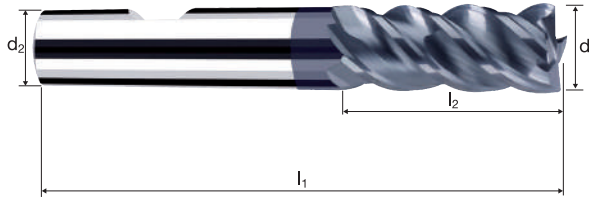


# Cylindrical end mills NVD

Smooth-edged, normal version

HM  
MG10  $\lambda$  45°  
 $\gamma$  0°

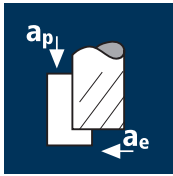


Roughing HPC    Roughing HDC    Finishing

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°.										POLYCHROM
										P15307
										P15207
$\emptyset$ Code	d <sub>1</sub> e8	d <sub>2</sub> h6	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	45°	$\alpha$	z		
180	3.00	6.00	57	8.00	15.56	0.10	6.0°	4		●
220	4.00	6.00	57	8.00	14.59	0.10	4.5°	4		●
260	5.00	6.00	57	10.00	14.72	0.15	2.5°	4		●
300	6.00	6.00	57	12.00	-	0.15	0.0°	4		●
391	8.00	8.00	63	19.00	-	0.15	0.0°	4		●
450	10.00	10.00	72	23.00	-	0.20	0.0°	4		●
501	12.00	12.00	83	27.00	-	0.20	0.0°	4		●
610	16.00	16.00	92	32.00	-	0.20	0.0°	4		●
682	20.00	20.00	104	39.00	-	0.20	0.0°	4		●

## Application



## Material

Steel  
< 850 N/mm<sup>2</sup>



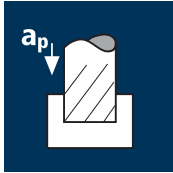
Steel  
850 - 1100 N/mm<sup>2</sup>



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



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



Steel  
< 850 N/mm<sup>2</sup>



Steel  
850 - 1100 N/mm<sup>2</sup>



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 <sub>c</sub> [m/min]	f <sub>s</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]	Q [cm <sup>3</sup> /min]
4.00	4	180	0.035	6.000	1.600	14325	2005	19.3
5.00	4	180	0.040	7.500	2.000	11460	1835	27.5
6.00	4	180	0.050	9.000	2.400	9550	1910	41.3
8.00	4	180	0.060	12.000	3.200	7160	1720	66.0
10.00	4	180	0.075	15.000	4.000	5730	1720	103.1
12.00	4	180	0.085	18.000	4.800	4775	1625	140.3
16.00	4	180	0.095	24.000	6.400	3580	1360	209.0
20.00	4	180	0.110	30.000	8.000	2865	1260	302.5

4.00	4	150	0.030	6.000	1.600	11935	1430	13.8
5.00	4	150	0.035	7.500	2.000	9550	1335	20.1
6.00	4	150	0.040	9.000	2.400	7960	1275	27.5
8.00	4	150	0.050	12.000	3.200	5970	1195	45.8
10.00	4	150	0.065	15.000	4.000	4775	1240	74.5
12.00	4	150	0.075	18.000	4.800	3980	1195	103.1
16.00	4	150	0.085	24.000	6.400	2985	1015	155.8
20.00	4	150	0.100	30.000	8.000	2385	955	229.2

4.00	4	70	0.030	6.000	1.600	5570	670	6.4
5.00	4	70	0.035	7.500	2.000	4455	625	9.4
6.00	4	70	0.040	9.000	2.400	3715	595	12.8
8.00	4	70	0.050	12.000	3.200	2785	555	21.4
10.00	4	70	0.060	15.000	4.000	2230	535	32.1
12.00	4	70	0.075	18.000	4.800	1855	555	48.1
16.00	4	70	0.085	24.000	6.400	1395	475	72.7
20.00	4	70	0.095	30.000	8.000	1115	425	101.6

4.00	4	90	0.020	6.000	1.600	7160	575	5.5
5.00	4	90	0.025	7.500	2.000	5730	575	8.6
6.00	4	90	0.030	9.000	2.400	4775	575	12.4
8.00	4	90	0.035	12.000	3.200	3580	500	19.3
10.00	4	90	0.045	15.000	4.000	2865	515	30.9
12.00	4	90	0.055	18.000	4.800	2385	525	45.4
16.00	4	90	0.065	24.000	6.400	1790	465	71.5
20.00	4	90	0.080	30.000	8.000	1430	460	110.0

4.00	4	145	0.025	5.000	4.000	11540	1155	23.1
5.00	4	145	0.030	6.250	5.000	9230	1110	34.6
6.00	4	145	0.040	7.500	6.000	7690	1230	55.4
8.00	4	145	0.045	10.000	8.000	5770	1040	83.1
10.00	4	145	0.055	12.500	10.000	4615	1015	126.9
12.00	4	145	0.065	15.000	12.000	3845	1000	180.0
16.00	4	145	0.070	20.000	16.000	2885	810	258.5
20.00	4	145	0.085	25.000	20.000	2310	785	392.3

4.00	4	120	0.020	5.000	4.000	9550	765	15.3
5.00	4	120	0.025	6.250	5.000	7640	765	23.9
6.00	4	120	0.030	7.500	6.000	6365	765	34.4
8.00	4	120	0.040	10.000	8.000	4775	765	61.1
10.00	4	120	0.050	12.500	10.000	3820	765	95.5
12.00	4	120	0.055	15.000	12.000	3185	700	126.1
16.00	4	120	0.065	20.000	16.000	2385	620	198.6
20.00	4	120	0.075	25.000	20.000	1910	575	286.5

4.00	4	55	0.025	5.000	4.000	4375	440	8.8
5.00	4	55	0.025	6.250	5.000	3500	350	10.9
6.00	4	55	0.030	7.500	6.000	2920	350	15.8
8.00	4	55	0.040	10.000	8.000	2190	350	28.0
10.00	4	55	0.045	12.500	10.000	1750	315	39.4
12.00	4	55	0.055	15.000	12.000	1460	320	57.8
16.00	4	55	0.065	20.000	16.000	1095	285	91.0
20.00	4	55	0.070	25.000	20.000	875	245	122.5

4.00	4	70	0.015	5.000	4.000	5570	335	6.7
5.00	4	70	0.020	6.250	5.000	4455	355	11.1
6.00	4	70	0.025	7.500	6.000	3715	370	16.7
8.00	4	70	0.025	10.000	8.000	2785	280	22.3
10.00	4	70	0.035	12.500	10.000	2230	310	39.0
12.00	4	70	0.040	15.000	12.000	1855	295	53.5
16.00	4	70	0.050	20.000	16.000	1395	280	89.1
20.00	4	70	0.060	25.000	20.000	1115	265	133.7