

Machined Material	Tool Material	Coating	SFM	Finishing Tools	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	2"
Aluminum					0.0035	0.005	0.0068	0.0083	0.01	0.012	0.015
	HSS/ CO		1000	3003	10000	8000	6400	5333	4000	3200	2000
	HSS/CO	TiCN	1350	TC3003	14400	10800	8640	7200	5400	4320	2700
	CARBIDE		3000	4K02-4K03	32000	24000	19200	16000	12000	9600	na
Mild Steel					0.002	0.0028	0.0036	0.0045	0.0055	0.007	0.0085
	HSS/ CO		120	1205	1280	960	768	640	480	384	240
	HSS/ CO	TiCN	310	TC1205	3300	2480	1985	1655	1240	995	620
	CARBIDE	TiCN	360	TC4205	3840	2880	2310	1920	1440	1152	na
	CARBIDE	TIALN	720	TR4205	7680	5760	4600	3840	2880	2300	na
Alloy Steel				0.0015	0.0021	0.0028	0.0034	0.004	0.0055	0.007	
	HSS/ CO		80	1205	850	640	512	425	320	255	160
	ASP	TiCN	110	TC1K05	1175	880	700	585	440	350	220
	CARBIDE	TiCN	280	TC4C05/S07	3000	2240	1790	1500	1120	895	na
	CARBIDE	TIALN	550	TR4C05/S07	5866	4400	3520	2933	2200	1760	na
Stainless				0.0015	0.0021	0.0028	0.0034	0.004	0.0055	0.007	
303	HSS/ CO		100	1205	1060	800	640	533	400	320	200
	ASP	TiCN	135	TC1K05	1440	1080	865	720	540	430	270
	CARBIDE	TiCN	300	TC4C05/S07	3200	2700	2200	1700	1200	1000	na
	CARBIDE	TIALN	600	TR4C05/S07	6400	4800	3840	3200	2400	1920	na
Stainless PH				0.001	0.0016	0.0022	0.0028	0.0035	0.0042	0.005	
15-5 17-4	HSS/ CO		70	1205	750	560	450	375	280	225	140
	ASP	TiCN	95	TC1K05	1015	760	610	510	380	300	190
	CARBIDE	TiAIN	250	TC4C05-5fl	3750	2000	1600	1335	1000	800	na
	CARBIDE	TIALN	400	TR4S07-6fl	4260	3200	2560	2132	1600	1280	na
Titanium				0.002	0.0027	0.0034	0.0039	0.005	0.0065	0.008	
6Al-4V	HSS/ CO		50	3405	533	400	320	265	200	160	100
	HSS CO	TiAIN	68	TF3405	725	544	435	362	272	218	136
	CARBIDE	TiCN	150	TR4C05-5fl	1600	1200	960	800	600	480	na
	CARBIDE	TIALN	200	TR4S07-6fl	2133	1600	1280	1066	800	640	na
Inconel				0.0008	0.0012	0.0016	0.002	0.0025	0.0032	0.004	
Inco 718	ASP		25	1K05	265	200	160	135	100	80	50
	ASP	TiCN	35	TC1K05	375	280	225	185	140	112	70
	CARBIDE	TiCN	75	TC4S07-4SOF	800	600	480	400	300	240	na
	CARBIDE	TIALN	100	TR4S07-4SOF	1066	800	640	535	400	320	na
RPM	Table feed = RPM X # fl X chip load/tooth				For long tools, reduce RPM and feeds to avoid chatter						
Chip load / tooth	These values are good for .010" to .030" finish pass				Use 5 fl inside pockets and 6 fl on straight linear peripheral						
	Values are good for stub lengths and regular length tools										

