

A Material for many Applications...

Abrasion Resistant KALCERAM Hard Ceramics with Good Sliding Properties



KALCERAM Hard Ceramics is particularly suitable where moderate abrasion is encountered and the extreme wear resistance of higher quality linings cannot be economically justified.

For this reason KALCERAM is used in some system components in coal-fired

power stations, refuse incineration plants, coking plants, processing plants, potash mines, steel works, chemical plants, quarries, ceramics factories, glass works, cement works, lime plants, etc.

Clay, kaolin, feldspar and sand are used as raw materials for the manufacture of KALCERAM. Particular emphasis is placed on the abrasion resistance of the finished tiles when establishing the composition of these materials. That is why KALCERAM is so different from other commercially available tiles.

KALCERAM tiles are normally supplied in a thickness of 15 mm, although other sizes between 10

and 25 mm thick are available. 10 mm thick tiles are available in a 100 x 100 mm size; tiles thicker than 10 mm are supplied in a 150 x 150 mm format.

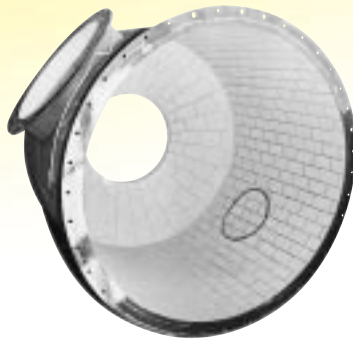
KALCERAM

Hard ceramics for plant components subject to moderate wear, e.g. coal bunkers and chutes, fine coal troughs, thickeners and chain conveyors.

- Installation: made-to-measure tiles are laid either in cement mortar or KALFIX synthetic mortar.
- Application temperature: up to 350° C.
- Advantages: wear resistance, smooth surface.

When the Wear Rate is Limited:

KALCERAM for Coal Bunkers, Fine Coal Troughs, Concentrators and Chain Conveyors



Even conical surfaces can be lined as required with cut KALCERAM tiles.



Chutes lined with KALCERAM are a solution that lasts, e.g. for bag loading systems in cement plants.

Bunkers and Silos

Concrete and steel bunkers can be lined with KALCERAM. The tiles are laid in cement mortar. Where high temperatures or chemicals are involved, special adhesives are used.

Lining gussets in bunkers presents no problems using KALCERAM tiles, provided they are cut to shape and laid by trained personnel. Hopper discharge chutes in every possible shape can be protected simply and easily.

Chutes, Troughs and Chain Conveyors

Spiral chutes with ceramic abrasion protection have been introduced in all sorts of manufacturing processes. Spiral chutes transport the material with the minimum of degradation.

In drag chain conveyors, both the trough itself and the chain return can be protected using KALCERAM. The design should include wire mesh spot-welded to the

steel trough to provide a better anchorage for the mortar on the steel.

Example of KALCERAM in use in the cement industry: A double-sided 30° bagging chute lined with 15 mm thick KALCERAM tiles laid in a 5 mm bed of KALFIX synthetic resin.

Mixers and Vessels

Mechanical wear at the walls of mixers and vessels is an additional factor to be considered when dealing with chemical processes. KALCERAM tiles, laid in a suitably resistant mortar, offer reliable protection for this equipment.

Cyclones, Separators, Sifters

The conical discharge section of the separator base is protected with a KALCERAM lining. The inner cone is exposed to more severe abrasion and is lined with the tougher ABRESIST fused cast basalt.



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