

Ceramite® Case Study: Waste to Energy Incinerator

Superior Performance in Wear Resistant Applications

Bulletin 0166

All Industries

01/07

Ceramite® BKR Waste Incinerator Feed Chamber Lining

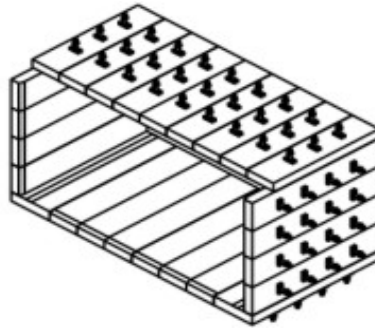
Ceramite® is a family of advanced ceramics that incorporate inorganic composite materials & densely packed micro particles. Ceramite® is formulated to yield high abrasive wear resistance, excellent mechanical strength, resistance to high temperature and resistance to thermal shock conditions. Ceramite® cast, hi-fired shapes are designed and produced to your specific application.

A major energy from waste producer in Ontario, Canada currently has five incinerators. The garbage feed stream had traditionally been rammed through a water cooled steel jacket as it entered the incinerator. The intense abrasion coupled with temperature exposure resulted in numerous leaks in the water cooled jacket and necessitating costly downtime.

Ceramite® was the obvious choice for temperature and abrasion resistance. Our design team was challenged to design a mechanical anchoring system which would prevent cracking from thermal expansion while maintaining tight tolerances not allowing penetration from the garbage liquids.

In October of 2006 this system of Ceramite® BKR tile were installed in the feed chamber of one of the incinerators, replacing the steel jacket and the potential for leaks. Three months into operation and the Ceramite chute is performing very well.

Downtime and costly repairs have been eliminated.



Design & Fabrication



Tile Installation



A Nice Tight Fit

A happy customer - The second Ceramite® chute is currently scheduled to be installed in February of 2007.

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 |