




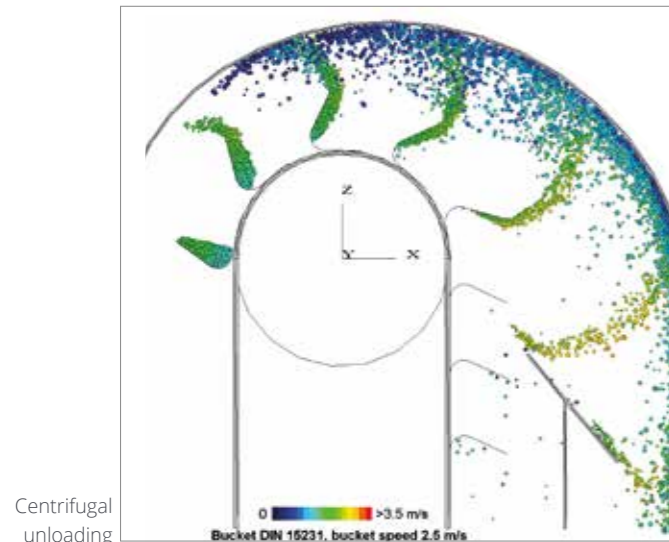
**YOUR TRADEMARK
FOR RELIABLE
ELEVATOR BELTS**



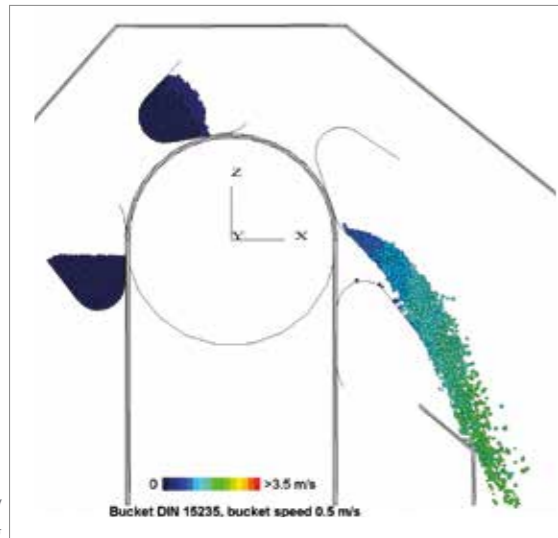
Since 1973 Polysur® has been the leading European brand in rubber elevator belts specially manufactured for use in the agricultural and industrial sectors. All qualities are manufactured in Europe in accordance with DIN, ISO and NEN. Our elevator belts stand for quality, reliability and innovation.

ELEVATOR BELTS ESPECIALLY DESIGNED FOR USE IN ELEVATORS

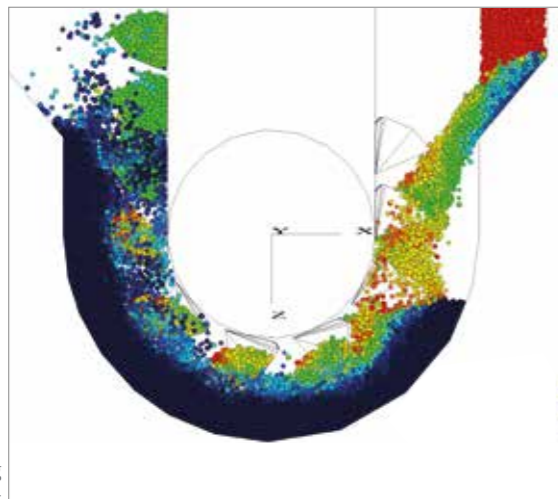
THE ELEVATOR BELT IS THE HEART OF THE MACHINE



