

## ELECTROPLATED DIAMOND & CBN TOOLS

### Usage and machined materials

Electroplated diamond and CBN tools are used for grinding, cutting and drilling of various hard materials, like tungsten carbide, technical ceramics, cast iron, high-alloyed steel, stone, composite materials, glass-reinforced-plastics, etc. Such materials are found across full scale of industries - from mechanical engineering, through automotive, aerospace, to medical, food processing industry and many more.

These tools use a single-layer of superabrasive grits (diamond, or CBN) that are bound by a nickel-based alloy to the tool's core body by the method of electrolysis.

### Benefits of electroplated tools:

- Can be easily produced in complex shapes and geometries, compared to sintered tools
- Can be renovated multiple times by re-plating the core body with a new layer of superabrasive
- Can provide high material removal rates due to extremely hard and aggressive grits of superabrasives
- Lower tool wear compared to tools made out of conventional abrasives (SiC / Al<sub>2</sub>O<sub>3</sub>)
- Well-suited for dry-grinding applications due to very good thermal conductivity
- Keep constant shape during the tool's lifetime (EP tools work until the layer wears off and the tool has to be re-plated)

## AVAILABLE DIMENSIONS, SHAPES AND GRIT SIZES

Electroplated diamond and CBN tools vary significantly in shapes and sizes. *Please be aware that the below-mentioned dimensions are only orientational and it is always necessary to consult the design of each tool individually.*

### Outer diameter:

From 1 mm to 700 mm

### Grit size of superabrasive:

From 15 to 1182 microns

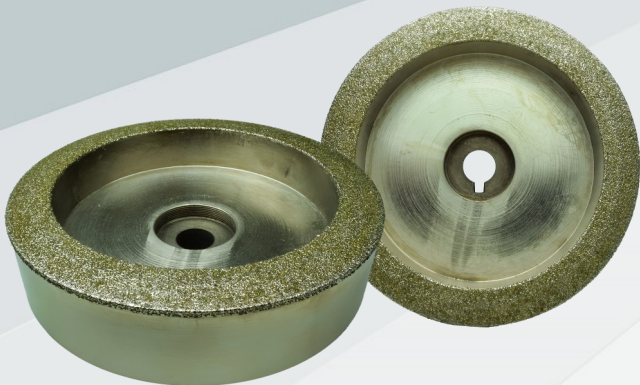
### Shapes:

Electroplated diamond & CBN tools can be used for almost every shape. Consult us for more information.

### Tolerances:

Tolerances depend on the customer's requirements. Please consult individually with us your required surface quality and tool productivity with regards to the tolerances.

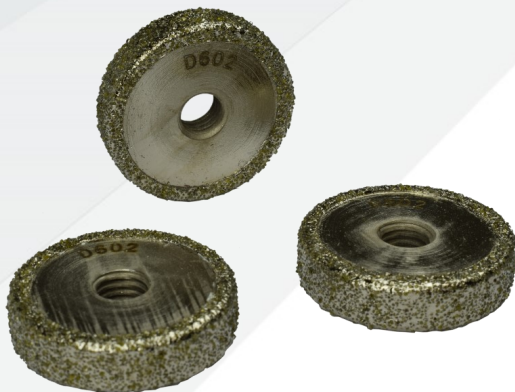
## APPLICATION EXAMPLES



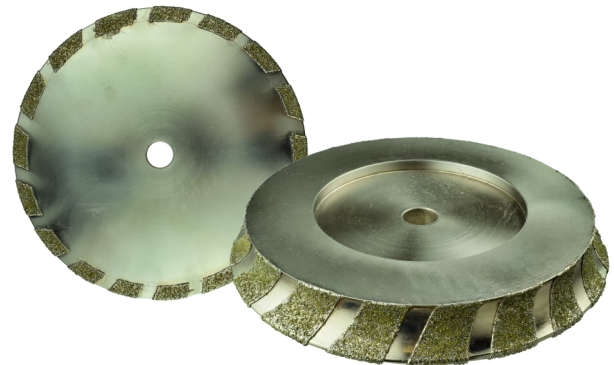
GRINDING WHEEL Ø250 MM, D1001 FOR CARBON BRUSHES



GRINDING WHEEL Ø60 MM, B251 FOR FLANGE REFURBISHING



DRESSING WHEELS Ø20 MM, D602 FOR SiC / Al<sub>2</sub>O<sub>3</sub> WHEELS



GRINDING WHEEL Ø215 MM, D1181 FOR SPONGES



VARIOUS PROFILE WHEELS FOR OPTICAL GLASS



GRINDING WHEEL Ø600 MM, D712 FOR CAST IRON



## CONTACT US FOR MORE INFORMATION

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