Metal Bond Blades

B1A SERIES

Realizes precise processing of difficult to cut materials based on superior wear resistance and rigidity

Precision Processing of Difficult-to-cut Materials

Sintered metal powder is used as the bonding agent material to realize strong holding power. As a result, these blades have a low wear rate. They are excellent for accurate cutting or grooving of electronic devices such as CSP packages, ceramics, and optical materials. Also, since they have both excellent rigidity and cutting ability there is low risk of wavy cutting.

- Minimized blade wear and high cutting ability.
- High rigidity to minimize wavy and slant cutting.
- Wide variety of bond types for various applications.
- Provides precise control of diamond concentration for optimal cutting quality.

Applications

Electronic parts, Optical devices, Various types of semiconductor packages, Ceramics, Mono-crystal ferrite, Glass, etc.
### Specifications

<table>
<thead>
<tr>
<th>O.D.</th>
<th>I.D.</th>
<th>Bonding strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>0.15</td>
<td>40</td>
</tr>
<tr>
<td>45°</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal code</th>
<th>Bonding strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1E863SS</td>
<td></td>
</tr>
</tbody>
</table>

- **Metal Bond Blades B1A Series**
- **Processing Data**

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Bonding strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td></td>
</tr>
</tbody>
</table>

- **Thickness accuracy**
  - 1: Standard accuracy
  - 2: ±0.005
  - 3: ±0.002

- **Bonding strength**
  - O.D.
  - Thickness
  - I.D.
  - Angle

- **Application by grit size**

- **Comparison of cutting efficiency for bond types**

- **Processing Data**

- **Comparison of cutting efficiency for bond types**

- **Application by grit size**

- **When ordering**

- **To use these DISCO blades and wheels (hereafter precision tooling) safely...**
  - **USE** a safety cover (nozzle case, cover), equipped as a standard accessory, to avoid injury.
  - **DO NOT** EXCEED the specified rpm limit indicated on the precision tooling.
  - **FOLLOW** the instruction manual of the equipment to mount the precision tooling properly.
  - **DO NOT** DROP OR HIT the precision tooling. This may cause breakage or injury.
  - **Always** CHECK the precision tooling for chipping or any other damage before starting to use it. **DO NOT** USE the tooling if there is any damage.
  - **READ** the operation manual of the cutting/grinding equipment before use.
  - **DO NOT USE** the precision tooling with modified or customized equipment.
  - **DO NOT** USE precision tooling that has a different size from the one recommended for your equipment.
  - **DO NOT USE** the precision tooling for any other purpose than grinding, cutting, or polishing.
  - **Always** USE water or coolant to prevent precision tooling damage.

---

**DISCO CORPORATION**

www.disco.co.jp

2014.11