

Series 556-557-559

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. 12.700mm	5/8 in. 15.870mm	3/4 in. 19.050mm	1 in. 25.400mm	1 1/4 in. 31.75mm	1 1/2 in. 38.10mm
Common structural steels	≤ 20 HRC	100		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 32 HRC	80		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Free-cutting steels	≤ 25 HRC	105		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 32 HRC	100		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Unalloyed heat-treatable steels	≤ 20 HRC	80		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
	≤ 25 HRC	80		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
	≤ 32 HRC	65		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Alloyed heat-treatable steels	≤ 32 HRC	50		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC	40		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
Unalloyed case hardened steels	≤ 25 HRC	100		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Alloyed case hardened steels	≤ 32 HRC	50		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC	25		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
Nitriding steels	≤ 32 HRC											
	≤ 43 HRC											
Tool steels	≤ 25 HRC	50		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC											
High speed steels	≤ 43 HRC											
Spring steels	≤ 38 HRC											
Stainless steels	≤ 28 HRC	35		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
	≤ 36 HRC	20		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
	≤ 46 HRC	25		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
Hardened steels	≤ 48 HRC											
	≤ 66 HRC											
Special alloys	≤ 54 HRC											
Cast iron	≤ 23 HRC	100		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 38 HRC	100		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Spheroidal graphite iron and malleable cast iron	≤ 23 HRC	80		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 38 HRC	65		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Chilled cast iron	≤ 38 HRC											
Ti and Ti-alloys	≤ 25 HRC											
	≤ 43 HRC											
Aluminum and Al-alloys	≤120HB	230		0.0049	0.0079	0.0124	0.0124	0.0157	0.0197	0.0248		
Al wrought alloys	≤200HB	230		0.0049	0.0079	0.0124	0.0124	0.0157	0.0197	0.0248		
Al cast alloys	≤ 10% Si	≤180HB	165	0.0049	0.0079	0.0124	0.0124	0.0157	0.0197	0.0248		
	≤ 24% Si	≤180HB	165	0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Magnesium alloys	≤120HB	230		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Copper	low-alloyed	≤ 80 HB	195	0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Brass	short-chipping	≤180HB	195	0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
	long-chipping	≤180HB	130	0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Bronze	short-chipping	≤180HB	100	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
		≤ 25 HRC	80	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Bronze	long-chipping	≤ 25 HRC	50	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
		≤ 32 HRC	40	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Duroplastics	-	60		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Thermoplastics	-	90		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		

Series 567 - 568

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. 12.700mm	5/8 in. 15.870mm	3/4 in. 19.050mm	1 in. 25.400mm	1 1/4 in. 31.75mm	1 1/2 in. 38.10mm
Common structural steels	≤ 20 HRC	105		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 32 HRC	85		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Free-cutting steels	≤ 25 HRC	115		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 32 HRC	110		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Unalloyed heat-treatable steels	≤ 20 HRC	90		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
	≤ 25 HRC	90		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
	≤ 32 HRC	80		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Alloyed heat-treatable steels	≤ 32 HRC	70		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC	55		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
Unalloyed case hardened steels	≤ 25 HRC	110		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Alloyed case hardened steels	≤ 32 HRC	65		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC	40		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
Nitriding steels	≤ 32 HRC	45		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC											
Tool steels	≤ 25 HRC	60		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
	≤ 43 HRC											
High speed steels	≤ 43 HRC											
Spring steels	≤ 38 HRC											
Stainless steels	≤ 28 HRC	40		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
	≤ 36 HRC	25		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
	≤ 46 HRC	35		0.0020	0.0031	0.0049	0.0049	0.0063	0.0079	0.0098		
Hardened steels	≤ 48 HRC											
	≤ 66 HRC											
Special alloys	≤ 54 HRC											
Cast iron	≤ 23 HRC	110		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 38 HRC	110		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Spheroidal graphite iron and malleable cast iron	≤ 23 HRC	90		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 38 HRC	70		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Chilled cast iron	≤ 38 HRC											
Ti and Ti-alloys	≤ 25 HRC											
	≤ 43 HRC											
Aluminum and Al-alloys	≤120HB											
Al wrought alloys	≤200HB											
Al cast alloys	≤ 10% Si	≤180HB	195	0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
	≤ 24% Si	≤180HB	195	0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Magnesium alloys	≤120HB	260		0.0039	0.0063	0.0098	0.0098	0.0124	0.0157	0.0197		
Copper	low-alloyed	≤ 80 HB	215	0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Brass	short-chipping	≤180HB	230	0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
	long-chipping	≤180HB	150	0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		
Bronze	short-chipping	≤180HB	110	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
		≤ 25 HRC	90	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Bronze	long-chipping	≤ 25 HRC	50	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
		≤ 32 HRC	50	0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Duroplastics	-	70		0.0025	0.0039	0.0063	0.0063	0.0079	0.0098	0.0124		
Thermoplastics	-	120		0.0031	0.0049	0.0079	0.0079	0.0098	0.0124	0.0157		