

Operating Guidelines - 12xD

ISO	Material Group No.	Condition	Hardness HB	Vc Cutting Speed SFM	Feed vs. Drill Diameter mm/rev (inch/rev)			
					6.0 mm	6.1-8.0mm	8.1-10.0mm	10.1-12.0mm
					(.236")	(.250-.313")	(.344-.394")	(.438-.469")
P	1	Low carbon steels (C <0.3)	125	131 - 262	.006 - .012	.008 - .016	.010 - .018	.012 - .020
	2		190	131 - 262				
	3	Carbon steels (C >0.3)	250	131 - 262				
	4		220	98 - 230				
	5		300	98 - 230				
	6	Low alloy steels	200	131 - 262		.008 - .014	.010 - .016	.012 - .018
	7		275	98 - 230				
	8		300	98 - 230				
	9		350	66 - 197				
	10	Alloy steels	200	98 - 230		.008 - .012	.010 - .014	.012 - .016
	11		325	66 - 197				
K	15	Gray cast iron	160	131 - 262	.008 - .016	.012 - .020	.014 - .022	.016 - .024
	16		250	131 - 262				
	17	Nodular cast iron	180	131 - 262	.006 - .014	.010 - .018	.012 - .020	.014 - .022
	18		260	98 - 230				
	19	Malleable cast iron	130	131 - 262				
	20		230	98 - 230				

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.