

D **Übersicht**
Hartmetall-Frässtifte

E **Overview**
Tungsten carbide
rotary burrs

I **Sommario**
Frese rotative in
metallo duro













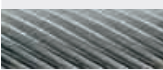





















D Die Schnittwerte für alle Werkzeuge entnehmen Sie bitte unserem separaten Zerspanungshandbuch.

E You will find the cutting conditions for all tools in our separate cutting manual.

I Per i parametri di lavorazione per tutti gli utensili richiedete il nostro manuale tecnico.











Typ / Type / Tipo	ZYA	ZYA-S	WRC	SPG	WKN
Typ / Type / Tipo ISO	A	A-S	C	G	N
Stirnverzahnung / Front cut / Taglio in testa		ja / yes / si			
Ø mm	2-20	2-20	3-20	3-16	3-12
Code / Codice	777	778	779	780	781
Seite / Page / Pagina	202	203	204	205	206

Zahnung / Cutting profile / Dentatura			ZYA	ZYA-S	WRC	SPG	WKN
 1A	Aluminium Aluminium Aluminio						
 1	DIN C						
 2							
 3	DIN MY						
 4	Diamant Diamond Diamanta						
 6	DIN MX						
 TiN 6	DIN MX						

D **Übersicht**
Hartmetall-Frässtifte

E **Overview**
Tungsten carbide rotary burrs

I **Sommario**
Frese rotative in metallo duro

							
SKM	KSK	KSJ	TRE	KUD	RBF	KEL	B
M	K	J	E	D	F	L	H
3-16	3-20	3-16	3-16	2,5-20	3-20	3-16	6-16
783	784	785	786	787	788	789	790
207	208	209	210	211	212	213	214
				▬	▬	▬	
					▬	▬	
▬				▬	▬	▬	
▬	▬	▬	▬	▬	▬	▬	▬
▬			▬	▬	▬	▬	▬
▬	▬	▬	▬	▬	▬	▬	▬
▬				▬	▬		



Hartmetall-Frässtifte
Tungsten carbide rotary burrs
Frese rotative in metallo duro

D Hartmetall-Frässtifte,
Zylinder, ohne
Stirnverzahnung

E Tungsten carbide rotary
burrs, cylindrical,
without front cut

I Frese rotative in metallo duro,
cilindriche,
senza taglio in testa

Unterschiedliche Zahnungen / Different cuts / Dentature diverse



Aluminium
Aluminium
Aluminio



DIN C



DIN MY



Diamant
Diamond
Diamante



DIN MX



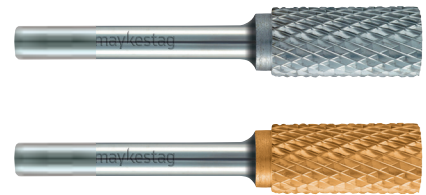
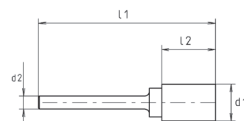
DIN MX

Nähere Informationen zu den einzelnen Zahnungen
siehe Seite 215.
Detailed information about the different cuts see on
page 215.
Informazioni più dettagliate circa le diverse dentature
vedi pagina 215.



DIN
ZYA

ISO
A



d1 mm	d2 mm	l1 mm	l2 mm	Code 7778 Art.-Nr.	Code 7771 Art.-Nr.	Code 7772 Art.-Nr.	Code 7773 Art.-Nr.
2	3	38	10				0 7773031021 00
2,5	3	38	12				
3	3	38	14				0 7773031031 00
3	3	50	14				
3	3	65	14				0 7773033031 00
4	3	40	10				0 7773031041 00
4	6	50	14				
5	3	42	12				
6	3	43	13				0 7773031061 00
6	6	50	16	0 7778061061 00			0 7773061061 00
8	6	65	20			0 7772061081 00	0 7773061081 00
10	6	58	13				
10	6	65	20	0 7778061101 00		0 7772061101 00	0 7773061101 00
12	6	70	25	0 7778061121 00		0 7772061121 00	0 7773061121 00
12	8	70	25				
16	6	70	25				0 7773061161 00
16	8	70	25				
20	6	70	25				0 7773061201 00

