to be worked is available under section 2-4 - End Mills for composite materials.

■ Consigliato / Suggested ▲ Consigliato con rivestimento / Suggested with coating

Designazione Materiale Material designation	Codice Materiale Material Number	Forza N/mm ² Strength N/mm ²	Frese rotanti / Rotary burs					
			1 - Alluminio 1 - Aluminium	2 - Corsa 2 - Course	3 - Medie 3 - Medium	4 - Diamante 4 - Diamond	5 - Finemente 5 - Fine	6 - Croce dentata 6 - Double cut
G-AlMg3	3.3541	130 - 190						
Al 99.5 / F13	3.0255	100 - 250						
GDAISI17Cu4		180 - 250		■				
GD-AISI12	3.2582	220 - 300		■				
GD-AISI9Cu3	3.2163	240 - 320		■				
AlCuMg1 / F39	3.1325	300 - 500	■	■				
MMC		600 - 1400	▲	■				
E-Cu	2.0060	220 - 350	■	■				
GCuSn5ZnPb / Rg5	2.1096	150 - 350	■	■				
GCuSn7ZnPb / Rg7	2.1090	150 - 350	■	■				
CuZn40 / Ms60	2.0360	340 - 500	■	■				
CuZn39Pb2 / Ms58	2.0380	350 - 500	■	■				
CuZn37 / Ms63	2.0321	300 - 550	■	■				
CUAl10Ni	2.0966	500 - 800	■	■				
Ampco 16		630	▲	▲	■			■
Ampco 20		600	▲	▲	■			■
MgAl6	3.5662	300 - 500	▲	▲	■			■
GMgAl9Zn1	3.5912	300 - 500	▲	▲	■			■
			■					
			■					
AFK-CFK-GFK			■			■		■
			■					■
			▲			■		
			■	■		■		
			■			■		
			▲	■				■
			■	■		■		
Q-St-37-3	1.0123	< 400		■	■	■	■	■
R-Fe80	1.1014	< 400		■	■	■	■	■
9SMnPb28	1.0718	500 - 700		■	■	■	■	■
St37-2	1.0037	320 - 470		■	■	■	■	■
16MnCr5	1.7131	500 - 700		■	■	■	■	■
Ck45	1.1191	600 - 800		■	■	■	■	■
Gs25CrMo4	1.7218	650 - 950		■	■	■	■	■
St70-2	1.0070	700 - 900		■	■	■	■	■
100Cr6	1.3505	700 - 900			■	■	■	■
X155CrVMo12-1	1.2379	900 - 1100			■	■	■	■
X30WCrV5-3	1.2567	1100			■	■	■	■
42CrMo4V	1.7225	1200 - 1400			■	■	■	■
X38CrMoV5-3	1.2367	900 - 1100			■	■	■	■
55NiCrMoV6	1.2713	47 - 52 HRC			■	■	■	■
45WCrV7	1.2542	56 - 60 HRC				■	■	■
X155CrVMo12-1	1.2379	60 - 63 HRC				■	■	■
X210CrW12	1.2436	63 - 66 HRC				■	■	■
FeroTiC		800 - 900			■	■	■	■
Hardox500		1300 - 1400			■	■	■	■
X10NiCrAlTi32-20 (INCO.800)	1.4876	610 - 850		▲	▲	■		■
X12CrNiTi18-9	1.4878	500 - 700		▲	▲	■		■
X6CrNiMoTi17-12-2	1.4571	500 - 730		▲	▲	■		■
X45SiCr4	1.4704	900 - 1100		▲	▲	■		■
X5NiCrTi26-15	1.4980	1200		▲	▲	■		■
Ti3 (Ti99.4)	3.7055	700		▲				
TiAl6V4	3.7164	700 - 900		▲				
TiAlMo4Sn2	3.7185	900 - 1250		▲				
NiCu30Fe (MONEL400I)	2.4360	420 - 610		▲	▲	■		■
NiCr19NbMo (INCONEL718)	2.4668	850-1200		▲	▲	■		■
Haynes 25 (L605)		1550 - 2000		▲	▲	■		■
GG 20	0.6020	120-220 HB			■	■		■
GG 30	0.6030	220 - 270 HB			■	■		■
		< 400 HB			■	■		■
GTW40	0.8040	360 - 420			■	■		■
GTS65	0.8165	560 - 650			■	■		■
GGG 40	0.7040	400		■	■	■		■
GGG 70	0.7070	700 - 1050		■	■	■		■
GGV (80% Perlit)		220 HB		■	■	■		■
GGV (100% Perlit)		230 HB		■	■	■		■
C-800		60		▲	▲	■		■
W-Cu 80/20		230-250 HV	▲	▲	▲			■

Indice - UTENSILI GRUPPO 1

Index - TOOL GROUP 1

LIME ROTATIVE STANDARD / STANDARD ROTARY BURS

Forma Shape	Dimensioni gambo Shank dimensions	N° ident. Code	Pagina Page	
ZYA Cilindrica senza tagliente frontale <i>Cylindrical without end cut</i>	Ø 3,00 mm Standard / <i>Standard</i> Lungh. gambo / <i>Shank length</i> 100 mm Lungh. gambo / <i>Shank length</i> 150 mm Lungh. gambo / <i>Shank length</i> 300 mm	40 30 30-100 30-150 30-300	13 13 27 29 31	
ZYA/ST Cilindrica con tagliente frontale <i>Cylindrical with end cut</i>	Ø 3,00 mm Standard / <i>Standard</i> Lungh. gambo / <i>Shank length</i> 100 mm Lungh. gambo / <i>Shank length</i> 150 mm Lungh. gambo / <i>Shank length</i> 300 mm	40-ST 30-ST 30-ST100 30-ST150 30-ST300	14 14 27 29 31	 
WRC Cilindrica a testa raggiata <i>Cylindrical radius end</i>	Ø 3,00 mm Standard / <i>Standard</i> Lungh. gambo / <i>Shank length</i> 100 mm Lungh. gambo / <i>Shank length</i> 150 mm Lungh. gambo / <i>Shank length</i> 300 mm	41 31 31-100 31-150 31-300	15 15 27 29 31	
KEL Conica a testa raggiata <i>Taper radius end</i>	Ø 3,00 mm Standard / <i>Standard</i> Lungh. gambo / <i>Shank length</i> 100 mm Lungh. gambo / <i>Shank length</i> 150 mm Lungh. gambo / <i>Shank length</i> 300 mm	42 32 32-100 32-150 32-300	16 16 27 29 31	
RBF Ad ogiva a testa raggiata <i>Tree with radius end</i>	Ø 3,00 mm Standard / <i>Standard</i> Lungh. gambo / <i>Shank length</i> 100 mm Lungh. gambo / <i>Shank length</i> 150 mm Lungh. gambo / <i>Shank length</i> 300 mm	43 33 33-100 33-150 33-300	17 17 28 30 32	
SPG Ad ogiva con vertice a spigolo <i>Tree with pointed end</i>	Ø 3,00 mm Standard / <i>Standard</i> Lungh. gambo / <i>Shank length</i> 100 mm Lungh. gambo / <i>Shank length</i> 150 mm Lungh. gambo / <i>Shank length</i> 300 mm	44 34 34-100 34-150 34-300	18 18 28 30 32	
SKM Conica <i>Conical</i>	Ø 3,00 mm Standard / <i>Standard</i>	45 35	19 19	
KSK-90° Conica a 90° <i>90° Conical</i>	Ø 3,00 mm Standard / <i>Standard</i>	46-90° 36-90°	20 20	

LIME ROTATIVE STANDARD / STANDARD ROTARY BURS

Forma Shape	Dimensioni gambo Shank dimensions	N° ident. Code	Pagina Page	
KSJ-60° Conica a 60° 60° Conical	Ø 3,00 mm	46-60°	21	
	Standard / Standard	36-60°	21	
TRE Ovale Oval	Ø 3,00 mm	47	22	
	Standard / Standard	37	22	
	Lungh. gambo / Shank length 100 mm	37-100	28	
	Lungh. gambo / Shank length 150 mm	37-150	30	
	Lungh. gambo / Shank length 300 mm	37-300	32	
KUD Sferica Ball	Ø 3,00 mm	48	23	
	Standard / Standard	38	23	
	Lungh. gambo / Shank length 100 mm	38-100	28	
	Lungh. gambo / Shank length 150 mm	38-150	30	
	Lungh. gambo / Shank length 300 mm	38-300	32	
WKN Tronco-conica Inverted cone without end cut	Ø 3,00 mm	49	24	
	Standard / Standard	39	24	
WKN/ST Tronco-conica con tagliente al centro Inverted cone with end cut	Ø 3,00 mm	49-ST	25	
	Standard / Standard	39-ST	25	

01

SET E ACCESSORI / SETS & ACCESSORIES

Forma Shape	Dimensioni gambo Shank dimensions	N° ident. Code	Pagina Page	
Set Sets	Nr. 10	10	26	
	Nr. 11	11	26	
	Nr. 12	12	26	
Smerigliatrice pneumatica Air grinding unit	Nr. 13	13	26	

LIME PER STAMPI E MATRICI - WN / MOULD, TOOL AND DIE MAKING ROTARY BURS - INTERNAL STANDARD

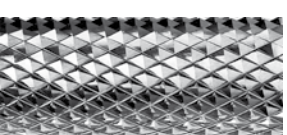
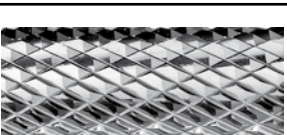
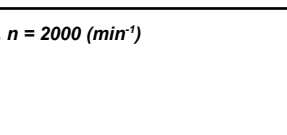
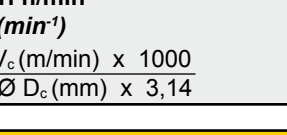
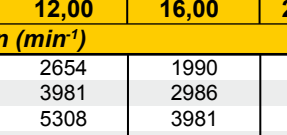
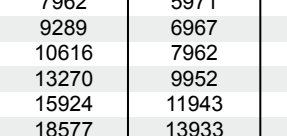
Forma Shape	Dimensioni gambo Shank dimensions	N° ident.. Code	Pagina Page	
Cilindrica Cylindrical	Tagliente tipo 4 Cut type	40ST-4	33-34	
Cilindrica Cylindrical	Tagliente tipo 6 Cut type	40ST-6	33-34	

LIME ROTATIVE SPECIALI - WN / SPECIAL ROTARY BURS - INTERNAL STANDARD

Forma Shape	Dimensioni gambo Shank dimensions	N° ident.. Code	Pagina Page	
Lime per canalini Groove cutters	WN - 6,00 mm Internal standard	114-90°	35	
Lime a disco raggiate Radius groove cutters	WN - 6,00 mm Norma interna 6,00 mm Internal standard 6,00 mm	115	36	
Lime a disco cilindriche Disc cutters	WN - 6,00 mm Norma interna 6,00 mm Internal standard 6,00 mm	116	36	

