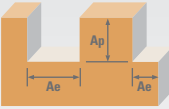


Speed & Feed Recommendations

Series 62 Fractional	Hardness BRINELL			Vc (SFM)		Diameter (D ₁) (inch)					
		Ae x D ₁	Ap x D ₁			1/4	3/8	1/2	3/4	1	
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F	 Profile	≤ 0.5	≤ 1.5	405	RPM	6188	4126	3094	2063	1547
					(324-486)	Fz	0.0006	0.0011	0.0015	0.0019	0.0021
						Feed (IPM)	11.1	13.6	18.6	15.7	19.5
		 Slot	1	≤ 1	325	RPM	4966	3311	2483	1655	1242
					(260-390)	Fz	0.0006	0.0011	0.0015	0.0019	0.0021
						Feed (IPM)	8.9	10.9	14.9	12.6	15.6
M	STAINLESS STEELS (DIFFICULT) 304, 304L, 316, 316L, 17-4PH, 15-5PH, 13-4PH, Custom 450	 Profile	≤ 0.5	≤ 1.5	280	RPM	4278	2852	2139	1426	1070
					(224-336)	Fz	0.0005	0.0009	0.0012	0.0015	0.0017
						Feed (IPM)	6.4	7.7	10.3	8.6	10.9
		 Slot	1	≤ 1	225	RPM	3438	2292	1719	1146	860
					(180-270)	Fz	0.0005	0.0009	0.0012	0.0015	0.0017
						Feed (IPM)	5.2	6.2	8.3	6.9	8.8
S	SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, Incoly 800, Monel 400, Rene, Waspalloy	 Profile	≤ 0.5	≤ 1.5	70	RPM	1070	713	535	357	267
					(56-84)	Fz	0.0004	0.0008	0.0010	0.0013	0.0014
						Feed (IPM)	1.3	1.7	2.1	1.9	2.2
		 Slot	1	≤ 1	56	RPM	856	570	428	285	214
					(45-67)	Fz	0.0004	0.0008	0.0010	0.0013	0.0014
						Feed (IPM)	1.0	1.4	1.7	1.5	1.8
S	TITANIUM ALLOYS Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si, Ti10Al2Fe3Al, Ti5Al53Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti152 Cr3Sn3Al	 Profile	≤ 0.5	≤ 1.5	155	RPM	2368	1579	1184	789	592
					(124-186)	Fz	0.0005	0.0009	0.0012	0.0015	0.0017
						Feed (IPM)	3.6	4.3	5.7	4.7	6.0
		 Slot	1	≤ 1	195	RPM	2980	1986	1490	993	745
					(156-234)	Fz	0.0005	0.0009	0.0012	0.0015	0.0017
						Feed (IPM)	4.5	5.4	7.2	6.0	7.6

rpm = sfm x 3.82 / D₁

ipm = (inch / flute) x number of flutes x rpm

reduce speed and feed for materials harder than listed

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