



Trelleborg Specialty Mining Hoses

Trelleborg Wear Resistant Specialty Mining Hose

Specialty flexible mining hoses are critical components for effective and efficient material handling in heavy media and slurry processing plants.

Trelleborg has had over 100 years experience in the development and manufacture of rubber products, which we can draw from to ensure a customised quality product is supplied.

Our Specialty Hoses consist of an abrasion or chemical resistant inner liner, rubberised fabric reinforcement, and weather / UV resistant outer cover.

High tensile wire reinforcement is moulded in the hose.

Trelleborg hoses are manufactured from various customised rubber compounds including NR, SBR, NBR, EPDM, Silicone and Viton.

Coupling construction is either fully integrated fixed flanges or loose fitting swivel flanges.

When specialised solutions are required, Trelleborg takes into consideration:

- **material being transported**
- **working pressure**
- **operating temperature**

- **exposure to chemicals / saline**
- **atmospheric conditions**

Our Specialty flexible hoses easily compensate for pipe work misalignments and can be used to buffer the vibration and movement typically associated with the interface between pumps and pipes.

Trelleborg Hoses typically range in size from 50mm to 525mm. Different sizes can be manufactured to suit customised applications.

Technical Services

Trelleborg mining product specialists are available for onsite audits to identify potential improvements and change-out recommendations.

Failed hoses can be analysed in our factory to identify the root cause of failure with a full report supplied detailing the findings and recommendations for improvement to the hose design.



Trelleborg Expansion Joints

Each expansion joint produced by Trelleborg is the result of a sophisticated design process and advanced production methods. Everything about it has been thought out in detail, so that even its standard quality is superior to comparable products. We supply products exactly according to your specifications for material composition, pressure and

temperature requirements, level of resistance, dimensions, flange choice, safety, vibration and sound reduction, and whatever else you require.

In order to guarantee that you receive the very best product, each delivery is subjected to a stringent final inspection by Trelleborg, which can be supplemented by whichever approval certificate you require.



Expansion joints

Expansion joints/compensators with closed arch.



Expansion Joints

Expansion joints without flanges, but with collars, can be made with an open or closed arch.



Heavy-duty expansion joints

These expansion joints can be used for high working pressures.



Hose expansion joints

These expansion joints are used to compensate for vibrations and large radial and axial movements in piping systems for example.



Expansion joint reducers

Expansion joint reducers are available with and without arches.



Expansion joints with double arch

An expansion joint with a double arch is used in circumstances where a single arch cannot sufficiently compensate for the displacement.





Diameter	Work pressure	Burst pressure	Vacuum	Temperature	Length
↓ DN100	atmospheric ↓ max. 250 Bar	atmospheric ↓ max. 1000 Bar	max. 100%	from -50 °C up to 200 °C	up to 30 mtr.
DN100 ↓ DN500	atmospheric ↓ max. 80 Bar	atmospheric ↓ max. 320Bar	max. 100%	from -50 °C up to 200 °C	up to 30 mtr.
DN500 ↓	atmospheric ↓ max. 60 Bar	atmospheric ↓ max. 240 Bar	max. 100%	from -50 °C up to 200 °C	up to 30 mtr.



Trelleborg Flexible Joints

Trelleborg can provide quick and efficient supply of custom-made, non-standard products, such as expansion joints in non-standard lengths and with non-standard flanges.

We also supply:

- Preformed rubber bends for suction or discharge applications with extra wear-resistant inner layers.
- Adapters made from wear-resistant elastomers with thick walls in almost every required shape (circle, ellipse, rectangle).



Reducers

A reduction in the diameter of the pipe often causes turbulence in the flow and results in increased wear and tear.

We produce wear-resistant reducers for this application in every required diameter and length.

Pinch valve

Pinch valves consist of a flexible hose built into a steel or aluminium casting. By throttling the hose the flow can be controlled. Trelleborg supply the flexible hoses which are used in these pinch valves.



Adapter

As well as reducers, we have various adapters in our range. These are flexible connections with, for example, a circular flange on one end and a rectangular flange on the other. We can produce any other shape you may require upon request. These adapters are made with extra thick walls using wear-resistant elastomers so that they have a long life.





Flexible telescopic hose

Flexible telescopic transport hoses for abrasive media. Used for crossing over a gap between different loading and unloading heights. Can be supplied in various diameters and types.



