DELFER®

CARBIDE CUTTING TOOLS

MILLING LINE

CARBIDE CUTTING TOOLS

VIA AOSTA 22 - 10092 BEINASCO (TO) - ITALY
TEL. +39 011 3971620 - FAX +39 011 3499779
E-mail:delfer@delfer.it - www.delfer.it

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MILLING LINE

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BMC30/M


AGATHON
250 PA CNC

INDICE • INDEX • INHALT

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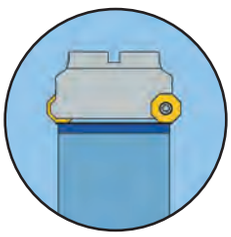
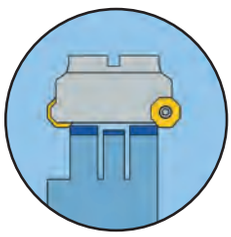
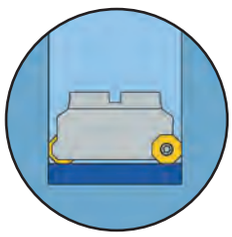


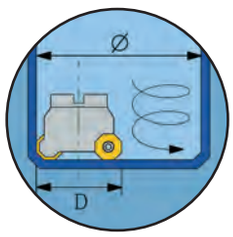
Spianatura
Facemilling
Planfräsen



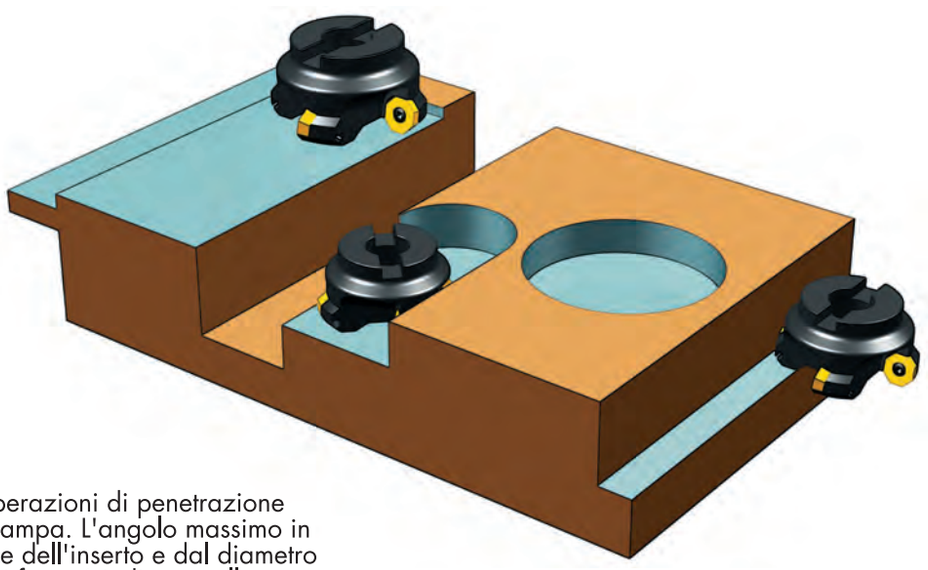
Lavorazione a taglio interrotto
Demanding intermittent machining
Schere Berabeitung bei unterbrochenem Schnitt



Esecuzione di cave
Full slot milling
Vollnutenfräsen



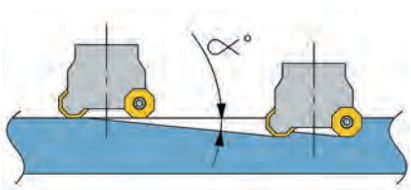
Interpolazione elicoidale
Helical interpolation
Zirkularfräsen



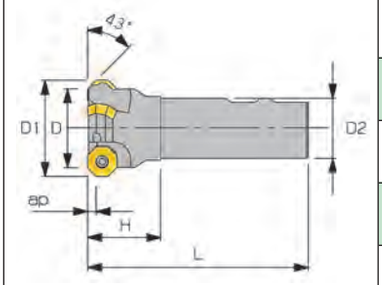
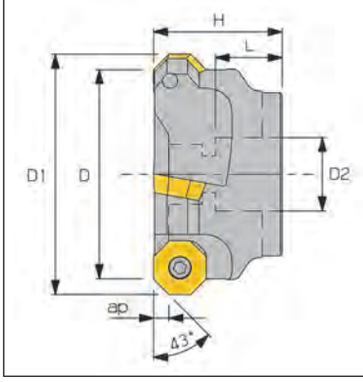
FRESATURA IN RAMPA Nelle operazioni di penetrazione è preferibile usare il sistema in rampa. L'angolo massimo in rampa dipende dalla dimensione dell'inserto e dal diametro della fresa.L'angolo $\alpha°$ per ogni fresa é indicato nella tabella qui di seguito.

RAMPING In penetrating operations ramping is preferred. The maximum ramping angle is dependent on insert size and cutter diameter.The angle $\alpha°$ for each cutter is presented in the table below.

EINTAUCHEN ALS RAMPE Wir empfehlen mittels einer Rampe einzutauchen. Der maximale Eintauchwinkelist abhängig von der Plattengröße und dem Fräserdurchmesser. Der Winkel $\alpha°$ für jeden Fräser ist in der untenstehenden Tabelle angegeben.

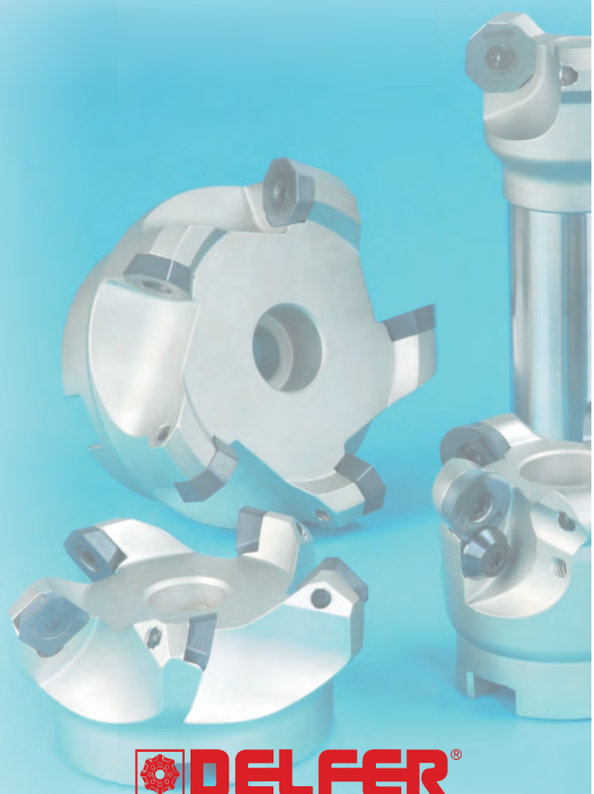


CODE N°	D	Fresatura in rampa Ramping Schräges Eintauchen $\alpha°$	Interpolazione elicoidale Helical interpolation Zirkularfräsen	
			∅ MIN	∅ MAX
801222	32	12	53	82
801523	40	9	69	98
802023	50	7	79	118
802030	50	7	79	118
802140	63	5 30'	115	144
803050	80	4	149	178
804060	100	3	189	218
805070	125	2	239	268

	CODE N°	D	D1	D2	L	H	Z	ap	
	801222	32	42	32	120	40	2	4,4	ODEW150508 ODET 150508
	801523	40	50	32	120	40	3	4,4	
	802023	50	60	32	120	40	3	4,4	
	802030	50	60	22	20	40	3	4,4	ODEW150508 ODET 150508
	802140	63	73	22	20	40	4	4,4	
	803050	80	90	27	25	50	5	4,4	
	804060	100	110	32		50	6	4,4	
	805070	125	135	40		63	7	4,4	
	806080	160	170	40/40		63	8	4,4	

RICAMBI • SPARES • ERSATZTEILE

CODE N°		
801222	VS5N (torx20)	CV5 (torx20)
801523		
802023		
802030		
802140		
803050		
804060		
805070		
806080		



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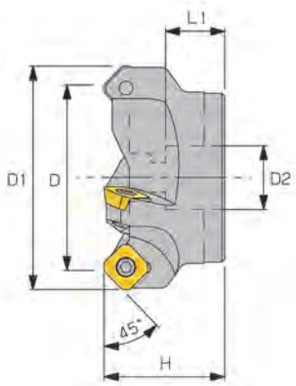
INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	ODEW150508	●	●		●	●	●			●
	ODET150508	●	●			●	●			

PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,15	0,25	0,35	0,45
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK25G	235/175	180/140	130/105	105/90
				RK40G	210/180	160/130	120/100	110/80
	Acciai legati Alloy steel Vergütete Formstähle	900-1200		RK25G	160/130	125/105	115/90	
				RK40G	150/120	120/100	110/90	100/80
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200		RK40G	120/100	105/90	95/85	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RB10	250/230	210/190	190/170	160/140
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		190/150	170/130	140/110	110/90

MULTIDEX 45



CODE N°	D	D1	D2	H	L1	Z	ap	
451030	40	52	16	40	19	3	5,5	SEHW1204AF SEHT 1204AF
452040	50	62	22	40	20	4	5,5	
452150	63	75	22	40	20	5	5,5	
453050	80	92	27	50	25	5	5,5	

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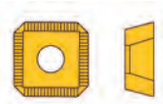
CODE N°		
451030	VS5N (torx20)	CV5 (torx20)
452040		
452150		
453050		

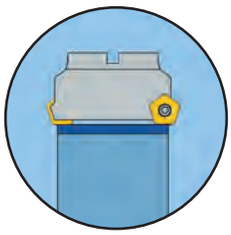
INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	SEHW1204AF	●	●		●	●	●			●
	SEHT1204AF	●	●			●	●			

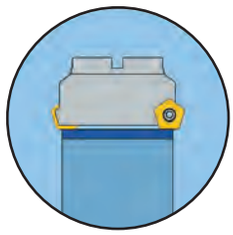
PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,20	0,30	0,40
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK25G	235/175	180/130	135/110	115/90
				RK40G	210/170	170/120	125/100	110/80
	Acciai legati Alloy steel Vergütete Formstähle	900-1200		RK25G	160/125	135/110		
				RK40G	145/125	120/105	100/90	
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200		RK40G	105/90			
Acciaio inossidabile Stainless steel Rostfreie Stähle				RK40G	160/120	145/120		
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RB10	180/140	145/120	130/90	105/80
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		150/110	120/90		
Leghe di Alluminio Aluminium alloys Aluminiumlegierungen			30-100	ZH20	1000/800	870/750	760/600	620/500

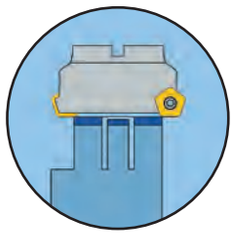
PENTADEX 66



Profondità di passata sino a 10 mm.
Depth of cut until 10 mm.
Schnttiefe bis 10 mm.



Sgrossatura e finitura speculare
Roughing and mirror finishing
Schrupp-und Schlichtbearbeitung

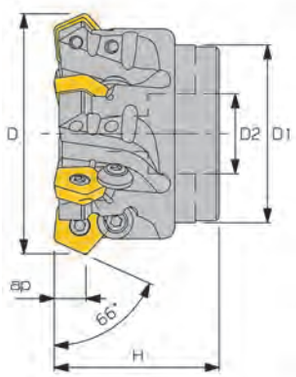


Indicato nella lavorazione a taglio interrotto
Suitable for interrupted cut operation
Einsetzbar für unterbrochenen Schnitt

Fresa a spianare per operazioni di sgrossatura e finitura con basso assorbimento di potenza.

Face cutter for finishing and roughing operation with very low power absorption.

Planfräser für Fein-und Schruppbearbeitung mit sehr geringer Kraftaufnahme.



CODE N°	D	D1	D2	H	L1	Z	ap	
662150	66	48	27	55	27	5	10	PDHW 120420
663060	80	60	27	55	27	6	10	
664070	100	80	32	55		7	10	

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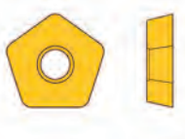
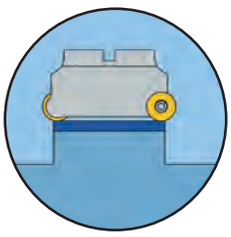
CODE N°			
662150	VS5N (torx20)	ST30	CV5 (torx20)
663060			
664070			

INSERTI • INSERTS • WENDEPLATTEN

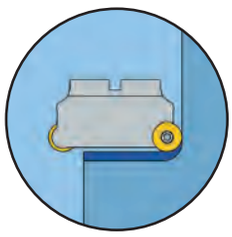
	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	PDHW120420		●		●		●			●

PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

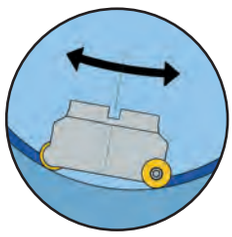
		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,25	0,35	0,45
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK40G	220/180	175/140	120/100	105/85
	Acciai legati Alloy steel Vergütete Formstähle	900-1200			150/130	125/110	105/90	90/75
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200			120/100	105/90	90/75	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RB10	230/200	205/170	160/140	130/110
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		170/150	140/120	115/90	100/80
Leghe di Alluminio Aluminium alloys Aluminiumlegierungen			30-100	ZH20	800/700	720/680	700/650	620/500



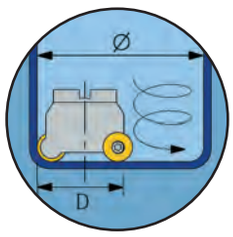
Spianatura
Facemilling
Planfräsen



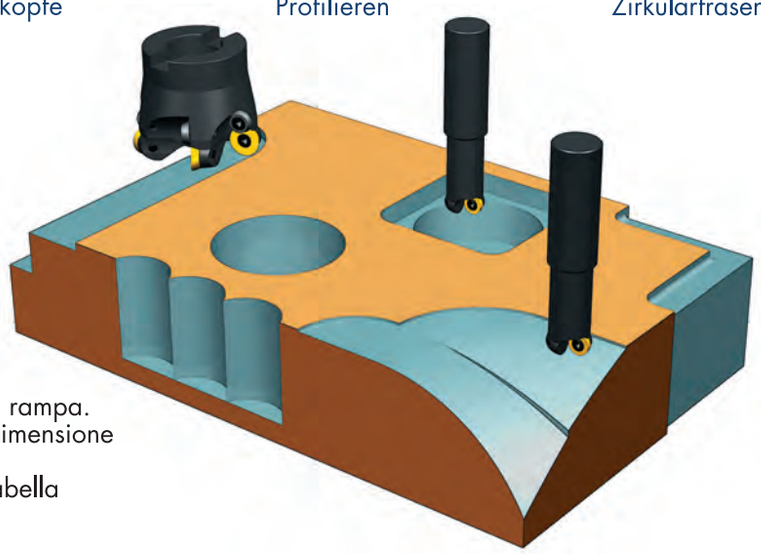
Spallamenti retti
Shoulder milling
Eckmesserköpfe



Profilatura
Profiling
Profilieren



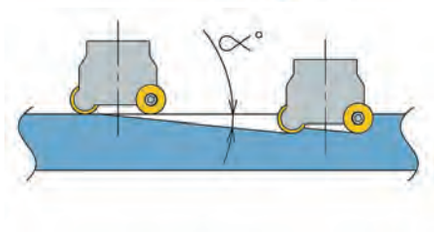
Interpolazione elicoidale
Helical interpolation
Zirkularfräsen



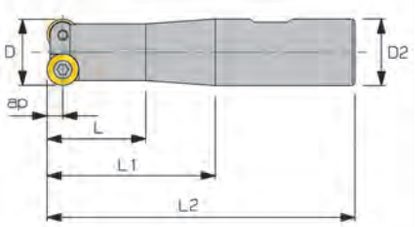
FRESATURA IN RAMPA Nelle operazioni di penetrazione é preferibile usare il sistema in rampa. L'angolo massimo in rampa dipende dalla dimensione dell'inserto e dal diametro della fresa. L'angolo α° per ogni fresa é indicato nella tabella qui di seguito.

RAMPING In penetrating operations ramping is preferred. The maximum ramping angle is dependent on insert size and cutter diameter.The angle α° for each cutter is presented in the table below.

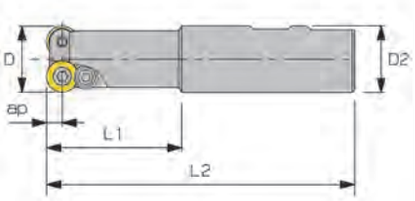
EINTAUCHEN ALS RAMPE
Wir empfehlen mittels einer Rampe einzutauchen. Der maximale Eintauchwinkelist abhängig von der Plattengröße und dem Fräserdurchmesser. Der Winkel α° für jeden Fräser ist in der untenstehenden Tabelle angegeben.



CODE N°	D	Fresatura in rampa Ramping Schräges Eintauchen α°	Interpolazione elicoidale Helical interpolation Zirkularfräsen			
			d=12		d=16	
			∅ MIN	∅ MAX	∅ MIN	∅ MAX
CX2532-35	25	21°	38	48		
CX3233-35	32	12°	52	62		
CX4034	40	14°			64	78
CX4015-42	42	6° 30′	72	82		
CX5051	50	5° 30′	88	98		
CX5042	50	10°			84	98
CX5004-52	52	10°			86	100
CX5015-52	52	5° 20′	92	102		
CX6316	63	4°	114	124		
CX6325	63	7° 20′			110	124
CX6506-66	66	3° 50′			116	130
CX6505-66	66	7°	120	130		
CX8006	80	6°			144	158
CX10007	100	4° 30′			184	198
CX12508	125	3° 20′			234	248



CODE N°	D	D2	L	L1	L2	Z	ap	
CX1231	12	16	20	40	90	2	3,5	RDHX0701MOT
CX1232	12	16	20	60	110	2	3,5	
CX1233	12	16	20	80	130	2	3,5	
CX1531	15	16	40	40	90	2	3,5	RDHX0702MOT
CX1532	15	16	40	60	110	2	3,5	
CX1533	15	20	40	80	130	2	3,5	
CX1534	15	20	40	100	150	2	3,5	
CX1535	15	25	40	120	178	2	3,5	
CX2021	20	20	40	40	92	2	5	RDH. 1003MOT RDMX1003MOT
CX2022	20	20	60	60	112	2	5	
CX2023	20	25	60	80	138	2	5	
CX2024	20	25	60	100	158	2	5	
CX2025	20	25	60	120	178	2	5	



CX2532-35	25	25		74	130	2	6	RDH. 12T3MOT RDMX12T3MOT
CX3233-35	32	32		90	150	3	6	
CX4034	40	32		110	170	3	8	RDH. 1604MOT RDMX1604MOT

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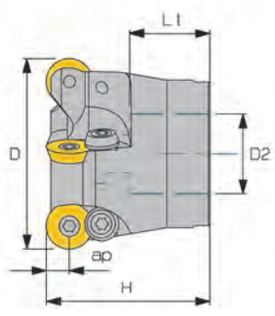
CODE N°			
CX12..	VS2M (torx8)		CV002 (torx20)
CX15..	VS2 (torx8)		
CX20..	VS35L (torx15)		CV004 (torx15)
CX2532-35 CX3233-35		ST40	
CX4034	VS5N (torx20)	ST30	CV5 (torx20)



CODE N°	D	D2	L1	H	Z	ap	
CX4015-42	42	16	19	42	5	6	RDH. 12T3MOT RDMX12T3MOT
CX5051	50	22	22	50	5	6	
CX5015-52	52	22	22	50	5	6	
CX6316	63	27	27	55	6	6	
CX6506-66	66	27	27	55	6	6	
CX5042	50	22	22	50	4	8	RDH. 1604MOT RDMX1604MOT
CX5004-52	52	22	22	50	4	8	
CX6325	63	27	27	55	5	8	
CX6505-66	66	27	27	55	5	8	
CX8006	80	27	27	55	6	8	
CX10007	100	32		55	7	8	
CX12508	125	40		55	8	8	

RICAMBI • SPARES • ERSATZTEILE

CODE N°			
CX4015-42	VS35L (torx15)	ST40	CV004 (torx15)
CX5051			
CX5015-52			
CX6316			
CX6506-66			
CX5042	VS5N (torx20)	ST30	CV5 (torx20)
CX5004-52			
CX6325			
CX6505-66			
CX8006			
CX10007			
CX12508			

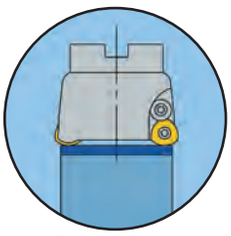
INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	RDHX0701MOT		●		●		●			●
	RDHX0702MOT		●		●		●			●
	RDHX1003MOT	●	●	●		●	●	●		
	RDMX1003MOT		●				●			
	RDHX12T3MOT	●	●		●	●	●			●
	RDMX12T3MOT		●				●			
	RDHX1604MOT		●		●		●			●
	RDMX1604MOT	●	●		○	●	●			○
	RDHT1003MOT			●				●		
	RDHT12T3MOT		●	●			●	●		
	RDHT1604MOT		●				●			

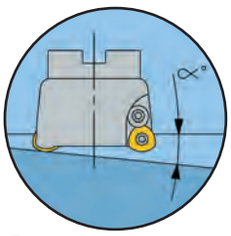
PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,15	0,25	0,40	0,50
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK25G	225/165	180/140	130/100	110/90
				RK40G	200/150	160/125	120/95	105/80
	Acciai legati Alloy steel Vergütete Formstähle	900-1200		RK25G	160/130	135/110	120/100	
				RK40G	150/115	125/110	115/95	100/80
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200		RK40G	125/105	110/100	100/80	85/75
Acciaio inossidabile Stainless steel Rostfreie Stähle				RK40G	160/120			
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK03E RB10	210/170	180/160	165/130	150/110
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		180/140	165/120	140/100	120/90

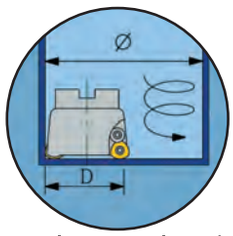
JETMILL



Spianatura
Facemilling
Planfräsen



Fresatura in rampa
Ramping
Eintauchen ais Rampe

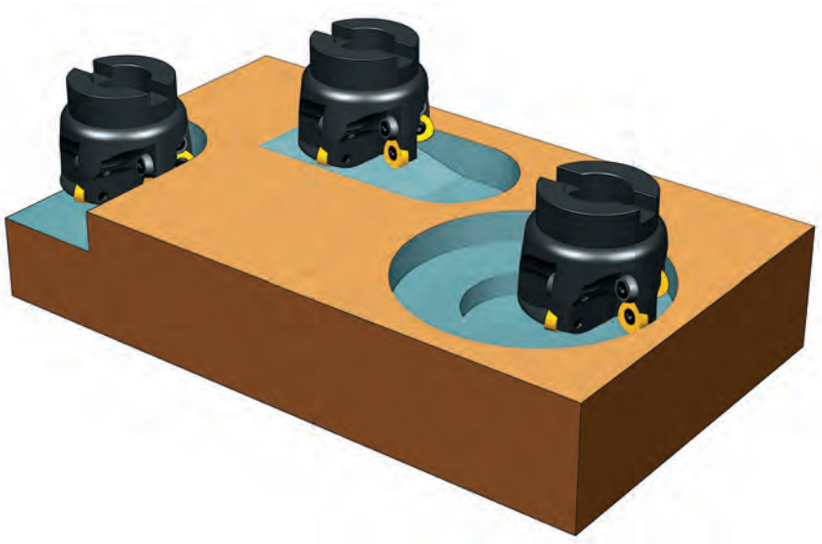


Interpolazione elicoidale
Helical interpolation
Zirkularfräsen

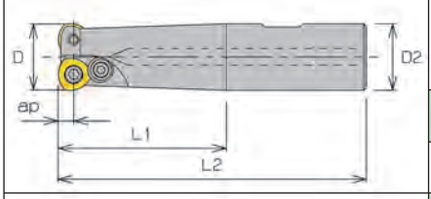
JET MILL offre numerosi vantaggi. Particolarmente adatta per lavori di svuotamento, non richiede preforo e consente avanzamenti molto elevati.Il sistema di doppio serraggio garantisce massima aderenza e stabilità dell'inserto.

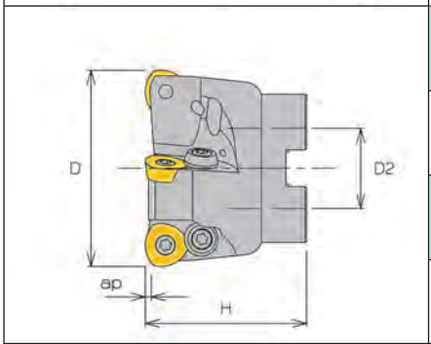
JET MILL offers several advantages. It is particularly suitable for empting operation and it allows machining with high feed rate. The double clamping system guarantees the insert maximum adherence and stability.

JET MILLbringt mehre Vorteile. Er ist geeignet für Ausräumopretaionen, er benötigt keine Vorbohrungen und er erlaubt Bearbeitungen mit hohen Vorschüben. Das doppelte Klemmsystem garantiert beste Postionierung und Stabilität.



