

RF 100 Speed - Standard Length - Inch

Series 6773



SLOTTING

Material	Hardness	max. ap	max. ae	Max. Angle of Engagement	SFM	feed rate inch per tooth, by diameter							
						1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4
Struct./free-cutting steels, unall. heat-treat./case hard. steels	up to 28 HRc	0.80 x D	1.00 x D	180°	525	0.0006	0.0008	0.0011	0.0017	0.0021	0.0028	0.0034	0.0041
Alloyed heat-treatable, tool and high speed steels	28 - 44 HRc	0.80 x D	1.00 x D	180°	410	0.0006	0.0008	0.0011	0.0016	0.0019	0.0025	0.0031	0.0038
Stainless steel - easy to machine / sulphured	up to 20 HRc	0.80 x D	1.00 x D	180°	275	0.0004	0.0007	0.0009	0.0011	0.0013	0.0018	0.0022	0.0026
Stainless steel - moderately difficult to machine	20 - 30 HRc	0.80 x D	1.00 x D	180°	180	0.0004	0.0007	0.0009	0.0011	0.0013	0.0018	0.0022	0.0026
Titanium	up to 40 HRc	0.80 x D	1.00 x D	180°	150	0.0004	0.0007	0.0009	0.0011	0.0013	0.0018	0.0022	0.0026
High Temp Alloys Inconel, Nimonic, Hastelloy, Monel	up to 40 HRc	0.80 x D	1.00 x D	180°	100	0.0004	0.0006	0.0008	0.0009	0.0011	0.0015	0.0019	0.0023

HIGH-VOLUME ROUGHING

Material	Hardness	max. ap	max. ae	Max. Angle of Engagement	SFM	feed rate inch per tooth, by diameter							
						1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4
Struct./free-cutting steels, unall. heat-treat./case hard. steels	up to 28 HRc	max a _p = flute length (l ₂)	0.20 x D	53°	875	0.0009	0.0014	0.0018	0.0028	0.0033	0.0044	0.0055	0.0066
Alloyed heat-treatable, tool and high speed steels	28 - 44 HRc		0.20 x D	53°	690	0.0009	0.0014	0.0018	0.0025	0.0030	0.0040	0.0050	0.0060
Stainless steel - easy to machine / sulphured	up to 20 HRc		0.15 x D	46°	500	0.0008	0.0012	0.0017	0.0021	0.0025	0.0033	0.0042	0.0050
Stainless steel - moderately difficult to machine	20 - 30 HRc		0.10 x D	37°	325	0.0010	0.0015	0.0020	0.0025	0.0030	0.0040	0.0050	0.0060
Titanium	up to 40 HRc		0.08 x D	31°	300	0.0011	0.0016	0.0022	0.0027	0.0033	0.0044	0.0055	0.0066
High Temp Alloys Inconel, Nimonic, Hastelloy, Monel	up to 40 HRc		0.08 x D	31°	200	0.0009	0.0014	0.0019	0.0023	0.0028	0.0038	0.0047	0.0056

HIGH-SPEED ROUGHING

Material	Hardness	max. ap	max. ae	Max. Angle of Engagement	SFM	feed rate inch per tooth, by diameter							
						1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4
Struct./free-cutting steels, unall. heat-treat./case hard. steels	up to 28 HRc	max a _p = flute length (l ₂)	0.15 x D	46°	950	0.0011	0.0016	0.0021	0.0033	0.0039	0.0052	0.0065	0.0078
Alloyed heat-treatable, tool and high speed steels	28 - 44 HRc		0.15 x D	46°	750	0.0011	0.0016	0.0021	0.0030	0.0036	0.0048	0.0059	0.0071
Stainless steel - easy to machine / sulphured	up to 20 HRc		0.10 x D	37°	550	0.0010	0.0015	0.0020	0.0025	0.0030	0.0040	0.0050	0.0060
Stainless steel - moderately difficult to machine	20 - 30 HRc		0.08 x D	31°	360	0.0011	0.0016	0.0022	0.0027	0.0033	0.0044	0.0055	0.0066
Titanium	up to 40 HRc		0.05 x D	26°	325	0.0011	0.0016	0.0022	0.0027	0.0033	0.0044	0.0055	0.0066
High Temp Alloys Inconel, Nimonic, Hastelloy, Monel	up to 40 HRc		0.05 x D	26°	225	0.0009	0.0014	0.0019	0.0023	0.0028	0.0038	0.0047	0.0056

HIGH-SPEED FINISHING

Material	Hardness	max. ap	max. ae	Max. Angle of Engagement	SFM	feed rate inch per tooth, by diameter							
						1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4
Struct./free-cutting steels, unall. heat-treat./case hard. steels	up to 28 HRc	max a _p = flute length (l ₂)	0.02 x D	18°	1050	0.0008	0.0012	0.0016	0.0024	0.0029	0.0039	0.0048	0.0058
Alloyed heat-treatable, tool and high speed steels	28 - 44 HRc		0.02 x D	18°	825	0.0008	0.0012	0.0016	0.0022	0.0026	0.0035	0.0044	0.0053
Stainless steel - easy to machine / sulphured	up to 20 HRc		0.02 x D	18°	560	0.0006	0.0009	0.0012	0.0015	0.0018	0.0025	0.0031	0.0037
Stainless steel - moderately difficult to machine	20 - 30 HRc		0.01 x D	11°	395	0.0008	0.0012	0.0016	0.0020	0.0024	0.0032	0.0039	0.0047
Titanium	up to 40 HRc		0.01 x D	11°	330	0.0008	0.0012	0.0016	0.0020	0.0024	0.0032	0.0039	0.0047
High Temp Alloys Inconel, Nimonic, Hastelloy, Monel	up to 40 HRc		0.01 x D	11°	230	0.0007	0.0010	0.0014	0.0017	0.0020	0.0027	0.0034	0.0041