Centrifugal unloading



Gravity unloading



Self-cleaning elevator boot

THE ELEVATOR

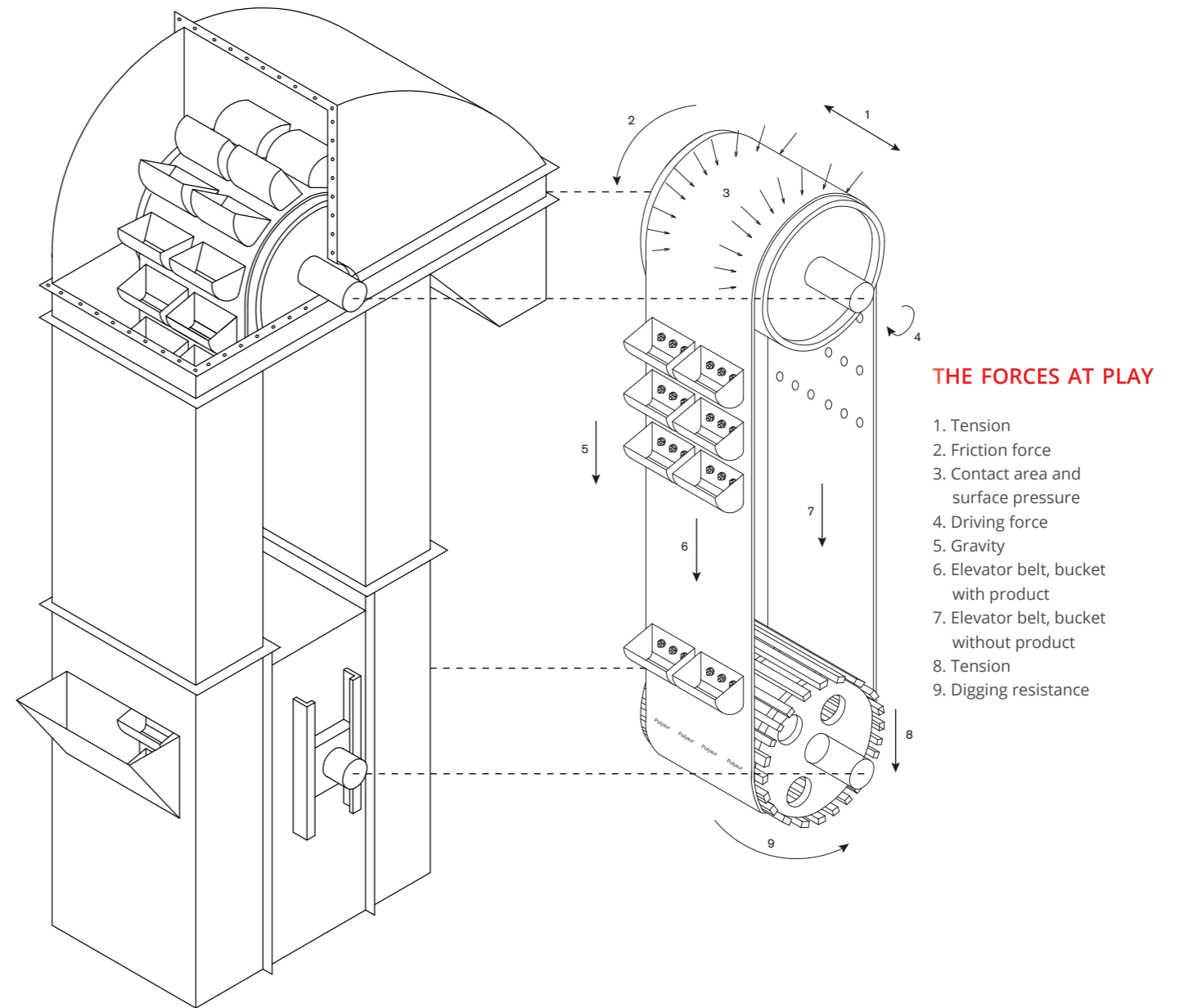
An elevator is a closed system, which means it can be difficult to see what goes on inside the system. Essentially, elevators operate according to a fairly simple principle and over the years not much has changed in this respect. From experience we know which elevator components and moving parts are subjected to the most wear due to the mechanical load and/or the products to be processed. Polysur® focus's on these critical elevator components and everything that comes into contact with the elevator belt.

Replacing an elevator belt half way through its expected service life can be a costly business. What lies at the heart of optimal and safe bulk processing is the elevator belt: to us, the elevator belt is key. This is the heart of the machine and, when running, the belt is subjected to various loads. The illustration opposite shows examples of conditions to which elevator belts are exposed. Other examples include:

- high or low temperatures
- oils, acids and grease
- slipping on the pulleys
- poor load distribution
- misalignment of the elevator belt
- worn out pulley lagging
- heavy elevator buckets
- incorrectly mounted elevator bolts
- poorly constructed return pulleys

Choosing a good quality elevator belt is crucial when it comes to preventing costly downtime. Polysur® elevator belts are manufactured especially for use in elevators. This we can guarantee a maximum life for your elevator belt.

Polysur® has an international network of specialists with a comprehensive delivery programme of additional critical components for elevators which will enable you to minimise wear and maintenance and to get the best out of your equipment. From elevator buckets to monitoring systems, our network can provide all the support you need. Request information on our website.



