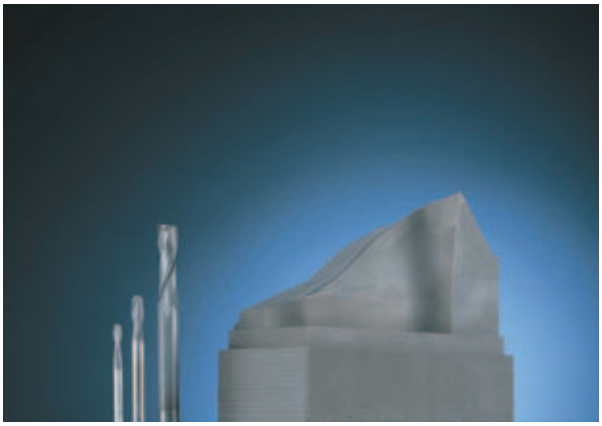
Maggiore produttività, minore usura
Le frese in metallo duro Silmax rivestite "Diamond" sono ideali per le lavorazioni di materiale non ferroso. Producono un'ottima rugosità superficiale del pezzo, riducendo sensibilmente la tendenza all'incollaggio del materiale di riporto sulla fresa stessa. Consigliato per la lavorazione di materiali fortemente abrasivi, migliorando la durata e le prestazioni dell'utensile.

Greater productivity, less wear.
Silmax Diamond coated Carbide cutters are suggested for machining non-ferrous materials. They provide an excellent surface quality, as well as a lower susceptibility to cold welding . Suggested for machining abrasive materials, Diamond coating provides higher performances and longer tool life.

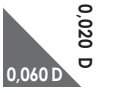
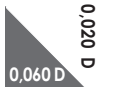


Höhere Produktivität, weniger Verschleiß
Die Diamond beschichteten Hartmetallfräser von Silmax sind ideal zur Bearbeitung von Nichteisen Werkstoffen. Sie gewährleisten eine optimale Oberflächenrauheit und verhindern weitgehend die Bildung von Aufbauschneiden. Sie sind für die Bearbeitung von stark reibenden Werkstoffen geeignet. Leistung und Standzeit des Werkzeugs werden verbessert.

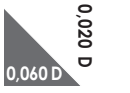
Większa wydajność, mniejsze zużycie.
Frezy pełnowęglikowe SILMAX z powłoką „DIAMOND" są idealnym wyborem przy obróbce materiałów nieżelaznych. Umożliwiają uzyskanie powierzchni o doskonałej jakości. Powłoka zapobiega powstawaniu narostu. Zalecane są do obróbki materiałów mocno ściernych, zapewniając większą wydajność i żywotność narzędzia.

GRAFITE

Graphite

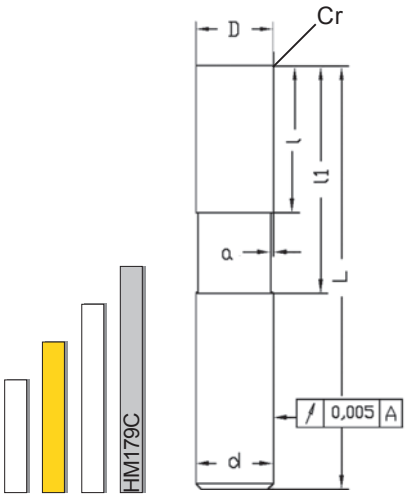
	HMD 175Cr				HMD 111 Cr				HMD 737			HMD 765s		
													
m/min	Vc 750			Vc 900			Vc 750			Vc 900			Vc 1200			Vc 1200		
D	fz	F	n	fz	F	n	fz	F	n	fz	F	n	fz	F	n	fz	F	n
mm	mm/z	mm/min	min	mm/z	mm/min	min	mm/z	mm/min	min	mm/z	mm/min	min	mm/z	mm/min	min	mm/z	mm/min	min
6,0	0,050	3981	39809	0,070	6688	47771	0,050	5971	39809	0,070	10032	47771	0,060	7643	63694	0,060	7643	63694
8,0	0,064	3845	29857	0,084	6047	35828	0,064	5767	29857	0,084	9070	35828	0,074	7107	47771	0,074	7107	47771
10,0	0,076	3609	23885	0,096	5477	28662	0,076	5413	23885	0,096	8215	28662	0,086	6538	38217	0,086	6538	38217
12,0	0,085	3370	19904	0,105	5000	23885	0,085	5055	19904	0,105	7499	23885	0,095	6029	31847	0,095	6029	31847
16,0	0,099	2957	14928	0,119	4265	17914	0,099	4436	14928	0,119	6398	17914	0,109	5209	23885	0,109	5209	23885

