

**GH100 U (Aero-Tech & Finish-Tech 50),
GH100 H (Finish-Tech 62),
GA200 A (Alumi-Tech)**

INCH



Surface feet per minute - SFM				
High Speed Milling			Rough	Slot
DOC 2xd			DOC 1xd	
WOC .05xd	WOC .1xd	WOC .25xd	WOC .4 to .9xd	WOC 1xd
2.5	2.3	1.5	1	1

$$RPM = \frac{SFM}{d_1} \times 3.82$$

$$IPM = \text{No. of teeth} \times IPT \times RPM$$

For finishing use WOC (ae) .01 up to .1xd, use SFM from .25xd column, do not increase IPT from table values

Material	Hard- ness	TYPE							1/8 3.17mm	1/4 6.35mm	5/16 7.94mm	3/8 9.52mm	1/2 12.70mm	5/8 15.87mm	3/4 19.05mm	1 25.40mm
			2.5	2.3	1.5	1	1	Multiply IPT x this factor based on WOC								
Structural + free-cutting steels, unalloyed heat-treatable + case hardened steels A283, 1151, 1215, L10, 10Lxx, 11Lxx, 12Lxx, 41Lxx, 51Lxx, 86Lxx, 86Lxx, 10xx	up to 28 HRc	U (3-Flt.) U (6÷8-Flt.)	840	760	640	530	400		.0005	.0010	.0016	.0017	.0023	.0027	.0034	.0044
Free-cutting steels, unalloyed case hardened steels, nitriding steels 1151, 1215, L10, 10Lxx, 11Lxx, 12Lxx, 41Lxx, 51Lxx, 86Lxx, 86Lxx, 10xx, 11xx	28 to 38 HRc	U (3-Flt.) U (6÷8-Flt.)	735	665	560	425	350		.0005	.0010	.0016	.0017	.0023	.0027	.0034	.0044
Alloyed heat-treatable, tool and high speed steels 13xx, 2340, 31xx, 32xx, 33xx, 34xx, 40xx, 41xx, 43xx, 4640, 50xx, 51xx, 61xx, 71xx, 86xx, 87xx, 92xx, 98xx, 98xx, Ax, Ox, Dx, Hxx, Lx, Wx, Mx, Tx	28 to 44 HRc	U (3-Flt.) U (6÷8-Flt.)	630	570	480	360	300		.0005	.0010	.0012	.0016	.0021	.0027	.0030	.0044
Hardened Steels Carbon and Alloy Steels, Tool & Die Steels	Up to 54 HRc	U (3-Flt.) U (6÷8-Flt.)	300	275	225	180	165		.0004	.0008	.0010	.0013	.0018	.0023	.0026	.0036
	54 to 60 HRc	U (6÷8-Flt.)	230						Finishing only WOC less than .1xd							
			.0004	.0006	.0010	.0013	.0018	.0020	.0030	.0036						
Stainless steel 303, 410, 420F, 430, 430F, 416	Up to 28 HRc	U (3-Flt.) U (6÷8-Flt.)	564	495	330	330	260		.0005	.0010	.0012	.0016	.0021	.0027	.0019	.0044
Stainless steel 304, 304L, 420, 17-4PH, 17-7PH, 15-5PH, 13-8PH	up tp 28 HRc	U (3-Flt.) U (6÷8-Flt.)	380	340	230	230	180		.0005	.0009	.0011	.0014	.0019	.0023	.0030	.0040
Stainless steel 310, 316, 316B, 316L, 317, Duplex	over 28 HRc	U (3-Flt.) U (6÷8-Flt.)	275	250	165	165	130		.0004	.0008	.0010	.0013	.0018	.0020	.0026	.0036
Titanium Alloys 6Al-4V, 5Al-2.5 Sn, 6Al-2Sn-4Zr-6Mo, 3Al-8V-6Cr-4Mo-4Zr, 10V-2Fe-3Al, 13V-11Cr-3Al	up to 42 HRc	U (3-Flt.) U (6÷8-Flt.)	275	250	165	165	130		.0004	.0008	.0010	.0014	.0019	.0023	.0030	.0040
High-Temperature Alloys Inconel, Nimonic, Monel, Hastelloy, Waspalloy, A286, Rene 41, Udimet, Stellite	up to 42 HRc	U (3-Flt.) U (6÷8-Flt.)	135	125	100	100	65		.0003	.0006	.0008	.0011	.0015	.0020	.0023	.0032
Cast iron, grey cast iron, spheroidal graphite and malleable cast iron 0.6010 EN-GL100 (GG10), 0.6020 EN-GJL-200 (GG20), 0.7050 EN-GJS-500-7 (GGG50), 0.8535 EN-GJMW-350-4 (GTW35)	up to 240 HB 30	U (3-Flt.) U (6÷8-Flt.)	725	655	550	425	345		.0005	.0010	.0013	.0017	.0023	.0027	.0034	.0044
Cast iron, grey cast iron, spheroidal graphite and malleable cast iron 0.6025 EN-GL250 (GG25), 0.6035 EN-GJL-350 (GG35), 0.7070 EN-GJS-700-2 (GGG70), 0.8170 EN-GJMB-700-2 (GTS70)	over 240 HB 30	U (3-Flt.) U (6÷8-Flt.)	630	570	480	360	300		.0005	.0010	.0012	.0016	.0021	.0027	.0030	.0044
Aluminum, Al-wrought alloys, Al-alloys 2024, 6061, 7075, 1050, 6351, 5005, 2017, 7075	up to 3% Si	A (2&3-Flt.)	2050	1875	1576	1300	985		.0006	.0013	.0016	.0021	.0028	.0035	.0041	.0056
Aluminium-cast alloys 3.2131 G-AISI5Cu1, 3.2153 G-AISI7Cu3, 3.2573 G-AISI9, 3.2581 G-AISI12, 3.2583 G-AISI12Cu, - G-AISI12CuNiMg	over 3% Si	A (2&3-Flt.) U (6÷8-Flt.)	1240	1120	945	985	590		.0006	.0011	.0014	.0019	.0025	.0031	.0038	.0052
Magnesium-alloys MgMn2, G-MgAl8Zn1, G-MgAl6Zn3	—	A (2&3-Flt.)	1050	950	800	590	500		.0005	.0010	.0013	.0017	.0023	.0027	.0034	.0044
Non-ferrous metals (copper, short- or long-chipping brass or bronze)	up to 28 HRc	A (2&3-Flt.) U (6÷8-Flt.)	1365	1235	1040	750	650		.0006	.0011	.0014	.0019	.0025	.0031	.0038	.0052