CODE N	D	ap	Fresatura in rampa Ramping Schräges Eintauchen α°	Interpolazione elicoidale Helical interpolation Zirkularfräsen einer Bohrung ins Volle	
				∅ MIN	∅ MAX
JM2532	25	1,5	14	33	47
JM3233	32	1,5	11	47	61
JM4204	42	1,5	7	64	79
JM5204	52	2,0	5	76	101
JM6605	66	2,0	4 10'	104	129
JM8005	80	2,0	2 35'	132	157





CODE N	D	D2	H	ap	L1	L2	Z	
JM2532	25	25		1,5	65	150	2	JDHW10T310
JM3233	32	32		1,5	120	200	3	
JM4204	42	16	42	1,5			4	
JM5204	52	22	50	2,0			4	JDHW14M520
JM6605	66	27	55	2,0			5	
JM8005	80	27	55	2,0			5	

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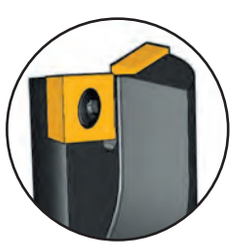
CODE N				
JM2532	VS35L (torx15)	ST40	CV004 (torx15)	
JM3233				
JM4204				
JM5204	VS5N (torx20)	ST30		CV5 (torx20)
JM6605				
JM8005				

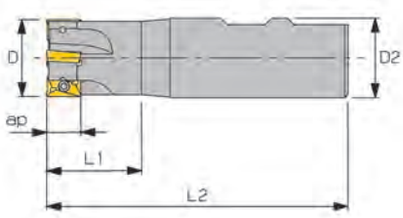
INSERTI • INSERTS • WENDEPLATTEN

CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
JDHW10T310		●		●		●			●
JDHW14M520		●		●		●			●

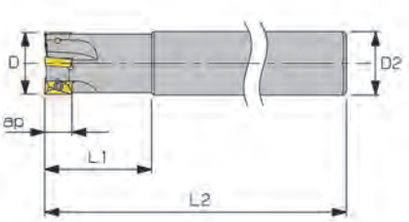
PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,70	1,0	2,0	3,0
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK40G	250/120	230/115	200/100	180/90
	Acciai legati Alloy steel Vergütete Formstähle	900-1200			200/110	185/100	170/95	155/80
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200			150/90	130/80	110/70	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK40G RB10	250/150	230/120	200/110	180/100
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		230/120	200/105	170/90	150/80

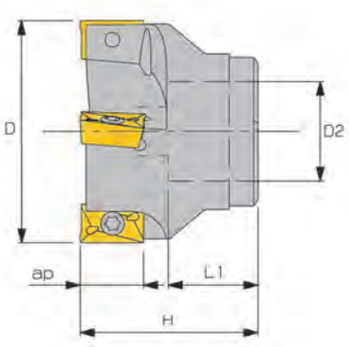




CODE N°	D	D2	ap	L1	L2	Z	
MH1021	10	16	10	24	80	1	APKT1003PDR
MH1221	12	16	10	26	80	1	
MH1622	16	16	10	30	85	2	
MH1722	17	16	10	30	85	2	
MH2023	20	20	10	30	90	3	
MH2123	21	20	10	30	90	3	
MH2524	25	25	10	30	95	4	
MH3225	32	25	10	30	95	5	



CODE N°	D	D2	ap	L1	L2	Z	
MH1021L	10	16	10	31	160	1	APKT1003PDR
MH1221L	12	16	10	31	160	1	
MH1622L	16	16	10	41	180	2	
MH1722L	17	16	10	25	180	2	
MH2022L	20	20	10	41	200	2	
MH2023L	20	20	10	41	200	3	
MH2122L	21	20	10	25	250	2	
MH2532L	25	25	13,5	50	200	2	ADKT1505PDR
MH3233L	32	32	13,5	50	250	3	
MH4033L	40	32	13,5	190	250	3	



CODE N°	D	D2	ap	L1	H	Z	
MH401006	40	22	10	20	40	6	APKT1003PDR
MH501007	50	22	10	20	40	7	
MH631008	63	22	10	20	40	8	
MH501505	50	22	13,5	20	40	5	ADKT1505PDR
MH631506	63	22	13,5	20	40	6	
MH801507	80	27	13,5	25	50	7	
MH401604	40	16	15	20	40	4	APKT1604PDR
MH501605	50	22	15	20	40	5	
MH631606	63	22	15	20	40	6	
MH801607	80	27	15	25	50	7	

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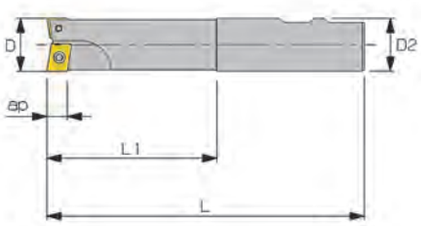
CODE N°				
MH1021	MH1021L	MH401006	VS2 (Torx8)	CV002 (torx8)
MH1221	MH1221L	MH501007		
MH1622	MH1622L	MH631008		
MH1722	MH1722L			
MH2023	MH2022L			
MH2123	MH2023L			
MH2524	MH2122L			
MH3225				
	MH2532L	MH501505	VS4 (Torx15)	CV004 (torx15)
	MH3233L	MH631506		
	MH4033L	MH801507		
		MH401604		
		MH501605		
		MH631606		
		MH801607		

INSERTI • INSERTS • WENDEPLATTEN

CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
APKT1003PDR		●				●			
APKT1604PDR		●				●			
ADKT1505PDR		●				●			



CODE N°	D	D2	L	L1	ap	Z	
MN2032	20	20	106	56	6	2	1CCMW060208 1ADGW100308
MN2032L	20	25	130	65	6	2	1CCMW060208 1ADGW100308
MN2532L	25	25	150	80	9	2	1CCMW09T308 1ADGW130308
MN3232L	32	32	170	90	12	2	1CCMW120408 1APGW160408

RICAMBI • SPARES • ERSATZTEILE

CODE N°		
MN2032 MN2032L	VS2-VS4T (torx8)-(torx15)	CV002-CV004 (torx8)-(torx15)
MN2532L	VS4-VS4T (torx15)	CV004 (torx15)
MN3232L	VS5N (torx20)	CV5 (torx20)

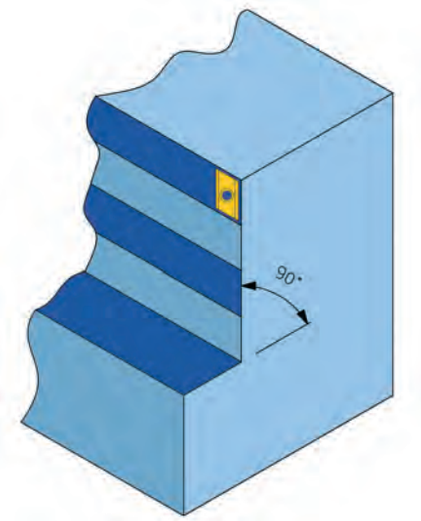
INSERTI • INSERTS • WENDEPLATTEN

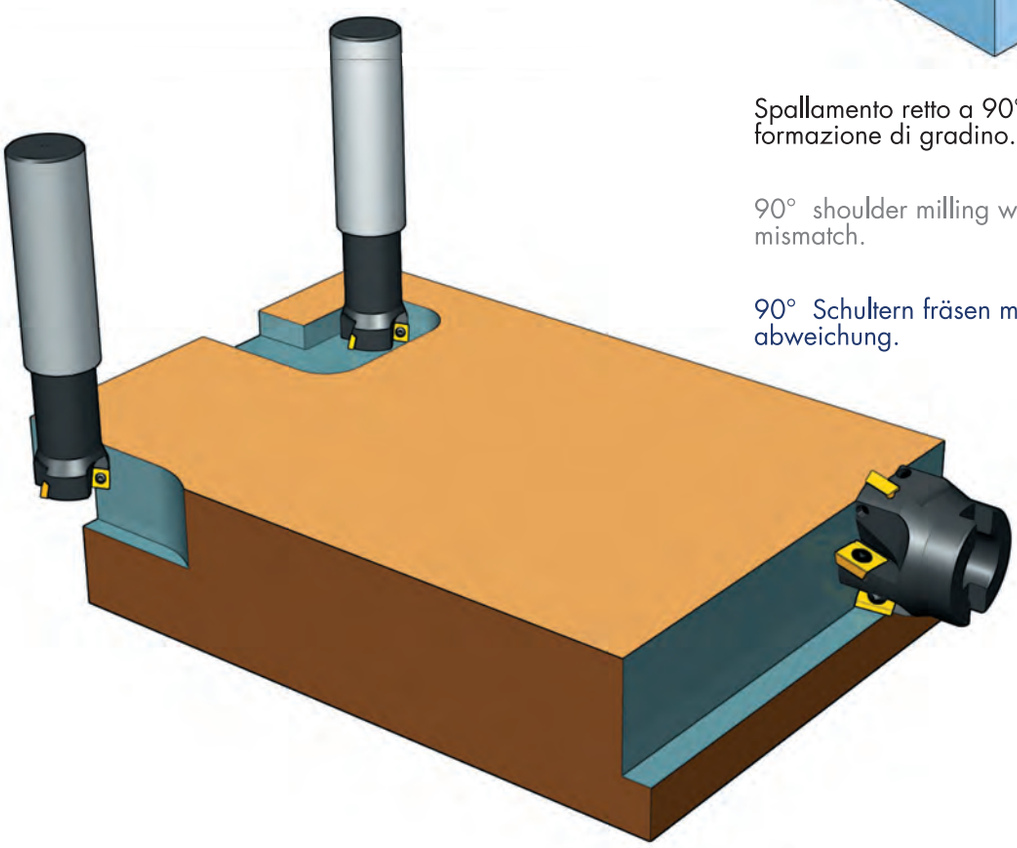
	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	CCMW060208		●				●			
	CCMW09T308		●				●			
	CCMW120408		●				●			
	ADGW100308		●		●		●			●
	ADGW130308		●				●			
	APGW160408		●				●			

JET 90

Finitura spallamenti retti
Finishing shoulder milling
Schlichten Eckmesserköpfe

Spianatura di finitura
Finishing facemilling
Schlichten planfräsen

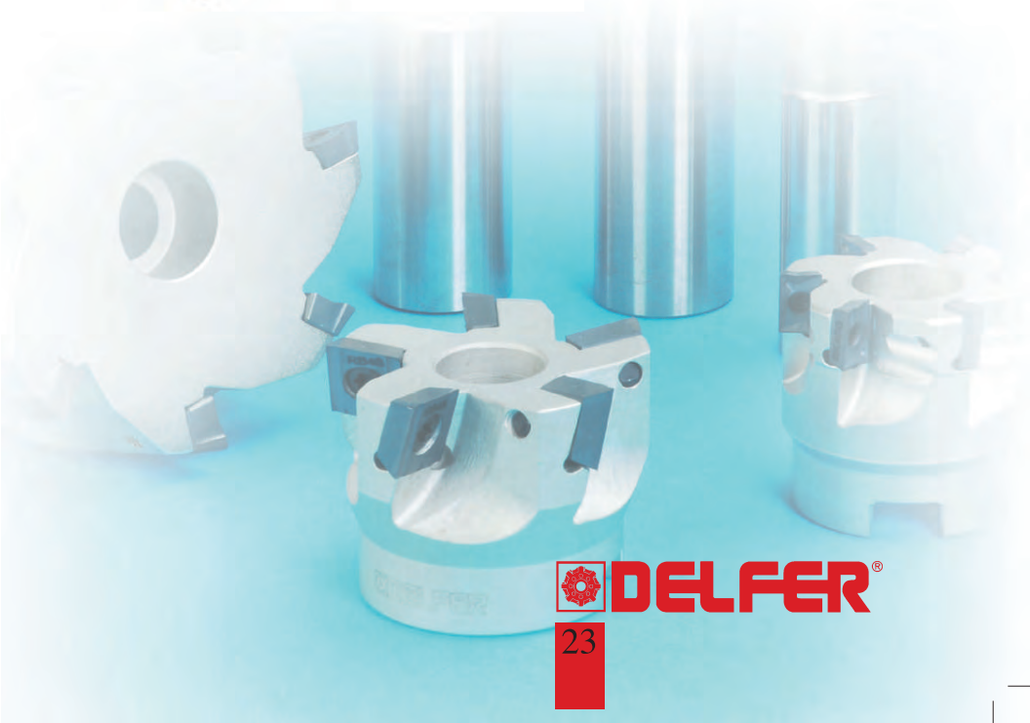


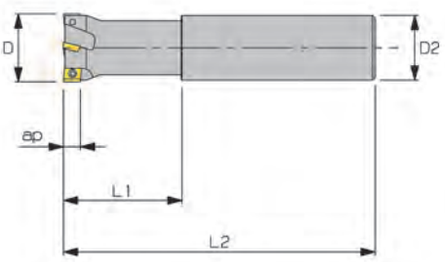


Spallamento retto a 90° con minima formazione di gradino.

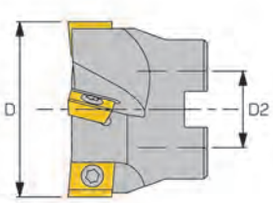
90° shoulder milling with minimized mismatch.

90° Schultern fräsen mit minimaler abweichung.





CODE N°	D	D2	H	ap	L1	L2	Z	
JE1632	16	16		10	30	90	2	ADHT1003PER
JE2033	20	20		10	40	110	3	
JE2533	25	25		10	45	120	3	
JE3234	32	32		10	50	120	4	
JE4005	40	16	36	10			5	ADHT1003PER
JE5005	50	22	40	14			5	ADHT1404PER
JE6306	63	22	40	14			6	



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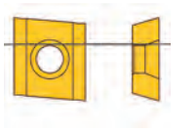
CODE N°			
JE1632	VS2 (torx8)	CV002 (torx8)	
JE2033			
JE2533			
JE3234			
JE4005			
JE5005	VS5N (torx20)		CV5 (torx20)
JE6306			

JET 90

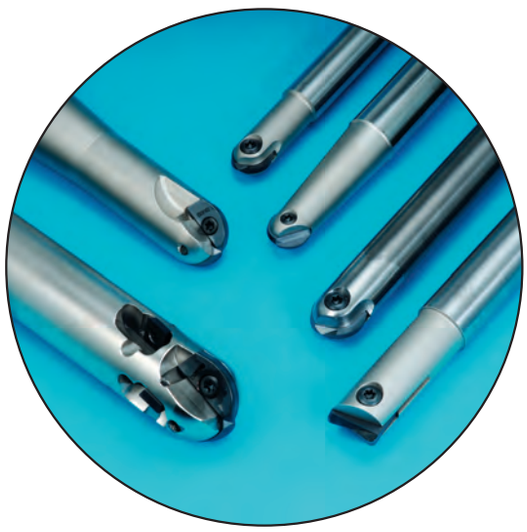
INSERTI • INSERTS • WENDEPLATTEN



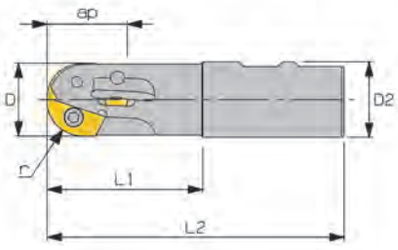
CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
ADHT1003PER		●				●			
ADHT1404PER		●				●			

PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

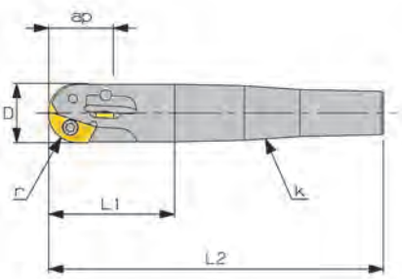
		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,15	0,20	0,25
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK40G	200/140	180/130	155/120	145/115
	Acciai legati Alloy steel Vergütete Formstähle	900-1200			160/125	145/120	130/110	
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200			135/115	120/105	105/90	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK40G	170/110	140/100	120/85	100/70
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		130/90	110/65		



MILLCOP MG



CODE N°	D	D2	K	ap	L1	L2	r	Z	
MG2532	25	25		15	60	117	12,5	2	2RCCW190412
MG2532L	25	32		15	110	170	12,5	2	
MG3234	32	32		31	65	125	16	2	2RCCW230516 2SDLW090308
MG3236L	32	32		45	120	180	16	2	2RCCW230516 4SDLW090308



CODE N°	D	D2	K	ap	L1	L2	r	Z	
MG2542	25		CM3	15	60	146	12,5	2	2RCCW190412
MG2542L	25		CM4	15	110	219	12,5	2	
MG3244	32		CM4	31	65	174	16	2	2RCCW230516 2SDLW090308
MG3244L	32		CM4	31	90	199	16	2	
MG3244XL	32		CM4	45	120	228	16	2	2RCCW230516 4SDLW090308
MG3246L	32		CM5	45	120	256	16	2	

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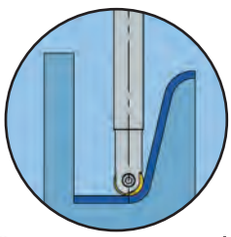
CODE N°				
MG2532	VS40C (torx15)			CC4 (torx15)
MG2532L				
MG2542				
MG2542L				
MG3234	VS50C (torx20)	VS4T (torx15)		CC4 (torx15)
MG3236L				
MG3244				
MG3244L				
MG3244XL				
MG3246L				CC5 (torx20)

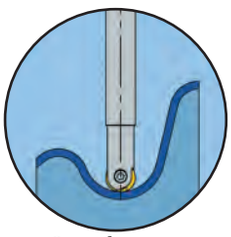
INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	RCCW190412		●				●			
	RCCW230516		●				●			
	SDLW090308	●	●			●	●			

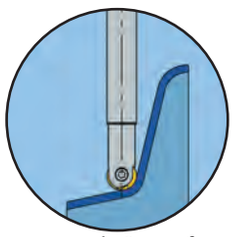
COPIDRILL CD • COPIBALL



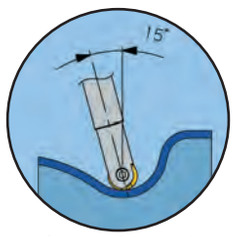
Copiatura in generale
General copying
Allgemeines kopierfräsen



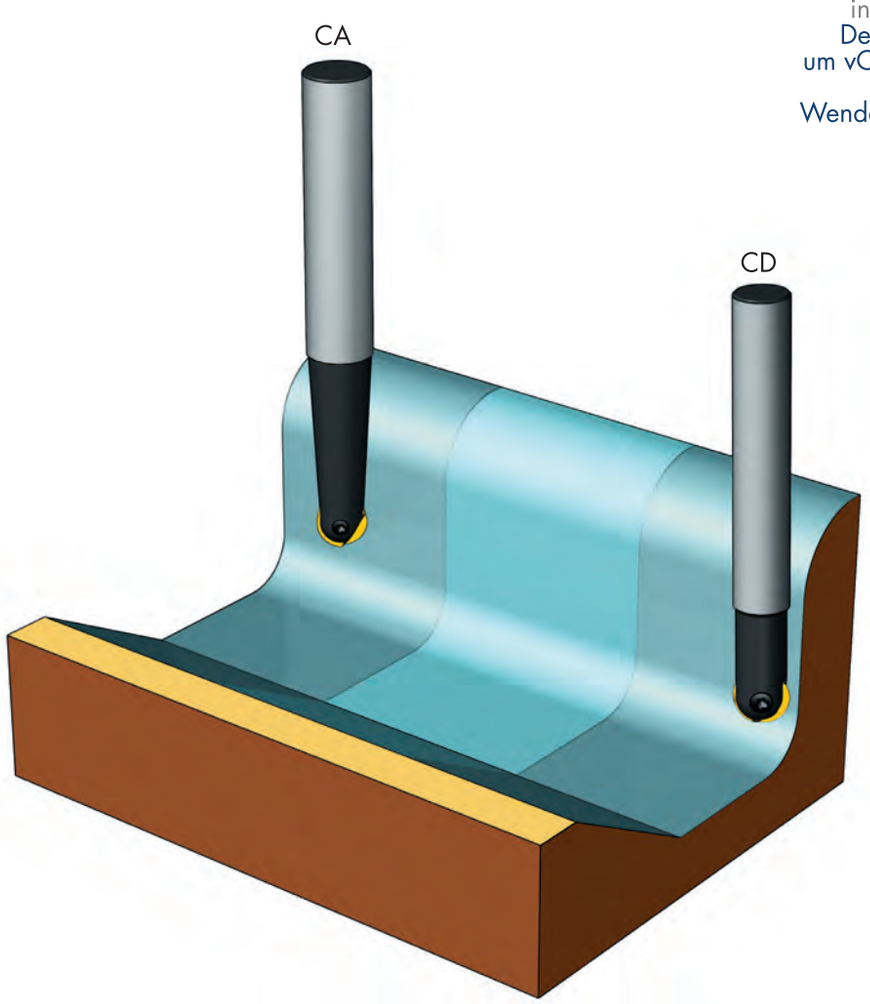
Semifinitura
Semifinishing
Vorschlichten



Copiatura di Superfinitura
Superfinishing for copy milling
Super-Schlichten für die Kopierbearbeitung



Inclinare l'asse fresa di 10° -15° elimina la Vc.0, e aumenta a durata dell'inserto
Tilt the cutter axis of 10° -15° decrease the Vc.0 and increase the insert's life
Den Fräser 10° -15° anstellen, um vC=0 zu vermeiden und die Lebensdauer der Wendeschneidplatte zu erhöhen



COPIDRILL: frese di semifinitura e finitura in copiatura, consentono di ottenere una buona finitura impiegando elevate velocità di taglio.

COPIDRILL: copying cutters in semi-finishing and finishing operation, permit to have a good finished surface using high cutting speed.

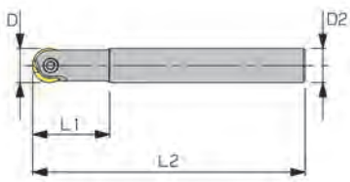
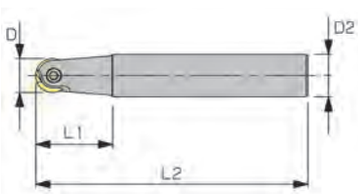
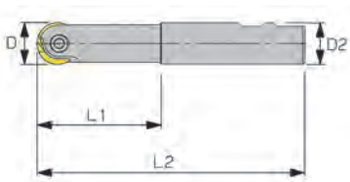
COPIDRILL: Kopierfräser für die Fein-und Feinstbearbeitung zum Erzielen von höchsten Oberflächengüten bei hohen Schnittgeschwindigkeiten.

COPIBALL: frese di finitura e super-finitura, consentono di ottenere una superficie finita speculare impiegando un'elevata velocità di taglio.

COPIBALL: finishing and super-finishing cutters, permit to have the specular finished surface together with high cutting speed.

COPIBALL: Schlicht und Super-Schlichtfräser für höchste Oberflächengüten beim HSC-Fräsen und öknomisches Arbeiten.

COPIDRILL CD

	CODE N°	D	D2	L1	L2	
	CD1233	12	12	32	130	RCN12..
	CD1234	12	12	46	150	
	CD1633	16	16	36	140	RCN16..
	CD1634	16	16	53	160	
	CD2033	20	20	45	160	RCN20..
	CD2034	20	20	61	175	
	CD2533	25	25	45	160	RCN25..
	CD2534	25	25	70	190	
	CD0835	8	12	46	150	RCN08..
	CD1035	10	12	46	150	RCN10..
	CD1235	12	16	58,5	160	RCN12..
	CD1635	16	20	65	175	RCN16..
	CD2035	20	25	76	190	RCN20..
	CD2535	25	32	98	210	RCN25..
	CD1231	12	12	35	80	RCN12..
	CD1232	12	12	46	100	
	CD1631	16	16	35	83	RCN16..
	CD1632	16	16	53	110	
	CD2031	20	20	45	95	RCN20..
	CD2032	20	20	61	125	
	CD3232	32	32	80	140	RCN32..

