

RECOMMENDED CUTTING CONDITIONS

ISO	VDI 3323	Material Description	HB	HRc	TTS31,TTS32	TTS33,TTS34	TKS35,TKS36	TTS37,TTS38	TTS39
					Vc (m/min)				
P	1	Non-alloy steel	125		41-46	41-46	41-46	41-46	30-35
	2		190	13	41-46	41-46	41-46	41-46	41-46
	3		250	25	35-40	35-40	35-40	35-40	35-40
	4		270	28	28-33	28-33	28-33	28-33	28-33
	5		300	32					
	6	Low alloy steel	180	10	28-33	28-33	28-33	28-33	28-33
	7		275	29	28-33	28-33	28-33	28-33	28-33
M	12	Stainless steel	200	15	18-23	18-23		18-23	18-23
	13		240	23	13-18	13-18		13-18	13-18
	14		180	10	10-14	10-14		10-14	10-14
K	15	Grey cast iron	180	10	28-33	28-33	28-33		
	16		260	26			28-33		
	17	Nodular cast iron	160	3	28-33	28-33	28-33		
	18		250	25			28-33		
	19	Malleable cast iron	130				28-33		
	20		230	21			28-33		
N	21	Aluminum-wrought alloy	60					28-33	28-33
	22		100				28-33	28-33	28-33
	23	Aluminum-cast, alloyed	75		41-46	41-46	30-35	41-46	41-46
	24		90		41-46	41-46	30-35	41-46	41-46
	25		130		30-35	30-35	30-35	30-35	30-35
	26	Copper and Copper Alloys (Bronze / Brass)	110		45-50	45-50			
	27		90						
	28		100		25-30	25-30		25-30	25-30

ISO	VDI 3323	Material Description	HB	HRc	TTS41-IC	TTS42-RCP	TKS43-IC	TKS44-RCP	TTS45-RCP
					Vc (m/min)				
P	1	Non-alloy steel	125		41-57	41-57	41-57	41-57	41-57
	2		190	13	41-57	41-57	41-57	41-57	41-57
	3		250	25	35-50	35-50	35-50	35-50	35-50
	4		270	28	28-41	28-41	28-41	28-41	28-41
	5		300	32					
	6	Low alloy steel	180	10	28-41	28-41	28-41	28-41	28-41
	7		275	29	28-41	28-41	28-41	28-41	28-41
M	12	Stainless steel	200	15	18-28	18-28			18-28
	13		240	23	13-22	13-22			13-22
	14		180	10	10-17	10-17			10-17
K	15	Grey cast iron	180	10	28-41	28-41	28-41	28-41	
	16		260	26			28-41	28-41	
	17	Nodular cast iron	160	3	28-41	28-41	28-41	28-41	
	18		250	25			28-41	28-41	
	19	Malleable cast iron	130				28-41	28-41	
	20		230	21			28-41	28-41	
N	21	Aluminum-wrought alloy	60						28-41
	22		100						28-41
	23	Aluminum-cast, alloyed	75		41-57	41-57	30-43	30-43	41-57
	24		90		41-57	41-57	30-43	30-43	41-57
	25		130		30-43	30-43	30-43	30-43	30-43
	26	Copper and Copper Alloys (Bronze / Brass)	110		45-62	45-62			
	27		90						
	28		100		25-37	25-37			25-37