

CUTTING DATA MINI SOLID CARBIDE BARS



ISO Standard	Material		Condition	Cutting Speed inch/min		
				Z6P	Z5	UNC
P	Non-Alloy steel and cast steel, free cutting steel	<0.25%C	Annealed	82-230	98-262	
		≥0.25%C	Annealed			
		< 0.55%C	Quenched and tempered			
		≥0.55%C	Annealed			
			Quenched and tempered			
	Low alloy steel and cast steel (less than 5% alloying elements)	Annealed	66-131	82-164		
	Quenched and tempered					
	High alloy steel, cast steel, and tool steel	Annealed	66-131	82-164		
		Quenched and tempered				
M	Stainless steel and cast steel	Ferritic/martensitic	82-131	98-197		
		Martensitic				
		Austenitic				
K	Cast iron nodular (GGG)	Ferritic/pearlitic	82-197	98-262		
		Pearlitic				
	Grey cast iron (GG)	Ferritic	98-230	98-262		
		Pearlitic				
	Malleable cast iron	Ferritic	66-131	66-164		
		Pearlitic				
N	Aluminum-wrought alloy		Not cureable	164-328	197-394	98-164
			Cured			
	Aluminum-cast, alloyed	≤12% Si	Not cureable	131-262	164-295	66-131
			Cured			
	Copper alloys	>12% Si >1% Pb	High temperature Free cutting	98-197	98-230	66-131
			Brass			
			Electrolytic copper			
	Non metallic		Duroplastics, fiber plastics	131-262		66-131
		Hard rubber				
S	High temp. alloys, Super alloys	Fe based	Annealed	49-98	49-131	
			Cured			
		Ni or Co based	Annealed			
			Cured			
	Titanium alloys		Cast			
			Alpha+beta alloys cured	33-98	33-98	
H	Hardened steel		Hardened 45-50 HRc	33-98	49-131	
			Hardened 51-55 HRc			
			Hardened 56-62 HRc			
	Chilled cast iron		Cast	33-98	33-98	
	Cast iron		Hardened	33-66	33-66	

Recommended Feed Rate: .0005 - .001 inch/rev