## **KALOCER®** High Alumina Ceramics

**Protects Equipment and Parts** with Versatile Design Options



- KALOCER® high density alumina ceramic linings and tiles prevent destructive wear in conveying, processing, and storage equipment. Made from high purity, fine grain, alpha aluminum oxide, a material almost diamond hard, KALOCER can be formed in a variety of pre-engineered standard and custom sizes and shapes.
- Use where equipment tolerances or weight restrictions allow only a thin wear resistant lining.
- Configurations in thickness as low as 1 mm (0.04 in).
- Outlasts other products up to ten times.
- FDA approved.
- Multiple attachment methods, such as welding and a variety of adhesives.

- Protects high speed moving parts: impellers, fan blades, mixer plows, augers, screw flightings, conveyor screws, and more.
- Effectively handles severe abrasion in elbows with tight radii.
- Specify for existing systems or original equipment.
- Custom engineered for specific applications.

## **KALOCER®** High Alumina Ceramics

# Increases Equipment Life and Lowers Maintenance Costs

Kalenborn Abresist offers pre-engineered linings matched to each application.

#### Our services include:

- On-site engineering
- Complete steel fabrications
- Variety of attachment methods
- Installation assistance or supervision



	KALOCER® Properties	
Property	US	Metric
Density	215 lbs/ft <sup>3</sup>	3.4 g/cm <sup>3</sup>
Temperature Limit	1,832°F	1,000°C
Thermal Conductivity	125 (Btu·in)/(ft²·h·°F) @ 70°F	18 W/(m·K) @ 20°C
Thermal Expansion	4.6 x 10 <sup>-6</sup> in/in/°F @ 70°F - 1,500°F	8.3 x 10 <sup>-6</sup> K <sup>-1</sup> @ 20°C - 800°C
Thermal Shock Resistance	360°F/hr	200°C/hr
Compressive Strength	256,000 lbf/in2 @ 70°F	1,765 MPa @ 20°C
Bending Strength	40,000 lbf/in2 @ 70°F	275 MPa @ 20°C
Electrical Resistance	8.5 x 10 <sup>14</sup> Ohms - cm @ 0°C @ 100 volts	
Porosity / Water Absorption	0%	
Hardness, Moh's Scale	9 (Where Diamond = 10)	
Chemical Composition	Al2O3 ~90%	

Technical Data is the result of tests performed on selected samples, and some variations are to be expected. Kalenborn Abresist does not represent, warrant or guarantee the accuracy, completeness or reliability of same. Due to the production process, variations in the product may be expected. These include, but are not limited to dimensional tolerances, surface finish, voids, porosity and hairline fractures.

### Experience with:

- Bottom and fly ash
- Dried sewage fertilizer
- Limestone

- Ore
- Cement
- Sand
- Coal
- Grain
- Glass/cullet



#### Kalenborn Abresist Corporation

5541 North State Road 13, Urbana, IN 46990 Phone: 260-774-3327 • Toll Free: 800-348-0717 www.kalenborn.us • E-mail: info@abresist.com