

Size 1/4" to 6" Diameter



SFM (ft/min)		Low Si Aluminum <10% (1200-1500) SFM (ft/min)	High Si Aluminum >10% (750-1000) SFM (ft/min)	Composites (0-0) SFM (ft/min)	Plastics (1500-2000) SFM (ft/min)	Brass & Copper (400-550) SFM (ft/min)	Grpahite (0-0) SFM (ft/min)				
		(1200 1300) 3114 (1411111)	(130 1000) 3114 (1411111)	(0 0) 31141 (14111111)	(1300 2000) 31 14 (1411111)	(400 330) 3114 (14/11111)	(0 0) 31 141 (1 (1111111)				
		Slotting	Slotting	Slotting	Slotting	Slotting	Slotting				
Diameter	# of Teeth	Rough	Rough	Rough	Rough	Rough	Rough				
1/4	12	.0040	-	.0040	.0040	.0040	.0040				
5/16	12	.0042		.0042	.0042	.0042	.0042				
3/8	14	.0045	-	.0045	.0045	.0045	.0045				
1/2	14	.0048	-	.0048	.0048	.0048	.0048				
5/8	16	.0050	-	.0050	.0050	.0050	.0050				
3/4	18	.0052	-	.0052	.0052	.0052	.0052				
1	20	.0055	-	.0055	.0055	.0055	.0055				
1 1/4	24	.0058	-	.0058	.0058	.0058	.0058				
1 1/2	36	.0060	-	.0060	.0060	.0060	.0060				
1 3/4	38	.0062	-	.0062	.0062	.0062	.0062				
2	40	.0065	-	.0065	.0065	.0065	.0065				
2 1/4	44	.0068	-	.0068	.0068	.0068	.0068				
2 1/2	48	.0070	-	.0070	.0070	.0070	.0070				
2 3/4	60	.0072	-	.0072	.0072	.0072	.0072				
3	72	.0075	-	.0075	.0075	.0075	.0075				
3 1/2	76	.0078	-	.0078	.0078	.0078	.0078				
4	80	.0080	-	.0080	.0080	.0800.	.0080				
5	100	.0080		.0080	.0080	.0080	.0080				
6	120	.0080	-	.0080	.0080	.0800.	.0080				
IPT (in/tooth)											

SFM (ft/min)		Cast Iron (150-350) SFM (ft/min)	Hardened Steel >48 RC (60-140) SFM (ft/min)	Mild Steels <48 RC (150-400) SFM (ft/min)	Stainless Steels (75-175) SFM (ft/min)	Super Alloys (50-150) SFM (ft/min)	Titanium (75-200) SFM (ft/min)				
		Slotting	Slotting	Slotting	Slotting	Slotting	Slotting				
Diameter	# of Teeth	Rough	Rough	Rough	Rough	Rough	Rough				
1/4	12	.0030	.0020	.0020	.0020	.0020	.0020				
5/16	12	.0033	.0021	.0021	.0021	.0021	.0021				
3/8	14	.0035	.0022	.0022	.0022	.0022	.0022				
1/2	14	.0038	.0023	.0023	.0023	.0023	.0023				
5/8	16	.0040	.0024	.0024	.0024	.0024	.0024				
3/4	18	.0042	.0025	.0025	.0025	.0025	.0025				
1	20	.0045	.0026	.0026	.0026	.0026	.0026				
1 1/4	24	.0049	.0027	.0027	.0027	.0027	.0027				
1 1/2	36	.0050	.0028	.0028	.0028	.0028	.0028				
1 3/4	38	.0052	.0029	.0029	.0029	.0029	.0029				
2	40	.0055	.0030	.0030	.0030	.0030	.0030				
2 1/4	44	.0058	.0033	.0033	.0031	.0031	.0031				
2 1/2	48	.0060	.0035	.0035	.0032	.0032	.0032				
2 3/4	60	.0062	.0038	.0038	.0033	.0033	.0033				
3	72	.0065	.0040	.0040	.0034	.0034	.0034				
3 1/2	76	.0068	.0042	.0042	.0035	.0035	.0035				
4	80	.0070	.0045	.0045	.0037	.0037	.0037				
5	100	.0070	.0048	.0048	.0039	.0039	.0039				
6	120	.0070	.0050	.0050	.0040	.0040	.0040				
	IPT (in/tooth)										

Not recommended for High Si Aluminum (>10%)

The parameters listed for tool series that are stocked uncoated are based on running an uncoated tool. If a coating is applied to the tools, the SFM can be increased by approximately 25%. All speed and feed recommendations should be considered only as a starting point. Start with conservative speeds and feeds while analyizing the rigidity of the process. Then cautiously progress incrementally to achieve optimum performance.

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