MATERIAL	Hardness: ≤ 28 Rc (≤ 271 HBn)													
	SFM	Chip Load (IPR - Inches Per Revolution) By Drill Diameter												
ALUMINUM ALLOYS		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
Casting (2xx, 5xx, 7xx, 8xx)	450	.00051	.00106	.00161	.00213	.00268	.00319	.00429	.00642	.00858	.01287	.01716	.02145	.02574
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	600													
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	450	.00046	.00096	.00145	.00192	.00241	.00287	.00386	.00578	.00772	.01158	.01544	.01931	.02317
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	.00051	.00106	.00161	.00213	.00268	.00319	.00429	.00642	.00858	.01287	.01716	.02145	.02574
ZINC ALLOYS	480													
COPPER ALLOYS														
High Coppers - 90%+ (C1xxxx)	170	.00041	.00085	.00129	.00170	.00214	.00255	.00343	.00513	.00686	.01030	.01373	.01716	.02059
Brass (Copper Zinc alloys, C2xxxx, C3xxxx, C4xxxx, C66400-C69800)	375													
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	1													
Unfilled Plastics	500	.00051	.00106	.00161	.00213	.00268	.00319	.00429	.00642	.00858	.01287	.01716	.02145	.02574
Reinforced Plastics	350	.00041	.00085	.00129	.00214	.00255	.00343	.00513	.00686	.01030	.01373	.01716	.02059	.02746

SHARVEY TOOL

Speeds & Feeds

Product Table: Miniature High Performance Drills - Aluminum Alloys **Characteristics:** 12x Length of Flute **Series:** DQWxxxx-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.