

Ceramite® Trowellable

Superior Performance in Wear Resistant Applications

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During 1980 Elkem Materials, Norway developed a high wear resistant material "Ceramite®" for lining of pipes to transport abrasive powders. Ceramite® covers a group of advanced castables exhibiting unique properties, such as extreme accuracy of casting, high abrasive wear resistance, mechanical strength and good resistance to high temperature, including applications exposed to thermal shock conditions. Ceramite® is easy to mix, cast and shape in any size and is easy to work with in-situ, using the trowellable formulation.

The key component of Ceramite® is Microsilica developed by Elkem. Microsilica (Silicon Oxide - SiO₂) is an amorphous silica product derived from the production of Ferro Silicon and Silicon Metal. Microsilica consists of ultra fine, sub-micron particles and is amorphous and thus very reactive. The average particle size is well below 0.15 micron in diameter, meaning that each microsphere is 100 times smaller than an average cement grain.

CERAMITE® PROPERTIES & QUALITIES

- ↪ Ceramite® covers a group of advanced castables with ultra-high wear properties and mechanical strength.
- ↪ Ceramite's® high density provides low porosity against chemical attack and gases.

↪ Ceramite® provides unique heat resistance with temperatures up to 2200°F (1204°C).

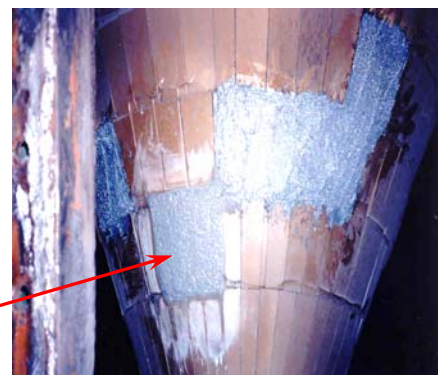
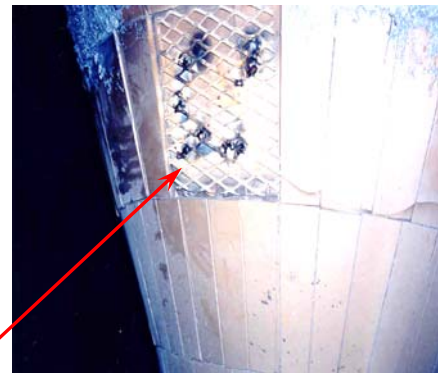
↪ Ceramite® is a technology adapted to high quality blends of bauxite and silicon carbide aggregates.

↪ Ceramite® increases the operating lifetime of refractory and metallic parts.

TROWELLABLE

Ceramite® Trowellable can be installed using "V" anchors, anchor/mesh combinations or whatever method contractors and/or your customer has used previously. The quality of anchor and mesh is normally carbon steel.

Ceramite® Trowellable qualities have been used to replace hardened steel, fused cast basalt, rubber liners and ceramic tile. Wear resistance is superior. The key feature of Ceramite® Trowellable is the elimination of any and all joints that are the area first attacked by abrasive conditions and the beginning of a failed section. Ceramite® Trowellables mix to an easily applied consistency and have received favourable comments from installers as "easier to work with than _____" (fill in previously used material here). Ceramite® Trowellables are used extensively in the aluminum, ferrous, cement and power generation industries.



SIGNIFICANT ATTRIBUTES

- ↪ High abrasion and corrosion resistance
- ↪ Trowel application can be installed overhead
- ↪ Seamless linings
- ↪ Mechanical anchoring ensuring lining stability
- ↪ Will conform to whatever shape is required
- ↪ 1/2" - 1 1/4" thicknesses are sufficient
- ↪ Field mix with a paddle mixer or 3/4" H.P. drill and Jiffler mixer
- ↪ One year shelf life

INDUSTRIES SERVED

- | | | | |
|-----------------|--------------------|------------------------|---------------------------|
| ↪ Refining | ↪ Non-Ferrous | ↪ Zinc | ↪ Precast Manufacturing |
| ↪ Rock Products | ↪ Die-Casting | ↪ Boiler Manufacturing | ↪ Mineral Processing |
| ↪ Chemical | ↪ Power Generation | ↪ Primary Aluminum | ↪ O.E.M. Furnace Builders |
| ↪ Steel | ↪ Incineration | ↪ Secondary Aluminum | ↪ Cremation |