



GoldLine® Premium 38

MINING AND MINERAL PROCESSING

PREMIUM NATURAL ABRASION RESISTANT RUBBER SHEETING

www.trelleborg.com/fluidhandling



The GoldLine® sheet rubber range provides unparalleled wear performance in the most challenging abrasive slurry applications.

With a history dating back to 1905. Rubber chemists at Trelleborg are acknowledged around the world as the foremost authority in the development of polymer solutions that seal, damp and protect in the most demanding environments and applications.

Arduous applications encountered throughout the mining and mineral processing industry are no exception. Dealing with abrasive process slurry is a daily challenge for mineral processing operations around the world. The need for plant availability 24 hours a day, 7 days a week, for 365 days of the year is paramount.

GoldLine® Premium 38 rubber is a proprietary vulcanised natural rubber manufactured in sheet format developed to deliver outstanding wear performance in process slurry applications operating above ambient temperatures. Using high quality natural rubber, GoldLine® exhibits outstanding physical and mechanical properties resulting in superior performance in wet abrasive mineral slurry applications.

Trelleborg's continued performance advantage across the rubber industry lies in our well proven, proprietary rubber formulations and state of the art rubber production facilities that have kept us ahead of the game since 1905.

The wear performance of GoldLine® Premium 38 abrasion resistant rubber sheeting from Trelleborg will keep your mineral processing operations ahead of the cost curve by reducing operational downtime with lower total ownership costs.

LINED PRODUCTS

GoldLine® Premium 38 rubber range is not only durable. It is exceptionally versatile and a suitable selection for rubber lining a variety of steel surfaces exposed to slurry abrasion in mineral processing plants.

Typical lining applications in mineral processing applications include:

- Chute lining
- Hopper lining
- Launder lining
- Vessel lining
- Pipe spool lining
- Tank lining
- Agitation shafts & blades
- Mill trunnions
- Mill trommel frames
- Screen underpans
- Thickeners
- Tailings pipework
- Slurry hose.

GoldLine® is applied to these surfaces to protect them from slurry abrasion using cold bonding adhesives and application techniques developed by Trelleborg.

Available in a range of sheet rubber thicknesses it can be cut into any shape and bonded to steel surfaces requiring protection from slurry abrasion of any geometrical complexity.

Supported by a worldwide network of technical experts. Trelleborg's distributors and applicators are fully trained and qualified to complete rubber lining scopes of work to suit your requirements.



ABRASION PERFORMANCE

SETAT® Submerged Elevated Temperature Abrasion Testing

Historically, rubber compounds have been ranked, specified and selected based on a wet version of the ISO 4649 / ASTM D5963 dry abrasion test method. The SETAT® test cell developed by Trelleborg Mining goes much further in its rubber testing regime to provide a new improved ranking and measure of premium sheet rubber performance.

- SETAT® rubber test specimens and coupons are fully immersed during the test.
- SETAT® test cell can be heated to various temperatures to reflect actual slurry operating conditions.
- SETAT® test duration is significantly longer than ISO 4649 / ASTM D5963. Rubber specimen contact with the selected test abradant can run up to 8,000 metres.

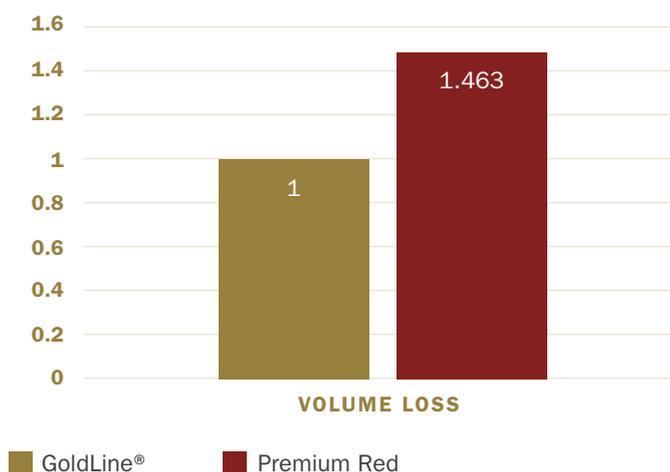
- SETAT® test forces applied to the rubber specimen can be adjusted to reflect in-plant forces that rubber lined surfaces are subjected.
- SETAT® test cell velocities can be varied.
- SETAT® testing can be conducted at a range of abradant roughness' to assess rubber loss under a range of wet fine and wet coarse slurry conditions.

Trelleborg's GoldLine® Premium 38 outranks other premium natural rubber sheet compounds under a range of SETAT® test conditions. Trelleborg expect that this new test method will yield far greater insights for engineers involved in the specification and selection of premium rubber compounds needed to resist wet abrasion in mineral processine circuits operating above ambient temperature conditions.

