



DIPOS FINISH™ OPERATING GUIDELINES

Materials				Vc Cutting Speed SFM	fz* Feed/Tooth (inch)	ap Axial Cut Depth (inch)	Harder.....Tougher						Coolant			
ISO	Mat'l Group #VDI 3323	Type	Examples				PCD	CBN	Cermet	Carbide						
							IN93D	IN80B	IN62C	IN2504	IN10K	IN2510		IN2505		
P	1 thru 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-1000	.004-.010	.010-.020							1	No		
				650-1600					1	2						
	6 thru 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700												1
				400-900					1	2						
	10, 11	High-alloy Steel	H13, A2, D2, M2, T1	300-600												1
350-650						1	2									
M	12 thru 13	Stainless Steel (Ferritic & Martensitic)	410, 416, 440	350-600	.004-.010	.010-.020							1	Yes		
	14	Stainless Steel (Austenitic)	303, 304, 316, 15-5, 17-4	300-550											1	May not be required at high speeds
K	15 thru 16	Gray Cast Iron	CLS. 20, 30, 45	500-1,000	.004-.010	.010-.020				1	2	3	No			
				1,800-3,000	.002-.008	.010-.020		1								
	17 thru 20	Nodular Cast Iron	60-40-18, 100-70-03	400-800	.004-.010	.010-.020				1	2	3				
N	21 - 30	Aluminum	7075, 6061	1,000-6,000	.004-.010	.010-.020	1				1		Yes			
S	31 thru 35	High-Temp Alloys	Inconel, Hastelloy, Nimonic, Monel	65-120	.004-.010	.010-.020							1	Yes		
		Co Based > 35 HRC	Stellite, Haynes	250-500	.002-.005	.010-.020							1			
		Ni Based > 35 HRC	Inconel, Hasteloy	200-450	.002-.005	.010-.020							1			
		Fe Based > 35 HRC		150-350	.002-.005	.010-.020							1			
	36 thru 37	Titanium Alloys	6Al-4V, 5Al-5Mo-5V-3Cr	85-130	.004-.010	.010-.020							1			
H	38 thru 39	Hardened Steel >48	A2, O1, D2	130-250	.004-.010	.010-.020		1					No			

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.