



REPAIR AND SPLICING MATERIAL

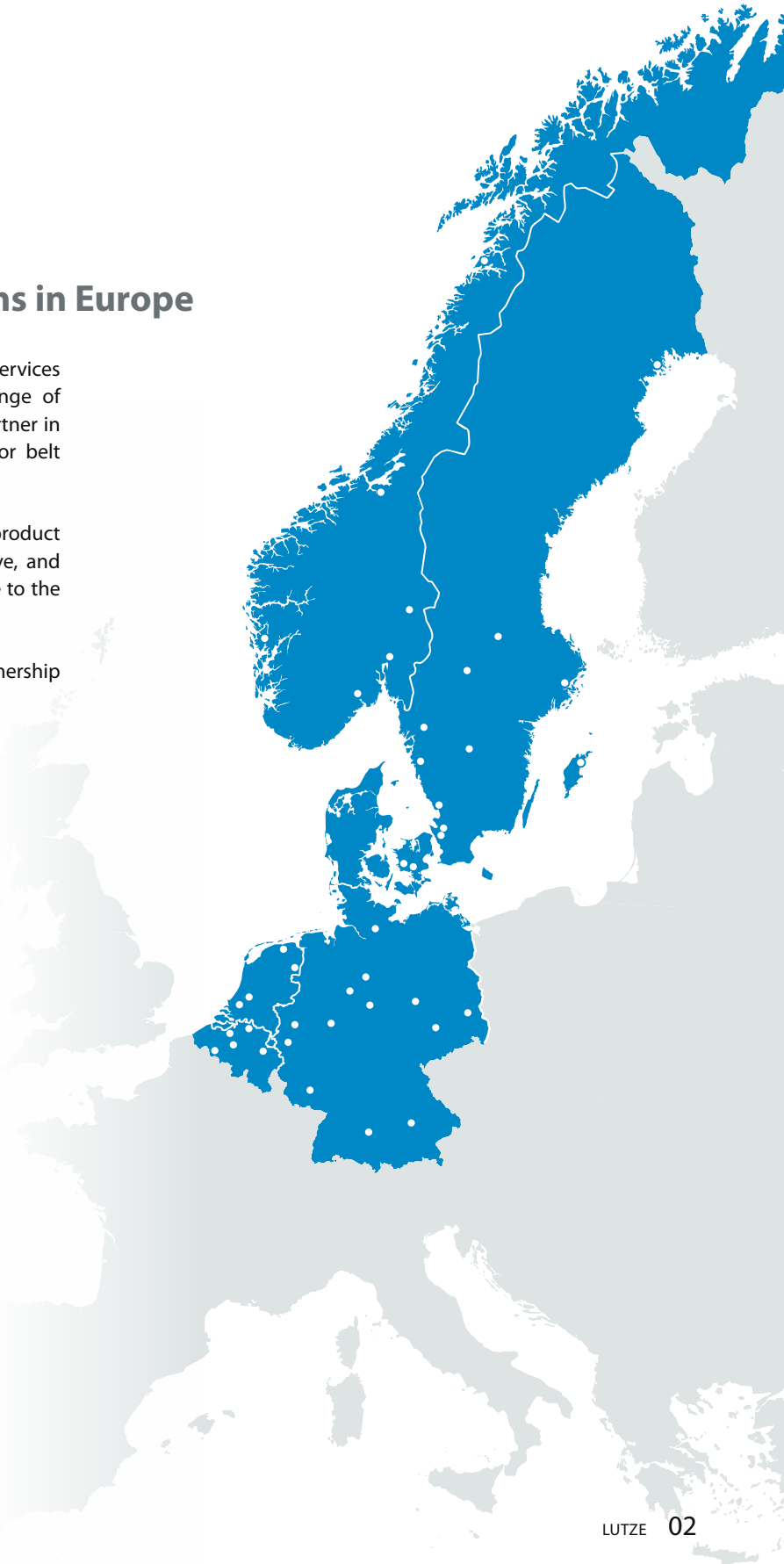
LUTZE GROUP

A team of 550 employees in a network of over 40 locations in Europe

The LUTZE Group offers comprehensive industrial services tailored to each individual application. A wide range of conveyor belts makes the LUTZE Group a reliable partner in all questions related to the operation of a conveyor belt system.

