

Series M226 • L226

Series M226 • L226	Hardness	Vc (m/min)	DC • mm							
			0.04	0.25	0.5	1	2	3		
P	CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536	≤ 175 Bhn or ≤ 7 HRc	40 (32-48)	RPM	315060	50410	25205	12602	6301	4201
				Fz	0.001	0.007	0.014	0.029	0.058	0.086
				Feed (mm/min)	363	363	363	363	363	363
	ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 50100	≤ 275 Bhn or ≤ 28 HRc	59 (48-71)	RPM	472590	75614	37807	18904	9452	6301
				Fz	0.001	0.007	0.013	0.026	0.052	0.078
				Feed (mm/min)	493	493	493	493	493	493
H	TOOL STEELS A2, D2, H13, L2, M2, P20, S7, T15, W2	≤ 475 Bhn or ≤ 50 HRc	24 (20-29)	RPM	193883	31021	15511	7755	3878	2585
				Fz	0.001	0.003	0.007	0.013	0.026	0.039
				Feed (mm/min)	102	102	102	102	102	102
K	CAST IRONS Gray, Malleable, Ductile	≤ 220 Bhn or ≤ 19 HRc	85 (68-102)	RPM	678591	108575	54287	27144	13572	9048
				Fz	0.001	0.004	0.008	0.016	0.033	0.049
				Feed (mm/min)	445	445	445	445	445	445
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F	≤ 275 Bhn or ≤ 28 HRc	20 (16-24)	RPM	157530	25205	12602	6301	3151	2100
				Fz	0.001	0.005	0.011	0.022	0.044	0.065
				Feed (mm/min)	137	137	137	137	137	137
	STAINLESS STEELS (DIFFICULT) 304, 316, 321, 13-8 PH, 15-5PH, 17-4 PH, CUSTOM 450	≤ 325 Bhn or ≤ 35 HRc	12 (10-15)	RPM	96942	15511	7755	3878	1939	1293
				Fz	0.001	0.004	0.009	0.018	0.035	0.053
				Feed (mm/min)	69	69	69	69	69	69
S	SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, Incoloy 800, Monel 400, Rene, Waspaloy	≤ 320 Bhn or ≤ 34 HRc	15 (12-18)	RPM	121177	19388	9694	4847	2424	1616
				Fz	0.000	0.003	0.006	0.011	0.022	0.033
				Feed (mm/min)	53	53	53	53	53	53
	TITANIUM ALLOYS Pure Titanium, Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si	≤ 350 Bhn or ≤ 38 HRc	15 (12-18)	RPM	121177	19388	9694	4847	2424	1616
				Fz	0.001	0.004	0.008	0.017	0.034	0.051
				Feed (mm/min)	82	82	82	82	82	82
N	ALUMINUM ALLOYS 2017, 2024, 356, 6061, 7075	≤ 150 Bhn or ≤ 7 HRc	75 (60-90)	RPM	593768	95003	47501	23751	11875	7917
				Fz	0.002	0.012	0.025	0.049	0.099	0.148
				Feed (mm/min)	1171	1171	1171	1171	1171	1171
	COPPER ALLOYS Alum Bronze, C110, Muntz Brass	≤ 140 Bhn or ≤ 3 HRc	55 (44-66)	RPM	436237	69798	34899	17449	8725	5816
				Fz	0.002	0.012	0.025	0.049	0.099	0.148
				Feed (mm/min)	861	861	861	861	861	861
PLASTICS Polycarbonate, PVC		75 (60-90)	RPM	593768	95003	47501	23751	11875	7917	
			Fz	0.002	0.012	0.025	0.049	0.099	0.148	
			Feed (mm/min)	1171	1171	1171	1171	1171	1171	

Note:

- Bhn (Brinell) HRc (Rockwell C) HRb (Rockwell B)
- rpm = Vc x 3.82 / DC
- ipm = Fr x rpm (Fr x maximum available rpm when recommendation exceeds machine limit)
- reduce speed and feed 30% when using uncoated drills
- reduce speed and feed for materials harder than listed
- refer to the KYOCERA SGS Tool Wizard® or sgsmicrotools.com for complete technical information