THE FORCES AT PLAY

1. Tension
2. Friction force
3. Contact area and surface pressure
4. Driving force
5. Gravity
6. Elevator belt, bucket with product
7. Elevator belt, bucket without product
8. Tension
9. Digging resistance

**EXTEND TIME
BETWEEN
MAINTENANCE
STOPS, REDUCE
YOUR COST
PER TONNE
OF PROCESSED
PRODUCT**



Source for the three simulations mentioned above: www.ibaf-engineering.de

THE RIGHT POLYSUR® ELEVATOR BELT FOR EVERY INDUSTRY

UNRIVALLED QUALITY IN ELEVATOR BELTS

Polysur® has been the leading European brand in rubber elevator belts since 1973. Its structure and properties are fully optimised for elevator belts and stand for quality, reliability and innovation. Polysur® elevator belts are suitable for a wide range of applications. Special versions have been developed for those special conditions where the standard belt quality does not suffice e.g. when dealing with chemicals, increased levels of wear or high temperatures. All qualities and versions have been produced in accordance with DIN, ISO and NEN standards, and can be supplied with bolt holes for elevator buckets. Polysur® elevator belts are reinforced with specially woven polyester/polyamide plies (EP) or steel fabric reinforcements. Distinguishing features of Polysur® elevator belts include:

- optimum reliability
- no blistering and delamination
- minimum elongation
- general safety



STRUCTURE AND
PROPERTIES ARE FULLY
OPTIMISED FOR USE
IN ELEVATORS

Elevator belt with EP plies

CONTACT US
FOR ADVICE
AND SUPPORT

OPTIMUM RELIABILITY

With 30% more polyamide weft threads in the EP fabric, our elevator belts are heavier and stronger transversely. As a result, the belts track better and are quieter when running. At the same time, the elevator buckets are more securely fastened to the belt. Significant lift heights and heavy elevator buckets require an extremely strong transverse belt construction. This can be achieved with Fleximat® steel fabric reinforcement, a specially produced fabric comprising length cords and cross cords which are bound together to form a

unified structure. No blistering and delamination. High adhesion prevents slipping and blistering and ensures that the rubber cover does not peel off. DIN prescribes a minimum adhesion of 4 N/mm. The rubber covers on the fabric and steel cable inserts in Polysur® elevator belts has extremely high adhesive properties, with an EP fabric with which we aim to achieve an average of 9 N/mm. Our Ferro elevator belts with steel fabric reinforcement can even achieve 18 N/mm on an average production run.



Elevator belt with Fleximat® steel
fabric reinforcement

MINIMUM ELONGATION

Minimum elongation means that shortening the belt several times due to stretch can be avoided. In practice, the tightly woven EP fabric guarantees a minimum elongation of 0.5% on average for a well-calculated belt strength. There is virtually no elongation in our elevator belts with steel fabric reinforcement.

GENERAL SAFETY

All elevator belts are anti-static in accordance with DIN 22104 (ISO 284). This means that the 3×10^8 Ohm standard is not exceeded.

Polysur® elevator belts are also available in a flame retardant version that complies with DIN 22103 (ISO 340). The high quality of Polysur® elevator belts is guaranteed, because there are no concessions made to the quality of the rubber.

Oils, acids, grease, low and high temperatures all influence the service life of elevator belts and compromise the rubber. With Polysur®, blistering, perishing and swelling of the belt is kept to a minimum and risks are limited.



NO CONCESSIONS TO THE QUALITY OF THE RUBBER

LONGER FLEXIBILITY DUE TO HIGH QUALITY

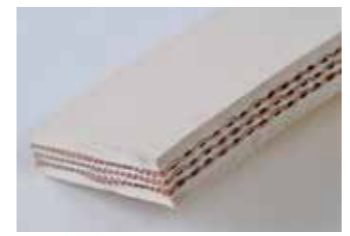
Polysur® elevator belts are manufactured at a vulcanisation temperature of 145 to 160 °C. If the temperature in the elevator is relatively high, the vulcanisation process continues and the rubber hardens. The extent of the hardening under the influence of high temperatures depends on the kind of rubber processed. Therefore, there is by definition no such thing as a 'heat-resistant belt'. 'A belt with increased resistance to deterioration under the influence of temperature', would be a better description. This deterioration process can be limited by using rubber qualities such as EPDM and EPM, which stay flexible longer under the influence of high temperatures. These rubber qualities have a service life of many years.

Several Polysur® versions are fully resistant to oils and greases, both mineral and vegetable. Very high concentrations of NBR rubber are used in these rubber mixtures, which counteracts hardening, swelling and blistering.

