

ABRESIST® Wear Resistant Linings

Extend The Service Life of Components That Move Abrasive Materials



ABRESIST® fused cast basalt linings are a mineral based, wear resistant material that protects material handling and processing components conveying abrasive materials. The pre-engineered ABRESIST linings and tiles are produced by melting volcanic rock, then casting into shaped tiles or cylinders, and annealing at carefully controlled temperatures to attain the desired hardness.

- Basalt linings can be used up to temperatures of 350°C/662°F.
- FDA approved.
- Standard cylinder sizes range from 40 mm to 500 mm internal diameter for pipes and bends.
- Highly effective in hydraulic and pneumatic conveying systems with some installations lasting more than 30 years.
- Production of virtually any shape or size lining.
- ABRESIST linings get smoother with use, ensuring good flowability and the avoidance of plugs, reducing pressure losses and lowering energy costs.
- Special tile shapes are made for larger pipe diameters, cyclones, chutes, separators and Archimedes type screw pumps.

ABRESIST®
Fused cast basalt

ABRESIST® Wear Resistant Linings

Significantly Reduce Maintenance and Downtime

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



ABRESIST Properties			
Property	US		Metric
Density	175 lbs/ft ³		2.8 g/cm ³
Temperature Limit	660°F		350°C
Thermal Conductivity	6.93 (Btu-in)/(ft ² ·h·°F) @ 70°F - 660°F		1.0 W/(m·K) @ 20°C - 350°C
Thermal Expansion	3.9 x 10 ⁻⁶ in/in/°F @ 70°F - 660°F		7 x 10 ⁻⁶ K ⁻¹ @ 20°C - 350°C
Compressive Strength	65,300 lbf/in ² @ 70°F		450 MPa @ 20°C
Bending Strength	4267 lbf/in ² @ 70°F		30 MPa @ 20°C
Electrical Resistance	10,000 Ohms @ 3 Volts and 1.0 mm		
Porosity / Water Absorption	0%		
Hardness, Moh's Scale	8 (Where Diamond = 10)		
Chemical Composition:	SiO ₂	46%	CaO 10%
	Al ₂ O ₃	14%	MgO 10%
	Fe ₂ O ₃ /FeO	14%	

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
- Ore
- Coal
- Dried sewage fertilizer
- Cement
- Grain
- Limestone
- Sand
- Glass/cullet



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