

KALCRET in Action:
of Wastewater Channels



Wastewater is conveyed to a settling basin via a screw conveyor that runs through a nine-meter-long trough. The transported solids such as sand, rock, or trash along with the simultaneous exposure to chemical substances cause significant wear.

The trough's existing concrete lining was severely damaged.

With KALCRET, the affected areas could be repaired quickly and cost-effectively. The customer benefited from a significantly longer service life compared to conventional concrete rehabilitation.



KALCRET in Action:
Sustainable Paper Production



One of Europe's leading paper manufacturers is using a combined heat and power plant as part of a modernization effort to recover energy from production waste. Sustainable paper production is clearly a top priority for the company.

A pre-separator in the flue gas cleaning system filters out coarse dust particles. A KALCRET lining extends the service life, ensures plant availability, and helps the flue gas cleaning system comply with strict emission limits.

Scan the QR code to read application examples for wear protection



A pre-separator in the flue gas cleaning



Checker plate with KALDETECT indicator blocks for wear protection monitoring



KALCRET.
Quality Made in Germany.



Kalenborn produces 4,000 metric tons and more of KALCRET annually in Germany and is committed to continuously optimizing the properties and manufacturing processes of its materials.

Through material testing and wear tests **conducted in our in-house laboratory** in accordance with international standards which can be independently verified we ensure the product quality and durability of KALCRET.

Throughout the project, samples can be taken for quality assurance to ensure the correct processing conditions during installation.



Scan the QR code to find the contact address

kalenborn.com

KALCRET
Hard Compound



KALCRET: Wear-Resistant High-Performance Concrete

KALCRET is a wear-resistant high-performance concrete consisting of durable hard materials in a high-strength cement matrix. The improved compound is tailored to specific requirements and provides maximum resistance to erosion and abrasion.

KALCRET is the leading cement-bound hard material compound on the market.

KALCRET combines excellent wear protection properties with ease of use. The particular advantage of all these compounds is their flexibility in practical applications. Large surfaces can be coated quickly and reliably, ensuring that plant availability is restored in a short time. KALCRET is suitable for lining plant components and piping systems, including in environmental technology such as air and water filtration plants, in waste-to-energy plants, in power plants, in building materials and cement plants, and in the steel industry.

Simple and Versatile to Use



KALCRET trowelled compound. This compound provides protection of horizontal, vertical, canted and curved surfaces. Compound can also be safely applied overhead.



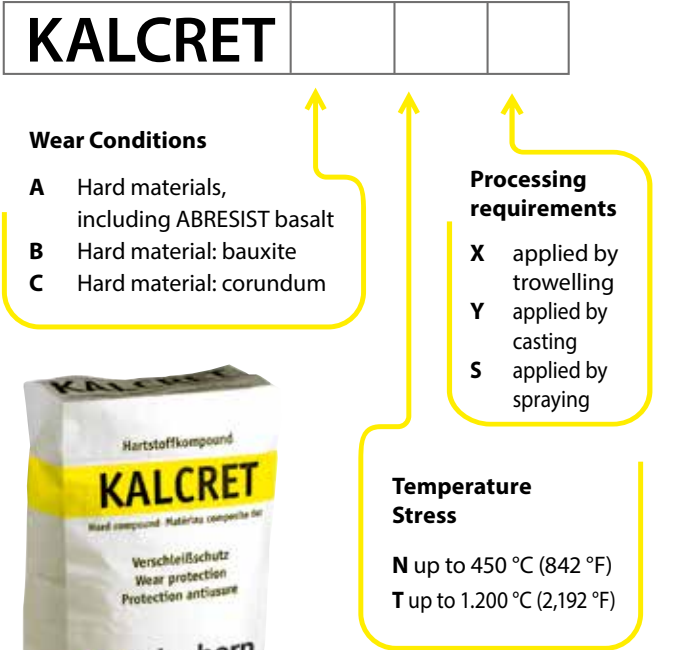
KALCRET casting compound. KALCRET poured mix is the material of choice when at flat surfaces are to be protected from wear or when it is possible to use formwork.



KALCRET sprayed-on compound. KALCRET spray-on compound allows large surfaces to be lined in a minimum of time. Spraying can be done horizontally and vertically. Overhead working is feasible without problem.

The Right Variant for Every Application

Depending on the wear load, operating temperature and application method, the KALCRET variants cover a wide range of applications.



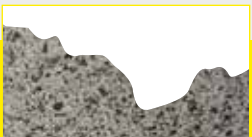
KALCRET meets strict requirements in accordance with international wear tests for erosion resistance per ASTM-C704-15 and abrasion resistance per Böhme DIN 52108 and ASTM G65.

Best Performance on the Market

Erosion wear according to ASTM C704-15



KALCRET BTY
< 3,8 cm³



Commercially available products
4-6 cm³

Less volume loss means better erosion resistance.

Abrasion wear according to Böhme DIN52108



KALCRET CTX
0,5-1 cm³/50cm²



Commercially available products
1-1,5 cm³/50cm²

Less volume loss means better abrasion resistance.

KALCRET-Advantages at a Glance

- high strength and wear resistance to sliding friction
- large surface lining
- application by trowelling, casting and spraying
- lining thickness depending on the stress due to wear
- can be used after 24 hours
- suitable for temperatures up to 1,200 °C / 2,152 °F
- high thermal shock resistance
- even complicated geometries are feasible
- easy overhead working
- ideally suited for repairs
- very good combination with all other materials possible
- can be installed at the site by locally available staff