



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TC804	TD804	TB804	TCE05	TDE05	TBE05	TCE06	TDE06	
					TC844	TD844	TB844	TCE09	TDE09				
					TC824	TD824	TB824	TCE01	TDE01				
					TC864	TD864	TB864	TCE02	TDE02				
					Vc (m/min)								
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18	12-18	18-24	
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	
	5		300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	10-14	
	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	10-14	
	9		350	38	3-5	5-7	3-5	3-5	5-7	3-5	3-5	5-7	
	10		High alloyed steel, and tool steel	200	15	3-5	5-7	3-5	3-5	5-7	3-5	3-5	5-7
	11	325		35									
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	7-10	10-15	
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	
	14		180	10	4-6	6-8	4-6	4-6	6-8	4-6	4-6	6-8	
K	15	Grey cast iron	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	
	16		260	26	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	
	18		250	25	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	
	19	Malleable cast iron	130										
20	230		21										
N	21	Aluminum-wrought alloy	60										
	22		100										
	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	
	24		90										
	25		130										
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	25-35	35-40	
	27		90		8-12	12-17	8-12	8-12	12-17	8-12	8-12	12-17	
	28		100		15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	
	29	Non Metallic Materials											
	30												
S	31	Heat Resistant Super Alloys	200	15									
	32		280	30									
	33		250	25									
	34		350	38									
	35		320	34									
	36	Titanium Alloys	400 Rm										
	37		1050 Rm										
H	38	Hardened steel	550	55									
	39		630	60									
	40	Chilled Cast Iron	400	42									
	41	Hardened Cast Iron	550	55									



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

VDI 3323	TBE06	TCE07	TDE07	TBE07	TCE08	TDE08	TBE08	TC804-IC	TC633	TC807
	Vc (m/min)									
1	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
2	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
3	12-18	12-18	18-24	12-18	12-18	18-24	12-18	12-18	12-18	12-18
4	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
5	6-10	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10	6-10
6	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
7	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
8	6-10	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10	6-10
9	3-5	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5	3-5
10	3-5	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5	3-5
11										
12	7-10	7-10	10-15	7-10	7-10	10-15	7-10	7-10	7-10	7-10
13	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
14	4-6	4-6	6-8	4-6	4-6	6-8	4-6	4-6	4-6	4-6
15	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
16	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
17	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
18	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
19										
20										
21										
22										
23	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
24										
25										
26	25-35	25-35	35-40	25-35	25-35	35-40	25-35	25-35	25-35	25-35
27	8-12	8-12	12-17	8-12	8-12	12-17	8-12	8-12	8-12	8-12
28	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
29										
30										
31										
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RECOMMENDED CUTTING CONDITIONS
EMPHOHLNE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min)								
					TB744 TB754 TQ744 TQ754	TC814 TC854 TC834 TC874	TD814 TD854 TD834 TD874	TB814 TB854 TB834 TB874	TCJ05 TCJ09 TCJ01 TCJ02	TDJ05 TDJ09 TDJ01 TDJ02	TBJ05	TCJ06	
P	1	Non-alloy steel	125			15-20	20-25	15-20	15-20	20-25	15-20	15-20	
	2		190	13	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	
	3		250	25		12-18	18-24	12-18	12-18	18-24	12-18	12-18	
	4		270	28	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	
	5		300	32		6-10	10-14	6-10	6-10	10-14	6-10	6-10	
	6	Low alloy steel	180	10	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	
	7		275	29	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	
	8		300	32		6-10	10-14	6-10	6-10	10-14	6-10	6-10	
	9		350	38		3-5	5-7	3-5	3-5	5-7	3-5	3-5	
	10		High alloyed steel, and tool steel	200	15		3-5	5-7	3-5	3-5	5-7	3-5	3-5
	11			325	35								
M	12	Stainless steel	200	15	7-10	7-10	10-15	7-10	7-10	10-15	7-10	7-10	
	13		240	23	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	
	14		180	10	4-6	4-6	6-8	4-6	4-6	6-8	4-6	4-6	
K	15	Grey cast iron	180	10		10-15	15-20	10-15	10-15	15-20	10-15	10-15	
	16		260	26		5-8	8-11	5-8	5-8	8-11	5-8	5-8	
	17	Nodular cast iron	160	3		10-15	15-20	10-15	10-15	15-20	10-15	10-15	
	18		250	25		5-8	8-11	5-8	5-8	8-11	5-8	5-8	
	19	Malleable cast iron	130										
20	230		21										
N	21	Aluminum-wrought alloy	60										
	22		100										
	23	Aluminum-cast, alloyed	75			15-20	20-25	15-20	15-20	20-25	15-20	15-20	
	24		90										
	25		130										
	26		110			25-35	35-40	25-35	25-35	35-40	25-35	25-35	
	27	Copper and Copper Alloys (Bronze / Brass)	90			8-12	12-17	8-12	8-12	12-17	8-12	8-12	
	28		100		15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	
	29												
	30	Non Metallic Materials											
S	31	Heat Resistant Super Alloys	200	15									
	32		280	30									
	33		250	25									
	34		350	38									
	35		320	34									
	36	Titanium Alloys	400 Rm										
	37		1050 Rm										
H	38	Hardened steel	550	55									
	39		630	60									
	40	Chilled Cast Iron	400	42									
	41	Hardened Cast Iron	550	55									



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EMPHOHLNE SCHNEIDKONDITIONEN

VDI 3323	Vc (m/min)											
	TDJ06	TBJ06	TCJ07	TDJ07	TBJ07	TCJ08	TDJ08	TBJ08	TC814-IC	TC445	TB428 TB438	TQ428 TQ438
1	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20		
2	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20	15-20
3	18-24	12-18	12-18	18-24	12-18	12-18	18-24	12-18	12-18	12-18		
4	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15	10-15
5	10-14	6-10	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10		
6	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15	10-15
7	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15	10-15
8	10-14	6-10	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10		
9	5-7	3-5	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5		
10	5-7	3-5	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5		
11												
12	10-15	7-10	7-10	10-15	7-10	7-10	10-15	7-10	7-10	7-10	7-10	7-10
13	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8	5-8
14	6-8	4-6	4-6	6-8	4-6	4-6	6-8	4-6	4-6	4-6	4-6	4-6
15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
16	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8		
17	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
18	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8		
19												
20												
21												
22												
23	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20		
24												
25												
26	35-40	25-35	25-35	35-40	25-35	25-35	35-40	25-35	25-35	25-35		
27	12-17	8-12	8-12	12-17	8-12	8-12	12-17	8-12	8-12	8-12		
28	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20	15-20
29												
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