Wear Resistant Mill & Scrubber Linings
Grinding Mills play a key role in Comminution and Mineral dressing and are subjected to severe impact and abrasion from the Mineral being ground and from the media that is introduced in the Mill to help break down the product.

Trelleborg has been at the fore front of specialised rubber compound development for milling applications. Trelleborg takes pride in working closely with our customers on improving liner designs.

The liner and compound development is undertaken to target enhanced availability of the Mill (reducing down time losses) with increased efficiency in grinding, and reduction in power drawn.

Trelleborg has a wide range of Rubber lifter bars and plates for Ball Mills, Rod Mills and Drum Scrubbers. Trelleborg Standard Rubber Lifter sizes are as follows:

- 210mm (W) x 250mm (H)
- 210mm (W) x 225mm (H)
- 210mm (W) x 200mm (H)
- 210mm (W) x 180mm (H)
- 210mm (W) x 160mm (H)
- 210mm (W) x 140mm (H)
- 200mm (W) x 200mm (H)
- 165mm (W) x 180mm (H)
- 165mm (W) x 160mm (H)
- 165mm (W) x 140mm (H)
- 150mm (W) x 160mm (H)
- 150mm (W) x 150mm (H)
- 140mm (W) x 135mm (H)
- 125mm (W) x 125mm (H)
- 100mm (W) x 100mm (H)
- 50mm (W) x 50mm (H)

All Trelleborg lifters come complete with Aluminium and Steel Tracks with different Face Angles to suit the Milling or Scrubbing Application.

Trelleborg also tailor make a wide range of Shell Plates, Grate Plate, Head Plates and Filling Segments including the Backing Rubber to protect the Mother plate of the Mill/Scrubber.

Trelleborg also maintains a Standards Range of Fixings to completely Seal and Protect.

Trelleborg works on the principle of continuous improvement to add value to the operation of the processing plant as a whole and strives to attain ultimate customer satisfaction.
Advantages of Trelleborg Mill Linings

- Improved liner life
- Lesser weight overall with reduced impact on rotating components.
- Easy handling and installation
- Lesser downtime losses
- Noise reduction
- Leak proof fastening system
- Easy Wear Monitoring and Wear Life predictability.
- Fixing design eliminates bolt breakages during operation.

Design and Improvements

Trelleborg designs are based on optimization with efficiency in grinding, reduction in power draw and availability of the equipment.

Also includes a wide selection of rubber compounds for improved wear life.

Trelleborg Special Grade Rubber vs Composite Steel Linings

- Lower cost
- Reduced weight
- Less power draw
- Reduced load on Mill Bearings, etc.
- Easy and faster Install
- Noise reduction
- No cracking or falling inserts - Safe
- Easy wear life monitoring

Trial carried out with Trelleborg Special Grade 1605Am Rubber compound vs Competitors Composite Steel linings in Ball Mill dia. 5490mm x 7625mm long was successful, resulting in complete change out of Shell linings.
Pulp Discharge Linings

Trelleborg designs and manufactures pulp lifter packages for AG, SAG, Ball Mills and Scrubbers.

Improved throughput, wear life (with indicator layers for easy inspection and monitoring) are the main criteria considered.

Pulp Lifter Components

- Inner and Outer Pulp Lifters
- Discharge Cone Liner
- Grate Plates
- Pan Support Filler Rings
- Clamp Rings
TESAMET (Composite) Mill Linings

Trelleborg TESAMET composite linings are designed with select special steel composition to suit each Milling Application.

TESAMET liners can be manufactured to a light duty or heavy duty modular design to keep in line with the lifting mechanism and safety regulations as required on site.

Advantages

- More availability of the Mill / Reduced down time losses.
- Less handling and reduction in reline costs.
- Better Sealing
- Noise reduction compared to Steel linings.
- Easy wear monitoring

Trelleborg TESAMET Lifter Bars, along with TESAMET Head Plates, (Head Plates are twice the Life of Lifters).
Trunnion Liners

Trelleborg Engineered Products manufacture and supply trunnion liners to suit various designs of mills and scrubbers.

Trelleborg Trunnion Liners are tailor made to suit specific applications. Fixing methods available are, direct bonded rubber, bolt in system, or hold down bars.

Trelleborg has developed a ‘T’ tracked trunnion liner for easier installation. Lifter bars can be included in the trunnion to minimise sliding abrasion.
Mill Lining Auxiliary Equipment

Trelleborg can supply all auxiliary items required for mill liner change outs, including:

• Extruded Filler Pieces
• Extruded Corner Segments
• Mill liner rubber backing, 6, 9 and 12mm thick

Trelleborg supply all fastening components required for mill liner change outs, including:

• T Bolts & Clamp Blocks
• Cup Washers
• Integral Sealing Washers

Trelleborg supply a complete range of backing rubber, extruded filler pieces and sealing strips.

Trelleborg After Sales Service

Trelleborg’s commitment to the continuous evaluation of our Mill Liners during operation, forms an integral part of our service.

We work closely with our customers on wear monitoring, by assisting them in the development of preventative and predictive maintenance regimes.

During shut downs, Trelleborg personnel will take wear measurements on site and present drawings of wear patterns and an assessment of product life remaining, along with any improvements that can be offered.
Trelleborg Engineered Products is part of the Trelleborg Offshore & Construction business area of the Trelleborg Group. Trelleborg Engineered Products is a leading global developer, manufacturer and provider of engineered polymer solutions to the energy, infrastructure and mining industries. Performing in some of the harshest environments on earth, its principal products are sealing systems for tunnels, a wide range of bearings, polymer solutions for floatover technology and wear resistant products for the mining industry. With local support, a track record of over 100 years and its everyday ingenuity, customers can rely on Trelleborg Engineered Products to deliver innovative polymer solutions that significantly improve the quality, safety and efficiency of its customers’ operations worldwide.