



HARD SPEED AND FEED RECOMMENDATIONS

TTP HARD Drill bits	Speed & Feed Recommendations	IMPERIAL				
		Material being drilled	Brinell Hardness (BHN)	Surface Speed (Feet/Minute)	Feed Per 1/6" to 1/8"	Revolution 1/8" x 1/4"
all below measurements are in inches						
Aluminium & Aluminium Alloys	40 - 100	325	0.0060	0.0090	0.0110	0.0135
Aluminium Cast	200	225	0.0500	0.0075	0.0090	0.0110
Alloyed Steel	200 - 300	65	0.0025	0.0040	0.0050	0.0065
Brass / Bronze	150 - 200	90	0.0350	0.0055	0.0075	0.0090
Copper	65 - 100	125	0.0040	0.0065	0.0080	0.0100
Low Carbon Steel	85 - 125	110	0.0040	0.0065	0.0080	0.0100
Medium Carbon Steel	125 - 175	65	0.0049	0.0065	0.0080	0.0100
High Carbon Steel	175 - 225	60	0.0030	0.0050	0.0065	0.0080
Cast iron (Soft Gray)	120 - 160	105	0.0040	0.0060	0.0085	0.0110
Cast Iron (Gray)	160 - 260	90	0.0050	0.0080	0.0100	0.0125
Cast Iron (Ductile)	250	80	0.0030	0.0040	0.0060	0.0080
Cast Iron (Malleable)	250 - 330	55	0.0020	0.0030	0.0045	0.0060
Tool and Die Steels	180 - 250	50	0.0030	0.0040	0.0060	0.0080
Tool and Die Steels	250 - 350	35	0.0020	0.0030	0.0045	0.0060
Heat Treated Steel	370 - 420	40	0.0025	0.0040	0.0050	0.0065
Free machining Stainless Steel	120 - 200	60	0.0040	0.0060	0.0085	0.0110
Moderate machining Stainless Steel	200 - 300	40	0.0020	0.0030	0.0045	0.0060
Difficult machining Stainless Steel	300 +	20	0.0020	0.0030	0.0045	0.0060
Nickel Alloys	300 - 375	20	0.0025	0.0040	0.0050	0.0065

Note : The Speeds and Feeds listed above are suggested starting points and can be increased or decreased depending on actual material and machining conditions. We suggest you start conservatively and increase speed and feed until optimum settings for application are found.