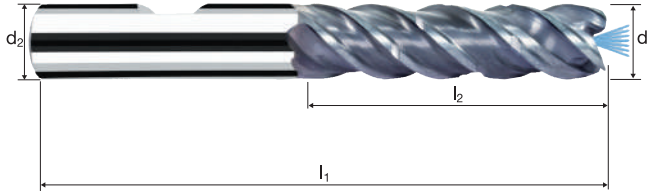
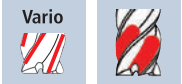
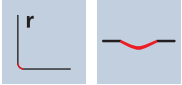


Cylindrical end mills MFC

Smooth-edged, chip breaker, medium length version
High-performance penetration edge, central air/cooling channel



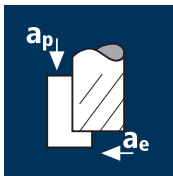
HM
MG10 λ 45°
 γ 0°



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56			Inox Stainless	Ti Titanium	GG(G) Tool Steel
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Ø Code	d ₁ e8	d ₂ h5	l ₁	l ₂	l ₄	r	α	z	POLYCHROM	
	Example: Order-N°: Coating: P Article-N°: 8212 ø-Code: 220									P8212
										P8112
220*	4.00	6.00	63	13.00	19.59	0.100	3.5°	4		●
260*	5.00	6.00	63	16.00	20.72	0.100	1.5°	4		●
300	6.00	6.00	63	21.00	-	0.100	0.0°	4		●
391	8.00	8.00	72	31.00	-	0.150	0.0°	4		●
450	10.00	10.00	84	37.00	-	0.200	0.0°	4		●
501	12.00	12.00	97	44.00	-	0.200	0.0°	4		●
610	16.00	16.00	108	53.00	-	0.200	0.0°	4		●
682	20.00	20.00	122	62.00	-	0.200	0.0°	4		●
* without chip breaker only										

Application

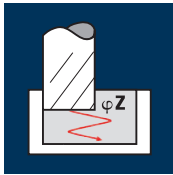


Material

Steel
850 - 1100 N/mm²



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _Z [°]
4.00	4	135	0.026	8.000	1.200	10745	1115	10.7	12°
5.00	4	135	0.030	10.000	1.500	8595	1030	15.5	12°
6.00	4	135	0.034	12.000	1.800	7160	975	21.0	12°
8.00	4	135	0.043	16.000	2.400	5370	925	35.5	12°
10.00	4	135	0.055	20.000	3.000	4295	945	56.7	12°
12.00	4	135	0.064	24.000	3.600	3580	915	79.2	12°
16.00	4	135	0.072	25.600	4.800	2685	775	95.0	12°
20.00	4	135	0.085	32.000	6.000	2150	730	140.3	12°



Steel
1100 - 1300 N/mm²



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _Z [°]
4.00	4	105	0.021	8.000	1.200	8355	700	6.7	12°
5.00	4	105	0.026	10.000	1.500	6685	695	10.4	12°
6.00	4	105	0.030	12.000	1.800	5570	670	14.4	12°
8.00	4	105	0.038	16.000	2.400	4180	635	24.4	12°
10.00	4	105	0.047	20.000	3.000	3340	630	37.7	12°
12.00	4	105	0.055	24.000	3.600	2785	615	52.9	12°
16.00	4	105	0.064	25.600	4.800	2090	535	65.7	12°
20.00	4	105	0.077	32.000	6.000	1670	515	98.8	12°

Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]
4.00	4	80	0.017	8.000	1.200	6365	435	4.2	8°
5.00	4	80	0.021	10.000	1.500	5095	430	6.4	8°
6.00	4	80	0.026	12.000	1.800	4245	440	9.5	8°
8.00	4	80	0.030	16.000	2.400	3185	380	14.7	8°
10.00	4	80	0.038	20.000	3.000	2545	385	23.2	8°
12.00	4	80	0.047	24.000	3.600	2120	400	34.5	8°
16.00	4	80	0.055	25.600	4.800	1590	350	43.0	8°
20.00	4	80	0.068	32.000	6.000	1275	345	66.5	8°

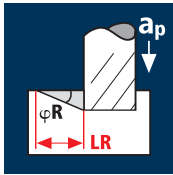
Application



Steel
850 - 1100 N/mm²



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]	LR [mm]
4.00	4	110	0.017	6.000	4.000	8755	595	14.3	12°	28.2
5.00	4	110	0.020	7.500	5.000	7005	560	21.0	12°	35.3
6.00	4	110	0.022	9.000	6.000	5835	515	27.7	12°	42.3
8.00	4	110	0.028	12.000	8.000	4375	490	47.1	12°	56.5
10.00	4	110	0.036	15.000	10.000	3500	505	75.6	12°	70.6
12.00	4	110	0.042	18.000	12.000	2920	490	105.9	12°	84.7
16.00	4	110	0.047	24.000	16.000	2190	410	158.0	12°	112.9
20.00	4	110	0.055	30.000	20.000	1750	385	231.1	12°	141.1



Steel
1100 - 1300 N/mm²



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]	LR [mm]
4.00	4	85	0.014	6.000	4.000	6765	380	9.1	12°	28.2
5.00	4	85	0.017	7.500	5.000	5410	370	13.8	12°	35.3
6.00	4	85	0.020	9.000	6.000	4510	360	19.5	12°	42.3
8.00	4	85	0.025	12.000	8.000	3380	340	32.5	12°	56.5
10.00	4	85	0.031	15.000	10.000	2705	335	50.3	12°	70.6
12.00	4	85	0.036	18.000	12.000	2255	325	70.1	12°	84.7
16.00	4	85	0.042	24.000	16.000	1690	285	109.1	12°	112.9
20.00	4	85	0.050	30.000	20.000	1355	270	162.3	12°	141.1

Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]	LR [mm]
4.00	4	65	0.011	6.000	4.000	5175	230	5.5	12°	28.2
5.00	4	65	0.014	7.500	5.000	4140	230	8.7	12°	35.3
6.00	4	65	0.017	9.000	6.000	3450	235	12.7	12°	42.3
8.00	4	65	0.020	12.000	8.000	2585	205	19.9	12°	56.5
10.00	4	65	0.025	15.000	10.000	2070	205	31.0	12°	70.6
12.00	4	65	0.031	18.000	12.000	1725	215	46.2	12°	84.7
16.00	4	65	0.036	24.000	16.000	1295	185	71.5	12°	112.9
20.00	4	65	0.044	30.000	20.000	1035	180	109.2	12°	141.1

This way to the cutting data software
ToolExpert MFC.
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