Electroformed Bond Blades

**NBC-Z SERIES**

High performance blades to support a wide range of applications

**Superior cutting quality for applications ranging from dicing wafers to cutting substrates**

The ultra-thin, high performance NBC-Z Series blades are a result of DISCO’s original blade development. These blades employ electroformed bonds that realize superb cutting quality and blade life. In addition to dicing semiconductor wafers, these blades are suitable for dicing a wide variety of semiconductor packages.

- Deep cutting and grooving are possible using ultra-thin blades.
- Blade thickness - 0.015 mm to 0.3 mm
- Wide range of grit sizes and bond types are available to meet application requirements
- Available for both dicing saws and slicers

**NBC-Z Types**

The structural strength of the blade allows for ultra-thin blades to be realized. They are suitable for dicing and deep grooving of narrow streets.

**NBC-ZB Types**

By changing the lateral face of the blades, surface chipping and slanted cuts are minimized. This results in improved cutting quality.

**Applications**

Silicon, GaAs, GaP, Various types of semiconductor packages, etc.
**Specifications**

**Concentration**
- 1: Low Concentration
- 2: Standard Concentration

**Surface treatment**
- No Code: Single surface grit protruded type
- L: Lapped type
- N: Increased strength type
- V: Grains protruding on both sides

**Thickness accuracy**
- G2: ±0.005
- G3: ±0.002
- G: Optional

**Surface treatment**
- SS: Optional

<table>
<thead>
<tr>
<th>Type</th>
<th>Grit size</th>
<th>Bond</th>
<th>Blade shape</th>
<th>O.D.</th>
<th>Thickness</th>
<th>I.D.</th>
<th>Angle</th>
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<tbody>
<tr>
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<td>13 #240</td>
<td>O</td>
<td>T1</td>
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*1 Products that include a special specification may be denoted with “ZBT*****.”

**Application by grit size**

### Grit size

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<tr>
<th>Grit size</th>
<th>Compound</th>
<th>Ceramic, BaTiO₃, CdTe</th>
<th>Glass-Epoxy, Green Ceramics, ATC</th>
<th>Zirconium</th>
<th>Quarti, PZT</th>
<th>Silicon</th>
<th>Ceramic Wafers</th>
<th>LiNbO₃, LiTaO₃</th>
<th>Semiconductor Wafers</th>
<th>Ferra, Garnet</th>
<th>CSM</th>
<th>Polycarbonate</th>
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**Processing data**

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.

To use these DISCO blades and wheels (hereafter precision tooling) safely... Please read carefully and follow the instructions below to prevent any accidents or injuries.

- **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.

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