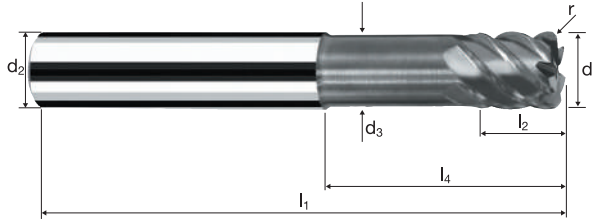
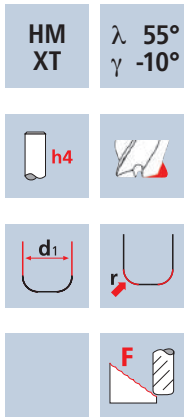


Corner radius end mills XSpeed

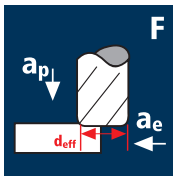
Tolerance r 0/+0.015, 3xd



Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60	HRC > 60	Ti Titanium	GG(G) Tool Steel HSS
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Ø Code	d ₁ 0/-0.01	d ₂ h4	d ₃	l ₁	l ₂	l ₃	l ₄	r 0/+0.015	α	z	Ordering Information	
											Coating X	Article-N° 7200
140	2.00	6.00	1.90	57	3.00	6.00	14.31	0.500	8.7°	4	•	•
180	3.00	6.00	2.80	57	4.00	9.00	15.63	0.500	6.0°	4	•	•
220	4.00	6.00	3.70	57	5.00	12.00	16.95	0.500	3.7°	4	•	•
260	5.00	6.00	4.60	57	6.00	15.00	18.27	0.500	1.7°	4	•	•
295	6.00	6.00	5.50	57	7.00	19.34	20.00	0.500	0.0°	4	•	•
300	6.00	6.00	5.50	57	7.00	19.34	20.00	0.500	0.0°	6	•	•
386	8.00	8.00	7.40	63	9.00	25.29	26.00	0.500	0.0°	4	•	•
391	8.00	8.00	7.40	63	9.00	25.29	26.00	0.500	0.0°	6	•	•
440	10.00	10.00	9.20	72	11.00	30.20	31.00	0.500	0.0°	4	•	•
450	10.00	10.00	9.20	72	11.00	30.20	31.00	0.500	0.0°	6	•	•
491	12.00	12.00	11.00	83	13.00	36.13	37.00	0.500	0.0°	4	•	•
501	12.00	12.00	11.00	83	13.00	36.13	37.00	0.500	0.0°	6	•	•
606	16.00	16.00	15.00	92	17.00	42.13	43.00	0.500	0.0°	6	•	•

Application



Material

Hardened tool steel
48 - 52 HRC

Hardened tool steel
52 - 56 HRC

Hardened tool steel
56 - 60 HRC

Hardened tool steel
> 60 HRC

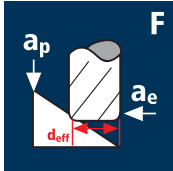
d1 [mm]	z	v _c [m/min]	f _s [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	r [mm]
2.00	4	150	0.020	0.050	0.700	1.44	33155	2655	0.50
3.00	4	150	0.025	0.050	1.050	2.44	19570	1955	0.50
4.00	4	150	0.030	0.060	1.400	3.47	13760	1650	0.50
5.00	4	150	0.035	0.060	1.750	4.47	10680	1495	0.50
6.00	6	150	0.040	0.080	2.100	5.54	8620	2070	0.50
8.00	6	150	0.045	0.080	2.800	7.54	6330	1710	0.50
10.00	6	150	0.050	0.100	3.500	9.60	4975	1490	0.50
12.00	6	150	0.055	0.100	4.200	11.60	4115	1360	0.50
16.00	6	150	0.065	0.120	5.600	15.65	3050	1190	0.50

