FEEDS & SPEEDS FOR RF 100 SHARP

Milling conditions:

HPC stable machining conditions high drive power

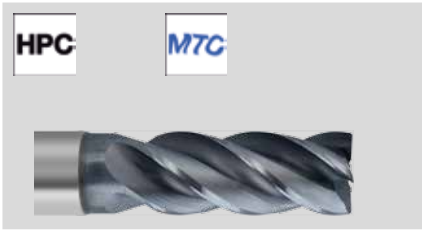
M7C unstable machining conditions low drive power

standard+ tools

Correction factors:

a_p roughing > 1,5 x D SFM -25% IPT -25%

long length tools SFM -40% IPT -40%



Material	Hard-ness	Application	WOC (a_e) max	SFM	Feed rate IPT (Inch per tooth)									
					1/16	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1“
Structural + free-cutting steels, unalloyed heat-treatable + case hardened steels A283, 1151, 1215, L10, 10Lxx, 11Lxx, 12Lxx, 41Lxx, 51Lxx, 86Lxx, 86Lxx, 10xx	Up to 25 HRC	Slotting	1 x D	590	0.0006	0.0007	0.0010	0.0013	0.0016	0.0023	0.0030	0.0039	0.0045	0.0060
		Roughing	0.75 x D	690	0.0007	0.0008	0.0011	0.0015	0.0019	0.0026	0.0035	0.0043	0.0050	0.0066
		Finishing	0.02 x D	1180	0.0007	0.0007	0.0011	0.0014	0.0018	0.0025	0.0033	0.0043	0.0050	0.0066
Free-cutting steels, unalloyed case hardened steels, nitriding steels 1151, 1215, L10, 10Lxx, 11Lxx, 12Lxx, 41Lxx, 51Lxx, 86Lxx, 86Lxx, 10xx, 11xx	25-38 HRC	Slotting	1 x D	525	0.0006	0.0006	0.0009	0.0012	0.0015	0.0021	0.0028	0.0035	0.0041	0.0056
		Roughing	0.75 x D	620	0.0006	0.0007	0.0010	0.0014	0.0017	0.0024	0.0032	0.0039	0.0045	0.0062
		Finishing	0.02 x D	1050	0.0006	0.0007	0.0010	0.0013	0.0016	0.0023	0.0030	0.0039	0.0045	0.0062
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	25-44 HRC	Slotting	1 x D	440	0.0005	0.0006	0.0008	0.0011	0.0014	0.0019	0.0025	0.0031	0.0038	0.0052
		Roughing	0.75 x D	525	0.0006	0.0007	0.0010	0.0013	0.0016	0.0022	0.0029	0.0035	0.0041	0.0057
		Finishing	0.02 x D	880	0.0006	0.0006	0.0009	0.0013	0.0016	0.0021	0.0028	0.0035	0.0041	0.0057
Stainless steel 303, 410, 420F, 430, 430F, 416	Up to 20 HRC	Slotting	1 x D	390	0.0004	0.0006	0.0008	0.0011	0.0014	0.0019	0.0025	0.0031	0.0038	0.0052
		Roughing	0.75 x D	460	0.0005	0.0007	0.0010	0.0013	0.0016	0.0022	0.0029	0.0035	0.0042	0.0057
		Finishing	0.02 x D	780	0.0005	0.0006	0.0009	0.0013	0.0016	0.0021	0.0028	0.0035	0.0042	0.0057
Stainless steel 304, 304L, 420	20-25 HRC	Slotting	1 x D	260	0.0003	0.0005	0.0008	0.0010	0.0013	0.0017	0.0023	0.0027	0.0034	0.0044
		Roughing	0.75 x D	325	0.0004	0.0006	0.0008	0.0012	0.0014	0.0020	0.0026	0.0031	0.0037	0.0048
		Finishing	0.02 x D	525	0.0004	0.0005	0.0008	0.0011	0.0014	0.0019	0.0025	0.0031	0.0037	0.0048
Stainless steel 310, 316, 316B, 316L, 317	Over 25 HRC	Slotting	1 x D	195	0.0003	0.0005	0.0007	0.0009	0.0011	0.0015	0.0020	0.0023	0.0030	0.0040