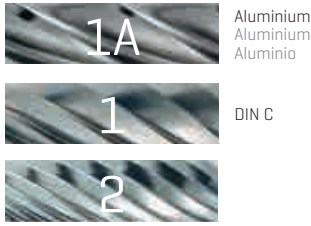
d1 mm	d2 mm	l1 mm	l2 mm	Code 7774 Art.-Nr.	Code 7776 Art.-Nr.	Code 7777 Art.-Nr.
2	3	38	10		0 7776031021 00	
2,5	3	38	12		0 7776031251 00	
3	3	38	14	0 7774031031 00	0 7776031031 00	0 7777031031 00
3	3	50	14		0 7776032031 00	
3	3	65	14		0 7776033031 00	
4	3	40	10		0 7776031041 00	
4	6	50	14	0 7774061041 00	0 7776061041 00	
5	3	42	12		0 7776031051 00	
6	3	43	13	0 7774031061 00	0 7776031061 00	
6	6	50	16	0 7774061061 00	0 7776961061 00	0 7777061061 00
8	6	65	20	0 7774061081 00	0 7776061081 00	0 7777061081 00
10	6	58	13		0 7776063101 00	
10	6	65	20	0 777406 110100	0 7776961101 00	0 7777061101 00
12	6	70	25	0 7774061121 00	0 7776961121 00	0 7777061121 00
12	8	70	25		0 7776081121 00	
16	6	70	25	0 7774061161 00	0 7776061161 00	
16	8	70	25	0 7774081161 00		
20	6	70	25			

D Hartmetall-Frässtifte, Zylinder, mit Stirnverzahnung

E Tungsten carbide rotary burrs, cylindrical, with front cut

I Frese rotative in metallo duro, cilindriche, taglio in testa

Unterschiedliche Zahnungen / Different cuts / Dentature diverse



Aluminium
Aluminium
Aluminio

DIN C



DIN MY



Diamant
Diamond
Diamante

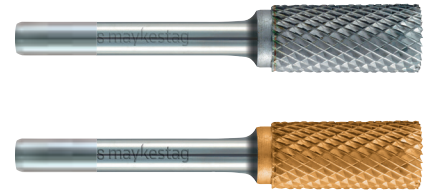
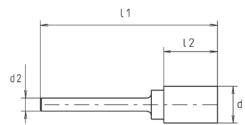




DIN MX




DIN MX

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 215.
Detailed information about the different cuts see on page 215.
Informazioni più dettagliate circa le diverse dentature vedi pagina 215.



d1 mm	d2 mm	l1 mm	l2 mm				
				Code 7788 Art.-Nr.	Code 7781 Art.-Nr.	Code 7782 Art.-Nr.	Code 7783 Art.-Nr.
2	3	38	10				0 7783031021 00
2	3	50	10				
2,5	3	38	12				0 7783031251 00
2,5	3	65	12				
2,5	3	75	12				
3	3	38	14				0 7783031031 00
3	3	50	14				0 7783032031 00
3	3	75	14				0 7783034031 00
4	6	50	14				0 7783061041 00
6	3	43	13				0 7783031061 00
6	6	50	16			0 7782061061 00	0 7783061061 00
8	6	65	20			0 7782061081 00	0 7783061081 00
10	6	58	13				
10	6	65	20	0 7788061101 00		0 7782061101 00	0 7783061101 00
12	6	70	25	0 7788961121 00		0 7782061121 00	0 7783061121 00
16	6	70	25			0 7782061161 00	0 7783061161 00
16	8	70	25				
20	8	70	25				