The LUTZE Group does not focus on the individual product of a static portfolio, but on a sustainable, innovative, and solution-oriented concept, that adds long-term value to the customer's operation and offers cost security.

High quality standards as well as a year-long partnership with the customer forms the foundation for this.



REPAIR AND SPLICING MATERIAL

Our solutions for your needs

With the increasing global approach of the LUTZE Group, the standardization of work material is essential for the successful cooperation of our locations in all countries. The same processing methods and the use of the same products are not only the basic requirement for the success of our daily work, but also enable the fulfillment of the highest demands of large projects.

Over the past few decades, a range of products have been established that our service personal and end customers can rely on. All materials are manufactured in the smallest possible batches in order to be able to deliver and process fresh products at all times.

Two central logistics centers supply our locations, worldwide partners and end customers. In doing so, they ensure that on-site stocks are kept to a minimum and help reduce the risk that chemicals will expire and must be disposed of. The LUTZE Group is also pursuing the goal of stocking as few

hazardous substances as possible at each location and reducing the health risk for every employee as far as possible.

The quality of the products is also monitored centrally and tested regularly, thus ensuring the reliability of all materials. In addition to LUTZE's own service personal, more and more maintenance staff from end customers and international sales partners are also putting their trust in the LUTZE product range.

This brochure summarizes what is required every day for successful repairs to conveyor belts and their endless splicing: cold glued, hot vulcanized or mechanically spliced.

In addition to the standard range, numerous special qualities and individually adapted solutions are possible.

Get in touch with your LUTZE contact, who will choose the best solution for you.

TYPES OF SPLICING FOR CONVEYOR BELTS

Hot vulcanization

The endless connection is created using raw rubber and a vulcanizing press. Pressure and heat cause the raw rubber to vulcanize, resulting in comparable properties to the rest of the belt.

Needed materials:

- raw rubber (cover rubber and intermediate rubber)
- hot vulcanizing solution Vulkaschol 951
- vulcanizing press
- pressure fabric
- silicone paper

Cold splicing

A 2-component adhesive consists of the actual adhesive and a hardener. Both are mixed together and applied to the prepared belt ends. After applying several layers, both adhesive ends are placed on top of each other and connected with pressure. In most applications, the result of the latest adhesives is comparable to the strength of hot vulcanization.

Needed materials:

- Repaschol 178B (rubber splicing)
- Repaschol 181 GPV (PU/PVC splicing)

