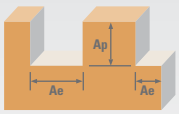

	Series MK2 Fractional	Hardness BRINELL		Ae x D_1	Ap x D_1	Vc (SFM)		Diameter (D_1) (inch) 0.008	0.016	0.031	0.04	0.06
S	**SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, 718, Incoly 800, Monel 400, Rene, Waspalloy**	≤ 300	Profile	≤ 0.5	≤ 1.5	45	RPM	21488	10744	5545	4298	2865
						(36-54)	Fz	0.000009	0.000020	0.000040	0.000050	0.000070
							Feed (IPM)	0.4	0.4	0.4	0.4	0.4
			Slot	1	≤ 1	35	RPM	16713	8356	4313	3343	2228
						(28-42)	Fz	0.000008	0.000015	0.000030	0.000040	0.000060
							Feed (IPM)	0.3	0.3	0.3	0.3	0.3
S	**TITANIUM ALLOYS (DIFFICULT) Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si, Ti10Al2Fe3Al, Ti5Al53Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti152 Cr3Sn3Al**	≤ 350	Profile	≤ 0.5	≤ 1.5	125	RPM	59688	29844	15403	11938	7958
						(100-150)	Fz	0.000011	0.000020	0.000040	0.000060	0.000090
							Feed (IPM)	1.3	1.2	1.2	1.4	1.4
			Slot	1	≤ 1	100	RPM	47750	23875	12323	9550	6367
						(80-120)	Fz	0.000010	0.000020	0.000040	0.000060	0.000080
							Feed (IPM)	1.0	1.0	1.0	1.1	1.0
N	**ALUMINUM ALLOYS 2017, 2024, 356, 6061, 7075**	≤ 150	Profile	≤ 0.5	≤ 1.5	800	RPM	382000	191000	98581	76400	50933
						(640-960)	Fz	0.000037	0.000070	0.000140	0.000220	0.000290
							Feed (IPM)	28.3	26.7	27.6	33.6	29.5
			Slot	1	≤ 1	640	RPM	305600	152800	78865	61120	40747
						(512-768)	Fz	0.000032	0.000060	0.000130	0.000190	0.000250
							Feed (IPM)	19.6	18.3	20.5	23.2	20.4
N	**COPPER ALLOYS Alum Bronze, C110, Muntz Brass**	≤ 140	Profile	≤ 0.5	≤ 1.5	240	RPM	114600	57300	29574	22920	15280
						(192-288)	Fz	0.000018	0.000040	0.000070	0.000110	0.000140
							Feed (IPM)	4.1	4.6	4.1	5.0	4.3
			Slot	1	≤ 1	190	RPM	90725	45363	23413	18145	12097
						(152-228)	Fz	0.000016	0.000030	0.000060	0.000090	0.000130
							Feed (IPM)	2.9	2.7	2.8	3.3	3.1
	PLASTICS Polycarbonate, PVC, Polypropylene		Profile	≤ 0.5	≤ 1.5	800	RPM	382000	191000	98581	76400	50933
						(640-960)	Fz	0.000037	0.000070	0.000140	0.000220	0.000290
							Feed (IPM)	28.3	26.7	27.6	33.6	29.5
			Slot	1	≤ 1	640	RPM	305600	152800	78865	61120	40747
						(512-768)	Fz	0.000032	0.000060	0.000130	0.000190	0.000250
							Feed (IPM)	19.6	18.3	20.5	23.2	20.4
	GRAPHITE	≤ 140	Profile	≤ 0.5	≤ 1.5	600	RPM	286500	143250	73935	57300	38200
						(480-720)	Fz	0.000037	0.000070	0.000140	0.000220	0.000290
							Feed (IPM)	21.2	20.1	20.7	25.2	22.2
			Slot	1	≤ 1	480	RPM	229200	114600	59148	45840	30560
						(384-576)	Fz	0.000032	0.000060	0.000130	0.000190	0.000250
							Feed (IPM)	14.7	13.8	15.4	17.4	15.3

rpm = sfm x 3.82 / D_1
ipm = (inch / flute) x 2 x rpm
reduce speed and feed for materials harder than listed
reduce speed to meet machine limitations
reduce feed and Ae when finish milling (.02 x D_1 maximum)
refer to the SGS Tool Wizard for complete technical information ()