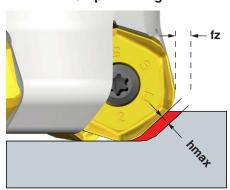


## **OPPOSITION OF A PROPERTY OF A**

## **Chip Thinning**



\* Chip Thinning Calculator is recommended to ensure hmax is greater than .003"

Materials				Vc	fz*	Harder <> Tougher				
ISO	Mat'l Group #VDI 3323	Туре	Examples	Cutting Speed SFM	Feed/Tooth (inch)	IN2510	IN2505	IN2530	IN6537	Coolant
P	1-5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-1000	.003008		3	2	1	No
	6 - 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700						
	10 - 11	High-alloy Steel	H13, A2, D2, M2, T1	300-600						
M	12 - 13	Stainless Steel (Ferritic & Martensitic)	410, 416, 440	350-600	.003007		2	1	3	Yes
	14	Stainless Steel (Austenitic)	303, 304, 316, 15-5, 17-4	300-550						May not be required at high speeds
K	15 - 16	Gray Cast Iron	CLS. 20, 30, 45	500-1000	.003008	1	2		3	No
	17 - 20	Nodular Cast Iron	60-40-18, 100-70-03	400-800						
S	31 - 35	High-Temp Alloys	Inconel, Hastelloy, Nimonic, Monel	65-150	.003006		1	2		Yes
	36 - 37	Titanium Alloys	6Al-4V, 5Al-5Mo-5V-3Cr	85-200			2	1		

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.

