

Machining Recommendations for TRIDEEP Drills

ISO	Material	Condition	Tensile Strength [N/mm ²]	Hardness HB	Material Group No.	LOGT		
						V m/min	Feed per insert size "DT"	
							06	
							mm/rev	
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C	Annealed	420	125	80-120	0.08-0.14	
		>= 0.25 %C	Annealed	650	190			2
		< 0.55 %C	Quenched and tempered	850	250			3
		>= 0.55 %C	Annealed	750	220			4
	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	1000	300	5		0.06-0.20	
		Annealed	600	200	6			
		Quenched and tempered	930	275	7			
			1000	300	8			
	High alloyed steel, cast steel and tool steel	1200	350	9	0.08-0.14			
		Annealed	680	200			10	
	Stainless steel and cast steel	Quenched and tempered	1100	325	11			
		Ferritic/martensitic.	680	200	12			
		Martensitic	820	240	13			
M	Stainless steel and cast steel	Austenitic, duplex	600	180	14	50-100	0.04-0.12	
K	Grey cast iron (GG)	Ferritic/pearlitic		180	15	80-120	0.08-0.25	
		Pearlitic /martensitic		260	16			
	Cast iron nodular (GGG)	Ferritic		160	17			
		Pearlitic		250	18			
	Malleable cast iron	Ferritic		130	19			
		Pearlitic		230	20			
N	Aluminum-wrought alloys	Not hardenable		60	21	80-160	0.08-0.20	
		Hardenable		100	22			
	Aluminum- cast alloys	<=12% Si	Not hardenable		75			23
		Hardenable		90	24			
	Copper alloys	>12% Si	High temperature		130			25
		>1% Pb	Free cutting		110			26
		Brass		90	27			
		Electrolitic copper		100	28			
	Non metallic	Duroplastics, fiber plastics						29
		Hard rubber						30
S	High temp. alloys	Fe based	Annealed		200	20-50	0.08-0.14	
		Hardened		280	32			
	Ni or Co based	Annealed		250	33			
		Hardened		350	34			
		Cast		320	35			