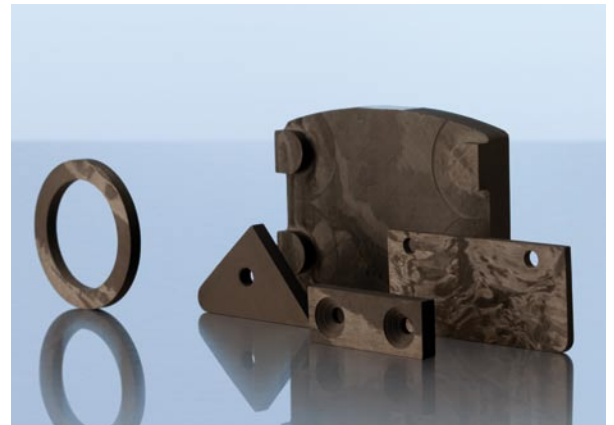


## FORTADUR™ – FIBER-REINFORCED GLASS

### Characteristics

- high thermal shock resistance
- high temperature stability
- low thermal conductivity
- high abrasive wear resistance
- high impact resistance and mechanical strength
- good chemical resistance
- low thermal expansion
- excellent heat insulation properties



Due to the outstanding characteristics FORTADUR™ is primarily qualified in hot handling.

Features	FORTADUR™ SiC-8252	In compare to unalloyed steel
Density (g/cm <sup>3</sup> )	2,5	8
Bending strength (MPa)	450	500
Maximum strain (%)	0.5 – 1	15
Fracture toughness (MPa m <sup>1/2</sup> )	25	50
Work of fracture (J/m <sup>2</sup> )	3.5 · 10 <sup>4</sup>	1.3 · 10 <sup>6</sup>
Young's Modulus (GPa)	110	210
Maximum application temperature (°C)	750	350
Thermal conductivity (W/Km)	1.5 – 3	
Thermal diffusivity (cm <sup>2</sup> /s)	0.008 – 0.016	
Thermal shock resistance (K)	> 450	

## Geometry of the semi-finished product

We produce semi-finished parts in forms of plates, disks and rings. The maximum sizes are:

Plates (length x width x height)	400 x 400 x 50 mm
Disks (outside diameter x height)	400 x 50 mm
Rings (outside diameter x height)	400 x 50 mm



The minimum height of the material is min. 3.0 mm (~ 0.1 inch).  
Special dimensions on request.

## Examples of possible design solutions

Take-out inserts, grippers, hooks, stripper plates, dead plates, positioning blocks, jaw chuck inserts, etc.

Our post processing center is specialised in the production of complex geometries.

## Fiber structures

FORTADUR™ is available in the following structures:

Fiber 0°/90° and randomly oriented fiber.

