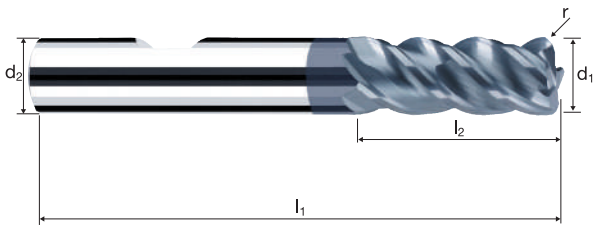
Corner radius end mills NX

Smooth-edged, normal version

HM MG10	λ 45° γ -20°

Vario



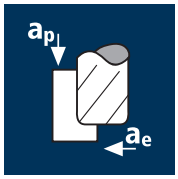
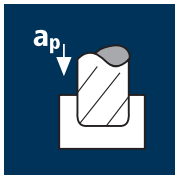
Roughing

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°. **15368** ø-Code **178**

Ø Code	d_1 e8	d_2 h6	l_1	l_2	l_4	r 0/+0.03	α	z	POLYCHROM P15368	POLYCHROM P15268
178	3.00	6.00	57	8.00	15.56	0.200	6.0°	4		●
180	3.00	6.00	57	8.00	15.56	0.500	6.0°	4		●
220	4.00	6.00	57	8.00	14.59	0.500	4.5°	4		●
260	5.00	6.00	57	10.00	14.72	0.500	2.5°	4		●
300	6.00	6.00	57	12.00	-	0.500	0.0°	4		●
388	8.00	8.00	63	19.00	-	0.500	0.0°	4		●
448	10.00	10.00	72	23.00	-	0.500	0.0°	4		●
498	12.00	12.00	83	27.00	-	0.500	0.0°	4		●
302	6.00	6.00	57	12.00	-	1.000	0.0°	4		●
391	8.00	8.00	63	19.00	-	1.000	0.0°	4		●
450	10.00	10.00	72	23.00	-	1.000	0.0°	4		●
501	12.00	12.00	83	27.00	-	1.000	0.0°	4		●
608	16.00	16.00	92	32.00	-	1.000	0.0°	4		●
680	20.00	20.00	104	39.00	-	1.000	0.0°	4		●
393	8.00	8.00	63	19.00	-	1.500	0.0°	4		●
453	10.00	10.00	72	23.00	-	1.500	0.0°	4		●
503	12.00	12.00	83	27.00	-	1.500	0.0°	4		●
610	16.00	16.00	92	32.00	-	1.500	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 [cm^3/min]
	Steel 850 - 1100 N/mm²	4.00	4	150	0.025	6.000	1.600	11935	1195	11.5
		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	0.055	12.000	3.200	5970	1315	50.4
		10.00	4	150	0.065	15.000	4.000	4775	1240	74.5
		12.00	4	150	0.080	18.000	4.800	3980	1275	110.0
		16.00	4	150	0.090	24.000	6.400	2985	1075	165.0
		20.00	4	150	0.110	30.000	8.000	2385	1050	252.1
	Steel 1100 - 1300 N/mm²	4.00	4	115	0.025	6.000	1.600	9150	915	8.8
		5.00	4	115	0.035	7.500	2.000	7320	1025	15.4
		6.00	4	115	0.040	9.000	2.400	6100	975	21.1
		8.00	4	115	0.055	12.000	3.200	4575	1005	38.7
		10.00	4	115	0.065	15.000	4.000	3660	950	57.1
		12.00	4	115	0.080	18.000	4.800	3050	975	84.3
		16.00	4	115	0.090	24.000	6.400	2290	825	126.5
		20.00	4	115	0.110	30.000	8.000	1830	805	193.3
	Hardened tool steel 52 - 56 HRC	4.00	4	55	0.015	6.000	1.200	4375	265	1.9
		5.00	4	55	0.018	7.500	1.500	3500	250	2.8
		6.00	4	55	0.021	9.000	1.800	2920	245	4.0
		8.00	4	55	0.027	12.000	2.400	2190	235	6.8
		10.00	4	55	0.036	15.000	3.000	1750	250	11.3
		12.00	4	55	0.042	18.000	3.600	1460	245	15.9
