Electroformed Bond Blades

ZP07 SERIES

High grade processing is possible with an electroplated porous structure blade

The ZP07 series realizes high-grade processing of hard materials and compound materials by employing a porous structure inside an electroplated blade

The ZP07 series combines high cutting ability that is specific to electroplated bond blades and appropriate self sharpening ability by forming pores in the electroplated bond. It is now possible to process silicon + glass, silicon carbide (SiC) and other materials that have been difficult-to-cut using the conventional electroplated bond.

- Realizes one-pass processing of glass + silicon wafer.
- Realizes high-quality processing of silicon carbide (SiC) and other difficult-to-cut materials.
- Two types available: Standard and low concentration.

New type of electroplated blade with pores in the blade.

<table>
<thead>
<tr>
<th>Applications</th>
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<tbody>
<tr>
<td>Composite materials (Glass + silicon wafer etc), SiC, Ceramics etc.</td>
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</table>
**Specifications**

**ZP07 - SD 2000 - F1B333 - A**** 54 × 0.1 A2 × 40 - L - S3**

<table>
<thead>
<tr>
<th>Grid Type</th>
<th>Grid Size</th>
<th>concentration</th>
<th>Special specification</th>
<th>Thickness Accuracy</th>
<th>O.D.</th>
<th>Thickness</th>
<th>Surface treatment</th>
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<tbody>
<tr>
<td>SD</td>
<td>320 #320</td>
<td>F1B333 Standard</td>
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<td>400 #400</td>
<td>F1B322 Low</td>
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<td>600 #600</td>
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</table>

* Grid Type: SD
* Grid Size: 320 #320, 400 #400, 600 #600, 800 #800, 1200 #1200, 1500 #1500, 1700 #1700, 2000 #2000

* All slit widths are 0.5 mm (except for the SS type) Blade thickness greater than 0.06 mm are available.

**Experimental Data**

The ZP07 series can process laminated wafers (silicon + glass) in one pass and can achieve high-grade results on the silicon, glass, and bonded surfaces.

**ZP07**

- Bonded surface

**ZP07**

- Glass Surface

**ZP07**

- Reference photo (Current electroformed bond blade)

**Workpiece**:
- Si 0.5 mmt + Glass 0.5 mmt

**Speed**:
- 5 mm/s

**Spindle revolution**:
- 30,000 min⁻¹

**Blade**:
- ZP07-SD2000-F1B333
- NBC-ZB1050

**Size**:
- 56 x 0.1 x 40 mm

**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.

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.

Due to improvements in our products, it is possible that product specifications may be changed without advanced notice.

Please confirm the product specifications with a DISCO representative.