OUR TYPES OF ELEVATOR BELTS

VARIETY OF QUALITY AND VERSIONS

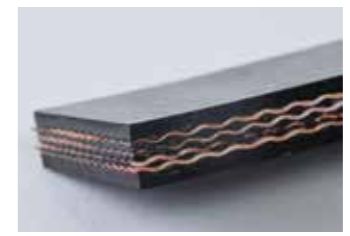
All Polysur® elevator belts are reinforced with specially woven polyester/polyamide plies or steel cord reinforcements, all possessing different characteristics so you will always be able to find the appropriate elevator belt for each situation.



FOOD
Polysur® also offers white food-grade quality (FDA certified) elevator belts and are mainly used for elevators in the food processing industry. This belt quality is very highly resistant to oil and fat and is also flame-retardant in accordance with DIN 22103 (ISO 340).

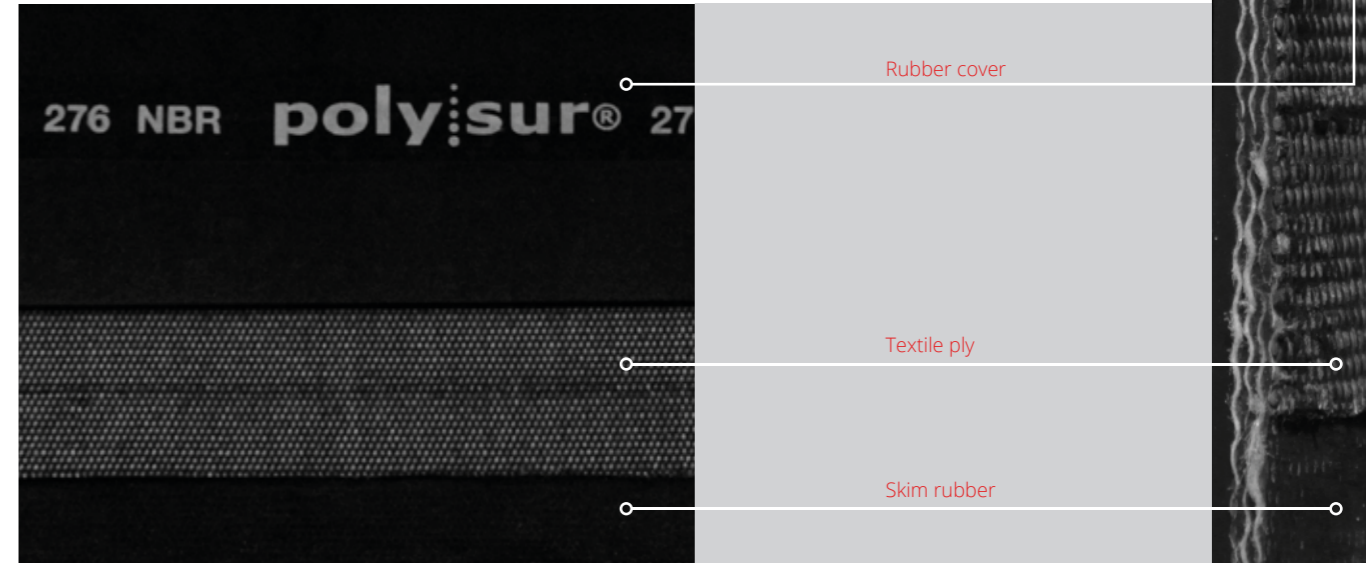


STEEL FABRIC
Polysur® Ferro elevator belts are reinforced with Fleximat® steel fabric, a specially produced fabric comprising length cords and cross cords which are bound together to form a unified structure. Because significant lift heights and heavy elevator buckets require an extremely strong transverse belt construction, this belt has been designed.



POLYESTER/POLYAMIDE
Polysur® elevator belts are reinforced with specially woven polyester/polyamide plies (EP) and are suitable for a wide range of applications. With 30% more polyamide weft threads in the EP fabric the belts are heavier and stronger transversely. As a result, the belts track better and are quieter when running.

VISIT OUR WEBSITE FOR FINDING TECHNICAL DATASHEETS AND TO ENQUIRE ABOUT ADDITIONAL COMPONENTS FOR ELEVATORS



Belt structure with EP fabric

YOUR TRADEMARK FOR RELIABLE ELEVATOR BELTS

READY DELIVERED PRODUCT

The Polysur® elevator belt can be supplied ready punched (EP belting) or drilled (steel cord belting) with bucket bolt holes according to a detailed Autocad drawing of the exact pattern. There is also an indication on the belt showing bucket and pulley side, one or two belt ends prepared for fitting the belt fastener, tools for preparing belt ends on site to fit the belt fastener, protective packaging and an elevator belt fitting manual.



Polysur® elevator belts are provided with a Polysur® logo after each 20 meter of elevator belt.

polysur®

info@polysur.com | www.polysur.com