Y-piece

Y-pieces are very sensitive to wear and tear. Building them completely from elastomers, results in a flexible and wear-resistant construction.



Pre-formed bend

In many material transport systems, the bends are sensitive to wear and tear. Trelleborg supply an extensive range of pre-formed bends for both suction and discharge purposes, in various diameters and radii.



Riser pipe

Rubber risers for vacuum cars give a longer lifetime, compared with the steel risers, which are normally used.

Available in various sizes, shapes and qualities.



Material Handling Hose

Drainage hoses are used where a flexible connection is essential.

The hoses are available in very large diameters and are fitted with integrated vulcanized rings and/or spirals to withstand soil pressure and vacuum conditions.

Trelleborg Flanges

A reliable and safe transport hose is a balanced product, where all the components must fit together perfectly. The end piece is formed by the flanges, and Trelleborg supply technically superior solutions which are suitable for a wide range of working pressures and all loads. Examples are: The rubber flange (no gasket required)



with a steel or stainless steel backing ring for medium working pressures. The Double Action® flange; a form-fit flange construction for higher working pressures, and suitable for very high axial loads. Vulcanized flange couplings for every working pressure, with optional swivel flanges, in accordance with the DIN and ANSI norms, for easy fitting.

Rubber flange-steel backing flange

This flange is used for medium pressures and suction hoses. The rubber flange means that the hose can remain relatively short, starting from a maximum angle of curvature. Because the wear resistant rubber layer extends partly into the top edge of the flange, it forms a good seal with the flange connection itself.

Double Action® flange

The Double Action® flange is our most recent development. The main feature of this flange is the superior axial strength due to an integrated locking flange. This product is able to accept high bending loads due to a thick integrated flange and backing flange and will not rust. The thick integrated flange and backing flange allow for a large radius in the flange neck, with no cutting forces on the cords.



Steel coupling vulcanized in

Trelleborg's solid steel couplings are suitable for heavy duty applications. They can be made with the smallest possible pitch circle diameters and are vulcanized into the hose. These couplings are also secured with our safety strap system for extra safety. We use these couplings as standard in our self floating hoses so that you can work during bad weather without the risk of a defective line.



Swivel flange

The Trelleborg swivel flange is used with medium service pressures at points where the bolt holes in the mounting flanges are not precisely aligned.

The swivel flange simplifies fitting between 2 fixed points.

Widened collar

There are many options for connecting hoses with straight ends. However, a big disadvantage of these hoses is that when a pipe is inserted it can form an obstruction in the hose. This can be prevented by using a hose with a widened collar. Because the ends are wider, the pipe which is not inserted does not cause any obstructions in the hose, resulting in an optimum flow. These collars can only be used for low pressure applications.



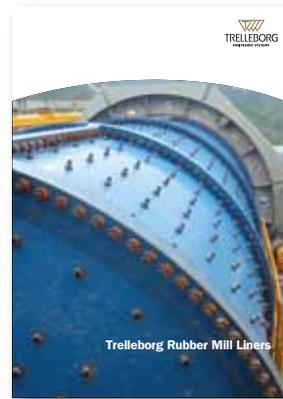
Other Trelleborg Products



Trelleborg Wear Panels



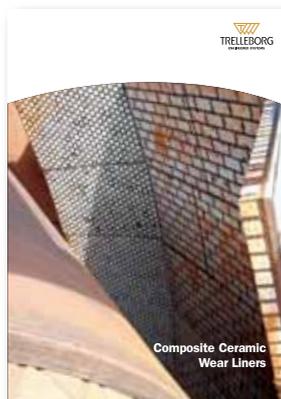
Trelleborg Mining Hose



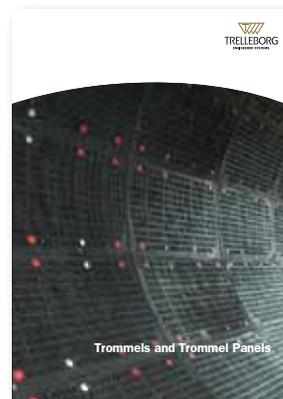
Trelleborg Rubber Mill Liners



Sheet Rubber Products
for the Mining Industry



Composite Ceramic
Wear Liners



Trommels and Trommel Panels



Trelleborg Rubber Lined Products



Dragline Fairlead Buffers



Trelleborg Special Rubber Products



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