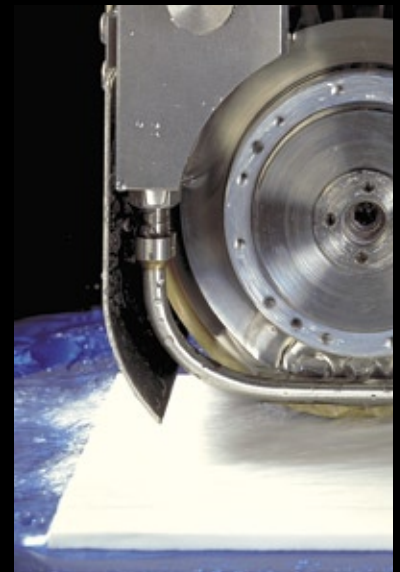


Metal Bond/Resin Bond Blades with Steel Core

A1A/K1A SERIES

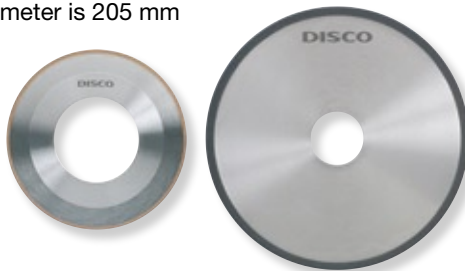
Maximizes blade rigidity with an integrated steel core



Steel Core Blades - High load, Deep Cut Processing

Disco has combined a steel core with metal bond blades and resin bond blades to attain high rigidity. As a result, when using multiple blades mounted on a slicer, deep cutting and high-load processing can be achieved. A wide variety of blade types are available for processing different applications.

- High rigidity is attained by combining a steel core with the blade
- Maximum outer diameter is 205 mm



A1A Series - Metal Bond

High rigidity. Long Life

The long life of the metal bond and the high rigidity of the steel core enables deep cutting of hard materials such as ceramics and ferrite.



Ceramics

Applications

Ceramics, various types of glass, ferrite, etc.

K1A Series - Resin Bond

High rigidity, Enhanced Quality

The excellent cutting ability of the resin bond and the rigidity of the steel core allows cutting and grooving of glass and crystal materials.



Glass

Applications

Ceramics, various types of glass, ferrite, etc.

Processing Data

Comparison of efficiency for bond types



Metal Bond/Resin Bond Blades with Steel Core

A1A/K1ASERIES



Specifications

| Type | Thickness Accuracy (mm) |
|-------------|-----------------------------------|
| A Metalbond | 1 Standard accuracy ^{*2} |
| | 9 ±0.010 |
| | 2 ±0.005 |
| | 3 ±0.002 |
| K Resinbond | 7 Standard accuracy ^{*2} |
| | 9 ±0.010 |
| | 2 ±0.005 |

^{*2} Varies according to the blade.

A 1A1 6 1 S2 SDC 320 L 50 MJ45 **O.D. Thickness I.D.**
76.2 x 0.4 x 40

| Basic Shape | Internal Code ^{*1} | Slit (Available for A1A Type only) ^{*3} | Abrasive Type | Grit Size | Concentration |
|-------------|-----------------------------|--|------------------------------|-----------|---------------|
| 1A1 | | O.D. 76.2 100 125 150 200 | SD Synthetic Diamond | 800 #800 | 25 |
| 1A1R | | 80 101.6 127 152.4 205 | SDC Coated Synthetic Diamond | 600 #600 | 50 |
| 1E1 | | S1 No. of slits 8 8 16 16 16 | SDC Coated Synthetic Diamond | 500 #500 | 75 |
| 1M1 | | Depth 7mm 10mm 12mm 15mm 15mm | B CBN | 400 #400 | 100 |
| 1N1 | | S2 No. of slits 72 80 80 80 80 | BC Coated CBN | 360 #360 | 125 |
| 1V1 | | Depth 2mm 2mm 2mm 2mm 2mm | | 320 #320 | |
| | | Large No. of slits 8 8 16 16 16 | | 280 #280 | |
| | | Slit Depth 7mm 10mm 12mm 15mm 15mm | | 240 #240 | |
| | | S3 Small No. of slits 64 64 64 64 64 | | 220 #220 | |
| | | Slit Depth 2mm 2mm 2mm 2mm 2mm | | 180 #180 | |
| | | SS Optional | | 150 #150 | |
| | | | | 120 #120 | |
| | | | | 100 #100 | |
| | | | | 80 #80 | |

^{*1} 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 |
|---------------|------------------|-------|
| 6 | L | MJ30 |
| | | MJ35 |
| | | MJ45 |
| | | MJ25 |
| | | MJ10 |
| 6 | N | MJ15 |
| | | BR10 |
| | | BR120 |

^{*3} All slit widths are 0.5mm (except for the SS type)
The specification of standard slits varies according to the outer diameter of the blade.
When placing orders, please refer to the chart above.

Standard specification range^{*4}

A1A Type (Metal Bond)

| Thickness ^{*5} | 0.3~ | 0.4~ | 0.5~ | 0.7~3.0 |
|-------------------------|-----------|-----------|-----------|----------|
| Grit Size | #180~#800 | #120~#800 | #100~#800 | #80~#800 |
| O.D. | #180~#800 | #120~#800 | #100~#800 | #80~#800 |
| 76.2,80 | | | | |
| 100,101.6 | | | | |
| 125,127 | | | | |
| 150,152.4 | | | | |
| 200,205 | | | | |

A1A1R is out of this standard specification range.

^{*4} Please contact a Disco representative for details.

^{*5} "Thickness" means the thickness of diamonds' layer. (The thinnest steel core is 0.3mm)

K1A Type (Resin Bond)

| Thickness ^{*5} | 0.3~ | 0.4~ | 0.5~ | 0.7~3.0 |
|-------------------------|-----------|-----------|-----------|----------|
| Grit Size | #180~#800 | #120~#800 | #100~#800 | #80~#800 |
| O.D. | #180~#800 | #120~#800 | #100~#800 | #80~#800 |
| 76.2,80 | | | | |
| 100,101.6 | | | | |
| 125,127 | | | | |
| 150,152.4 | | | | |
| 180,203.2 | | | | |

K1A1R is out of this standard specification range.
Available for K1A1R only.

^{*4} Please contact a Disco representative for details.

^{*5} "Thickness" means the thickness of diamonds' layer. (The thinnest steel core is 0.3mm)

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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