		16.00	4	55	0.048	24.000	4.800	1095	210	24.2
		20.00	4	55	0.060	30.000	6.000	875	210	37.8
	Titanium alloys > 300 HB [Ti6Al4V]	4.00	4	50	0.015	6.000	1.600	3980	240	2.3
		5.00	4	50	0.020	7.500	2.000	3185	255	3.8
		6.00	4	50	0.020	9.000	2.400	2655	210	4.6
		8.00	4	50	0.025	12.000	3.200	1990	200	7.6
		10.00	4	50	0.035	15.000	4.000	1590	225	13.4
		12.00	4	50	0.040	18.000	4.800	1325	210	18.3
		16.00	4	50	0.050	24.000	6.400	995	200	30.6
		20.00	4	50	0.060	30.000	8.000	795	190	45.8
	Steel 850 - 1100 N/mm²	4.00	4	115	0.020	5.000	4.000	9150	730	14.6
		5.00	4	115	0.025	6.250	5.000	7320	730	22.9
		6.00	4	115	0.025	7.500	6.000	6100	610	27.5
		8.00	4	115	0.035	10.000	8.000	4575	640	51.2
		10.00	4	115	0.045	12.500	10.000	3660	660	82.4
		12.00	4	115	0.055	15.000	12.000	3050	670	120.8
		16.00	4	115	0.065	20.000	16.000	2290	595	190.3
		20.00	4	115	0.080	25.000	20.000	1830	585	292.8
	Steel 1100 - 1300 N/mm²	4.00	4	90	0.020	5.000	4.000	7160	575	11.5
		5.00	4	90	0.025	6.250	5.000	5730	575	17.9
		6.00	4	90	0.025	7.500	6.000	4775	475	21.5
		8.00	4	90	0.035	10.000	8.000	3580	500	40.1
		10.00	4	90	0.045	12.500	10.000	2865	515	64.5
		12.00	4	90	0.055	15.000	12.000	2385	525	94.5
		16.00	4	90	0.065	20.000	16.000	1790	465	149.0
		20.00	4	90	0.080	25.000	20.000	1430	460	229.2
	Hardened tool steel 52 - 56 HRC	4.00	4	50	0.009	4.000	4.000	3980	145	2.3
		5.00	4	50	0.012	5.000	5.000	3185	155	3.8
		6.00	4	50	0.015	6.000	6.000	2655	160	5.7
		8.00	4	50	0.018	8.000	8.000	1990	145	9.2
		10.00	4	50	0.024	10.000	10.000	1590	155	15.3
		12.00	4	50	0.030	12.000	12.000	1325	160	22.9
		16.00	4	50	0.033	16.000	16.000	995	130	33.6
		20.00	4	50	0.042	20.000	20.000	795	135	53.5
	Titanium alloys > 300 HB [Ti6Al4V]	4.00	4	40	0.010	5.000	4.000	3185	125	2.5
		5.00	4	40	0.015	6.250	5.000	2545	155	4.8
		6.00	4	40	0.020	7.500	6.000	2120	170	7.6
		8.00	4	40	0.025	10.000	8.000	1590	160	12.7
		10.00	4	40	0.030	12.500	10.000	1275	155	19.1
		12.00	4	40	0.040	15.000	12.000	1060	170	30.6
		16.00	4	40	0.045	20.000	16.000	795	145	45.8
		20.00	4	40	0.055	25.000	20.000	635	140	70.0

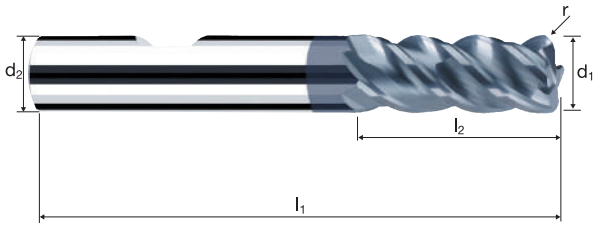
Corner radius end mills NX

Smooth-edged, normal version

X-Generation X

HM MG10	λ 45° γ -20°

Vario



Roughing

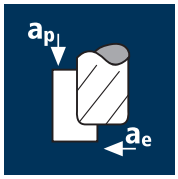
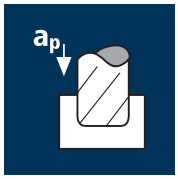
Finishing

