

KALDETECT Wear Detection Monitor System

Electrical, Pneumatic or Mechanical Systems to Monitor Abrasion / Wear from Abresist

Even superior wear resistant linings do not have unlimited lifetimes, especially in cases of extremely abrasive materials and harsh operating conditions. This can become critical, e.g. when for environmental protection reasons, certain harmful materials cannot be allowed to pollute the environment. Watch the video.

For example: pneumatic conveying lines within waste incineration plants that are designed for the incineration of hazardous waste. The leakage in a conveying line as a result of unexpected abrasion would cause dangerous or environmentally harmful substances to be released.

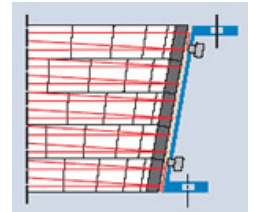
For these and other cases, systems are offered that monitor possible wear in the lining before material leaks into the atmosphere or soil.

Ideal for material combinations

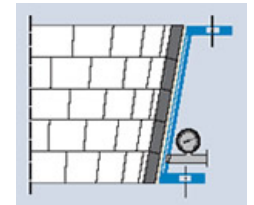
KALCRET is also fit for combination with other materials from the Abresist Kalenborn wear protection program, such as with: ABRESIST® fused cast basalt, KALCOR® zirconium corundum and KALOCER® High Alumina Ceramics.



Electrical Wear Detection - The wear resistant lining is fitted on the outside with a low voltage electrical circuit. If the wear resistant lining wears through due to abrasion, the electrical circuit will be interrupted. Options in the electrical circuit design will allow the system to initiate an alarm with an indication of the relevant lined section or shut down the plant automatically. The electrical wear detection is available for all of the wear resistant materials and also for combined linings of any plant components.



Pneumatic Wear Detection - The steel casing is twin-walled. With changes of the pressure level in the space between the two walls caused by a leak, an indicator or alarm will be activated or the plant will be shut down. This system can be used for single components or complete systems.



Mechanical Wear Detection - A serrated wear-measuring tape is placed in a continuous groove of the abrasion resistant lining. The width of the visible saw tooth is an indication of the condition of the protective lining. Additionally, the wear resistant lining can be fitted with a borehole. The length of an indicator pin installed in the hole monitors the thickness or condition of the protective lining when removed and inspected.