FINISH-TECH 50 GH100 U (6/8/10-Flute) - Inch - Standard Length

center cutting



Standard



No. Flutes



Helix Angle



Chamfer



Rake Angle



Finishing

Tool material

Surface finish



Solid Carbide

bright



Solid Carbide

FIREX®

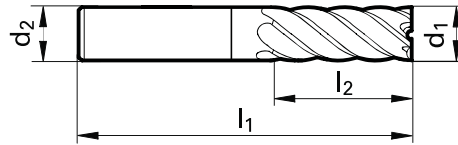
Series

3178

3179

Application group	Material examples	Ideal for
P	Steel	●
M	Stainless steel	●
K	Cast iron	●
N	Aluminum	○
S	Ni / Ti alloys	●
H	Hardened steel	○
●=Optimal ○=Secondary		

Speed and Feed data found on page 293



d1 h10	d2 h6	l1	l2	Chamfer	No. of Flutes	Code no.	EDP Number	EDP Number
inch	inch	inch	inch	inch				
1/4	1/4	2 1/2	3/4	0.004	6	6.350	9031780063500	9031790063500
5/16	5/16	2 1/2	7/8	0.004	6	7.940	9031780079400	9031790079400
3/8	3/8	2 1/2	7/8	0.004	6	9.520	9031780095200	9031790095200
1/2	1/2	3	1	0.006	6	12.700	9031780127000	9031790127000
5/8	5/8	3 1/2	1 1/4	0.006	6	15.870	9031780158700	9031790158700
3/4	3/4	4	1 1/2	0.006	8	19.050	9031780190500	9031790190500
1	1	4	1 1/2	0.012	10	25.400	9031780254000	9031790254000