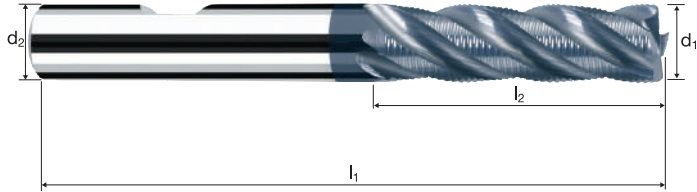
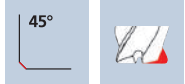


Cylindrical end mills

Profiled, medium length version



HM
MG10 λ 38°
 γ 0°

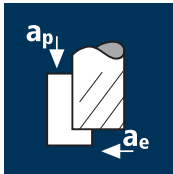


ToolSchool P15238 / P15338
 P15239 / P15339

Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless	Ti Titanium	GG(G)
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Example: Order-N°.										POLYCHROM
										P45372
Ø Code	d ₁ e8	d ₂ h6	l ₁	l ₂	l ₄	45°	α	z		
180	3.00	6.00	63	14.00	21.56	0.25	6.0°	3		●
220	4.00	6.00	63	17.00	23.09	0.30	4.0°	3		●
260	5.00	6.00	63	19.00	23.22	0.35	2.0°	4		●
300	6.00	6.00	63	19.00	-	0.35	0.0°	4		●
391	8.00	8.00	72	28.00	-	0.45	0.0°	4		●
450	10.00	10.00	84	34.00	-	0.60	0.0°	4		●
501	12.00	12.00	97	40.00	-	0.60	0.0°	4		●
610	16.00	16.00	108	48.00	-	0.70	0.0°	4		●
612	16.00	16.00	108	48.00	-	0.70	0.0°	6		●
682	20.00	20.00	122	56.00	-	0.70	0.0°	4		●
684	20.00	20.00	122	56.00	-	0.70	0.0°	6		●

Application



Material

Steel
< 850 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]
3.00	3	180	0.015	4.800	0.600	19100	860	2.5
4.00	3	180	0.020	6.400	0.800	14325	860	4.4
5.00	4	180	0.025	8.000	1.000	11460	1145	9.2
6.00	4	180	0.035	9.600	1.200	9550	1335	15.4
8.00	4	180	0.045	12.800	1.600	7160	1290	26.4
10.00	4	180	0.060	16.000	2.000	5730	1375	44.0
12.00	4	180	0.070	19.200	2.400	4775	1335	61.6
16.00	4	180	0.075	25.600	3.200	3580	1075	88.0
20.00	4	180	0.080	32.000	4.000	2865	915	117.3

Steel
850 - 1100 N/mm²



3.00	3	130	0.015	4.800	0.600	13795	620	1.8
4.00	3	130	0.020	6.400	0.800	10345	620	3.2
5.00	4	130	0.025	8.000	1.000	8275	830	6.6
6.00	4	130	0.035	9.600	1.200	6895	965	11.1
8.00	4	130	0.045	12.800	1.600	5175	930	19.1
10.00	4	130	0.060	16.000	2.000	4140	995	31.8
12.00	4	130	0.070	19.200	2.400	3450	965	44.5
16.00	4	130	0.075	25.600	3.200	2585	775	63.6
20.00	4	130	0.080	32.000	4.000	2070	660	84.7

Titanium alloys
> 300 HB
[Ti6Al4V]



3.00	3	45	0.010	4.800	0.600	4775	145	0.4
4.00	3	45	0.015	6.400	0.800	3580	160	0.8
5.00	4	45	0.020	8.000	1.000	2865	230	1.8
6.00	4	45	0.025	9.600	1.200	2385	240	2.8
8.00	4	45	0.035	12.800	1.600	1790	250	5.1
10.00	4	45	0.045	16.000	2.000	1430	260	8.3
12.00	4	45	0.055	19.200	2.400	1195	265	12.1
16.00	4	45	0.060	25.600	3.200	895	215	17.6
20.00	4	45	0.065	32.000	4.000	715	185	23.8

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



3.00	3	55	0.010	4.800	0.600	5835	175	0.5
4.00	3	55	0.015	6.400	0.800	4375	195	1.0
5.00	4	55	0.020	8.000	1.000	3500	280	2.2
6.00	4	55	0.025	9.600	1.200	2920	290	3.4
8.00	4	55	0.035	12.800	1.600	2190	305	6.3
10.00	4	55	0.045	16.000	2.000	1750	315	10.1
12.00	4	55	0.055	19.200	2.400	1460	320	14.8
16.00	4	55	0.060	25.600	3.200	1095	265	21.5
20.00	4	55	0.065	32.000	4.000	875	230	29.1



Steel
< 850 N/mm²



3.00	3	150	0.015	1.650	3.000	15915	715	3.5
4.00	3	150	0.020	2.200	4.000	11935	715	6.3
5.00	4	150	0.025	2.750	5.000	9550	955	13.1
6.00	4	150	0.030	3.300	6.000	7960	955	18.9
8.00	4	150	0.040	4.400	8.000	5970	955	33.6
10.00	4	150	0.050	5.500	10.000	4775	955	52.5
12.00	4	150	0.055	6.600	12.000	3980	875	69.3
16.00	4	150	0.055	8.800	16.000	2985	655	92.4
20.00	4	150	0.060	11.000	20.000	2385	575	126.1

Steel
850 - 1100 N/mm²



3.00	3	80	0.015	1.650	3.000	8490	380	1.9
4.00	3	80	0.020	2.200	4.000	6365	380	3.4
5.00	4	80	0.025	2.750	5.000	5095	510	7.0
6.00	4	80	0.030	3.300	6.000	4245	510	10.1
8.00	4	80	0.040	4.400	8.000	3185	510	17.9
10.00	4	80	0.050	5.500	10.000	2545	510	28.0
12.00	4	80	0.055	6.600	12.000	2120	465	37.0
16.00	4	80	0.055	8.800	16.000	1590	350	49.3
20.00	4	80	0.060	11.000	20.000	1275	305	67.2

Titanium alloys
> 300 HB
[Ti6Al4V]



3.00	3	35	0.010	1.650	3.000	3715	110	0.6
4.00	3	35	0.015	2.200	4.000	2785	125	1.1
5.00	4	35	0.020	2.750	5.000	2230	180	2.5
6.00	4	35	0.025	3.300	6.000	1855	185	3.7
8.00	4	35	0.030	4.400	8.000	1395	165	5.9
10.00	4	35	0.040	5.500	10.000	1115	180	9.8
12.00	4	35	0.045	6.600	12.000	930	165	13.2
16.00	4	35	0.045	8.800	16.000	695	125	17.6
20.00	4	35	0.050	11.000	20.000	555	110	24.5

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



3.00	3	45	0.010	1.650	3.000	4775	145	0.7
4.00	3	45	0.015	2.200	4.000	3580	160	1.4
5.00	4	45	0.020	2.750	5.000	2865	230	3.2
6.00	4	45	0.025	3.300	6.000	2385	240	4.7
8.00	4	45	0.030	4.400	8.000	1790	215	7.6
10.00	4	45	0.040	5.500	10.000	1430	230	12.6
12.00	4	45	0.045	6.600	12.000	1195	215	17.0
16.00	4	45	0.045	8.800	16.000	895	160	22.7
20.00	4	45	0.050	11.000	20.000	715	145	31.5