



Vitrified CBN wheel
For bearing



Superfinish CBN honing stone
For bearing



Rotary dresser
For water pump, ball bearing



Metal cup dresser
For bearing ID grinding

EHWA industrial diamond tools are indispensable in modern industries and are often applied to bearing and aerospace industries. In particular, EHWA has been providing the worldwide leading aerospace engine manufacturing and bearing companies as its main customers with the very best products.

Diamond tools for **Bearing**



Double disc surface
grinding wheel
For bearing



roller roller race
grinding wheel
For bearing



Rotary dresser
For LM guide



Rotary dresser
For ball screw

Bearing

Vitrified CBN wheel



Grinding parts

① ID (Inner race internal diameter) / ② IR (Inner race) / ③ OR (Outer race) / ④ Lip / ⑤ Ring face

| Advantages |

- Higher removal rates and shorter cycle times
- Reduced grinding force
- Reduced mechanical & thermal damage to bearing
- Stable and precise grinding performance for superior quality, surface finish, cylindricity and less size deviation

| Grinding Condition |

- Wheel speed : 30 ~ 80 m/s
- Removal amount : 0.1 ~ 0.35mm D
- Dressing amount : 5 ~ 30 μ m
- Dressing ratio : 0.3~0.6
- Dresser : Diamond rotary dresser
- Coolant : Oil, emulsion

| Mounting type |



Bearing Super finishing stone



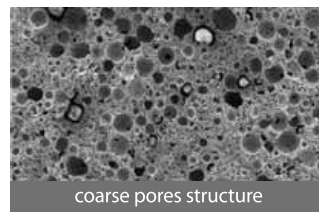
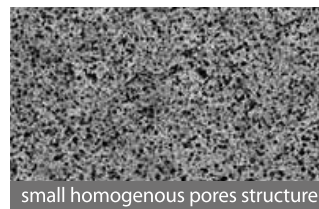
Superfinish CBN honing stone
For bearing



| Advantages |

- **Longer tool life and improved productivity**
 - 5~10 times longer tool life than conventional stone
 - Shorter cycle time for honing
 - higher stock removal rate
- **Excellent performance**
 - improved surface finish
- **ECO-friendly**
 - No sulfur
 - More consistent performance with less scrap

Micro structure of CBN stone

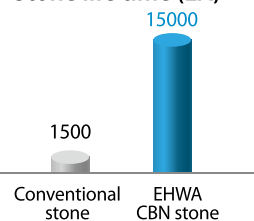


| Taper roller bearing raceway super finishing |

Condition

- Vw : 100~200rpm
- Removal : 5 μ m
- Surface roughness : Ra 0.06 μ m
- Stone specification : B2400K120VHWPN

Stone life time (EA)



Bearing

Rotary dresser



Rotary dresser
For water pump & ball bearing



- Diamond rotary dresser for ball / roller / hub bearings & water pump bearing

| Advantages |

- Highly precise and complex grinding
- Less dressing load and excellent dressing performance
- Longer tool life and cycle time reduction
- Available for dressing of vitrified CBN wheel

Water pump bearing



Ball bearing



Taper hub bearing



Bearing Metal cup dresser



Metal cup dresser
For bearing ID grinding



| Advantages |

- **Longer life**
- 20,000~30,000 times (depending on the wheel size)
- **Precise dressing**
- Less grinding deviation after dressing
- **Longer dressing interval and outstanding performance**



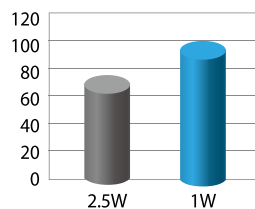
Metal cup dresser



Rotary cup dresser

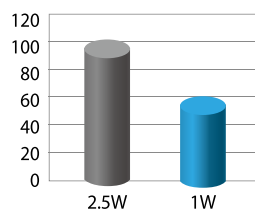
| Reference |

With steel quill
Vitrified wheel



Dressing performance
depending on tip width
on width of diamond layer

With steel head
Vitrified wheel



Workpiece dimensional stability
depending on tip width
on width of diamond layer

Face grinding wheel



Double disc surface grinding wheel
For bearings



| Ring & roller face grinding wheel |

EHWA diamond manufactures wheels for bearing face grinding

It improves the productivity by reducing cycle time

It is suitable for cost saving and quality improvement with longer life and better surface finish

| Advantages |

- Longer life
- Short cycle time
- Excellent surface finish

Face grinding

for IR/OR ring of ball bearing

| For application |

- Roller of needle bearing
- Roller of roller bearing
- IR/OR ring of bearing

Face grinding

for roller of roller bearing



Taper roller face grinding wheel



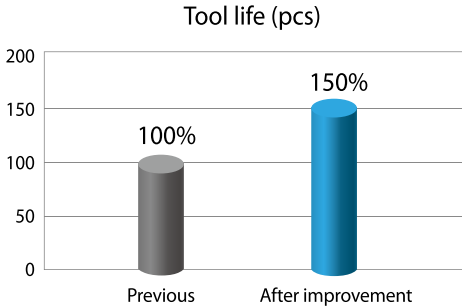
Taper roller face grinding wheel
For bearings



| Advantages |

- Longer tool life & cost saving
- Higher stock removal rate and superior performance
- Excellent surface finish

| Performance |



Bearing

Rotary dresser · for LM guide

Bearing



Rotary dresser
For LM guide



- LM guide is a linear motion product that is used to manufacture automotive equipment.
- LM guide consists of a block and rail, and balls between them rotating.
- Rotary dresser is used for dressing the CBN wheel that polishes the seat of the ball between a block and rail.

Workpiece block

Workpiece rail

Bearing Rotary dresser · for ball screw



Rotary dresser
For ball screw



| Ball screw |

- An assembly that converts rotational motion into linear motion.
- Consists of ball screw and nut.

| Advantages |

- Highly precise dressing with longer life
- High diamond concentration