Velocità di taglio (valori approssimativi) per lime rotative Cerin

Cutting speeds (approximative values) for Cerin rotary burs

Materiale Material	VHM V _c (m/min)	Cer-T V _c (m/min)	Tipo tagliente Cut type	
< 400 N/mm ²	800 - 1000	800 - 1000	Tagliente tipo 1 Cut type 1	
< 705 N/mm ²	600 - 800	800 - 1000		
Titanio e leghe di titanio Titan Titanlegierungen	max n = 2000 (min ⁻¹)			①
< 400 N/mm ²	650 - 800	650 - 1000	Tagliente tipo 2 Cut type 2	
< 850 N/mm ²	500 - 650	600 - 800		
Titanio e leghe di titanio Titan Titanlegierungen	max n = 2000 (min ⁻¹)			②
< 705 N/mm ²	500 - 650	600 - 800	Tagliente tipo 3 Cut type 3	
< 1125 N/mm ²	400 - 500	400 - 600		
< 46 HRC	200 - 450	300 - 500		
Titanio e leghe di titanio Titan Titanlegierungen	max n = 2000 (min ⁻¹)			
< 850 N/mm ²	450 - 650	500 - 750	Tagliente tipo 4 Cut type 4	
< 1125 N/mm ²	350 - 500	400 - 600		
< 46 HRC	250 - 350	250 - 500		
< 418 HB	200 - 350	300 - 450		
Titan Titanlegierungen	max n = 2000 (min ⁻¹)			④
< 1125 N/mm ²	350 - 600	400 - 600	Tagliente tipo 5 Cut type 5	
< 1450 N/mm ²	250 - 300	250 - 400		
< 2050 N/mm ²	150 - 250	150 - 300		
< 66HRC	150 - 300	200 - 400		
Titan Titanlegierungen	max n = 2000 (min ⁻¹)			⑤
< 705 N/mm ²	500 - 650	600 - 800	Tagliente tipo 6 Cut type 6	
< 1125 N/mm ²	300 - 500	400 - 600		
< 46 HRC	200 - 450	300 - 500		
Titanio e leghe di titanio Titan Titanlegierungen	max n = 2000 (min ⁻¹)			

* Attenzione! Titanio e leghe di titanio max. n = 2000 (giri/min⁻¹) * Attention! Titanium and Titanium alloys max. n = 2000 (min⁻¹)

Velocità di taglio V_c (m/min) - Numero di giri n (min⁻¹)

Cutting speeds V_c (m/min) - Revolution per minute n (min⁻¹)

Formule di calcolo: Velocità di taglio V _c (m/min) - Numero di giri n/min	
Formula: cutting speed V _c (m/min) - Revolution per minute n (min ⁻¹)	
$V_c \text{ (m/min)} = \frac{\varnothing D_c \text{ (mm)} \times 3,14 \times n \text{ (min}^{-1}\text{)}}{1000}$	$n \text{ (min}^{-1}\text{)} = \frac{V_c \text{ (m/min)} \times 1000}{\varnothing D_c \text{ (mm)} \times 3,14}$

V _c (m/min)	D _c (mm)								
	3,00	4,00	5,00	6,00	8,00	10,00	12,00	16,00	20,00
Numero giri n (min ⁻¹) / Revolution per minute n (min ⁻¹)									
100	10616	7962	6369	5308	3981	3185	2654	1990	1592
150	15924	11943	9554	7962	5971	4777	3981	2986	2389
200	21231	15924	12739	10616	7962	6369	5308	3981	3185
250	26539	19904	15924	13270	9952	7962	6635	4976	3981
300	31847	23885	19108	15924	11943	9554	7962	5971	4777
350	37155	27866	22293	18577	13933	11146	9289	6967	5573
400	42463	31847	25478	21231	15924	12739	10616	7962	6369
500	53079	39809	31847	26539	19904	15924	13270	9952	7962
600	63694	47771	38217	31847	23885	19108	15924	11943	9554
700	74310	55732	44586	37155	27866	22293	18577	13933	11146
800	84926	63694	50955	42463	31847	25478	21231	15924	12739
900	95541	71656	57325	47771	35828	28662	23885	17914	14331
1000	106157	79618	63694	53079	39809	31847	26539	19904	15924

* Attenzione! Titanio e leghe di titanio max. n = 2000 (min⁻¹) * Attention! Titanium and Titanium alloys max. n = 2000 (min⁻¹)

Tipologie taglienti per lime rotative Cerin

Cut types of Cerin rotary burs

Tagliente tipo 1 - Alluminio

Cut type 1 - Aluminium



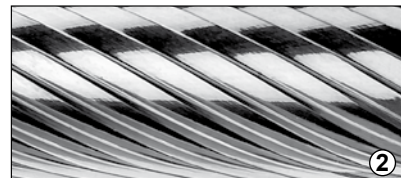
Particolarmente indicata per alluminio, magnesio, plastiche e gomma dura.

Buona efficienza di taglio ed elevata asportazione di materiale. Lo speciale disegno della geometria di questo tagliente facilita l'evacuazione del truciolo, impedendo l'intasamento dell'utensile.

Particularly suitable for working on aluminium, magnesium, plastic, and hard rubber. Gives high cutter efficiency, with good removal of material. The specific features of this type of cut facilitate rapid removal of chips preventing these from clogging the tool.

Tagliente tipo 2 - Grossa

Cut type 2 - Course

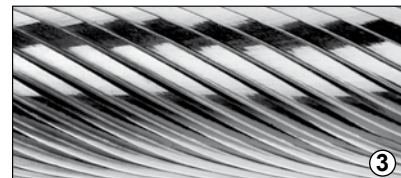


Tagliente intermedio fra la 1 e la 3. Particolarmente indicata per metalli leggeri, bronzo, ottone, stagno, zinco, rame e altri materiali facilmente lavorabili. Per i materiali a truciolo lungo questa dentatura deve essere impiegata con scanalature rompitruciolo.

This type of cut is intermediate between cut 1 and cut 3 and it is recommended for soft materials, bronze, brass, tin, zinc, copper and other easily removable materials. For long chipping material this cut should be used with chip breaker.

Tagliente tipo 3 - Media / standard

Cut type 3 - Medium

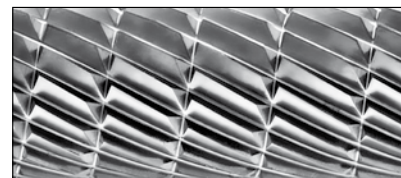


Il tagliente standard è idoneo per acciaio (anche temperato) fino a circa 56 HRC, acciaio fuso, leghe d'acciaio, cordoni di saldatura e quasi tutti i materiali metallici. Questo utensile permette di ottenere risultati ottimali e superfici di buona qualità.

Standard cut. Suitable for steel (including tempered) cast steel, weld seams, and in general almost all metallic materials. Together with optimum efficiency, it gives a good surface finish.

Rompitruciolo

Chip breaker



L'uso del rompitruciolo è consigliato per materiali a truciolo lungo, per poter produrre trucioli corti. Tutti gli utensili con le dentature 1-2-3 e 5 possono essere forniti con rompitruciolo, su richiesta e con una piccola maggiorazione di prezzo.

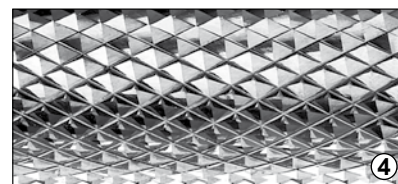
This can be executed on all single cut file cutters. Use is recommended for working of materials which produce long chips. Upon request, Cerin rotary burs with cut type 1-2-3 and 5 can be supplied with chip breaker with a small additional price.

Tipologie taglienti per lime rotative Cerin

Cut types of Cerin rotary burs

Tagliente tipo 4 - Diamante

Cut type 4 - Diamond

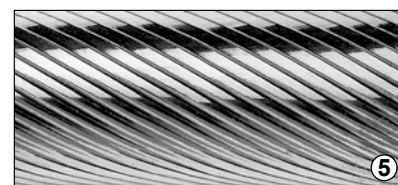


Tagliente idoneo per ghisa grigia, acciai altamente legati, acciai inossidabili, al nichel-cromo e al manganese. La speciale geometria del tagliente consente un'elevata penetrazione nel materiale con una maggiore capacità di asportazione di un tagliente standard. Evita la formazione di trucioli veri e propri, polverizzando il materiale rimosso, permettendo così di lavorare senza problemi.

Recommended for high alloy steel, stainless steel, magnesium alloys, grey cast iron and CrNi steels. Its particular geometry allows considerable material penetration with a removal capacity greater than the standard cut. It avoids the formation of true proper chips pulverising the removed material and thus avoiding the associated disadvantage for the operator during working.

Tagliente tipo 5 - Fine

Cut type 5 - Fine

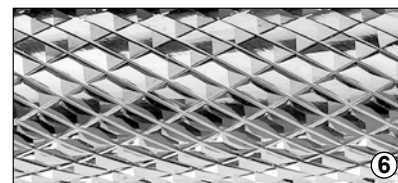


Tagliente consigliato per lavorazioni di acciai temprati fino a 66 HRC e per ottenere elevate finiture superficiali.

Fine cut. Particularly suitable for tempered steel up to 66 HRC and for obtaining high surface finish.

Tagliente tipo 6 - Doppio taglio incrociato

Cut type 6 - Double cut

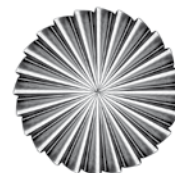


Tagliente universale per quasi tutti i materiali metallici, anche per acciai temprati e resistenti alla corrosione. Riduce le vibrazioni permettendo un miglior controllo del taglio durante la lavorazione. Elevata capacità di taglio con finiture di ottima qualità.

Universal cut suitable for working on almost metallic materials, including tempered steels and corrosion resistant material. Reduces vibration and gives a better control of the cutter during working. Considerable removal capacity with good surface finish.

Tagliente frontale

Frontal teeth



Le lime rotative Cerin tipo 30 e 39 possono essere fornite su richiesta con dentatura frontale.

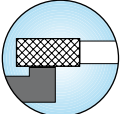
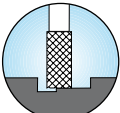
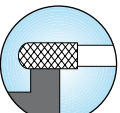
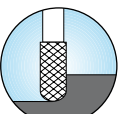
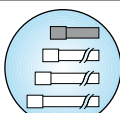
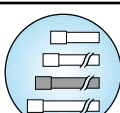
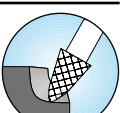
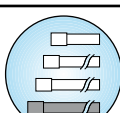
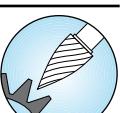
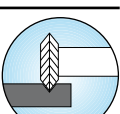
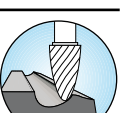
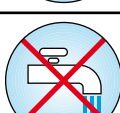
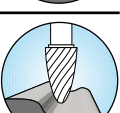
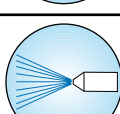
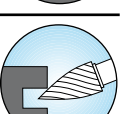
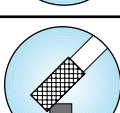
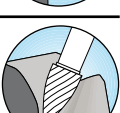
Si consigliano quando devono essere effettuate delle leggere asportazioni di testa.

Cerin rotary burs type 30 and 39 can be supplied with end cut upon request.

