Series # 1702

Material group	Hardness	SFM	Feed Rate - IPR									
			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	≤100 Bhn	325	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
	>100-260 Bhn	275	•	0.0040	0.0065	0.0080	0.0100	0.0100	•	•	•	•
Free-cutting steels	≤24 Rc	360	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
	>24-30 Rc	275	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
Unalloyed heat-treatable steels	≤16 Rc	295	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
	16-24 Rc	275	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
	24-30 Rc	260	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
Alloyed heat-treatable steels	24-30 Rc	260	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
	>30-38 Rc	245	•	0.0040	0.0065	0.0080	0.0100	0.0100	•	•	•	•
Unalloyed case hardened steels	≤230 Bhn	325	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
Alloyed case hardened steels	24-30 Rc	295	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
	>30-38 Rc	210	•	0.0030	0.0050	0.0065	0.0080	0.0080	•	•	•	•
Nitriding steels	≥24-30 Rc	245	•	0.0040	0.0065	0.0080	0.0100	0.0100	•	•	•	•
	>30-38 Rc	225	•	0.0030	0.0050	0.0065	0.0080	0.0080	•	•	•	•
Tool steels	≤24 Rc	160	•	0.0040	0.0065	0.0080	0.0100	0.0100	•	•	•	•
	>24-30 Rc	130	•	0.0030	0.0050	0.0065	0.0080	0.0080	•	•	•	•
High speed steels	≥14-30 Rc	130	•	0.0025	0.0040	0.0050	0.0065	0.0065	•	•	•	•
Spring steels	≤330 Bhn	110	•	0.0020	0.0030	0.0040	0.0050	0.0050	•	•	•	•
Stainless steels, sulphured	≤24 Rc	115	•	0.0025	0.0040	0.0050	0.0065	0.0065	•	•	•	•
austenitic	≤24 Rc	110	•	0.0025	0.0040	0.0050	0.0065	0.0065	•	•	•	•
martensitic	≤24 Rc	110	•	0.0020	0.0030	0.0040	0.0050	0.0050	•	•	•	•
Hardened steels	≤40-48 Rc	110	•	0.0020	0.0030	0.0040	0.0050	0.0050	•	•	•	•
	>48-60 Rc	65	•	0.0015	0.0025	0.0030	0.0040	0.0040	•	•	•	•
Special alloys	≤38 Rc	65	•	0.0025	0.0040	0.0050	0.0065	0.0065	•	•	•	•
Cast iron	≤240 Bhn	520	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
	<300 Bhn	390	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
Spheroidal graphite iron and malleable cast iron	≤240 Bhn	390	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
	<300 Bhn	310	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
Chilled cast iron	≤350 Bhn	80	•	0.0020	0.0030	0.0040	0.0050	0.0050	•	•	•	•
Ti and Ti-alloys	≤24 Rc	95	•	0.0020	0.0030	0.0040	0.0050	0.0050	•	•	•	•
	>24-38 Rc	80	•	0.0020	0.0030	0.0040	0.0050	0.0050	•	•	•	•
Aluminium and Al-alloys	≤120 Bhn	655	•	0.0080	0.0125	0.0160	0.0200	0.0200	•	•	•	•
Al wrought alloys	≤150 Bhn	655	•	0.0080	0.0125	0.0160	0.0200	0.0200	•	•	•	•
Al cast alloys ≤ 10 % Si	≤200 Bhn	555	•	0.0080	0.0125	0.0160	0.0200	0.0200	•	•	•	•
> 10 % Si	≤200 Bhn	455	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
Magnesium alloys	≤150 Bhn	655	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
Copper, low-alloyed	≤120 Bhn	260	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
Brass, short-chipping	≤200 Bhn	685	•	0.0065	0.0100	0.0125	0.0160	0.0160	•	•	•	•
long-chipping	≤200 Bhn	455	•	0.0050	0.0080	0.0100	0.0125	0.0125	•	•	•	•
Bronze, short-chipping	≤200 Bhn	260	•	0.0040	0.0065	0.0080	0.0100	0.0100	•	•	•	•
	>200-260 Bhn	210	•	0.0040	0.0065	0.0080	0.0100	0.0100	•	•	•	•
Bronze, long-chipping	≤24 Rc	195	•	0.0030	0.0050	0.0065	0.0080	0.0080	•	•	•	•
	>24-30 Rc	145	•	0.0030	0.0050	0.0065	0.0080	0.0080	•	•	•	•
Duroplastics	–	•	•	•	•	•	•	•	•	•	•	•
Thermoplastics	–	•	•	•	•	•	•	•	•	•	•	•
Reinforced plastics - Kevlar	–	•	•	•	•	•	•	•	•	•	•	•
Reinforced plastics - GFK / CFK	–	•	•	•	•	•	•	•	•	•	•	•