



Series	Hardness	Ae x DC	Ap x DC	Vc (sfm)	DC • in											
					1/4	5/16	3/8	1/2								
P TOOL STEELS MOLD AND DIE STEEL 300M, 4340, 52100, HP-9-4-20, M50, A2, D2, H13, L2, M2, P20, S7, T15, W2	≤ 420 Bhn or ≤ 45 HRc	Slot 	1	≤ 0.3	215	RPM	3285	2628	2190	1643						
					(172-258)	Fz	0.0013	0.0019	0.0025	0.0031						
						Feed (ipm)	26	30	33	31						
					265	RPM	4049	3239	2699	2025						
					(212-318)	Fz	0.0018	0.0026	0.0035	0.0044						
						Feed (ipm)	44	51	57	53						
	HSM	≤ 0.04	HSM 	≤ 0.1	≤ 1.5	560	RPM	8557	6845	5705	4278					
						(448-672)	Fz	0.0022	0.0033	0.0044	0.0055					
							Feed (ipm)	113	136	151	141					
						H TOOL STEELS MOLD AND DIE STEEL 300M, 4340, 52100, HP-9-4-20, M50, A2, D2, H13, L2, M2, P20, S7, T15, W2	≤ 560 Bhn or ≤ 55 HRc	Slot 	1	≤ 0.3	120	RPM	1834	1467	1222	917
											(96-144)	Fz	0.0010	0.0015	0.0020	0.0025
												Feed (ipm)	11	13	15	14
150	RPM	2292	1834	1528	1146											
(120-180)	Fz	0.0014	0.0021	0.0028	0.0035											
	Feed (ipm)	19	23	26	24											
HSM	≤ 0.04	HSM 	≤ 0.1	≤ 1.5	490		RPM	7487	5990	4991	3744					
					(392-588)		Fz	0.0018	0.0026	0.0035	0.0044					
							Feed (ipm)	81	93	105	99					
					H TOOL STEELS MOLD AND DIE STEEL 300M, 4340, 52100, HP-9-4-20, M50, A2, D2, H13, L2, M2, P20, S7, T15, W2		≤ 740 Bhn or ≤ 65 HRc	Slot 	1	≤ 0.3	65	RPM	993	795	662	497
											(52-78)	Fz	0.0008	0.0011	0.0015	0.0019
												Feed (ipm)	5	5	6	6
80	RPM	1222	978	815		611										
(64-96)	Fz	0.0011	0.0016	0.0021		0.0026										
	Feed (ipm)	8	9	10		10										
HSM	≤ 0.04	HSM 	≤ 0.1	≤ 1.5	250	RPM	3820	3056	2547	1910						
					(200-300)	Fz	0.0013	0.0019	0.0025	0.0031						
						Feed (ipm)	30	35	38	36						

Bhn (Brinell) HRc (Rockwell C) HSM (High Speed Machining)
 rpm = Vc x 3.82 / DC
 ipm = Fz x 6 x rpm
 reduce speed and feed for materials harder than listed
 reduce feed and Ae when finish milling (.02 x DC maximum)
 feed rates listed have chip thinning adjustments included where applicable
 refer to the SGS Tool Wizard® for complete technical information (www.kyocera-sgstool.com)