

# Series M226 • L226

Series M226 • L226	Hardness	Vc (m/min)	DC • mm							
			0.04	0.25	0.5	1	2	3		
<b>P</b>	<b>CARBON STEELS</b> 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
				Fr	0.0012	0.0072	0.0144	0.0288	0.0576	0.0865
				Feed (mm/min)	363	363	363	363	363	363
				RPM	472590	75614	37807	18904	9452	6301
				Fr	0.0010	0.0065	0.0130	0.0261	0.0521	0.0782
				Feed (mm/min)	493	493	493	493	493	493
<b>M</b>	<b>STAINLESS STEELS (DIFFICULT)</b> 304, 304L, 316, 316L	≤ 275 Bhn or ≤ 28 HRc	20 (16-24)	RPM	157530	25205	12602	6301	3151	2100
				Fr	0.0009	0.0054	0.0109	0.0218	0.0435	0.0653
				Feed (mm/min)	137	137	137	137	137	137
				RPM	96942	15511	7755	3878	1939	1293
				Fr	0.0007	0.0044	0.0088	0.0177	0.0354	0.0531
				Feed (mm/min)	69	69	69	69	69	69
<b>K</b>	<b>CAST IRONS</b> Gray, Malleable, Ductile	≤ 220 Bhn or ≤ 19 HRc	85 (68-102)	RPM	678591	108575	54287	27144	13572	9048
				Fr	0.0007	0.0041	0.0082	0.0164	0.0328	0.0491
				Feed (mm/min)	445	445	445	445	445	445
				RPM	593768	95003	47501	23751	11875	7917
				Fr	0.0020	0.0123	0.0247	0.0493	0.0986	0.1479
				Feed (mm/min)	1171	1171	1171	1171	1171	1171
<b>N</b>	<b>ALUMINUM ALLOYS</b> 2017, 2024, 356, 6061, 7075	≤ 150 Bhn or ≤ 7 HRc	75 (60-90)	RPM	436237	69798	34899	17449	8725	5816
				Fr	0.0020	0.0123	0.0247	0.0493	0.0987	0.1480
				Feed (mm/min)	861	861	861	861	861	861
				RPM	593768	95003	47501	23751	11875	7917
				Fr	0.0020	0.0123	0.0247	0.0493	0.0986	0.1479
				Feed (mm/min)	1171	1171	1171	1171	1171	1171
<b>S</b>	<b>COPPER ALLOYS</b> Alum Bronze, C110, Muntz Brass	≤ 140 Bhn or ≤ 3 HRc	55 (44-66)	RPM	121177	19388	9694	4847	2424	1616
				Fr	0.0004	0.0028	0.0055	0.0110	0.0220	0.0330
				Feed (mm/min)	53	53	53	53	53	53
				RPM	121177	19388	9694	4847	2424	1616
				Fr	0.0007	0.0042	0.0085	0.0170	0.0339	0.0509
				Feed (mm/min)	82	82	82	82	82	82
<b>H</b>	<b>PLASTICS</b> Polycarbonate, PVC	≤ 320 Bhn or ≤ 34 HRc	15 (12-18)	RPM	193883	31021	15511	7755	3878	2585
				Fr	0.0005	0.0033	0.0066	0.0131	0.0262	0.0393
				Feed (mm/min)	102	102	102	102	102	102
				RPM	121177	19388	9694	4847	2424	1616
				Fr	0.0004	0.0028	0.0055	0.0110	0.0220	0.0330
				Feed (mm/min)	53	53	53	53	53	53
<b>S</b>	<b>HIGH TEMP ALLOYS (NICKEL, COBALT, IRON BASE)</b> Inconel 601, 617, 625, Incoloy 800, Monel 400, Rene, Waspaloy	≤ 350 Bhn or ≤ 38 HRc	15 (12-18)	RPM	121177	19388	9694	4847	2424	1616
				Fr	0.0007	0.0042	0.0085	0.0170	0.0339	0.0509
				Feed (mm/min)	82	82	82	82	82	82
				RPM	121177	19388	9694	4847	2424	1616
				Fr	0.0007	0.0042	0.0085	0.0170	0.0339	0.0509
				Feed (mm/min)	82	82	82	82	82	82
<b>S</b>	<b>TITANIUM ALLOYS</b> Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si	≤ 475 Bhn or ≤ 50 HRc	24 (20-29)	RPM	193883	31021	15511	7755	3878	2585
				Fr	0.0005	0.0033	0.0066	0.0131	0.0262	0.0393
				Feed (mm/min)	102	102	102	102	102	102
				RPM	193883	31021	15511	7755	3878	2585
				Fr	0.0005	0.0033	0.0066	0.0131	0.0262	0.0393
				Feed (mm/min)	102	102	102	102	102	102
<b>S</b>	<b>TOOL STEELS</b> A2, D2, H13, L2, M2, P20, S7, T15, W2	≤ 475 Bhn or ≤ 50 HRc	24 (20-29)	RPM	193883	31021	15511	7755	3878	2585
				Fr	0.0005	0.0033	0.0066	0.0131	0.0262	0.0393
				Feed (mm/min)	102	102	102	102	102	102
				RPM	193883	31021	15511	7755	3878	2585
				Fr	0.0005	0.0033	0.0066	0.0131	0.0262	0.0393
				Feed (mm/min)	102	102	102	102	102	102

- Note:**
- Bhn (Brinell)    HRc (Rockwell C)    HRb (Rockwell B)
  - rpm = (Vc x 1000) / (DC x 3.14)
  - mm/min = 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® for complete technical information ([www.kyocera-sgstool.com](http://www.kyocera-sgstool.com))