**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.

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### Speeds & Feeds

**Material:** CARBON STEELS

**Free-Machining/Low Carbon steels, 10xx - 1029 & all 10Lxx, 11xx - 1139 & all 11Lxx, 12xx - 1215 & all 12Lxx, 1030 - 1095, 1140 - 1151, 13xx, 15xx, 2xxx, 3xxx, 4xxx & 4xLxx, 5xxx & 5xLxx, 50xxx & 50Lxxx, 51xxx & 51Lxxx, 52xxx & 52Lxxx, 6xxx, 8xxx, 9xxx

**Stainless Steels**

203 EZ, 303 (all types), 416, 416Se, 416 Plus X, 420F, 420FSe, 430F, 430FSe, 440F, 440FSe, 15-8, 15-5, 15-7, 17-4, 17-7

**Tool Steels**

A, L, O, P, W series

**Titanium Alloys**

Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discloy, Incloy

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### Product Table: Miniature High Performance Drills - Prehardened Steels

**Characteristics:** 12x Length of Flute

**Series:** CHTxxx-C3

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### SPEEDS & FEEDS: MINIATURE HIGH PERFORMANCE DRILLS

**Prehardened Steels**

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Hardness: 29-37 Rc (279-344 HBn)</th>
<th>Chip Load (IPR - Inches Per Revolution) By Drill Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SFM</td>
<td>0.015</td>
</tr>
<tr>
<td>CARBON STEELS</td>
<td>Free-Machining/Low Carbon steels, 10xx &amp; all 10Lxx, 11xx - 1139 &amp; all 11Lxx, 12xx - 1215 &amp; all 12Lxx</td>
<td>240</td>
</tr>
<tr>
<td>STAINLESS STEELS</td>
<td>203 EZ, 303 (all types), 416, 416Se, 416 Plus X, 420F, 420FSe, 430F, 430FSe, 440F, 440FSe</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>.00023</td>
</tr>
</tbody>
</table>

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**PRODUCT NOTES:**

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