

Series 606 Fractional		Hardness BRINELL	Vc (SFM)	Diameter (D ₁) (inch)									
				1/8	3/16	1/4	3/8	1/2	3/4	1			
P	CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536		125	RPM	3820	2547	1910	1273	955	637	478		
		≤ 200	(100-150)	Fr	0.0011	0.0016	0.0021	0.0032	0.0042	0.0063	0.0084		
			Feed (IPM)	4.2	4.1	4.0	4.1	4.0	4.0	4.0			
		> 200 ≤ 300	60	RPM	1834	1222	917	611	458	306	229		
			(48-72)	Fr	0.0010	0.0014	0.0019	0.0029	0.0038	0.0057	0.0076		
				Feed (IPM)	1.8	1.7	1.7	1.8	1.7	1.7	1.7		
		> 300 ≤ 420	45	RPM	1375	917	688	458	344	229	172		
			(36-54)	Fz	0.0006	0.0009	0.0012	0.0018	0.0024	0.0036	0.0048		
				Feed (IPM)	0.8	0.8	0.8	0.8	0.8	0.8	0.8		
		P	ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 50100		95	RPM	2903	1935	1452	968	726	484	363
				≤ 275	(76-114)	Fz	0.0009	0.0014	0.0018	0.0027	0.0036	0.0054	0.0072
					Feed (IPM)	2.6	2.7	2.6	2.6	2.6	2.6	2.6	
> 275 ≤ 375	60			RPM	1834	1222	917	611	458	306	229		
	(48-72)			Fr	0.0009	0.0014	0.0018	0.0027	0.0036	0.0054	0.0072		
				Feed (IPM)	1.7	1.7	1.7	1.7	1.7	1.7	1.7		
> 375 ≤ 450	35			RPM	1070	713	535	357	267	178	134		
	(28-42)			Fr	0.0006	0.0008	0.0011	0.0017	0.0022	0.0033	0.0044		
				Feed (IPM)	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
P	TOOL STEELS A2, D2, H13, L2, M2, P20, S7, T15, W2				35	RPM	1070	713	535	357	267	178	134
				≤ 250	(28-42)	Fr	0.0006	0.0008	0.0011	0.0017	0.0022	0.0033	0.0044
					Feed (IPM)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
		> 250 ≤ 330	25	RPM	764	509	382	255	191	127	96		
			(20-30)	Fr	0.0003	0.0005	0.0006	0.0009	0.0012	0.0018	0.0024		
				Feed (IPM)	0.2	0.3	0.2	0.2	0.2	0.2	0.2		
		> 330 ≤ 450	20	RPM	611	407	306	204	153	102	76		
			(16-24)	Fr	0.0003	0.0005	0.0006	0.0009	0.0012	0.0018	0.0024		
				Feed (IPM)	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
		K	CAST IRONS Gray, Malleable, Ductile		105	RPM	3209	2139	1604	1070	802	535	401
				≤ 200	(84-126)	Fr	0.0012	0.0018	0.0024	0.0036	0.0048	0.0072	0.0096
					Feed (IPM)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	
> 200 ≤ 330	75			RPM	2292	1528	1146	764	573	382	287		
	(60-90)			Fr	0.0012	0.0018	0.0024	0.0036	0.0048	0.0072	0.0096		
				Feed (IPM)	2.8	2.8	2.8	2.8	2.8	2.8	2.8		
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F 440F				53	RPM	1620	1080	810	540	405	270	202
				≤ 250	(42-64)	Fr	0.0006	0.0009	0.0012	0.0018	0.0024	0.0036	0.0048
					Feed (IPM)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
				> 250 ≤ 330	46	RPM	1406	937	703	469	351	234	176
					(37-55)	Fr	0.0005	0.0007	0.0009	0.0014	0.0018	0.0027	0.0036
						Feed (IPM)	0.7	0.7	0.6	0.7	0.6	0.6	0.6

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