Resin Bond Blades

P1A SERIES

With an emphasis on cutting performance, this blade provides high processing quality for difficult-to-cut materials.

Processing Hard Materials

These sintered diamond blades employ a thermo-setting resin as the bonding material. Taking advantage of its excellent elasticity, the cutting ability of this bond has been maximized. They are suitable for processing difficult-to-cut materials such as glass and crystal materials.

- Suitable for highly brittle materials such as glass.
- A wide variety of bond types are available.
- Provides precise control of diamond concentration to achieve optimal cutting quality.

Applications

Glass, Crystal, Quart, LiTaO₃, Various types of semiconductor packages, Ceramics, etc.
Resin Bond Blades

**P1A SERIES**

### Specification

<table>
<thead>
<tr>
<th>Internal Code</th>
<th>Bonding Strength</th>
<th>Concentration</th>
<th>Bond</th>
<th>Thickness accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 1A8</td>
<td>SD</td>
<td>1 0.005</td>
<td>BR05</td>
<td>54 × 0.15 × 40 × 45°</td>
</tr>
<tr>
<td>P 1E8 6 3</td>
<td>Synthetic diamond</td>
<td>2,3</td>
<td>BR50</td>
<td>⏰</td>
</tr>
</tbody>
</table>

*3 Products that include a special specification may be denoted with "RBT-****".
*2 Shapes other than 1A8 are available with a thickness of 0.1 mm or more.

### Processing Data

#### Comparison of cutting efficiency for bond types

<table>
<thead>
<tr>
<th>Bond</th>
<th>BR05</th>
<th>BR75</th>
<th>MB01</th>
<th>BR10</th>
<th>B01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear-out faster</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above shows the trend of process results when a dresser board is used. Depending on the cutting conditions and type of material, actual results may vary. The values are for reference only.

#### Application by grit size

<table>
<thead>
<tr>
<th>Grit</th>
<th>#1200</th>
<th>#3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LInO3, LiTaO3</td>
<td>Crystal</td>
<td></td>
</tr>
<tr>
<td>Glass Family (Quartz, soda glass etc.)</td>
<td>Al2O3</td>
<td></td>
</tr>
<tr>
<td>AlN, SiN</td>
<td>CBN</td>
<td></td>
</tr>
</tbody>
</table>

- Due to improvements in our products, it is possible that product specifications may be changed without advance notice.
- Please confirm the product specifications with a DISCO representative.

### When ordering

Please contact a DISCO representative with your product needs such as type, wheel size, and quantity.

When you place the first order with us, please explain application information such as materials to grind, sizes, machine, type, and other specification.

We are ready to help you to determine which is our most appropriate product type for your application.

### Processing Data

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 damage before starting to use it. DO NOT USE the precision 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.

[www.disco.co.jp](http://www.disco.co.jp)