d1 mm	d2 mm	l1 mm	l2 mm			
				Code 7784 Art.-Nr.	Code 7786 Art.-Nr.	Code 7787 Art.-Nr.
2	3	38	10	0 7784031021 00		
2	3	50	10	0 7784032021 00		
2,5	3	38	12		0 7786031251 00	
2,5	3	65	12	0 7784033251 00		
2,5	3	75	12		0 7786034251 00	
3	3	38	14	0 7784031031 00	0 7786031031 00	0 7787031031 00
3	3	50	14	0 7784032031 00	0 7786032031 00	
3	3	75	14	0 7784034031 00		
4	6	50	14	0 7784061041 00	0 7786061041 00	
6	3	43	13	0 7784031061 00	0 7786031061 00	
6	6	50	16	0 7784061061 00	0 7786961061 00	0 7787061061 00
8	6	65	20	0 7784061081 00	0 7786061081 00	0 7787061081 00
10	6	58	13		0 7786062101 00	
10	6	65	20	0 7784061101 00	0 7786961101 00	0 7787061101 00
12	6	70	25	0 7784061121 00	0 7786961121 00	0 7787061121 00
16	6	70	25	0 7784061161 00	0 7786061161 00	
16	8	70	25	0 7784081161 00		
20	8	70	25	0 7784081201 00		

Hartmetall-Frässtifte
Tungsten carbide rotary burrs
Frese rotative in metallo duro

D Hartmetall-Frässtifte, Walzenrund

E Tungsten carbide rotary burrs, ball nose

I Frese rotative in metallo duro, cilindrica sferica

Unterschiedliche Zahnungen / Different cuts / Dentature diverse



1A
Aluminium
Aluminium
Aluminio



3
DIN MY



6 TiN
DIN MX



1
DIN C



4
Diamant
Diamond
Diamante



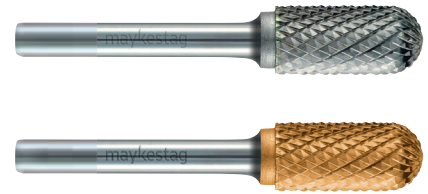
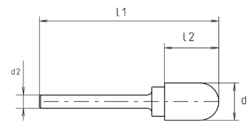
6
DIN MX

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 215.
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DIN
WRC

ISO
C







d1 mm	d2 mm	l1 mm	l2 mm	1A	1	2	3
				Code 7798 Art.-Nr.	Code 7791 Art.-Nr.	Code 7792 Art.-Nr.	Code 7793 Art.-Nr.
3	3	38	14			0 7792031031 00	0 7793031031 00
3	3	50	14				0 7793032031 00
4	3	40	10				0 7793031041 00
4	6	50	14				0 7793061041 00
5	3	42	12				0 7793031051 00
6	3	43	14				0 7793031061 00
6	6	50	16		0 7791061061 00	0 7792061061 00	0 7793061061 00
6	6	150	16				0 7793062061 00
8	6	65	20	0 7798061081 00		0 7792061081 00	0 7793061081 00
10	6	65	20	0 7798061101 00	0 7791061101 00	0 7792061101 00	0 7793061101 00
10	6	70	25				
10	6	150	20				
12	6	70	25	0 7798061121 00	0 7791061121 00	0 7792061121 00	0 7793061121 00
12	6	150	25				
12	8	70	25				
16	6	70	25	0 7798061161 00		0 7792061161 00	0 7793061161 00
16	8	70	25				
20	6	70	25				