2.00	4	120	0.020	0.050	0.700	1.44	26525	2120	0.50
3.00	4	120	0.025	0.050	1.050	2.44	15655	1565	0.50
4.00	4	120	0.030	0.060	1.400	3.47	11010	1320	0.50
5.00	4	120	0.035	0.060	1.750	4.47	8545	1195	0.50
6.00	6	120	0.040	0.080	2.100	5.54	6895	1655	0.50
8.00	6	120	0.045	0.080	2.800	7.54	5065	1370	0.50
10.00	6	120	0.050	0.100	3.500	9.60	3980	1195	0.50
12.00	6	120	0.055	0.100	4.200	11.60	3295	1085	0.50
16.00	6	120	0.065	0.120	5.600	15.65	2440	950	0.50

2.00	4	80	0.015	0.050	0.700	1.44	17685	1060	0.50
3.00	4	80	0.020	0.050	1.050	2.44	10435	835	0.50
4.00	4	80	0.025	0.060	1.400	3.47	7340	735	0.50
5.00	4	80	0.030	0.060	1.750	4.47	5695	685	0.50
6.00	6	80	0.030	0.080	2.100	5.54	4595	825	0.50
8.00	6	80	0.035	0.080	2.800	7.54	3375	710	0.50
10.00	6	80	0.040	0.100	3.500	9.60	2655	635	0.50
12.00	6	80	0.045	0.100	4.200	11.60	2195	595	0.50
16.00	6	80	0.050	0.120	5.600	15.65	1625	490	0.50

2.00	4	40	0.015	0.050	0.700	1.44	8840	530	0.50
3.00	4	40	0.020	0.050	1.050	2.44	5220	415	0.50
4.00	4	40	0.025	0.060	1.400	3.47	3670	365	0.50
5.00	4	40	0.030	0.060	1.750	4.47	2850	340	0.50
6.00	6	40	0.030	0.080	2.100	5.54	2300	415	0.50
8.00	6	40	0.035	0.080	2.800	7.54	1690	355	0.50
10.00	6	40	0.040	0.100	3.500	9.60	1325	320	0.50
12.00	6	40	0.045	0.100	4.200	11.60	1100	295	0.50
16.00	6	40	0.050	0.120	5.600	15.65	815	245	0.50

Application



Material

Hardened tool steel
48 - 52 HRC

Hardened tool steel
52 - 56 HRC

Hardened tool steel
56 - 60 HRC

Hardened tool steel
> 60 HRC

d1 [mm]	z	v _c [m/min]	f _s [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	β [°]
2.00	4	256	0.020	0.050	0.050	1.94	42005	3360	45°
3.00	4	300	0.025	0.050	0.050	2.94	32480	3250	45°
4.00	4	300	0.030	0.060	0.060	3.96	24115	2895	45°
5.00	4	300	0.035	0.060	0.060	4.96	19255	2695	45°
6.00	6	300	0.040	0.080	0.080	5.98	15970	3830	45°
8.00	6	300	0.045	0.080	0.080	7.98	11965	3230	45°
10.00	6	300	0.050	0.100	0.100	9.99	9560	2870	45°
12.00	6	300	0.055	0.100	0.100	11.99	7965	2630	45°
16.00	6	300	0.065	0.120	0.120	16.00	5970	2330	45°

2.00	4	250	0.020	0.050	0.050	1.94	41020	3280	45°
3.00	4	250	0.025	0.050	0.050	2.94	27065	2705	45°
4.00	4	250	0.030	0.060	0.060	3.96	20095	2410	45°
5.00	4	250	0.035	0.060	0.060	4.96	16045	2245	45°
6.00	6	250	0.040	0.080	0.080	5.98	13305	3195	45°
8.00	6	250	0.045	0.080	0.080	7.98	9970	2690	45°
10.00	6	250	0.050	0.100	0.100	9.99	7965	2390	45°
12.00	6	250	0.050	0.100	0.100	11.99	6635	1990	45°
16.00	6	250	0.060	0.120	0.120	16.00	4975	1790	45°

2.00	4	180	0.015	0.050	0.050	1.94	29535	1770	45°
3.00	4	180	0.020	0.050	0.050	2.94	19490	1560	45°
4.00	4	180	0.025	0.060	0.060	3.96	14470	1445	45°
5.00	4	180	0.030	0.060	0.060	4.96	11550	1385	45°
6.00	6	180	0.035	0.080	0.080	5.98	9580	2010	45°
8.00	6	180	0.040	0.080	0.080	7.98	7180	1725	45°
10.00	6	180	0.045	0.100	0.100	9.99	5735	1550	45°
12.00	6	180	0.045	0.100	0.100	11.99	4780	1290	45°
16.00	6	180	0.055	0.120	0.120	16.00	3580	1180	45°

