



Vi-Pro 5 Flute														
Material Guide		HRC	SFM		Suggested Chip Load Per Tooth									
			Stub, Reg	Long, Xlong	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1
COBALT BASE ALLOYS	Stellite, HS-21, Haynes 25/188, X-40, L-605	under 32 over 32	550-570 200-225	385-400 140-160	.0004 .0008	.0005 .0011	.0009 .0016	.0010 .0018	.0012 .0019	.0014 .0021	.0016 .0028	.0019 .0031	.0024 .0037	.0029 .0041
NICKEL BASE ALLOYS	Inconel-625/718, Waspalloy, Rene, Hastelloy	under 32 over 32	550-570 200-225	385-400 140-160	.0004 .0008	.0005 .0011	.0009 .0016	.0010 .0018	.0012 .0019	.0014 .0021	.0016 .0028	.0019 .0031	.0024 .0037	.0029 .0041
IRON BASE ALLOYS	Incoloy 800-802, Multimet N-155, Timkin 16-25-6, Carpeneter 22-b3	under 32 over 32	550-570 200-225	385-400 140-160	.0004 .0008	.0005 .0011	.0009 .0016	.0010 .0018	.0012 .0019	.0014 .0021	.0016 .0028	.0019 .0031	.0024 .0037	.0029 .0041
MONEL	Monel-65% Nickel		550-570	385-400	.0004 .0008	.0009 .0011	.0014 .0016	.0015 .0017	.0017 .0019	.0019 .0021	.0026 .0028	.0029 .0031	.0035 .0037	.0039 .0041
TITANIUM ALLOYS	Commercially Pure, 6AL-4V, Astm 1/2/3, 6Al-25N-4Zr-2Mo-Si		550-570	385-400	.0004 .0008	.0009 .0011	.0014 .0016	.0015 .0017	.0017 .0019	.0019 .0021	.0026 .0028	.0029 .0031	.0035 .0037	.0039 .0041
STAINLESS STEEL (PRECIPITATION)	12/8, 15/5, 17-4, AM-350/355	under 32 over 32	600-625 550-570	420-440 385-400	.0004 .0008	.0009 .0011	.0014 .0016	.0016 .0020	.0017 .0025	.0019 .0031	.0026 .0032	.0029 .0037	.0035 .0039	.0039 .0041
STAINLESS STEEL (AUSTENITIC)	200 Series, 302, 303, 304, 316		600-625	420-440	.0004 .0008	.0009 .0011	.0014 .0016	.0016 .0020	.0017 .0025	.0019 .0031	.0026 .0032	.0029 .0037	.0035 .0039	.0039 .0041
	304L, 316L	under 32 over 32	600-625 550-570	420-440 385-400	.0004 .0008	.0009 .0011	.0014 .0016	.0016 .0020	.0017 .0025	.0019 .0031	.0026 .0032	.0029 .0037	.0035 .0039	.0039 .0041
STAINLESS STEEL (MARTENSITIC)	403, 410, 416, 440		600-625	420-440	.0004 .0008	.0009 .0011	.0014 .0016	.0016 .0020	.0017 .0025	.0019 .0031	.0026 .0032	.0029 .0037	.0035 .0039	.0039 .0041
HIGH STRENGTH TOOL STEELS	4140, 4340, 6150, 5210, A2,D2 P20, H11, H13, S2, 01	under 32 over 32	600-625 550-570	420-440 385-400	.0004 .0008	.0009 .0011	.0014 .0016	.0016 .0020	.0017 .0025	.0019 .0031	.0026 .0032	.0029 .0037	.0035 .0039	.0039 .0041
MEDIUM ALLOY STEELS	200, 250, 300	under 32 over 32	510-530 470-490	360-375 325-340	.0004 .0008	.0009 .0011	.0014 .0016	.0016 .0020	.0017 .0025	.0019 .0031	.0026 .0032	.0029 .0037	.0035 .0039	.0039 .0041
CARBON STEELS	1000's, 1100's, 1300's		800-850	560-595	.0004 .0008	.0011 .0013	.0018 .0020	.0024 .0026	.0030 .0032	.0033 .0035	.0035 .0037	.0039 .0041	.0041 .0043	.0054 .0056
DUCTILE	Ductile Cast Irons		800-850	560-595	.0004 .0008	.0011 .0013	.0018 .0020	.0024 .0026	.0030 .0032	.0033 .0035	.0035 .0037	.0039 .0041	.0041 .0043	.0054 .0056
CAST IRONS	Gray Cast Irons		800-850	560-595	.0004 .0008	.0011 .0013	.0018 .0020	.0024 .0026	.0030 .0032	.0033 .0035	.0035 .0037	.0039 .0041	.0041 .0043	.0054 .0056