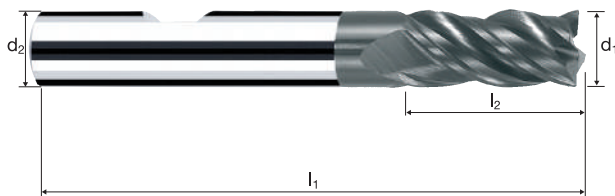
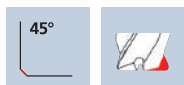


Cylindrical end mills

Smooth-edged, short version



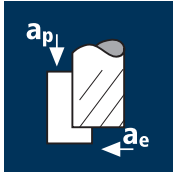
HM
MG10 λ 40°
 γ 0°



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	GG(G) Tool Steel Nickel-Alloys
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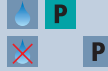
Example: Order-N°.		Coating P	Article-N° 5329	ø-Code 180							POLYCHROM
Ø Code	d ₁ e8	d ₂ h6		l ₁	l ₂	l ₄	45°	α	z		
180	3.00	6.00		50	6.00	13.56	0.10	7.0°	4		●
220	4.00	6.00		50	8.00	14.09	0.10	4.5°	4		●
260	5.00	6.00		50	9.00	13.22	0.15	2.5°	4		●
300	6.00	6.00		50	10.00	-	0.15	0.0°	4		●
391	8.00	8.00		54	13.00	-	0.15	0.0°	4		●
450	10.00	10.00		63	16.00	-	0.20	0.0°	4		●
501	12.00	12.00		73	19.00	-	0.20	0.0°	4		●
610	16.00	16.00		82	25.00	-	0.20	0.0°	4		●

Application



Material

Steel
< 850 N/mm²



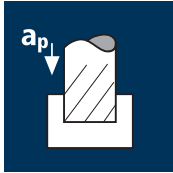
Steel
850 - 1100 N/mm²



Cold work tool steel
(12% Cr),
high alloyed
[1.2379]



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



Steel
< 850 N/mm²



Steel
850 - 1100 N/mm²



Cold work tool steel
(12% Cr),
high alloyed
[1.2379]



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]
3.00	4	190	0.020	3.000	1.400	20160	1615	6.8
4.00	4	190	0.025	4.000	1.800	15120	1510	10.9
5.00	4	190	0.035	5.000	2.300	12095	1695	19.5
6.00	4	190	0.040	6.000	2.700	10080	1615	26.1
8.00	4	190	0.055	8.000	3.600	7560	1665	47.9
10.00	4	190	0.070	10.000	4.500	6050	1695	76.2
12.00	4	190	0.075	12.000	5.400	5040	1510	98.0
16.00	4	190	0.100	16.000	4.000	3780	1510	96.8

3.00	4	140	0.020	3.000	1.400	14855	1190	5.0
4.00	4	140	0.025	4.000	1.800	11140	1115	8.0
5.00	4	140	0.035	5.000	2.300	8915	1250	14.3
6.00	4	140	0.040	6.000	2.700	7425	1190	19.3
8.00	4	140	0.055	8.000	3.600	5570	1225	35.3
10.00	4	140	0.070	10.000	4.500	4455	1250	56.1
12.00	4	140	0.075	12.000	5.400	3715	1115	72.2
16.00	4	140	0.100	16.000	4.000	2785	1115	71.3

3.00	4	70	0.020	3.000	1.400	7425	595	2.5
4.00	4	70	0.025	4.000	1.800	5570	555	4.0
5.00	4	70	0.030	5.000	2.300	4455	535	6.1
6.00	4	70	0.040	6.000	2.700	3715	595	9.6
8.00	4	70	0.050	8.000	3.600	2785	555	16.0
10.00	4	70	0.065	10.000	4.500	2230	580	26.1
12.00	4	70	0.075	12.000	5.400	1855	555	36.1
16.00	4	70	0.095	16.000	4.000	1395	530	33.9

3.00	4	90	0.015	3.000	1.400	9550	575	2.4
4.00	4	90	0.020	4.000	1.800	7160	575	4.1
5.00	4	90	0.020	5.000	2.300	5730	460	5.3
6.00	4	90	0.030	6.000	2.700	4775	575	9.3
8.00	4	90	0.035	8.000	3.600	3580	500	14.4
10.00	4	90	0.045	10.000	4.500	2865	515	23.2
12.00	4	90	0.055	12.000	5.400	2385	525	34.0
16.00	4	90	0.065	16.000	4.000	1790	465	29.8

3.00	4	155	0.015	2.400	3.000	16445	985	7.1
4.00	4	155	0.020	3.200	4.000	12335	985	12.6
5.00	4	155	0.030	4.000	5.000	9870	1185	23.7
6.00	4	155	0.035	4.800	6.000	8225	1150	33.2
8.00	4	155	0.045	6.400	8.000	6165	1110	56.8
10.00	4	155	0.055	8.000	10.000	4935	1085	86.8
12.00	4	155	0.060	9.600	12.000	4110	985	113.7
16.00	4	155	0.075	6.400	16.000	3085	925	94.7

3.00	4	105	0.015	2.400	3.000	11140	670	4.8
4.00	4	105	0.020	3.200	4.000	8355	670	8.6
5.00	4	105	0.030	4.000	5.000	6685	800	16.0
6.00	4	105	0.035	4.800	6.000	5570	780	22.5
8.00	4	105	0.045	6.400	8.000	4180	750	38.5
10.00	4	105	0.055	8.000	10.000	3340	735	58.8
12.00	4	105	0.060	9.600	12.000	2785	670	77.0
16.00	4	105	0.075	6.400	16.000	2090	625	64.2

3.00	4	55	0.015	2.400	3.000	5835	350	2.5
4.00	4	55	0.020	3.200	4.000	4375	350	4.5
5.00	4	55	0.030	4.000	5.000	3500	420	8.4
6.00	4	55	0.035	4.800	6.000	2920	410	11.8
8.00	4	55	0.045	6.400	8.000	2190	395	20.2
10.00	4	55	0.055	8.000	10.000	1750	385	30.8
12.00	4	55	0.060	9.600	12.000	1460	350	40.3
16.00	4	55	0.075	6.400	16.000	1095	330	33.6

3.00	4	70	0.010	2.400	3.000	7425	295	2.1
4.00	4	70	0.015	3.200	4.000	5570	335	4.3
5.00	4	70	0.025	4.000	5.000	4455	445	8.9
6.00	4	70	0.030	4.800	6.000	3715	445	12.8
8.00	4	70	0.035	6.400	8.000	2785	390	20.0
10.00	4	70	0.045	8.000	10.000	2230	400	32.1
12.00	4	70	0.050	9.600	12.000	1855	370	42.8
16.00	4	70	0.060	6.400	16.000	1395	335	34.2