Solid Carbide Drills

STARTER DRILL

Precision Starting / Guide hole to improve drill tool life.

STARTER DRILL

Three faceted, opposing 120° faces form a 90° cutting angle to provide a perfectly round, high accuracy starter hole.
Features

Triangular pyramid shape helps high precision drilling.
Optimize cost effectiveness by creating center holes of 0.0039 inch to 0.118 inch.
Long tool life ensured by MIRACLE VP15TF coating.
The same Starting / Guide drill can be used for dual purposes. Center hole drilling and a 90° chamfer angle.

Cutting performance

When using a Starter Drill
No guide hole

<Cutting conditions>
Workpiece: 304 stainless steel

<table>
<thead>
<tr>
<th>Tool</th>
<th>Revolution (min⁻¹)</th>
<th>Feed</th>
<th>Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP0300SB</td>
<td>10,000</td>
<td>.00002 IPR</td>
<td>Water soluble emulsion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tool</th>
<th>Revolution (min⁻¹)</th>
<th>Feed</th>
<th>Hole depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE0020SB</td>
<td>20 SFM</td>
<td>.00002 IPR</td>
<td>.011 inch Blind hole</td>
</tr>
</tbody>
</table>

Cuts a high-precision hole. The bottom of the hole is drilled polygonally because the drill wanders.

Large burr

RECOMMENDED CUTTING CONDITIONS

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Revolution (min⁻¹)</th>
<th>Table Feed (IPR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP0300SB</td>
<td>10,000</td>
<td>.00002</td>
</tr>
</tbody>
</table>

For your safety

- Do not touch cutting or chips without wearing gloves.
- Use tools under recommended cutting conditions, and exchange tools before excessive wear occurs.
- Chips become extremely hot, scattered over and may be stretched. Ensure safety guards and goggles are used.
- In case of using non-water soluble oil, make sure to have a fire prevention countermeasure.
- Use the provided wrench spanner, and ensure the inserts and spare parts are damped securely.

Note: Please contact Mitsubishi Materials for special grades and geometries other than our standard products.