

Speeds and Feeds



- 1) Select your material in the ISO colored chart.
- 2) Start with the recommended cutting speed, v_c (m/min). Adjust the cutting speed based on your cutting conditions.

Group		Material Description	Hardness (HB)	Hardness (HRC)	Recommended Cutting Speed
ISO	VDI 3323				Cutting Speed
P	1	Non-Alloyed Steel	125		20-25
	2		190	13	20-25
	3		250	25	18-24
	4		270	28	15-20
	5		300	32	10-14
	6	Low-Alloyed Steel	180	10	15-20
	7		275	29	15-20
	8		300	32	10-14
	9		350	38	5-7
	10		High-Alloyed Steel, and Tool Steel	200	15
	11	325		35	
M	12	Stainless Steel	200	15	10-15
	13		240	23	8-11
	14		180	10	6-8
K	15	Gray Cast Iron	180	10	15-20
	16		260	26	8-11
	17	Nodular Cast Iron	160	3	15-20
	18		250	25	8-11
	19	Malleable Cast Iron	130		
20	230		21		
N	21	Aluminum-Wrought Alloy	60		
	22		100		
	23	Aluminum-Cast, Alloyed	75		20-25
	24		90		
	25		130		
	26		110		35-40
	27	Copper and Copper Alloys (Bronze / Brass)	90		12-17
	28		100		20-25
	29	Non-Metallic Materials			
	30				