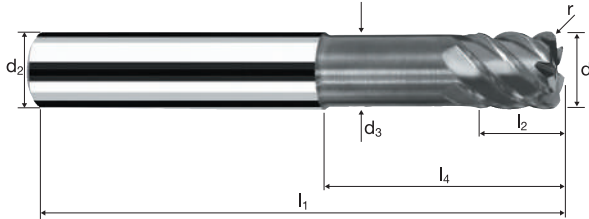
2.00	4	100	0.010	0.050	0.050	1.94	16410	655	45°
3.00	4	100	0.015	0.050	0.050	2.94	10825	650	45°
4.00	4	100	0.015	0.060	0.060	3.96	8040	480	45°
5.00	4	100	0.020	0.060	0.060	4.96	6420	515	45°
6.00	6	100	0.020	0.080	0.080	5.98	5325	640	45°
8.00	6	100	0.025	0.080	0.080	7.98	3990	600	45°
10.00	6	100	0.025	0.100	0.100	9.99	3185	480	45°
12.00	6	100	0.030	0.100	0.100	11.99	2655	480	45°
16.00	6	100	0.035	0.120	0.120	16.00	1990	420	45°

Corner radius end mills XSpeed

Tolerance r 0/+0.015, 3xd



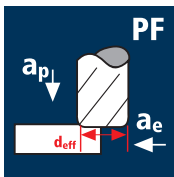
HM λ 55°
XT γ -10°



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

Ø Code	d ₁ 0/-0.01	d ₂ h4	d ₃	l ₁	l ₂	l ₃	l ₄	r 0/+0.015	α	z	Example: Order-N°.	
											Coating X	Article-N° 7200
											X-AL	
											X7200	
218	4.00	6.00	3.70	57	5.00	12.00	16.95	1.000	3.8°	4	●	
258	5.00	6.00	4.60	57	6.00	15.00	18.27	1.000	1.8°	4	●	
293	6.00	6.00	5.50	57	7.00	19.34	20.00	1.000	0.0°	4	●	
297	6.00	6.00	5.50	57	7.00	19.34	20.00	1.000	0.0°	6	●	
384	8.00	8.00	7.40	63	9.00	25.29	26.00	1.000	0.0°	4	●	
388	8.00	8.00	7.40	63	9.00	25.29	26.00	1.000	0.0°	6	●	
435	10.00	10.00	9.20	72	11.00	30.20	31.00	1.000	0.0°	4	●	
445	10.00	10.00	9.20	72	11.00	30.20	31.00	1.000	0.0°	6	●	
486	12.00	12.00	11.00	83	13.00	36.13	37.00	1.000	0.0°	4	●	
496	12.00	12.00	11.00	83	13.00	36.13	37.00	1.000	0.0°	6	●	
608	16.00	16.00	15.00	92	17.00	42.13	43.00	1.000	0.0°	6	●	

Application



Material

Hardened tool steel
48 - 52 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	r [mm]
4.00	4	150	0.045	0.340	1.400	3.50	13640	2455	1.00
5.00	4	150	0.050	0.380	1.750	4.57	10450	2090	1.00
6.00	6	150	0.055	0.400	2.100	5.60	8525	2815	1.00
8.00	6	150	0.070	0.440	2.800	7.66	6235	2620	1.00
10.00	6	150	0.085	0.480	3.500	9.71	4915	2510	1.00
12.00	6	150	0.105	0.500	4.200	11.73	4070	2565	1.00
16.00	6	150	0.130	0.560	5.600	15.80	3020	2355	1.00

Hardened tool steel
52 - 56 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	r [mm]
4.00	4	120	0.040	0.340	1.400	3.50	10915	1745	1.00
5.00	4	120	0.045	0.380	1.750	4.57	8360	1505	1.00
6.00	6	120	0.050	0.400	2.100	5.60	6820	2045	1.00
8.00	6	120	0.065	0.440	2.800	7.66	4985	1945	1.00
10.00	6	120	0.075	0.480	3.500	9.71	3935	1770	1.00
12.00	6	120	0.095	0.500	4.200	11.73	3255	1855	1.00
16.00	6	120	0.115	0.560	5.600	15.80	2420	1670	1.00

