

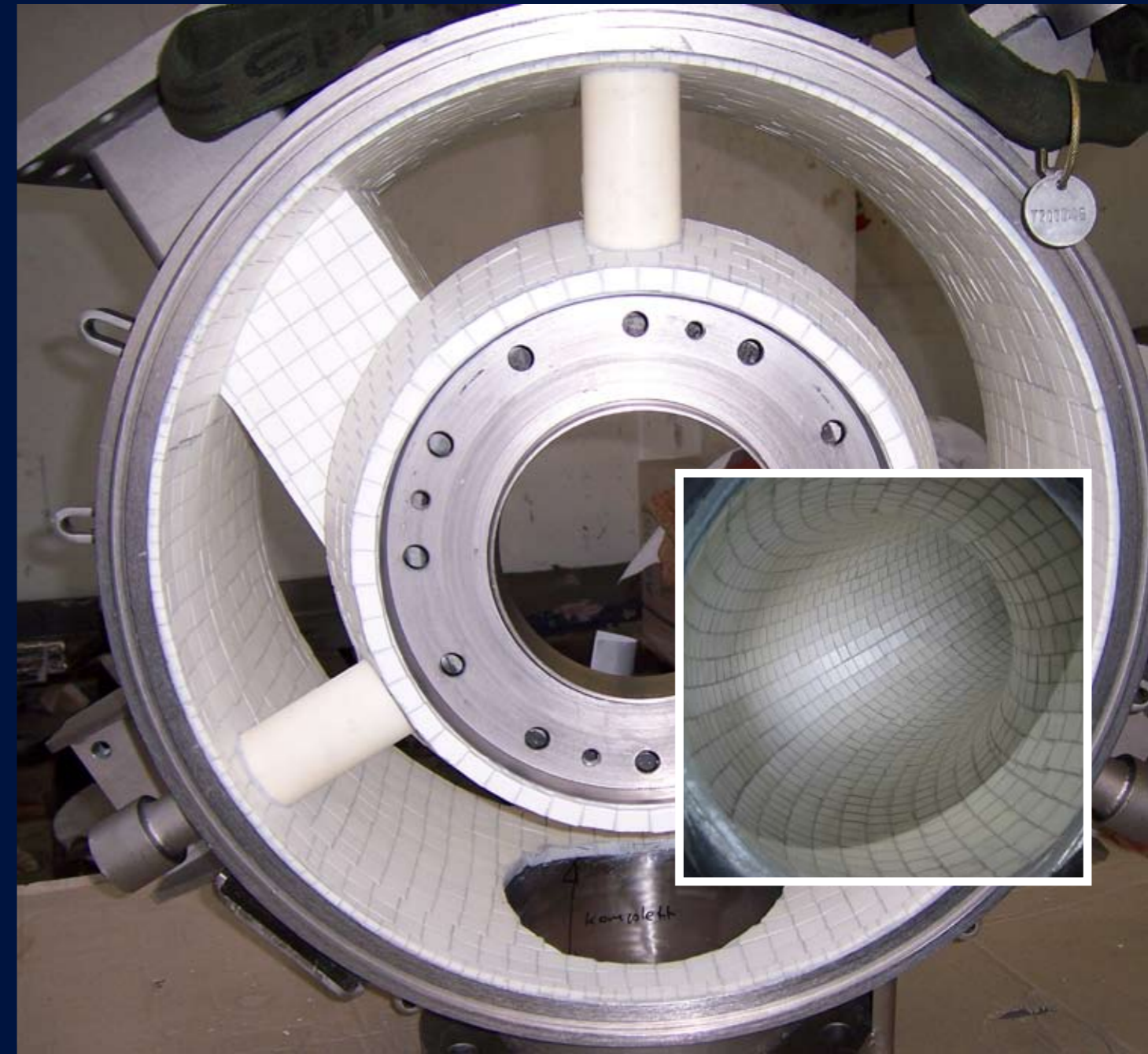
# Application areas

- Grinding systems
- Separator systems
- Cyclones
- Pipes
- Ducts
- Hooper
- Ventilator housing
- Mixer
- Chain conveyor
- Diffusor
- Dedusting systems for coal, ash, sinter
- Sinter slurry ducts
- High temperature cyclones
- Salt plants



*If you want to have more detail information about our product- and service program, please do not hesitate to contact us under follow address*

## Densit® Aluminium Oxide Ceramic



## Densit® Aluminium Oxide Ceramic

### Manufacture

The basic material for Densit® Aluminium Oxide Ceramic is extreme pure synthetic (Alpha) aluminium oxide. Today the best solution concerning wear protection and material costs, is aluminium oxide ceramic with a purity of 92%.

