

Recommended Drilling Speeds (RPM)							
Drill Type	Softwood	Hardwood	Acrylic	Brass	Aluminium	Steel	Notes
Twist Drills							
1 mm - 5 mm	3000	3000	2500	3000	3000	3000	Lubricate drill with cutting oil when drilling steel 3mm or thicker. Use centre punch on all holes to prevent drill from wandering.
6 mm - 10 mm	3000	1500	2000	1200	2500	1000	
11 mm - 15 mm	1500	750	1500	750	1500	600	
16 mm - 25 mm	750	500	N/R	400	1000	350	
Brad Point Drills							
3 mm	1800	1200	1500	N/R	N/R	N/R	Raise 6 mm and smaller bits often to clear shavings and prevent heat build up.
6 mm	1800	1000	1500	N/R	N/R	N/R	
10 mm	1800	750	1500	N/R	N/R	N/R	
12 mm	1800	750	1000	N/R	N/R	N/R	
15 mm	1800	500	750	N/R	N/R	N/R	
19 mm	1400	250	750	N/R	N/R	N/R	
22 mm	1200	250	500	N/R	N/R	N/R	
25 mm	1000	250	250	N/R	N/R	N/R	
Forstner Bits							
6 mm - 10 mm	2400	700	N/R	N/R	N/R	N/R	Raise 6 mm - 10mm bits often to clear shavings and prevent heat build up. Make several shallow passes with larger bits; allow bit to cool between passes.
13 mm - 16 mm	2400	500	250	N/R	N/R	N/R	
19 mm - 25 mm	1500	500	250	N/R	N/R	N/R	
28 mm - 32 mm	1000	250	250	N/R	N/R	N/R	
35 mm - 50 mm	500	250	N/R	N/R	N/R	N/R	
Hole Saws							
25 mm - 38 mm	500	350	N/R	250	250	N/R	Do not use with brass or aluminium thicker than 1.5 mm. Avoid dense hardwoods.
40 mm - 50 mm	500	250	N/R	150	250	N/R	
53 mm - 64 mm	250-500	N/R	N/R	150	250	N/R	
Flat Bits							
6 mm - 13 mm	2000	1500	N/R	N/R	N/R	N/R	Clamp to work table to improve quality of hole.
15 mm - 25 mm	1750	1500	N/R	N/R	N/R	N/R	
28 mm - 38 mm	1500	1000	N/R	N/R	N/R	N/R	
Tank Cutter							
6 mm - 13 mm	500	250	250	N/R	N/R	N/R	Drill one side, flip material, place centre bit in its hole and resume.
15 mm - 25 mm	250	250	250	N/R	N/R	N/R	
Countersinks							
2 flute	1400	1400	N/R	N/R	N/R	N/R	Raise and lower frequently for quicker cutting.
5 flute	1000	750	750	250	250	250	
Countersink Screw Pilot Bits							
All Sizes	1500	1000	500	500	N/R	N/R	Clear twist drill often.
Plug Cutters							
All Sizes	1000	500	N/R	N/R	N/R	N/R	Cut to full depth so bit chamfers plug
NR - Not Recommended							
<ul style="list-style-type: none"> Recommendations are based on visual and tactile tests under workshop conditions. Drilling faster than recommended can cause overheating. Speeds slower than recommended may cause poor quality holes. All wood testing done on face grain. Reduce speeds when drilling end grain. Speeds based on new bits. 							