RICAMBI • SPARES • ERSATZTEILE

CODE N°		
CD08..	VS08 (torx8)	CV002 (torx8)
CD10..	VS10 (torx8)	
CD12..	VS12 (torx20)	CV005 (torx20)
CD16..	VS16 (torx20)	
CD20..	VS20 (torx20)	
CD25..	VS25 (torx20)	
CD32..	VS32 (torx20)	

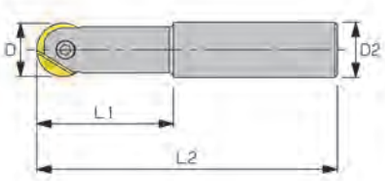
COPIDRILL CD

INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	RCN08			●				●	●	
	RCN10			●				●	●	
	RCN12			●				●	●	
	RCN16			●				●	●	
	RCN20			●				●	●	
	RCN25			●				●	●	
	RCN32			●				●	●	
	RCN08AL			●				●		
	RCN10AL			●				●		
	RCN12AL			●				●		
	RCN16AL			●				●		
	RCN20AL			●				●		
	RCN25AL			●				●		
	RCN32AL			●				●		

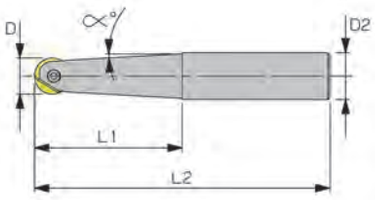
PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,20	0,30	0,40
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werkzeugstähle	400-900		RK03E RK03CF	250/180	220/160	200/150	180/135
	Acciai legati Alloy steel Vergütete Formstähle	900-1200			220/150	200/140	180/125	
	Acciai per stampi Mould steel Durchgehärtete Werkzeugstähle	>1200			160/125	140/105	120/90	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK03E RK03CF	320/200	290/165	250/140	210/120
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		270/180	240/130	200/105	150/90
Leghe di Alluminio Aluminium alloys Aluminiumlegierungen			30-100	ZK03M	1100/900	1000/850	900/600	800/550

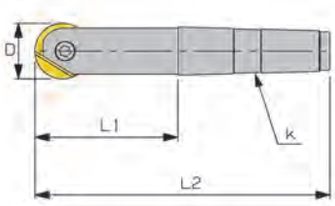


CODE N°	D	D2	L1	L2	
CA0822	8	12	35	92	RCA08
CA0823	8	12	53	110	
CA1022	10	12	35	92	RCA10
CA1023	10	12	53	110	
CA1222	12	12	32	100	RCA12
CA1223	12	12	36	125	
CA1224	12	12	46	150	
CA1622	16	16	32	100	RCA16
CA1623	16	16	38	125	
CA1624	16	16	50	160	
CA2022	20	20	40	115	RCA20
CA2023	20	20	50	150	
CA2024	20	20	60	190	
CA2522	25	25	46	125	RCA25
CA2523	25	25	50	150	
CA2524	25	25	64	200	
CA3222	32	32	50	130	RCA32
CA3223	32	32	60	190	
CA3224	32	32	76	250	

COPIBALL



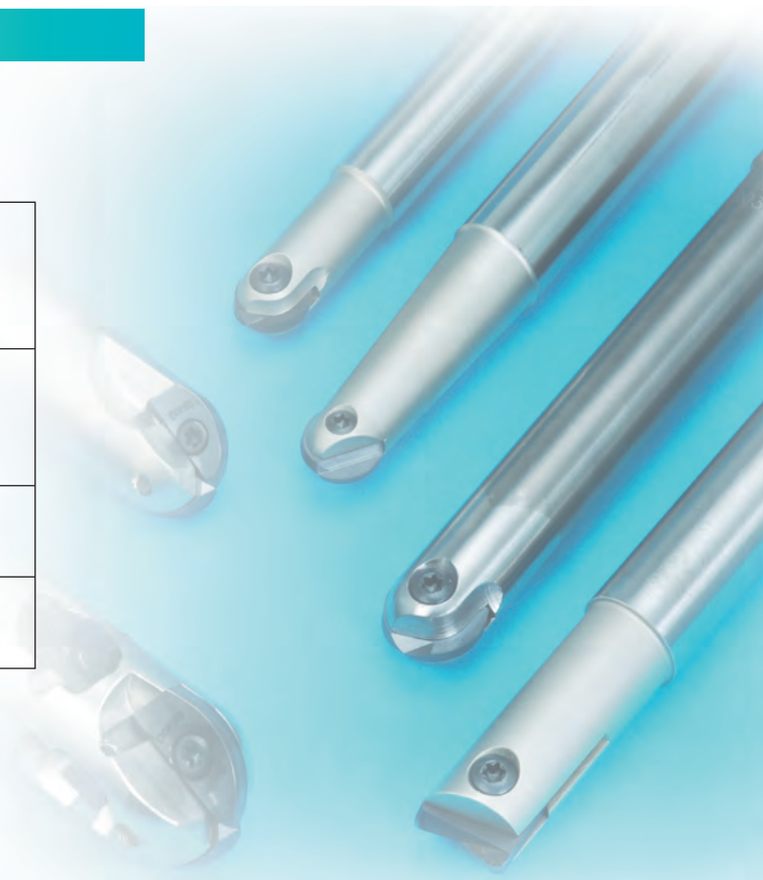
CODE N°	D	D2	K	L1	L2	∝°	
CA0825	8	12		75	132	1 50′	RCA08
CA1025	10	12		75	132	1 30′	RCA10
CA1225	12	16		60	160	1 30′	RCA12
CA1625	16	20		57	175	1 30′	RCA16
CA2025	20	25		80	190	1 50′	RCA20
CA2026	20	25		80	250	1 50′	
CA2525	25	32		100	215	1 30′	RCA25
CA2526	25	32		100	315	1 30′	
CA3225	32	40		110	240	1 10′	RCA32
CA3226	32	40		110	305	1 10′	



CA1252	12		CM2	53	121		RCA12
CA1652	16		CM2	63	131		RCA16
CA2052	20		CM2	75	143		RCA20
CA2552	25		CM3	90	175		RCA25
CA3252	32		CM4	106	214		RCA32

RICAMBI • SPARES • ERSATZTEILE

CODE N°			
CA08..	VSA08 (torx7)	CV015 (torx7)	
CA10..	VSA10 (torx8)	CV002 (torx8)	
CA12..	VSA12 (torx10)	CV003 (torx10)	
CA16..	VSA16 (torx15)	CV004 (torx15)	
CA20..	VSA20 (torx20)	CV005 (torx20)	
CA25..	VSA25 (torx30)		CC6 (torx30)
CA32..	VSA32 (torx30)		



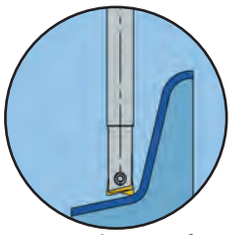
INSERTI • INSERTS • WENDEPLATTEN

CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
RCA08			●				●	●	
RCA10			●				●	●	
RCA12			●				●	●	
RCA16			●				●	●	
RCA20			●				●	●	
RCA25			●				●	●	
RCA32			●				●	●	

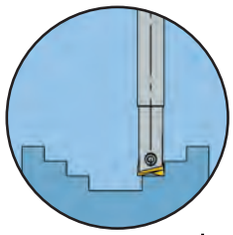
PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,20	0,30	0,40
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK03E RK03CF	250/180	220/160	200/150	180/135
	Acciai legati Alloy steel Vergütete Formstähle	900-1200			200/150	180/130	160/110	140/90
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200			160/120	140/105	110/80	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK03E RK03CF	330/200	290/160	240/130	200/115
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		260/170	220/120	190/100	125/85
Leghe di Alluminio Aluminium alloys Aluminiumlegierungen			30-100	ZK03M	1100/900	1000/850	900/600	800/550
Grafite - Graphite - Graphit				RK03E	400/200	300/150		

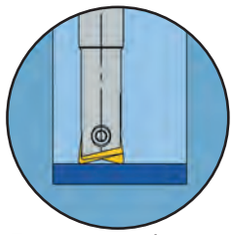
JET VBF



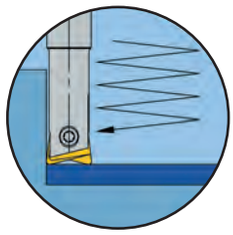
Copiatura di Superfinitura
Super-finishing for copy milling
Super-Schlichten für die Kopierbearbeitung



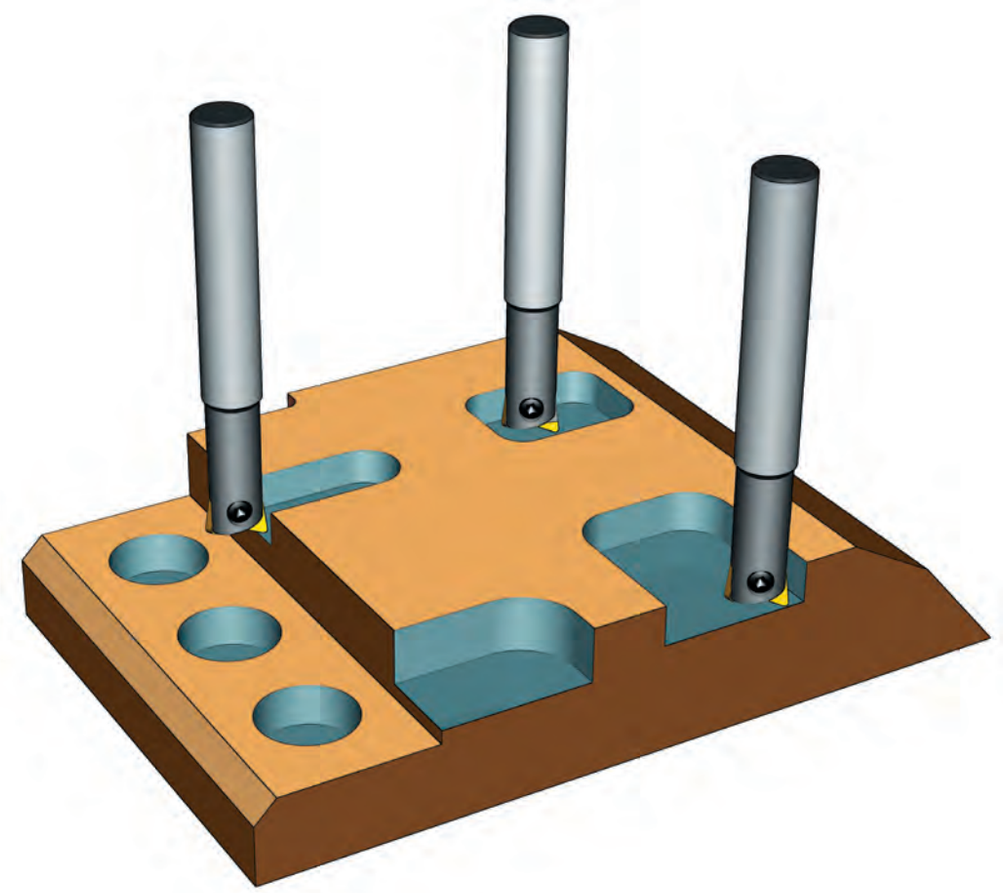
Copiatura per interpolazione
Interpolation copying
Zirkularkopierfräsen



Esecuzione di cave
Full slot milling
Vollnutenfräsen



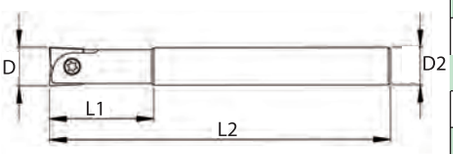
Avanzamento per piani inclinati
Ramping
Eintauchen als rampe



JET BF Si utilizzano per operazioni di svuotamento e copiatura stampi, permettendo lavorazioni di foratura e fresatura. La particolare geometria di taglio permette forti avanzamenti anche nelle lavorazioni più difficoltose. Notevole la robustezza di questa fresa grazie alla chiusura perfetta garantita da una base prismatica.

JET BF Are designed for both empyting and mould copying operation, and allow milling and drilling machining. The cutting geometry permits high feed rates in even the most difficult materials to machine. This tool is very strenght, thanks to the perfect lock, guranteed by a prismatic seat.

JET BF ist ausgelegt für die Bearbeitungen: Ausräumen und Kopierfräsen und es erlaubt die Fräs-und Bohrbearbeitung. Die Schneidengeometrie ermöglicht hohe Vorschübe in der Bearbeitung von schwerzerspanbaren Werkstoffen. Das Werkzeug hat eine hohe Festigkeit, dank der perfekten Klemmung, garaniert durch den prismatischen Sitz.



CODE N°	D	D2	L1	L2	
VBF0808	8	8	40	120	WPV-WPB08
VBF0810	8	10	30	120	
VBF1010	10	10	40	120	WPV-WPB10
VBF1012	10	12	35	150	
VBF1222	12	12	50	160	WPV-WPB12
VBF1622	16	16	53	175	WPV-WPB16
VBF2022	20	20	61	190	WPV-WPB20
VBF2522	25	25	70	190	WPV-WPB25
VBF3232	25	25	80	210	WPV-WPB32

RICAMBI • SPARES • ERSATZTEILE

CODE N°			
VBF008.	KTS08 (Torx08)	T 08	
VBF010.	KTS10 (Torx15)	T 15	
VBF122.	VS 12 (Torx20)	CV005 (Torx20)	
VBF162.	VS 16 (Torx20)	CV005 (Torx20)	
VBF202.	VS 20 (Torx20)	CV005 (Torx20)	
VBF252.	VS 25 (Torx30)	CV005 (Torx20)	
VBF323.	VS 32 (Torx30)	CV005 (Torx20)	

JET VBF

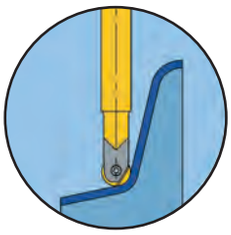
INSERTI • INSERTS • WENDEPLATTEN

CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
WPV-WPB08							●	●	
WPV-WPB10							●	●	
WPV-WPB12							●	●	
WPV-WPB16							●	●	
WPV-WPB20									
WPV-WPB25									
WPV-WPB32									

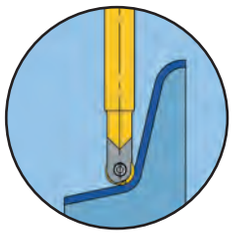
PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,20	0,30	0,40
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK03E	200/170	180/150	160/135	140/120
	Acciai legati Alloy steel Vergütete Formstähle	900-1200		RK03E	170/130	145/120	130/110	115/95
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200		RK03CF	140/110	125/100	110/90	100/80
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK03E	230/180	210/160	180/140	150/120
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290	RK03E RK03CF	190/120	160/100	140/90	120/85
Grafite - Graphite - Graphit				RK03CF	300/200	250/150		

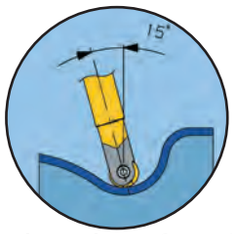
CARBIDE SHANK



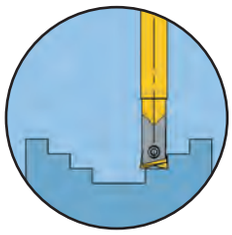
COPIBALL CARDIBE CC:
copiatura di superfinitura
con alta velocitàdi taglio
per macchine HSC.
COPIBALL CARDIBE CC:
copying superfinishing
operation withhigh speed cut
and for HSC machine.
COPIBALL CARBIDE CC:
Feinstbearbeitung mit hohen
Schnittgeschwindigkeiten
und HSC Bearbeitung



COPIDRILL CARDIBE CCD:
copiatura di finitura
con alta velocità di
taglio per macchine HSC.
COPIDRILL CARDIBE CCD:
copying finishing operation
with high speed cut and
for HSC machine.
COPIDRILL CARBIDE CCD:
Kopierfräsen mit hohen
Schnittgeschwindigkeiten
und HSC Bearbeitung.



Inclinare l'asse fresa di
10 -15 elimina la Vc.0,
e aumenta la
durata dell'inserto.
Tilt the cutter axis of 10 -15
decrease the Vc.0 and
increasethe insert's life.
Den Fräser 10 -15 anstellen,
um vC=0 zu vermeiden und
die Lebensdauer der
Wendeschneidplatte zu erhöhen.

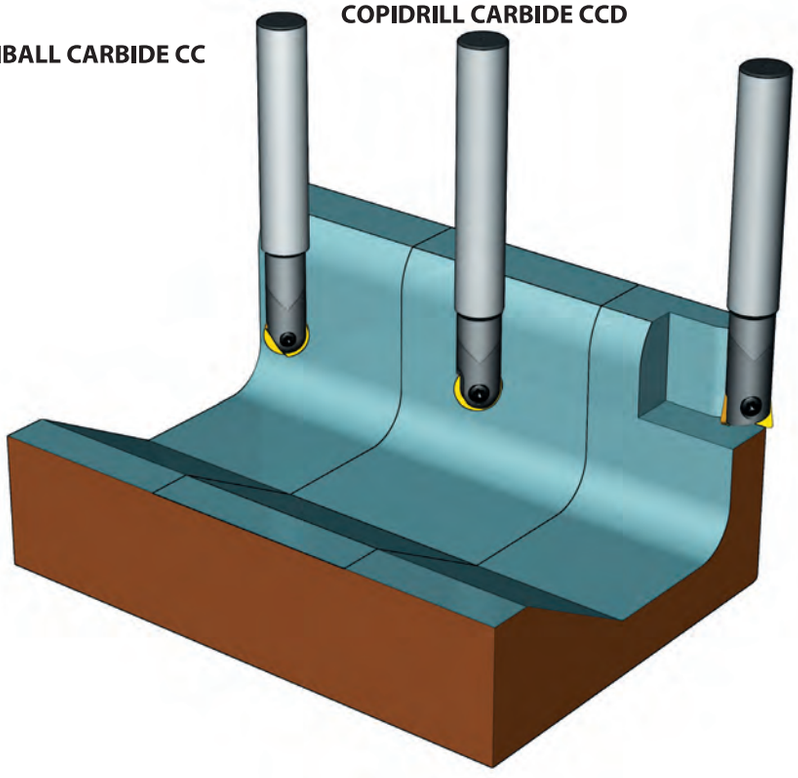


JET CARBIDE CCVBF
Copiatura per
interpolazione.
JET CARBIDE CCVBF
Interpolation copying.
JET CARBIDE CCVBF
Jet Hartmetall zum
Zirkularkopierfräsen.

COPIBALL CARBIDE CC

COPIDRILL CARBIDE CCD

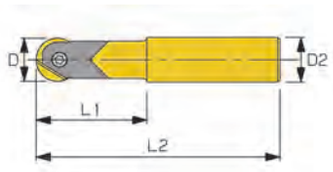
JET CARBIDE CCVBF

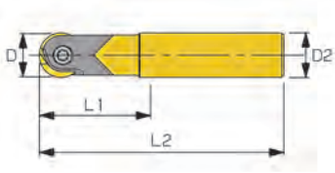


Il corpo in metallo duro riduce al minimo la vibrazioni
aumentando notevolmente la vita dell'inserto e permettendo
una lavorazione in maggiore profondità.

The Carbide body minimizes the vibrations, with a great increase
of the insert's life and allowing a deeper machining.

Dieser Hartmetallkörper reduziert Vibrationen, steigert die Standzeit
der Wendeschneidplatten und erlaubt eine höhere Bearbeitung.

COPIBALL CC	CODE N°	D	D2	L1	L2	
	CC1223	12	12	35	120	RCA12
	CC1224	12	12	50	145	
	CC1623	16	16	40	140	RCA16
	CC1624	16	16	89	195	
	CC2023	20	20	50	140	RCA20
	CC2024	20	20	125	240	

COPIDRILL CCD	CODE N°	D	D2	L1	L2		
	CCD1232	12	12	35	120	RCN12	RCN12AL
	CCD1231	12	12	50	145		
	CCD1632	16	16	40	140	RCN16	RCN16AL
	CCD1631	16	16	89	195		
	CCD2032	20	20	50	140	RCN20	RCN20AL
	CCD2031	20	20	125	240		

RICAMBI • SPARES • ERSATZTEILE

CODE N°		
CC1223 CC1224	VSA12 (torx10)	CV003 (torx10)
CC1623 CC1624	VSA16 (torx15)	CV004 (torx15)
CC2023 CC2024	VSA20 (torx20)	CV005 (torx20)
CCD1231 CCD1232 CCD1631 CCD1232 CCD2031 CCD2032	VS12 VS16 (torx20) VS20	CV005 (torx20)

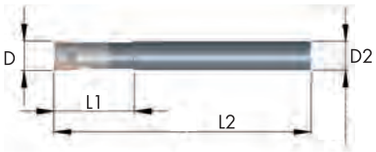
INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	RCA12 RCA16 RCA20			● ● ●				● ● ●	● ● ●	
	RCN12 RCN16 RCN20			● ● ●				● ● ●	● ● ●	
	RCN12AL RCN16AL RCN20AL			● ● ●				● ● ●		

PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

		Durezza Hardness Härte			Vc = m/min fz = mm			
		N/mm2	HB		0,10	0,20	0,30	0,40
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK03E RK03CF	400/300	370/280	320/210	280/180
	Acciai legati Alloy steel Vergütete Formstähle	900-1200			320/260	290/220	260/190	200/140
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200			290/190	230/145	180/110	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK03E RK03CF	420/330	370/290	310/200	270/170
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290		340/260	280/200	240/180	190/130
Leghe di Alluminio Aluminium alloys Aluminiumlegierungen			30-100	ZK03M	1250/1200	1100/900	1000/700	900/650
Grafite - Graphite - Graphit				RK03E RK03CF	450/300	420/280		

JET CARBIDE CCVBF



CODE N°	D	D2	L1	L2	
CCVBF0808	8	8	25	100	WPV-WPB08
CCVBF1010	10	10	35	120	WPV-WPB10
CCVBF1212	12	12	50	160	WPV-WPB12
CCVBF1616	16	16	55	175	WPV-WPB16
CCVBF2020	20	20	75	190	WPV-WPB20

RICAMBI • SPARES • ERSATZTEILE

CODE N°		
CCVBF0808	KTS08 (torx08)	T08
CCVBF1010	KTS10 (torx15)	CV004 (torx15)
CCVBF1212	VS12 (torx20)	CV005 (torx20)
CCVBF1616	VS16 (torx20)	CV005 (torx20)
CCVBF2020	VS20 (torx20)	CV005 (torx20)

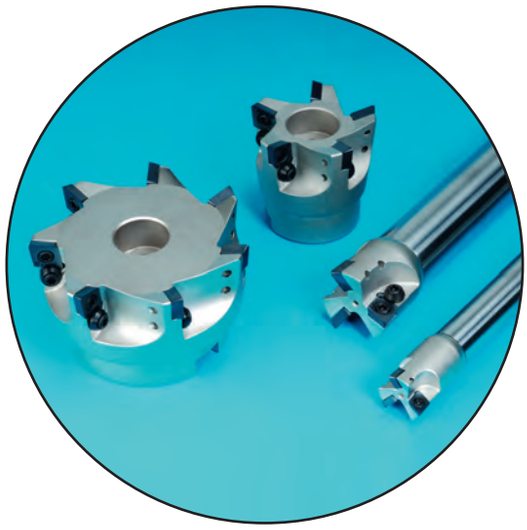
JET CARBIDE CCVBF

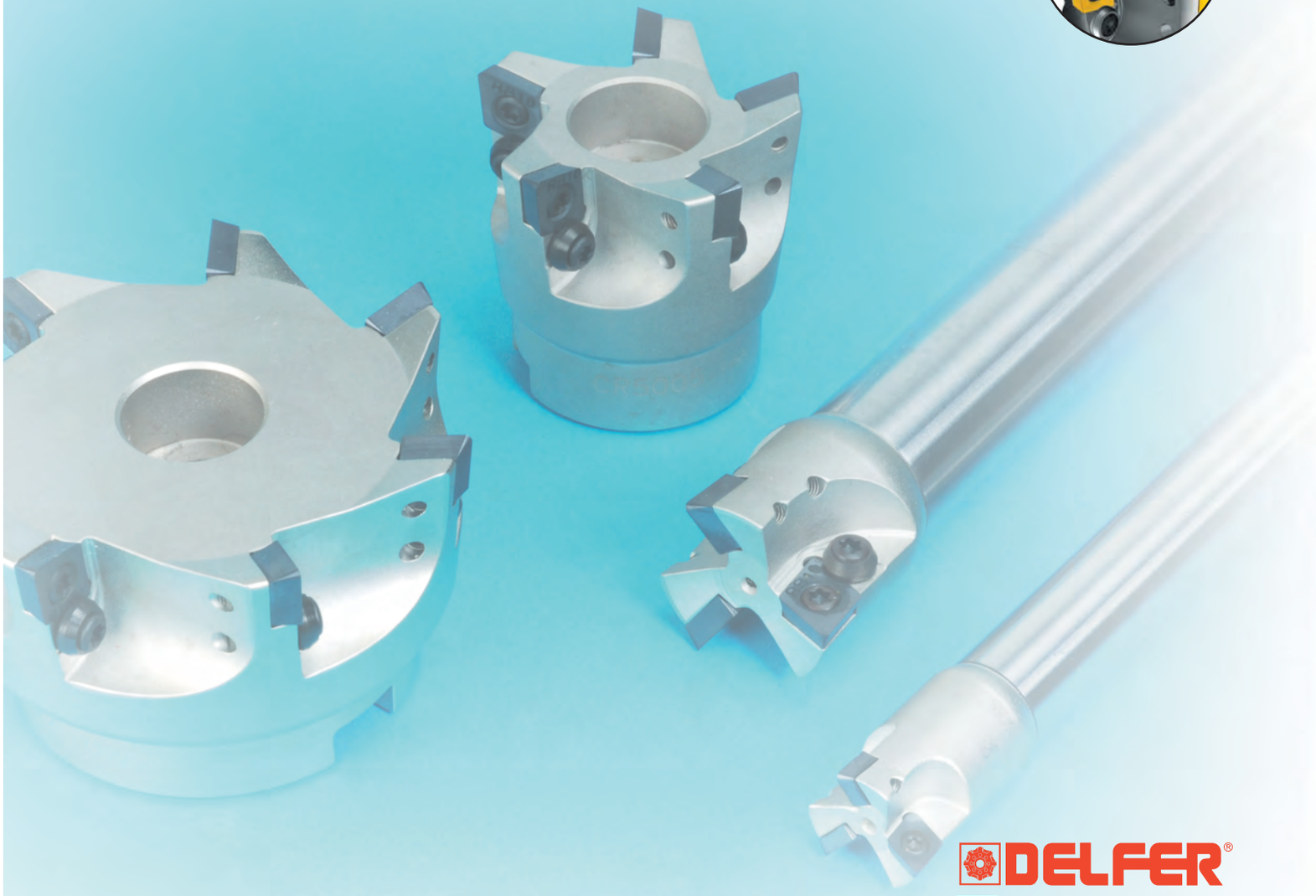
INSERTI • INSERTS • WENDEPLATTEN

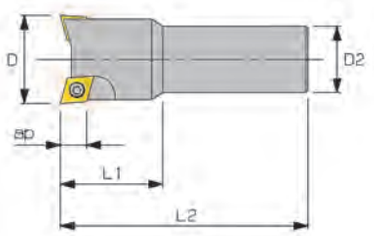
CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
WPV-WPB08							●	●	
WPV-WPB10							●	●	
WPV-WPB12							●	●	
WPV-WPB16							●	●	
WPV-WPB20									

PARAMETRI DI TAGLIO • CUTTING PARAMETERS • SCHNITTPARAMETER

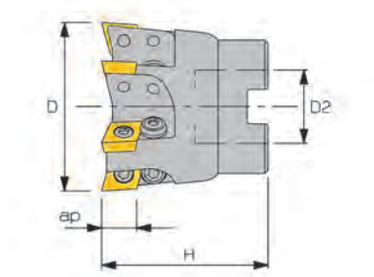
		Durezza Hardness Härte			Vc = m/min			
					fz = mm			
		N/mm2	HB		0,10	0,20	0,30	0,40
Acciaio - Steel - Stähle	Acciai poco legati Low alloy steel Unlegierter Werzeugstähle	400-900		RK03E	360/270	330/250	290/190	250/150
	Acciai legati Alloy steel Vergütete Formstähle	900-1200		RK03E	300/240	280/215	240/170	180/125
	Acciai per stampi Mould steel Durchgehärtete Werzeugstähle	>1200		RK03E RK03CF	260/165	215/130	165/105	
Ghisa - Cast iron - Guß	Ghisa grigia Gray cast iron Grauguß		190-220	RK03E	400/305	345/265	295/180	255/160
	Ghisa nodulare Nodular cast iron Kugelgraphitguß		230-290	RK03E RK03CF	310/245	250/185	210/160	165/110
Grafite - Graphite - Graphit				RK03CF	450/300	410/280		







CODE N°	D	D2	H	ap	L1	L2	Z	
CR1022	10	10		4	60	160	2	XDHW040110
CR1222	12	10		4	30	160	2	
CR1622	16	12		6	30	200	2	XDHW060210
CR2023	20	16		6	30	200	3	
CR2523	25	20		6	30	200	3	
CR3223	32	25		10	30	250	3	XDHW10T310



