	ISO Material	HRC	M/Min. (Vc)		CHIPLOAD PER TOOTH (Fz)				
			NON-COOLANT	COOLANT FED	3.0 - 6.0mm	6.0 - 10.0mm	10.0 - 13.0mm	13.0 - 16.0mm	16.0 - 20.0mm
S	**COBALT BASE ALLOYS**								
	Powdered Metal, Stellite, Hs-21, Haynes 25/188, X-40, L-605	< 40 > 40	60 40	70 55	.035 - .060 .025 - .050	.060 - .085 .050 - .075	.075 - .100 .060 - .085	.085 - .110 .075 - .100	.095 - .130 .095 - .110
	NICKEL BASE ALLOYS								
	Invar, Kovar, Inconel-625/718, Waspaloy, Rene, Hastelloy, A286	< 40 > 40	40 20	60 45	.035 - .060 .025 - .050	.060 - .085 .050 - .075	.075 - .100 .060 - .085	.085 - .125 .075 - .100	.085 - .110 .085 - .100
	IRON BASE ALLOYS								
	Incoloy 800-802, Multimet N-155, Timkin 16-25-6, Carpenter 22-b3	< 40 > 40	50 40	75 60	.050 - .075 .025 - .050	.075 - .085 .050 - .075	.085 - .100 .075 - .085	.100 - .125 .085 - .100	.110 - .140 .095 - .110
	MONEL								
	Monel - 65% Nickel		45	70	.035 - .060	.050 - .075	.060 - .085	.075 - .100	.085 - .120
	TITANIUM ALLOYS								
	Commercially Pure, 6Al-4V, Astm 1/2/3, 6Al-25N-4Zr-2Mo-Si		70	90	.035 - .060	.060 - .085	.075 - .100	.085 - .110	.095 - .130
M	**STAINLESS STEELS**								
	(Precipitation) 13/8, 15/5, 17-4, pH Types	< 40 > 40	70 50	90 70	.050 - .075 .025 - .050	.075 - .085 .050 - .075	.085 - .100 .075 - .085	.100 - .125 .085 - .100	.100 - .140 .085 - .110
	(Austentic) 200 Series, 300 Series	< 40 > 40	70 50	90 70	.050 - .075 .035 - .050	.075 - .085 .050 - .060	.085 - .100 .060 - .075	.100 - .125 .075 - .100	.100 - .140 .075 - .110
	(Austentic) 304L, 316L, Nitronic 50	< 40 > 40	40 20	55 30	.035 - .050 .025 - .035	.050 - .060 .035 - .050	.060 - .085 .050 - .075	.085 - .110 .075 - .100	.075 - .110 .075 - .110
	(Martensitic) 400 Series	< 40 > 40	70 50	90 70	.050 - .075 .025 - .050	.075 - .085 .050 - .075	.085 - .100 .075 - .085	.100 - .125 .085 - .100	.100 - .130 .085 - .110
P	**HIGH STRENGTH TOOL STEELS**								
	4140, 4340, 6150, 5210, A2, D2, P20, H11, H13, S2, O1	< 40 > 40	60 50	90 70	.050 - .075 .025 - .050	.075 - .085 .050 - .075	.085 - .100 .075 - .085	.100 - .125 .085 - .100	.100 - .130 .085 - .100
	MEDIUM ALLOY TOOL STEELS								
	200, 250, 300, 8620	< 40 > 40	60 50	90 70	.050 - .075 .025 - .050	.075 - .085 .050 - .075	.085 - .100 .075 - .085	.100 - .125 .085 - .100	.100 - .140 .085 - .110
	LOW CARBON STEELS								
	Platinum, A36, 12L14, 1000's, 1100's, 1300's	< 40 > 40	60 50	90 70	.050 - .075 .025 - .050	.075 - .085 .050 - .075	.085 - .100 .075 - .085	.100 - .125 .085 - .100	.100 - .140 .085 - .120
	CAST STEELS								
	Steel		60	90	.060 - .090	.100 - .125	.100 - .125	.125 - .150	.175 - .200
K	**CAST MATERIAL**								
	Ductile Iron		75	100	.060 - .090	.100 - .125	.100 - .125	.125 - .150	.175 - .200
	Gray Iron		75	120	.060 - .090	.100 - .125	.100 - .125	.125 - .150	.175 - .200
N	**NON-FERROUS**								
	Aluminum 2014, 2024, 6061-(T1-T6), 7075		90 - 120	90 - 150	.090 - .120	.125 - .150	.175 - .200	.225 - .250	.225 - .250
	Aluminum Die Cast		75 - 90	90 - 120	.060 - .100	.100 - .120	.150 - .175	.200 - .225	.200 - .225
	Magnesium		90	120	.080 - .120	.125 - .150	.175 - .200	.225 - .250	.225 - .250
	Copper		90	120	.060 - .100	.100 - .125	.100 - .125	.125 - .150	.175 - .200
	Brass		60 - 90	90 - 120	.060 - .120	.100 - .150	.150 - .200	.200 - .250	.200 - .250
	Bronze		45 - 60	70 - 90	.040 - .100	.060 - .125	.075 - .125	.125 - .175	.175 - .225

NOTE - ABOVE ARE STARTING PARAMETERS ONLY. HIGHER RESULTS MAY BE ACHIEVED WITH OPTIMUM CONDITIONS.