**Bladed Hole Opener**

**Technical Summary**

The bladed hole opener is used for wellbore enlargement where roller cones are not necessary or applicable.

**Features**

- Machined out of AISI 4140HT/4145HT
- Blade structures may be integral spiral, integral straight, or welded straight.
- Blades are dressed with tungsten carbide chips to allow for backreaming.
- Slick blade OD helps reduce vibrations and ensures full gauge hole.
- Three field changeable jets allow for effective blade and hole cleaning.
- May be box down, integral bull nose, or fitted with the Spherical Pilot Bit
- Note: May be dressed with PDC

**Devil Drill**

**Technical Summary**

The bladed hole opener is used for wellbore enlargement where roller cones are not necessary or applicable.

**Features**

- Machined out of AISI 4140HT/4145HT
- Blade structures may be integral spiral, integral straight, or welded straight.
- Blades are dressed with tungsten carbide chips to allow for backreaming.
- Slick blade OD helps reduce vibrations and ensures full gauge hole.
- Three field changeable jets allow for effective blade and hole cleaning.
- May be box down, integral bull nose, or fitted with the Spherical Pilot Bit
- Note: May be dressed with PDC

**Security Custom**

**Technical Summary**

The Security Custom Hole Openers are designed to handle big-hole drilling projects, offshore well conductor holes, and other drilling needs where speed and reliability are important.

**Features**

- Quick-change cutter assembly to allow fast, easy changes on rig floor using hand tools
- High velocity jet circulation for efficient hole cleaning and longer cutter life
- “Nail-Lock” retained nozzles can be changed quickly and easily for matching particular pump capacities or hydraulics programs.
- One-piece body eliminates unnecessary threaded connections.
- Cutters can be changed quickly and easily.
- Cutter Types:
  - Type S: tooth type for soft formations
  - Type MG: tooth type for medium to hard formations. Carbide inserts for gauge protection, sealed bearing
  - Type S6: insert type for soft to medium formations, sealed bearing
  - Type H8: insert type for hard formations, sealed bearing
  - Type H10: insert type for extremely hard, abrasive formations, sealed bearing
**HOLE OPENER SPECIFICATIONS**

### DEVIL DRILL HOLE OPENER

<table>
<thead>
<tr>
<th>Size Range</th>
<th>Pilot Hole Size</th>
<th>Standard Top Connection (Pin)</th>
<th>Standard Bottom Connection (Box)</th>
<th>Standard Bull Nose Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 3/8&quot; – 4 1/4&quot;</td>
<td>3&quot;</td>
<td>2 3/8&quot; Reg</td>
<td>2 3/8&quot; Reg / Bull nose</td>
<td>24&quot; – 42&quot;</td>
</tr>
<tr>
<td>4 1/4&quot; – 4 3/4&quot;</td>
<td>3 3/8&quot;</td>
<td>2 3/8&quot; Reg</td>
<td>2 3/8&quot; Reg / Bull nose</td>
<td>24&quot; – 42&quot;</td>
</tr>
<tr>
<td>5 1/2&quot; – 6 3/8&quot;</td>
<td>3 3/8&quot;</td>
<td>3 1/2&quot; Reg</td>
<td>3 1/2&quot; Reg / Bull nose</td>
<td>36&quot; – 42&quot;</td>
</tr>
<tr>
<td>7 1/2&quot; – 8 3/4&quot;</td>
<td>4 3/8&quot;</td>
<td>4 1/2&quot; Reg</td>
<td>4 1/2&quot; Reg / Bull nose</td>
<td>36&quot; – 48&quot;</td>
</tr>
<tr>
<td>9 1/8&quot; – 10 3/8&quot;</td>
<td>6 3/8&quot;</td>
<td>6 1/4&quot; Reg / 7 1/8&quot; Reg</td>
<td>6 1/4&quot; Reg / Bull nose</td>
<td>42&quot; – 60&quot;</td>
</tr>
<tr>
<td>12 1/8&quot; – 13 1/8&quot;</td>
<td>8 3/8&quot;</td>
<td>6 3/8&quot; Reg / 7 1/8&quot; Reg</td>
<td>6 3/8&quot; Reg / Bull nose</td>
<td>42&quot; – 60&quot;</td>
</tr>
<tr>
<td>14 1/8&quot; – 14 3/8&quot;</td>
<td>8 3/8&quot;</td>
<td>6 3/8&quot; Reg / 7 1/8&quot; Reg</td>
<td>6 3/8&quot; Reg / Bull nose</td>
<td>42&quot; – 60&quot;</td>
</tr>
<tr>
<td>17 1/4&quot; – 17 3/4&quot;</td>
<td>9 3/8&quot;</td>
<td>6 3/8&quot; Reg / 7 1/8&quot; Reg</td>
<td>6 3/8&quot; Reg / Bull nose</td>
<td>42&quot; – 60&quot;</td>
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<tr>
<td>18 1/2&quot; – 26&quot;</td>
<td>11 1/2&quot;</td>
<td>7 3/8&quot; Reg</td>
<td>7 3/8&quot; Reg / Bull nose</td>
<td>42&quot; – 60&quot;</td>
</tr>
</tbody>
</table>

All measurements are in inches unless otherwise noted.

### SECURITY CUSTOM HOLE OPENER

<table>
<thead>
<tr>
<th>Popular Hole Sizes</th>
<th>Recommended Pilot Hole Size (in)</th>
<th>Number of Cutter Saddles</th>
<th>Standard Top Connection (Pin)</th>
<th>Standard Bottom Connection (Box)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26&quot;</td>
<td>14 3/4&quot; – 17 1/2&quot;</td>
<td>3</td>
<td>7 3/8&quot; Reg</td>
<td>7 3/8&quot; Reg</td>
</tr>
<tr>
<td>36&quot;</td>
<td>17 1/2&quot; – 26&quot;</td>
<td>4</td>
<td>7 3/8&quot; Reg</td>
<td>7 3/8&quot; Reg</td>
</tr>
<tr>
<td>42&quot;</td>
<td>26&quot; – 36&quot;</td>
<td>4</td>
<td>7 3/8&quot; Reg</td>
<td>7 3/8&quot; Reg</td>
</tr>
</tbody>
</table>

All measurements are in inches unless otherwise noted.

Drilling Tools International, Inc. is a leading provider of downhole tools to the land and offshore drilling markets. For more than 30 years our company has been guided by the principals of Strength, Innovation and Performance. We consistently deliver world class customer service while providing quality products that meet the demanding drilling applications of today's market.

Our Quality Management System is certified in compliance to ISO 9001, and API Spec Q1 and our manufacturing is licensed to API Spec 7-1. Our Quality Management System governs all of our processes from planning, to process control, to delivery. This ensures that we consistently manufacture products that not only meet API standards but also meet the ever-changing needs of our customers.

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