Hardened tool steel
56 - 60 HRC



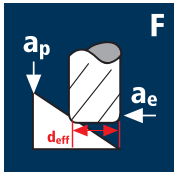
d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	r [mm]
4.00	4	80	0.035	0.340	1.400	3.50	7275	1020	1.00
5.00	4	80	0.040	0.380	1.750	4.57	5570	890	1.00
6.00	6	80	0.045	0.400	2.100	5.60	4545	1230	1.00
8.00	6	80	0.055	0.440	2.800	7.66	3325	1095	1.00
10.00	6	80	0.070	0.480	3.500	9.71	2625	1100	1.00
12.00	6	80	0.085	0.500	4.200	11.73	2170	1105	1.00
16.00	6	80	0.105	0.560	5.600	15.80	1610	1015	1.00

Hardened tool steel
> 60 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	r [mm]
4.00	4	40	0.025	0.340	1.400	3.50	3640	365	1.00
5.00	4	40	0.030	0.380	1.750	4.57	2785	335	1.00
6.00	6	40	0.030	0.400	2.100	5.60	2275	410	1.00
8.00	6	40	0.040	0.440	2.800	7.66	1660	400	1.00
10.00	6	40	0.050	0.480	3.500	9.71	1310	395	1.00
12.00	6	40	0.060	0.500	4.200	11.73	1085	390	1.00
16.00	6	40	0.075	0.560	5.600	15.80	805	365	1.00

Application



Material

Hardened tool steel
48 - 52 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	β [°]
4.00	4	300	0.030	0.080	0.080	3.86	24740	2970	45°
5.00	4	300	0.035	0.080	0.080	4.86	19650	2750	45°
6.00	6	300	0.040	0.110	0.110	5.90	16185	3885	45°
8.00	6	300	0.045	0.110	0.110	7.90	12090	3265	45°
10.00	6	300	0.050	0.140	0.140	9.94	9605	2880	45°
12.00	6	300	0.055	0.140	0.140	11.94	8000	2640	45°
16.00	6	300	0.065	0.160	0.160	15.96	5985	2335	45°

Hardened tool steel
52 - 56 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	β [°]
4.00	4	250	0.030	0.080	0.080	3.86	20615	2475	45°
5.00	4	250	0.035	0.080	0.080	4.86	16375	2290	45°
6.00	6	250	0.040	0.110	0.110	5.90	13490	3235	45°
8.00	6	250	0.045	0.110	0.110	7.90	10075	2720	45°
10.00	6	250	0.050	0.140	0.140	9.94	8005	2400	45°
12.00	6	250	0.050	0.140	0.140	11.94	6665	2000	45°
16.00	6	250	0.060	0.160	0.160	15.96	4985	1795	45°

Hardened tool steel
56 - 60 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	β [°]
4.00	4	180	0.025	0.080	0.080	3.86	14845	1485	45°
5.00	4	180	0.030	0.080	0.080	4.86	11790	1415	45°
6.00	6	180	0.035	0.110	0.110	5.90	9710	2040	45°
8.00	6	180	0.040	0.110	0.110	7.90	7255	1740	45°
10.00	6	180	0.045	0.140	0.140	9.94	5765	1555	45°
12.00	6	180	0.045	0.140	0.140	11.94	4800	1295	45°
16.00	6	180	0.055	0.160	0.160	15.96	3590	1185	45°

Hardened tool steel
> 60 HRC



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _s [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _t [mm/min]	β [°]
4.00	4	100	0.015	0.080	0.080	3.86	8245	495	45°
5.00	4	100	0.020	0.080	0.080	4.86	6550	525	45°
6.00	6	100	0.020	0.110	0.110	5.90	5395	645	45°
8.00	6	100	0.025	0.110	0.110	7.90	4030	605	45°
10.00	6	100	0.025	0.140	0.140	9.94	3200	480	45°
12.00	6	100	0.030	0.140	0.140	11.94	2665	480	45°
16.00	6	100	0.035	0.160	0.160	15.96	1995	420	45°