**Speeds & Feeds**

**Product Table:** Back Deburring Mill  
**Characteristics:** 4x Reach Multiple  
**Series:** 8463xx

**Product Notes:**
When selecting Chip Loads (IPT) by diameter, please be sure to consider the Effective Cutter Diameter (D4 dimension in catalog)  
This should not be confused with the Head Diameter.

Chip Loads are given 2 ways:
- Deburring refers to removing the burr only  
- Edge Break refers to a .002” -.005” chamfered feature on the workpiece

Chip Loads (IPT) within table reflect machining on 1 side of existing feature  
For machining on 2 sides, reduce Chip Load to 60% of posted values

When machining using Circular Interpolation, the Linear Feed rate (IPM) should be adjusted:
- For Circular Interpolation around inside of a hole: Adjusted Feed = [(Major Diameter - Effective Cutter Diameter) / Major Diameter] x Linear Feed
- For Circular Interpolation around outside of post: Adjusted Feed = [(Major Diameter + Effective Cutter Diameter) / Major Diameter] x Linear Feed

### STARTING CHIP LOAD (IPT) By EFFECTIVE CUTTER DIAMETER

<table>
<thead>
<tr>
<th>Material</th>
<th>Hardness</th>
<th>SFM</th>
<th>.015</th>
<th>.031</th>
<th>.047</th>
<th>.062</th>
<th>.078</th>
<th>.093</th>
<th>.125</th>
<th>.167</th>
<th>.250</th>
<th>.312</th>
<th>.375</th>
<th>.500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Ferrous Alloys</td>
<td>≤ 28 Rc</td>
<td>200 - 1200</td>
<td>0.00010</td>
<td>0.00026</td>
<td>0.00040</td>
<td>0.00053</td>
<td>0.00066</td>
<td>0.00095</td>
<td>0.00128</td>
<td>0.00191</td>
<td>0.00256</td>
<td>0.00319</td>
<td>0.00384</td>
<td>0.00512</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deburr</td>
<td>Edge Break</td>
<td>Deburr</td>
<td>Edge Break</td>
<td>Deburr</td>
<td>Edge Break</td>
<td>Deburr</td>
<td>Edge Break</td>
<td>Deburr</td>
<td>Edge Break</td>
<td>Deburr</td>
<td>Edge Break</td>
</tr>
<tr>
<td>Ferrous Alloys</td>
<td>≤ 45 Rc</td>
<td>150 - 250</td>
<td>0.00009</td>
<td>0.00022</td>
<td>0.00034</td>
<td>0.00045</td>
<td>0.00056</td>
<td>0.00081</td>
<td>0.00109</td>
<td>0.00163</td>
<td>0.00217</td>
<td>0.00271</td>
<td>0.00326</td>
<td>0.00435</td>
</tr>
<tr>
<td>46 &lt; 68 Rc</td>
<td>50 - 100</td>
<td></td>
<td>0.00008</td>
<td>0.00020</td>
<td>0.00031</td>
<td>0.00040</td>
<td>0.00051</td>
<td>0.00073</td>
<td>0.00098</td>
<td>0.00146</td>
<td>0.00196</td>
<td>0.00244</td>
<td>0.00293</td>
<td>0.00391</td>
</tr>
</tbody>
</table>

**General Notes:**
All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. Chip loads reflect uncoated cutters and may be increased 10%-20% if coated.

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.