Diamond wheel

21CENTURY CO., LTD

Resin Bond Wheel

1. Feature

Resin bond enable excellent grinding performance and surface roughness to be fine without chipping

2. Application

Tungsten carbide, Ceramic, Cermet, Casting, High speed steel, Fe-alloy steel









POLYMIDE Bond Wheel

1. Feature

Used Polyamid resin instead of general Phenol resin to heat-resistance and abrasion-resistance

2. Application

Carbide of drill and end-mill Inserts of cermet and carbide









Metal Bond Wheel

1. Feature

Used the powder of Cu, Sn, Fe, Co to high abrasion-resistance

2. Application

Glass, Ceramic, Ferrite needed form-preservation









Vitrified Bond Wheel

1. Feature

Used glassiness bonding to be better bonding strength than resin bond.

Changed pore and organization to control easy chip flow .

2. Application

Automotive parts
PCD/PCBN
Bearing
Can be applied Automatic line









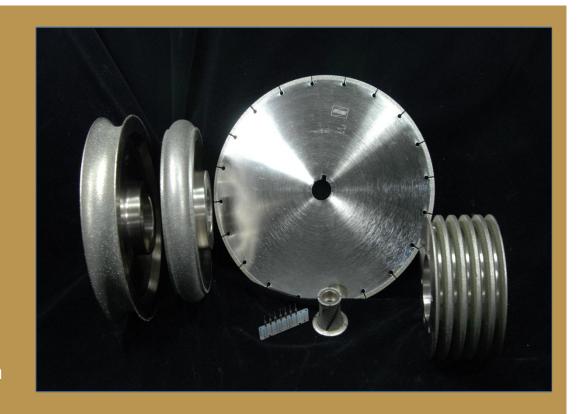
Electrode plated wheel

1. Feature

1-layer with super chylomicron plated with Ni to be high grinding performance and form preservation, but shorter tool life than the other bond

2. Application

Complicated products
Products needed precision form
Very soft products









Vacuum brazed Wheel

1. Feature

Different method with chemical reaction to be high preservation. Good chip flow to be higher tool life and cutting than electrode plated wheel.

2. Application

Complicated products
Products needed precision form
Very soft products



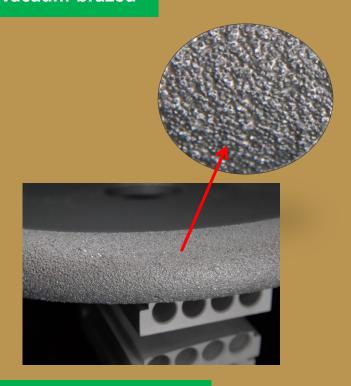






Vacuum brazed Wheel

Vacuum brazed



Vacuum brazed feature

- 1. Higher adhesive by sintering method
- 2. Higher grinding removal and increasing tool life

Electrode plated



Grinding Stone









Vitrified Grinding Stone



1. Feature

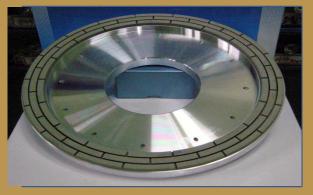
High abrasion resistance with powder of Cu, Sn, Fe, Co etc

2. Application

Glass, Ceramic, Ferrite needed form-preservation

SAPPHIRE









Metal Bond Edge Wheel

- Bonding composition without chipping as to Sapphire edge
- Possibility of various customized shape
- Longer tool life by re-electric discharge









Vitrified **Backgrinding Wheel**

- Bonding structure of minimization of chipping as to Backgrinding
- Possibility of various customized shape
- Higher abrasion rate than Resin products



