MATERIAL	Hardness: ≤ 28 Rc (≤ 271 HBn)													
	SFM	Chip Load (IPR - Inches Per Revolution) By Drill Diameter  0.015 0.031 0.047 0.062 0.078 0.093 0.125 0.187 0.250 0.375 0.500 0.625 0.750												
ALUMINUM ALLOYS		0.013	0.031	0.041	0.002	0.070	0.033	0.123	0.107	0.230	0.575	0.300	0.023	0.730
Casting (2xx, 5xx, 7xx, 8xx)	450	.00079	.00164	.00248	.00327	.00412	.00491	.00660	.00987	.01320	.01980	.02640	.03300	.03960
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	600													
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	450	.00071	.00147	.00223	.00295	.00371	.00442	.00594	.00889	.01188	.01782	.02376	.02970	.03564
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	420													
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	390													
Casting - 12%-16% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	350													
Wrought - 5%-8% Si (4xxx)	600													
Wrought - 8%-12% Si (4xxx)	480													
MAGNESIUM ALLOYS	900	.00079	.00164	.00248	.00327	.00412	.00491	.00660	.00987	.01320	.01980	.02640	.03300	.03960
ZINC ALLOYS	480													
COPPER ALLOYS														
High Coppers - 90%+ (C1xxxx)	170		.00131	.00199	.00262	.00329	.00393	.00528	.00790	.01056	.01584	.02112	.02640	.03168
Brass (Copper Zinc alloys, C2xxxx, C3xxxx, C4xxxx, C66400-C69800)	375	.00063												
Phosphor Bronzes (Copper Tin alloys, C5xxxx)	170													
Aluminum Bronzes (Copper Aluminum alloys, C60600-C64200)	375													
Silicon Bronzes (Copper Silicon alloys, C64700-C66100)	375													
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxxx)	170													
Cast Copper Alloys (C83300-C86200, C86400-C87900, C92200-C95800, C97300-C97800, C99400-C99700)	400													
PLASTICS														
Unfilled Plastics	500	.00079	.00164	.00248	.00327	.00412	.00491	.00660	.00987	.01320	.01980	.02640	.03300	.03960
Reinforced Plastics	350	.00063	.00131	.00199	.00329	.00393	.00528	.00790	.01056	.01584	.02112	.02640	.03168	.04224



Speeds & Feeds

Product Table: Miniature High Performance Drills - Aluminum Alloys

**Characteristics:** 3x-5x Length of Flute **Series:** AVAxxxx-C8, BAFxxxx-C8

## **Product Notes:**

Pecking cycles are recommended to avoid chip packing and breakage. For Non-Ferrous materials, the initial peck depth should be 3-5x Diameter with each subsequent peck at 2-3x Diameter.

For hole depths 12x Diameter or greater, a pilot hole of up to 1.5x Diameter is recommended.

## **General Notes:**

All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions.

If you require additional information, Harvey Tool has a team of technical experts available to assist you through even the most challenging applications. Please contact us at **800-645-5609** or **Harveytech@harveyperformance.com**.

WARNING: Cutting tools may shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment in the vicinity of use.