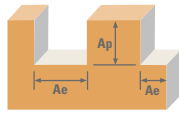


Series  
55M, 55MCR,  
55MB  
Metric

Series	Hardness	Ae x DC	Ap x DC	Vc (m/min)	DC • mm								
					6	8	10	12	16	20			
P  CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536	≤ 275 Bhn or ≤ 28 HRc	Profile 	≤ 0.25	≤ 1.5	117	RPM	6220	4665	3732	3110	2333	1866	
					(94-141)	Fz	0.022	0.036	0.061	0.070	0.072	0.085	
					Feed (mm/min)	672	846	1145	1082	836	796		
		HSM 	≤ 0.05	≤ 2	192	RPM	10179	7634	6107	5089	3817	3054	
					(154-230)	Fz	0.043	0.073	0.123	0.137	0.141	0.154	
					Feed (mm/min)	2198	2769	3746	3481	2687	2345		
	ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 50100	≤ 375 Bhn or ≤ 40 HRc	Profile 	≤ 0.25	≤ 1.5	99	RPM	5251	3938	3151	2626	1969	1575
						(79-119)	Fz	0.017	0.028	0.045	0.053	0.054	0.064
						Feed (mm/min)	441	546	571	693	529	504	
			HSM 	≤ 0.05	≤ 2	162	RPM	8563	6422	5138	4282	3211	2569
						(129-194)	Fz	0.034	0.055	0.091	0.103	0.105	0.128
						Feed (mm/min)	1438	1781	2329	2209	1685	1644	
M  STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F	≤ 275 Bhn or ≤ 28 HRc	Profile 	≤ 0.25	≤ 1.5	113	RPM	5978	4484	3587	2989	2242	1793	
					(90-135)	Fz	0.017	0.028	0.045	0.053	0.059	0.064	
					Feed (mm/min)	502	622	813	789	660	574		
		HSM 	≤ 0.05	≤ 2	171	RPM	9048	6786	5429	4524	3393	2714	
					(137-205)	Fz	0.034	0.055	0.091	0.103	0.113	0.128	
					Feed (mm/min)	1520	1882	2461	2334	1911	1737		
	STAINLESS STEELS (DIFFICULT) 304, 304L, 316, 316L	≤ 275 Bhn or ≤ 28 HRc	Profile 	≤ 0.25	≤ 1.5	78	RPM	4120	3090	2472	2060	1545	1236
						(62-93)	Fz	0.014	0.026	0.043	0.048	0.054	0.061
						Feed (mm/min)	297	396	527	494	415	379	
			HSM 	≤ 0.05	≤ 2	117	RPM	6220	4665	3732	3110	2333	1866
						(94-141)	Fz	0.031	0.051	0.085	0.096	0.105	0.120
						Feed (mm/min)	970	1194	1592	1493	1224	1120	
STAINLESS STEELS (PH) 13-8 PH, 15-5 PH, 17-4 PH, Custom 450	≤ 325 Bhn or ≤ 35 HRc	Profile 	≤ 0.25	≤ 1.5	72	RPM	3797	2848	2278	1898	1424	1139	
					(57-86)	Fz	0.014	0.021	0.037	0.041	0.046	0.051	
					Feed (mm/min)	273	304	425	387	328	289		
		HSM 	≤ 0.05	≤ 2	108	RPM	5736	4302	3441	2868	2151	1721	
					(87-130)	Fz	0.026	0.045	0.075	0.082	0.092	0.104	
					Feed (mm/min)	757	964	1285	1170	991	895		

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# METRIC V-Carb



Series  
55M, 55MCR,  
55MB  
Metric

Metric	Hardness	Ae x DC	Ap x DC	Vc (m/min)	DC • mm							
					6	8	10	12	16	20		
<b>K</b>	<b>CAST IRONS (LOW &amp; MEDIUM ALLOY) Gray, Malleable, Ductile</b>	Profile 	≤ 0.25	≤ 1.5	143	RPM	7594	5695	4556	3797	2848	2278
					(115-172)	Fz	0.022	0.036	0.061	0.070	0.077	0.085
					Feed (mm/min)	820	1033	1397	1321	1093	972	
		HSM 	≤ 0.05	≤ 2	215	RPM	11391	8543	6834	5695	4271	3417
					(172-258)	Fz	0.043	0.073	0.123	0.137	0.151	0.171
					Feed (mm/min)	2460	3099	4192	3895	3226	2916	
	<b>CAST IRONS (HIGH ALLOY) Gray, Malleable, Ductile</b>	Profile 	≤ 0.25	≤ 1.5	110	RPM	5816	4362	3490	2908	2181	1745
					(88-132)	Fz	0.017	0.028	0.045	0.053	0.059	0.064
					Feed (mm/min)	489	605	791	768	642	558	
		HSM 	≤ 0.05	≤ 2	165	RPM	8725	6544	5235	4362	3272	2617
					(132-198)	Fz	0.034	0.055	0.091	0.103	0.113	0.128
					Feed (mm/min)	1466	1815	2373	2251	1843	1675	
<b>S</b>	<b>SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, Incoloy, Monel 400</b>	Profile 	≤ 0.25	≤ 1.5	21	RPM	1131	848	679	565	424	339
					(17-26)	Fz	0.014	0.021	0.037	0.041	0.046	0.051
					Feed (mm/min)	81	90	127	115	98	86	
		HSM 	≤ 0.05	≤ 2	33	RPM	1729	1297	1037	864	648	519
					(26-39)	Fz	0.026	0.045	0.075	0.082	0.092	0.104
					Feed (mm/min)	228	290	387	353	299	270	
	<b>SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 718, X-750, Incoloy, Waspaloy, Hastelloy, Rene</b>	Profile 	≤ 0.25	≤ 1.5	17	RPM	889	666	533	444	333	267
					(13-20)	Fz	0.010	0.017	0.027	0.031	0.036	0.040
					Feed (mm/min)	43	57	71	69	60	53	
		HSM 	≤ 0.05	≤ 2	26	RPM	1373	1030	824	687	515	412
					(21-31)	Fz	0.019	0.032	0.056	0.062	0.069	0.077
					Feed (mm/min)	132	165	231	214	178	159	

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