CODE N°	D	D2	H	ap	L1	L2	Z	
CR5005-52	52	22	50	10			5	XDHW10T310
CR6506-66	66	27	50	10			6	
CR8007	80	27	50	10			7	

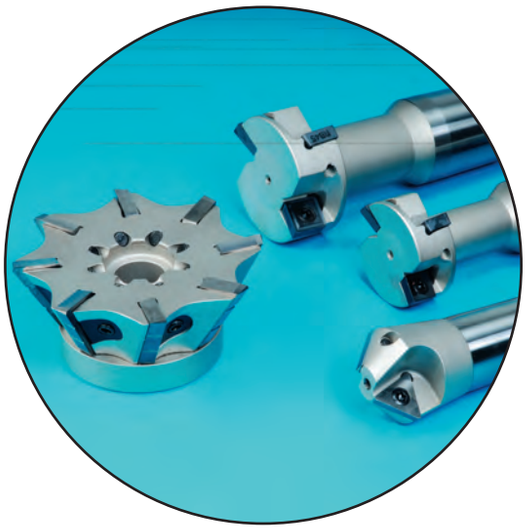
RICAMBI • SPARES • ERSATZTEILE

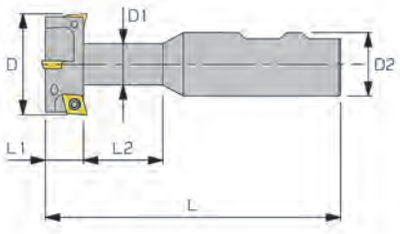
CODE N°			
CR1022	VS1 (torx6)		CV001 (torx6)
CR1222			
CR1622	VS2 (torx8)		CV002 (torx8)
CR2023			
CR2523			
CR3223	VS35L (torx15)	ST40	CV004 (torx15)
CR5005-52			
CR6506-66			
CR8007			

INSERTI • INSERTS • WENDEPLATTEN

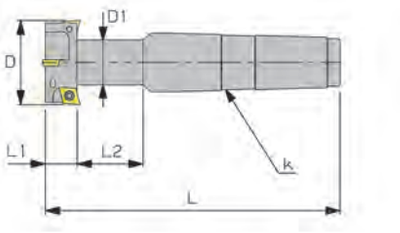
CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
XDHW040110	●			●	●				●
XDHW060210	●			●	●				●
XDHW10T310	●			●	●				●

FRESE • CUTTERS • FRÄSER

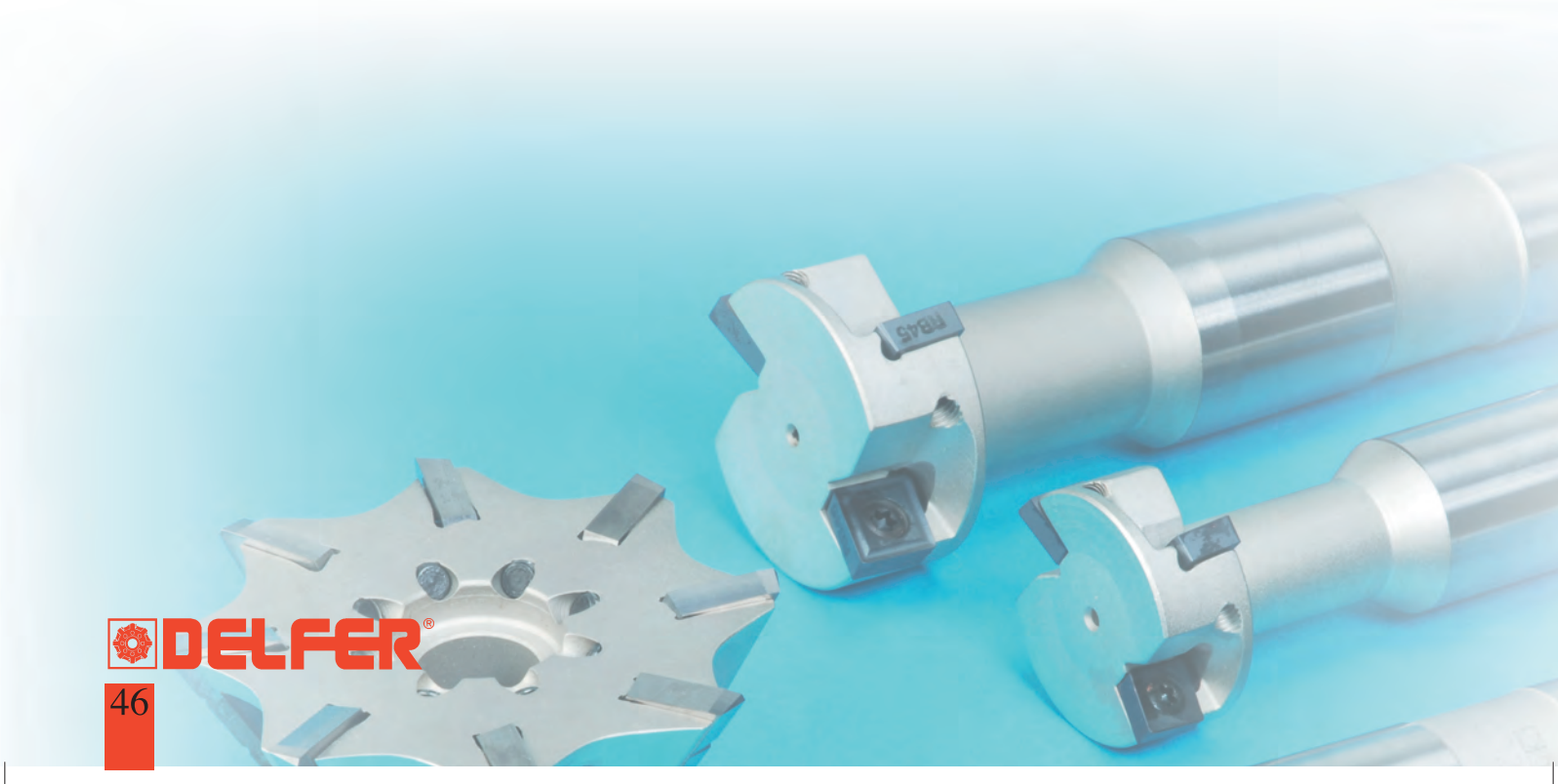




CODE N°	D	D2	K	L1	L2	L	D1	Z	
TR2511C	25	20		11	20	88	12	4	CCM. 060208
TR3012C	30	20		12	25	93	13	4	
TR3214C	32	25		14	26	104,5	15	4	CCM. 09T308
TR3716C	37	25		16	30	109	17	4	



TR2511	25		CM2	11	20	105	12	4	CCM. 060208
TR3012	30		CM2	12	25	110	13	4	
TR3214	32		CM3	14	26	133	15	4	CCM. 09T308
TR3716	37		CM3	16	30	138	17	4	
TR4018	40		CM3	18	31	140	19	4	CCM. 120408
TR4620	46		CM4	20	35	170	24	4	
TR4922	49		CM4	22	38	175	25	4	



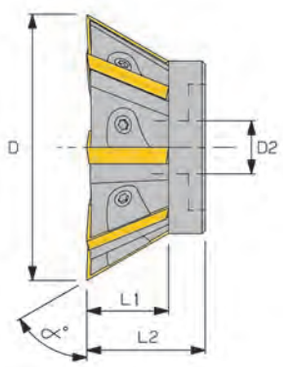
INDEX TR

RICAMBI • SPARES • ERSATZTEILE

CODE N°			
TR2511C TR3012C	TR2511 TR3012	VS2 (torx8)	CV002 (torx8)
TR3214C TR3716C	TR3214 TR3716	VS4 (torx15)	CV004 (torx15)
	TR4018 TR4620 TR4922	VS5N (torx20)	CV005 (torx20)

INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	CCMW060208		●				●			
	CCMW09T308		●				●			
	CCMW120408		●				●			
	CCMT060208		●		●		●			●
	CCMT09T308		●				●			
	CCMT120408		●		●		●			●



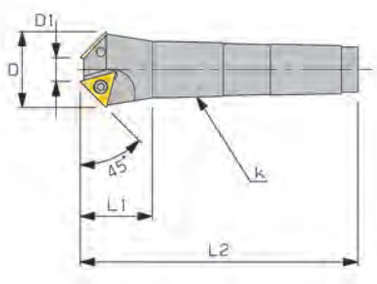
CODE N°	D	D2	L1	L2	α°	Z	
AR08060	80	16	25	36	60°	8	ARG2560
AR10060	100	22	33	45	60°	8	ARG3360

RICAMBI • SPARES • ERSATZTEILE

CODE N°			
AR08060	TAR60/80	M6 (ch 3)	HV3 (ch 3)
AR10060	TAR60		

INSERTI • INSERTS • WENDEPLATTEN

CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
ARG2560		●		●					
ARG3360		●		●					



CODE N°	D	D1	K	L1	L2	Z	
G1932	19	8	CM2	20,5	90	2	TPM0511
G3232	32	11	CM3	30,5	117	2	TPM0911

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CODE N°		
G1932	VS2 (torx8)	CV002 (torx8)
G3232	VS4 (torx15)	CV004 (torx15)

INSERTI • INSERTS • WENDEPLATTEN

CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
TPM0511	●			●					
TPM0911	●			●					

EXTENSION SYSTEM



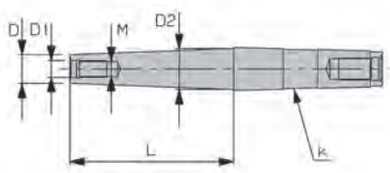




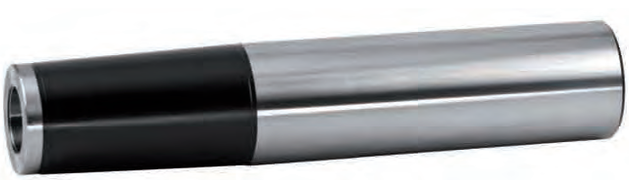


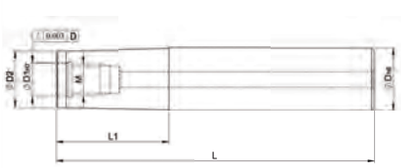


EXTENSION SYSTEM



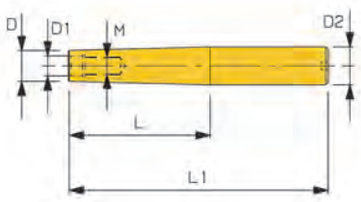
CODE N°	L	K	D	D1	D2	M
CK2380D	80	CM3	13	8,5	23	M8
CK3380D	80	CM3	18	10,5	23	M10
CK365D	30	CM3	21	12,5	23	M12
CK395D	60	CM3	21	12,5	23	M12
CK3120D	85	CM3	21	12,5	23	M12
CK3130D	95	CM3	21	12,5	23	M12
CK4155D	120	CM4	21	12,5	30	M12
CK480D	35	CM4	29	17	30	M16
CK4110D	65	CM4	29	17	30	M16
CK4140D	95	CM4	29	17	30	M16
CK5165D	120	CM5	29	17	43	M16
CK5195D	150	CM5	29	17	43	M16
CK5225D	180	CM5	29	17	43	M16



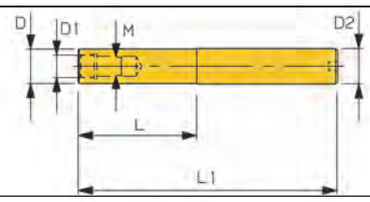


CODE N°	L	L1	D	D1	D2	M
DPR12M06160-40	160	40	12	6,5	9,8	6
DPR16M08160-45	160	45	16	8,5	12,8	8
DPR16M08200-10	200	10	16	8,5	14	8
DPR20M10160-50	160	50	20	10,5	17,8	10
DPR20M10250-12	250	12	20	10,5	18	10
DPR25M12160-55	160	55	25	12,5	20,8	12
DPR25M12250-15	250	15	25	12,5	23	12
DPR32M16160-60	160	60	32	17	28,8	16
DPR32M16300-18	300	18	32	17	29	16

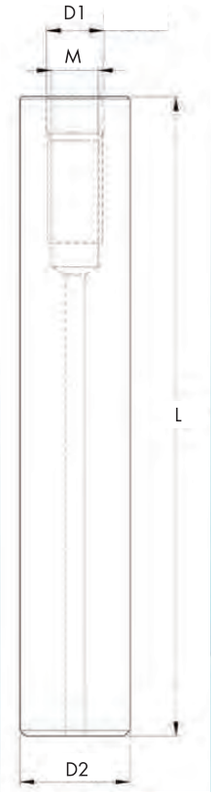
EXTENSION SYSTEM HEAVY METAL



CODE N°	L	L1	D2	D	D1	M
PD12125D	80	125	12	9,7	6,5	M6
PD16090D	40	90	16	13	8,5	M8
PD16110D	60	110	16	13	8,5	M8
PD16130D	80	130	16	13	8,5	M8
PD16170D	120	170	16	13	8,5	M8
PD20090D	40	90	20	18	10,5	M10
PD20110D	60	110	20	18	10,5	M10
PD20130D	80	130	20	18	10,5	M10
PD20170D	120	170	20	18	10,5	M10

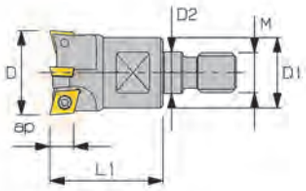
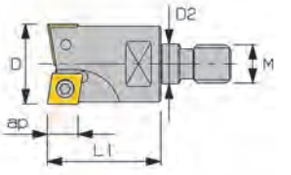
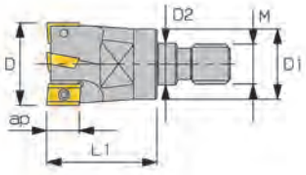
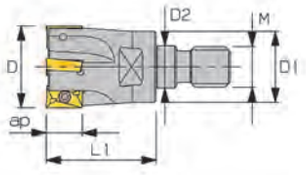
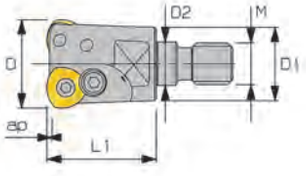


PDC10080D	40	80	10	9,7	6,5	M6
PDC10100D	60	100	10	9,7	6,5	M6
PDC10120D	80	120	10	9,7	6,5	M6



CODE N°	L	D2	D1	M
DPRMD11M06-100	100	11	6,5	6
DPRMD11M06-150	150	11	6,5	6
DPRMD12M06-100	100	12	6,5	6
DPRMD12M06-150	150	12	6,5	6
DPRMD15M08-100	100	15	8,5	8
DPRMD15M08-150	150	15	8,5	8
DPRMD15M08-200	200	15	8,5	8
DPRMD16M08-100	100	16	8,5	8
DPRMD16M08-150	150	16	8,5	8
DPRMD16M08-200	200	16	8,5	8
DPRMD19M10-100	100	19	10,5	10
DPRMD19M10-150	150	19	10,5	10
DPRMD19M10-200	200	19	10,5	10
DPRMD20M10-100	100	20	10,5	10
DPRMD20M10-150	150	20	10,5	10
DPRMD20M10-200	200	20	10,5	10
DPRMD24M12-150	150	24	12,5	12
DPRMD24M12-200	200	24	12,5	12
DPRMD24M12-250	250	24	12,5	12
DPRMD25M12-150	150	25	12,5	12
DPRMD25M12-200	200	25	12,5	12
DPRMD25M12-250	250	25	12,5	12
DPRMD32M16-250	250	32	17	16
DPRMD32M16-300	300	32	17	16
DPRMD32M16-400	400	32	17	16

EXTENSION SYSTEM

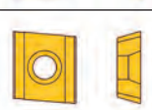
		CODE N°	D	D1	D2	ap	L1	M	Z	INSERTI INSERTS WENDEPLATTEN
	CONTUR 	MSCR10D	10	9,7	6,5	4	18	M6	2	XDHW040110
		MSCR12D	12	9,7	6,5	4	18	M6	2	
		MSCR16D	16	13	8,5	6	23	M8	2	XDHW060210
		MSCR20D	20	19	10,5	6	30	M10	3	
		MSCR25D	25	21	12,5	6	35	M12	3	
		MSCR35D	35	29	17	10	43	M16	3	XDHW10T310
		MSCR42D	42	29	17	10	43	M16	4	
	MINIDRILL 	MSMN25D	25	24	12,5	9	35	M12	2	1 ADGW130308 1 CCMW09T308
		MSMN32D	32	30	17	12	40	M16	2	1 APGW160408 1 CCMW120408
		MSMN36D	36	34	17	12	40	M16	2	1 APGW190408 1 CCMW120408
	JET 90 	MSJE16D	16	13	8,5	10	23	M8	2	ADHT1003PER
		MSJE20D	20	18	10,5	10	26	M10	3	
		MSJE25D	25	21	12,5	10	33	M12	3	
		MSJE32D	32	29	17	10	43	M16	4	
	HELIDEX 	MSMH20D	20	18	10,5	10	26	M10	3	APKT1003PDR
		MSMH25D	25	21	12,5	10	33	M12	4	
		MSMH32D	32	29	17	10	43	M16	5	
	JETMILL 	MSJM25D	25	21	12,5	1,5	32	M12	2	JDHW10T310
		MSJM323D	32	29	17	1,5	40	M16	3	

EXTENSION SYSTEM

RICAMBI •SPARES • ERSATZTEILE

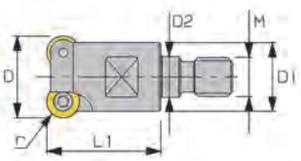
CODE N°			
MSCR10D	VS1 (torx6)		CV001 (torx6)
MSCR12D			
MSCR16D	VS2 (torx8)		CV002 (torx8)
MSCR20D			
MSCR25D			
MSJE16D			
MSJE20D			
MSJE25D			
MSJE32D			
MSMH20D			
MSMH25D			
MSMH32D			
MSCR35D	VS35L(torx15)	ST40	CV004 (torx15)
MSCR42D			
MSJM25D			
MSJM323D			
MSMN25D	VS4-VS4T(torx15)		
MSMN32D	VS5N(torx20)		CV005 (torx20)
MSMN36D			

INSERTI • INSERTS • WENDEPLATTEN

	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	XDHW040110	●			●	●				●
	XDHW060210	●			●	●				●
	XDHW10T310	●			●	●				●
	ADGW130308		●		●		●			●
	APGW160408		●				●			
	APGW190408		●				●			
	CCMW060208		●				●			
	CCMW09T308		●				●			
	CCMW120408		●				●			
	ADHT1003PER		●				●			
	APKT1003PDR		●				●			
	JDHW10T310		●		●		●			●

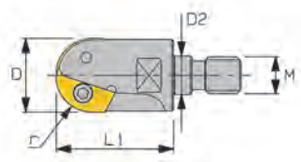
EXTENSION SYSTEM

TORIDEX



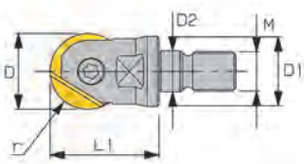
CODE N°	D	D1	D2	r	L1	M	Z	INSERTI INSERTS WENDEPLATTEN
MSCX15D	15	13	8,5	3,5	23	M8	2	RDHX0702MOT
MSCX20D	20	19	10,5	5	30	M10	2	RD..1003MOT
MSCX24D	24	21	12,5	6	35	M12	2	RD..12T3MOT
MSCX253D	25	21	12,5	5	35	M12	3	RD..1003MOT
MSCX255D	25	21	12,5	5	35	M12	2	RD..1003MOT
MSCX32D	32	29	17	6	43	M16	3	RD..12T3MOT
MSCX328D	32	29	17	8	43	M16	2	RD..1604MOT
MSCX35D	35	29	17	6	43	M16	3	RD..12T3MOT
MSCX42D	42	29	17	6	43	M16	4	RD..12T3MOT

MILLCOP MG



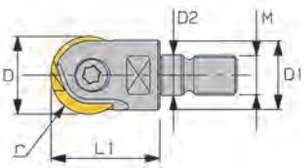
CODE N°	D	D1	D2	r	L1	M	Z	INSERTI INSERTS WENDEPLATTEN
MSMG25D	25	23	12,5	12,5	35	M12	2	RCCW190412
MSMG32D	32	29	17	16	40	M16	2	RCCW230516

COPIBALL



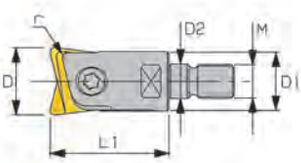
CODE N°	D	D1	D2	r	L1	M	Z	INSERTI INSERTS WENDEPLATTEN
MSCA08D	8	9,7	6,5	4	23	M6	2	RCA08
MSCA10D	10	9,7	6,5	5	23	M6	2	RCA10
MSCA12D	12	9,7	6,5	6	23	M6	2	RCA12
MSCA16D	16	13	8,5	8	28	M8	2	RCA16
MSCA20D	20	18	10,5	10	28	M10	2	RCA20

COPIDRILL



CODE N°	D	D1	D2	r	L1	M	Z	INSERTI INSERTS WENDEPLATTEN
MSCD12D6	12	9,7	6,5	6	23	M6	2	RCN12..
MSCD16D8	16	13	8,5	8	28	M8	2	RCN16..
MSCD20D10	20	18	10,5	10	28	M10	2	RCN20..
MSCD25D12	25	23,7	12,5	12,5	83	M12	2	RCN25..

JET VBF



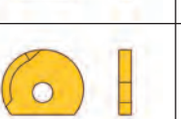
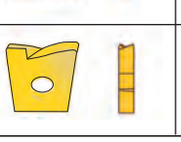
CODE N°	D	D1	D2	r	L1	M	Z	INSERTI INSERTS WENDEPLATTEN
MSVBF12D	12	9,7	6,5	1,0	27	M6	2	WPV-WPB 12..
MSVBF16D	16	13	8,5	1,3	31	M8	2	WPV-WPB 16..
MSVBF20D	20	18	10,5	1,6	36	M10	2	WPV-WPB 20..

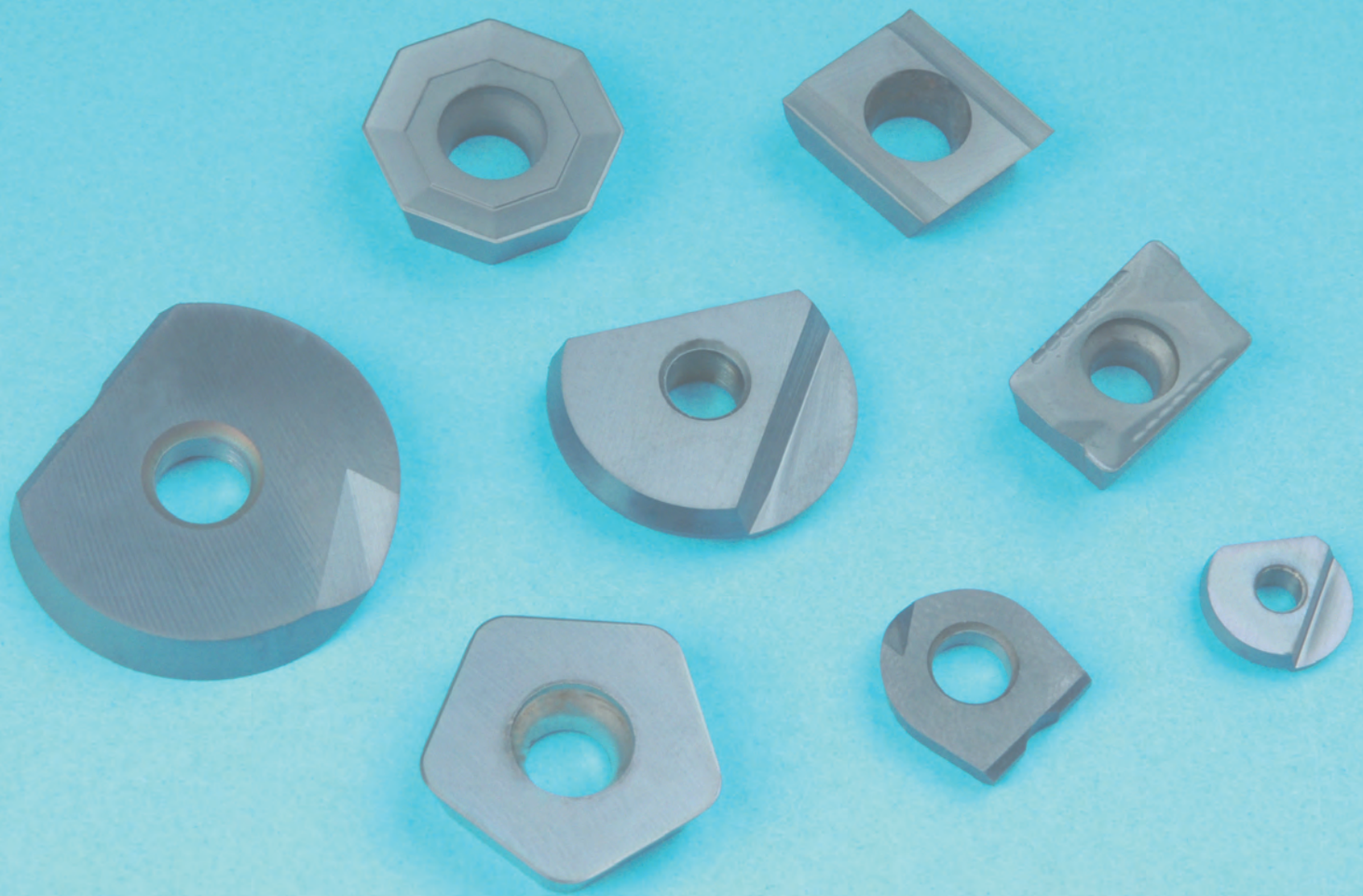
EXTENSION SYSTEM

RICAMBI •SPARES • ERSATZTEILE

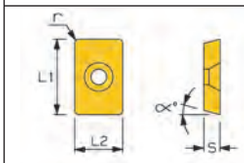
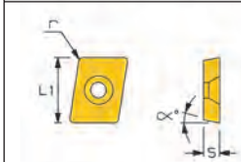
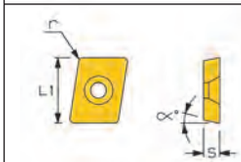
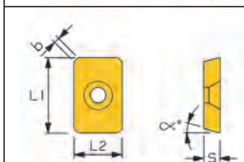
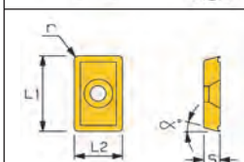
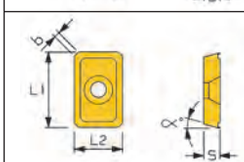
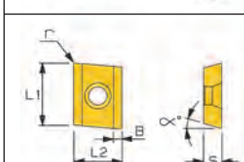
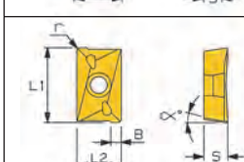
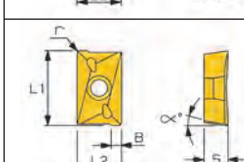
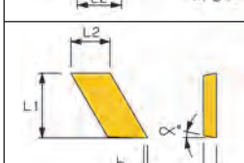
CODE N°					
MSCX15D	VS2 (torx8)				CV002(torx8)
MSCX20D	VS35L(torx15)				CV004(torx15)
MSCX253D					
MSCX255D					
MSCX24D		ST40			
MSCX32D					
MSCX35D					
MSCX42D					
MSCX328D	VS5N(torx20)	ST30			CV005(torx20)
MSMG25D			VS40C(torx15)		CV004(torx15)
MSMG32D			VS50C(torx20)		CV005(torx20)
MSCA08D				VSA08(torx7)	CV015(torx7)
MSCA10D				VSA10(torx8)	CV002(torx8)
MSCA12D				VSA12(torx10)	CV003(torx10)
MSCA16D				VSA16(torx15)	CV004(torx15)
MSCA20D				VSA20(torx20)	CV005 (torx20)
MSCD12D6				VS12 VS16 VS20 VS25 (torx20)	
MSCD16D8					
MSCD20D10					
MSCD25D12					
MSVBF12D				VS12 (torx15)	CV005 (torx20)
MSVBF16D				VS16 VS20 (torx20)	CV005 (torx20)
MSVBF20D					

