

Ceramic wear protection materials for any type of wear



SC Zirconia ceramic

Ideal for cases of

- _ strong abrasive wear
- _ any kind of bulk solids
- _ service temperature up to 1000°C

Advantages:

- _ exceptionally high wear resistance
- _ high hardness
- _ flexible shaping and mounting possibilities

Areas of application:

cyclones, separators, piping

SC Alumina ceramic

Reliable in cases of

- _ strong abrasive wear
- _ any kind of bulk solids
- _ service temperature up to 1500°C

Advantages:

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

Areas of application:

separators, piping, cyclones, screens, nozzles, diffusers

SC Silicon carbide ceramic

Valuable in cases of

- _ strong abrasive and impact wear
- _ extreme temperature changes
- _ service temperature up to 1700°C

Advantages:

- _ excellent resistance to temperature changes and thermal shocks
- _ high hardness, high temperature conductivity

Areas of application:

pulverized fuel piping, melt chutes, hydrocyclones, nozzles, vent linings

SC Hard ceramic

Suitable in cases of

- _ medium-level abrasive wear
- _ fine-grain bulk solids
- _ service temperature up to 500°C

Advantages:

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

Areas of application:

flotations, separators, chutes

SC Wear-Stop®

Economical in cases of

- _ abrasive wear
- _ frequent temperature fluctuations
- _ service temperature up to 1200°C

Advantages:

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

Areas of application:

separators, cyclones, piping, mechanical conveyors

SC Cast basalt

Time-tested and economical in cases of

- _ high abrasive wear
- _ transport of medium to coarse materials
- _ service temperature up to 350°C

Advantages:

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

Areas of application:

piping, cyclones, separators, bunker, chutes



Foundry | Steel



Minerals



Cement



Coal

We're beating the drum ...

... for mastering the extremes of drive drums and return pulley drums. A ceramic/steel bonding with a special bonding procedure



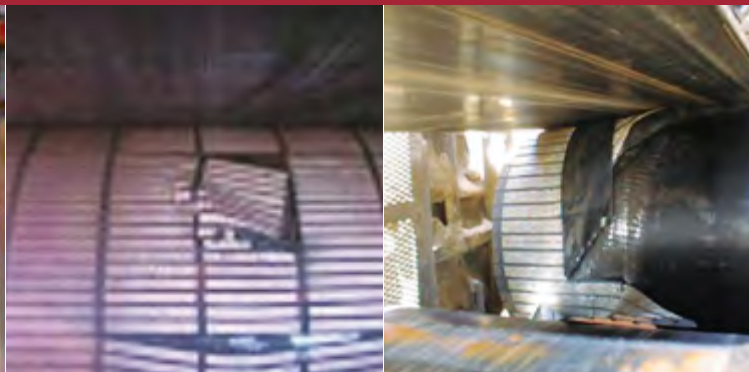
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Special bonding procedure in a construction tent



Rubber coatings may shear off

With a special epoxy bonding system, highly wear resistant ceramic elements (alumina ceramic) are bonded directly onto the steel surface. This procedure guarantees an enormous shearing strength of the composite construction, high durability of the drum and low wear of the conveyor belt.

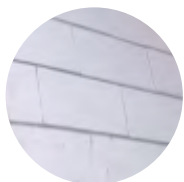
The ceramic surfaces can be matched in a perfect way to the different service conditions. Two examples outline this:



Ribbed ceramic for:

- _ abrasive bulk solids
- _ dry/wet media
- _ high slippage

The drainage grooves create a self-cleaning process of the drum surface. The ribbing increases the grip.



Smooth ceramic for:

- _ adherent bulk solids
- _ moist/sticky media

Advantages compared to rubberized composite constructions:

Extreme and fluctuating stresses to the conveyor belt cause very high shearing forces on the drum surface which may cause the rubber/ceramic system to shear off to a widespread extent.

Th. Scholten GmbH's special composite system with its direct bonding of the ceramic onto the steel drum achieves an enormously high shearing strength, leading to a long service life.

Our service:

We line any type of drive drums, return pulley drums and transport drums with steel surfaces. We protect new and used drums, either in our plant or in suitable site workshops.

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Made in Germany 

Abrasion erodes your profits.
We manage wear protection.

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