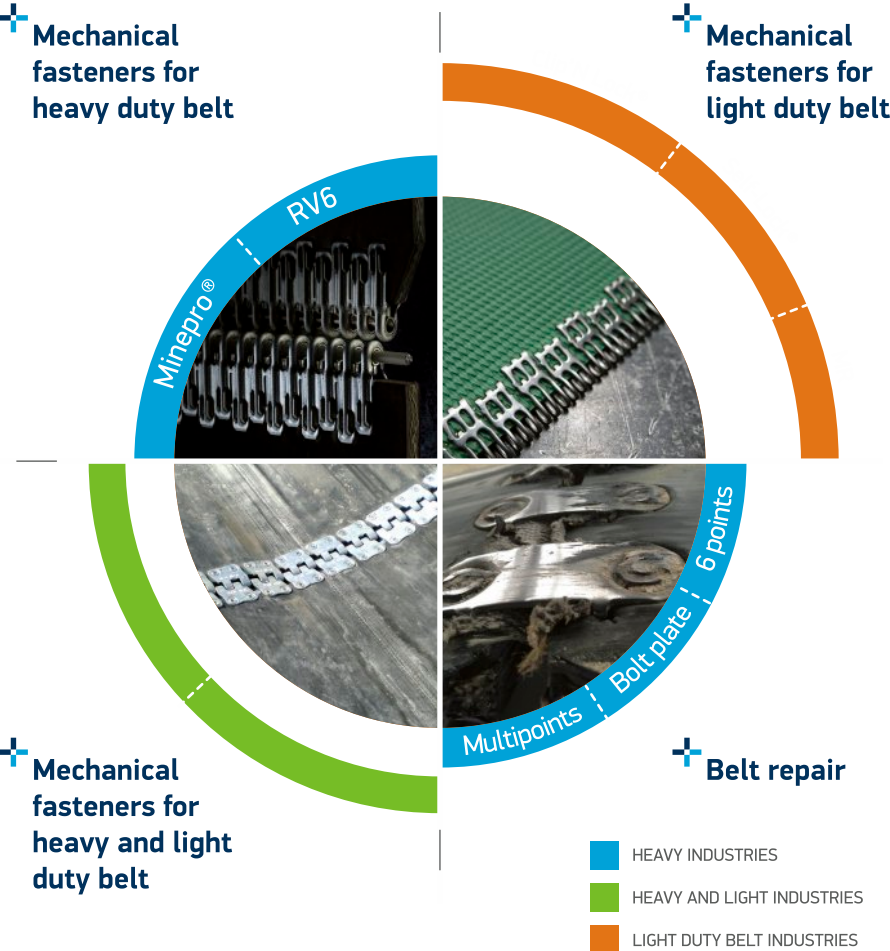


Mechanical splicing

The fasteners are mechanically embedded into the belt ends and thus ensure that the power is transmitted to the belt. Some fasteners are fixed with screws, others require a special tool. Finally, a connecting rod links the belt ends to each other.

Needed materials:

- mechanical fastener (eventually connecting rod)
- tools



CHOOSING THE RIGHT ADHESIVE

Steelprimer 140

Adhesion promoter for preparing metal surfaces for permanently elastic bonding, e.g. with rubber.

Repaschol 181 GPV

2-component contact adhesive for bonding PVC and PU materials and conveyor belts.