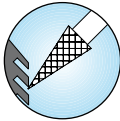
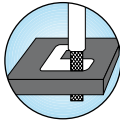
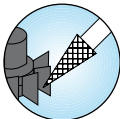
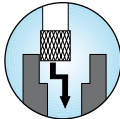
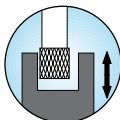
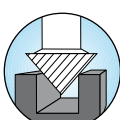
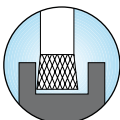
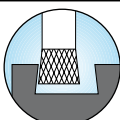
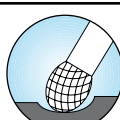
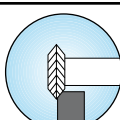
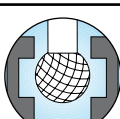
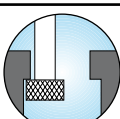
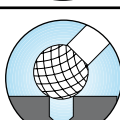
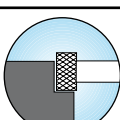
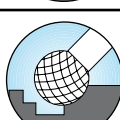
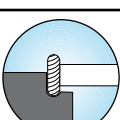
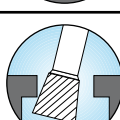
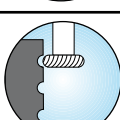
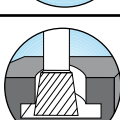
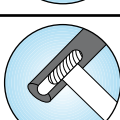
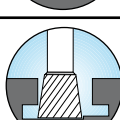
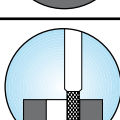
Used if frontal material has to be removed.

DESCRIZIONE DEI PITTOGRAMMI (SIMBOLI) ICONS (SYMBOLS) DESCRIPTION

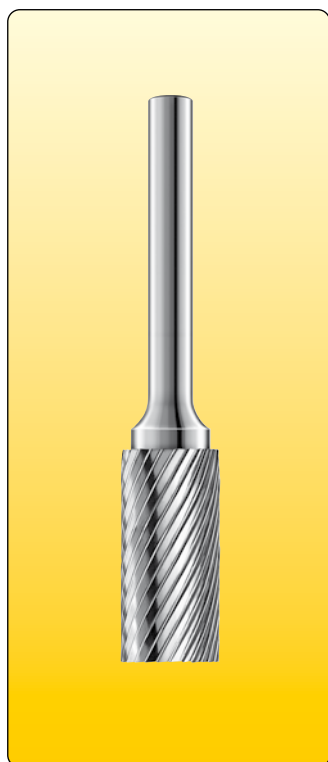
01

Qualità metallo duro <i>Carbide grade</i>		Esempio di lavorazione <i>Application example</i>	
Qualità metallo duro <i>Carbide grade</i>		Esempio di lavorazione <i>Application example</i>	
Dimensioni simili a DIN 8033 <i>Dimensions similar to DIN 8033</i>		Esempio di lavorazione <i>Application example</i>	
Norma interna (WN) <i>Internal standard (WN)</i>		Esempio di lavorazione <i>Application example</i>	
Lunghezza utensile <i>Tool length</i>		Esempio di lavorazione <i>Application example</i>	
Lunghezza utensile <i>Tool length</i>		Esempio di lavorazione <i>Application example</i>	
Lunghezza utensile <i>Tool length</i>		Esempio di lavorazione <i>Application example</i>	
Lunghezza utensile <i>Tool length</i>		Esempio di lavorazione <i>Application example</i>	
Attenzione! Riduzione velocità di taglio <i>Attention! Reduced cutting speed</i>		Esempio di lavorazione <i>Application example</i>	
Con emulsione <i>With emulsion</i>		Esempio di lavorazione <i>Application example</i>	
Lavorazione a secco <i>Dry machining</i>		Esempio di lavorazione <i>Application example</i>	
Con aria <i>With compressed air</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	

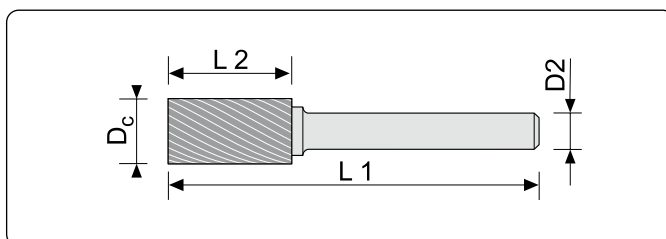
DESCRIZIONE DEI PITTOGRAMMI (SIMBOLI) ICONS (SYMBOLS) DESCRIPTION

Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
Esempio di lavorazione <i>Application example</i>		Esempio di lavorazione <i>Application example</i>	
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Esempio di lavorazione <i>Application example</i>			
Esempio di lavorazione <i>Application example</i>			

Forma ZYA - cilindrica senza tagliente frontale Shape ZYA - Cylindrical without end cut



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



1.
01



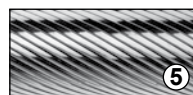
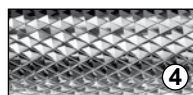
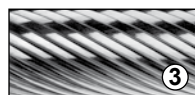
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				1	2 *	3	4	5 *	6		
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2	10	40	3,00	-	⊗	●	●	⊗	●	4020/...	
2,5	12	40	3,00	-	⊗	●	●	⊗	●	4025/...	
3	13	40	3,00	-	⊗	●	●	⊗	●	4033/...	
4	10	45	3,00	-	⊗	●	●	⊗	●	4043/...	
5	12	47	3,00	-	⊗	●	●	⊗	●	4053/...	
6	13	48	3,00	-	⊗	●	●	⊗	●	4063/...	
4	13	50	6,00	●	⊗	●	●	⊗	●		300406/...
6	16	50	6,00	●	⊗	●	●	⊗	●		300606/...
8	20	65	6,00	●	⊗	●	●	⊗	●		300806/...
10	20	65	6,00	●	⊗	●	●	⊗	●		301006/...
12	25	70	6,00	●	⊗	●	●	⊗	●		301206/...
16	25	70	6,00	●	⊗	●	●	⊗	●		301606/...
16	25	70	8,00	●	⊗	●	●	⊗	●		301608/...
20	25	70	6,00	●	⊗	●	●	⊗	●		302006/...
20	25	70	8,00	●	⊗	●	●	⊗	●		302008/...

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

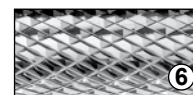
... Please always indicate cut type (example: 2015/4)



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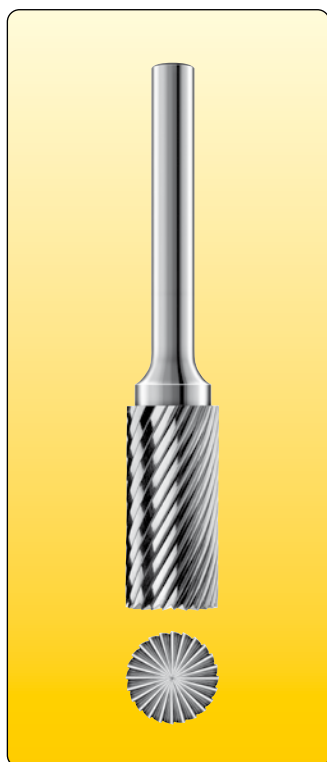


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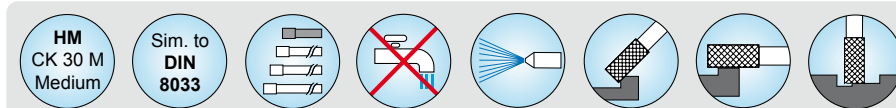
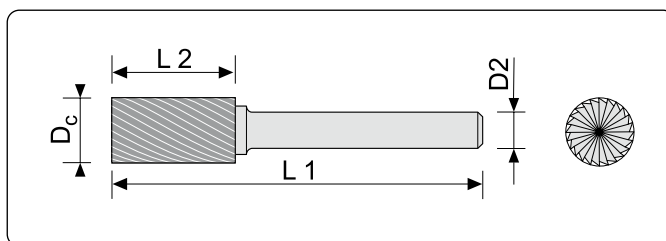


Forma ZYA/ST - cilindrica con tagliente frontale Shape ZYA/ST - Cylindrical with end cut

1.
01



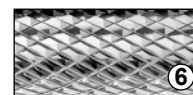
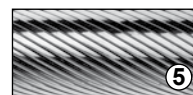
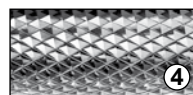
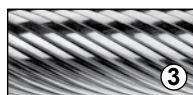
Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



D _c	L2	L1	D2	Tagliente tipo / Cut type						40-ST	30-ST
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1,5	8	40	3,00	-	⊗	●	●	⊗	●	4015/...ST	
2	10	40	3,00	-	⊗	●	●	⊗	●	4020/...ST	
2,5	12	40	3,00	-	⊗	●	●	⊗	●	4025/...ST	
3	13	40	3,00	-	⊗	●	●	⊗	●	4033/...ST	
4	10	45	3,00	-	⊗	●	●	⊗	●	4043/...ST	
5	12	47	3,00	-	⊗	●	●	⊗	●	4053/...ST	
6	13	48	3,00	-	⊗	●	●	⊗	●	4063/...ST	
4	13	50	6,00	●	⊗	●	●	⊗	●		300406/...ST
6	16	50	6,00	●	⊗	●	●	⊗	●		300606/...ST
8	20	65	6,00	●	⊗	●	●	⊗	●		300806/...ST
10	20	65	6,00	●	⊗	●	●	⊗	●		301006/...ST
12	25	70	6,00	●	⊗	●	●	⊗	●		301206/...ST
16	25	70	6,00	●	⊗	●	●	⊗	●		301606/...ST
16	25	70	8,00	●	⊗	●	●	⊗	●		301608/...ST
20	25	70	6,00	●	⊗	●	●	⊗	●		302006/...ST
20	25	70	8,00	●	⊗	●	●	⊗	●		302008/...ST

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

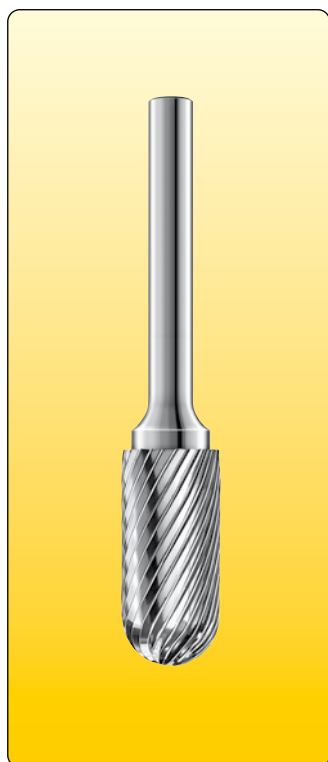
... Please always indicate cut type (example: 2015/4)



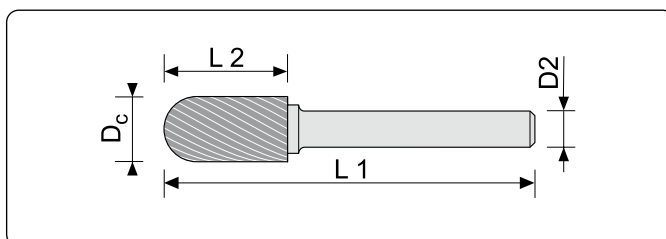
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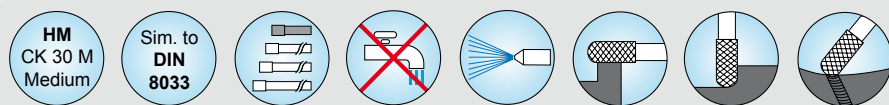
Forma WRC - cilindrica a testa raggiata Shape WRC - Cylindrical radius end



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



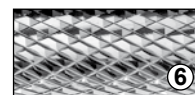
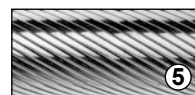
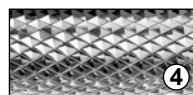
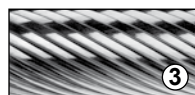
1.
01



D _c	L2	L1	D2	Tagliente tipo / Cut type						41	31
				1	2 *	3	4	5 *	6		
1,5	8	40	3,00	-	⊗	●	●	⊗	●	4115/...	
2	10	40	3,00	-	⊗	●	●	⊗	●	4120/...	
2,5	12	40	3,00	-	⊗	●	●	⊗	●	4125/...	
3	13	40	3,00	-	⊗	●	●	⊗	●	4133/...	
4	10	45	3,00	-	⊗	●	●	⊗	●	4143/...	
5	12	47	3,00	-	⊗	●	●	⊗	●	4153/...	
6	13	48	3,00	-	⊗	●	●	⊗	●	4163/...	
4	13	50	6,00	●	⊗	●	●	⊗	●		310406/...
6	16	50	6,00	●	⊗	●	●	⊗	●		310606/...
8	20	65	6,00	●	⊗	●	●	⊗	●		310806/...
10	20	65	6,00	●	⊗	●	●	⊗	●		311006/...
12	25	70	6,00	●	⊗	●	●	⊗	●		311206/...
16	25	70	6,00	●	⊗	●	●	⊗	●		311606/...
16	25	70	8,00	●	⊗	●	●	⊗	●		311608/...
20	25	70	6,00	●	⊗	●	●	⊗	●		312006/...
20	25	70	8,00	●	⊗	●	●	⊗	●		312008/...

