

## GRINDING WHEELS FOR TOP & BOTTOM FLAT HONING AND FINE GRINDING

### Usage

Flat honing and fine grinding, also known as top & bottom grinding, or disc grinding is a modern and very efficient production method of mass-producing very precise tools and parts for various industries. Very high precision in height and parallelism of the ground products is being achieved through this method.

Principle of this method is that the ground tools / parts are being ground from one or both sides by large diamond cup wheels / discs. When two wheels are being used, they rotate in opposite directions.

Ground parts and tools are fastened within Carriers and placed onto the bottom grinding wheel. During the machining process, Carriers rotate around the surface of the grinding wheel.

This method is suitable for grinding of all kinds of material: from technical ceramics ( $Al_2O_3$ ,  $ZrO_2$ ,  $Si_3N_4$ , etc.), tungsten carbide, steel, PCD, PCBN, glass, aluminum, ferrites and other.

### Grinding machines

Our grinding wheels can be used in machines from all major manufacturers, e.g. Melchiorre, Peter Wolters, Stähli, Supfina and other.



BOTTOM GRINDING WHEEL WITH  
WORKPIECES' CARRIERS

## AVAILABLE SIZES, TYPES OF WHEELS AND SERVICES

### Resin-bonded grinding wheels:

- Diameter up to 1000 mm, height of grinding layer up to 6 mm (other dimensions upon request)
- Shape of grinding segments: circular pellets, straight segments (other shapes upon request)

### Vitrified grinding wheels:

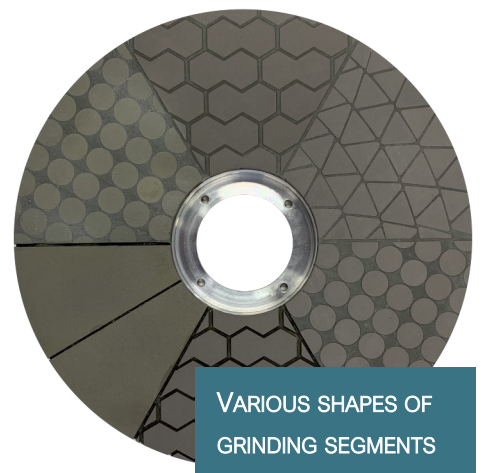
- Diameter up to 1000 mm, height of grinding layer up to 6 mm (other dimensions upon request)
- Shape of grinding segments: circular, trigonal, hexagonal pellets (other shapes upon request)

**Metal-bonded grinding wheels:** Upon request

### Grit sizes of diamond and CBN:

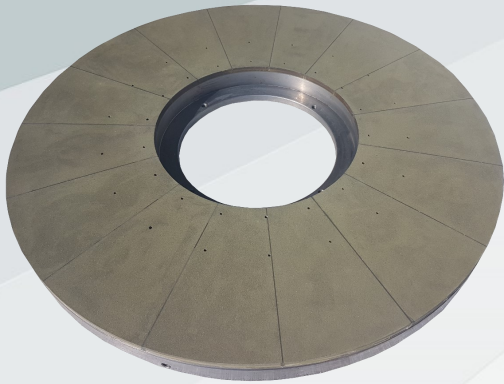
- We supply wheels with all standard grit sizes. Selection of the right grit size depends on the desired surface roughness of the ground workpiece.
- Most commonly used grit sizes are D/B76 to D/B126 (FEPA sizing)

**Repair & renovation:** We can repair / renovate your crashed / worn-out wheels (incl. removal of the old grinding layer)



VARIOUS SHAPES OF  
GRINDING SEGMENTS

## PRACTICAL EXAMPLES OF USAGE OF OUR WHEELS



WHEEL Ø710 MM, RESINOUS BOND, STRAIGHT SEGMENTS

- Double-sided grinding with two diamond wheels
- Grinding of parts from technical ceramics ( $\text{Al}_2\text{O}_3$ )
- Stock removal of ~1.4 mm of material from both sides of the workpiece



WHEEL Ø710 MM, VITRIFIED BOND, TRIANGULAR PELLETS

- Double-sided grinding with two diamond wheels
- Grinding of parts from technical ceramics ( $\text{Si}_3\text{N}_4$ , SiC)
- Stock removal of ~0.5 mm of material from both sides of the workpiece



## CONTACT US FOR MORE INFORMATION

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## NOTES