

# TECHNICAL CERAMICS

Technical ceramics and glasses are materials characterized by extreme hardness and brittleness. These materials are very difficult to machine using conventional manufacturing methods. Therefore, since 2005, Fuchshofer Präzisionstechnik GmbH has been offering the machining of 'Advanced Materials' on state-of-theart machining centers, with and without ultrasonic technology.



#### PROCESSING VARIABLES:

(Travel paths X/Y/Z)

- 450 x 650 x 460 mm
- 510 x 400 x 350 mm
- 650 x 520 x 475 mm
- 980 x 630 x 630 mm

#### AREAS OF APPLICATION:

- Semiconductor industry/ chip industry
- Chemical industry
- Medical technology
- Metrology
- · aerospace industry
- · General mechanical engineering

# MATERIALS TO BE PROCESSED:

#### Ceramic materials:

- Oxide ceramics
  - Aluminum oxide (Al2O3)
  - Zirconium oxide (ZrO2)
  - Mixed oxides (ZrO2/AlO3)
- Non-oxide ceramics
  - Silicon carbide (SSiC)
  - Silicon nitride (Si3N4)
  - Aluminum nitride (AIN)
- Silicate ceramics
  - cordierite
  - steatite
  - mullite

## Technical glass:

- Quartz glass (SiO2)
- borofloat

#### Glass ceramics:

- Zerodur®
- Macor

### **Tungsten carbide:**

- Tungsten carbide-cobalt carbides (WC-Co)
- Carbide grades for steel machining (WC-(Ti, Ta, Nb)C-Co)
- Cermets