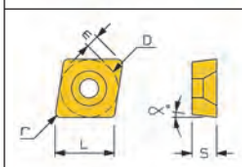
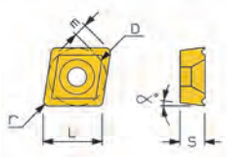
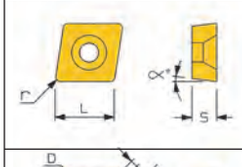
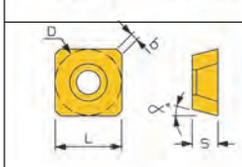
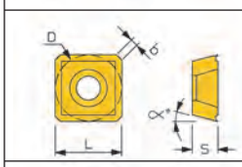
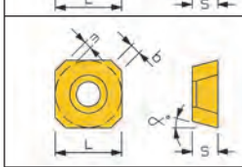
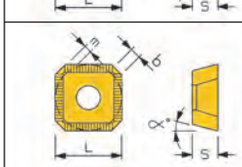
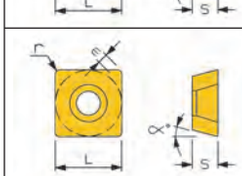
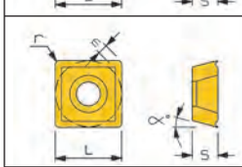
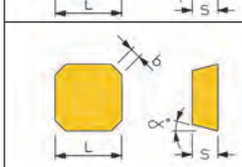
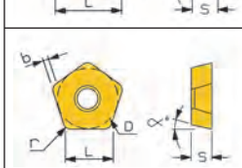
INSERTI •INSERTS • WENDEPLATTEN

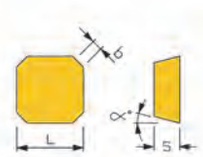
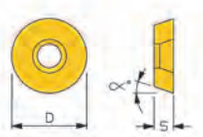
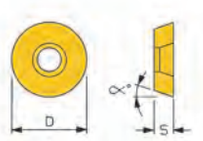
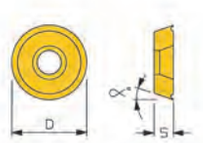
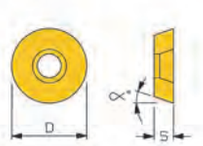
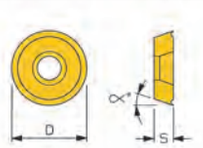
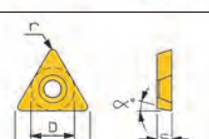
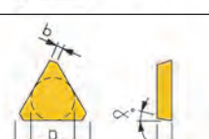
	CODE N°	ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10
	RDHX0702MOT		●		●		●			●
	RDHX1003MOT	●	●	●		●	●	●		
	RDMX1003MOT		●				●			
	RDHX12T3MOT	●	●		●	●	●			●
	RDMX12T3MOT		●				●			
	RDHX1604MOT		●		●		●			●
	RDMX1604MOT	●	●		○	●	●			○
	RDHT1003MOT			●				●		
	RDHT12T3MOT		●	●			●	●		
	RDHT1604MOT		●				●			
	RCCW190412		●				●			
	RCCW230516		●				●			
	RCA08			●				●	●	
	RCA10			●				●	●	
	RCA12			●				●	●	
	RCA16			●				●	●	
	RCA20			●				●	●	
	RCN12			●				●	●	
	RCN16			●				●	●	
	RCN20			●				●	●	
	RCN25			●				●	●	
	RCN12AL			●				●		
	RCN16AL			●				●		
	RCN20AL			●				●		
	RCN25AL			●				●		
	WPK-WPB12			●				●	●	
	WPK-WPB16			●				●	●	
	WPK-WPB20			●				●	●	

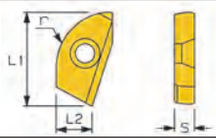
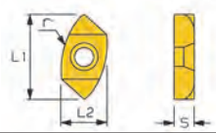
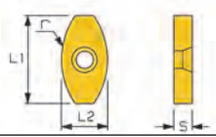
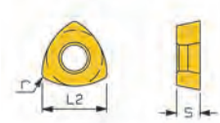
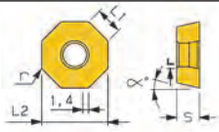
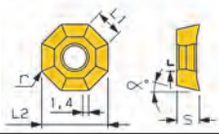
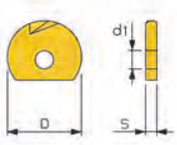
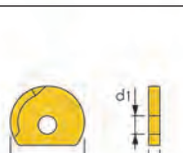
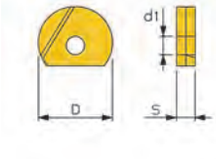


DELFER®

		ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10	L1 mm	L2 mm	S mm	r mm	b mm	B mm	α°
	ADLW1503ZZR	●	●			●	●				15	9,52	3,18	0,8			15
	ADGW100308 ADGW130308		● ●		●		● ●			●	10,6 13,5		3,18 3,18	0,8 0,8			15 15
	APGW160408 APGW190408		● ●				● ●				16,6 19,6		4,76 4,76	0,8 0,8			11 11
	APEW1504ZZR APLW1504ZZR APLW2004ZZR		● ● ●		●		● ● ●				15,88 15,88 20	12,70 12,70 12,70	4,76 4,76 4,76		1,94 1,94 1,1		11 11 11
	ADLT1503ZZR	●	●			●	●				15	9,52	3,18	0,8			15
	APLT1504ZZR	●	●			●	●				15,88	12,70	4,76		1,94		11
	ADHT1003PER ADHT1404PER		● ●				● ●				10,4 14	6,60 11,80	3,18 4,76	0,5 0,6		1,2 1,4	15 15
	ADKT1505PDR		●				●				15	9,52	5	0,8		1,6	15
	APKT1003PDR APKT1604PDR		● ●				● ●				10,5 16,3	6,70 9,45	3,5 5,3	0,5 0,8		1,2 1,8	11 11
	ARG2560 ARG3360		● ●		● ●						25 33	12,70 12,70	4,76 4,76		1,4 1,4		11 11

		ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10	L mm	D mm	S mm	r mm	b mm	m mm	α°
	CCMW060208		●				●				6,40	6,35	2,38	0,8		1,319	7
	CCMW09T308		●				●				9,70	9,52	3,97	0,8		2,206	7
	CCMW120408		●				●				12,90	12,70	4,76	0,8		3,080	7
	CCMT060208		●		●		●			●	6,40	6,35	2,38	0,8		1,319	7
	CCMT080308		●		●		●			●	8,05	7,97	3,18	0,8		1,765	7
	CCMT09T308		●				●				9,70	9,52	3,97	0,8		2,206	7
	CCMT120408		●		●		●			●	12,90	12,70	4,76	0,8		3,080	7
	XDHW040110	●			●	●				●	4		1,59	1,0			15
	XDHW060210	●			●	●				●	6,50		2,38	1,0			15
	XDHW10T310	●			●	●				●	10		3,97	1,0			15
	SPLW1204AD		●		●		●			●	12,70	12,70	4,76		0,5		11
	SPEW1204AD						○				12,70	12,70	4,76		0,5		11
	SPLT1204AD		●				●				12,70	12,70	4,76		0,5		11
	SEHW1204AF	●	●		●	●	●			●	12,70		4,76		2,75	1,25	20
	SEHW1504AF	●	●		●	●	●			●	15,88		4,76		2,85	1,86	20
	SEHT1204AF	●	●			●	●				12,70		4,76		2,75	1,25	20
	SDLW090308	●	●			●	●				9,52		3,18	0,8		1,644	15
	SDLT090308		○				●				9,52		3,18	0,8		1,644	15
	SEAN1203AFN	●	●		○	●	●			●	12,70		3,18		1,6		20
	SEKN1203AFN	●	●		○	●	●			●	12,70		3,18		1,6		20
	SEKN1504AFN	●	●		●	●	●			●	15,88		4,76		1,6		20
	PDHW120420		●		●		●			●	12	16,54	4,76	2	1,4		15

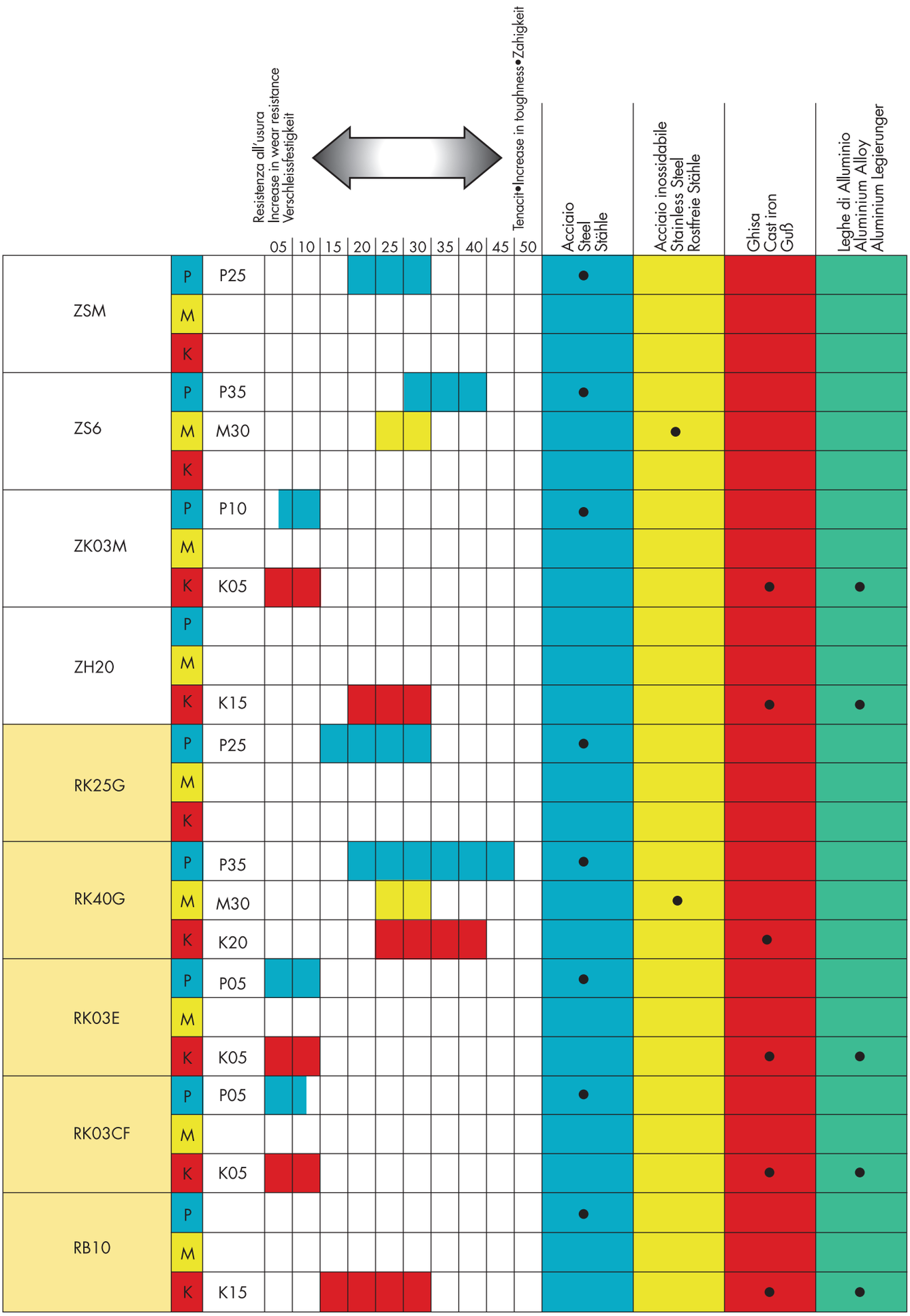
		ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10	L mm	D mm	S mm	r mm	b mm	α°
	SFAN1203EFR	●									12,70		3,18		1,4~	26
	SFAN1203EFL				●						12,70		3,18		1,4~	26
	SPKN1203EDR	●	●			●	●				12,70		3,18		1,4~	11
	SPKN1203EDL	●	●		●	●	●			●	12,70		3,18		1,4~	11
	SPKN1504EDR	O	O		●	O	●			●	15,88		4,76		1,4~	11
	SPKN1504EDL	●	●			●	●				15,88		4,76		1,4~	11
	RDHX0701MOT		●		●		●			●		7	1,99			15
	RDHX0702MOT		●		●		●			●		7	2,38			15
	RDHX0802MOT		●		●		●			●		8	2,38			15
	RDHX1003MOT	●	●	●		●	●	●				10	3,18			15
	RDHX12T3MOT	●	●		●	●	●			●		12	3,97			15
	RDHX1604MOT		●		●		●			●		16	4,76			15
	RDMX1003MOT		●				●					10	3,18			15
	RDMX12T3MOT		●				●					12	3,97			15
	RDMX1604MOT	●	●		O	●	●			O		16	4,76			15
	RDHT1003MOT			●				●				10	3,18			15
	RDHT12T3MOT		●	●			●	●				12	3,97			15
	RDHT1604MOT		●				●					16	4,76			15
	RDEW10T3MO		●				●					10	3,97			15
	RPEW1204MO		●				●					12	4,76			11
	RDMT10T3MO		●				●					10	3,97			15
	RPMT1204MO		●				●					12	4,76			11
	TPM0511	●			●						9,60	5,55	2,50	0,8		8
	TPM0911	●			●						16,50	9,52	3,18	0,8		11
	TPKN1603PDR	●	●		●	●	●			●	16,50	9,52	3,18		1,0~	11
	TPKN1603PDL					●					16,50	9,52	3,18		1,0~	11
	TPKN2204PDR	●	●		●	●	●			●	22	12,70	4,76		1,5~	11
	TPKN2204PDL		O								22	12,70	4,76		1,5~	11
	TPKR2204PDR	●				●					22	12,70	4,76		1,5^	11

		ZSM	ZS6	ZK03M	ZH20	RK25G	RK40G	RK03E	RK03CF	RB10	L1 mm	L2 mm	S mm	r mm	d1 mm	D mm	α°
	RCCW190412		●				●				12	7,5	4,5	12,5			7
	RCCW230516		●				●				25	10,5	5,5	16,0			9
	RDCW250620		●				●				19	12,4	6,0	20			15
	RDCW250625		●				●				19	13,4	6,0	25			15
	RDEW220620		●				●				22	13,6	6,0	20			15
	RDEW290625		●				●				29	15	6,0	25			15
	JDHW10T310		●		●		●			●		10,4	3,97	1,0			15
	JDHW14M520		●		●		●			●		14,4	5,00	2,0			15
	ODEW150508	●	●		●	●	●			●	6,0	15,88	5,50	0,8			15
	ODET150508	●	●			●	●				6,0	15,88	5,50	0,8			15
	RCN08			●				●	●				2		2,5	8	12
	RCN10			●				●	●				2,4		3	10	12
	RCN12			●				●	●				2,5		5	12	12
	RCN16			●				●	●				3		5	16	12
	RCN20			●				●	●				3		5	20	12
	RCN25			●				●	●				4		6	25	12
	RCN32			●				●	●				5		8	32	12
	RCN08 AL			●				●					2		2,5	8	12
	RCN10 AL			●				●					2,4		3	10	12
	RCN12 AL			●				●					2,5		5	12	12
	RCN16 AL			●				●					3		5	16	12
	RCN20 AL			●				●					3		5	20	12
	RCN25 AL			●				●					4		6	25	12
	RCN32 AL			●				●					5		8	32	12
	RCA08			●				●	●				2,4		2,5	8	
	RCA10			●				●	●				2,6		3	10	
	RCA12			●				●	●				3		3,5	12	
	RCA16			●				●	●				4		4	16	
	RCA20			●				●	●				5		5	20	
	RCA25			●				●	●				6		6	25	
	RCA32			●				●	●				7		8	32	
	RBF1210			●				●	●			2,5		1,0	3,7	12	11
	RBF1613			●				●	●			4,2		1,3	5,3	16	11
	RBF2016			●				●	●			5		1,6	5,3	20	11
	RBF2520			●				●	●			5		2,0	9	25	11

METALLO DURO PER FRESATURA•MILLING CARBIDE GRADE SELECTION•HARTMETALL FRÄSSORTEN

ZSM		Qualità in metallo duro non rivestita. ZSM é particolarmente adatto per lavorazioni di fresature leggere e medie d'acciaio. Uncoated carbide grade. ZSM is an universal grade for use in light and medium machining of steel. ZSM unbe schictetes hartmetall ist besonderst geeignet für die leichte und mittlere Bearbeitung von Stahl.
ZS6		Qualità in metallo duro non rivestita. ZS6 é una qualità universale per le lavorazioni medie e pesanti d'acciaio. Uncoated carbide grade. ZS6 is an universal grade for use in medium and heavy machining of steel. ZS6 unbe schictetes hartmetall ist ein universal einsetzbares Hartmetall für die mittlere bis schwere Zerspanung von Stahl.
ZK03M		Qualità in metallo duro non rivestita. ZK03M é particolarmente adatto per lavorazioni di copiatura leggere e medie dei materiali non ferrosi. Uncoated carbide grade. ZK03M is particularly suitable for use in light and medium copying operation of non-ferrous metals. ZK03M unbe schictetes hartmetall ist besonderst geeignet bei leichten und mittleren Kopierfräsen von NE - Metallen.
ZH20		Qualità in metallo duro non rivestita. ZH20 é una qualità universale per le lavorazioni pesanti e medie dei materiali non ferrosi. Uncoated carbide grade. ZH20 is an universal grade for use in medium and heavy machining of non-ferrous metals. ZH20 unbe schictetes hartmetall ist ein universal einsetzbares Hartmetall für die mittlere bis schwere Zerspanung von NE - Metallen.
RK25G	 TIAIN	RK25G é una nuova qualità rivestita ideale per le lavorazioni a secco. Il substrato è estremamente resistente all'usura. Particolarmente indicata nelle lavorazioni leggere e medie di acciaio. RK25G is a new coated grade ideal for dry operation. The substrate resists built-up edge. Particularly suitable in light and medium machining of steel. RK25G ist mit neuer Beschichtung ideal für die Trockenbearbeitung. Das Substrat ist resistent gegen Aufbauschneiden - Bildung. Einsetzbar für die leichte und mittlere Bearbeitung von Stahl.
RK40G	 TIAIN	Qualità in metallo duro TIAIN (PVD) spessore 4 µm. RK40G é una nuova qualità ad alto rendimento sia per la fresatura di acciaio, acciaio stampi, acciaio inossidabile e ghisa. Coated carbide grade TIAIN (PVD) thickness 4 µm. RK40G is a grade with high performance ideal for milling steel, mould steel, stainless steel and cast iron. Hartmetall mit einer 4 µm dicken TiAlN (PVD) Beschichtung. RK40G ist eine Sorte mit hoher Eigenschaft, ideal zum Fräsen von Stahl, Gesenkschmiedesthal, rostfreiem Stahl ind Guß.
RK03E	 TIAIN	Qualità in metallo duro rivestito (PVD) in TIAIN spessore 3 µm. Particolarmente indicato nelle lavorazione di copiatura in finitura e superfinitura. Coated carbide grade TIAIN (PVD) thickness 3 µm. Particularly suitable for finishing and superfinishing copying operation. Hartmetall mit einer 3 µm dicken TiAlN (PVD) Beschichtung. Besonders geeignet für die Fein- und Feinstbearbeitung beim Kopierfräsen.
RK03CF	 TIAIN Monolayer	Qualità in metallo duro rivestito in TIAIN (PVD) spessore 3 µm. Particolarmente indicato in copiatura in lavorazioni di finitura e superfinitura ed HSC. Coated carbide grade TIAIN (PVD) thickness 3 µm. Particularly suitable for copying operation in finishing, superfinishing and HSC. Einlagiges TiAlN beschichtetes Hartmetall mit einer 3 µm dicken TiAlN (PDV) Beschichtung. Besonders geeignet zum Kopierfräsen bei der Fein, Feinstbearbeitung und bei der HSC - Bearbeitung .
RB10	 TIAIN	Qualità in metallo duro rivestito in (PVD) in TIAIN spessore 4 µm. Grado appositamente studiato per le lavorazioni medie della ghisa. Coated carbide grade TIAIN (PVD) thickness 4 µm. Grade suitable for medium machining of cast iron. Hartmetall mit einer 4 µm dicken TiAlN (PVD) Beschichtung Geeignet für die mittlere Bearbeitung von Grauguß.

METALLO DURO PER FRESATURA•MILLING CARBIDE GRADE SELECTION•HARTMETALL FRÄSSORTEN



METALLO DURO INTEGRALE • SOLID CARBIDE • VOLLHARTMETALL

SPEEDCUT FRESE SFERICHE • BALL NOSE CUTTERS • RADIUSFRÄSER

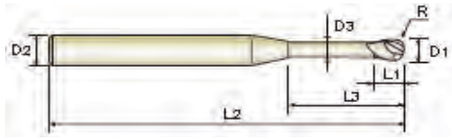
SPEEDCUT FRESE TORICHE • RADIUSCUTTERS • TORISCHERFRÄSER

SPEEDCUT FRESE PIATTE • SOLID CARBIDE MULTI FLUTE VOLLHARTMETALL MEHRSCHNEIDER

144.8

HRC 70

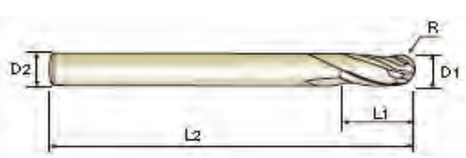
FRESA 2 TAGLI SFERICA PER NERVATURE



CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
144805015	0,25	0,5	0,5	1,5	50	0,45	6	
144805033	0,25	0,5	0,5	3,3	50	0,45	6	
144806020	0,30	0,6	0,6	2,0	50	0,55	6	
144806040	0,30	0,6	0,6	4,0	50	0,55	6	
144808025	0,40	0,8	0,8	2,5	50	0,75	6	
144808055	0,40	0,8	0,8	5,5	50	0,75	6	
144810033	0,50	1	1	3,3	50	0,95	6	
144810067	0,50	1	1	6,7	50	0,95	6	
144810120	0,50	1	1	12,0	50	0,95	6	
144812044	0,60	1,2	1,2	4,4	50	1,15	6	
144812080	0,60	1,2	1,2	8,0	50	1,15	6	
144815050	0,75	1,5	1,5	5,0	50	1,45	6	
144815097	0,75	1,5	1,5	9,7	50	1,45	6	
144815150	0,75	1,5	1,5	15,0	50	1,45	6	
144820060	1,00	2	2	6,0	50	1,95	6	
144820130	1,00	2	2	13,0	50	1,95	6	
144820200	1,00	2	2	20,0	60	1,95	6	

130.8

FRESA 3 TAGLI SFERICA

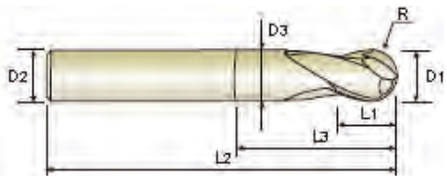


CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
130800030	1,50	3	8	-	60	-	6	
130800040	2,00	4	8	-	70	-	6	
130800050	2,50	5	10	-	80	-	6	
130800060	3,00	6	12	-	90	-	6	
130800080	4,00	8	14	-	100	-	8	
130800100	5,00	10	18	-	100	-	10	
130800120	6,00	12	22	-	110	-	12	
130800160	8,00	16	30	-	140	-	16	
130800200	10,00	20	38	-	160	-	20	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	**HRc40 - 45**	**HRc45 - 55**	**HRc55 - 70**			
●	●	●	●			
BUONO		ECCELLENTE		NON CONSIGLIATO		

140.8

FRESA 2 TAGLI SFERICA

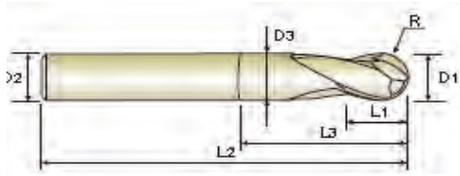


CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
140828001	0,05	0,1	0,2	-	40	-	4	
140828002	0,10	0,2	0,3	-	40	-	4	
140828003	0,15	0,3	0,5	-	40	-	4	
140828004	0,20	0,4	0,6	-	40	-	4	
140828005	0,25	0,5	0,7	-	40	-	4	
140828006	0,30	0,6	0,9	-	40	-	4	
140828007	0,35	0,7	1,1	-	40	-	4	
140828008	0,40	0,8	1,2	-	40	-	4	
140828009	0,45	0,9	1,4	-	40	-	4	
140828010	0,50	1	1,5	3,0	50	0,95	6	
140828015	0,75	1,5	2	4,0	50	1,45	6	
140828020	1,00	2	2,5	5,0	50	1,95	6	
140828025	1,25	2,5	3	7,0	50	2,4	6	
140828030	1,50	3	4	10,0	60	2,85	6	
140828035	1,75	3,5	4,5	10,0	60	3,35	6	
140828040	2,00	4	5	10,0	60	3,85	6	
140828045	2,25	4,5	5,5	10,0	60	4,35	6	
140828050	2,50	5	6	12,0	60	4,85	6	
140828055	2,75	5,5	6,5	12,0	60	5,35	6	
140828060	3,00	6	7	15,0	60	5,85	6	
140828903	3,00	6	9	30,0	90	5,85	6	
140828901	4,00	8	9	15,0	60	7,7	8	
140828080	4,00	8	9	15,0	80	7,7	8	
140828904	4,00	8	12	30,0	100	7,7	8	
140828902	5,00	10	11	25,0	60	9,7	10	
140828100	5,00	10	11	25,0	80	9,7	10	
140828905	5,00	10	15	30,0	100	9,7	10	
140828120	6,00	12	14	25,0	80	11,7	12	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	HRc40 - 45	HRc45 - 55	HRc55 - 70			
●	●	●	●			
BUONO		ECCELLENTE		NON CONSIGLIATO		