Graphite

	HMD 121			HMD 122					
								Serie Lunga , Long, Lang, Długa F -15%, n -15%	
m/min	Vc 600			Vc 600			Vc 600		
D	fz	F	n	fz	F	n	fz	F	n
mm	mm/z	mm/min	min	mm/z	mm/min	min	mm/z	mm/min	min
0,5	0,001	191	95000	0,001	191	95000	0,001	191	95000
0,8	0,001	191	95000	0,001	191	95000	0,001	191	95000
1,0	0,002	318	80000	0,002	318	80000	0,002	318	80000
1,5	0,003	446	75000	0,003	446	75000	0,003	446	75000
2,0	0,003	459	75000	0,003	459	75000	0,003	459	75000
2,5	0,005	764	75000	0,005	764	75000	0,005	764	75000

175 Cr

Frese a due taglienti rivestite Diamond



a = 0,10 - 0,20

MG Co10

6527L 6528

λ 35°

Cr

D	d	L	l	l1	Cr	175	Diamond HMD	Z
h6	h6						€	
2	3	50	6	13	0,3	175020Cr03	90,90	2
3	3	50	7	18	0,3	175030Cr03	86,60	2
4	4	50	8	19	0,3	175040Cr03	83,60	2
5	5	50	10	21	0,5	175050Cr05	102,20	2
6	6	57	10	21	0,5	175060Cr05	120,50	2
8	8	63	16	27	0,5	175080Cr05	175,30	2
10	10	72	19	30	0,5	175100Cr05	234,80	2
12	12	83	22	38	1,0	175120Cr10	297,50	2
16	16	92	26	42	1,0	175160Cr10	543,70	2

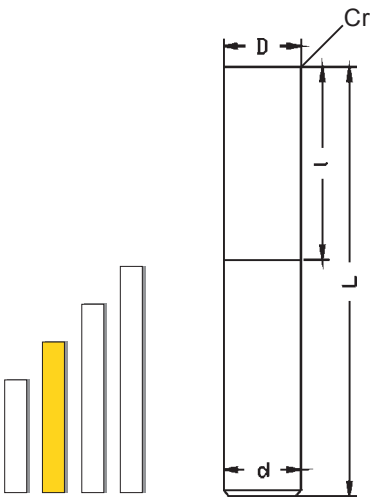
MQL AIR Pag. 251

175 Cr	HMD	PARAMETRI DI TAGLIO (Cutting data) Pag.72
		Graphite
	●	Vc 750
	●	Vc 900

GRAFITE

111 Cr

Frese a tre taglienti rivestite Diamond



MG Co10

6527L 6528

λ 30°

Cr

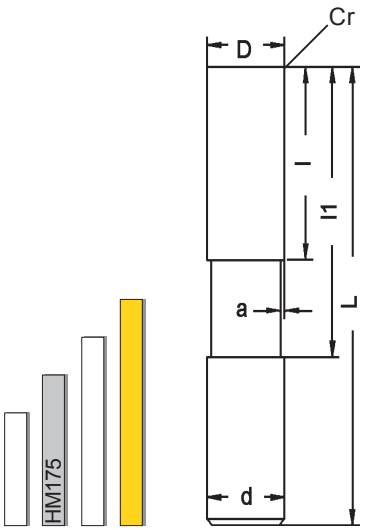
D	d	L	l	Cr	111	Diamond HMD	Z
h10	h6					€	
3	3	38	7	0,3	111030	88,30	3
4	4	50	8	0,3	111040	85,30	3
5	5	50	10	0,5	111050	104,30	3
6	6	57	10	0,5	111060	122,90	3
8	8	63	16	0,5	111080	178,30	3
10	10	72	19	0,5	111100	237,20	3
12	12	83	22	1,0	111120	302,40	3
16	16	92	26	1,0	111160	546,10	3