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)

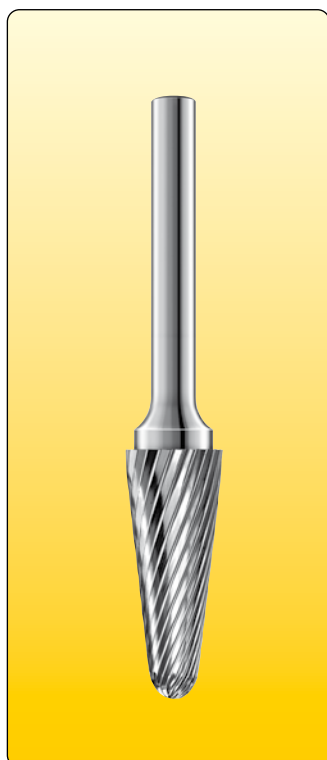


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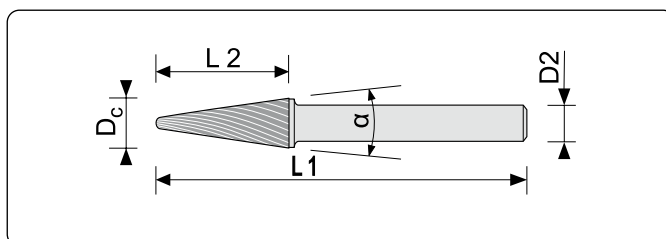
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Forma KEL - conica a testa raggata Shape KEL - Taper radius end

1.
01



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



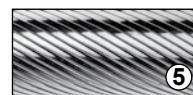
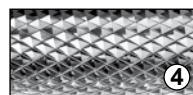
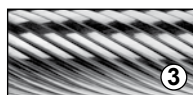
D _c	L2	L1	D2	R	α	Tagliente tipo / Cut type						42	32
						1	2 *	3	4	5 *	6		
3	14	40	3,00	1	6°	-	⊗	●	●	⊗	●	4233/...	
4	14	49	3,00	1	10°	-	⊗	●	●	⊗	●	4243/...	
5	16	51	3,00	1,5	10°	-	⊗	●	●	⊗	●	4253/...	
6	20	55	3,00	1,5	10°	-	⊗	●	●	⊗	●	4263/...	
4	14	50	6,00	1	10°	●	⊗	●	●	⊗	●		320406/...
6	20	50	6,00	1,5	10°	●	⊗	●	●	⊗	●		320606/...
8	20	65	6,00	1,5	14°	●	⊗	●	●	⊗	●		320806/...
10	20	65	6,00	2,9	14°	●	⊗	●	●	⊗	●		321006/...
12	30	75	6,00	2,6	14°	●	⊗	●	●	⊗	●		321206/...
16	30	75	6,00	4,8	14°	●	⊗	●	●	⊗	●		321606/...
16	30	75	8,00	4,8	14°	●	⊗	●	●	⊗	●		321608/...
20	42	87	6,00	5,9	14°	●	⊗	●	●	⊗	●		322006/...
20	42	87	8,00	5,9	14°	●	⊗	●	●	⊗	●		322008/...

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

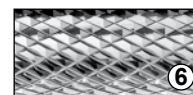
... Please always indicate cut type (example: 2015/4)



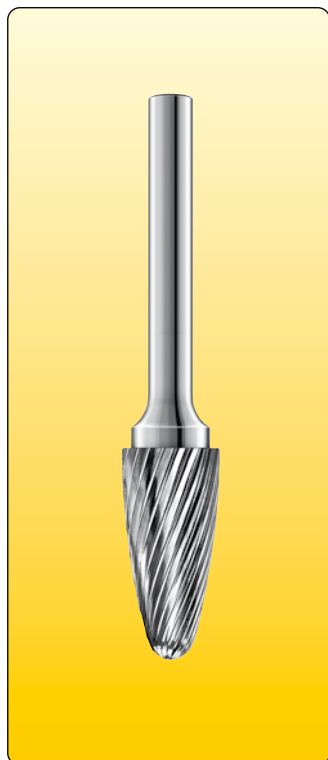
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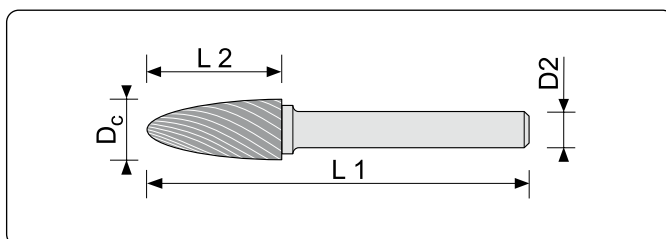
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Forma RBF - ogiva a testa raggiata Shape RBF - Tree with radius end



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



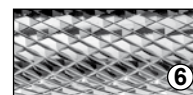
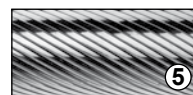
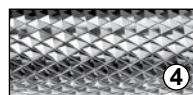
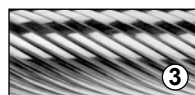
1.
01



D _c	L2	L1	D2	R~	Tagliente tipo / Cut type						43	33
					1	2 *	3	4	5 *	6		
3	13	40	3,00	0,8	-	⊗	●	●	⊗	●	4333/...	
4	10	45	3,00	1	-	⊗	●	●	⊗	●	4343/...	
5	12	47	3,00	1,2	-	⊗	●	●	⊗	●	4353/...	
6	13	48	3,00	1,4	-	⊗	●	●	⊗	●	4363/...	
4	14	50	6,00	1	●	⊗	●	●	⊗	●		330406/...
6	18	50	6,00	1,5	●	⊗	●	●	⊗	●		330606/...
8	20	65	6,00	1,8	●	⊗	●	●	⊗	●		330806/...
10	20	65	6,00	2,5	●	⊗	●	●	⊗	●		331006/...
12	25	70	6,00	2,5	●	⊗	●	●	⊗	●		331206/...
16	30	75	6,00	3,6	●	⊗	●	●	⊗	●		331606/...
16	30	75	8,00	3,6	●	⊗	●	●	⊗	●		331608/...
20	35	80	6,00	5	●	⊗	●	●	⊗	●		332006/...
20	35	80	8,00	5	●	⊗	●	●	⊗	●		332008/...

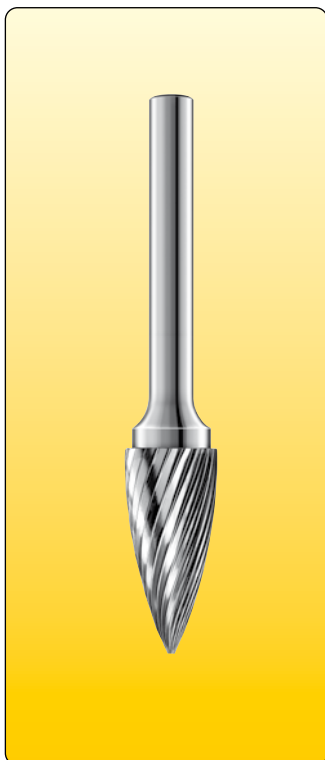
... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)

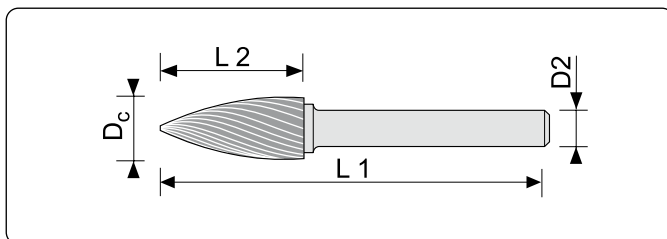


*

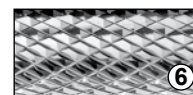
*



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request

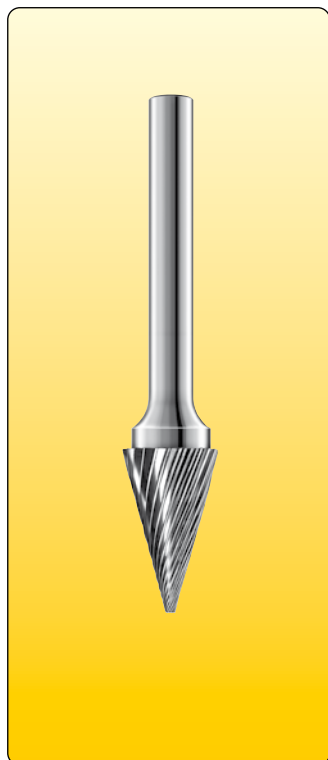
[illegible]

... Please always indicate cut type (example: 2015/4)

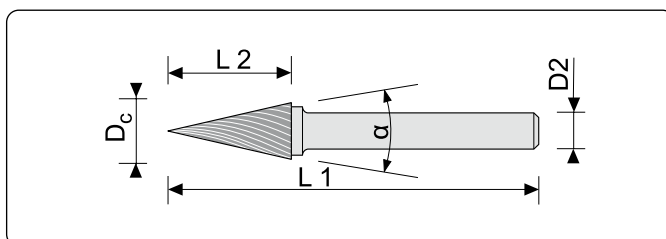


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Forma SKM - conica Shape SKM - Conical



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



1.
01

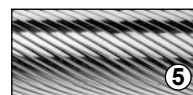
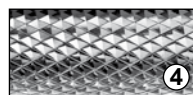
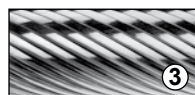


D _c	L2	L1	D2	Tagliente tipo / Cut type						45	35
				1	2 *	3	4	5 *	6		
3	11	40	3,00	-	⊗	●	●	⊗	●	4533/...	
4	10	45	3,00	-	⊗	●	●	⊗	●	4543/...	
5	12	47	3,00	-	⊗	●	●	⊗	●	4553/...	
6	13	48	3,00	-	⊗	●	●	⊗	●	4563/...	
4	14	50	6,00	●	⊗	●	●	⊗	●		350406/...
6	18	50	6,00	●	⊗	●	●	⊗	●		350606/...
8	20	65	6,00	●	⊗	●	●	⊗	●		350806/...
10	20	65	6,00	●	⊗	●	●	⊗	●		351006/...
12	25	70	6,00	●	⊗	●	●	⊗	●		351206/...
16	25	70	6,00	●	⊗	●	●	⊗	●		351606/...
16	25	70	8,00	●	⊗	●	●	⊗	●		351608/...
20	24	69	6,00	●	⊗	●	●	⊗	●		352006/...
20	24	69	8,00	●	⊗	●	●	⊗	●		352008/...

