



**Speeds & Feeds**

**Product Table:** Miniature High Performance Drills - Prehardened Steels  
**Characteristics:** 12x Length of Flute  
**Series:** CHTxxx-C3

**Product Notes:**

- Pecking cycles are recommended to avoid chip packing and breakage.
  - For steels at 29-37 Rc, an initial peck should be 2-3x Diameter, and each subsequent peck should be 1-2x Diameter.
  - For harder steels at 38-45 Rc, 1-2x Diameter is recommended for an initial peck, and each subsequent peck should be .5-1x 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.

MATERIAL	Hardness: 29-37 Rc (279-344 HBn)										Hardness: 38-45 Rc (353-421 HBn)									
	SFM	Chip Load (IPR - Inches Per Revolution) By Drill Diameter									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		0.015	0.031	0.047	0.062	0.078	0.093	0.125	0.187	0.250
<b>CARBON STEELS</b>																				
Free-Machining/Low Carbon steels, 10xx 1029 & all 10Lxx, 11xx - 1139 & all 11Lxx, 12xx - 1215 & all 12Lxx	240	.00041	.00085	.00128	.00169	.00213	.00254	.00341	.00511	.00683	-	-	-	-	-	-	-	-	-	-
1030 - 1095, 1140 - 1151, 13xx, 15xx, 2xxx, 3xxx, 4xxx & 4xLxx, 5xxx & 5xLxx, 50xxx & 50Lxxx, 51xxx & 51Lxxx, 52xxx & 52Lxxx, 6xxx, 8xxx, 9xxx	150	.00037	.00077	.00117	.00155	.00195	.00232	.00312	.00467	.00624	-	-	-	-	-	-	-	-	-	-
<b>STAINLESS STEELS</b>																				
203 EZ, 303 (all types), 416, 416Se, 416 Plus X, 420F, 420FSe, 430F, 430FSe, 440F, 440FSe	180	.00041	.00085	.00128	.00169	.00213	.00254	.00341	.00511	.00683	-	-	-	-	-	-	-	-	-	-
201, 202, 203, 205, 301, 302, 304, 304L, 308, 309, 310, 314, 316, 316L, 317, 321, 329, 330, 347, 348, 385, 403, 405, 409, 410, 413, 420, 429, 430, 434, 436, 442, 446, 501, 502	150	.00037	.00077	.00117	.00155	.00195	.00232	.00312	.00467	.00624	100	.00030	.00062	.00094	.00124	.00156	.00186	.00250	.00373	.00499
414, 431, 440A, 440B, 440C, 13-8, 15-5, 15-7, 17-4, 17-7	125	.00023	.00048	.00073	.00097	.00122	.00145	.00195	.00292	.00390	90	.00019	.00039	.00059	.00077	.00097	.00116	.00156	.00233	.00312
<b>TOOL STEELS</b>																				
A, L, O, P, W series	125	.00037	.00077	.00117	.00155	.00195	.00232	.00312	.00467	.00624	100	.00030	.00062	.00094	.00124	.00156	.00186	.00250	.00373	.00499
D, H, M, T, S series	90	.00023	.00048	.00073	.00097	.00122	.00145	.00195	.00292	.00390	75	.00019	.00039	.00059	.00077	.00097	.00116	.00156	.00233	.00312
<b>TITANIUM ALLOYS</b>																				
70	100	.00023	.00048	.00073	.00097	.00122	.00145	.00195	.00292	.00390	75	.00019	.00039	.00059	.00077	.00097	.00116	.00156	.00233	.00312
<b>HIGH TEMP ALLOYS</b>																				
Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discoloy, Incoloy	70	.00023	.00048	.00073	.00097	.00122	.00145	.00195	.00292	.00390	50	.00019	.00039	.00059	.00077	.00097	.00116	.00156	.00233	.00312