

# SOLID CARBIDE DRILLS

# SOLID CARBIDE REAMERS

## Speed & Feed Recommendations

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Speed (S.F.M.)	Material	Speed (S.F.M.)	Feed (I.P.R.)
250-450	Aluminum/Aluminum Alloys	100-250	.005-.015
100-250	Aluminum-High Silicon	80-200	.003-.012
250-450	Brass	100-250	.005-.015
150-250	Bronze	90-175	.003-.012
150-350	Copper/Copper Alloys	90-220	.005-.015
130-200	Cast Iron (soft)	80-200	.006-.015
100-150	Cast Iron (medium)	60-150	.006-.012
50-130	Cast Iron (hard)	40-90	.004-.010
300-600	Magnesium	100-250	.005-.015
60-180	Monel	40-120	.004-.012
60-120	Steel-Cast & Forged	40-100	.003-.010
60-80	Steel-Heat Treated (35-40 Rc)	40-70	.004-.008
40-60	Steel-Heat Treated (40-45 Rc)	30-50	.002-.006
20-40	Steel-Heat Treated (45 Rc +)	15-40	.001-.004
100-180	Steel-Medium carbon	50-100	.005-.010
60-130	Mold Steel	40-120	.004-.006
40-110	Tool Steel	30-90	.004-.006
30-90	Stainless Steel-300 Series	20-80	.004-.008
40-130	Stainless Steel-400 Series	30-120	.005-.010
30-70	Inconel	20-60	.001-.005
30-60	Rene	20-60	.002-.006
40-100	Titanium	30-90	.002-.008
30-60	Waspoly	20-60	.002-.006
200-350	Epoxy Fiber	100-250	.005-.015
200-600	Plastic	100-300	.005-.015
200-400	Resin-Fiber glass	100-300	.005-.015
80-200	Masonite	60-150	.005-.015
70-120	Phenolic	60-100	.005-.015

## SOLID CARBIDE DRILLS

Diameter Range (Inches)	Feed (Inches per Revolution)
under 1/16"	.0005-.001
over 1/16" thru 1/8"	.001-.002
over 1/8" thru 1/4"	.002-.003
over 1/4" thru 3/8"	.003-.005
over 3/8" thru 1/2"	.005-.008

*Please Note:* Reduce the speed and feed when hole depth exceeds three times the drill diameter.

All recommendations should be considered only as a starting point, with possible variations to achieve optimum results.