

CASE STUDY –

LINASHIELD THERMOPLASTIC POLYURETHANE

IRON ORE MINE, RSA

AT A GLANCE CHALLENGES

- The current rubber solution has a lifespan of 6–8 weeks
- Frequent shutdowns to effect repairs

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

The customer has been using natural 12mm rubber from a reputable supplier for a number of years in their JIG separation plant. The rubber solution has a life of approximately 6 to 8 weeks. This results in frequent, premature shutdowns of the system to effect temporary repairs to their reducers.

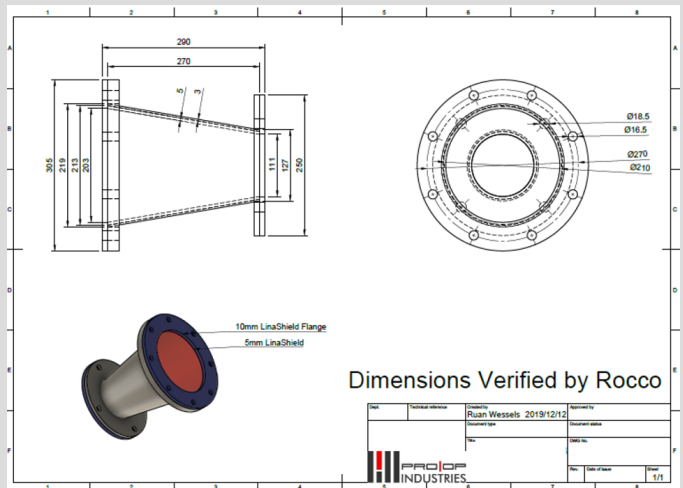
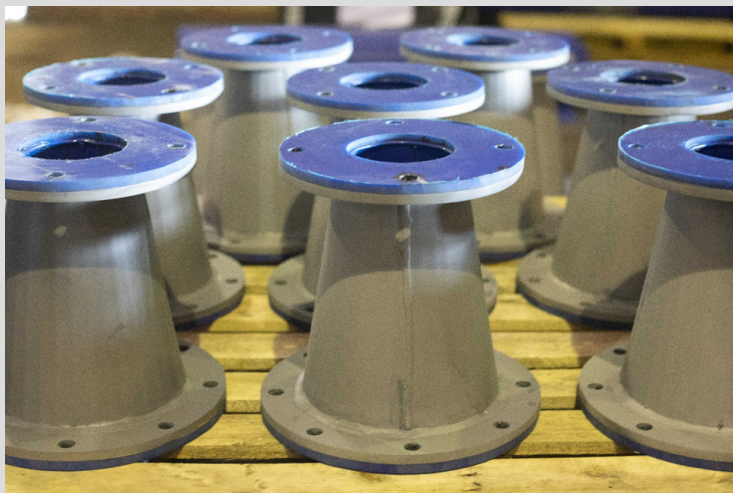
SOLUTION

A 5mm LinaShield lining was glued in the inside of distance piece pipes together with 10mm LinaShield Flanges. The glue used was Topstick PL.

The distance piece pipes were manufactured by Pro-Op Industries.

TEST RESULT

Successfully manufactured and delivered. The wear life of the Linashield lined reducers was 20 weeks at the time of writing the report.





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PRODUCT:	LinaShield Thermoplastic Polyurethane
LOCATION:	Iron Ore Mine, South Africa
PRODUCT DESCRIPTION:	10mm flange and 5mm Linashield pipe Lining glued to NPS 7" steel pipes
SHORE A HARDNESS:	85°
APPLICATION:	Slurry - Linashield lined reducers
MAXIMUM PARTICLE SIZE:	-12mm
INSTALLATION DATE:	February 2020

TEST RESULT:

Successful - 8 weeks and counting

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

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Case Study conducted in partnership with