151.8

FRESA 2 TAGLI SFERICA SCARICATA

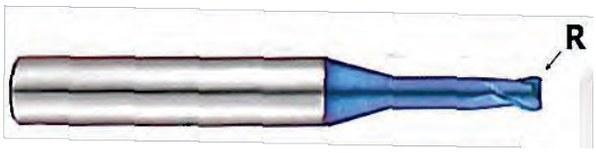


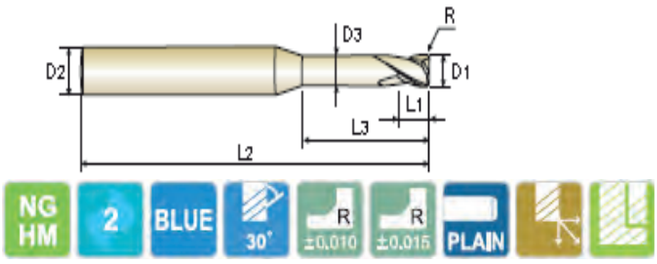
CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
151800100	0,50	1	1	2,2	50	0,95	4	
151800120	0,60	1,2	1,2	2,6	50	1,15	4	
151800150	0,75	1,5	1,5	3,0	50	1,45	4	
151800200	1,00	2	2	4,0	50	1,95	6	
151800300	1,50	3	3	6,0	60	2,85	6	
151800400	2,00	4	4	8,0	70	3,85	6	
151800500	2,50	5	5	10,0	80	4,85	6	
151800600	3,00	6	6	12,0	90	5,85	6	
151800700	3,50	7	7	14,0	90	6,7	8	
151800800	4,00	8	8	16,0	100	7,7	8	
151800900	4,50	9	9	18,0	100	8,7	10	
151801000	5,00	10	10	20,0	100	9,7	10	
151801200	6,00	12	12	24,0	110	11,7	12	
151801400	7,00	14	14	28,0	110	13,7	14	
151801600	8,00	16	16	32,0	140	15,7	16	
151801800	9,00	18	18	36,0	140	17,7	18	
151802000	10,00	20	20	40,0	160	19,7	20	
151802500	12,50	25	25	50,0	180	24,7	25	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	**HRc40 - 45**	**HRc45 - 55**	**HRc55 - 70**			
●	●	●	●			
BUONO		**ECCELLENTE**		**NON CONSIGLIATO**		

102.8

FRESA 2 TAGLI TORICA PER NERVATURE

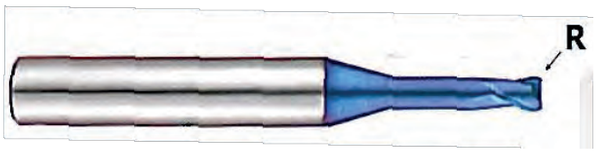




CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
102800936	0,05	0,5	0,7	1,5	45	0,45	4	
102800932	0,05	0,5	0,7	2,5	45	0,45	4	
102800935	0,05	0,5	0,7	4,0	45	0,45	4	
102800931	0,05	0,6	0,9	2,0	45	0,55	4	
102800933	0,05	0,6	0,9	3,0	45	0,55	4	
102800934	0,05	0,6	0,9	4,0	45	0,55	4	
102860102	0,10	0,6	0,9	2,0	45	0,55	4	
102870104	0,10	0,7	1	4,0	45	0,65	4	
102880102	0,10	0,8	1,2	2,0	45	0,75	4	
102800008	0,10	0,8	1,2	4,0	45	0,75	4	
102800924	0,10	0,8	1,2	6,0	45	0,75	4	
102800925	0,10	1	1,5	4,0	50	0,95	6	
102800926	0,10	1	1,5	6,0	50	0,95	6	
102800010	0,20	1	1,5	4,0	50	0,95	6	
102800910	0,20	1	1,5	6,0	50	0,95	6	
102800911	0,20	1	1,5	8,0	50	0,95	6	
102800912	0,30	1	1,5	4,0	50	0,95	6	
102800930	0,30	1	1,5	6,0	50	0,95	6	
102810308	0,30	1	1,5	8,0	50	0,95	6	
102800154	0,20	1,5	2,5	4,0	50	1,45	6	
102815206	0,20	1,5	2,5	6,0	50	1,45	6	
102815208	0,20	1,5	2,5	8,0	50	1,45	6	
102800913	0,20	1,5	2,5	10,0	50	1,45	6	
102800914	0,20	1,5	2,5	12,0	50	1,45	6	
102800915	0,30	1,5	2,5	4,0	50	1,45	6	
102815306	0,30	1,5	2,5	6,0	50	1,45	6	
102815308	0,30	1,5	2,5	8,0	50	1,45	6	
102800927	0,20	2	3	6,0	50	1,95	6	
102820208	0,20	2	3	8,0	50	1,95	6	
102820210	0,20	2	3	10,0	55	1,95	6	
102820212	0,20	2	3	12,0	55	1,95	6	
102800916	0,30	2	3	6,0	50	1,95	6	
102820308	0,30	2	3	8,0	50	1,95	6	
102820310	0,30	2	3	10,0	55	1,95	6	
102820312	0,30	2	3	12,0	55	1,95	6	
102820316	0,30	2	3	16,0	55	1,95	6	
102800917	0,50	2	3	6,0	50	1,95	6	
102800020	0,50	2	3	10,0	55	1,95	6	
102800918	0,50	2	3	12,0	55	1,95	6	
102830208	0,20	3	4	8,0	55	2,85	6	
102830210	0,20	3	4	10,0	55	2,85	6	
102830212	0,20	3	4	12,0	55	2,85	6	
102830216	0,20	3	4	16,0	55	2,85	6	
102830308	0,30	3	4	8,0	55	2,85	6	
102800919	0,30	3	4	10,0	55	2,85	6	
102830312	0,30	3	4	12,0	55	2,85	6	
102830316	0,30	3	4	16,0	55	2,85	6	
102800030	0,50	3	4	10,0	55	2,85	6	
102830512	0,50	3	4	12,0	55	2,85	6	

102.8

FRESA 2 TAGLI TORICA PER NERVATURE

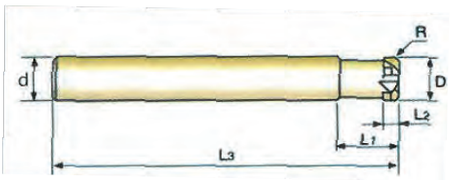


CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
102800901	0,50	3	4	16,0	55	2,85	6	
102800902	0,50	3	4	20,0	55	2,85	6	
102840212	0,20	4	5	12,0	55	3,85	6	
102840216	0,20	4	5	16,0	55	3,85	6	
102840220	0,20	4	5	20,0	55	3,85	6	
102840310	0,30	4	5	10,0	55	3,85	6	
102800920	0,30	4	5	12,0	55	3,85	6	
102840316	0,30	4	5	16,0	55	3,85	6	
102840320	0,30	4	5	20,0	55	3,85	6	
102800040	0,50	4	5	12,0	55	3,85	6	
102800903	0,50	4	5	16,0	55	3,85	6	
102800904	0,50	4	5	20,0	55	3,85	6	
102841012	1,00	4	5	12,0	55	3,85	6	
102841016	1,00	4	5	16,0	55	3,85	6	
102800921	0,30	6	7	20,0	60	5,85	6	
102800060	0,50	6	7	20,0	60	5,85	6	
102800905	1,00	6	7	20,0	60	5,85	6	
102800906	1,50	6	7	20,0	60	5,85	6	
102862020	2,00	6	7	20,0	60	5,85	6	
102800922	0,30	8	9	25,0	60	7,7	8	
102800929	0,50	8	9	25,0	60	7,7	8	
102800080	1,00	8	9	25,0	60	7,7	8	
102800907	1,50	8	9	25,0	60	7,7	8	
102882025	2,00	8	9	25,0	60	7,7	8	
102800923	0,30	10	11	32,0	70	9,7	10	
102810532	0,50	10	11	32,0	70	9,7	10	
102800100	1,00	10	11	32,0	70	9,7	10	
102800908	1,50	10	11	32,0	70	9,7	10	
102810232	2,00	10	11	32,0	70	9,7	10	
102812538	0,50	12	12	38,0	80	11,7	12	
102800120	1,00	12	12	38,0	80	11,7	12	
102800909	1,50	12	12	38,0	80	11,7	12	
102812238	2,00	12	12	38,0	80	11,7	12	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	**HRc40 - 45**	**HRc45 - 55**	**HRc55 - 70**			
●	●	●	●			
BUONO		ECCELLENTE		NON CONSIGLIATO		

159.8

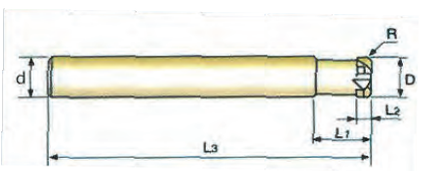
FRESA 4 TAGLI TORICA ALTA VELOCITA'



CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	GAMBO		
159802005	0,5	2,00	1,0	6	50	6		
159803005	0,5	3,00	1,2	8	50	6		
159804005	0,5	4,00	1,5	10	50	6		
159806005	0,5	6,00	2,5	12	60	6		
159806010	1	6,00	2,5	12	60	6		
159808010	1	8,00	3,5	16	60	8		
159808020	2	8,00	3,5	16	60	8		
159810010	1	10,00	4,0	20	70	10		
159810020	2	10,00	4,0	20	70	10		
159812020	2	12,00	5,0	25	80	12		
159812030	3	12,00	5,0	25	80	12		

159.9

FRESA 4 TAGLI TORICA ALTA VELOCITA' SERIE LUNGA

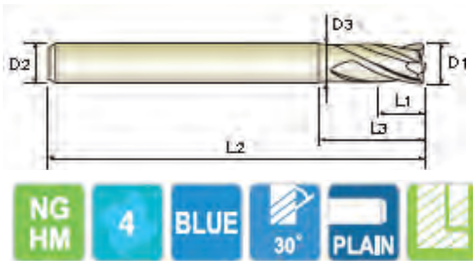


CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	GAMBO		PREZZI
159900205	0,5	2,00	1,0	6	70	6		
159900305	0,5	3,00	1,2	8	70	6		
159900405	0,5	4,00	1,5	10	70	6		
159900505	0,5	5,00	2,0	10	70	6		
159900605	0,5	6,00	2,5	12	90	6		
159900610	1	6,00	2,5	12	90	6		
159900810	1	8,00	3,5	16	100	8		
159900820	1	8,00	3,5	16	100	8		
159901010	1	10,00	4,0	20	100	10		
159901020	2	10,00	4,0	20	100	10		
159901220	2	12,00	5,0	25	110	12		
159901230	3	12,00	5,0	25	110	12		
159901630	3	16,00	6,5	30	130	16		

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	**HRc40 - 45**	**HRc45 - 55**	**HRc55 - 70**			
●	●	●	●			
BUONO		**ECCELLENTE**		**NON CONSIGLIATO**		

170.8

FRESA 4 TAGLI



CODICE	R	DIAMETRO	LUNGHEZZA TAGLIENTE	LUNGHEZZA EFFETTIVA	LUNGHEZZA TOTALE	D SCARICO	GAMBO	
170802010	-	1	1,5	3,0	50	0.95	6	
170802020	-	2	2	5,0	50	1.95	6	
170802030	-	3	3	8,0	55	2.85	6	
170802040	-	4	4	10,0	55	3.85	6	
170802050	-	5	5	13,0	55	4.85	6	
170802060	-	6	6	15,0	55	5.85	6	
170802080	-	8	8	20,0	65	7.7	8	
170802100	-	10	10	25,0	75	9.7	10	
170802120	-	12	12	28,0	85	11.7	12	
170802160	-	16	16	32,0	90	15.7	16	
170802200	-	20	20	40,0	105	19.7	20	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	**HRc40 - 45**	**HRc45 - 55**	**HRc55 - 70**			
●	●	●	●			
BUONO		**ECCELLENTE**		**NON CONSIGLIATO**		

210.8

FRESA 6-8 TAGLI 45° SERIE LUNGA

CODICE	DIAMETRO		LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	Z		GAMBO	
210800600	6,0		13	57	6		6	
210800800	8,0		19	63	6		8	
210801000	10,0		22	72	6		10	
210801200	12,0		26	83	6		12	
210801400	14,0		26	83	6		14	
210801600	16,0		32	92	6		16	
210801800	18,0		32	92	8		18	
210802000	20,0		38	104	8		20	
210802500	25,0		44	104	8		25	

215.8

FRESA 6-8 TAGLI 45° SERIE EXTRA LUNGA

CODICE	DIAMETRO		LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	Z		GAMBO	
215800600	6,0		26	70	6		6	
215800800	8,0		36	90	6		8	
215801000	10,0		46	100	6		10	
215801200	12,0		56	110	6		12	
215801600	16,0		66	130	6		16	
215802000	20,0		76	140	8		20	
215802500	25,0		92	180	8		25	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti						
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti	acciai molto resistenti	Inox	Titanio	Inconel
HB225 - 325	HRc40 - 45	HRc45 - 55	HRc55 - 70			
●	●	●	●			
BUONO		ECCELLENTE		NON CONSIGLIATO		

150.4

HRC58

FRESA 2 TAGLI LUNGA, TESTA SEMISFERICA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
150400100	1,00	4	2,5	50	2	
150400106	1,00	6	2,5	50	2	
150400120	1,20	4	3	50	2	
150400150	1,50	4	4	50	2	
150400156	1,50	6	4	50	2	
150400200	2,00	6	5	50	2	
150400250	2,50	6	6	60	2	
150400300	3,00	6	8	60	2	
150400350	3,50	6	8	70	2	
150400400	4,00	6	8	70	2	
150400500	5,00	6	10	80	2	
150400600	6,00	6	12	90	2	
150400700	7,00	8	14	90	2	
150400800	8,00	8	14	100	2	
150400900	9,00	10	18	100	2	
150401000	10,00	10	18	100	2	
150401200	12,00	12	22	110	2	
150401400	14,00	14	26	110	2	
150401600	16,00	16	30	140	2	
150401800	18,00	18	34	140	2	
150402000	20,00	20	38	160	2	
150402500	25,00	25	50	180	2	

151.4

FRESA 2 TAGLI EXTRACORTA, TESTA SEMISFERICA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
151400100	1,00	4	1	50	2	
151400120	1,20	4	1,2	50	2	
151400150	1,50	4	1,5	50	2	
151400200	2,00	6	2	50	2	
151400300	3,00	6	3	60	2	
151400400	4,00	6	4	70	2	
151400500	5,00	6	5	80	2	
151400600	6,00	6	6	90	2	
151400800	8,00	8	8	100	2	
151401000	10,00	10	10	110	2	
151401200	12,00	12	12	110	2	
151401400	14,00	14	14	110	2	
151401600	16,00	16	16	140	2	
151401800	18,00	18	18	140	2	
151402000	20,00	20	20	160	2	
151402500	25,00	25	25	180	2	

154.4

FRESA 2 TAGLI LUNGA, TESTA SEMISFERICA CONICA

CODICE	DIAMETRO	GAMBO	DIAM. SOTTOTESTA	LUNGHEZZA TAGLIENTE	SCARICO	L. SCARICO SOTTO GAMBO	LUNGH. TOTALE	á	
154401130	1,00	6	2	2,0	4	23,00	60	1°30'	
154401500	1,00	6	4,3	2,0	4	23,00	60	5°	
154401300	1,00	6	5	2,0	4	42,00	80	3°	
154402130	2,00	6	2,9	4,0	6	23,00	60	1°30'	
154402500	2,00	6	5	4,0	6	23,00	60	5°	
154402300	2,00	6	5,7	4,0	6	41,00	80	3°	
154403300	3,00	6	5,6	6,0	8	32,00	70	3°	
154403130	3,00	6	5,3	6,0	8	52,00	90	1°30'	
154404300	4,00	6	6	8,0	10	28,00	70	3°	
154404130	4,00	6	6	8,0	10	49,00	90	1°30'	
154405300	5,00	8	8	10,0	12	41,00	90	3°	
154405130	5,00	8	7,6	10,0	12	61,00	110	1°30'	
154406300	6,00	8	8	12,0	15	34,00	90	3°	
154406130	6,00	8	8	12,0	15	53,00	110	1°30'	
154408300	8,00	10	10	14,0	17	36,00	100	3°	
154408130	8,00	10	10	14,0	17	55,00	120	1°30'	
154410300	10,00	12	12	18,0	21	40,00	110	3°	
154410130	10,00	12	12	18,0	21	59,00	130	1°30'	
154412300	12,00	16	16	22,0	25	63,00	140	3°	
154412130	12,00	16	16	22,0	25	83,00	160	1°30'	

155.4

FRESA 2 TAGLI EXTRALUNGA, TESTA SEMISFERICA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
155400200	2,00	3	6	80	2	
155400300	3,00	3	8	100	2	
155400400	4,00	4	8	100	2	
155400500	5,00	6	10	120	2	
155400600	6,00	6	10	120	2	
155400800	8,00	8	14	140	2	
155401000	10,00	10	18	180	2	
155401200	12,00	12	22	200	2	
155401600	16,00	16	30	250	2	
155402000	20,00	20	38	250	2	

161.4

FRESA 4 TAGLI LUNGA, TORICA

CODICE	DIAMETRO	R	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
161430003	3,00	R0,3	6	12,0	50	4	
161440003	4,00	R0,3	6	15,0	50	4	
161440005	4,00	R0,5	6	15,0	50	4	
161450003	5,00	R0,3	6	20,0	60	4	
161450005	5,00	R0,5	6	20,0	60	4	
161460003	6,00	R0,3	6	20,0	60	4	
161460005	6,00	R0,5	6	20,0	60	4	
161460010	6,00	R1,0	6	20,0	60	4	
161480003	8,00	R0,3	8	25,0	70	4	
161480005	8,00	R0,5	8	25,0	70	4	
161480010	8,00	R1,0	8	25,0	70	4	
161480015	8,00	R1,5	8	25,0	70	4	
161480020	8,00	R2,0	8	25,0	70	4	
161410003	10,00	R0,3	10	30,0	90	4	
161410005	10,00	R0,5	10	30,0	90	4	
161410010	10,00	R1,0	10	30,0	90	4	
161410015	10,00	R1,5	10	30,0	90	4	
161410020	10,00	R2,0	10	30,0	90	4	
161412005	12,00	R0,5	12	30,0	90	4	
161412010	12,00	R1,0	12	30,0	90	4	
161412015	12,00	R1,5	12	30,0	90	4	
161412020	12,00	R2,0	12	30,0	90	4	
161416005	16,00	R0,5	16	50,0	110	4	
161416010	16,00	R1,0	16	50,0	110	4	
161416015	16,00	R1,5	16	50,0	110	4	
161416020	16,00	R2,0	16	50,0	110	4	
161420005	20,00	R0,5	20	55,0	110	4	
161420010	20,00	R1,0	20	55,0	110	4	
161420015	20,00	R1,5	20	55,0	110	4	
161420020	20,00	R2,0	20	55,0	110	4	

210.6

FRESA 6–8 TAGLI LUNGA, ELICA 45° TORICA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z		
210600600	6,00	6	13	57	6	-	
210600700	7,00	8	16	63	6	-	
210600800	8,00	8	19	63	6	-	
210600900	9,00	10	19	72	6	-	
210601000	10,00	10	22	72	6	-	
210601200	12,00	12	26	83	6	-	
210601400	14,00	14	26	83	6	-	
210601600	16,00	16	32	92	6	-	
210601800	18,00	18	32	92	8	-	
210602000	20,00	20	38	104	8	-	
210602500	25,00	25	44	104	8	-	

170.4 FRESA 4 TAGLI LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
170400200	2,00	4	8	40	4	
170400300	3,00	6	12	50	4	
170400400	4,00	6	15	50	4	
170400500	5,00	6	20	60	4	
170400600	6,00	6	20	60	4	
170400800	8,00	8	25	70	4	
170401000	10,00	10	30	90	4	
170401200	12,00	12	30	90	4	
170401400	14,00	16	40	110	4	
170401600	16,00	16	50	110	4	
170401800	18,00	20	50	110	4	
170402000	20,00	20	55	110	4	
170402500	25,00	25	75	140	4	

210.4 FRESA 6−8 TAGLI LUNGA, ELICA 45°

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
210400600	6,00	6	13	57	6	
210400700	7,00	8	16	63	6	
210400800	8,00	8	19	63	6	
210400900	9,00	10	19	72	6	
210401000	10,00	10	22	72	6	
210401200	12,00	12	26	83	6	
210401400	14,00	14	26	83	6	
210401600	16,00	16	32	92	6	
210401800	18,00	18	32	92	8	
210402000	20,00	20	38	104	8	
210402500	25,00	25	44	104	8	

215.4 FRESA 6 TAGLI EXTRALUNGA, ELICA 45° , SERIE EXTRA LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	Z	
215400600	6,00	6	26	70	6	
215400800	8,00	8	36	90	6	
215401000	10,00	10	46	100	6	
215401200	12,00	12	56	110	6	
215401600	16,00	16	66	130	6	
215402000	20,00	20	76	140	6	
215402500	25,00	25	92	180	6	

19424

HRC45

FRESA A 2 TAGLI CORTA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194240100	1,00	4	3	40	
194240150	1,50	4	4,5	40	
194240200	2,00	2	8	32	
194240250	2,50	2,5	8	32	
194240300	3,00	3	12	32	
194240350	3,50	3,5	12	32	
194240400	4,00	4	12	40	
194240450	4,50	4,5	14	50	
194240500	5,00	5	14	50	
194240550	5,50	5,5	16	50	
194240600	6,00	6	16	50	
194240700	7,00	7	20	60	
194240800	8,00	8	20	60	
194240900	9,00	9	20	60	
194241000	10,00	10	22	70	
194241200	12,00	12	22	70	
194241400	14,00	14	25	75	
194241600	16,00	16	25	75	
194242000	20,00	20	32	100	

19168

FRESA A 2 TAGLI CORTA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
191680100	1,00	3	3	39	
191680150	1,50	3	5	39	
191680200	2,00	3	7	39	
191680250	2,50	3	7	39	
191680300	3,00	3	9	39	
191680400	4,00	4	14	51	
191680500	5,00	5	16	51	
191680600	6,00	6	19	64	
191680800	8,00	8	21	64	
191681000	10,00	10	25	70	
191681200	12,00	12	25	76	
191681600	16,00	16	32	89	
191682000	20,00	20	38	102	

19444

FRESA A 2 TAGLI CORTA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194440200	2,00	6	3	50	
194440300	3,00	6	4	50	
194440350	3,50	6	4	50	
194440400	4,00	6	5	54	
194440450	4,50	6	5	54	
194440500	5,00	6	6	64	
194440600	6,00	6	7	64	
194440700	7,00	8	8	58	
194440800	8,00	8	9	58	
194440900	9,00	10	10	66	
194441000	10,00	10	11	66	
194441200	12,00	12	12	73	
194441400	14,00	14	14	75	
194441600	16,00	16	16	82	
194441800	18,00	18	18	84	
194442000	20,00	20	20	92	

19527

FRESA A 2 TAGLI LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
195270350	3,50	3,5	7	50	
195270400	4,00	4	8	50	
195270450	4,50	4,5	8	50	
195270500	5,00	5	10	50	
195270550	5,50	5,5	10	57	
195270600	6,00	6	10	57	
195270650	6,50	6,5	13	60	
195270700	7,00	7	13	60	
195270750	7,50	7,5	16	63	
195270800	8,00	8	16	63	
195270850	8,50	8,5	16	67	
195270900	9,00	9	16	67	
195270950	9,50	9,5	19	72	
195271000	10,00	10	19	72	
195271100	11,00	11	22	83	
195271200	12,00	12	22	83	
195271300	13,00	13	22	83	
195271400	14,00	14	22	83	
195271500	15,00	15	26	92	
195271600	16,00	16	26	92	
195271800	18,00	18	26	92	
195272000	20,00	20	32	104	

19445

FRESA A 2 TAGLI LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194450200	2,00	3	6	38	
194450280	2,80	6	7	57	
194450300	3,00	6	7	57	
194450350	3,50	6	7	57	
194450400	4,00	6	8	57	
194450450	4,50	6	8	57	
194450500	5,00	6	10	57	
194450600	6,00	6	10	57	
194450700	7,00	8	13	63	
194450800	8,00	8	16	63	
194450900	9,00	10	16	72	
194451000	10,00	10	19	72	
194451200	12,00	12	22	83	
194451400	14,00	14	22	83	
194451600	16,00	16	26	92	
194451800	18,00	18	26	92	
194452000	20,00	20	32	104	

19452

FRESA A 2 TAGLI EXTRA LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194529030	3,00	3	20	60	
194529040	4,00	4	20	60	
194529050	5,00	5	25	75	
194529060	6,00	6	30	75	
194529080	8,00	8	30	75	
194529100	10,00	10	40	100	
194529120	12,00	12	45	100	
194529140	14,00	14	45	100	
194529160	16,00	16	45	100	
194529180	18,00	18	45	100	
194529200	20,00	20	45	100	

19553 - 19410

FRESA A 3 TAGLI CORTA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
195530050	0,50	3	1,5	38	
195530060	0,60	3	1,5	38	
195530080	0,80	3	2	38	
195530100	1,00	3	2	38	
195530120	1,20	3	2	38	
195530150	1,50	3	2	38	
194100200	2,00	6	4	35	
194100250	2,50	6	5	36	
194100300	3,00	6	5	36	
194100350	3,50	6	6	37	
194100400	4,00	6	7	38	
194100450	4,50	6	8	38	
194100500	5,00	6	8	39	
194100550	5,50	6	8	39	
194100600	6,00	6	8	39	
194100700	7,00	8	10	42	
194100800	8,00	8	11	43	
194100900	9,00	10	11	48	
194101000	10,00	10	13	50	
194101200	12,00	12	15	55	
194101400	14,00	14	15	58	
194101600	16,00	16	18	62	
194101800	18,00	18	20	70	
194102000	20,00	20	22	75	