	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°. **15368** ø-Code **306**

	POLYCHROM
	P15368
	P15268

Ø Code	d_1 e8	d_2 h6	l_1	l_2	l_4	r 0/+0.03	α	z		
306	6.00	6.00	57	12.00	-	2.000	0.0°	4		●
395	8.00	8.00	63	19.00	-	2.000	0.0°	4		●
505	12.00	12.00	83	27.00	-	2.000	0.0°	4		●
611	16.00	16.00	92	32.00	-	2.000	0.0°	4		●
683	20.00	20.00	104	39.00	-	2.000	0.0°	4		●
457	10.00	10.00	72	23.00	-	2.500	0.0°	4		●
506	12.00	12.00	83	27.00	-	2.500	0.0°	4		●
612	16.00	16.00	92	32.00	-	2.500	0.0°	4		●
684	20.00	20.00	104	39.00	-	2.500	0.0°	4		●
508	12.00	12.00	83	27.00	-	4.000	0.0°	4		●
614	16.00	16.00	92	32.00	-	4.000	0.0°	4		●
686	20.00	20.00	104	39.00	-	4.000	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	10.00	4	150	0.065	15.000	4.000	4775	1240	74.5
		12.00	4	150	0.080	18.000	4.800	3980	1275	110.0
		16.00	4	150	0.090	24.000	6.400	2985	1075	165.0
		20.00	4	150	0.110	30.000	8.000	2385	1050	252.1
	Steel 1100 - 1300 N/mm²	10.00	4	115	0.065	15.000	4.000	3660	950	57.1
		12.00	4	115	0.080	18.000	4.800	3050	975	84.3
		16.00	4	115	0.090	24.000	6.400	2290	825	126.5
		20.00	4	115	0.110	30.000	8.000	1830	805	193.3
	Hardened tool steel 52 - 56 HRC	10.00	4	55	0.036	15.000	3.000	1750	250	11.3
		12.00	4	55	0.042	18.000	3.600	1460	245	15.9
		16.00	4	55	0.048	24.000	4.800	1095	210	24.2
		20.00	4	55	0.060	30.000	6.000	875	210	37.8
	Titanium alloys > 300 HB [Ti6Al4V]	10.00	4	50	0.035	15.000	4.000	1590	225	13.4
		12.00	4	50	0.040	18.000	4.800	1325	210	18.3
		16.00	4	50	0.050	24.000	6.400	995	200	30.6
		20.00	4	50	0.060	30.000	8.000	795	190	45.8
	Steel 850 - 1100 N/mm²	10.00	4	115	0.045	12.500	10.000	3660	660	82.4
		12.00	4	115	0.055	15.000	12.000	3050	670	120.8
		16.00	4	115	0.065	20.000	16.000	2290	595	190.3
		20.00	4	115	0.080	25.000	20.000	1830	585	292.8
	Steel 1100 - 1300 N/mm²	10.00	4	90	0.045	12.500	10.000	2865	515	64.5
		12.00	4	90	0.055	15.000	12.000	2385	525	94.5
		16.00	4	90	0.065	20.000	16.000	1790	465	149.0
		20.00	4	90	0.080	25.000	20.000	1430	460	229.2
	Hardened tool steel 52 - 56 HRC	10.00	4	50	0.024	10.000	10.000	1590	155	15.3
		12.00	4	50	0.030	12.000	12.000	1325	160	22.9
		16.00	4	50	0.033	16.000	16.000	995	130	33.6
		20.00	4	50	0.042	20.000	20.000	795	135	53.5
	Titanium alloys > 300 HB [Ti6Al4V]	10.00	4	40	0.030	12.500	10.000	1275	155	19.1
		12.00	4	40	0.040	15.000	12.000	1060	170	30.6
		16.00	4	40	0.045	20.000	16.000	795	145	45.8
		20.00	4	40	0.055	25.000	20.000	635	140	70.0