Integral Small Carbide Boring Bars

Bar Dia. 1/2" 5/8"
Boring Ratio 8 x Dia. 10 x Dia. 12 x Dia. 14 x Dia.

Thru Coolant Medium
Steel and Carbide Boring Bars

Bar Dia. 3/4" 1" 1 1/4"
Boring Ratio 8 x Dia. 10 x Dia. 12 x Dia. 14 x Dia.

Jet-Stream™ Modular Large
Steel Boring Bars

Bar Dia. 1 1/2" 2" 2 1/2" 3" 4"
Boring Ratio 8 x Dia. 10 x Dia. 12 x Dia.
Solution Tool™ Small Diameters 1/2” and 5/8”
The No! Vibration Re-Tunable Boring Bars - Integral

- Deep Hole Boring Made Simple
- 8xD, 10xD, 12xD and 14xD boring (overhang) ratios
- For high material removal rate, high surface finish and tight tolerances
- Bars are pretuned at the factory to the specific boring ratio
- Bars can be Re-tuned on the machine to optimize boring performance in challenging application

<table>
<thead>
<tr>
<th>Inch</th>
<th>Bar Description</th>
<th>UPC No.</th>
<th>R.H.</th>
<th>L.H.</th>
<th>Boring Ratio</th>
<th>Construction</th>
<th>Dia.</th>
<th>B</th>
<th>C</th>
<th>L</th>
<th>C2</th>
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<th>Insert Screw</th>
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<td>6.25</td>
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<td>11.88</td>
<td>3.00</td>
<td>3.13</td>
<td>TS-25.45-EM2</td>
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</tbody>
</table>

Call for other head styles
Maximum Boring & Threading Ratio for Steel, Carbide and Solution Tool! Boring Bars

Steel Bars
4 x Dia. Boring Ratio
2 x Dia. Threading Ratio
2 x Dia. Grooving Ratio
- General boring bar applications
- For small bores

Carbide Bars
6 x Dia. Boring Ratio
3 x Dia. Threading Ratio
3 x Dia. Grooving Ratio
- Best for boring small holes
- Rigid for close tolerances and good surface finish
- Rigid for heavy material removal at high depth of cut and feed rate.

Solution Tool!™ (Steel Body)
8 x Dia., 10 x Dia., 12 x Dia. Boring Ratio
4 x Dia. Threading Ratio
4 x Dia. Grooving Ratio
- For deep hole boring applications

Solution Tool!™ (Carbide Body)
8 x Dia., 10 x Dia., 12 x Dia., 14 x Dia. Boring Ratio
5 x Dia. Threading Ratio
5 x Dia. Grooving Ratio
- High performance deep hole boring applications for higher material removal rate.

MOST COMMON DEEP HOLE BORING PROBLEMS:
Poor Surface Finish, Poor Machining Tolerance & Poor Insert Life

MOST COMMON CAUSES:

1) Boring Bar Cutting Ratio:
   If the incorrect boring bar cutting ratio is used, the boring bar will vibrate.

2) Boring Bar Diameter:
   Too small boring bar diameter will deflect under pressure and vibrate, too large boring bar diameter, will obstruct the evacuation of the chips.

3) Boring Bar Holding System:
   When boring bar is not held properly and rigidly in the boring bar holder, vibrations will develop when cutting. A split Boring Bar Holder must be used.

4) Boring Overhang:
   When the boring bar is over extended it will vibrate (Steel bar 4 x Dia., Carbide bar 6 x Dia., Solution Tool!™ 8 - 14 x Dia.

5) Incorrect Insert:
   Incorrect insert geometry, nose radius, rake angle, chip breaker, and clearance angle will cause vibrations.

6) Cutting Parameter:
   When wrong cutting parameters are used for the specific material to be bored, and for the operation to be executed, the boring bar will not perform properly.

7) Chip Clogging:
   When chips are clogged in the work piece bore, jamming the insert, wrapping around the boring bar, and thrown against the wall, the insert will be damaged.
   Always use High Pressure Coolant to remove chips

For more information ask for the Solution Tool!™ Catalog
### Solution Tool!™

Large Diameters 1 1/2”, 2”, 2 1/2”, 3”, 4”
The No! Vibration Re-Tunable Jet-Stream™ Modular Large Steel Boring Bars

- DEEP HOLE BORING MADE SIMPLE
- 8xD, 10xD and 12xD boring (overhang) ratios
- For high material removal rate, high surface finish and tight tolerances
- Bars are pre-tuned at the factory to the specific boring ratio
- Bars can be Re-tuned on the machine to optimize boring performance in challenging applications

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<th>UPC No.</th>
<th>Boring Ratio</th>
<th>Construction</th>
<th>D</th>
<th>C1</th>
<th>C2</th>
<th>Modular Head</th>
<th>Coolant Attachment Thread</th>
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<tbody>
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<td>59321</td>
<td>Steel Body</td>
<td>1.500</td>
<td>18.000</td>
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<td>22.500</td>
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All the Jet-Stream Boring Heads will fit all the above Solution Tool Boring Bars

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Call for other head styles
Solution Tool!™ Medium Diameters 3/4”, 1” and 1 1/4”
The No! Vibration Re-Tunable Thru Coolant Medium Boring Bars

- DEEP HOLE BORING MADE SIMPLE
- 8xD, 10xD, 12x&D and 14x&D boring (overhang) ratios
- For high material removal rate, high surface finish and tight tolerances
- Bars are pretuned at the factory to the specific boring ratio
- Bars can be Re-tuned on the machine to optimize boring performance in challenging applications

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<th>Dia.</th>
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<td>Steel Body 8 x Dia 3º 5° Right. Hand</td>
<td>0.750 9.00 8.20 6.00 3.00</td>
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<td>1/8”-27 NPT</td>
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<td>DV12X-08-MQBBN-9-CB</td>
<td>Carbide Body 8 x Dia 3º 5° Right. Hand</td>
<td>0.750 9.00 8.20 6.00 3.00</td>
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<td>DV16X-08-MQBBN-12-SB</td>
<td>Steel Body 10 x Dia 3º 5° Right. Hand</td>
<td>1.000 12.00 11.20 8.00 4.00</td>
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Outperforms the BEST®

For heavy material removal rate, high surface finish and tight tolerances

Call: 979-282-2861   Fax: 888-508-7055   Visit: www.doriantool.com   E-mail: sales@doriantool.com