19169

FRESA A 4 TAGLI CORTA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
191690100	1,00	3	3	39	
191690150	1,50	3	5	39	
191690200	2,00	3	7	39	
191690250	2,50	3	7	39	
191690300	3,00	3	9	39	
191690400	4,00	4	14	51	
191690500	5,00	5	16	51	
191690600	6,00	6	19	64	
191690800	8,00	8	21	64	
191691000	10,00	10	25	70	
191691200	12,00	12	25	76	
191691600	16,00	16	32	89	
191692000	20,00	20	38	102	

19449

FRESA A 4 TAGLI LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194499010	2,00	3	7	38	
194490300	3,00	6	8	57	
194490350	3,50	6	10	57	
194490400	4,00	6	11	57	
194490450	4,50	6	11	57	
194490500	5,00	6	13	57	
194490600	6,00	6	13	57	
194490700	7,00	8	16	63	
194490800	8,00	8	19	63	
194490900	9,00	10	19	72	
194491000	10,00	10	22	72	
194491200	12,00	12	26	83	
194491400	14,00	14	26	83	
194491600	16,00	16	32	92	
194491800	18,00	18	32	92	
194492000	20,00	20	38	104	

19453

FRESA A 4 TAGLI EXTRA LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194539030	3,00	3	20	60	
194539040	4,00	4	20	60	
194539050	5,00	5	25	75	
194539060	6,00	6	30	75	
194539080	8,00	8	30	75	
194539100	10,00	10	40	100	
194539120	12,00	12	45	100	
194539140	14,00	14	45	100	
194539160	16,00	16	45	100	
194539180	18,00	18	45	100	
194539200	20,00	20	45	100	

19540

FRESA A 4 TAGLI LUNGA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
195400350	3,50	3,5	7	50	
195400400	4,00	4	11	50	
195400450	4,50	4,5	11	50	
195400500	5,00	5	13	50	
195400550	5,50	5,5	13	57	
195400600	6,00	6	13	57	
195400650	6,50	6,5	16	60	
195400700	7,00	7	16	60	
195400750	7,50	7,5	19	63	
195400800	8,00	8	19	63	
195400850	8,50	8,5	19	67	
195400900	9,00	9	19	67	
195400950	9,50	9,5	22	72	
195401000	10,00	10	22	72	
195401100	11,00	11	26	83	
195401200	12,00	12	26	83	
195401300	13,00	13	26	83	
195401400	14,00	14	26	83	
195401500	15,00	15	32	92	
195401600	16,00	16	32	92	
195401800	18,00	18	32	92	
195402000	20,00	20	38	104	

19624

FRESA A 2 TAGLI SFERICA, CORTA

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	PREZZO
196240200	R.1,00	2,00	6	4	48	
196240250	R.1,25	2,50	6	4	48	
196240300	R.1,50	3,00	6	4	48	
196240400	R.2,00	4,00	6	6	50	
196249010	R.2,00	4,00	4	12	40	
196240500	R.2,50	5,00	6	7	51	
196249020	R.2,50	5,00	5	14	50	
196240600	R.3,00	6,00	6	7	51	
196240800	R.4,00	8,00	8	9	59	
196241000	R.5,00	10,00	10	10	60	
196241200	R.6,00	12,00	12	14	71	
196241400	R.7,00	14,00	14	14	71	
196241600	R.8,00	16,00	16	16	76	
196241800	R.9,00	18,00	18	18	76	
196242000	R.10,00	20,00	20	20	82	

19170

FRESA A 2 TAGLI SFERICA, CORTA

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
191700100	R.0,50	1,00	3	3	39	
191700150	R.0,75	1,50	3	5	39	
191700200	R.1,0	2,00	3	7	39	
191700250	R.1,25	2,50	3	8	39	
191700300	R.1,50	3,00	3	10	39	
191700400	R.2,00	4,00	4	14	51	
191700500	R.2,50	5,00	5	16	51	
191700600	R.3,00	6,00	6	19	64	
191700800	R.4,00	8,00	8	21	64	
191701000	R.5,00	10,00	10	25	70	
191701100	R.5,50	11,00	11	25	70	
191701200	R.6,0	12,00	12	25	76	
191701600	R.8,00	16,00	16	32	89	
191702000	R.10,00	20,00	20	38	102	

19437

FRESA A 2 TAGLI SFERICA, CORTA

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	PREZZO
194370200	R.1,00	2,00	6	3	50	
194370300	R.1,50	3,00	6	4	50	
194370400	R.2,00	4,00	6	5	54	
194370500	R.2,50	5,00	6	6	54	
194370600	R.3,00	6,00	6	7	54	
194370800	R.4,00	8,00	8	9	58	
194371000	R.5,00	10,00	10	11	66	
194371200	R.6,00	12,00	12	12	73	
194371400	R.7,00	14,00	14	14	75	
194371800	R.9,00	18,00	18	18	84	
194372000	R.10,00	20,00	20	20	92	

19438

FRESA A 2 TAGLI SFERICA, LUNGA

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194380200	R.1,00	2,00	3	6	38	
194380300	R.1,50	3,00	6	7	57	
194380400	R.2,00	4,00	6	8	57	
194380500	R.2,50	5,00	6	10	57	
194380600	R.3,00	6,00	6	10	57	
194380800	R.4,00	8,00	8	16	63	
194381000	R.5,00	10,00	10	19	72	
194381200	R.6,00	12,00	12	22	83	
194381400	R.7,00	14,00	14	22	83	
194381600	R.8,00	16,00	16	26	92	
194381800	R.9,00	18,00	18	26	92	
194382000	R.10,00	20,00	20	32	104	

19454

FRESA A 2 TAGLI SFERICA, CODOLO LUNGO

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194540300	R.1,50	3,00	3	5	75	
194540400	R.2,00	4,00	4	8	75	
194540500	R.2,50	5,00	5	9	75	
194540600	R.3,00	6,00	6	10	100	
194540800	R.4,00	8,00	8	12	100	
194541000	R.5,00	10,00	10	14	100	
194541200	R.6,00	12,00	12	16	100	
194541400	R.7,00	14,00	14	18	100	
194541600	R.8,00	16,00	16	22	150	
194542000	R.10,00	20,00	20	26	150	

19455

FRESA A 2 TAGLI SFERICA, EXTRALUNGA

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
194559030	R.1,50	3,00	3	20	60	
194559040	R.2,00	4,00	4	20	60	
194559050	R.2,50	5,00	5	25	75	
194559060	R.3,00	6,00	6	30	75	
194559080	R.4,00	8,00	8	30	75	
194559100	R.5,00	10,00	10	40	100	
194559120	R.6,00	12,00	12	45	100	
194559140	R.7,00	14,00	14	45	100	
194559160	R.8,00	16,00	16	45	100	
194559180	R.9,00	18,00	18	45	100	
194559200	R.10,00	20,00	20	45	100	

19634

FRESA A 4 TAGLI SFERICA, CORTA

CODICE	R.	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
196340200	R.1,00	2,00	6	4	48	
196340300	R.1,50	3,00	6	4	48	
196340400	R.2,00	4,00	6	6	50	
196340500	R.2,50	5,00	6	7	51	
196340600	R.3,00	6,00	6	7	51	
196340800	R.4,00	8,00	8	9	59	
196341000	R.5,00	10,00	10	10	60	
196341200	R.6,00	12,00	12	14	71	
196341400	R.7,00	14,00	14	14	71	
196341600	R.8,00	16,00	16	16	76	
196341800	R.9,00	18,00	18	18	76	
196342000	R.10,00	20,00	20	20	82	

19251

FRESA A 2 TAGLI PER NERVATURE SFERICA

CODICE	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	SCARICO SOTTO GAMBO	LUNGHEZZA TOTALE	
192510004	0,40	4	0,7	2,0	50	
192510005	0,50	4	0,75	2,0	50	
192510901	0,50	4	0,75	4,0	50	
192510902	0,50	4	0,75	6,0	50	
192510006	0,60	4	0,9	2,0	50	
192510903	0,60	4	0,9	4,0	50	
192510904	0,60	4	0,9	6,0	50	
192510008	0,80	4	1,2	4,0	50	
192510905	0,80	4	1,2	6,0	50	
192510906	0,80	4	1,2	8,0	50	
192510010	1,00	4	1,5	6,0	50	
192510907	1,00	4	1,5	8,0	50	
192510908	1,00	4	1,5	10,0	50	
192510909	1,00	4	1,5	12,0	50	
192510012	1,20	4	1,8	8,0	50	
192510910	1,20	4	1,8	12,0	50	
192510014	1,40	4	2,1	16,0	50	
192510015	1,50	4	2,3	6,0	50	
192510911	1,50	4	2,3	8,0	50	
192510912	1,50	4	2,3	10,0	50	
192510913	1,50	4	2,3	12,0	50	
192510914	1,50	4	2,3	16,0	50	
192510915	1,50	4	2,3	20,0	50	
192510016	1,60	4	2,4	8,0	50	
192510916	1,60	4	2,4	12,0	50	
192510917	1,60	4	2,4	16,0	50	
192510918	1,60	4	2,4	20,0	50	
192510020	2,00	4	3	8,0	50	
192510919	2,00	4	3	10,0	50	
192510920	2,00	4	3	12,0	50	
192510921	2,00	4	3	14,0	50	
192510922	2,00	4	3	16,0	50	
192510923	2,00	4	3	20,0	50	
192510030	3,00	6	4,5	10,0	50	
192510924	3,00	6	4,5	12,0	50	
192510925	3,00	6	4,5	16,0	60	
192510926	3,00	6	4,5	20,0	60	
192510927	3,00	6	4,5	25,0	75	
192510040	4,00	6	6	12,0	50	
192510928	4,00	6	6	16,0	60	
192510929	4,00	6	6	20,0	75	
192510930	4,00	6	6	25,0	75	
192510931	4,00	6	6	30,0	75	

19252 -19254

FRESA 2 – 4 TAGLI TORICA, SERIE CORTA

←R

2 TAGLI	4 TAGLI	R	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
192520020	**192540020**	0,20	2	4	4	50	
192520901	**192540901**	0,30	2	4	4	50	
192520902	**192540902**	0,50	2	4	4	50	
192520025	**192540025**	0,20	2,5	4	5	50	
192520903	**192540903**	0,30	2,5	4	5	50	
192520904	**192540904**	0,50	2,5	4	5	50	
192520030	**192540030**	0,20	3	4	6	50	
192520905	**192540905**	0,30	3	4	6	50	
192520906	**192540906**	0,50	3	4	6	50	
192520907	**192540907**	1,00	3	4	6	50	
192520040	**192540040**	0,20	4	4	8	50	
192520908	**192540908**	0,30	4	4	8	50	
192520909	**192540909**	0,50	4	4	8	50	
192520910	**192540910**	1,00	4	4	8	50	
192520050	**192540050**	0,20	5	6	10	50	
192520911	**192540911**	0,30	5	6	10	50	
192520912	**192540912**	0,50	5	6	10	50	
192520913	**192540913**	1,00	5	6	10	50	
192520060	**192540060**	0,20	6	6	12	50	
192520914	**192540914**	0,30	6	6	12	50	
192520915	**192540915**	0,50	6	6	12	50	
192520916	**192540916**	1,00	6	6	12	50	
192520080	**192540080**	0,50	8	8	16	60	
192520917	**192540917**	1,00	8	8	16	60	
192520918	**192540918**	1,50	8	8	16	60	
192520919	**192540919**	2,00	8	8	16	60	
192520920	**192540920**	2,50	8	8	16	60	
192520100	**192540100**	0,50	10	10	20	75	
192520921	**192540921**	1,00	10	10	20	75	
192520922	**192540922**	1,50	10	10	20	75	
192520923	**192540923**	2,00	10	10	20	75	
192520924	**192540924**	2,50	10	10	20	75	
192520120	**192540120**	0,50	12	12	24	75	
192520925	**192540925**	1,00	12	12	24	75	
192520926	**192540926**	1,50	12	12	24	75	
192520927	**192540927**	2,00	12	12	24	75	
192520928	**192540928**	2,50	12	12	24	75	

19253 -19255

FRESA A 2–4 A TAGLI TORICA, SERIE LUNGA

←R

2 TAGLI	4 TAGLI	R	DIAMETRO	GAMBO	LUNGHEZZA TAGLIENTE	LUNGHEZZA TOTALE	
192530030	**192550030**	0,50	3	4	6	75	
192530901	**192550901**	1,00	3	4	6	75	
192530040	**192550040**	0,50	4	4	8	75	
192530902	**192550902**	1,00	4	4	8	75	
192530050	**192550050**	0,50	5	6	10	75	
192530903	**192550903**	1,00	5	6	10	75	
192530060	**192550060**	0,50	6	6	12	75	
192530904	**192550904**	1,00	6	6	12	75	
192530080	**192550080**	0,50	8	8	16	100	
192530905	**192550905**	1,00	8	8	16	100	
192530906	**192550906**	1,50	8	8	16	100	
192530907	**192550907**	2,00	8	8	16	100	
192530908	**192550908**	2,50	8	8	16	100	
192530100	**192550100**	0,50	10	10	20	100	
192530909	**192550909**	1,00	10	10	20	100	
192530910	**192550910**	1,50	10	10	20	100	
192530911	**192550911**	2,00	10	10	20	100	
192530912	**192550912**	2,50	10	10	20	100	
192530120	**192550120**	0,50	12	12	24	100	
192530913	**192550913**	1,00	12	12	24	100	
192530914	**192550914**	1,50	12	12	24	100	
192530915	**192550915**	2,00	12	12	24	100	
192530916	**192550916**	2,50	12	12	24	100	

533.5

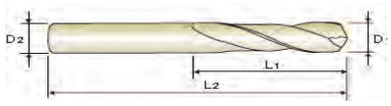
PUNTE HM RIVESTITE PER ACCIAI FINO A 65-70 HRc

CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
533500300	3,00	3	16	46	
533500330	3,30	4	18	48	
533500340	3,40	4	20	50	
533500350	3,50	4	20	50	
533500400	4,00	4	22	52	
533500420	4,20	6	25	65	
533500430	4,30	6	28	68	
533500440	4,40	6	28	68	
533500450	4,50	6	28	68	
533500500	5,00	6	32	72	
533500510	5,10	6	32	72	
533500520	5,20	6	32	72	
533500550	5,50	6	35	75	
533500600	6,00	6	35	75	
533500650	6,50	8	40	80	
533500680	6,80	8	45	85	
533500690	6,90	8	45	85	
533500700	7,00	8	45	85	
533500750	7,50	8	45	85	
533500800	8,00	8	50	98	
533500850	8,50	10	50	98	
533500860	8,60	10	57	105	
533500880	8,80	10	57	105	
533500900	9,00	10	57	105	
533500950	9,50	10	57	105	
533501000	10,00	10	63	111	
533501020	10,20	12	63	111	
533501030	10,30	12	63	111	
533501050	10,50	12	63	111	
533501080	10,80	12	71	119	
533501100	11,00	12	71	119	
533501150	11,50	12	71	119	
533501200	12,00	12	71	119	
533501400	14,00	14	77	125	

Leghe di acciaio	Acciai resistenti temprati		
	HRc40 - 55	**HRc - 55**	**HB225 - 325**
	■	■	
NON CONSIGLIATO	**ECCELLENTE**		**NON CONSIGLIATO**

530.5

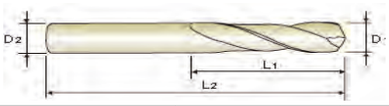
PUNTE 3 X D IN METALLO DURO CODOLO CILINDRICO PER ACCIAI



CODICE	DIAMETRO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
530500300	3,00	16	49	
530500310	3,10	18	49	
530500320	3,20	18	49	
530500330	3,30	18	49	
530500340	3,40	20	52	
530500350	3,50	20	52	
530500360	3,60	20	52	
530500370	3,70	20	52	
530500380	3,80	22	55	
530500390	3,90	22	55	
530500400	4,00	22	55	
530500410	4,10	22	55	
530500420	4,20	22	55	
530500430	4,30	24	58	
530500440	4,40	24	58	
530500450	4,50	24	58	
530500460	4,60	24	58	
530500470	4,70	24	58	
530500480	4,80	26	62	
530500490	4,90	26	62	
530500500	5,00	26	62	
530500510	5,10	26	62	
530500520	5,20	26	62	
530500530	5,30	26	62	
530500540	5,40	28	66	
530500550	5,50	28	66	
530500560	5,60	28	66	
530500570	5,70	28	66	
530500580	5,80	28	66	
530500590	5,90	28	66	
530500600	6,00	28	66	
530500610	6,10	31	70	
530500620	6,20	31	70	
530500630	6,30	31	70	
530500640	6,40	31	70	
530500650	6,50	31	70	
530500660	6,60	31	70	
530500670	6,70	31	70	
530500680	6,80	34	74	
530500690	6,90	34	74	
530500700	7,00	34	74	
530500710	7,10	34	74	
530500720	7,20	34	74	
530500730	7,30	34	74	
530500740	7,40	34	74	
530500750	7,50	34	74	
530500760	7,60	37	79	
530500770	7,70	37	79	
530500780	7,80	37	79	
530500790	7,90	37	79	
530500800	8,00	37	79	

530.5

PUNTE 3 X D IN METALLO DURO CODOLO CILINDRICO PER ACCIAI



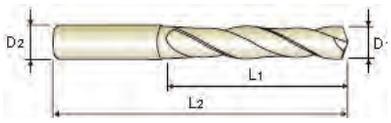
DIN 6539 | MG | h6 | h7 | 140°

530500810	8,10	37	79	
530500820	8,20	37	79	
530500830	8,30	37	79	
530500840	8,40	37	79	
530500850	8,50	37	79	
530500860	8,60	40	84	
530500870	8,70	40	84	
530500880	8,80	40	84	
530500890	8,90	40	84	
530500900	9,00	40	84	
530500910	9,10	40	84	
530500920	9,20	40	84	
530500930	9,30	40	84	
530500940	9,40	40	84	
530500950	9,50	40	84	
530500960	9,60	43	89	
530500970	9,70	43	89	
530500980	9,80	43	89	
530500990	9,90	43	89	
530501000	10,00	43	89	
530501020	10,20	43	89	
530501050	10,50	43	89	
530501100	11,00	47	95	
530501150	11,50	47	95	
530501200	12,00	51	102	
530501250	12,50	51	102	
530501300	13,00	51	102	
530501350	13,50	54	107	
530501400	14,00	54	107	
530501450	14,50	56	111	
530501500	15,00	56	111	
530501550	15,50	58	115	
530501600	16,00	58	115	
530501650	16,50	60	119	
530501700	17,00	60	119	
530501750	17,50	62	123	
530501800	18,00	62	123	
530501850	18,50	64	127	
530501900	19,00	64	127	
530501950	19,50	66	131	
530502000	20,00	66	131	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti			
Leghe di acciaio	Acciai resistenti non temprati	Acciai resistenti temprati	
HB225	**HRc30 - 45**	**HRc45 - 55**	**HRc55**
■	■	■	■
BUONO	**ECCELLENTE**	**ECCELLENTE**	

531.5

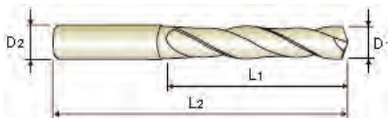
PUNTE 3 X D IN METALLO DURO CODOLO RINFORZATO



CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
531500300	3,00	6	20	62	
531500310	3,10	6	20	62	
531500320	3,20	6	20	62	
531500330	3,30	6	20	62	
531500340	3,40	6	20	62	
531500350	3,50	6	20	62	
531500360	3,60	6	20	62	
531500370	3,70	6	20	62	
531500380	3,80	6	24	66	
531500390	3,90	6	24	66	
531500400	4,00	6	24	66	
531500410	4,10	6	24	66	
531500420	4,20	6	24	66	
531500430	4,30	6	24	66	
531500440	4,40	6	24	66	
531500450	4,50	6	24	66	
531500460	4,60	6	24	66	
531500470	4,70	6	24	66	
531500480	4,80	6	28	66	
531500490	4,90	6	28	66	
531500500	5,00	6	28	66	
531500510	5,10	6	28	66	
531500520	5,20	6	28	66	
531500530	5,30	6	28	66	
531500540	5,40	6	28	66	
531500550	5,50	6	28	66	
531500560	5,60	6	28	66	
531500570	5,70	6	28	66	
531500580	5,80	6	28	66	
531500590	5,90	6	28	66	
531500600	6,00	6	28	66	
531500610	6,10	8	34	79	
531500620	6,20	8	34	79	
531500630	6,30	8	34	79	
531500640	6,40	8	34	79	
531500650	6,50	8	34	79	
531500660	6,60	8	34	79	
531500670	6,70	8	34	79	
531500680	6,80	8	34	79	
531500690	6,90	8	34	79	
531500700	7,00	8	34	79	
531500710	7,10	8	41	79	
531500720	7,20	8	41	79	
531500730	7,30	8	41	79	
531500740	7,40	8	41	79	
531500750	7,50	8	41	79	
531500760	7,60	8	41	79	

531.5

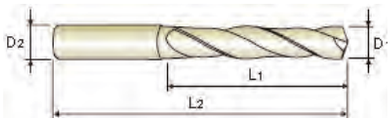
PUNTE 3 X D IN METALLO DURO CODOLO RINFORZATO



CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
531500770	7,70	8	41	79	
531500780	7,80	8	41	79	
531500790	7,90	8	41	79	
531500800	8,00	8	41	79	
531500810	8,10	10	47	89	
531500820	8,20	10	47	89	
531500830	8,30	10	47	89	
531500840	8,40	10	47	89	
531500850	8,50	10	47	89	
531500860	8,60	10	47	89	
531500870	8,70	10	47	89	
531500880	8,80	10	47	89	
531500890	8,90	10	47	89	
531500900	9,00	10	47	89	
531500910	9,10	10	47	89	
531500920	9,20	10	47	89	
531500930	9,30	10	47	89	
531500940	9,40	10	47	89	
531500950	9,50	10	47	89	
531500960	9,60	10	47	89	
531500970	9,70	10	47	89	
531500980	9,80	10	47	89	
531500990	9,90	10	47	89	
531501000	10,00	10	47	89	
531501010	10,10	12	55	102	
531501020	10,20	12	55	102	
531501030	10,30	12	55	102	
531501040	10,40	12	55	102	
531501050	10,50	12	55	102	
531501060	10,60	12	55	102	
531501070	10,70	12	55	102	
531501080	10,80	12	55	102	
531501090	10,90	12	55	102	
531501100	11,00	12	55	102	
531501110	11,10	12	55	102	
531501120	11,20	12	55	102	
531501130	11,30	12	55	102	
531501140	11,40	12	55	102	
531501150	11,50	12	55	102	
531501160	11,60	12	55	102	
531501170	11,70	12	55	102	
531501180	11,80	12	55	102	
531501190	11,90	12	55	102	
531501200	12,00	12	55	102	
531501230	12,30	14	60	107	
531501250	12,50	14	60	107	

531.5

PUNTE 3 X D IN METALLO DURO CODOLO RINFORZATO

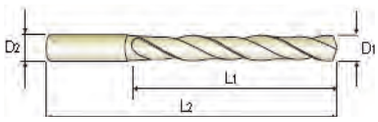


CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
531501280	12,80	14	60	109	
531501300	13,00	14	60	107	
531501350	13,50	14	60	107	
531501380	13,80	14	60	107	
531501400	14,00	14	60	107	
531501450	14,50	16	65	115	
531501480	14,80	16	65	115	
531501500	15,00	16	65	115	
531501550	15,50	16	65	115	
531501580	15,80	16	65	115	
531501600	16,00	16	65	115	
531501650	16,50	18	73	123	
531501680	16,80	18	73	123	
531501700	17,00	18	73	123	
531501750	17,50	18	73	123	
531501780	17,80	18	73	123	
531501800	18,00	18	73	123	
531501850	18,50	20	79	131	
531501900	19,00	20	79	131	
531501950	19,50	20	79	131	
531501980	19,80	20	79	131	
531502000	20,00	20	79	131	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti					
Leghe di acciaio	Acciai resistenti non temprati		Acciai resistenti temprati		
HB225	HRc30 - 45		HRc45 - 55	HRc55	
■	■				
BUONO	**ECCELLENTE**		**NON CONSIGLIATO**		
Inox	Cast Iron	Copper	Bronze	Alluminio	Titanio
■	■	,			
BUONO	**BUONO**	**NON CONSIGLIATO**			

532.5

PUNTE 5 X D IN METALLO DURO CON CODOLO RINFORZATO

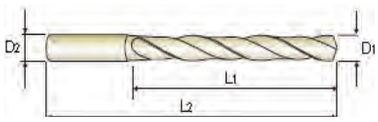


diam.1-2,9

CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
532500100	1,00	3	8	55	
532500110	1,10	3	12	55	
532500120	1,20	3	12	55	
532500130	1,30	3	12	55	
532500140	1,40	3	12	55	
532500150	1,50	3	16	55	
532500160	1,60	3	16	55	
532500170	1,70	3	16	55	
532500180	1,80	3	16	55	
532500190	1,90	3	16	55	
532500200	2,00	4	21	57	
532500210	2,10	4	21	57	
532500220	2,20	4	21	57	
532500230	2,30	4	21	57	
532500240	2,40	4	21	57	
532500250	2,50	4	21	57	
532500260	2,60	4	21	57	
532500270	2,70	4	21	57	
532500280	2,80	4	21	57	
532500290	2,90	4	21	57	
532500300	3,00	6	28	66	
532500310	3,10	6	28	66	
532500320	3,20	6	28	66	
532500330	3,30	6	28	66	
532500340	3,40	6	28	66	
532500350	3,50	6	28	66	
532500360	3,60	6	28	66	
532500370	3,70	6	28	66	
532500380	3,80	6	36	74	
532500390	3,90	6	36	74	
532500400	4,00	6	36	74	
532500410	4,10	6	36	74	
532500420	4,20	6	36	74	
532500430	4,30	6	36	74	
532500440	4,40	6	36	74	
532500450	4,50	6	36	74	
532500460	4,60	6	36	74	
532500470	4,70	6	36	74	
532500480	4,80	6	44	82	
532500490	4,90	6	44	82	
532500500	5,00	6	44	82	
532500510	5,10	6	44	82	
532500520	5,20	6	44	82	
532500530	5,30	6	44	82	
532500540	5,40	6	44	82	

