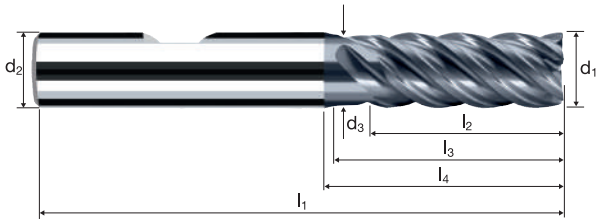
Cylindrical end mills E-Cut

Smooth-edged, normal version, short neck

HM MG10	λ 45° γ 10°

r

Vario

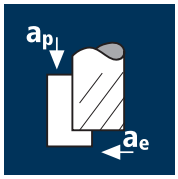
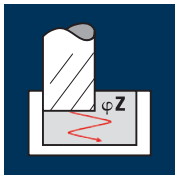


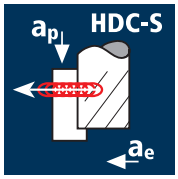
Roughing HPC | Roughing HDC | Finishing

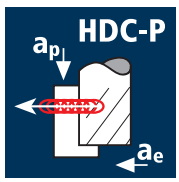
Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56			Inox Stainless	Ti Titanium	GG(G) Tool Steel

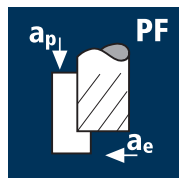
Example: **Order-N°.** Coating **P** Article-N°. **8405** ø-Code **220**

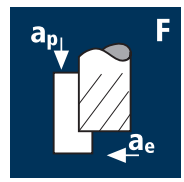
Ø Code	d_1 e8	d_2 h6	d_3	l_1	l_2	l_3	l_4	r	α	z	POLYCHROM P8405	POLYCHROM P8305
220	4.00	6.00	3.70	57	11.00	16.00	20.82	0.100	3.0°	5		●
260	5.00	6.00	4.60	57	13.00	18.00	21.27	0.100	1.5°	5		●
300	6.00	6.00	5.50	57	13.00	18.15	20.00	0.100	0.0°	5		●
391	8.00	8.00	7.40	63	19.00	23.63	26.00	0.150	0.0°	5		●
450	10.00	10.00	9.20	72	23.00	27.99	31.00	0.200	0.0°	5		●
501	12.00	12.00	11.00	83	27.00	33.29	37.00	0.200	0.0°	5		●
610	16.00	16.00	15.00	92	32.00	38.73	43.00	0.200	0.0°	5		●
682	20.00	20.00	19.00	104	40.00	48.23	53.00	0.250	0.0°	5		●

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]	φZ [°]
	Steel < 850 N/mm²	4.00	5	165	0.040	6.000	1.200	13130	2625	18.9	1°
		5.00	5	165	0.049	7.500	1.500	10505	2575	29.0	1°
		6.00	5	165	0.051	9.000	1.800	8755	2230	36.2	1°
		8.00	5	165	0.069	12.000	2.400	6565	2265	65.2	1°
		10.00	5	165	0.085	15.000	3.000	5250	2230	100.4	1°
		12.00	5	165	0.096	18.000	3.600	4375	2100	136.1	1°
		16.00	5	165	0.111	24.000	4.800	3285	1820	209.9	1°
		20.00	5	165	0.127	30.000	6.000	2625	1670	300.2	1°
	Steel 850 - 1100 N/mm²	4.00	5	150	0.036	6.000	1.200	11935	2150	15.5	1.5°
		5.00	5	150	0.045	7.500	1.500	9550	2150	24.2	1.5°
		6.00	5	150	0.045	9.000	1.800	7960	1790	29.0	1.5°
		8.00	5	150	0.060	12.000	2.400	5970	1790	51.6	1.5°
		10.00	5	150	0.074	15.000	3.000	4775	1765	79.5	1.5°
		12.00	5	150	0.089	18.000	3.600	3980	1770	114.7	1.5°
		16.00	5	150	0.102	24.000	4.800	2985	1520	175.3	1.5°
		20.00	5	150	0.115	30.000	6.000	2385	1375	247.1	1.5°
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	4.00	5	95	0.025	6.000	1.200	7560	945	6.8	1°
		5.00	5	95	0.031	7.500	1.500	6050	935	10.5	1°
		6.00	5	95	0.031	9.000	1.800	5040	780	12.7	1°
		8.00	5	95	0.042	12.000	2.400	3780	795	22.9	1°
		10.00	5	95	0.051	15.000	3.000	3025	770	34.7	1°
		12.00	5	95	0.062	18.000	3.600	2520	780	50.6	1°
		16.00	5	95	0.064	24.000	4.800	1890	605	69.7	1°
		20.00	5	95	0.080	30.000	6.000	1510	605	108.9	1°

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 N/mm²	4.00	5	243	0.073	11.000	0.400	19335	7100	31.2
		5.00	5	243	0.092	13.000	0.500	15470	7150	46.5
		6.00	5	243	0.112	13.000	0.600	12890	7190	56.1
		8.00	5	243	0.150	19.000	0.800	9670	7230	109.9
		10.00	5	243	0.185	23.000	1.000	7735	7155	164.5
		12.00	5	243	0.223	27.000	1.200	6445	7190	232.9
		16.00	5	243	0.245	32.000	1.600	4835	5915	302.9
		20.00	5	243	0.307	40.000	2.000	3865	5945	475.5
	Steel 850 - 1100 N/mm²	4.00	5	195	0.073	11.000	0.400	15520	5700	25.1
		5.00	5	195	0.092	13.000	0.500	12415	5740	37.3
		6.00	5	195	0.112	13.000	0.600	10345	5770	45.0
		8.00	5	195	0.150	19.000	0.800	7760	5805	88.2
		10.00	5	195	0.185	23.000	1.000	6205	5740	132.0
		12.00	5	195	0.223	27.000	1.200	5175	5770	186.9
		16.00	5	195	0.245	32.000	1.600	3880	4750	243.1
		20.00	5	195	0.307	40.000	2.000	3105	4770	381.5
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	4.00	5	135	0.070	11.000	0.200	10745	3780	8.3
		5.00	5	135	0.088	13.000	0.250	8595	3780	12.3
		6.00	5	135	0.106	13.000	0.300	7160	3780	14.7
		8.00	5	135	0.141	19.000	0.400	5370	3780	28.7
		10.00	5	135	0.176	23.000	0.500	4295	3780	43.5
		12.00	5	135	0.211	27.000	0.600	3580	3780	61.2
		16.00	5	135	0.229	32.000	0.800	2685	3070	78.6
		20.00	5	135	0.295	40.000	1.000	2150	3165	126.6







Suitable cutting data for other applications and materials can be found in the cutting data software **ToolExpert E-Cut**