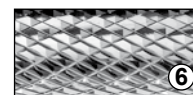
... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)
... Please always indicate cut type (example: 2015/4)



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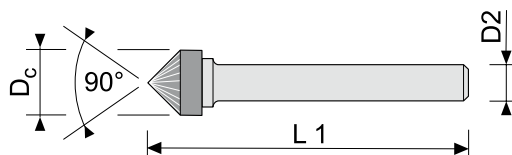
*



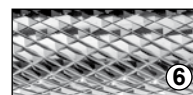
1.01



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request

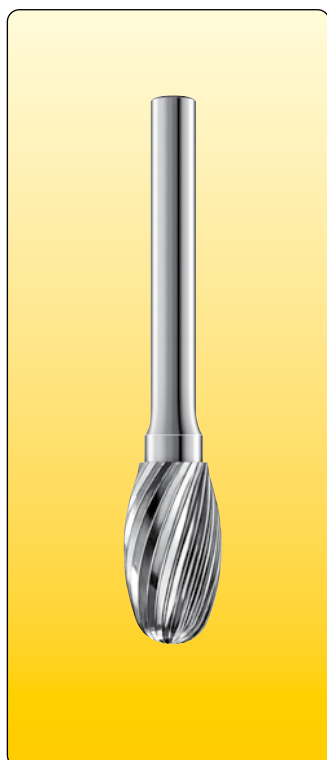
[illegible]

... Please always indicate cut type (example: 2015/4)

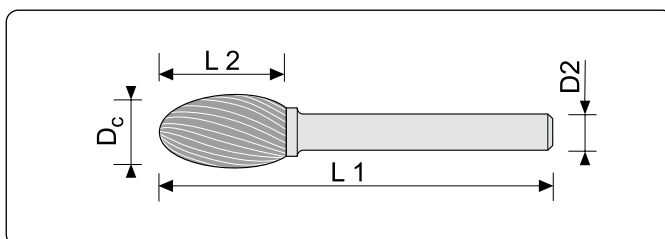


Forma TRE - ovale Shape TRE - Oval

1.
01



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



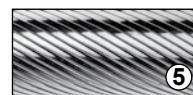
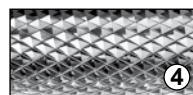
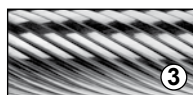
D _c	L2	L1	D2	R	Tagliente tipo / Cut type						47	37
					1	2 *	3	4	5 *	6		
3	7	40	3,00	1,2	-	⊗	●	●	⊗	●	4733/...	
4	7	42	3,00	1,5	-	⊗	●	●	⊗	●	4743/...	
5	8	43	3,00	2	-	⊗	●	●	⊗	●	4753/...	
6	10	45	3,00	2,8	-	⊗	●	●	⊗	●	4763/...	
4	7	50	6,00	1,5	●	⊗	●	●	⊗	●		370406/...
6	10	50	6,00	2,8	●	⊗	●	●	⊗	●		370606/...
8	13	58	6,00	3,7	●	⊗	●	●	⊗	●		370806/...
10	16	61	6,00	4	●	⊗	●	●	⊗	●		371006/...
12	20	65	6,00	5	●	⊗	●	●	⊗	●		371206/...
16	25	70	6,00	6,5	●	⊗	●	●	⊗	●		371606/...
16	25	70	8,00	6,5	●	⊗	●	●	⊗	●		371608/...
20	25	70	6,00	9	●	⊗	●	●	⊗	●		372006/...
20	25	70	8,00	9	●	⊗	●	●	⊗	●		372008/...

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

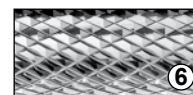
... Please always indicate cut type (example: 2015/4)



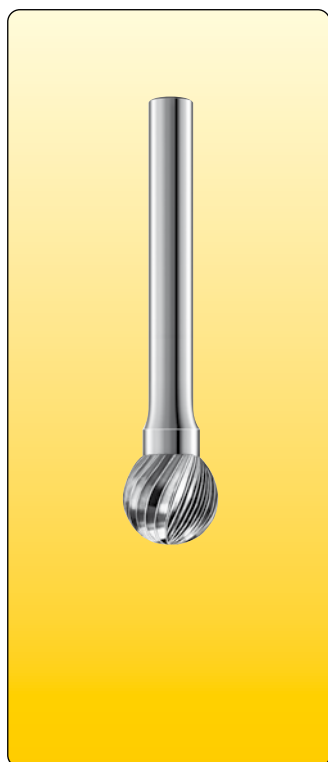
*



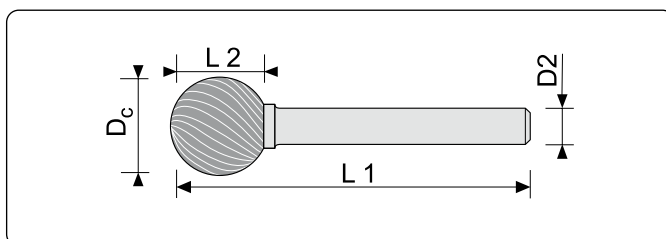
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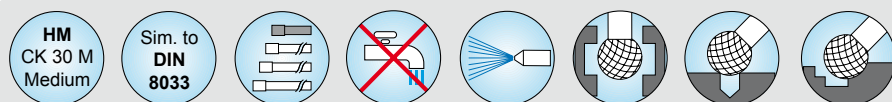
Forma KUD - sferica Shape KUD - Ball



Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



1.
01



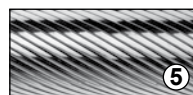
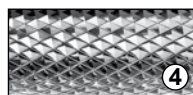
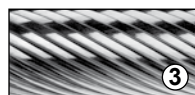
D _c	L2	L1	D2	Tagliente tipo / Cut type						48	38
				1	2 *	3	4	5 *	6		
1,5	1,35	40	3,00	-	⊗	●	●	⊗	●	4815/...	
2	1,8	40	3,00	-	⊗	●	●	⊗	●	4820/...	
2,5	2,2	40	3,00	-	⊗	●	●	⊗	●	4825/...	
3	2,7	40	3,00	-	⊗	●	●	⊗	●	4833/...	
4	3,6	38,5	3,00	-	⊗	●	●	⊗	●	4843/...	
5	4,5	39,5	3,00	-	⊗	●	●	⊗	●	4853/...	
6	5,4	40,4	3,00	-	⊗	●	●	⊗	●	4863/...	
4	3,6	50	6,00	●	⊗	●	●	⊗	●		380406/...
6	5	50	6,00	●	⊗	●	●	⊗	●		380606/...
8	7,2	52,2	6,00	●	⊗	●	●	⊗	●		380806/...
10	9	54	6,00	●	⊗	●	●	⊗	●		381006/...
12	10,8	55,8	6,00	●	⊗	●	●	⊗	●		381206/...
16	14,4	59,4	6,00	●	⊗	●	●	⊗	●		381606/...
16	14,4	59,4	8,00	●	⊗	●	●	⊗	●		381608/...
20	18	63	6,00	●	⊗	●	●	⊗	●		382006/...
20	18	63	8,00	●	⊗	●	●	⊗	●		382008/...

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

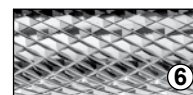
... Please always indicate cut type (example: 2015/4)



*

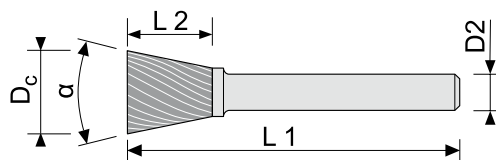


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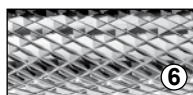




Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request

[illegible]

... Please always indicate cut type (example: 2015/4)

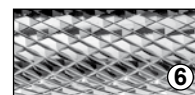
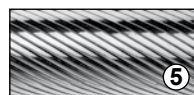
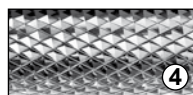
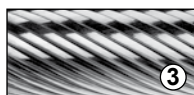


Technical drawing of a tapered pin (Fig. 1.10). The side view shows a pin with a tapered head of length L_2 and a cylindrical shaft of length L_1 . The head has a diameter D_c and a taper angle α . The shaft has a diameter D_2 . A cross-sectional view on the right shows the internal radial slots.

1.01

[illegible]

... Please always indicate cut type (example: 2015/4)



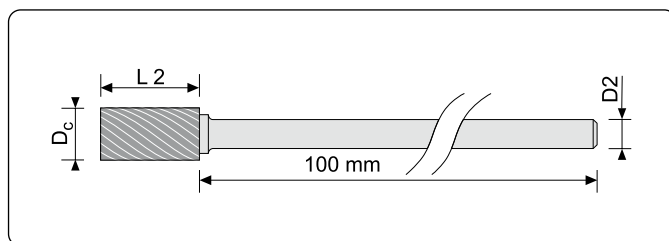
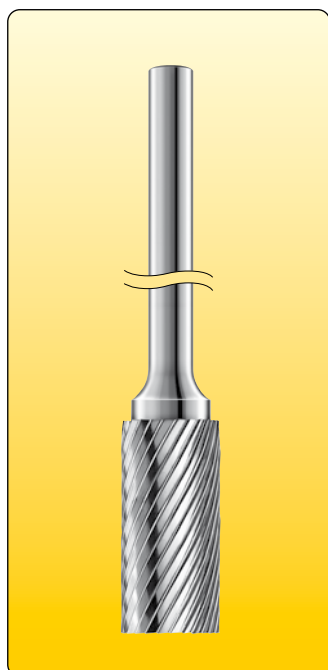
Kit e accessori Sets & Accessories

Kit / Set	Nr. 10
	Kit n° 10 - composto da: 4033 - 4133 - 4233 - 4333 - 4433 - 4533 - 4633 - 4733 - 4833 - 4933 Disponibile con taglienti tipo 3-4-5-6 <i>Set Nr. 10 - including:</i> 4033 - 4133 - 4233 - 4333 - 4433 - 4533 - 4633 - 4733 - 4833 - 4933 <i>Available in cut type 3-4-5-6</i>
Kit / Set	Nr. 11
	Kit n° 11 - composto da: 4063 - 4163 - 4263 - 4363 - 4463 - 4563 - 4663 - 4763 - 4863 - 4963 Disponibile con taglienti tipo 2-3-4-5-6 <i>Set Nr. 11 - including:</i> 4063 - 4163 - 4263 - 4363 - 4463 - 4563 - 4663 - 4763 - 4863 - 4963 <i>Available in cut type 2-3-4-5-6</i>
Kit / Set	Nr. 12
	Kit n° 12 - composto da: 300606 - 310606 - 320606 - 330606 - 340606 - 350606 - 360606 - 370606 - 380606 - 390606 Disponibile con taglienti tipo 1-2-3-4-5-6 <i>Set Nr. 12 - including:</i> 300606 - 310606 - 320606 - 330606 - 340606 - 350606 - 360606 - 370606 - 380606 - 390606 <i>Available in cut type 1-2-3-4-5-6</i>