LUCON Cleaner

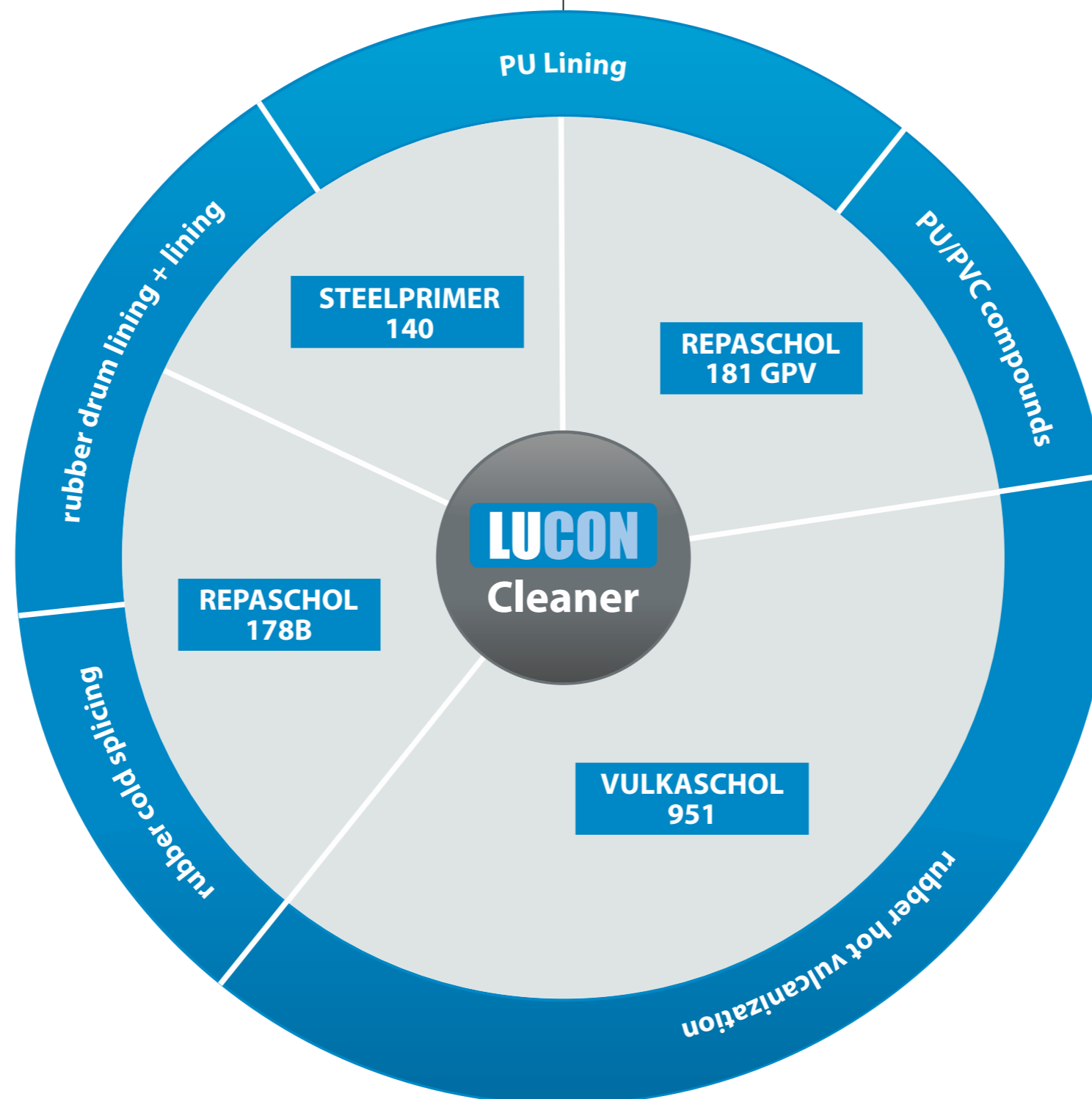
Removes oily and greasy residues from surfaces. To be used especially before bonding.

Repaschol 178B

2-component contact adhesive for the cold splicing of rubber conveyor belts, bonding of rubber linings and coverings as well as permanently elastic bonding of rubber materials to each other.

Vulkaschol 951

Universal rubber solution for the hot vulcanization of steel cord and fabric conveyor belts made of normal quality rubber.



CRITICAL INFLUENCES WHEN BONDING RUBBER

Weather conditions

Optimum processing temperature (5 – 30 °C)

- At ambient temperatures below 5 °C, the surface must be heated.
- If the relative humidity is high (> 70%), the surface must be dried / heated.
- The surfaces must always be protected from weather influences (such as rain).
- The splice must also be protected from dust, dirt and other environmental influences.



Surface preparation

- Grease, oil and dirt must be removed from the surface.
- Cleaner should always be used before and after roughening.
- The surface must be sufficiently roughened.



Adhesive preparation

- Adhesive and hardener must be mixed in the correct ratio.
- The components must be thoroughly mixed to form a homogeneous adhesive mixture.
- The mixed adhesive has limited workability and should always be covered.



Adhesive processing

- The processing speed of the adhesive depends on the ambient temperature:
 - the colder, the slower
 - the warmer, the faster
- Depending on the bonding partner, a different number of coats are required. For example:
 - fabric: 3 strokes
 - rubber: 2 strokes
- The individual coats can be applied after sufficient drying.
- The last coat must still be tacky before the parts are joined.



REPASCHOL 178B

Description

Repaschol 178B is a two-component adhesive for the cold bonding of **rubber** conveyor belts, anti-wear linings made of rubber, drum and roller coverings and generally for permanently elastic, high-strength bonding of rubber, metal and fabric.



