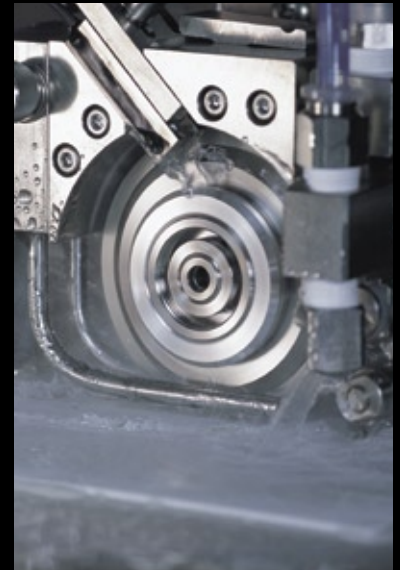


Electroformed Bond Blades

NBC-Z SERIES

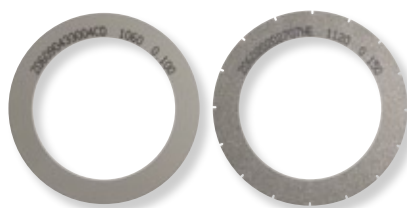
High performance blade to support a wide range of applications



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

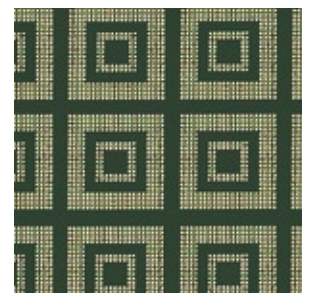
The structural strength of the blade allows for ultra-thin blades to be realized. They are suitable for dicing and deep grooving of narrow streets.

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, LiTaO₃, etc.



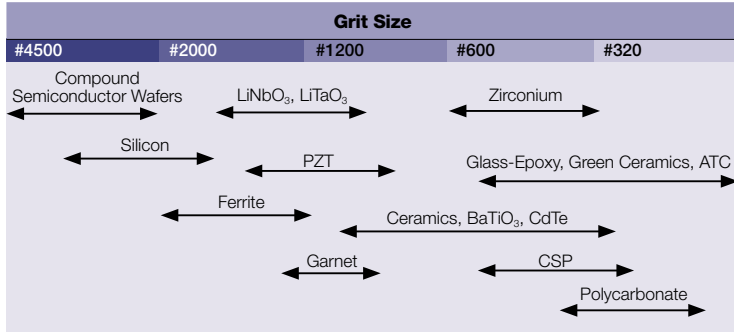
ISO 9001
JQA-0954



REGISTERED ORGANIZATION
No. E892 - ISO 14001

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 ^{1,2} Accuracy	Slit ³	Blade Shape ⁴	O.D.	Thickness	I.D.	Angle
1 Low Concentration	26	#4800	21 #800	G2 ±0.005	S1	56	0.15	40	45°
2 Standard Concentration	02	#4500	09 #700	G3 ±0.002	S2				
	27	#4000	10 #600	G Optional	S3				
	03	#3500	25 #500		S4				
	04	#3000	11 #400		Small Slit				
	05	#2000	28 #360		Large Slit				
	06	#1700	12 #320		Slit				
	07	#1500	14 #280		Slit				
	08	#1200	13 #240		Slit				
	24	#1000			SS				

*1 Not indicated in the case of the standard accuracy.
*2 Standard accuracy differs depending on the product and size.
*3 All slit widths are 0.5mm (except for the SS type)
*4 Blade thickness greater than 0.1 mm are available

Standard blade types⁵

Concentration	Thickness	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
1 2	26		Available for Z type only													
	02															
	27															
	03															
	04															
	05															
	06															
	07															
	08															
	24															
	21															
	09															
	10															
	25															
	11															
	28															
	12															
	14															
	13															

⁵ 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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