Operating Guidelines

Series 12J1E, 22J3E Material		Brinell Hardness	SFM	Feed per Insert	Grades IN3040/IN6055	IN2005	IN2015	IN1030	IN2030	IN2040	Coolant
Aluminum	7075-T6, 6061-T6, 2024	-	1500-8000	.004-.018	1	3	2				Yes
Cast Iron	Gray	150-250	300-1000	.004-.018		2	1				No
	Nodular		300-600								
Steel	Low Carbon 1018-8620	100-250	400-1000	.004-.018		2		1	1*	3	
	High Carbon F-6180	250-400	350-500	.004-.015		3		1	1*	2	No
	Alloyed Steel 4140, 4340	150-300	300-700	.004-.018							
	Tool Steel A-6, D-1, D-2	Up to 300									
Stainless Steel	300 Series, 304, 316	-	300-700	.004-.018		2	3	1	1*		May not be required at high speeds
	400 Series, 15-5 PH	-	400-900								
	13-8 PH	-	200-400								Yes
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy, Waspalloy	-	75-120	.003-.006		1	3	2	2		Yes
Titanium	6AL-4V	-	100-150	.005-.008		2		1	1		Yes

*Preferred for higher SFM.

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.