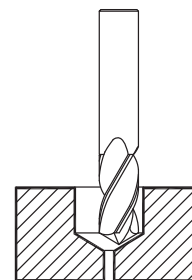
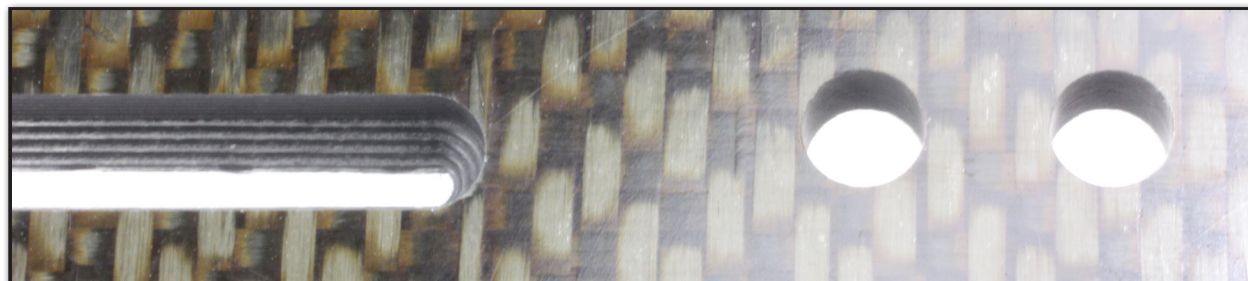


* Solids *

Type	Rc Hardness	SFM (Vc)	CHIPLOAD PER FLUTE (Fz)			
		152M, 152MA 154M, 154MA	3.0 - 6.0	6.0 - 10.0	10.0 - 14.0	14.0 - 20.0
STAINLESS STEELS						
13/8, 15/5, 17-4, pH Types	< 35	45 - 75	.006 - .020	.010 - .025	.020 - .050	.025 - .075
400 Series	< 35	45 - 75	.006 - .020	.010 - .025	.020 - .050	.025 - .075
HIGH STRENGTH TOOL STEELS						
4140, 4340, 6150, 5210, A2, D2, P20, H11, H13, S2, O1	< 30 30 - 38	45 - 60 30 - 45	.006 - .020 .003 - .010	.010 - .025 .005 - .015	.020 - .050 .010 - .035	.025 - .075 .025 - .050
MEDIUM ALLOY TOOL STEELS						
200, 250, 300	< 35	55 - 75	.008 - .025	.015 - .035	.025 - .065	.035 - .100
CARBON STEELS						
A36, 1000's, 1100's, 1300's	< 35	55 - 75	.008 - .025	.015 - .035	.025 - .065	.035 - .100
CAST MATERIAL						
Steel		75 - 105	.010 - .035	.025 - .050	.035 - .075	.050 - .100
Aluminum		75 - 105	.010 - .035	.020 - .050	.035 - .075	.050 - .100
ALUMINUM						
Aircraft Grade (6061, 7075)		90 - 150	.010 - .035	.025 - .050	.035 - .075	.050 - .100
MAGNESIUM						
		90 - 135	.008 - .025	.020 - .040	.025 - .065	.040 - .090
COPPER						
Copper Alloys		75 - 115	.008 - .025	.020 - .040	.025 - .065	.040 - .090
BRASS, BRONZE						
Brass, Aluminum/Bronze, Low Silicon Bronze		75 - 115	.008 - .025	.020 - .040	.025 - .065	.040 - .090
COMPOSITE MATERIAL						
Glass Epoxy, Fiberglass, Plastics		60 - 120	.010 - .035	.025 - .050	.035 - .075	.050 - .100
Graphite, G10, Carbon Fiber		90 - 150	.010 - .035	.025 - .050	.035 - .075	.050 - .100



Milling pre-drilled through hole to size

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