# **PT-CERAMIC®**

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OUR SOLUTION



## PT-CERAMIC®



Paper-Technological produced ceramic - utilizing the production capacity of an industrial paper-machine under use of synthetic, high-purity alumina as filler.

This ensures high quantities of high quality, thin alumina ceramic with good reproducibility.

#### Advantage of the technology

Paper-technological casting by corrugation, stamping and folding enables a great variety of structures. Due to their high percentage of void these structures have a low volume weight. Nevertheless a good mechanical strength is assured.

- Use of different, custom-designed fillers
   (alumina, mullite, cordierite)
- > Variable thickness
- Use of paper-technological casting technologies
   possible (corrugation, stamping, folding)

#### Advantage of the ceramic

- > High chemical purity > 99,5 % Alumina
- Good mechanical strength
- > Good thermal shock behavior
- > Size accuracy ± 0,1mm
- > Thin and light

### Light-weight construction for kiln furniture

- > Low weight of kiln furniture
- > Faster firing-cycles
- > Lesser energy consumption
- > Lesser CO₂ emission

### Future possibilities of application

- > Kiln furniture (Setter plates, plates, Trays)
- > Chem. industry (fillers, filters)
- > Electrical Engineering (flash-over protection, separator)

# TECHNICAL DATA

Basic raw material:	c raw material: Alumin	
Classification temperature:		1650°C
Continuous application:		1600°C
Porosity:	21,5 Vol-%	
Density (Liner):		2,95 g/cm³
Density (Dividers):	~ 0,5 g (variable)/cm³	
Chemical analyses fired (EN 955-2; 4):	Al <sub>2</sub> O <sub>3</sub>	> 99,5%
Maximum size (state of technology):	Liner	400×400 mm
	Divider	300 x 300 mm
Flexural strength at 20 °C:	Liner	130 MPa
	Divider	25 MPa
Flexural strength at 1500 °C:	Liner	n.a.
	Divider	6 MPa
Available Thickness (Liner):	0,65; 1,1 mm	
Thermal shock behavior (Liner):		very good

