

Resin Bond Blades

# P1A SERIES



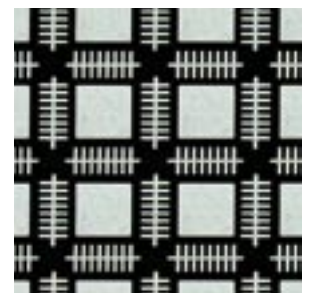
## Processing Hard Materials

These sintered diamond blades employ thermo-setting resin as the bonding material which provides active self-sharpening and elasticity characteristics. They are suitable for processing of hard-to-cut materials such as glass and crystal materials.

- Suitable for highly fragile materials such as glass
- A wide variety of bond types are available
- Able to precisely control diamond concentration to achieve cutting quality



Glass



QFN

### Applications

*Glass, crystal, quartz, lithium tantalate, various types of semiconductor packages, ceramics, etc.*



ISO 9001  
JQA-0954



REGISTERED ORGANIZATION  
No. E892-ISO 14001

## Processing Data

## Resin Bond Blades

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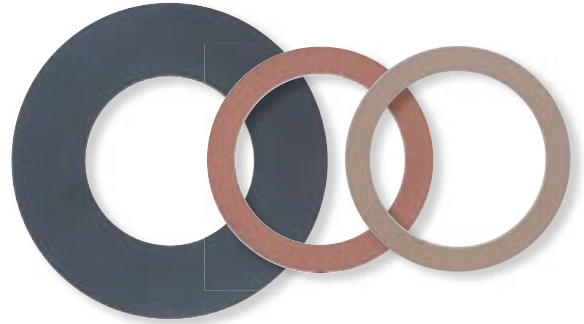
### Comparison of cutting efficiency for bond types

Bond				
BR50	BR75	MB01	BR10	B01
←—————→				→
Wear-out faster				

The above shows the tendency of the process result when a dresser board is cut. Depending on the cutting conditions and type of material, the tendency may vary. Therefore, this shall only be used as a reference.

### Application by grit size

Grit		
#1200	#600	#320
←—————→		←—————→
LiNbO <sub>3</sub> , LiTaO <sub>3</sub>		QFN
←—————→		
Crystal		
←—————→		
Glass Family (Quartz, Soda glass etc.)		
←—————→		
Al <sub>2</sub> O <sub>3</sub>		
←—————→		
Aluminium nitride		



## Specifications

**P 1A8 6 3 SD 600 N 50 BR50 54 x 0.15 x 40**

Type <sup>1</sup>	Basic Shape	Internal Code <sup>1</sup>	Thickness Accuracy	Abrasive Type	Grit Size	Bonding Strength <sup>1</sup>	Concentration <sup>1</sup>	Bond <sup>1</sup>	O.D.	Thickness	I.D.				
G	1A8	5	1 Standard accuracy <sup>2</sup>	SD Synthetic diamond	6000 #6000	R	13	B01	54	0.15	40				
P			2 ±0.005	SDC Coated Synthetic diamond	5000 #5000										
			3 ±0.002 (mm)	B CBN	4000 #4000										
	1E8	6	*2 Varies according to the blade.	B CBN	3000 #3000	N	25	BR10	54	0.15	40				
	1M8			B CBN	2000 #2000										
	1N8			B CBN	1700 #1700										
	1V8			B CBN	1500 #1500										
				B CBN	1200 #1200										
				B CBN	1000 #1000										
			800 #800		600 #600		500 #500		400 #400		360 #360		320 #320		280 #280

<sup>1</sup> 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
G	5	R	13	B01
			12	MB01
			11	
P			21	
P	6	N	10	BR10 BR50 BR75
			25	
			50	
			75	
			100	

### Standard blade types<sup>3</sup>

Bond: B01, MB01

thickness	0.05~	0.06~	0.08~	0.1~	0.15~0.7
Grit Size	#1000~#6000	#800~#6000	#600~#6000	#400~#6000	
50 ~under52.5					
52.5 ~under63.5					
63.5~88.9					

Bond: BR10, BR50, BR75

thickness	0.1~	0.15~0.3	0.3~1.0
Grit Size	#400~#5000		
50 ~under63.5			
63.5 ~76.2			

BR10 bond is out of this standard specification range.

<sup>3</sup> Please contact a Disco representative for details.

G1A: #4000 and bigger grit blades are available.

### When ordering

Please contact a Disco representative with your product needs such as type, thickness, outer and inner diameter, and quantity.

When you place the first order with us, please explain application information such as materials to cut or grind, sizes, shape, 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 wheels 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 maximum rpm if it is specified.
- FOLLOW the instruction manual of the machine to mount wheel properly.
- DO NOT DROP OR HIT wheels. This may cause wheel breakage or injury.
- Always CHECK the wheel for chipping or any other wheel damage before starting to use the wheel. DO NOT USE the wheel if there is any damage.
- READ the operation manual of the cutting/ grinding equipment before use.
- DO NOT USE a wheel with a modified or customized equipment.
- DO NOT USE a wheel that has a different size from the one recommended for your machine.
- DO NOT USE a wheel for any other purpose than Grinding, Cutting, or Polishing.
- Always USE water or coolant to prevent wheel breakage.

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