

224 SERIES



GROUP #	MATERIAL GROUP & HARDNESS	MATERIAL EXAMPLES	LOW SFM	HIGH SFM	TYPE OF CUT	IPT Ø 0.250	IPT Ø 0.375	IPT Ø 0.500	IPT Ø 0.625	IPT Ø 0.750	IPT 1.000
N1	WROUGHT ALUMINUM ALLOYS <12% Si	1000-8000 SERIES EXCLUDING 4000 SERIES	400	3500	SLOTTING	0.0030	0.0046	0.0061	0.0080	0.0090	0.0115
			400	5000	ROUGH	0.0040	0.0053	0.0073	0.0090	0.0106	0.0120
			400	5000	FINISH OR HEM	0.0050	0.0063	0.0089	0.0100	0.0123	0.0150
N2	High Silicon Aluminum Alloys >12%	4000 SERIES & CASTINGS	300	3500	SLOTTING	0.0030	0.0036	0.0050	0.0070	0.0083	0.0105
			300	5000	ROUGH	0.0040	0.0048	0.0060	0.0080	0.0096	0.0120
			300	5000	FINISH OR HEM	0.0040	0.0054	0.0080	0.0090	0.0110	0.0140
N3	Copper, Copper Alloys, & Magnesium Alloys <190 BHN	C110, C93200, C95500	300	800	SLOTTING	0.0020	0.0032	0.0040	0.0055	0.0060	0.0080
			300	900	ROUGH	0.0020	0.0032	0.0040	0.0065	0.0060	0.0085
			300	1000	FINISH OR HEM	0.0023	0.0035	0.0045	0.0070	0.0050	0.0090
N4	Non Metallic	ULTEM, ABS, NYLON, TOOLBOARD, PHENOLIC	200	1000	SLOTTING	0.0010	0.0020	0.0030	0.0038	0.0045	0.0050
			200	2600	ROUGH	0.0013	0.0022	0.0033	0.0041	0.0048	0.0053
			200	2600	FINISH OR HEM	0.0016	0.0025	0.0036	0.0045	0.0051	0.0056

MILL PROCESS	ADOC	RDOC
SLOTTING	Up to 1x Diameter	100%
ROUGHING	Up to 2x Diameter	16-49%
FINISH OR HEM	Up to 2.5x Diameter	2-15%

Must use chip thinning calculations when developing feedrates for FINISH OR HEM toolpaths
Cut feedrate up to 40% for finishing if surface finish shows feed lines

