

Series # 2463

Material group	Hardness		SFM	Feed Rate - IPR									
	HRC	BHN		1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm	1 1/4 in. 31.750 mm	1 1/2 in. 38.100 mm
	Common structural steels	-		≤ 150	340	0.0015	0.0040	0.0065	0.0080	0.0100			
	≤ 32	≤ 301	300	0.0015	0.0040	0.0065	0.0080	0.0100					
Free-cutting steels	≤ 25	≤ 255	340	0.0017	0.0050	0.0080	0.0100	0.0125					
	≤ 32	≤ 301	300	0.0015	0.0040	0.0065	0.0080	0.0100					
Unalloyed heat-treatable steels	≤ 20	≤ 220	340	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 25	≤ 255	300	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 32	≤ 301	255	0.0015	0.0040	0.0065	0.0080	0.0100					
Alloyed heat-treatable steels	≤ 32	≤ 301	255	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 43	≤ 402											
Unalloyed case hardened steels	≤ 25	≤ 255	340	0.0017	0.0050	0.0080	0.0100	0.0125					
Alloyed case hardened steels	≤ 32	≤ 301	255	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 43	≤ 402											
Nitriding steels	≤ 32	≤ 301	215	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 43	≤ 402											
Tool steels	≤ 25	≤ 255	215	0.0012	0.0030	0.0050	0.0065	0.0080					
	≤ 43	≤ 402											
High speed steels	≤ 43	≤ 402											
Spring steels	≤ 38	≤ 354	105	0.0010	0.0025	0.0040	0.0050	0.0065					
Hardened steels	≤ 48	≤ 460	85	0.0012	0.0030	0.0050	0.0065	0.0080					
	≤ 66	-											
Stainless steels, sulphured	≤ 28	≤ 273	105	0.0015	0.0040	0.0065	0.0080	0.0100					
austenitic	≤ 36	≤ 337	105	0.0012	0.0030	0.0050	0.0065	0.0080					
martensitic	≤ 46	≤ 435	105	0.0012	0.0030	0.0050	0.0065	0.0080					
Cast iron	≤ 23	≤ 242	385	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 38	≤ 354	340	0.0015	0.0040	0.0065	0.0080	0.0100					
Spheroidal graphite iron and malleable cast iron	≤ 23	≤ 242	300	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 38	≤ 354	340	0.0015	0.0040	0.0065	0.0080	0.0100					
Chilled cast iron	≤ 38	≤ 354											
New cast materials GGV	≤ 20	≤ 220											
	≤ 32	≤ 301											
New cast materials ADI	≤ 32	≤ 301											
	≤ 43	≤ 402											
Special alloys	≤ 54	≤ 549	65	0.0010	0.0025	0.0040	0.0050	0.0065					
Ti and Ti-alloys	≤ 25	≤ 255	85	0.0012	0.0030	0.0050	0.0065	0.0080					
	≤ 43	≤ 402	65	0.0010	0.0025	0.0040	0.0050	0.0065					
Aluminium and Al-alloys	-	≤ 120	855	0.0025	0.0080	0.0125	0.0160	0.0200					
Al wrought alloys	-	≤ 200	855	0.0025	0.0080	0.0125	0.0160	0.0200					
Al cast alloys ≤ 10 % Si	-	≤ 180	640	0.0020	0.0065	0.0100	0.0125	0.0160					
≤ 24 % Si	-	≤ 180	510	0.0020	0.0065	0.0100	0.0125	0.0160					
Magnesium alloys	-	≤ 120	770	0.0017	0.0050	0.0080	0.0100	0.0125					
Copper, low-alloyed	-	≤ 150	340	0.0017	0.0050	0.0080	0.0100	0.0125					
Brass, short-chipping	-	≤ 180	770	0.0017	0.0050	0.0080	0.0100	0.0125					
long-chipping	-	≤ 180	770	0.0017	0.0050	0.0080	0.0100	0.0125					
Bronze, short-chipping	-	≤ 180	510	0.0017	0.0050	0.0080	0.0100	0.0125					
	≤ 25	≤ 255	510	0.0017	0.0050	0.0080	0.0100	0.0125					
Bronze, long-chipping	≤ 25	≤ 255	300	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 32	≤ 301	215	0.0012	0.0030	0.0050	0.0065	0.0080					
Duroplastics			215	0.0015	0.0040	0.0065	0.0080	0.0100					
Thermoplastics			170	0.0012	0.0030	0.0050	0.0065	0.0080					
Reinforced plastics - Kevlar													
Reinforced plastics - GFK / CFK			340	0.0012	0.0030	0.0050	0.0065	0.0080					

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	Common structural steels	-		≤ 150	330	0.0015	0.0040	0.0065	0.0080	0.0100			
	≤ 32	≤ 301	295	0.0015	0.0040	0.0065	0.0080	0.0100					
Free-cutting steels	≤ 25	≤ 255	330	0.0017	0.0050	0.0080	0.0100	0.0125					
	≤ 32	≤ 301	295	0.0015	0.0040	0.0065	0.0080	0.0100					
Unalloyed heat-treatable steels	≤ 20	≤ 220	330	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 25	≤ 255	295	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 32	≤ 301	260	0.0015	0.0040	0.0065	0.0080	0.0100					
Alloyed heat-treatable steels	≤ 32	≤ 301	260	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 43	≤ 402											
Unalloyed case hardened steels	≤ 25	≤ 255	330	0.0017	0.0050	0.0080	0.0100	0.0125					
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Tool steels	≤ 25	≤ 255	215	0.0012	0.0030	0.0050	0.0065	0.0080					
	≤ 43	≤ 402											
High speed steels	≤ 43	≤ 402											
Spring steels	≤ 38	≤ 354	100	0.0010	0.0025	0.0040	0.0050	0.0065					
Hardened steels	≤ 48	≤ 460	80	0.0012	0.0030	0.0050	0.0065	0.0080					
	≤ 66	-											
Stainless steels, sulphured	≤ 28	≤ 273	100	0.0015	0.0040	0.0065	0.0080	0.0100					
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Cast iron	≤ 23	≤ 242	375	0.0015	0.0040	0.0065	0.0080	0.0100					
	≤ 38	≤ 354	360	0.0015	0.0040	0.0065	0.0080	0.0100					
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Ti and Ti-alloys	≤ 25	≤ 255	80	0.0012	0.0030	0.0050	0.0065	0.0080					
	≤ 43	≤ 402	65	0.0010	0.0025	0.0040	0.0050	0.0065					
Aluminium and Al-alloys	-	≤ 120	855	0.0025	0.0080	0.0125	0.0160	0.0200					
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