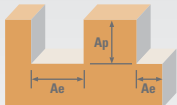


Series 57M Metric	Hardness BRINELL			Vc (m/min)	Diameter (D ₁) (mm)					
		Ae x D ₁	Ap x D ₁		6	8	10	12		
P	> 280 ≤ 420		1	≤ 0.3	66	RPM	3499	2624	2099	1749
					(53-79)	Fz	0.032	0.048	0.064	0.079
						Feed (mm/min)	672	756	806	829
			≤ 0.1	≤ 1.5	81	RPM	4294	3220	2576	2147
					(65-97)	Fz	0.046	0.066	0.089	0.112
						Feed (mm/min)	1185	1275	1376	1443
			≤ 0.04	≤ 1.5	171	RPM	9064	6798	5439	4532
					(137-205)	Fz	0.056	0.084	0.112	0.140
						Feed (mm/min)	3046	3426	3655	3807
P	> 420 ≤ 560		1	≤ 0.3	37	RPM	1961	1471	1177	981
					(30-44)	Fz	0.025	0.038	0.051	0.064
						Feed (mm/min)	294	335	360	377
			≤ 0.1	≤ 1.5	46	RPM	2438	1829	1463	1219
					(37-55)	Fz	0.036	0.053	0.071	0.089
						Feed (mm/min)	527	582	623	651
			≤ 0.04	≤ 1.5	149	RPM	7898	5924	4739	3949
					(119-179)	Fz	0.046	0.066	0.089	0.112
						Feed (mm/min)	2180	2346	2531	2654
H	> 560 < 745		1	≤ 0.3	20	RPM	1060	795	636	530
					(16-24)	Fz	0.020	0.028	0.038	0.048
						Feed (mm/min)	127	134	145	153
			≤ 0.1	≤ 1.5	24	RPM	1272	954	763	636
					(19-29)	Fz	0.028	0.041	0.053	0.066
						Feed (mm/min)	214	235	243	252
			≤ 0.04	≤ 1.5	76	RPM	4029	3021	2417	2014
					(61-91)	Fz	0.033	0.048	0.064	0.079
						Feed (mm/min)	798	870	928	955

rpm = (1000 x m/min) / (3.14 x D₁)

mm / min = (mm / flute) x 6 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 ()