

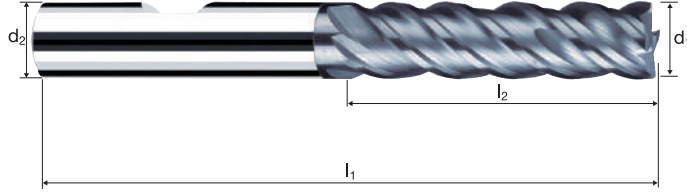
Cylindrical end mills NVD

Smooth-edged, medium length version



HM
MG10

λ 45°
 γ 0°

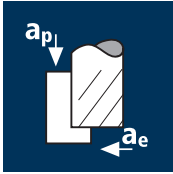


Roughing HPC Roughing HDC Finishing

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
		Coating P	Article-N° 15308		ø-Code 220					P15308
										P15208
Ø Code	d ₁ e8	d ₂ h6	l ₁	l ₂	l ₄	45°	α	z		
220	4.00	6.00	63	13.00	19.59	0.10	3.5°	4		●
260	5.00	6.00	63	16.00	20.72	0.15	1.5°	4		●
300	6.00	6.00	63	21.00	-	0.15	0.0°	4		●
391	8.00	8.00	72	31.00	-	0.15	0.0°	4		●
450	10.00	10.00	84	37.00	-	0.20	0.0°	4		●
501	12.00	12.00	97	44.00	-	0.20	0.0°	4		●
610	16.00	16.00	108	53.00	-	0.20	0.0°	4		●
682	20.00	20.00	122	62.00	-	0.20	0.0°	4		●

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]
4.00	4	180	0.025	7.200	0.800	14325	1430	8.3
5.00	4	180	0.030	9.000	1.000	11460	1375	12.4
6.00	4	180	0.040	10.800	1.200	9550	1530	19.8
8.00	4	180	0.050	14.400	1.600	7160	1430	33.0
10.00	4	180	0.065	18.000	2.000	5730	1490	53.6
12.00	4	180	0.075	21.600	2.400	4775	1430	74.3
16.00	4	180	0.085	28.800	3.200	3580	1220	112.2
20.00	4	180	0.105	36.000	4.000	2865	1205	173.3

Steel
850 - 1100 N/mm²



4.00	4	140	0.025	7.200	0.800	11140	1115	6.4
5.00	4	140	0.030	9.000	1.000	8915	1070	9.6
6.00	4	140	0.040	10.800	1.200	7425	1190	15.4
8.00	4	140	0.050	14.400	1.600	5570	1115	25.7
10.00	4	140	0.065	18.000	2.000	4455	1160	41.7
12.00	4	140	0.075	21.600	2.400	3715	1115	57.8
16.00	4	140	0.085	28.800	3.200	2785	945	87.3
20.00	4	140	0.105	36.000	4.000	2230	935	134.8

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

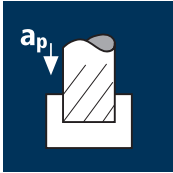


4.00	4	70	0.025	7.200	0.800	5570	555	3.2
5.00	4	70	0.030	9.000	1.000	4455	535	4.8
6.00	4	70	0.035	10.800	1.200	3715	520	6.7
8.00	4	70	0.045	14.400	1.600	2785	500	11.6
10.00	4	70	0.060	18.000	2.000	2230	535	19.3
12.00	4	70	0.070	21.600	2.400	1855	520	27.0
16.00	4	70	0.080	28.800	3.200	1395	445	41.1
20.00	4	70	0.100	36.000	4.000	1115	445	64.2

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



4.00	4	85	0.020	7.200	0.800	6765	540	3.1
5.00	4	85	0.020	9.000	1.000	5410	435	3.9
6.00	4	85	0.025	10.800	1.200	4510	450	5.8
8.00	4	85	0.030	14.400	1.600	3380	405	9.4
10.00	4	85	0.040	18.000	2.000	2705	435	15.6
12.00	4	85	0.050	21.600	2.400	2255	450	23.4
16.00	4	85	0.055	28.800	3.200	1690	370	34.3
20.00	4	85	0.070	36.000	4.000	1355	380	54.5



Steel
< 850 N/mm²



4.00	4	145	0.015	5.400	4.000	11540	690	15.0
5.00	4	145	0.015	6.750	5.000	9230	555	18.7
6.00	4	145	0.020	8.100	6.000	7690	615	29.9
8.00	4	145	0.025	10.800	8.000	5770	575	49.8
10.00	4	145	0.035	13.500	10.000	4615	645	87.2
12.00	4	145	0.040	16.200	12.000	3845	615	119.6
16.00	4	145	0.050	19.200	16.000	2885	575	177.2
20.00	4	145	0.060	24.000	20.000	2310	555	265.9

Steel
850 - 1100 N/mm²



4.00	4	105	0.015	5.400	4.000	8355	500	10.8
5.00	4	105	0.015	6.750	5.000	6685	400	13.5
6.00	4	105	0.020	8.100	6.000	5570	445	21.7
8.00	4	105	0.025	10.800	8.000	4180	420	36.1
10.00	4	105	0.035	13.500	10.000	3340	470	63.2
12.00	4	105	0.040	16.200	12.000	2785	445	86.6
16.00	4	105	0.050	19.200	16.000	2090	420	128.3
20.00	4	105	0.060	24.000	20.000	1670	400	192.5

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



4.00	4	55	0.010	5.400	4.000	4375	175	3.8
5.00	4	55	0.015	6.750	5.000	3500	210	7.1
6.00	4	55	0.020	8.100	6.000	2920	235	11.3
8.00	4	55	0.025	10.800	8.000	2190	220	18.9
10.00	4	55	0.030	13.500	10.000	1750	210	28.4
12.00	4	55	0.035	16.200	12.000	1460	205	39.7
16.00	4	55	0.045	19.200	16.000	1095	195	60.5
20.00	4	55	0.055	24.000	20.000	875	195	92.4

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



4.00	4	65	0.010	5.400	4.000	5175	205	4.5
5.00	4	65	0.010	6.750	5.000	4140	165	5.6
6.00	4	65	0.015	8.100	6.000	3450	205	10.1
8.00	4	65	0.020	10.800	8.000	2585	205	17.9
10.00	4	65	0.025	13.500	10.000	2070	205	27.9
12.00	4	65	0.030	16.200	12.000	1725	205	40.2
16.00	4	65	0.035	19.200	16.000	1295	180	55.6
20.00	4	65	0.045	24.000	20.000	1035	185	89.4