



Series Z5MCR Metric	Hardness (Brinell)	Profile	Ae x D ₁	Ap x D ₁	Vc (m/min)	Diameter (D ₁) (mm)							
						6	8	10	12	16	20	25	
S	≤ 300	Profile	≤ 0.5	≤ 1.5	24	RPM	1293	969	776	646	485	388	310
						Fz	0.014	0.023	0.029	0.036	0.044	0.048	0.053
						Feed (mm/min)	90	111	112	116	107	93	82
		Slot	1	≤ 1	20	RPM	1050	788	630	525	394	315	252
						Fz	0.014	0.023	0.029	0.036	0.044	0.048	0.053
						Feed (mm/min)	74	91	91	95	87	76	67
S	> 300	Profile	≤ 0.5	≤ 1.5	19	RPM	1002	751	601	501	376	301	240
						Fz	0.012	0.019	0.024	0.029	0.033	0.037	0.043
						Feed (mm/min)	60	71	72	73	62	56	52
		Slot	1	≤ 1	15	RPM	808	606	485	404	303	242	194
						Fz	0.012	0.019	0.024	0.029	0.033	0.037	0.043
						Feed (mm/min)	48	58	58	59	50	45	42
S	≤ 350	Profile	≤ 0.5	≤ 1.5	66	RPM	3474	2605	2084	1737	1303	1042	834
						Fz	0.019	0.032	0.040	0.048	0.056	0.064	0.070
						Feed (mm/min)	330	417	417	417	365	333	292
		Slot	1	≤ 1	52	RPM	2747	2060	1648	1373	1030	824	659
						Fz	0.019	0.032	0.040	0.048	0.056	0.064	0.070
						Feed (mm/min)	261	330	330	330	288	264	231
S	> 350 ≤ 440	Profile	≤ 0.5	≤ 1.5	23	RPM	1212	909	727	606	454	364	291
						Fz	0.019	0.032	0.040	0.048	0.056	0.064	0.070
						Feed (mm/min)	115	145	145	145	127	116	102
		Slot	1	≤ 1	18	RPM	969	727	582	485	364	291	233
						Fz	0.019	0.032	0.040	0.048	0.056	0.064	0.070
						Feed (mm/min)	92	116	116	116	102	93	81

Note:

- rpm = (1000 x m/min) / (3.14 x D₁)
- mm / min = (mm / flute) x 5 x rpm
- ramp at 5 degrees or less, using slotting speed and feed rates (do not plunge)
- 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 ()



Tool Wizard
CALCULATE APPLICATION PARAMETERS