SMERIGLIATRICE PNEUMATICA Numero di giri: **24.000 giri/min** - Consumo aria: **250 l/min**
AIR GRINDING UNIT 24.000 min⁻¹ - Air consumption: **250 l/min**

Kit / Set	Nr. 13
	Kit n° 13 - composto da: 301206/1 - 311206/2 - 321206/3 - 331206/4 - 341206/5 - 351206/3SP - 361206/3 - 371206/3 - 381206/6 - 391206/3 SMS 30 DC <i>Set Nr. 13 - including:</i> 301206/1 - 311206/2 - 321206/3 - 331206/4 - 341206/5 - 351206/3SP - 361206/3 - 371206/3 - 381206/6 - 391206/3 SMS 30 DC

Lime rotative - Lunghezza gambo 100 mm Rotary burs shank length 100 mm



HM
CK 30 M
Medium

WN

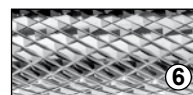
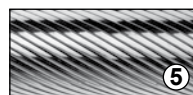
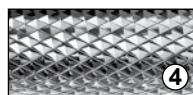
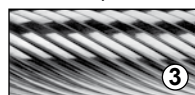


1.
02

D _c	L2	D2	Tagliente tipo / Cut type						Codice articolo Order code	Forma Design
			1	2	3	4	5	6		
6	18	6	-	-	●	●	-	●	300606/...x100	Forma - Shape ZYA Ident. 30
8	20	6	-	-	●	●	-	●	300806/...x100	
10	20	6	-	-	●	●	-	●	301006/...x100	
12	25	6	-	-	●	●	-	●	301206/...x100	
16	25	6	-	-	●	●	-	●	301606/...x100	
16	25	8	-	-	●	●	-	●	301608/...x100	
20	25	6	-	-	●	●	-	●	302006/...x100	
20	25	8	-	-	●	●	-	●	302008/...x100	
6	18	6	-	-	●	●	-	●	300606/...STx100	Forma - Shape ZYA-ST Ident. 30-ST
8	20	6	-	-	●	●	-	●	300806/...STx100	
10	20	6	-	-	●	●	-	●	301006/...STx100	
12	25	6	-	-	●	●	-	●	301206/...STx100	
16	25	6	-	-	●	●	-	●	301606/...STx100	
16	25	8	-	-	●	●	-	●	301608/...STx100	
20	25	6	-	-	●	●	-	●	302006/...STx100	
20	25	8	-	-	●	●	-	●	302008/...STx100	
6	18	6	-	-	●	●	-	●	310606/...x100	Forma - Shape WRC Ident. 31
8	20	6	-	-	●	●	-	●	310806/...x100	
10	20	6	-	-	●	●	-	●	311006/...x100	
12	25	6	-	-	●	●	-	●	311206/...x100	
16	25	6	-	-	●	●	-	●	311606/...x100	
16	25	8	-	-	●	●	-	●	311608/...x100	
20	25	6	-	-	●	●	-	●	312006/...x100	
20	25	8	-	-	●	●	-	●	312008/...x100	
6	20	6	-	-	●	●	-	●	320606/...x100	Forma - Shape KEL-14° Ident. 32
8	20	6	-	-	●	●	-	●	320806/...x100	
10	20	6	-	-	●	●	-	●	321006/...x100	
12	30	6	-	-	●	●	-	●	321206/...x100	
16	30	6	-	-	●	●	-	●	321606/...x100	
16	30	8	-	-	●	●	-	●	321608/...x100	
20	42	6	-	-	●	●	-	●	322006/...x100	
20	42	8	-	-	●	●	-	●	322008/...x100	

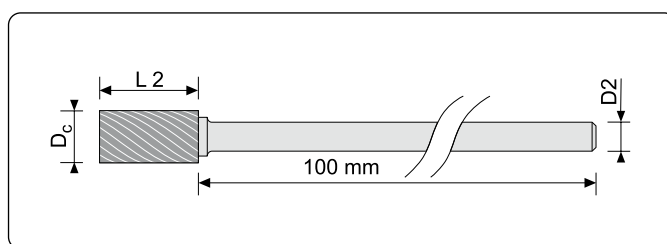
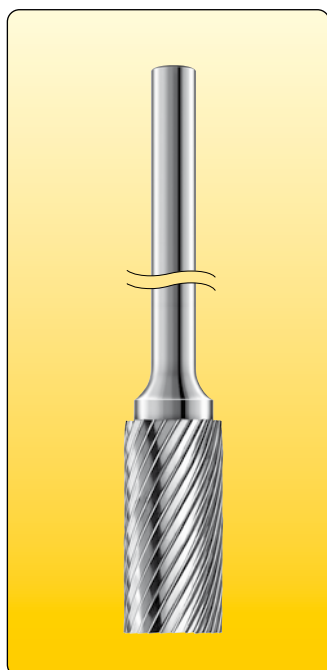
... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)



Lime rotative - Lunghezza gambo 100 mm Rotary burs shank length 100 mm

1.
02



HM
CK 30 M
Medium

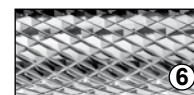
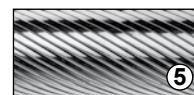
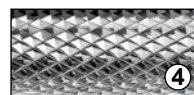
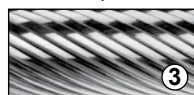
WN



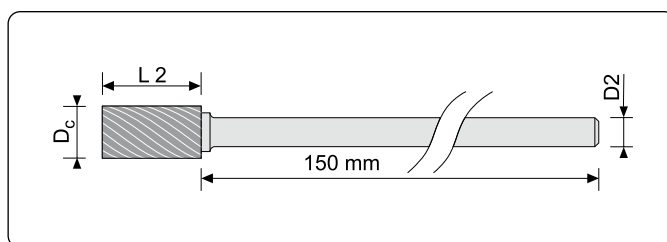
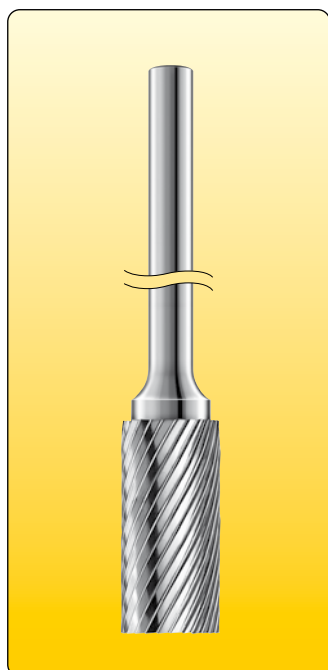
D _c	L2	D2	Tagliente tipo / Cut type						Codice articolo Order code	Forma - Shape Design	
			1	2	3	4	5	6			
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8	20	6	-	-	●	●	-	●	330806/...x100		
10	20	6	-	-	●	●	-	●	331006/...x100		
12	25	6	-	-	●	●	-	●	331206/...x100		
16	30	6	-	-	●	●	-	●	331606/...x100		
16	30	8	-	-	●	●	-	●	331608/...x100		
20	35	6	-	-	●	●	-	●	332006/...x100		
20	35	8	-	-	●	●	-	●	332008/...x100		
6	18	6	-	-	●	●	-	●	340606/...x100	Forma - Shape SPG	Ident. 34
8	20	6	-	-	●	●	-	●	340806/...x100		
10	20	6	-	-	●	●	-	●	341006/...x100		
12	25	6	-	-	●	●	-	●	341206/...x100		
16	30	6	-	-	●	●	-	●	341606/...x100		
16	30	8	-	-	●	●	-	●	341608/...x100		
20	40	6	-	-	●	●	-	●	342006/...x100		
20	40	8	-	-	●	●	-	●	342008/...x100		
6	20	6	-	-	●	●	-	●	370606/...x100	Forma - Shape TRE	Ident. 37
8	13	6	-	-	●	●	-	●	370806/...x100		
10	16	6	-	-	●	●	-	●	371006/...x100		
12	20	6	-	-	●	●	-	●	371206/...x100		
16	25	6	-	-	●	●	-	●	371606/...x100		
16	25	8	-	-	●	●	-	●	371608/...x100		
20	25	6	-	-	●	●	-	●	372006/...x100		
20	25	8	-	-	●	●	-	●	372008/...x100		
6	5,4	6	-	-	●	●	-	●	380606/...x100	Forma - Shape KUD	Ident. 38
8	7,2	6	-	-	●	●	-	●	380806/...x100		
10	9	6	-	-	●	●	-	●	381006/...x100		
12	10,8	6	-	-	●	●	-	●	381206/...x100		
16	14,4	6	-	-	●	●	-	●	381606/...x100		
16	14,4	8	-	-	●	●	-	●	381608/...x100		
20	18	6	-	-	●	●	-	●	382006/...x100		
20	18	8	-	-	●	●	-	●	382008/...x100		

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)



Lime rotative - Lunghezza gambo 150 mm Rotary burs shank length 150 mm



HM
CK 30 M
Medium

WN

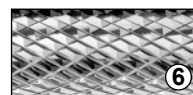
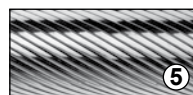
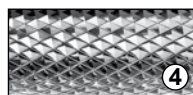
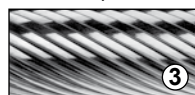


1.
02

D _c	L2	D2	Tagliante tipo / Cut type						Codice articolo Order code	Forma Design
			1	2	3	4	5	6		
6	18	6	-	-	●	●	-	●	300606/...x150	Forma - Shape ZYA Ident. 30
8	20	6	-	-	●	●	-	●	300806/...x150	
10	20	6	-	-	●	●	-	●	301006/...x150	
12	25	6	-	-	●	●	-	●	301206/...x150	
16	25	6	-	-	●	●	-	●	301606/...x150	
16	25	8	-	-	●	●	-	●	301608/...x150	
20	25	6	-	-	●	●	-	●	302006/...x150	
20	25	8	-	-	●	●	-	●	302008/...x150	
6	18	6	-	-	●	●	-	●	300606/...STx150	Forma - Shape ZYA-ST Ident. 30-ST
8	20	6	-	-	●	●	-	●	300806/...STx150	
10	20	6	-	-	●	●	-	●	301006/...STx150	
12	25	6	-	-	●	●	-	●	301206/...STx150	
16	25	6	-	-	●	●	-	●	301606/...STx150	
16	25	8	-	-	●	●	-	●	301608/...STx150	
20	25	6	-	-	●	●	-	●	302006/...STx150	
20	25	8	-	-	●	●	-	●	302008/...STx150	
6	18	6	-	-	●	●	-	●	310606/...x150	Forma - Shape WRC Ident. 31
8	20	6	-	-	●	●	-	●	310806/...x150	
10	20	6	-	-	●	●	-	●	311006/...x150	
12	25	6	-	-	●	●	-	●	311206/...x150	
16	25	6	-	-	●	●	-	●	311606/...x150	
16	25	8	-	-	●	●	-	●	311608/...x150	
20	25	6	-	-	●	●	-	●	312006/...x150	
20	25	8	-	-	●	●	-	●	312008/...x150	
6	20	6	-	-	●	●	-	●	320606/...x150	Forma - Shape KEL-14° Ident. 32
8	20	6	-	-	●	●	-	●	320806/...x150	
10	20	6	-	-	●	●	-	●	321006/...x150	
12	30	6	-	-	●	●	-	●	321206/...x150	
16	30	6	-	-	●	●	-	●	321606/...x150	
16	30	8	-	-	●	●	-	●	321608/...x150	
20	42	6	-	-	●	●	-	●	322006/...x150	
20	42	8	-	-	●	●	-	●	322008/...x150	

