



## CASE STUDY – LINASHIELD THERMOPLASTIC POLYURETHANE

**OSBORN ENGINEERED PRODUCTS, BOKSBURG,  
RSA**

### AT A GLANCE CHALLENGES

- Daily downtime of roughly 2 hours/day
- Grit stuck between the track and recirculation chutes

### BENEFITS

- Highest abrasion resistance compared to traditional linings
- Low co-efficient of friction (non-stick liners)
- Elasticity in broad temperature range
- High tear resistance
- No skin irritation
- No plasticizers, so enhanced longevity compared to rubber
- Perfect for welding & bonding
- Excellent low-temp impact strength
- Lasts longer than rubber linings, reducing downtime and contributes to cost savings
- Reduces vibration
- UV resistant

### PROBLEM DESCRIPTION

Osborn Engineered Products is a leading name in global mining and quarry markets, providing a full range of engineering products, including crushers, feeders and screens, further specialising in crushing and screening plants.

In the shot-blasting bay, shot-blasting grit gets stuck in between the track and the recirculation chute. This causes downtime of 2 hours per day for cleaning.

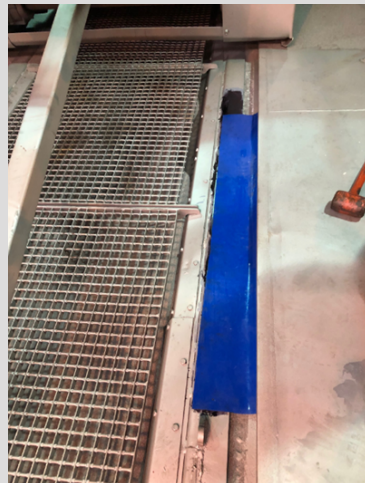
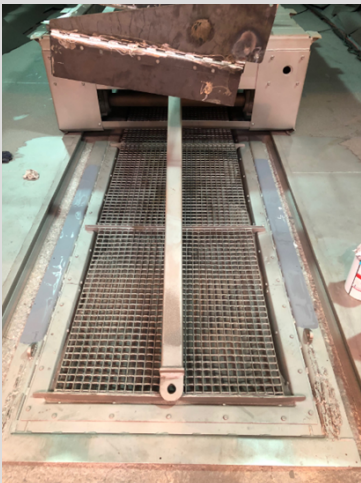
### SOLUTION

LinaShield 5mm was tested next to the tracks and recirculation chute on a mild-steel backing. The glue used was SC-24 with a hardener from Eltim Engineering. LinaShield was installed to cover this area and seal it off, level to the tracks.

This result showed no further steel grit getting stuck between the tracks, thereby allowing the machine to run all day, with zero downtime. This proposed solution would also assist with reducing the time for cleaning.

### TEST RESULT

Success. LinaShield is still in place after 6 weeks. The time and operational savings to Osborn are significant and on-going.





## CASE STUDY – LINASHIELD THERMOPLASTIC POLYURETHANE

**OSBORN ENGINEERED PRODUCTS, BOKSBURG,  
RSA**

### AT A GLANCE

PRODUCT:	LinaShield Thermoplastic Polyurethane Insitu Lining
LOCATION:	Osborn Engineered Products, Boksburg, RSA
PRODUCT DESCRIPTION:	5mm Linashield on mild steel placed alongside tracks in shot blasting bay
SHORE A HARDNESS:	85°
APPLICATION:	3mm Linashield glued to mild steel to cover and reduce downtime in shot blasting
MATERIAL SHOT IN BAY:	Shot blasting steel grit
MAXIMUM PARTICLE SIZE:	Steel grit size 0.8mm
INSTALLATION DATE:	8 October 2019 – end July 2019

### TEST RESULT:

Successful – the Linashield is still in place

### ADDITIONAL INFORMATION – LINASHIELD


#### OTHER APPLICATIONS:

Wear linings | Cyclones | Screens | Belts |  
Conveyors | Dump truck linings | Wagons | Silos |  
Chutes | Feeding channels | Magnetic separators |  
Cones | Hoppers | Crushers | Sorters | Skips | Bins  
| Slurry Channels....  
and MANY more

#### TYPICAL INDUSTRIES:

- Mining
- Mineral processing plants
- Bulk material handling equipment
- Thermal power stations
- Transportation
- Agriculture (grain storage & handling)
- Food & Feed Processing
- Construction
- Aggregates
- Earth Moving Equipment

 [info@perspex.co.za](mailto:info@perspex.co.za)

 087 097 0111

Case Study conducted in partnership with

