Amana Tool®

INDUSTRIAL

High Performance Solid Carbide AlTiN Coated Combination Drill/Countersinks

Depth of Cut: 1 x Tool Diameter †

Material	Surface Feet Per Minute (SFM)	Chip Load Per Tooth Drill Diameter 5/64" (2mm) - 1/8" (3mm)
Cast Iron (S)	220 - 525	0.0005" - 0.002"
Cast Iron (H)	175 - 350	0.0005" - 0.002"
Ducile Iron	130 - 315	0.0005" - 0.002"
Fiber	350 - 525	0.0005" - 0.002"
Glass Filled Plastic	130 - 315	0.0005" - 0.002"
Graphite	350 - 700	0.0005" - 0.002"
Inconel/Nimonic/Waspaloy	140 - 190	0.0005" - 0.002"
Magnesium	525 - 875	0.0005" - 0.002"
Malleable Iron	130 - 315	0.0005" - 0.002"
Nickel	130 - 315	0.0005" - 0.002"
Plastic	400 - 1000	0.0005" - 0.002"
Steel: < 81 HRB (B)	700 - 1050	0.0005" - 0.002"
Steel: < 24 Rc (C)	525 - 820	0.0005" - 0.002"
Steel: 24 - 32 Rc	350 - 610	0.0005" - 0.002"
Steel: 32 - 41 Rc	260 - 385	0.0005" - 0.002"
Stainless Steel (S)	175 - 525	0.0005" - 0.002"
Stainless Steel (H)	85 - 175	0.0005" - 0.002"
Thermoplastics	1,500 - 2,050	0.0005" - 0.002"
Titanium	50 - 175	0.0005" - 0.002"
Wood	250 - 600	0.0005" - 0.002"
Zinc	430 - 525	0.0005" - 0.002"

Tool Reference #'s	Drill Diameter
51670	5/64"
51672	1/8"

† Depth of Cut: 1 x D Use recommended feed rate
2 x D Reduce feed rate by 25%
3 x D Reduce feed rate by 50%

Simple Machining Calculations:
To find **RPM:** (SFM x 3.82) / diameter of tool
To find **SFM:** 0.262 x diameter of tool x RPM
To find **Feed Rate IPM:** RPM x # of flutes x chip load
To find **Chip Load:** Feed Rate IPM / (RPM x # of flutes)
To find **Ramp Down:** Feed Rate IPM / # of flutes

Disclaimer: It is important to understand that these values are only recommendations.

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