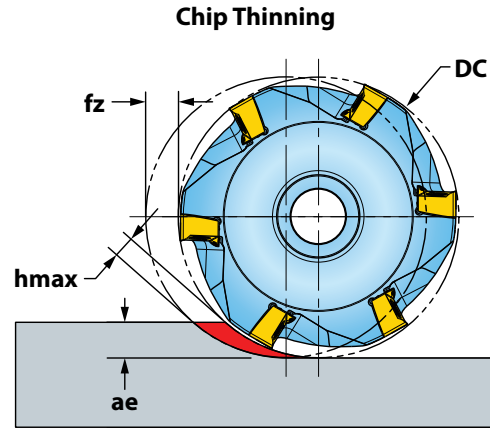# ISOPLUS™ DK1G OPERATING GUIDELINES

Chip Thinning

* Chip Thinning Calculator is recommended to ensure hmax falls within fz range.

Materials				Vc Cutting Speed SFM	fz* Feed/Tooth (inch)	Harder <------------------------> Tougher				Coolant
ISO	Mat'l Group #VDI 3323	Type	Examples			Ceramic	Carbide			
						IN70N	IN2504	IN4005	IN4030	
P	1 - 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-1000						No
	6 - 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700	.003-.013			2	2	
	10 - 11	High-alloy Steel	H13, A2, D2, M2, T1	300-600						
K	15 - 16	Gray Cast Iron	CLS. 20, 30, 45	500-1000	.003-.013		1	2	3	No
				1800-3000	.003-.008	1				
	17 - 20	Nodular Cast Iron	60-40-18, 100-70-03	400-800	.003-.012		1	2	3	No
				1500-2500	.003-.007	1				No
		CGI	CGI	300-500	.003-.005	1				
H	38 thru 39	Hardened Steel >48	A2, O1, D2	150-300	.003-.007		1	2		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.

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