



**TEDI GRZ MILL OPERATING GUIDELINES**

Materials			Sharp Grade	Metric		Inch		
ISO	Type	Condition		Vc Cutting Speed (m/min)	fz Feed/Tooth (mm/z)	Vc Cutting Speed (SFM)	fz Feed/Tooth (inch/z)	
<b>N</b>	N1	Aluminum-wrought alloys	Not hardenable	PCD	≤ 6000	0.05÷0.25	≤ 19,685	.002-.010
			Hardenable					
	N2	Aluminum-cast alloys	Not hardenable < 7% Si	PCD	≤ 6000	0.05÷0.25	≤ 19,685	.002-.010
			Hardenable 7-12% Si					
			High temperatures ≥12%					
	N3	Copper alloys	Free cutting > 1% Pb	PCD	≤ 2000	0.05÷0.25	≤ 6500	.002-.010
			Brass					
			Electrolytic copper					
			Eco brass					
	N4	Graphite		PCD	≤ 2000	0.05÷0.2	≤ 6500	.002-.008
N5	Plastic	Thermoplast	PCD	≤ 2000	0.05÷0.25	≤ 6500	.002-.010	
		Duroplast						
<b>K</b>	K1	Gray cast iron (GG)	Ferritic/Pearlitic	CBN	1000÷2000	0.05÷0.25	3200-6500	.002-.010
			Pearlitic/Martensitic					
<b>H</b>	H1	Hardened steel	Hardened 55 HRC	CBN	150÷300	0.05÷0.25	500-1000	.002-.010
			Hardened 60 HRC					
<b>O</b>	O1	Plastic	AFK	PCD	≤ 2000	0.05÷0.25	≤ 2000	.002-.010
		Plastic (duroplastic)	CFRP/GRP					
		Plastic (thermoplastic)	CFRP/GRP					
	O2	Carbon matrix	CFC	PCD	≤ 2000	0.05÷0.25	≤ 2000	.002-.010

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.