

					L4273	L4274	L4276	L12D1	L12D3	L19E1	L19E3	L41A1 L42A1
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)							
P	1	Non-alloy steel	125		80-120	80-120	80-120	80-120	80-120			
	2		190	13	80-120	80-120	80-120	80-120	80-120			
	3		250	25	80-120	80-120	80-120	80-120	80-120			
	4		270	28	80-120	80-120	80-120	80-120	80-120			
	5		300	32	80-120	80-120	80-120	80-120	80-120			
	6	Low alloy steel	180	10	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	7		275	29	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	8		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	9		350	38	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	10	High alloyed steel, and tool steel	200	15	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	11		325	35	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
M	12	Stainless steel	200	15	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
	13		240	23	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
	14		180	10	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
K	15	Grey cast iron	180	10	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	16		260	26	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	17	Nodular cast iron	160	3	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	18		250	25	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	19	Malleable cast iron	130		50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	20		230	21	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
N	21	Aluminum- wrought alloy	60		100-300	100-300	100-300	100-300	100-300			100-300
	22		100		100-300	100-300	100-300	100-300	100-300			100-300
	23	Aluminum- cast, alloyed	75		100-300	100-300	100-300	100-300	100-300			100-300
	24		90		100-300	100-300	100-300	100-300	100-300			100-300
	25		130		100-300	100-300	100-300	100-300	100-300			100-300
	26	Copper and Copper Alloys (Bronze / Brass)	110		100-300	100-300	100-300	100-300	100-300			100-300
	27		90		100-300	100-300	100-300	100-300	100-300			100-300
	28		100		100-300	100-300	100-300	100-300	100-300			100-300
	29	Non Metallic Materials			100-300	100-300	100-300	100-300	100-300			80-150
	30				100-300	100-300	100-300	100-300	100-300			80-150
S	31	Heat Resistant Super Alloys	200	15	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	32		280	30	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	33		250	25	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	34		350	38	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	35		320	34	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	36	Titanium Alloys	400Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	37		1050Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	
H	38	Hardened steel	550	55						25-60	25-60	
	39		630	60						25-50	25-50	
	40	Chilled Cast Iron	400	42						25-70	25-70	
	41	Hardened Cast Iron	550	55						25-60	25-60	