

## For Grinding Periphery and Cutting Edge / Flank Master Type-V

### High Efficiency and High Precision Grinding of Cutting Edges of PCD / PCBN Tools

Since the bond that has high grain holding power and porous structure that meet these requirements is employed, both sharpness and wear resistance can be utilized simultaneously to realize high efficiency and high precision grinding.



#### ■ Features

- Both sharpness and wear resistance can be utilized in grinding of cutting edges of PCD / PCBN cutting tools to realize high efficiency and high precision grinding operations.

#### ■ Applications

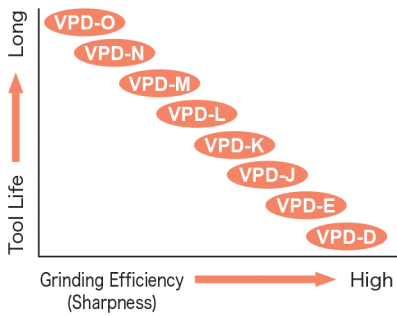
- Grinding of cutting edges of PCD / PCBN cutting tools

#### ■ Machining Examples

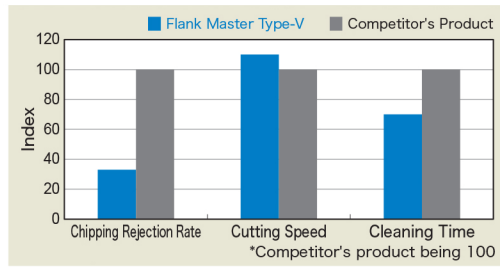
□ Comparison with Competitor's Vitrified Bond

- |                        |  |
|------------------------|--|
| 1) Machine             | NC Peripheral Grinder  |
| 2) Wheel Specification | ① Flank Master Type-V<br>② Competitor's Vitrified Bond Wheel |
| 3) Workpiece           | PCD (Polycrystalline Diamond)                                |
| 4) Coolant             | Water-Soluble  |

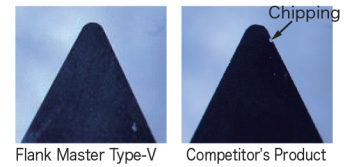
#### ■ Bond Line up



#### Comparison with Competitor's Product



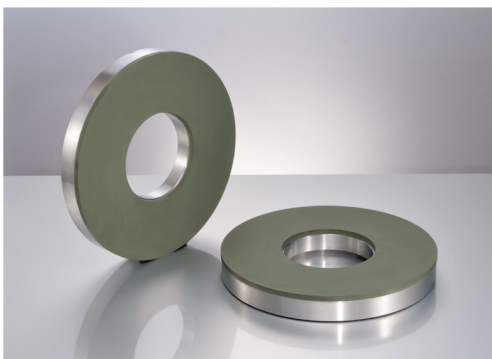
#### Comparison of Ground Surfaces



## For Thickness Grinding / Flat Master Type-R, Type-V

### Ideal for Thickness Processing of Cutting-Edge Replacement Chips

Grinding process for adjusting thickness of cemented carbide and cermet insert tips, there has been an issue that abrasive grains sink into the bond due to the grinding load, and the productivity decreases due to the dull grinding surface. "Flat Master" overcomes this issue and suppresses the decrease in productivity. Vitrified and resin bond types are available.



Type-R

#### ■ Features

- Suppresses abrasive grain subduction during machining and maintains good sharpness.

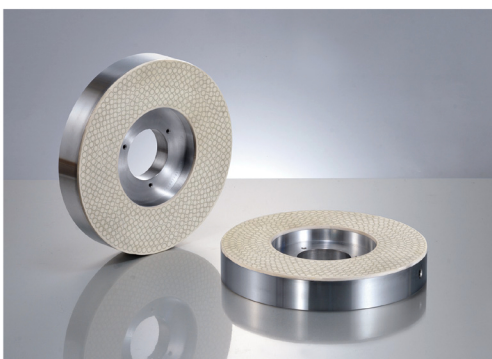
#### ■ Applications

- Grinding process for adjusting thickness of carbide, Cermet and Ceramic insert tips

#### ■ Machining Examples

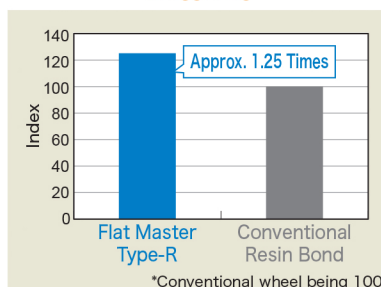
□ Comparison with Conventional Resin Bond Wheel

- |                        |   |
|------------------------|---|
| 1) Machine             | Parallel-Surface Honing Machine                   |
| 2) Wheel Specification | ① Flat Master Type-R<br>② Conventional Resin Bond |
| 3) Workpiece           | Carbide / Cermet                                  |
| 4) Coolant             | Water-Soluble                                     |



Type-V

#### Wheel Life



#### Sharpness Retention

