# CERA BORA WHEELS

## ●CERA BORA WHEELS

The cera bora wheel is bonded by a special fine ceramic. The higher porosity rate is obtained thanks to its excellent grain holding strength as compared with presently avail -able wheels. The cera bora wheel is the optimum product for automated grinding lines, groove grinding and cam shaft grinding, because it is easily trued and dressed.

Manufactured using super-high temperature and pressure technologies, CBN grains are the second-hardest substance known, after diamonds. Because they are twice as hard as conventional abrasive grains such as aluminum oxides and silicon carbide. Blade sharpness lasts significantly longer, leading to high machine efficiency. They are chemically inert with metallics such as Fe, Ni, and Co. CBN is best-suited to the grinding of steel alloys.

1. This product is bonded with our unique fine ceramic bonds to hold firmly the CBN grains which were chemically bonded.

2. CBN provides excellent cutting performance by adjusting size and quantity of the porosity according to the grinding conditions.

3. It provides easy dressing with high rigidity and pore structure.

4. It allows for sophisticated quality design and manufacture and can be adapted to various grinding conditions through tailored order production.

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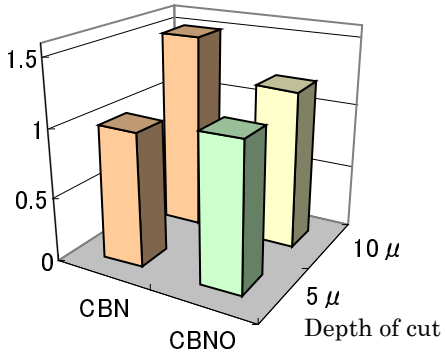
## ●GRAINS

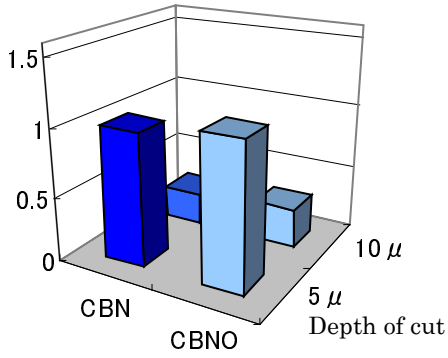
| | |
|---|---|
| **CBN** | ・Standard |
| **CBNO** | ・Highly angular crystal shape　・High thermal stability |

※*CBNO* : For sharper more aggressive cutting edges that regenerate quickly without developing a dull, wear-flat areas.For greater wear resistance longer wheel life and controlled fracture

(Surface grinding)




**Grinding force**




**Grinding ratio**

### ※*CBNO*

Lower power consumption : Lower work piece temperature and longer tool life.
Tighter work piece form tolerance.

Shaper more durable cutting edges : Higher grinding efficiency.

## ●BOND

| | | | |
|---|---|---|---|
| **CR01** | Standard | Surface, Cylindrical, Internal | Steel |
| **CR13** | Long wheel life | Surface, Cylindrical, Internal | Steel |
| **CR21** | For CBNO | Surface, Cylindrical, Internal<br>Camshaft, Creep feed, Grooving | Camshaft, Screw |
| **CR37** | Higher material removal rates | Camshaft, Cylindrical | Camshaft |

## ●CONCENTRATION

| Grinding | Concentration |
|---|---|
| Cylindrical | 75～200 |
| Surface | 50～150 |
| Internal | 100～200 |
| Vertical spindle surface | 75～150 |
| Double-disc surface | 50～80 |

| Grinding | Concentration |
|---|---|
| Camshaft | 150～200 |
| Tool | 75～125 |
| Screw | 75～125 |

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