



Aluminum & Non-Ferrous Drills Technical Information

- RedLine Aluminum & Non-Ferrous High Performance Drills have been specifically designed for high penetration rates, great chip evacuation, and improved hole quality, speed and performance for lower hole costs!
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.
- Aluminum & Non-Ferrous, High Performance Drills found on pages 280-283.

Aluminum & Non-Ferrous, Speeds & Feeds										
Material	Grades	SFM	Tool Diameter (IPR)							
			1/32 (.0312)	1/16 (.0625)	1/8 (.1250)	1/4 (.2500)	3/8 (.3750)	1/2 (.5000)	5/8 (.6250)	3/4 (.7500)
N - Non-Ferrous										
Aluminum Alloys	2014, 2024, 6061, 7075	750	.0020	.0030	.0080	.0120	.0140	.0180	.0220	.0240
Aluminum High Silicon	A380, A390	500	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
Brass/Bronze	Aluminum Bronze, Low Silicon Bronze	225	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
Composites	G-10, Fiberglass, Graphite, Graphite Epoxy, Plastics	300	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
Copper		225	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120

NOTE: Speeds and Feeds listed are estimated and will vary by application.

Aluminum & Non-Ferrous Tolerances (Inch)		
Drill Size	Tolerance by Drill ϕ (m7)	Tolerance by Shank ϕ (h6)
.0000-.1181	+0.0008/+0.0047	+0/-0.0024
.1182-.2362	+0.0016/+0.0063	+0/-0.0031
.2363-.3937	+0.0024/+0.0083	+0/-0.0035
.3938-.7087	+0.0027/+0.0098	+0/-0.0043
.7088-.7500	+0.0031/+0.0114	+0/-0.0051

Aluminum & Non-Ferrous Tolerances (Metric)		
Drill Size	Tolerance by Drill ϕ (m7)	Shank ϕ (h6)
0-3.0	+0.002/+0.012	+0/-0.006
3.01-6.00	+0.004/+0.016	+0/-0.008
6.01-10.00	+0.006/+0.021	+0/-0.009
10.01-18.00	+0.007/+0.025	+0/-0.011
18.01-20.0	+0.008/+0.029	+0/-0.013