

Series # 6400

Material group	Hardness	SFM	Feed Rate - IPR					
			0.0315 in. 0.800 mm	0.0394 in. 1.000 mm	0.0591 in. 1.500 mm	0.0787 in. 2.000 mm	0.0984 in. 2.500 mm	0.1181 in. 3.000 mm
Common structural steels	≤100 Bhn	295 - 395	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	>100-260 Bhn	295 - 360	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
Free-cutting steels	≤24 Rc	295 - 395	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	>24-30 Rc	260 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
Unalloyed heat-treatable steels	≤16 Rc	260 - 360	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	16-24 Rc	260 - 360	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	24-30 Rc	260 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
Alloyed heat-treatable steels	24-30 Rc	260 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
	>30-38 Rc	197 - 260	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
Unalloyed case hardened steels	≤230 Bhn	295 - 360	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
Alloyed case hardened steels	24-30 Rc	230 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
	>30-38 Rc	200 - 260	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
Nitriding steels	≥24-30 Rc	200 - 260	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
	>30-38 Rc	165 - 230	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
Tool steels	≤24 Rc	130 - 200	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
	>24-30 Rc	130 - 200	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
High speed steels	≥14-30 Rc	130 - 200	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
Spring steels	≤330 Bhn	130 - 200	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
Stainless steels, sulphured austenitic martensitic	≤24 Rc	100	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
	≤24 Rc	50	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
	≤24 Rc	100	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
Hardened steels	≤40-48 Rc							
	>48-60 Rc							
Special alloys	≤38 Rc	35	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
Cast iron	≤240 Bhn	< 490	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
	<300 Bhn	< 460	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
Spheroidal graphite iron and malleable cast iron	≤240 Bhn	< 460	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
	<300 Bhn	< 425	0.0035	0.0043	0.0067	0.0091	0.0110	0.0134
Chilled cast iron	≤350 Bhn							
Ti and Ti-alloys	≤24 Rc	50	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
	>24-38 Rc	50	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
Aluminium and Al-alloys	≤120 Bhn	200 - 260	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
Al wrought alloys	≤150 Bhn	200 - 260	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
Al cast alloys ≤ 10 % Si > 10 % Si	≤200 Bhn	395 - 490	0.0013	0.0017	0.0026	0.0036	0.0047	0.0059
	≤200 Bhn	395 - 490	0.0013	0.0017	0.0026	0.0036	0.0047	0.0059
Magnesium alloys	≤150 Bhn							
Copper, low-alloyed	≤120 Bhn							
Brass, short-chipping long-chipping	≤200 Bhn							
	≤200 Bhn							
Bronze, short-chipping	≤200 Bhn							
	>200-260 Bhn							
Bronze, long-chipping	≤24 Rc							
	>24-30 Rc							
Duroplastics	-							
Thermoplastics	-							
Reinforced plastics - Kevlar	-							
Reinforced plastics - GFK / CFK	-							

Series # 6401

Material group	Hardness	SFM	Feed Rate - IPR					
			0.0315 in. 0.800 mm	0.0394 in. 1.000 mm	0.0591 in. 1.500 mm	0.0787 in. 2.000 mm	0.0984 in. 2.500 mm	0.1181 in. 3.000 mm
Common structural steels	≤100 Bhn	295 - 395	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	>100-260 Bhn	295 - 360	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
Free-cutting steels	≤24 Rc	295 - 395	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	>24-30 Rc	260 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
Unalloyed heat-treatable steels	≤16 Rc	260 - 360	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	16-24 Rc	260 - 360	0.0031	0.0039	0.0059	0.0079	0.0098	0.0118
	24-30 Rc	260 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
Alloyed heat-treatable steels	24-30 Rc	260 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
	>30-38 Rc	197 - 260	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
Unalloyed case hardened steels	≤230 Bhn	295 - 360	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
Alloyed case hardened steels	24-30 Rc	230 - 330	0.0028	0.0035	0.0051	0.0071	0.0087	0.0106
	>30-38 Rc	200 - 260	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
Nitriding steels	≥24-30 Rc	200 - 260	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
	>30-38 Rc	165 - 230	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
Tool steels	≤24 Rc	130 - 200	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
	>24-30 Rc	130 - 200	0.0024	0.0031	0.0047	0.0063	0.0079	0.0094
High speed steels	≥14-30 Rc	130 - 200	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
Spring steels	≤330 Bhn	130 - 200	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
Stainless steels, sulphured austenitic martensitic	≤24 Rc	100	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
	≤24 Rc	50	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
	≤24 Rc	100	0.0006	0.0009	0.0014	0.0020	0.0028	0.0035
Hardened steels	≤40-48 Rc							
	>48-60 Rc							
Special alloys	≤38 Rc	35	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
Cast iron	≤240 Bhn	< 490	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
	<300 Bhn	< 460	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
Spheroidal graphite iron and malleable cast iron	≤240 Bhn	< 460	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
	<300 Bhn	< 425	0.0035	0.0043	0.0067	0.0091	0.0110	0.0134
Chilled cast iron	≤350 Bhn							
Ti and Ti-alloys	≤24 Rc	50	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
	>24-38 Rc	50	0.0003	0.0005	0.0008	0.0013	0.0018	0.0024
Aluminium and Al-alloys	≤120 Bhn	200 - 260	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
Al wrought alloys	≤150 Bhn	200 - 260	0.0035	0.0047	0.0071	0.0094	0.0134	0.0142
Al cast alloys ≤ 10 % Si > 10 % Si	≤200 Bhn	395 - 490	0.0013	0.0017	0.0026	0.0036	0.0047	0.0059
	≤200 Bhn	395 - 490	0.0013	0.0017	0.0026	0.0036	0.0047	0.0059
Magnesium alloys	≤150 Bhn							
Copper, low-alloyed	≤120 Bhn							
Brass, short-chipping long-chipping	≤200 Bhn							
	≤200 Bhn							
Bronze, short-chipping	≤200 Bhn							
	>200-260 Bhn							
Bronze, long-chipping	≤24 Rc							
	>24-30 Rc							
Duroplastics	-							
Thermoplastics	-							
Reinforced plastics - Kevlar	-							
Reinforced plastics - GFK / CFK	-							