Application examples

- cold splicing of rubber conveyor belts
- rubber anti-wear liners
- drum linings

Packaging

Quantity	Bundle	Hardener	Item no.
300 g	can	23 g bottle	CA2454
650 g	can	56 g bottle	CA2451
4 kg	bucket	320 g bottle	CA2455
170 kg	barrel	48 x 320 g bottles	CA2465

Processing

Consumption	about 150 g/m ²
Flash off time	about 30 min. (complete) about 5 – 15 min. (last indent)
Pot life	about 2 hours

REPASCHOL 181 GPV

Description

Repaschol 181 GPV is a 2-component adhesive for cold bonding of **PVC and PU**. It is mainly used for the cold splicing of plastic conveyor belts.



Application examples

- cold splicing of PVC and PU conveyor belts
- manufacturing of cuffs
- PU linings

Packaging

Quantity	Bundle	Hardener	Item no.
650 g	can	50 g bottle	CA0375

Processing

Consumption	400 – 500 g/m ² per coating
Flash off time	20 – 30 min.
Pot life	max. 2 hours

LUCON CLEANER

Description

Serves to prepare surfaces to be bonded. Removes oil, grease and dirt from rubber, plastic and metal surfaces.



Application examples

- removal of dirt
- surface preparation for bonding

Packaging

Quantity	Bundle	Item no.
1.000 ml	can	CA2723
25 l	hobbock	CA2728
175 kg	barrel	CA1885

Processing

Consumption

Depending on the type and degree of contamination of the material and the ambient temperature.

STEELPRIMER 140

Description

Steel primer 140 is an adhesion promoter used to prepare metal surfaces before applying a cold adhesive to create a resilient and durable bond, for example rubber linings.



Application examples

- rubber linings
- drum linings

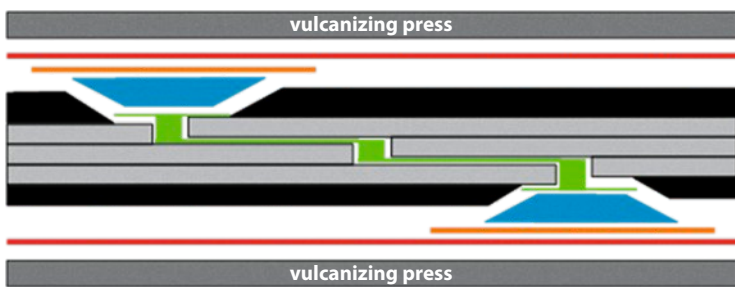
Packaging

Quantity	Bundle	Item no.
700 g	can	CA0389

Processing

Consumption	150 - 200 g/m ²
Flash off time	about 30 min.

SPLICING MATERIAL FOR HOT VULCANIZATION



The figure shows a belt splicing in a sectional representation.

The splicing is a step-splice of a fabric conveyor belt with 3 layers. The two belt ends are prepared according to the LUTZE connection instructions and then put together as shown in the illustration.

Unvulcanized rubber NQ

Cover rubber and intermediate rubber, normal quality

CA1342 intermediate rubber 0,6 x 580 mm, rolls of 12,1 kg

401190019-2 cover rubber 2 x 60 mm, rolls of 10,0 kg

401190019-3 cover rubber 3 x 60 mm, rolls of 10,0 kg

401190019-4 cover rubber 4 x 60 mm, rolls of 10,0 kg



Silicone paper

The **silicone paper** prevents material from sticking to the heating plates during vulcanization.

Dimension	1.000 x 20.000 mm
Item no.	CA0971



VULKASCHOL 951

Description

Universal rubber solution for the hot vulcanization of steel cord and fabric conveyor belts made of normal quality rubber.

Application examples

- hot splicings



Packaging

Quantity	Bundle	Item no.
650 g	can	2322340
20 kg	barrel	CA1343

Processing

Consumption	150 - 200 g/m ²
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Pressure cloth

The **pressure cloth** increases the pressure during vulcanization in the seam strip area, allows trapped air to escape and helps set the joint in place during vulcanization in the press.

