

Cylindrical end mills HX

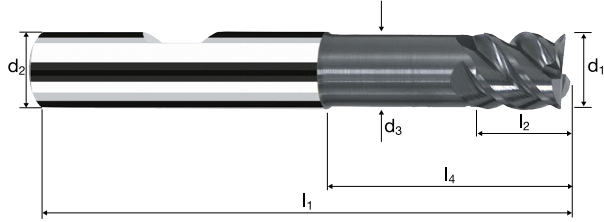
Smooth-edged, normal version with neck



HM
MG10

λ 55°
 γ -10°

45°



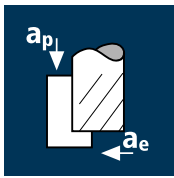
Roughing **Finishing**



		Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60	HRC > 60		Ti Titanium	GG(G)
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Ø Code	d ₁ e8	d ₂ h6	d ₃	l ₁	l ₂	l ₃	l ₄	45°	α	z	Coating	
											POLYCHROM	DURO-S
Example: Order-N°: D 5348 180												
180	3.00	6.00	2.80	57	4.00	14.00	20.63	0.10	4.5°	4	P5348	D5348
220	4.00	6.00	3.70	57	5.00	16.00	20.95	0.10	3.0°	4	P5248	D5248
260	5.00	6.00	4.60	57	6.00	18.00	21.27	0.15	1.5°	4		
300	6.00	6.00	5.50	57	7.00	19.34	20.00	0.15	0.0°	4		
391	8.00	8.00	7.40	63	9.00	25.29	26.00	0.15	0.0°	4		
450	10.00	10.00	9.20	72	11.00	30.20	31.00	0.20	0.0°	4		
501	12.00	12.00	11.00	83	13.00	36.13	37.00	0.20	0.0°	4		
610	16.00	16.00	15.00	92	17.00	42.13	43.00	0.20	0.0°	4		
682	20.00	20.00	19.00	104	21.00	52.13	53.00	0.20	0.0°	4		
772	25.00	25.00	24.00	121	26.00	63.13	64.00	0.25	0.0°	4		

Application



Material

Hardened tool steel
42 - 48 HRC



Hardened tool steel
48 - 52 HRC



Hardened tool steel
52 - 56 HRC



Hardened tool steel
56 - 60 HRC



Hardened tool steel
42 - 48 HRC



Hardened tool steel
48 - 52 HRC



Hardened tool steel
52 - 56 HRC



Hardened tool steel
56 - 60 HRC



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]
3.00	4	110	0.020	3.000	1.800	11670	935	5.0
4.00	4	110	0.025	4.000	2.400	8755	875	8.4
5.00	4	110	0.030	5.000	3.000	7005	840	12.6
6.00	4	110	0.040	6.000	3.600	5835	935	20.2
8.00	4	110	0.050	8.000	4.800	4375	875	33.6
10.00	4	110	0.065	10.000	6.000	3500	910	54.6
12.00	4	110	0.075	12.000	7.200	2920	875	75.6
16.00	4	110	0.100	16.000	4.000	2190	875	56.0
20.00	4	110	0.125	20.000	5.000	1750	875	87.5
3.00	4	70	0.015	3.000	1.800	7425	445	2.4
4.00	4	70	0.020	4.000	2.400	5570	445	4.3
5.00	4	70	0.030	5.000	3.000	4455	535	8.0
6.00	4	70	0.035	6.000	3.600	3715	520	11.2
8.00	4	70	0.045	8.000	4.800	2785	500	19.3
10.00	4	70	0.055	10.000	6.000	2230	490	29.4
12.00	4	70	0.065	12.000	7.200	1855	485	41.7
16.00	4	70	0.090	16.000	4.000	1395	500	32.1
20.00	4	70	0.110	20.000	5.000	1115	490	49.0
3.00	4	50	0.015	3.000	1.800	5305	320	1.7
4.00	4	50	0.020	4.000	2.400	3980	320	3.1
5.00	4	50	0.025	5.000	3.000	3185	320	4.8
6.00	4	50	0.025	6.000	3.600	2655	265	5.7
8.00	4	50	0.035	8.000	4.800	1990	280	10.7
10.00	4	50	0.045	10.000	6.000	1590	285	17.2
12.00	4	50	0.055	12.000	3.000	1325	290	10.5
16.00	4	50	0.075	16.000	4.000	995	300	19.1
20.00	4	50	0.090	20.000	5.000	795	285	28.6
3.00	4	25	0.010	3.000	1.800	2655	105	0.6
4.00	4	25	0.015	4.000	2.400	1990	120	1.1
5.00	4	25	0.015	5.000	3.000	1590	95	1.4
6.00	4	25	0.020	6.000	3.600	1325	105	2.3
8.00	4	25	0.025	8.000	4.800	995	100	3.8
10.00	4	25	0.035	10.000	6.000	795	110	6.7
12.00	4	25	0.040	12.000	3.000	665	105	3.8
16.00	4	25	0.055	16.000	4.000	495	110	7.0
20.00	4	25	0.065	20.000	5.000	400	105	10.3
3.00	4	95	0.015	1.500	3.000	10080	605	2.7
4.00	4	95	0.020	2.000	4.000	7560	605	4.8
5.00	4	95	0.025	2.500	5.000	6050	605	7.6
6.00	4	95	0.030	3.000	6.000	5040	605	10.9
8.00	4	95	0.040	4.000	8.000	3780	605	19.4
10.00	4	95	0.050	5.000	10.000	3025	605	30.2
12.00	4	95	0.060	6.000	12.000	2520	605	43.5
16.00	4	95	0.080	4.000	16.000	1890	605	38.7
20.00	4	95	0.100	5.000	20.000	1510	605	60.5
3.00	4	60	0.015	1.500	3.000	6365	380	1.7
4.00	4	60	0.020	2.000	4.000	4775	380	3.1
5.00	4	60	0.025	2.500	5.000	3820	380	4.8
6.00	4	60	0.030	3.000	6.000	3185	380	6.9
8.00	4	60	0.040	4.000	8.000	2385	380	12.2
10.00	4	60	0.050	5.000	10.000	1910	380	19.1
12.00	4	60	0.060	6.000	12.000	1590	380	27.5
16.00	4	60	0.080	4.000	16.000	1195	380	24.4
20.00	4	60	0.100	5.000	20.000	955	380	38.2
3.00	4	40	0.010	1.500	3.000	4245	170	0.8
4.00	4	40	0.015	2.000	4.000	3185	190	1.5
5.00	4	40	0.020	2.500	5.000	2545	205	2.5
6.00	4	40	0.025	3.000	6.000	2120	210	3.8
8.00	4	40	0.030	4.000	8.000	1590	190	6.1
10.00	4	40	0.040	5.000	10.000	1275	205	10.2
12.00	4	40	0.050	6.000	12.000	1060	210	15.3
16.00	4	40	0.065	4.000	16.000	795	205	13.2
20.00	4	40	0.080	5.000	20.000	635	205	20.4
3.00	4	20	0.009	1.500	3.000	2120	75	0.3
4.00	4	20	0.011	2.000	4.000	1590	70	0.6
5.00	4	20	0.014	2.500	5.000	1275	70	0.9
6.00	4	20	0.017	3.000	6.000	1060	70	1.3
8.00	4	20	0.023	4.000	8.000	795	75	2.3
10.00	4	20	0.029	5.000	10.000	635	75	3.7
12.00	4	20	0.034	6.000	12.000	530	70	5.2
16.00	4	20	0.046	4.000	16.000	400	75	4.7
20.00	4	20	0.057	5.000	20.000	320	75	7.3