



ISO	MATERIAL	HARDNESS	Vc (SFM)*		SAW DIAMETER (INCH)				
					1.00" - 3.00"	3.01" - 5.00"	5.01" - 8.00"	8.01" - 10.00"	10.01" - 12.00"
			HSS/ Cobalt	Carbide	Fz (INCH PER TOOTH)*				
P	CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536	≤ 275 BHN or ≤ 28 HRC	40-95	90-200	.0003 - .0009	.0003 - .0009	.0004 - .0011	.0005 - .0012	.0010 - .0020
	ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 17-4 PH	≤ 375 BHN or ≤ 40 HRC	30-70	60-150	.0003 - .0009	.0003 - .0009	.0004 - .0011	.0005 - .0012	.0007 - .0015
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F	≤ 275 BHN or ≤ 28 HRC	60-110	80-190	.0002 - .0008	.0003 - .0008	.0004 - .0010	.0005 - .0012	.0010 - .0022
	STAINLESS STEELS (DIFFICULT) 304, 304L, 316, 316L	≤ 275 BHN or ≤ 28 HRC	30-75	40-130	.0003 - .0008	.0003 - .0008	.0004 - .0010	.0005 - .0012	.0010 - .0018
K	GRAY IRONS Class 20, 30, 40, 50, 60, G3000, G3500	≤ 220 BHN or ≤ 19 HRC	45-100	80-150	.0003 - .0009	.0003 - .0010	.0004 - .0012	.0005 - .0014	.0010 - .0020
	DUCTILE IRONS D&M series, 250, 300, 350, 400, 60-40-18, 65-45-12	≤ 260 BHN or ≤ 26 HRC	20-75	30-90	.0003 - .0009	.0003 - .0009	.0004 - .0011	.0005 - .0012	.0008 - .0016
N	NON-FERROUS Aluminum, Aluminum cast, Brass, Copper, Bronze, Non Metallic	≤ 271 BHN or ≤ 28 HRC	180-900	450-1200	.0005 - .0009	.0006 - .0011	.0006 - .0013	.0007 - .0015	.0010 - .0030
H	TOOL STEELS A2, D2, H13, L2, M2, P20, S7, T15, W2	≤ 375 BHN or ≤ 55 HRC	10-25	30-130	.0002 - .0008	.0003 - .0009	.0004 - .0010	.0005 - .0013	.0007 - .0020
S	HR SUPER ALLOYS Inconel 718, Waspaloy, Hastelloy, Inconel 625, Stellite 31, Haynes 25, Rene 41	≤ 275 BHN or ≤ 28 HRC	05-20	30-80	.0002 - .0005	.0003 - .0006	.0004 - .0010	.0005 - .0011	.0006 - .0012
	TITANIUM 6AL-4V, ASTM 1, 2, 3, 6AL-2S	≤ 275 BHN or ≤ 28 HRC	10-30	40-180	.0002 - .0007	.0003 - .0010	.0004 - .0012	.0005 - .0016	.0007 - .0020

*Speeds & feeds are starting recommendations only. Factors such as machine type, fixture, tooling rigidity, available horsepower, coolant delivery method and others will affect the performance significantly.