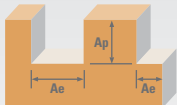


Series 62M Metric	Hardness BRINELL			Vc (m/min)	Diameter (D ₁) (mm)					
		Ae x D ₁	Ap x D ₁		6	10	12	20	25	
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F	 ≤ 0.5 ≤ 1.5		123	RPM	6544	3926	3272	1963	1570
				(99-148)	Fz	0.014	0.029	0.036	0.051	0.053
					Feed (mm/min)	283	345	471	398	495
		 1 ≤ 1		99	RPM	5251	3151	2626	1575	1260
				(79-119)	Fz	0.014	0.029	0.036	0.051	0.053
					Feed (mm/min)	227	277	378	319	397
M	STAINLESS STEELS (DIFFICULT) 304, 304L, 316, 316L, 17-4PH, 15-5PH, 13-4PH, Custom 450	 ≤ 0.5 ≤ 1.5		85	RPM	4524	2714	2262	1357	1086
				(68-102)	Fz	0.012	0.024	0.029	0.040	0.043
					Feed (mm/min)	163	195	261	217	277
		 1 ≤ 1		69	RPM	3635	2181	1818	1091	872
				(55-82)	Fz	0.012	0.024	0.029	0.040	0.043
					Feed (mm/min)	131	157	209	174	222
S	SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, Incoly 800, Monel 400, Rene, Waspalloy	 ≤ 0.5 ≤ 1.5		21	RPM	1131	679	565	339	271
				(17-26)	Fz	0.010	0.021	0.024	0.035	0.035
					Feed (mm/min)	33	43	54	47	57
		 1 ≤ 1		17	RPM	905	543	452	271	217
				(14-20)	Fz	0.010	0.021	0.024	0.035	0.035
					Feed (mm/min)	26	35	43	38	46
S	TITANIUM ALLOYS Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si, Ti10Al2Fe3Al, Ti5Al53Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti152 Cr3Sn3Al	 ≤ 0.5 ≤ 1.5		47	RPM	2504	1503	1252	751	601
				(38-57)	Fz	0.012	0.024	0.029	0.040	0.043
					Feed (mm/min)	90	108	144	120	153
		 1 ≤ 1		59	RPM	3151	1890	1575	945	756
				(48-71)	Fz	0.012	0.024	0.029	0.040	0.043
					Feed (mm/min)	113	136	181	151	193

$$\text{rpm} = (1000 \times \text{m/min}) / (3.14 \times D_1)$$

$$\text{mm / min} = (\text{mm / flute}) \times \text{number of flutes} \times \text{rpm}$$

reduce speed and feed for materials harder than listed

refer to the SGS Tool Wizard for complete technical information ()