		Roughing	0.60 x D	260	0.0004	0.0005	0.0008	0.0010	0.0013	0.0018	0.0024	0.0031	0.0033	0.0044
		Finishing	0.01 x D	390	0.0004	0.0005	0.0007	0.0009	0.0011	0.0015	0.0020	0.0023	0.0030	0.0040
Special alloys (nickel based “Ni“) Nimonic, Inconel, Monel, Hastelloy	Up to 40 HRC	Slotting	1 x D	95	0.0003	0.0003	0.0005	0.0007	0.0009	0.0012	0.0016	0.0020	0.0023	0.0032
		Roughing	0.60 x D	130	0.0004	0.0004	0.0006	0.0008	0.0011	0.0014	0.0019	0.0023	0.0025	0.0035
		Finishing	0.01 x D	195	0.0004	0.0003	0.0005	0.0007	0.0009	0.0012	0.0016	0.0020	0.0023	0.0032
Titanium alloys (“Ti“) 6Al-4V, 5Al-2.5 Sn, 6Al-2Sn-4Zr-6Mo, 3Ai-8V-6Cr4Mo-4Zr, 10V-2Fe-3Ai, 13V-11Cr-3Ai	Over 40 HRC	Slotting	1 x D	195	0.0003	0.0005	0.0008	0.0010	0.0013	0.0017	0.0023	0.0027	0.0035	0.0045
		Roughing	0.60 x D	260	0.0004	0.0006	0.0009	0.0012	0.0015	0.0020	0.0027	0.0035	0.0044	0.0056
		Finishing	0.02 x D	390	0.0004	0.0005	0.0008	0.0011	0.0014	0.0019	0.0025	0.0031	0.0039	0.0050
Aluminium, Al-wrought alloys, Al-alloys 2024, 6061, 7075, 1050, 6351, 5005, 2017, 7075	≤ 7% Si	Slotting	1 x D	1640	0.0007	0.0008	0.0012	0.0016	0.0020	0.0030	0.0040	0.0051	0.0060	0.0080
		Roughing	0.75 x D	1965	0.0008	0.0009	0.0014	0.0019	0.0023	0.0035	0.0046	0.0059	0.0069	0.0092
		Finishing	0.02 x D	3280	0.0008	0.0009	0.0014	0.0018	0.0022	0.0033	0.0044	0.0055	0.0066	0.0088
Aluminium-cast alloys 3.2131 G-AlSi5Cu1, 3.2153 G-AlSi7Cu3, 3.2573 G-AlSi9, 3.2581 G-AlSi12, 3.2583 G-AlSi12Cu, - G-AlSi12CuNiMg	≥ 7% Si	Slotting	1 x D	750	0.0006	0.0007	0.0010	0.0014	0.0017	0.0023	0.0030	0.0039	0.0045	0.0060
		Roughing	0.75 x D	980	0.0007	0.0008	0.0012	0.0016	0.0020	0.0026	0.0035	0.0043	0.0052	0.0069
		Finishing	0.02 x D	1500	0.0007	0.0008	0.0011	0.0015	0.0019	0.0025	0.0033	0.0043	0.0050	0.0066
Magnesium-alloys MgMn2, G-MgAl8Zn1, G-MgAl6Zn3	-	Slotting	1 x D	590	0.0006	0.0006	0.0009	0.0013	0.0016	0.0021	0.0028	0.0035	0.0041	0.0056
		Roughing	0.75 x D	685	0.0006	0.0007	0.0011	0.0015	0.0018	0.0024	0.0032	0.0039	0.0045	0.0062
		Finishing	0.02 x D	1180	0.0006	0.0007	0.0010	0.0014	0.0017	0.0023	0.0030	0.0039	0.0045	0.0062
Non-ferr. met. (copper, short-/long-chipp. brass/bronze)	Up to 25 HRC	Slotting	1 x D	820	0.0006	0.0007	0.0010	0.0014	0.0017	0.0023	0.0030	0.0039	0.0045	0.0060
		Roughing	0.75 x D	950	0.0007	0.0008	0.0012	0.0016	0.0020	0.0026	0.0035	0.0043	0.0050	0.0066
		Finishing	0.02 x D	1640	0.0006	0.0008	0.0011	0.0015	0.0019	0.0025	0.0033	0.0043	0.0050	0.0066