d1 mm	d2 mm	l1 mm	l2 mm	4	6	6
				Code 7794 Art.-Nr.	Code 7796 Art.-Nr.	Code 7797 Art.-Nr.
3	3	38	14	0 7794031031 00	0 7796031031 00	0 7797031031 00
3	3	50	14		0 7796032031 00	
4	3	40	10	0 7794031041 00	0 7796031041 00	
4	6	50	14	0 7794061041 00	0 7796061041 00	
5	3	42	12	0 7794031051 00		
6	3	43	14	0 7794031061 00	0 7796031061 00	
6	6	50	16	0 7794061061 00	0 7796061061 00	0 7797061061 00
6	6	150	16	0 7794062061 00	0 7796062061 00	
8	6	65	20	0 7794061081 00	0 7796061081 00	0 7797061081 00
10	6	65	20	0 7794061101 00	0 7796061101 00	0 7797061101 00
10	6	70	25		0 7796063101 00	
10	6	150	20	0 7794062101 00		
12	6	70	25	0 7794061121 00	0 7796061121 00	0 7797061121 00
12	6	150	25	0 7794062121 00		
12	8	70	25		0 7796081121 00	
16	6	70	25	0 7794061161 00	0 7796061161 00	
16	8	70	25	0 7794081161 00		
20	6	70	25	0 7794061201 00		

D Beschreibung der Verzahnungen

E Description of cuts

I Descrizione delle dentature

			
<p>Zahnung 1A (Aluminium) Für Aluminium und Aluminium-legierungen sowie Kunststoffe.</p> <p>Cut 1A (aluminium): Suitable for aluminium and aluminium alloys as well as plastics.</p> <p>Dentatura 1A (alluminio): Per sgrossatura alluminio, leghe di alluminio, plastica.</p>	<p>Zahnung 1 (DIN C) Zum Entgraten nicht gehärteter Stähle, Leichtmetalle, Legierungen und Hartgummi.</p> <p>Cut 1 (DIN C): Suitable for deburring non-hardened steels, soft steels, alloys and hard plastics.</p> <p>Dentatura 1 (DIN C): Sgrossatura di acciai non temprati, metalli leggeri, leghe, gomma dura.</p>	<p>Zahnung 2 Für Stähle hoher Festigkeit, Inox, Stahlguss, Schweißnähte und Messing.</p> <p>Cut 2: Suitable for steels with high tensile strength, inox, cast steels, welding seams and brass</p> <p>Dentatura 2: Adatte per acciai ad alta resistenza, acciai inox, acciaio fuso, cordoni di saldatura, ottone.</p>	<p>Zahnung 3 (DIN MY) Für allgemeine Arbeiten wie Entgraten, Fasen, Kantenbrechen mit sauberer Oberfläche. Für Stähle mit hoher Festigkeit, Schweißnähte.</p> <p>Cut 3 (DIN MY): For general purposes such as deburring, chamfering and smoothing edges with clean surface. Suitable for steels with high tensile strength and welding seams.</p> <p>Dentatura 3 (DIN MY): Per lavorazioni universali di sgrossatura, smussatura, spianatura degli spigoli, con ottima finitura della superficie. Adatte per acciai ad alta resistenza, cordoni di saldature.</p>

	
<p>Zahnung 4 (Diamant): Hohe Oberflächengüte für gehärtete Stähle, Schweißnähte hoher Festigkeit.</p> <p>Cut 4 (diamond): Suitable for hardened steels with excellent surface quality and welding seams with high tensile strength.</p> <p>Dentatura 4 (diamante): Ottima finitura delle superficie su acciai temprati, e saldature alta resistenza.</p>	<p>Zahnung 6 (DIN MX): Mit dieser Universalverzahnung werden auch bei härtesten Werkstoffen und Schweißnähten glatte Oberflächen erzielt, ideal für den Werkzeug- und Formenbau.</p> <p>Cut 6 (DIN MX): With this universal cutting profile even hardest materials and welding seams can be machined with best finishing quality. Ideal for the tool and mould industry</p> <p>Dentatura 6 (DIN MX): Questa dentatura universale permette di ottenere delle superfici ottimali anche su acciai e saldature ad alta resistenza; ideale per acciai da utensili e acciai da stampi.</p>



Hartmetall-Frässtifte
Tungsten carbide rotary burrs
Frese rotative in metallo duro