



## Resin Bond Blades

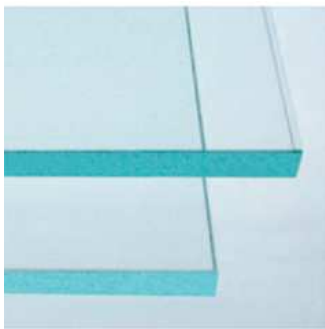
# P1A SERIES

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.



Glass



#### Applications

Glass, Crystal, Quart, LiTaO<sub>3</sub>, Various types of semiconductor packages, Ceramics, etc.

## Specification

**Internal Code**<sup>\*3</sup>

**Thickness**<sup>\*3,4</sup> accuracy (mm)

1	Standard accuracy <sup>*5</sup>
2	±0.005
3	±0.002

**Bonding Strength**<sup>\*3</sup>

**Concentration**<sup>\*3</sup>

**Bond**<sup>\*3</sup>

**\*1 P 1E8 6 3 SD 600 N 50 BR50**

**54 × 0.15 × 40 × 45°**

O.D.    Thickness    I.D.    Angle

Type <sup>*3</sup>	Basic shape <sup>*2</sup>	Synthetic	Grit size
G	1A8	SD Synthetic diamond	280 #280
P	1E8	SDC Coated Synthetic diamond	320 #320
	1M8	B cBN	360 #360
P	1N8	BC Coated cBN	400 #400
	1V8		500 #500
P		SD Synthetic diamond	600 #600
			800 #800
			1000 #1000
			1200 #1200
			1500 #1500
			1700 #1700
			2000 #2000
			3000 #3000
P		SD Synthetic diamond	4000 #4000
			5000 #5000
			6000 #6000

\*4 Possible accuracy differs depending on the product, size and bond.  
\*5 Standard accuracy differs depending on the product and size.

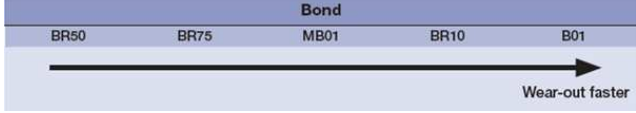
\*1 Products that include a special specification may be denoted with "RBT-\*\*\*\*\*".  
\*2 Shapes other than 1A8 are available with a thickness of 0.1 mm or more.

\*3 Regarding the combination of blades. The type, internal code, bonding strength, and concentration of each blade correspond to the bond type. Please refer to the chart below.

Type	Internal code	Bonding strength	Concentration	Bond	Thickness accuracy
G	5	R	13	B01 MB01	1,2,3
			12		
			11		
			21		
			10		
P	6	N	25	BR10 BR50 BR75	1,2,3
			50		
			75		
			100		

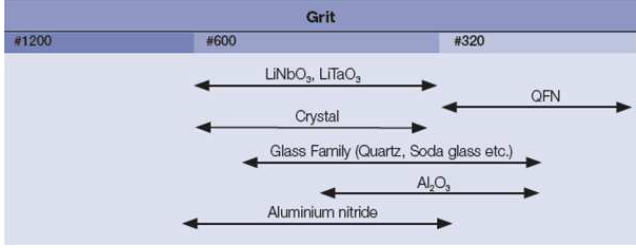
## Processing Data

### ■ Comparison of cutting efficiency for bond types



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



#### 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.

