CERAMIC WEAR PROTECTION MATERIALS FOR ANY KIND OF OPERATIONAL STRESS

SC-CAST BASALT

Areas of use
- protection against abrasive wear during transport, preparation, processing, storage of medium-sized to coarse bulk material with high abrasive stress, at an operating temperature of up to 350 °C

Applications
- piping, trenches, chutes, chain conveyors, cyclone separators, tanks, bunker

Advantages
- extremely abrasion resistant
- smooth surface which improves easy flow
- resistant to corrosion and moisture
- resistant to acids

SC-HARD CERAMIC

Areas of use
- protection against abrasive wear caused by fine grained bulk material conveyed with medium abrasive stress, at an operating temperature of up to 500 °C

Applications
- flotations, trenches, chutes, chain conveyors, cyclone separators, tanks, vessels, bunker

Advantages
- smooth surface which improves easy flow
- high abrasive and pressure resistance
- resistant to acids and alkalis
- frost resistant and resistant to corrosion

SC-ALUMINA CERAMIC

Areas of use
- protection against abrasive wear with high abrasive stress, for any kind of bulk material, at an operating temperature of up to 1.550 °C

Applications
- piping, flotations, trenches, chutes, chain conveyors, cyclone separators, tanks, vessels, bunker, nozzles

Advantages
- highest level of strength and hardness
- high corrosion resistance
- available in very thin wall thicknesses

SC-ZIRCONIA CERAMIC

Areas of use
- protection against abrasive and impact wear with high abrasive stress, for any kind of bulk material, at an operating temperature of up to 1.000 °C

Applications
- classifier, cyclones, piping, tanks, vessels

Advantages
- exceptional wear resistance
- high hardness
- flexible shaping options
- flexible fastening methods

SC-SILICON CARBIDE CERAMICS

Areas of use
- protection against high abrasive and impact wear with extreme abrasive stress at high operating temperatures of up to 1.700 °C with extreme temperature fluctuations, for any kind of bulk material

Applications
- special piping, pulverized fuel piping, lining of fans, melting flumes, hydro cyclones, nozzles

Advantages
- excellent resistance to temperature fluctuations and thermal shocks
- high hardness, high temperature conductivity

SC-WearStop®

Areas of use
- protection against abrasive wear when temperature fluctuations are closely spaced, at an operating temperature of up to 1.200 °C, for any kind of bulk material

Applications
- classifier, cyclones, mechanical conveyor systems, piping systems, flue gas ducts, tanks, transition areas

Advantages
- very cost effective
- high hardness and abrasion resistance
- permits lining without joints even of complex geometric shapes

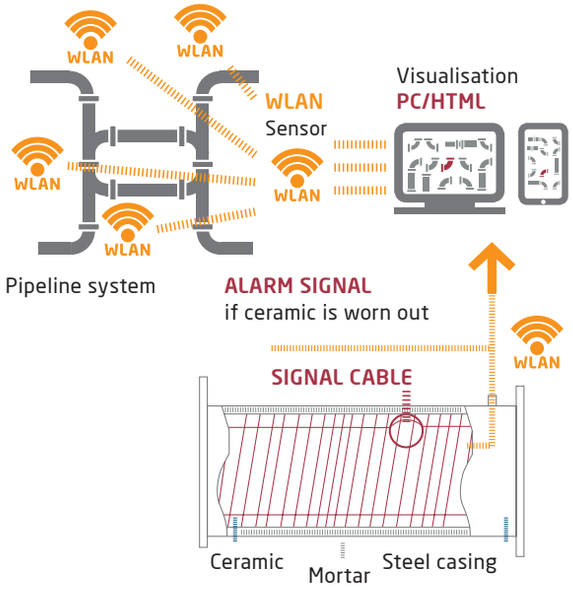
NO CHANCE FOR ABRASION.

TH. SCHOLTEN GMBH & CO. KG

EARLY WARNING LEAK DETECTION SYSTEM - ON THE SAFE SIDE VIA WLAN

Leakages are not only very annoying, they can also incur enormous costs. Professionals estimate for example that a leakage in a pneumatic transport system may well cause annual costs for the energy loss alone - given a 3 mm size hole and a pressure of 8 bar - in a range between 3.000 and 10.000 EUR. Abrasion particularly affects curved pipes and bends which transport highly abrasive materials.
The best remedy for such applications is to implement a complete package consisting of a ceramic lining inside the piping and our all-in leak detection system. Throughout all areas subjected to wear, the ceramic cylinders are wrapped with a signal cable, the signals then being visualised.

ALARM SIGNAL VIA WLAN



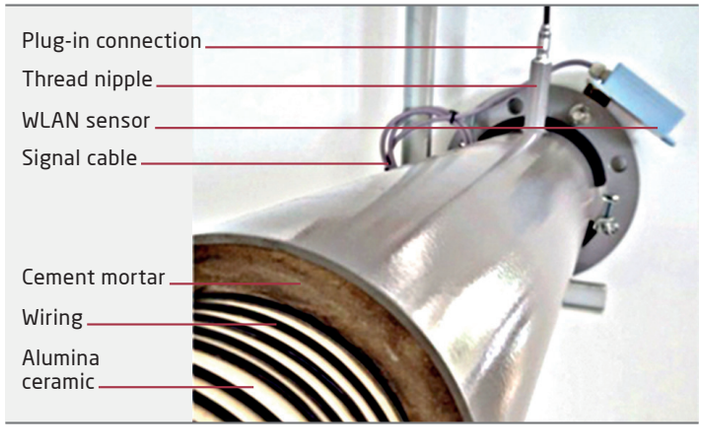
With the complete Scholten package "wear protection plus leak detection", you are on the safe side with regard to ATEX and pressure equipment directives, as well.

IMMENSE SAFETY - DAY AND NIGHT

If the ceramic is destroyed by wear e.g. inside a pipe bend, the sensor system reacts without delay. During the visualisation, the pipe component is displayed and the information required for obtaining a spare part is indicated. Frequently, the repair can be carried out during standby mode, so that a shutdown of the plant - involving further losses in time and production - can be avoided.

- recording of up to 1.000 sensors per remote station
- subsequently upgradeable
- operating range of sensor to remote station 400 mtrs (50 - 80 mtrs within buildings)
- range can be increased by using several remote stations or repeater
- sensors work without external voltage source (battery-powered up to 5 years)

FUNCTIONAL STRUCTURE



Our specialists plan, produce, supply and install this safety package as an all-in solution. Wear protected pipe systems and further monitored plant components such as e.g. cyclones - all from one single source.

WE ARE ACTIVE IN MANY DIFFERENT INDUSTRIES

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