


Series 55, 55CR Fractional	Hardness BRINELL				Vc (SFM)	Diameter (D ₁) (inch)							
		Ae x D ₁	Ap x D ₁										
				1/8		1/4	3/8	1/2	5/8	3/4	1		
P	CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536		≤ 0.25	≤ 1.5	385	RPM	11766	5883	3922	2941	2353	1961	1471
					(308-462)	Fz	0.0004	0.0009	0.0017	0.0023	0.0029	0.0028	0.0032
						Feed (IPM)	20.6	26.5	33.3	33.8	34.1	27.5	23.5
			≤ 0.05	≤ 2	630	RPM	19253	9626	6418	4813	3851	3209	2407
					(504-756)	Fz	0.0007	0.0018	0.0034	0.0046	0.0057	0.0055	0.0064
						Feed (IPM)	67.4	86.6	109.1	110.7	109.7	88.2	77.0
P	ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 50100		≤ 0.25	≤ 1.5	325	RPM	9932	4966	3311	2483	1986	1655	1242
					(260-390)	Fz	0.0003	0.0007	0.0013	0.0017	0.0022	0.0021	0.0024
						Feed (IPM)	12.9	17.4	21.5	21.1	21.9	17.4	14.9
			≤ 0.05	≤ 2	530	RPM	16197	8098	5399	4049	3239	2699	2025
					(424-636)	Fz	0.0005	0.0014	0.0026	0.0034	0.0043	0.0041	0.0048
						Feed (IPM)	42.1	56.7	70.2	68.8	69.6	55.3	48.6
P	TOOL STEELS A2, D2, H13, L2, M2, P20, S7, T15, W2		≤ 0.25	≤ 1.5	175	RPM	5348	2674	1783	1337	1070	891	669
					(140-210)	Fz	0.0002	0.0005	0.0010	0.0013	0.0016	0.0017	0.0018
						Feed (IPM)	5.3	6.7	8.9	8.7	8.6	7.6	6.0
			≤ 0.05	≤ 2	290	RPM	8862	4431	2954	2216	1772	1477	1108
					(232-348)	Fz	0.0004	0.0010	0.0019	0.0025	0.0032	0.0033	0.0035
						Feed (IPM)	17.7	22.2	28.1	27.7	28.4	24.4	19.4
K	CAST IRONS (LOW & MEDIUM ALLOY) Gray, Malleable, Ductile		≤ 0.25	≤ 1.5	470	RPM	14363	7182	4788	3591	2873	2394	1795
					(376-564)	Fz	0.0004	0.0009	0.0017	0.0023	0.0029	0.0030	0.0032
						Feed (IPM)	25.1	32.3	40.7	41.3	41.7	35.9	28.7
			≤ 0.05	≤ 2	705	RPM	21545	10772	7182	5386	4309	3591	2693
					(564-846)	Fz	0.0007	0.0018	0.0034	0.0046	0.0057	0.0059	0.0064
						Feed (IPM)	75.4	97.0	122.1	123.9	122.8	105.9	86.2
K	CAST IRONS (HIGH ALLOY) Gray, Malleable, Ductile		≤ 0.25	≤ 1.5	360	RPM	11002	5501	3667	2750	2200	1834	1375
					(288-432)	Fz	0.0003	0.0007	0.0013	0.0017	0.0022	0.0023	0.0024
						Feed (IPM)	14.3	19.3	23.8	23.4	24.2	21.1	16.5
			≤ 0.05	≤ 2	540	RPM	16502	8251	5501	4126	3300	2750	2063
					(432-648)	Fz	0.0005	0.0014	0.0026	0.0034	0.0043	0.0044	0.0048
						Feed (IPM)	42.9	57.8	71.5	70.1	71.0	60.5	49.5
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F 440F		≤ 0.25	≤ 1.5	370	RPM	11307	5654	3769	2827	2261	1885	1413
					(296-444)	Fz	0.0003	0.0007	0.0013	0.0017	0.0022	0.0023	0.0024
						Feed (IPM)	14.7	19.8	24.5	24.0	24.9	21.7	17.0
			≤ 0.05	≤ 2	560	RPM	17114	8557	5705	4278	3423	2852	2139
					(448-672)	Fz	0.0005	0.0014	0.0026	0.0034	0.0043	0.0044	0.0048
						Feed (IPM)	44.5	59.9	74.2	72.7	73.6	62.7	51.3

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