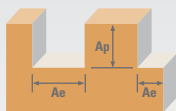




Series

44, 45, 43CR, 43CB,
43LC, 43, 43L, 47,
47B, 47ES, 47EB

Fractional

 $A_e \times D_1$ $A_p \times D_1$ Vc
(SFM)Diameter (D₁)
(inch)

47B, 47ES, 47EB				Vc		Diameter (D ₁) (inch)						
Fractional		Ae x D ₁	Ap x D ₁	(SFM)		1/8	1/4	3/8	1/2	3/4	1	
N	COPPER ALLOYS Beryllium Copper C110, Maganese Bronze, Tin Bronze		1	≤ 1	345	RPM	10543	5272	3514	2636	1757	1318
					(276-414)	Fz	0.0008	0.0020	0.0040	0.0050	0.0060	0.0070
						Feed 2 flutes (IPM)	17	21	28	26	21	18
						Feed 3 flutes (IPM)	25	32	42	40	32	28
			≤ 0.5	≤ 1.5	430	RPM	13141	6570	4380	3285	2190	1643
					(344-516)	Fz	0.0008	0.0020	0.0040	0.0050	0.0060	0.0070
						Feed 2 flutes (IPM)	21	26	35	33	26	23
						Feed 3 flutes (IPM)	32	39	53	49	39	34
			≤ 0.5	≤ 2	710	RPM	21698	10849	7233	5424	3616	2712
					(568-852)	Fz	0.0017	0.0045	0.0085	0.0115	0.0140	0.0160
						Feed 2 flutes (IPM)	74	98	123	125	101	87
						Feed 3 flutes (IPM)	111	146	184	187	152	130
	PLASTICS ABS, Polycarbonate, PVC, Polypropylene		1	≤ 1	1600	RPM	48896	24448	16299	12224	8149	6112
					(1280-1920)	Fz	0.0015	0.0040	0.0075	0.0100	0.0120	0.0140
						Feed 2 flutes (IPM)	147	196	244	244	196	171
						Feed 3 flutes (IPM)	220	293	367	367	293	257
			≤ 0.5	≤ 1.5	2000	RPM	61120	30560	20373	15280	10187	7640
					(1600-2400)	Fz	0.0015	0.0040	0.0075	0.0100	0.0120	0.0140
						Feed 2 flutes (IPM)	183	244	306	306	244	214
						Feed 3 flutes (IPM)	275	367	458	458	367	321
			≤ 0.5	≤ 2	3300	RPM	100848	50424	33616	25212	16808	12606
					(2640-3960)	Fz	0.0034	0.0090	0.0170	0.0230	0.0275	0.0320
						Feed 2 flutes (IPM)	686	908	1143	1160	924	807
						Feed 3 flutes (IPM)	1029	1361	1714	1740	1387	1210

rpm = sfm x 3.82 / D₁

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

HSM (high speed machining)

reduce speed and feed for materials harder than listed

reduce feed and Ae when finish milling (.02 x D₁ maximum)

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