

Electroformed Bond Blades

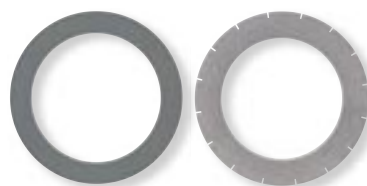
# NBC-Z SERIES



## Superior cutting quality - 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 a 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 with the super-thin up to 3" diameter 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

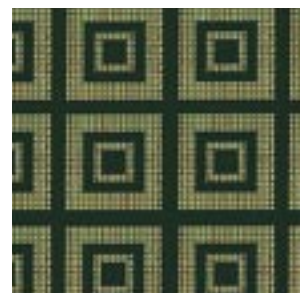
The structural strength of the blade allows for ultra-thin blades to be realized. They are suitable for dicing and deep grooving of narrow streets.

## NBC-ZB Types

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



Silicon wafer



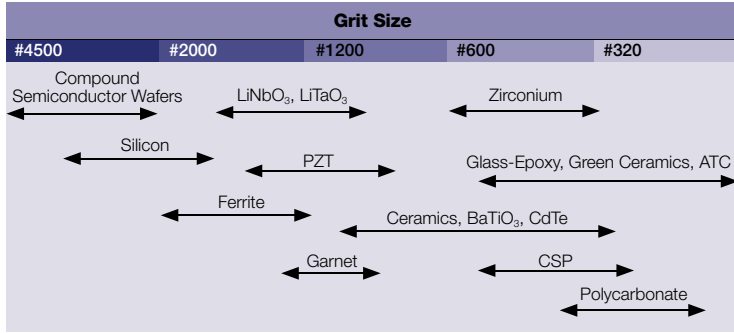
CSP

### Applications

*Silicon, GaAs, GaP, LiTaO<sub>3</sub>, etc.*

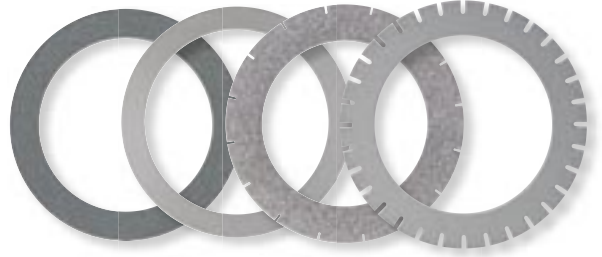
## Processing Data

### Application by grit size



## Electroformed Bond Blades

# NBC-Z SERIES



## Specifications

Type	Bond	Optional
Z	O Standard Bond	L Lapping process (Z Type only)
ZB	J Soft Bond	

**NBC - Z 1 09 0 L G2 S3 T1**

**56 x 0.15 x 40 x 45°**

Concentration	Grit Size		Thickness Accuracy	Slit <sup>1</sup>	Blade Shape <sup>2</sup>	O.D.	Thickness	I.D.	Angle
1 Low Concentration	26 #4800	21 #800	G2 ±0.005	S1 No. of slits 4 Depth 1mm	T1				θ
2 Standard Concentration	02 #4500	09 #700	G3 ±0.002	S2 No. of slits 8 Depth 1mm	T2				
	27 #4000	10 #600	G Optional (mm)	S3 No. of slits 16 Depth 1mm	T3				
	03 #3500	25 #500		Small Slit No. of slits 60 Depth 1mm	T4				
	04 #3000	11 #400		Large Slit No. of slits 12 Depth 2mm					
	05 #2000	28 #360		SS Optional					
	06 #1700	12 #320							
	07 #1500	14 #280							
	08 #1200	13 #240							
	24 #1000								

\*1 All slit widths are 0.5mm (except for the SS type)  
Blade thickness greater than 0.04 mm are available  
\*2 Blade thickness greater than 0.1 mm are available

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

Concentration	Thickness	Grit														
1 2	Grit	0.015 ~0.020	0.020 ~0.030	0.030 ~0.040	0.040 ~0.050	0.050 ~0.060	0.060 ~0.065	0.065 ~0.075	0.075 ~0.080	0.080 ~0.100	0.100 ~0.150	0.150 ~0.160	0.160 ~0.180	0.180 ~0.200	0.200 ~0.300	(mm)
1	26	Available for Z type only														
2	02	Available for Z type only														
	27	Available for Z type only														
	03	Available for Z type only														
	04	Available for Z type only														
	05	Available for Z type only														
	06	Available for Z type only														
	07	Available for Z type only														
	08	Available for Z type only														
	24	Available for Z type only														
	21	Available for Z type only														
	09	Available for Z type only														
	10	Available for Z type only														
	25	Available for Z type only														
	11	Available for Z type only														
	28	Available for Z type only														
	12	Available for Z type only														
	14	Available for Z type only														
	13	Available for Z type only														

\*3 Please contact a Disco representative for details.

A lapping process is applied to the standard A types for thickness greater than 0.15 mm

### 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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