MQL AIR Pag. 251

111 Cr	HMD	PARAMETRI DI TAGLIO (Cutting data) Pag.72
		Graphite
	●	Vc 750
	●	Vc 900

GRAFITE

179C Frese a due taglienti rivestite Diamond



a=0,10-0,20

MG Co10

Silmax Norm

λ 35°

Cr

D	d	L	l	l1	Cr	179C			Diamond HMD	Z
h10	h6								€	
4	4	80	8	26	0,3	179040C			95,30	2
5	5	100	10	38	0,5	179050C			114,10	2
6	6	100	12	50	0,5	179060C			135,10	2
8	8	100	16	50	0,5	179080C			188,40	2
10	10	150	20	100	0,5	179100C			310,00	2
12	12	150	24	100	1,0	179120C			382,50	2

GRAFITE

MQL AIR Pag. 251

179C	HMD	PARAMETRI DI TAGLIO (Cutting data) Pag.72
		Graphite
	●	Vc 638
	●	Vc 765

121 Micro

Microfrese a due taglienti rivestite Diamond

MG Co10

Silmax Norm

λ 30°

90°

Toll D = 0 -0,02

122 Micro

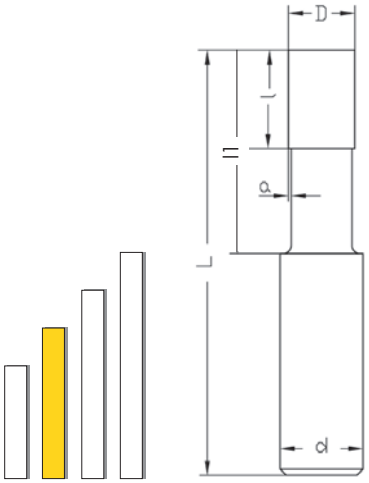
Microfrese semisferiche rivestite Diamond

MG Co10

Silmax Norm

λ 30°

Toll r = ± 0,01

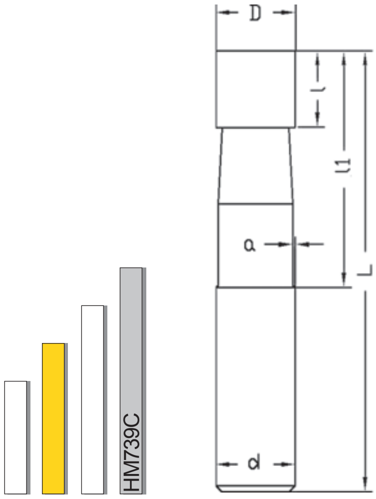


a = 0,02-0,05

D	d h6	L	l	l1	121	HMD Diamond €	z	122	r	HMD Diamond €	z
0,5	3	39	0,75	2,0	1210205	71,60	2	1220205	0,25	71,60	2
0,5	3	39	0,75	4,0	1210405	71,60	2	1220405	0,25	71,60	2
0,5	3	60	0,75	6,0	1210605	102,20	2	1220605	0,25	102,20	2
0,8	3	39	1,2	4,0	1210408	71,60	2	1220408	0,4	71,60	2
0,8	3	39	1,2	6,0	1210608	71,60	2	1220608	0,4	71,60	2
0,8	3	60	1,2	9,0	1210908	102,20	2	1220908	0,4	102,20	2
1,0	3	39	1,5	6,0	1210610	71,60	2	1220610	0,5	71,60	2
1,0	3	39	1,5	9,0	1210910	71,60	2	1220910	0,5	71,60	2
1,0	3	60	1,5	12,0	1211210	102,20	2	1221210	0,5	102,20	2
1,5	3	39	2,25	6,0	1210615	71,60	2	1220615	0,75	71,60	2
1,5	3	39	2,25	9,0	1210915	71,60	2	1220915	0,75	71,60	2
1,5	3	60	2,25	12,0	1211215	102,20	2	1221215	0,75	102,20	2
2,0	3	39	3	9,0	1210920	85,70	2	1220920	1,0	85,70	2
2,0	3	39	3	12,0	1211220	85,70	2	1221220	1,0	85,70	2
2,0	3	60	3	15,0	1211520	102,20	2	1221520	1,0	102,20	2
2,5	4	50	3,7	12,0	1211225	102,20	2	1221225	1,25	102,20	2
2,5	4	80	3,7	25,0	1212525	102,20	2	1222525	1,25	102,20	2
3,0	4	50	4,5	15,0	1211530	102,20	2	1221530	1,5	102,20	2
3,0	4	80	4,5	30,0	1213030	102,20	2	1223030	1,5	102,20	2

