

Metal Bond Blades

# B1A SERIES

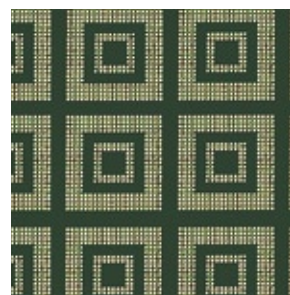
**Realizes precise processing of difficult to cut material based on superior wear resistance and rigidity**



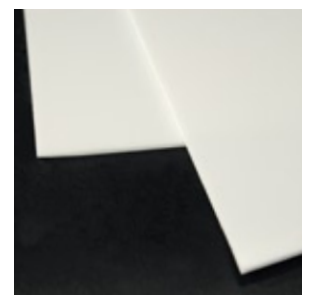
## Precision Processing of Hard-to-Cut Materials

Sintered metal powder is used as the bonding agent material to realize strong holding power. As a result, these blades have low blade wear. They are excellent for accurate cutting or grooving of electronic devices such as CSP packages, ceramics and optical materials. Also, since they have both excellent rigidity and cutting ability there is low risk of wavy cutting.

- Minimized blade wear and high cutting ability
- High rigidity - minimized wavy and slant cutting
- Wide variety of bond types for various applications.
- Able to precisely control diamond concentration to achieve cutting quality



CSP



Ceramics

### Applications

*Electronic parts, optical devices, various types of semiconductor packages, ceramics, mono-crystal ferrite, glass, etc.*



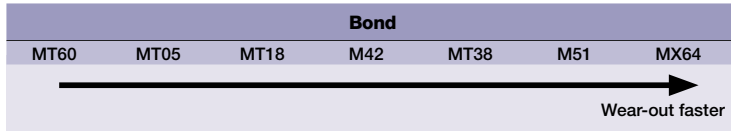
ISO 9001  
JQA-0954



REGISTERED ORGANIZATION  
No. E892-ISO 14001

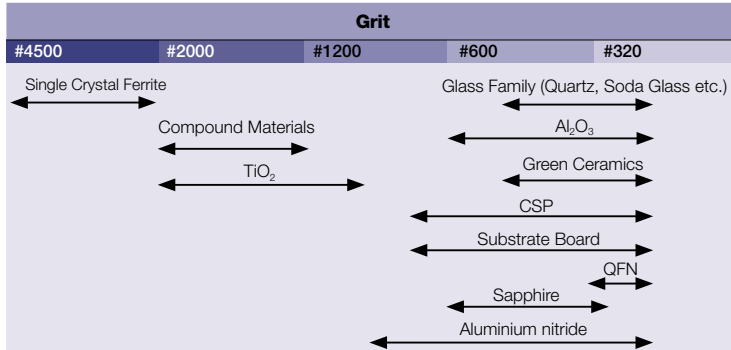
## Processing Data

### Comparison of cutting efficiency for bond types



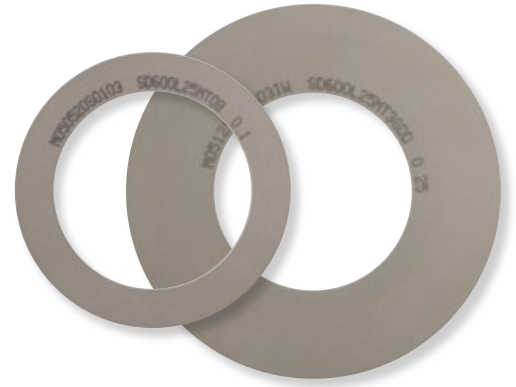
The above shows the tendency of the process result when a dresser board is cut. Depending on the cutting conditions and type of material, the tendency may vary. Therefore, this shall only be used as a reference.

### Application by grit size



## Metal Bond Blades

# B1A SERIES



## Specifications

**B 1A8 0 3 S3 SD 600 N 50 M42 54 x 0.15 x 40**

Basic Shape	Internal Code <sup>1</sup>	Thickness <sup>2</sup> Standard Accuracy <sup>3</sup>	Slit <sup>4</sup>	Abrasive Type	Grit Size	Bonding Strength <sup>1</sup>	Concentration	Bond <sup>1</sup>	O.D.	Thickness	I.D.
1A8		1 Standard accuracy <sup>3</sup> 2 ±0.005 3 ±0.002 (mm)	S1 No. of slits 4 Depth 1mm S2 No. of slits 8 Depth 1mm S3 No. of slits 16 Depth 1mm S5 No. of slits 40 Depth 1mm SS Optional	SD Synthetic diamond SDC Coated Synthetic diamond B Coated CBN BC Coated CBN	6000 #6000 5000 #5000 4000 #4000 3000 #3000 2000 #2000 1700 #1700 1500 #1500 1200 #1200 1000 #1000 800 #800 600 #600 500 #500 400 #400 360 #360 320 #320 280 #280		25 Low 50 75 100 125 150 High				
1E8											
1M8											
1N8											
1V8											

<sup>1</sup> Regarding the combination of blades  
Internal code and bonding strength of each blade correspond to the bond type. Please refer to the chart below.

Internal Code	Bonding Strength	Bond
0	N	M42 M51
6	L	MT38 MX64
	P	MT05 MT18 MT60

<sup>2</sup> Possible accuracy differs depending on the product and size.  
<sup>3</sup> Standard accuracy differs depending on the product and size.  
<sup>4</sup> All slit widths are 0.5mm (except for the SS type)

### Standard blade types<sup>5</sup>

Bond: M42, M51

Thickness	0.1~	0.15~	0.2~	0.4~1.0 (mm)
Grit Size	#600~#6000	#400~#6000	#320~#6000	#400~#6000
O.D.				
50~under63.5				Available for M42 bond only
63.5~80				M51 bond is out of this standard specification range

<sup>5</sup> Please contact a Disco representative for details.

Bond: MT60, MT05, MT18, MT38, MX64

Thickness	0.15~1.0 (mm)
Grit Size	#400~#6000
O.D.	
50~under63.5	MT60, MT05, MT18 bond is out of this standard specification range
63.5~80	

### 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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