Relative Abrasion Loss

Application Simulation:

P80 = 75 microns; Temp = 50 deg. C



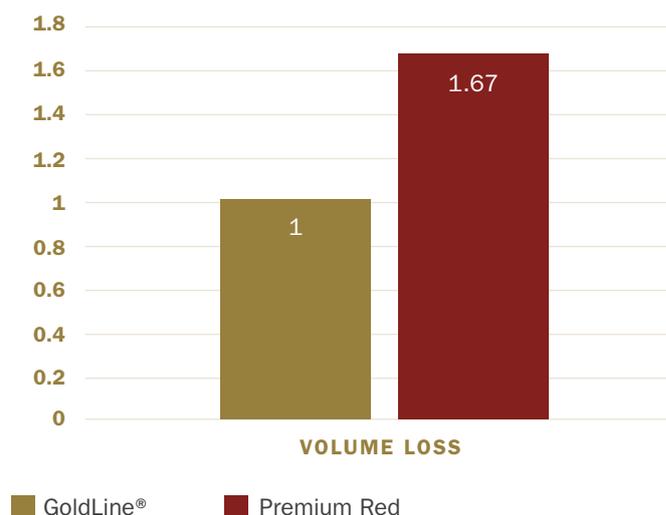
'Premium Red' rubber loses 46.3% more rubber than GoldLine® Premium 38.

Test Conditions:

- Fully immersed
- 50C
- Abradant 180 Grit (75um)
- Test duration 8,000 mtrs
- >10N Load

Application Simulation:

P80 = 201 microns; Temp = 50 deg. C



'Premium Red' rubber loses 67.00% more rubber than GoldLine® Premium 38.

Test Conditions:

- Fully immersed
- 50C
- Abradant 80 Grit (201um)
- Test duration 8,000 mtrs
- >10N Load

RUBBER SELECTION PHILOSOPHY

GoldLine® Mechanical properties, durability, availability, versatility and technical support are all incorporated in a single sheet selection philosophy delivering exceptional performance results in wet abrasive slurry applications in Mineral Processing Circuits.

- High tensile strength
- High elongation at break
- High tear strength
- High resilience
- High abrasion performance at ambient temperatures
- High abrasion performance at elevated temperatures
- High natural rubber content
- Excellent workability and flexibility
- Easy application to steel surfaces
- High bond strengths
- Available in a range of common lining thicknesses
- Roll formats and lengths to minimise lining and application yield losses.

STOCK PROGRAMME, ROLL FORMATS AND PACKAGING

Dimensions

THICKNESS (MM)		BONDING LAYER		LENGTH (MM)		WEIGHT (MM)	BONDING LAYER
3	±0.3	1500	±2%	13	±2%	2.9	Yes
6	±0.6	1500	±2%	13	±2%	5.76	Yes
10	±0.7	1500	±2%	13	±2%	9.60	Yes
12	±1.0	1500	±2%	13	±2%	11.50	Yes
20	±1.4	1500	±2%	6	±2%	19.2	Yes
25	±1.75	1500	±2%	6	±2%	23.75	Yes

Identification

Branding	Trelleborg logo embossed on one side
Packaging	All thickness rolled on cardboard tube ø 200mm. Bonding layer internal side protected by a clear polypropylene film, easily removable by hand.
Wrapping	Black high strength polyethylene fabric with Trelleborg brand tape.
Labelling	Self-adhesive label indicating product name, dimensions, area in m ² , nominal weight and product code to allow product traceability – Circumferentially applied identification tape.

TECHNICAL SUPPORT

With well over 100 years of polymer science and engineering at Trelleborg. We have all the necessary technical and application expertise to support rubber selection in a range of abrasive mineral processing applications. With polymer research and development centres around the world. We have the laboratory facilities and in house capabilities to perform and verify performance rubber testing in accordance with site specific process applications.

Bespoke testing regimes can be performed in representative slurry/liquor conditions at a range of temperatures and pH conditions to verify and support in service rubber performance.

Examples of bespoke rubber testing campaigns include:

Immersion testing:

To determine effect of liquids which provides useful insights into the performance of lining rubbers exposed to the many different types of reagents used throughout Mineral Processing Industry to improve and accelerate mineral separation and liberation of valuable minerals from their ores.

FRAS testing:

To determine flame persistence, afterglow characteristics and anti-static determinations of rubber used to eliminate or reduce fire loads in mineral processing plants.

Accelerated rubber ageing tests:

To determine rubber performance and mechanical property degradation at temperature.

Please contact your local technical representative to discuss your specific rubber selection testing requirements.





Trelleborg is a world leader in engineered polymer solutions that seal, damp and protect critical applications in demanding environments. Its innovative solutions accelerate performance for customers in a sustainable way.

WWW.TRELLEBORG.COM

Scan here to view more product information



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