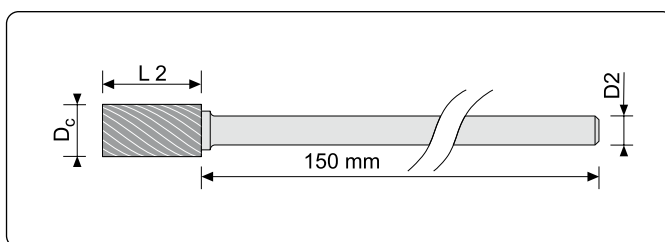
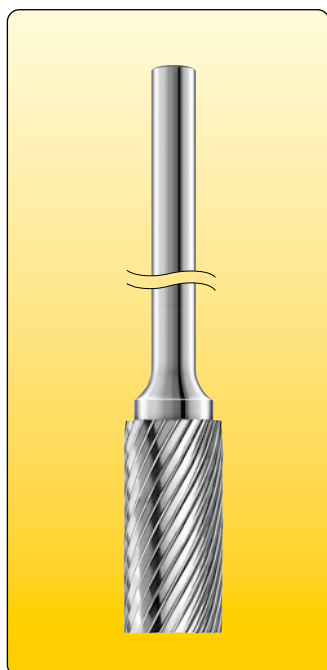
... Indicare sempre la tipologia del tagliante (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)



Lime rotative - Lunghezza gambo 150 mm Rotary burs shank length 150 mm

1.
02



HM
CK 30 M
Medium

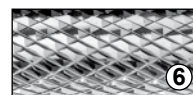
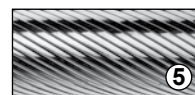
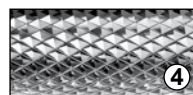
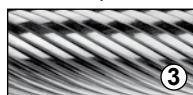
WN



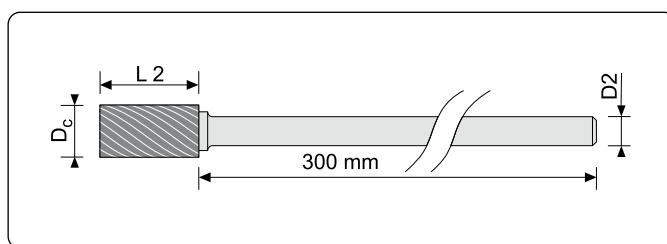
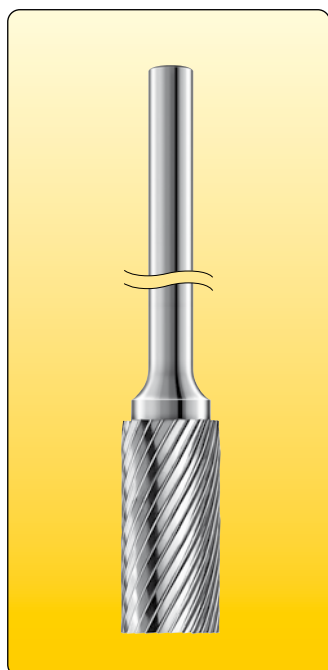
D _c	L2	D2	Tagliante tipo / Cut type						Codice articolo Order code	Forma - Shape Design	
			1	2	3	4	5	6			
6	18	6	-	-	●	●	-	●	330606/...x150	Forma - Shape RBF	Ident. 33
8	20	6	-	-	●	●	-	●	330806/...x150		
10	20	6	-	-	●	●	-	●	331006/...x150		
12	25	6	-	-	●	●	-	●	331206/...x150		
16	30	6	-	-	●	●	-	●	331606/...x150		
16	30	8	-	-	●	●	-	●	331608/...x150		
20	35	6	-	-	●	●	-	●	332006/...x150		
20	35	8	-	-	●	●	-	●	332008/...x150		
6	18	6	-	-	●	●	-	●	344606/...x150	Forma - Shape SPG	Ident. 34
8	20	6	-	-	●	●	-	●	344806/...x150		
10	20	6	-	-	●	●	-	●	341006/...x150		
12	25	6	-	-	●	●	-	●	341206/...x150		
16	30	6	-	-	●	●	-	●	341606/...x150		
16	30	8	-	-	●	●	-	●	341608/...x150		
20	40	6	-	-	●	●	-	●	342006/...x150		
20	40	8	-	-	●	●	-	●	342008/...x150		
6	20	6	-	-	●	●	-	●	370606/...x150	Forma - Shape TRE	Ident. 37
8	13	6	-	-	●	●	-	●	370806/...x150		
10	16	6	-	-	●	●	-	●	371006/...x150		
12	20	6	-	-	●	●	-	●	371206/...x150		
16	25	6	-	-	●	●	-	●	371606/...x150		
16	25	8	-	-	●	●	-	●	371608/...x150		
20	25	6	-	-	●	●	-	●	372006/...x150		
20	25	8	-	-	●	●	-	●	372008/...x150		
6	5,4	6	-	-	●	●	-	●	380606/...x150	Forma - Shape KUD	Ident. 38
8	7,2	6	-	-	●	●	-	●	380806/...x150		
10	9	6	-	-	●	●	-	●	381006/...x150		
12	10,8	6	-	-	●	●	-	●	381206/...x150		
16	14,4	6	-	-	●	●	-	●	381606/...x150		
16	14,4	8	-	-	●	●	-	●	381608/...x150		
20	18	6	-	-	●	●	-	●	382006/...x150		
20	18	8	-	-	●	●	-	●	382008/...x150		

... Indicare sempre la tipologia del tagliante (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)



Lime rotative - Lunghezza gambo 300 mm Rotary burs shank length 300 mm



HM
CK 30 M
Medium

WN



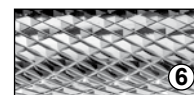
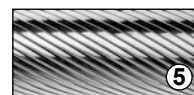
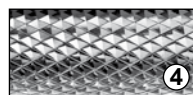
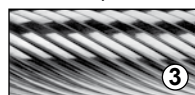
Vc
-30%

1.
02

D _c	L2	D2	Tagliente tipo / Cut type						Codice articolo Order code	Forma Design
			1	2	3	4	5	6		
6	18	6	-	-	●	●	-	●	300606/...x300	Forma - Shape ZYA Ident. 30 
8	20	6	-	-	●	●	-	●	300806/...x300	
10	20	6	-	-	●	●	-	●	301006/...x300	
12	25	6	-	-	●	●	-	●	301206/...x300	
16	25	6	-	-	●	●	-	●	301606/...x300	
16	25	8	-	-	●	●	-	●	301608/...x300	
20	25	6	-	-	●	●	-	●	302006/...x300	
20	25	8	-	-	●	●	-	●	302008/...x300	
6	18	6	-	-	●	●	-	●	300606/...STx300	Forma - Shape ZYA-ST Ident. 30-ST 
8	20	6	-	-	●	●	-	●	300806/...STx300	
10	20	6	-	-	●	●	-	●	301006/...STx300	
12	25	6	-	-	●	●	-	●	301206/...STx300	
16	25	6	-	-	●	●	-	●	301606/...STx300	
16	25	8	-	-	●	●	-	●	301608/...STx300	
20	25	6	-	-	●	●	-	●	302006/...STx300	
20	25	8	-	-	●	●	-	●	302008/...STx300	
6	18	6	-	-	●	●	-	●	310606/...x300	Forma - Shape WRC Ident. 31 
8	20	6	-	-	●	●	-	●	310806/...x300	
10	20	6	-	-	●	●	-	●	311006/...x300	
12	25	6	-	-	●	●	-	●	311206/...x300	
16	25	6	-	-	●	●	-	●	311606/...x300	
16	25	8	-	-	●	●	-	●	311608/...x300	
20	25	6	-	-	●	●	-	●	312006/...x300	
20	25	8	-	-	●	●	-	●	312008/...x300	
6	20	6	-	-	●	●	-	●	320606/...x300	Forma - Shape KEL-14° Ident. 32 
8	20	6	-	-	●	●	-	●	320806/...x300	
10	20	6	-	-	●	●	-	●	321006/...x300	
12	30	6	-	-	●	●	-	●	321206/...x300	
16	30	6	-	-	●	●	-	●	321606/...x300	
16	30	8	-	-	●	●	-	●	321608/...x300	
20	42	6	-	-	●	●	-	●	322006/...x300	
20	42	8	-	-	●	●	-	●	322008/...x300	

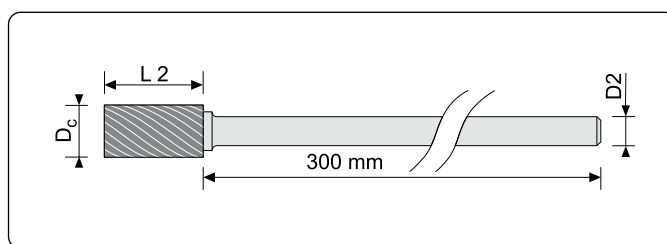
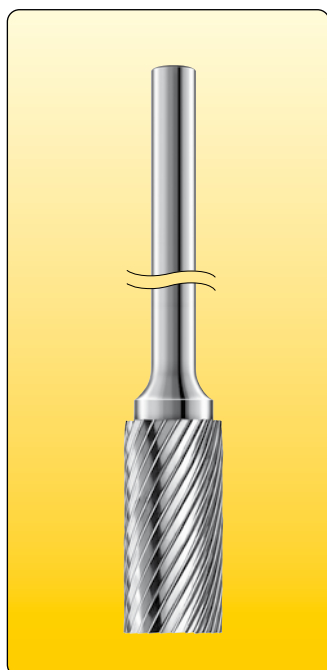
... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

.. Please always indicate cut type (example: 2015/4)



Lime rotative - Lunghezza gambo 300 mm Rotary burs shank length 300 mm

1.
02



HM
CK 30 M
Medium

WN

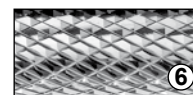
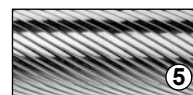
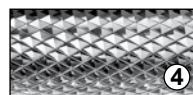
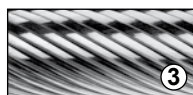