MQL AIR Pag. 251				PARAMETRI DI TAGLIO (Cutting data) Pag.72
				Graphite
121	HMD	●		Vc 600
122	HMD	●	●	Vc 600

SILMAX



737 Frese semisferiche rivestite Diamond

MG Co10

Silmax Norm

λ 30°

765s Frese semisferiche rivestite Diamond

MG Co10

Silmax Norm

λ 50°

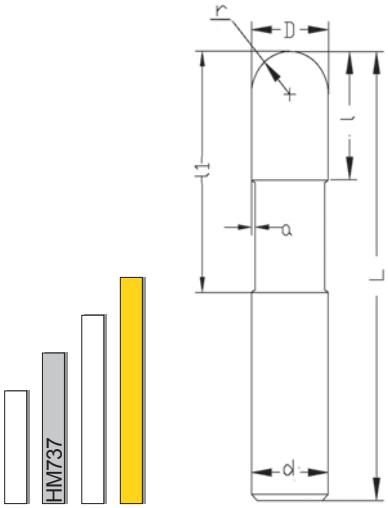
D h10	d h6	L	l	r	737	Diamond HMD €	Z
2	3	38	5	1,0	737020	85,40	2
3	3	50	7	1,5	737030	95,00	2
4	4	50	8	2,0	737040	91,40	2
5	5	50	10	2,5	737050	109,80	2
6	6	57	10	3,0	737060	129,10	2
8	8	63	16	4,0	737080	181,30	2
10	10	72	19	5,0	737100	240,30	2
12	12	83	22	6,0	737120	310,90	2
16	16	92	26	8,0	737160	586,40	2

D h6	d h6	L	l	a x l1	r	765	Diamond HMD €	Z
3	3	50	3	0,15x22	1,5	765030	73,10	2
4	4	50	4	0,20x22	2,0	765040	92,20	2
5	5	50	5	0,20x22	2,5	765050	111,00	2
6	6	57	6	0,25x21	3,0	765060	128,40	2
8	8	63	8	0,35x27	4,0	765080	181,80	2
10	10	72	10	0,50x32	5,0	765100	236,50	2
12	12	83	12	0,50x38	6,0	765120	300,80	2
16	16	92	16	0,80x44	8,0	765160	611,60	2

GRAFITE

MQL AIR Pag. 251			PARAMETRI DI TAGLIO (Cutting data) Pag.72 — Graphite
737	HMD	●	Vc 1200
765s	HMD	●	Vc 1200

739C Frese semisferiche rivestite Diamond



a=0,10-0,20

MG Co10

Silmax Norm

λ 35°

D	d	L	l	l1	r	739C			HMD	Z
h10	h6								Diamond €	
4	4	80	8	38	2,0	739040C			109,70	2
5	5	100	10	50	2,5	739050C			129,20	2
6	6	100	12	50	3,0	739060C			150,20	2
8	8	100	16	50	4,0	739080C			203,30	2
10	10	150	20	100	5,0	739100C			324,30	2
12	12	150	24	100	6,0	739120C			396,40	2

MQL AIR Pag. 251

739C	HMD	PARAMETRI DI TAGLIO (Cutting data) Pag.72
		Graphite
	●	Vc 1000

GRAFITE