532.5

PUNTE 5 X D IN METALLO DURO CON CODOLO RINFORZATO

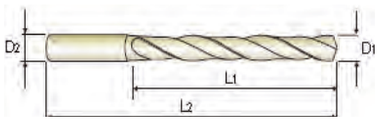


diam.1-2,9

CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
532500550	5,50	6	44	82	
532500560	5,60	6	44	82	
532500570	5,70	6	44	82	
532500580	5,80	6	44	82	
532500590	5,90	6	44	82	
532500600	6,00	6	44	82	
532500610	6,10	8	53	91	
532500620	6,20	8	53	91	
532500630	6,30	8	53	91	
532500640	6,40	8	53	91	
532500650	6,50	8	53	91	
532500660	6,60	8	53	91	
532500670	6,70	8	53	91	
532500680	6,80	8	53	91	
532500690	6,90	8	53	91	
532500700	7,00	8	53	91	
532500710	7,10	8	53	91	
532500720	7,20	8	53	91	
532500730	7,30	8	53	91	
532500740	7,40	8	53	91	
532500750	7,50	8	53	91	
532500760	7,60	8	53	91	
532500770	7,70	8	53	91	
532500780	7,80	8	53	91	
532500790	7,90	8	53	91	
532500800	8,00	8	53	91	
532500810	8,10	10	61	103	
532500820	8,20	10	61	103	
532500830	8,30	10	61	103	
532500840	8,40	10	61	103	
532500850	8,50	10	61	103	
532500860	8,60	10	61	103	
532500870	8,70	10	61	103	
532500880	8,80	10	61	103	
532500890	8,90	10	61	103	
532500900	9,00	10	61	103	
532500910	9,10	10	61	103	
532500920	9,20	10	61	103	
532500930	9,30	10	61	103	
532500940	9,40	10	61	103	
532500950	9,50	10	61	103	
532500960	9,60	10	61	103	

532.5

PUNTE 5 X D IN METALLO DURO CON CODOLO RINFORZATO

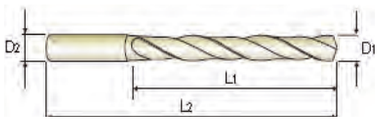


diam.1-2,9

CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
532500970	9,70	10	61	103	
532500980	9,80	10	61	103	
532500990	9,90	10	61	103	
532501000	10,00	10	61	103	
532501010	10,10	12	71	118	
532501020	10,20	12	71	118	
532501030	10,30	12	71	118	
532501040	10,40	12	71	118	
532501050	10,50	12	71	118	
532501060	10,60	12	71	118	
532501070	10,70	12	71	118	
532501080	10,80	12	71	118	
532501090	10,90	12	71	118	
532501100	11,00	12	71	118	
532501110	11,10	12	71	118	
532501120	11,20	12	71	118	
532501130	11,30	12	71	118	
532501140	11,40	12	71	118	
532501150	11,50	12	71	118	
532501160	11,60	12	71	118	
532501170	11,70	12	71	118	
532501180	11,80	12	71	118	
532501190	11,90	12	71	118	
532501200	12,00	12	71	118	
532501230	12,30	14	77	124	
532501250	12,50	14	77	124	
532501280	12,80	14	77	124	
532501300	13,00	14	77	124	
532501350	13,50	14	77	124	
532501380	13,80	14	77	124	
532501400	14,00	14	77	124	
532501450	14,50	16	83	133	
532501480	14,80	16	83	133	
532501500	15,00	16	83	133	
532501550	15,50	16	83	133	
532501580	15,80	16	83	133	
532501600	16,00	16	83	133	
532501650	16,50	18	93	143	
532501680	16,80	18	93	143	
532501700	17,00	18	93	143	
532501750	17,50	18	93	143	
532501780	17,80	18	93	143	

532.5

PUNTE 5 X D IN METALLO DURO CON CODOLO RINFORZATO



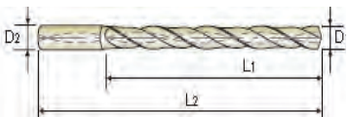
CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
532501800	18,00	18	93	143	
532501850	18,50	20	101	153	
532501900	19,00	20	101	153	
532501950	19,50	20	101	153	
532501980	19,80	20	101	153	
532502000	20,00	20	101	153	

diam.1-2,9

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti					
Leghe di acciaio	Acciai resistenti non temprati		Acciai resistenti temprati		
HB225	**HRc30 - 45**		**HRc45 - 55**	**HRc55**	
■	■				
BUONO	**ECCELLENTE**		**NON CONSIGLIATO**		
Inox	Cast Iron	Copper	Bronze	Alluminio	Titanio
■	■	,			
BUONO	**BUONO**	**NON CONSIGLIATO**			

560.5

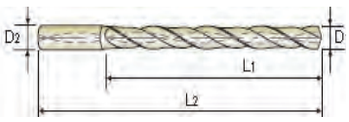
PUNTE 8 X D IN METALLO DURO CON FORI DI LUBRIFICAZIONE CODOLO RINFORZATO



CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
560500300	3,00	6	34	72	
560500310	3,10	6	34	72	
560500320	3,20	6	34	72	
560500330	3,30	6	34	72	
560500340	3,40	6	34	72	
560500350	3,50	6	34	72	
560500360	3,60	6	34	72	
560500370	3,70	6	34	72	
560500380	3,80	6	43	81	
560500390	3,90	6	43	81	
560500400	4,00	6	43	81	
560500410	4,10	6	43	81	
560500420	4,20	6	43	81	
560500430	4,30	6	43	81	
560500440	4,40	6	43	81	
560500450	4,50	6	43	81	
560500460	4,60	6	43	81	
560500470	4,70	6	43	81	
560500480	4,80	6	57	95	
560500490	4,90	6	57	95	
560500500	5,00	6	57	95	
560500510	5,10	6	57	95	
560500520	5,20	6	57	95	
560500530	5,30	6	57	95	
560500540	5,40	6	57	95	
560500550	5,50	6	57	95	
560500560	5,60	6	57	95	
560500570	5,70	6	57	95	
560500580	5,80	6	57	95	
560500590	5,90	6	57	95	
560500600	6,00	6	57	95	
560500610	6,10	8	76	114	
560500620	6,20	8	76	114	
560500630	6,30	8	76	114	
560500640	6,40	8	76	114	
560500650	6,50	8	76	114	
560500660	6,60	8	76	114	
560500670	6,70	8	76	114	
560500680	6,80	8	76	114	
560500690	6,90	8	76	114	
560500700	7,00	8	76	114	
560500710	7,10	8	76	114	
560500720	7,20	8	76	114	
560500730	7,30	8	76	114	
560500740	7,40	8	76	114	
560500750	7,50	8	76	114	
560500760	7,60	8	76	114	

560.5

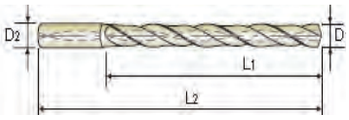
PUNTE 8 X D IN METALLO DURO CON FORI DI LUBRIFICAZIONE CODOLO RINFORZATO



CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
560500300	3,00	6	34	72	
560500310	3,10	6	34	72	
560500320	3,20	6	34	72	
560500330	3,30	6	34	72	
560500340	3,40	6	34	72	
560500350	3,50	6	34	72	
560500360	3,60	6	34	72	
560500370	3,70	6	34	72	
560500380	3,80	6	43	81	
560500390	3,90	6	43	81	
560500400	4,00	6	43	81	
560500410	4,10	6	43	81	
560500420	4,20	6	43	81	
560500430	4,30	6	43	81	
560500440	4,40	6	43	81	
560500450	4,50	6	43	81	
560500460	4,60	6	43	81	
560500470	4,70	6	43	81	
560500480	4,80	6	57	95	
560500490	4,90	6	57	95	
560500500	5,00	6	57	95	
560500510	5,10	6	57	95	
560500520	5,20	6	57	95	
560500530	5,30	6	57	95	
560500540	5,40	6	57	95	
560500550	5,50	6	57	95	
560500560	5,60	6	57	95	
560500570	5,70	6	57	95	
560500580	5,80	6	57	95	
560500590	5,90	6	57	95	
560500600	6,00	6	57	95	
560500610	6,10	8	76	114	
560500620	6,20	8	76	114	
560500630	6,30	8	76	114	
560500640	6,40	8	76	114	
560500650	6,50	8	76	114	
560500660	6,60	8	76	114	
560500670	6,70	8	76	114	
560500680	6,80	8	76	114	
560500690	6,90	8	76	114	
560500700	7,00	8	76	114	
560500710	7,10	8	76	114	
560500720	7,20	8	76	114	
560500730	7,30	8	76	114	
560500740	7,40	8	76	114	
560500750	7,50	8	76	114	
560500760	7,60	8	76	114	

560.5

PUNTE 8 X D IN METALLO DURO CON FORI DI LUBRIFICAZIONE CODOLO RINFORZATO



CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
560501250	12,50	14	133	178	
560501300	13,00	14	133	178	
560501350	13,50	14	133	178	
560501400	14,00	14	133	178	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti					
Leghe di acciaio	Acciai resistenti non temprati		Acciai resistenti temprati		
HB225	HRc30 - 45		HRc45 - 55	HRc55	
■	■				
BUONO	**ECCELLENTE**		**NON CONSIGLIATO**		
Inox	Cast Iron	Copper	Bronze	Alluminio	Titanio
■	■				
BUONO	**BUONO**	**NON CONSIGLIATO**			

565.5

PUNTE 10 XD IN METALLO DURO CON FORI DI LUBRIFICAZIONE

CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
565500300	3,00		39	90	
565500330	3,30	4	46	97	
565500350	3,50	4	46	97	
565500400	4,00	4	52	103	
565500420	4,20	5	59	112	
565500450	4,50	5	59	112	
565500500	5,00	5	65	118	
565500550	5,50	6	72	127	
565500600	6,00	6	78	133	
565500650	6,50	7	85	141	
565500680	6,80	7	91	147	
565500700	7,00	7	91	147	
565500750	7,50	8	98	155	
565500800	8,00	8	104	161	
565500850	8,50	9	111	169	
565500900	9,00	9	117	175	
565500950	9,50	10	124	182	
565501000	10,00	10	130	188	
565501050	10,50	11	137	201	
565501100	11,00	11	143	207	
565501150	11,50	12	150	215	
565501200	12,00	12	156	221	
565501250	12,50	13	163	229	
565501300	13,00	13	169	235	
565501350	13,50	14	176	243	
565501400	14,00	14	182	249	

Lavorazione di Materiali consigliati, seguendo i parametri suggeriti			
Leghe di acciaio	Acciai	Acciai resistenti non temprati	Cast Iron
HB225	HB225 - 325	HRc30 - 45	
■	■		
ECCELLENTE	**ECCELLENTE**	**BUONO**	**BUONO**

566.5

PUNTE IN METALLO DURO 15 XD CON FORI DI LUBRIFICAZIONE

CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
566500300	3,00	3	54	105	
566500350	3,50	4	63	114	
566500400	4,00	4	72	123	
566500450	4,50	5	81	134	
566500500	5,00	5	90	143	
566500550	5,50	6	99	154	
566500600	6,00	6	108	163	
566500700	7,00	7	126	182	
566500800	8,00	8	144	201	
566500900	9,00	9	162	220	
566501000	10,00	10	180	238	
566501100	11,00	11	198	262	
566501200	12,00	12	216	281	

567-5

PUNTE IN METALLO DURO 20 XD CON FORI DI LUBRIFICAZIONE

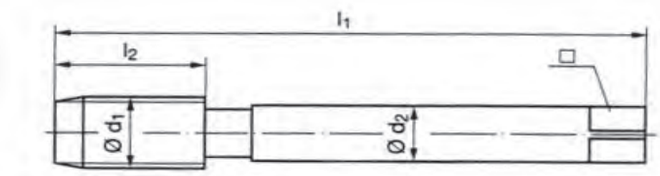
CODICE	DIAMETRO	DIAMETRO GAMBO	LUNGHEZZA TAGLIO	LUNGHEZZA TOTALE	
567500300	3,00	3	69	120	
567500350	3,50	4	81	132	
567500400	4,00	4	92	143	
567500450	4,50	5	104	157	
567500500	5,00	5	115	168	
567500550	5,50	6	127	182	
567500600	6,00	6	138	193	
567500700	7,00	7	161	217	
567500800	8,00	8	184	241	
567500900	9,00	9	207	265	
567501000	10,00	10	230	288	
567501200	12,00	12	276	341	

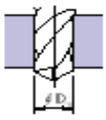
Lavorazione di Materiali consigliati, seguendo i parametri suggeriti			
Leghe di acciaio	Acciai	Acciai resistenti non temprati	Cast Iron
HB225	HB225 - 325	HRc30 - 45	
■	■		
ECCELLENTE	**ECCELLENTE**	**BUONO**	**BUONO**

668.0

HR

MASCHI A MACCHINA FORI PASSANTII - M -
HSS E - TOLLERANZA 6H
DIN - 371 - 376
FORMA - C -
PER MATERIALI DURI

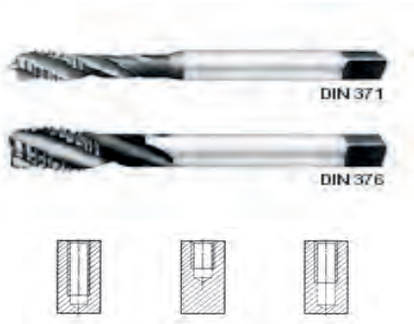




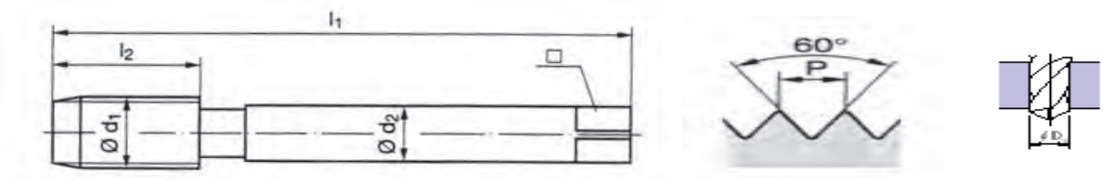
CODICE	DIAMETRO	x	PASSO	LUNGHEZZA TOTALE	LUNGHEZZA FILETTO	GAMBO	□	DIAMETRO FILETTO	
668000200	2,00	X	0,40	45	8	2,80	2,1	1,60	
668000220	2,20	X	0,45	45	8	2,80	2,1	1,75	
668000230	2,30	X	0,40	45	8	2,80	2,1	1,90	
668000250	2,50	X	0,45	50	9	2,80	2,1	2,05	
668000260	2,60	X	0,45	50	9	2,80	2,1	2,10	
668000300	3,00	X	0,50	56	11	3,50	2,7	2,50	
668000350	3,50	X	0,60	56	12	4,00	3,0	2,90	
668000400	4,00	X	0,70	63	13	4,50	3,4	3,30	
668000450	4,50	X	0,75	70	14	6,00	4,9	3,70	
668000500	5,00	X	0,80	70	15	6,00	4,9	4,20	
668000600	6,00	X	1,00	80	17	6,00	4,9	5,00	
668000700	7,00	X	1,00	80	17	7,00	5,5	6,00	
668000800	8,00	X	1,25	90	20	8,00	6,2	6,80	
668000900	9,00	X	1,25	90	20	9,00	7,0	7,80	
668001000	10,00	X	1,50	100	22	10,00	8,0	8,50	
668001100	11,00	X	1,50	100	22	8,00	6,2	9,50	
668001200	12,00	X	1,75	110	24	9,00	7,0	10,20	
668001400	14,00	X	2,00	110	26	11,00	9,0	12,00	
668001600	16,00	X	2,00	110	27	12,00	9,0	14,00	
668001800	18,00	X	2,50	125	30	14,00	11,0	15,50	
668002000	20,00	X	2,50	140	32	16,00	12,0	17,50	
668002200	22,00	X	2,50	140	32	18,00	14,5	19,50	
668002400	24,00	X	3,00	160	34	18,00	14,5	21,00	
668002700	27,00	X	3,00	160	36	20,00	16,0	24,00	
668003000	30,00	X	3,50	180	40	22,00	18,0	26,50	

669.0

HR



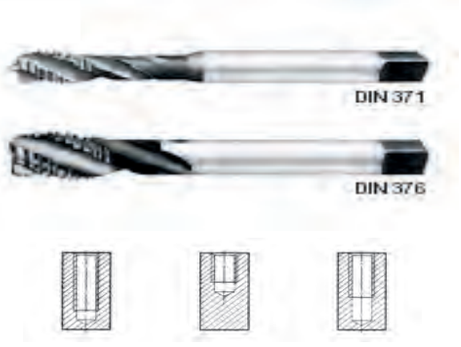
MASCHI A MACCHINA FORI CIECHI - M -
HSS E - TOLLERANZA 6H
DIN - 371 - 376
FORMA - C - R 40°
PER MATERIALI DURI



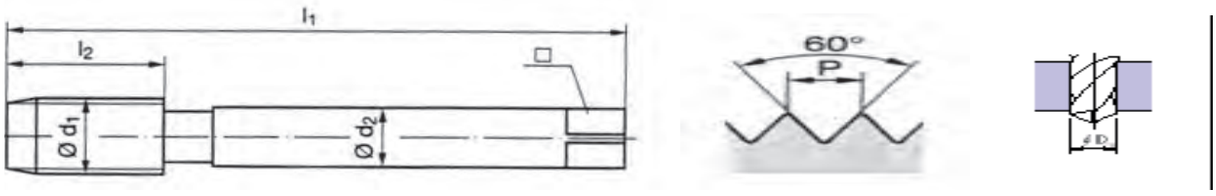
CODICE	DIAMETRO	x	PASSO	LUNGHEZZA TOTALE	LUNGHEZZA FILETTO	GAMBO	□	DIAMETRO FILETTO	
669000200	2,00	X	0,40	45	8	2,80	2,1	1,60	
669000220	2,20	X	0,45	45	8	2,80	2,1	1,75	
669000230	2,30	X	0,40	45	8	2,80	2,1	1,90	
669000250	2,50	X	0,45	50	9	2,80	2,1	2,05	
669000260	2,60	X	0,45	50	9	2,80	2,1	2,10	
669000300	3,00	X	0,50	56	6	3,50	2,7	2,50	
669000350	3,50	X	0,60	56	7	4,00	3,0	2,90	
669000400	4,00	X	0,70	63	7	4,50	3,4	3,30	
669000450	4,50	X	0,75	70	8	6,00	4,9	3,70	
669000500	5,00	X	0,80	70	8	6,00	4,9	4,20	
669000600	6,00	X	1,00	80	10	6,00	4,9	5,00	
669000700	7,00	X	1,00	80	10	7,00	5,5	6,00	
669000800	8,00	X	1,25	90	13	8,00	6,2	6,80	
669000900	9,00	X	1,25	90	13	9,00	7,0	7,80	
669001000	10,00	X	1,50	100	15	10,00	8,0	8,50	
669001100	11,00	X	1,50	100	17	8,00	6,2	9,50	
669001200	12,00	X	1,75	110	18	9,00	7,0	10,20	
669001400	14,00	X	2,00	110	20	11,00	9,0	12,00	
669001600	16,00	X	2,00	110	20	12,00	9,0	14,00	
669001800	18,00	X	2,50	125	25	14,00	11,0	15,50	
669002000	20,00	X	2,50	140	25	16,00	12,0	17,50	
669002200	22,00	X	2,50	140	25	18,00	14,5	19,50	
669002400	24,00	X	3,00	160	30	18,00	14,5	21,00	
669002700	27,00	X	3,00	160	30	20,00	16,0	24,00	
669003000	30,00	X	3,50	180	35	22,00	18,0	26,50	

669.2

HR



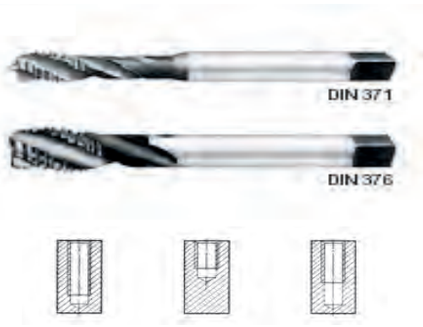
MASCHI A MACCHINA FORI CIECHI - M -
HSS E - TOLLERANZA 6H
DIN - 371 - 376
FORMA - C - R 40°
VAPORIZZATO
PER MATERIALI DURI



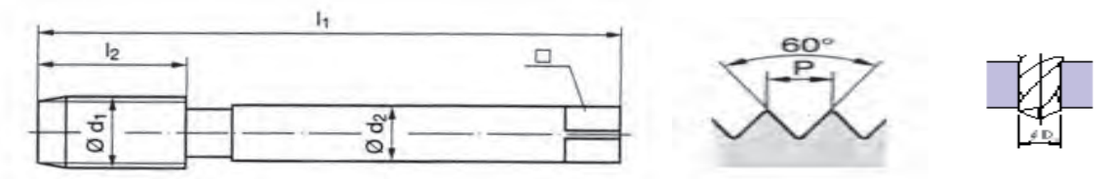
CODICE	DIAMETRO	x	PASSO	LUNGHEZZA TOTALE	LUNGHEZZA FILETTO	GAMBO	□	DIAMETRO FILETTO	
669200200	2,00	X	0,40	45	8	2,80	2,1	1,60	
669200220	2,20	X	0,45	45	8	2,80	2,1	1,75	
669200230	2,30	X	0,40	45	8	2,80	2,1	1,90	
669200250	2,50	X	0,45	50	9	2,80	2,1	2,05	
669200260	2,60	X	0,45	50	9	2,80	2,1	2,10	
669200300	3,00	X	0,50	56	6	3,50	2,7	2,50	
669200350	3,50	X	0,60	56	7	4,00	3,0	2,90	
669200400	4,00	X	0,70	63	7	4,50	3,4	3,30	
669200450	4,50	X	0,75	70	8	6,00	4,9	3,70	
669200500	5,00	X	0,80	70	8	6,00	4,9	4,20	
669200600	6,00	X	1,00	80	10	6,00	4,9	5,00	
669200700	7,00	X	1,00	80	10	7,00	5,5	6,00	
669200800	8,00	X	1,25	90	13	8,00	6,2	6,80	
669200900	9,00	X	1,25	90	13	9,00	7,0	7,80	
669201000	10,00	X	1,50	100	15	10,00	8,0	8,50	
669201100	11,00	X	1,50	100	17	8,00	6,2	9,50	
669201200	12,00	X	1,75	110	18	9,00	7,0	10,20	
669201400	14,00	X	2,00	110	20	11,00	9,0	12,00	
669201600	16,00	X	2,00	110	20	12,00	9,0	14,00	
669201800	18,00	X	2,50	125	25	14,00	11,0	15,50	
669202000	20,00	X	2,50	140	25	16,00	12,0	17,50	
669202200	22,00	X	2,50	140	25	18,00	14,5	19,50	
669202400	24,00	X	3,00	160	30	18,00	14,5	21,00	
669202700	27,00	X	3,00	160	30	20,00	16,0	24,00	
669203000	30,00	X	3,50	180	35	22,00	18,0	26,50	

669.9

HR



MASCHI A MACCHINA FORI CIECHI - M -
HSS E - TOLLERANZA 6H
DIN - 371 - 376
FORMA - C - R 40°
RIVESTIMENTO - TIALN
PER MATERIALI DURI



CODICE	DIAMETRO	x	PASSO	LUNGHEZZA TOTALE	LUNGHEZZA FILETTO	GAMBO	□	DIAMETRO FILETTO	
669900200	2,00	X	0,40	45	8	2,80	2,1	1,60	
669900220	2,20	X	0,45	45	8	2,80	2,1	1,75	
669900230	2,30	X	0,40	45	8	2,80	2,1	1,90	
669900250	2,50	X	0,45	50	9	2,80	2,1	2,05	
669900260	2,60	X	0,45	50	9	2,80	2,1	2,10	
669900300	3,00	X	0,50	56	6	3,50	2,7	2,50	
669900350	3,50	X	0,60	56	7	4,00	3,0	2,90	
669900400	4,00	X	0,70	63	7	4,50	3,4	3,30	
669900450	4,50	X	0,75	70	8	6,00	4,9	3,70	
669900500	5,00	X	0,80	70	8	6,00	4,9	4,20	
669900600	6,00	X	1,00	80	10	6,00	4,9	5,00	
669900700	7,00	X	1,00	80	10	7,00	5,5	6,00	
669900800	8,00	X	1,25	90	13	8,00	6,2	6,80	
669900900	9,00	X	1,25	90	13	9,00	7,0	7,80	
669901000	10,00	X	1,50	100	15	10,00	8,0	8,50	
669901100	11,00	X	1,50	100	17	8,00	6,2	9,50	
669901200	12,00	X	1,75	110	18	9,00	7,0	10,20	
669901400	14,00	X	2,00	110	20	11,00	9,0	12,00	
669901600	16,00	X	2,00	110	20	12,00	9,0	14,00	
669901800	18,00	X	2,50	125	25	14,00	11,0	15,50	
669902000	20,00	X	2,50	140	25	16,00	12,0	17,50	
669902200	22,00	X	2,50	140	25	18,00	14,5	19,50	
669902400	24,00	X	3,00	160	30	18,00	14,5	21,00	
669902700	27,00	X	3,00	160	30	20,00	16,0	24,00	
669903000	30,00	X	3,50	180	35	22,00	18,0	26,50	

KIT PUNTE HSS

195.0 SET

HSSCo5% - DIN338

CODICE	NR. PEZZI	DIAMETRI	
165000001	19	MM 1 - 10 x 0,5 MM	
165000002	25	MM 1 - 13 x 0,5 MM	
165000003	24	MM 1 - 10,5 x 0,5 + Prefori MM. 3,3 - 4,2 - 6,8 - 10,2	

165.0 SET

HSS - DIN338

CODICE	NR. PEZZI	DIAMETRI	
195000001	19	MM 1 - 10 x 0,5 MM	
195000002	25	MM 1 - 13 x 0,5 MM	
195000003	24	MM 1 - 10,5 x 0,5 + Prefori MM. 3,3 - 4,2 - 6,8 - 10,2	