Vc
-30%

D _c	L2	D2	Tagliente tipo / Cut type						Codice articolo Order code	Forma Design
			1	2	3	4	5	6		
6	18	6	-	-	●	●	-	●	330606/...x300	Forma - Shape RBF Ident. 33
8	20	6	-	-	●	●	-	●	330806/...x300	
10	20	6	-	-	●	●	-	●	331006/...x300	
12	25	6	-	-	●	●	-	●	331206/...x300	
16	30	6	-	-	●	●	-	●	331606/...x300	
16	30	8	-	-	●	●	-	●	331608/...x300	
20	35	6	-	-	●	●	-	●	332006/...x300	
20	35	8	-	-	●	●	-	●	332008/...x300	
6	18	6	-	-	●	●	-	●	340606/...x300	Forma - Shape SPG Ident. 34
8	20	6	-	-	●	●	-	●	340806/...x300	
10	20	6	-	-	●	●	-	●	341006/...x300	
12	25	6	-	-	●	●	-	●	341206/...x300	
16	30	6	-	-	●	●	-	●	341606/...x300	
16	30	8	-	-	●	●	-	●	341608/...x300	
20	40	6	-	-	●	●	-	●	342006/...x300	
20	40	8	-	-	●	●	-	●	342008/...x300	
6	20	6	-	-	●	●	-	●	370606/...x300	Forma - Shape TRE Ident. 37
8	13	6	-	-	●	●	-	●	370806/...x300	
10	16	6	-	-	●	●	-	●	371006/...x300	
12	20	6	-	-	●	●	-	●	371206/...x300	
16	25	6	-	-	●	●	-	●	371606/...x300	
16	25	8	-	-	●	●	-	●	371608/...x300	
20	25	6	-	-	●	●	-	●	372006/...x300	
20	25	8	-	-	●	●	-	●	372008/...x300	
6	5,4	6	-	-	●	●	-	●	380606/...x300	Forma - Shape KUD Ident. 38
8	7,2	6	-	-	●	●	-	●	380806/...x300	
10	9	6	-	-	●	●	-	●	381006/...x300	
12	10,8	6	-	-	●	●	-	●	381206/...x300	
16	14,4	6	-	-	●	●	-	●	381606/...x300	
16	14,4	8	-	-	●	●	-	●	381608/...x300	
20	18	6	-	-	●	●	-	●	382006/...x300	
20	18	8	-	-	●	●	-	●	382008/...x300	

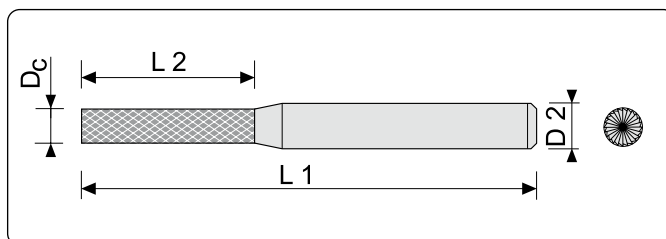
... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)

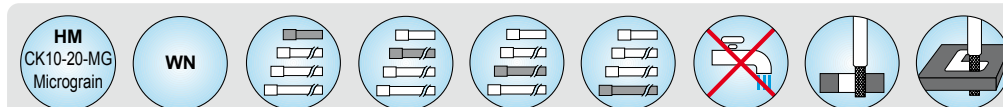


Lime rotative per stampi e matrici con tagliente frontale Mould, tool and die making rotary burs with end cut

Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



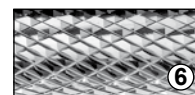
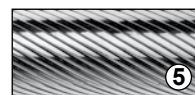
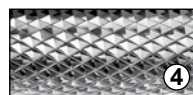
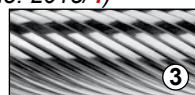
1.
03



D _c	L2	L1	D2	Tagliente tipo / Cut type						Codice articolo tagliente 4 Cut type 4	Codice articolo tagliente 6 Cut type 6
				1	2	3	4	5	6		
1	6	50	3,00	-	-	-	●	-	●	4010/4STx050	4010/6STx050
1	6	65	3,00	-	-	-	●	-	●	4010/4STx065	4010/6STx065
1	6	70	3,00	-	-	-	●	-	●	4010/4STx070	4010/6STx070
1	6	80	3,00	-	-	-	●	-	●	4010/4STx080	4010/6STx080
1	6	90	3,00	-	-	-	●	-	●	4010/4STx090	4010/6STx090
1	6	100	3,00	-	-	-	●	-	●	4010/4STx100	4010/6STx100
1,5	8	50	3,00	-	-	-	●	-	●	4015/4STx050	4015/6STx050
1,5	8	65	3,00	-	-	-	●	-	●	4015/4STx065	4015/6STx065
1,5	8	70	3,00	-	-	-	●	-	●	4015/4STx070	4015/6STx070
1,5	8	80	3,00	-	-	-	●	-	●	4015/4STx080	4015/6STx080
1,5	8	90	3,00	-	-	-	●	-	●	4015/4STx090	4015/6STx090
1,5	8	100	3,00	-	-	-	●	-	●	4015/4STx100	4015/6STx100
2	10	50	3,00	-	-	-	●	-	●	4020/4STx050	4020/6STx050
2	10	65	3,00	-	-	-	●	-	●	4020/4STx065	4020/6STx065
2	10	70	3,00	-	-	-	●	-	●	4020/4STx070	4020/6STx070
2	10	80	3,00	-	-	-	●	-	●	4020/4STx080	4020/6STx080
2	10	90	3,00	-	-	-	●	-	●	4020/4STx090	4020/6STx090
2	10	100	3,00	-	-	-	●	-	●	4020/4STx100	4020/6STx100

... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

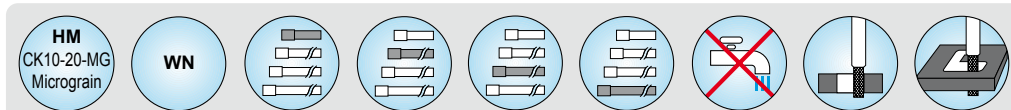
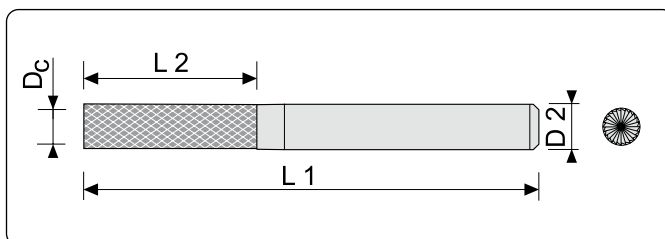
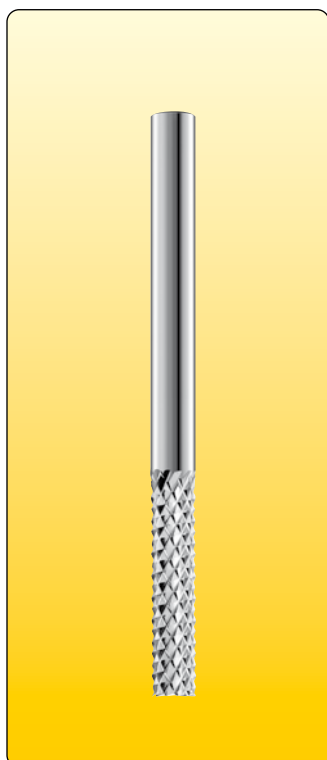
... Please always indicate cut type (example: 2015/4)



Lime rotative per stampi e matrici con tagliente frontale Mould, tool and die making rotary burs with end cut

Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request

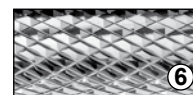
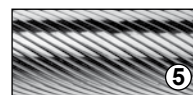
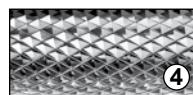
1.
03



D _c	L2	L1	D2	Tagliente tipo / Cut type						Codice articolo tagliente 4 Cut type 4	Codice articolo tagliente 6 Cut type 6
				1	2	3	4	5	6		
2,5	12	50	3,00	-	-	-	●	-	●	4025/4STx050	4025/6STx050
2,5	12	65	3,00	-	-	-	●	-	●	4025/4STx065	4025/6STx065
2,5	12	70	3,00	-	-	-	●	-	●	4025/4STx070	4025/6STx070
2,5	12	80	3,00	-	-	-	●	-	●	4025/4STx080	4025/6STx080
2,5	12	90	3,00	-	-	-	●	-	●	4025/4STx090	4025/6STx090
2,5	12	100	3,00	-	-	-	●	-	●	4025/4STx100	4025/6STx100
3	14	50	3,00	-	-	-	●	-	●	4033/4STx050	4033/6STx050
3	14	65	3,00	-	-	-	●	-	●	4033/4STx065	4033/6STx065
3	14	70	3,00	-	-	-	●	-	●	4033/4STx070	4033/6STx070
3	14	80	3,00	-	-	-	●	-	●	4033/4STx080	4033/6STx080
3	14	90	3,00	-	-	-	●	-	●	4033/4STx090	4033/6STx090
3	14	100	3,00	-	-	-	●	-	●	4033/4STx100	4033/6STx100

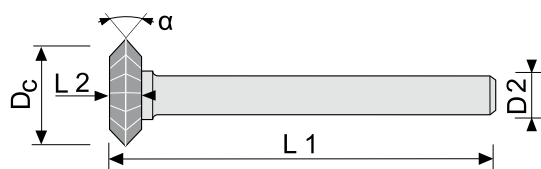
... Indicare sempre la tipologia del tagliente (per esempio: 2015/4)

... Please always indicate cut type (example: 2015/4)



Lime rotative per canalini - 90°
Grove cutters at 90°

Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request



1.04

[illegible]

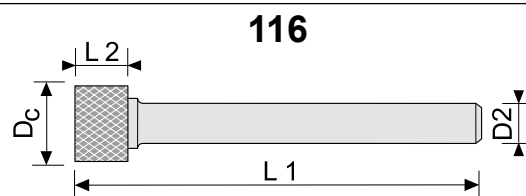
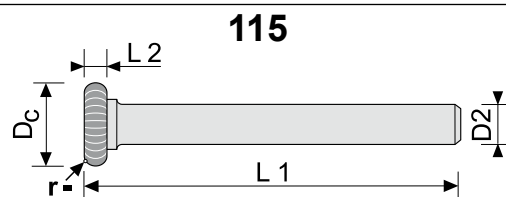
Lime rotative raggate e cilindriche Disc cutters straight or with radius

Disponibile su richiesta anche con rivestimento Cer-T
Cer-T coating upon request

115



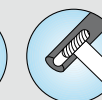
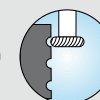
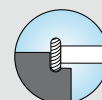
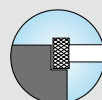
116



**1.
04**

HM
CK 30 M
Medium

WN



D _c	L2	L1	D2	r 115	115	116
10	2	47	6	20	1151006/3x2	1161006/4x2
10	3	48	6	20	1151006/3x3	1161006/4x3
10	4	49	6	20	1151006/3x4	1161006/4x4
10	6	51	6	20	1151006/3x6	1161006/4x6
12	2	47	6	24	1151206/3x2	1161206/4x2
12	3	48	6	24	1151206/3x3	1161206/4x3
12	4	49	6	24	1151206/3x4	1161206/4x4
12	6	51	6	24	1151206/3x6	1161206/4x4
16	2	47	6	30	1151606/3x2	1161606/4x2
16	3	48	6	30	1151606/3x3	1161606/4x3
16	4	49	6	30	1151606/3x4	1161606/4x4
16	6	51	6	30	1151606/3x6	1161606/4x6
16	8	53	6	30	1151606/3x8	1161606/4x8
20	2	47	6	35	1152006/3x2	1162006/4x2
20	4	49	6	35	1152006/3x4	1162006/4x4
20	6	51	6	35	1152006/3x6	1162006/4x6
20	8	53	6	35	1152006/3x8	1162006/4x8
20	10	55	6	35	1152006/3x10	1162006/4x10



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