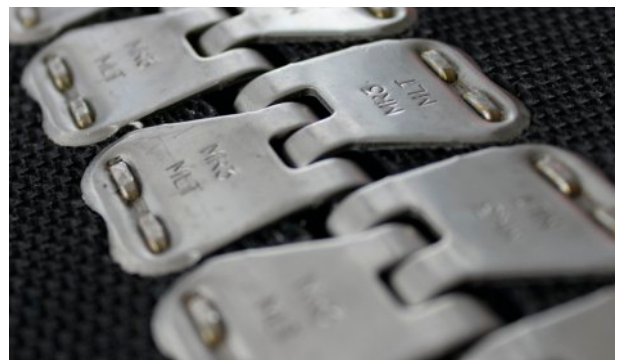
Dimension	1.200 x 10.000 mm
Item no.	CA1891



MECHANICAL SPLICING

MINI RECORD

The Mini Record (MR) series consists of fasteners with pre-assembled staples, which represent a fast method for conveyor belts with fabric tension forces up to 400 N/mm.



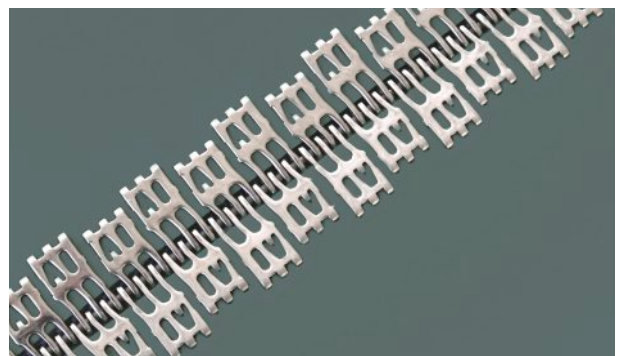
MS®

MS® series fasteners are installed with screws and are suitable for fabric conveyor belts with tensile forces up to 1,250 N/mm. Special mounting devices are not required.



CLIP 'N LOCK

The Clip 'N Lock series is used for LUWILITE plastic conveyor belts. The meander design ensures high flexibility and connection security.



Super-Screw

The flexible fastener is installed using a cordless screwdriver and used for conveyor belts with tensile forces of up to 630 N/mm.

Super-Screw fasteners in abrasion-resistant, oil- and grease-resistant and heat-resistant rubber quality are available for different belt designs.



All fasteners are available in galvanized steel and stainless steel.

REPAIR MATERIALS

LUWIREP

LUWIREP® was made by LUTZE to quickly repair minor damage before major problems arise. With the help of LUTZE plastics' know-how, LUWIREP® was specially developed to match the properties of a standard conveyor belt.

It fits perfectly into the repaired belt, wears out together with the original rubber and will remain in the conveyor belt until it fails for other reasons. In addition to LUTZE's technicians, end customers also benefit from the simplicity of the system. Even inexperienced personnel can be trained in a short time to carry out small repairs themselves.



Possible repairs

- cover plate damage and punctures on fabric and steel cord belts
- suitable for use with all standard scraper and belt cleaning systems
- coverage of mechanical fasteners
- reparation of particularly stressed areas
- filling joints of lining panels
- and much more

FIX 'N' GO

Should the conveyor belt already be damaged to the point where the fabric is critically compromised, MLT's Fix'n'Go can be used to restore lost traction. Such a repair can also be combined with LUWIREP® 70 and thus enables continued operation even with sharp belt cleaner systems.



The LUTZE Group offers a comprehensive range of products and services in the conveyor and plastics technology sectors.



- Conveyor technology
- Screening media
- Plastics technology
- **Luwitan** wear protection
- **Luwispray** spray coating
- **Luwirep** repair systems
- Waterjet cutting technology
- Service