The most common production methods are pressing or casting. Slip cast is a simple method for manufacture of complex geometries.

Is the aluminium oxide ceramic pressed or casted in form, the next production step is the sintering by a temperature of approx. 1.500°C. Is the sintering process finished the aluminium oxide ceramic is highly dense and has no porosity.



Physical properties:		
Density	3,4-3,65	g/cm <sup>3</sup>
Porosity	0	%
Hardness	~ 9	
Compressive strength	> 3000	MPa
Bending strength	240 - 300	MPa
Coefficient of expansion	6 - 8 x 10 <sup>-6</sup>	1/K
Thermal conductivity	20 - 22	W/mK
Max. Temperature	1.500	°C

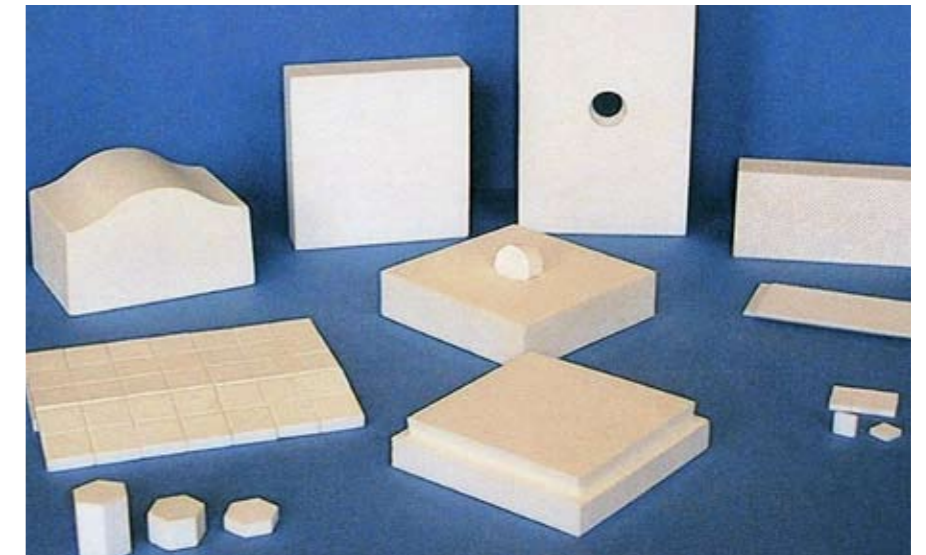
	Standard rectangle aluminium oxide tiles							
	Thickness of the tiles in mm							
	1,5	2	4	6	10	13	25	50
10 x 10								
20 x 20								
50 x 150						X	X	X
75 x 150						X	X	X
75 x 100						X	X	X
100 x 100						X	X	X
150 x 100						X	X	X
200 x 150								

### Products and form size

Based on the different manufacture methods we can produce nearly all geometries. Please aware that with the grade of complexity the cost of the necessary from raise also. Standard products are today tiles in different shapes and thickness and cylinders in different diameters and thickness.

#### Advantage of Densit® Aluminium Oxide Ceramic

- Manufacture of extreme thin parts
- Extremely smooth surface
- High hardness
- High process temperature possible
- High acid resistance



#### Standard sizes

- Rectangle plate with a length from 25 mm to 250 mm
- With a minimum thickness of 13 mm we can deliver tile with a bore
- Tile thickness from 6 – 50 mm
- Mosaic in rectangle or hex form with a site length of 20 mm or 25 mm
- Mosaic tiles with a thickness from 3 mm to 10 mm



#### Installation

- Gluing onto the construction
- Combination of cluing and mechanical fixing

#### Possible Clues

- Two components epoxy
- Silicon glue

#### Possible putty or cement

- High temperature putty
- Cement
- Refractory cement

