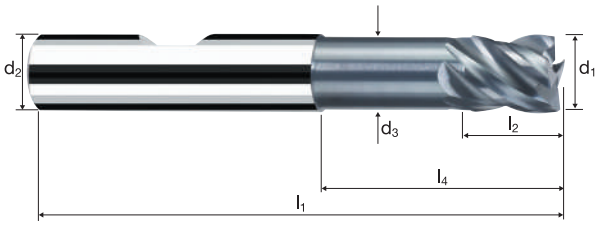
Cylindrical end mills NX

Smooth-edged, normal version, neck

HM MG10	λ 45° γ -20°

45°

Vario



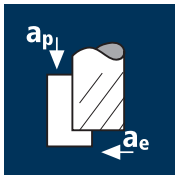
Roughing

Finishing

	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60			Ti Titanium	GG(G) Tool Steel

Example: **Order-N°.** Coating **P** Article-N°. **15342** ø-Code **220**

Ø Code	d_1 e8	d_2 h6	d_3	l_1	l_2	l_3	l_4	45°	α	z	POLYCHROM P15342	POLYCHROM P15242
220	4.00	6.00	3.70	57	6.00	16.00	20.95	0.10	3.0°	4		●
260	5.00	6.00	4.60	57	8.00	18.00	21.27	0.15	1.5°	4		●
300	6.00	6.00	5.50	57	9.00	19.34	20.00	0.15	0.0°	4		●
391	8.00	8.00	7.40	63	12.00	25.29	26.00	0.15	0.0°	4		●
450	10.00	10.00	9.20	72	15.00	30.20	31.00	0.20	0.0°	4		●
501	12.00	12.00	11.00	83	18.00	36.13	37.00	0.20	0.0°	4		●
610	16.00	16.00	15.00	92	24.00	42.13	43.00	0.20	0.0°	4		●
682	20.00	20.00	19.00	104	30.00	52.13	53.00	0.20	0.0°	4		●

Application	Material	d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	Q [cm³/min]
	Steel 850 - 1100 N/mm²	4.00	4	150	0.030	4.000	2.600	11935	1430	14.9
		5.00	4	150	0.040	5.000	3.250	9550	1530	24.8
		6.00	4	150	0.045	6.000	3.900	7960	1430	33.5
		8.00	4	150	0.060	8.000	5.200	5970	1430	59.6
		10.00	4	150	0.075	10.000	6.500	4775	1430	93.1
		12.00	4	150	0.090	12.000	7.800	3980	1430	134.1
		16.00	4	150	0.100	16.000	10.400	2985	1195	198.6
		20.00	4	150	0.125	20.000	13.000	2385	1195	310.4
	Steel 1100 - 1300 N/mm²	4.00	4	115	0.025	4.000	2.600	9150	915	9.5
		5.00	4	115	0.035	5.000	3.250	7320	1025	16.7
		6.00	4	115	0.040	6.000	3.900	6100	975	22.8
		8.00	4	115	0.055	8.000	5.200	4575	1005	41.9
		10.00	4	115	0.065	10.000	6.500	3660	950	61.9
		12.00	4	115	0.080	12.000	7.800	3050	975	91.4
		16.00	4	115	0.090	16.000	10.400	2290	825	137.1
		20.00	4	115	0.110	20.000	13.000	1830	805	209.4
	Hardened tool steel 52 - 56 HRC	4.00	4	50	0.015	4.000	2.600	3980	240	2.5
		5.00	4	50	0.020	5.000	3.250	3185	255	4.1
		6.00	4	50	0.020	6.000	3.900	2655	210	5.0
		8.00	4	50	0.025	8.000	5.200	1990	200	8.3
		10.00	4	50	0.035	10.000	6.500	1590	225	14.5
		12.00	4	50	0.040	12.000	7.800	1325	210	19.9
		16.00	4	50	0.050	16.000	10.400	995	200	33.1
		20.00	4	50	0.060	20.000	13.000	795	190	49.7
	Titanium alloys > 300 HB [Ti6Al4V]	4.00	4	60	0.015	4.000	1.600	4775	285	1.8
		5.00	4	60	0.020	5.000	2.000	3820	305	3.1
		6.00	4	60	0.020	6.000	2.300	3185	255	3.5
		8.00	4	60	0.025	8.000	3.100	2385	240	5.9
		10.00	4	60	0.035	10.000	3.900	1910	265	10.4
		12.00	4	60	0.040	12.000	4.700	1590	255	14.4
		16.00	4	60	0.050	16.000	6.200	1195	240	23.7
		20.00	4	60	0.060	20.000	7.800	955	230	35.8
	Steel 850 - 1100 N/mm²	4.00	4	120	0.020	3.600	4.000	9550	765	11.0
		5.00	4	120	0.025	4.500	5.000	7640	765	17.2
		6.00	4	120	0.035	5.400	6.000	6365	890	28.9
		8.00	4	120	0.045	7.200	8.000	4775	860	49.5
		10.00	4	120	0.055	9.000	10.000	3820	840	75.6
		12.00	4	120	0.065	10.800	12.000	3185	830	107.3
		16.00	4	120	0.075	14.400	16.000	2385	715	165.0
		20.00	4	120	0.095	18.000	20.000	1910	725	261.3
	Steel 1100 - 1300 N/mm²	4.00	4	90	0.020	3.600	4.000	7160	575	8.3
		5.00	4	90	0.025	4.500	5.000	5730	575	12.9
		6.00	4	90	0.035	5.400	6.000	4775	670	21.7
		8.00	4	90	0.045	7.200	8.000	3580	645	37.1
		10.00	4	90	0.055	9.000	10.000	2865	630	56.7
		12.00	4	90	0.065	10.800	12.000	2385	620	80.4
		16.00	4	90	0.075	14.400	16.000	1790	535	123.8
		20.00	4	90	0.095	18.000	20.000	1430	545	196.0
	Hardened tool steel 52 - 56 HRC	4.00	4	40	0.015	3.600	4.000	3185	190	2.8
		5.00	4	40	0.020	4.500	5.000	2545	205	4.6
		6.00	4	40	0.025	5.400	6.000	2120	210	6.9
		8.00	4	40	0.030	7.200	8.000	1590	190	11.0
		10.00	4	40	0.040	9.000	10.000	1275	205	18.3
		12.00	4	40	0.045	10.800	12.000	1060	190	24.8
		16.00	4	40	0.050	14.400	16.000	795	160	36.7
		20.00	4	40	0.065	18.000	20.000	635	165	59.6
	Titanium alloys > 300 HB [Ti6Al4V]	4.00	4	50	0.020	3.600	4.000	3980	320	4.6
		5.00	4	50	0.025	4.500	5.000	3185	320	7.2
		6.00	4	50	0.030	5.400	6.000	2655	320	10.3
		8.00	4	50	0.040	7.200	8.000	1990	320	18.3
		10.00	4	50	0.050	9.000	10.000	1590	320	28.6
		12.00	4	50	0.060	10.800	12.000	1325	320	41.3
		16.00	4	50	0.070	14.400	16.000	995	280	64.2
		20.00	4	50	0.085	18.000	20.000	795	270	97.4