Trellex Conveyor Components
Carry back
What to do
Clean the belt at the discharge point.
How to do it
Use Trellex Engineered Belt Cleaning System. A Pre-Cleaner in combination with a T-Cleaner or an Arm-Cleaner is the most efficient solution for smooth belts. If a single cleaner is required, the Pre-Cleaner is recommended for coarse or wet and sticky material, the T-Cleaner and Arm-Cleaner for dry and fine material. For reversible belts a T-Cleaner is a good solution. For cleated belts carrying dry material a Trellex Belt Brush is the best solution.

Spillage
What to do
Seal the loading area. Support the belt edge. Deflect the material towards the centre of the belt. Eliminate mistracking.
How to do it
This problem is best solved by installing a Trellex Sealing System in combination with a Trellex Impact Station. The Impact Bar or Glide Bar supports the belt edge eliminating belt sag between idlers. For maximum wear life and efficiency a Wear Liner should be installed on the inside of the bottom of the chute and along the skirtboards to keep material away from the seal. Centre the belt by installing a Trellex Belt Guiding System so that the belt edge stays outside the seal.

Mistracking
What to do
Clean the belt. Cover the belt. Guide the belt.
How to do it
If material is building up on return rollers, installing a Trellex Belt Cleaning System in combination with Trellex Roller Sleeve takes care of the problem. If the conveyor is exposed to rain, snow or side winds, Trellex Conveyor Hoods or Conveyor Enclosure will protect it. If the problem is difficult to locate or correct, a Trellex Belt Guiding System is a quick and efficient way of controlling belt tracking without pinching the belt causing damage to the belt edge.

Pinching Accidents
What to do
Protect areas where hands, hair or loose clothing could get stuck.
How to do it
Installing Trellex Return Roll Guards significantly reduces the risk of getting body parts or clothing pinched between the return rollers and the conveyor belt. A simple and economical way of increasing work safety.

Dust
What to do
Contain it.
How to do it
By enclosing the transported material using a Trellex Loading Point Sealing System and using Trellex Conveyor Enclosure or Conveyor Hoods on the rest of the Conveyor, dust and fines can be contained on the belt. An efficient way of improving the work environment and reducing maintenance cost.
**Conveying**

**Impact Damage**

What to do
Reduce the free drop height and/or absorb the kinetic energy from the falling material.

How to do it
By installing Trellex Impact Bars mounted on a Heavy Duty Impact Cradle or a special adapter that fits in the existing idler, energy from the falling material is efficiently absorbed. The Impact Bars protect the belt from being damaged by sharp or large material. Impact Stations are made with articulated sides to make the installation easy and to ensure proper fit.

**Premature roller break down**

What to do
Use a high quality roller.

How to do it
Invest in Trellex Idlers to enjoy the lowest total cost. Trellex Idlers are value engineered for economical and reliable operation. They are in operation around the world in the harshest of operating conditions. Metso has a full product range of roll designs in Fixed Frame, Wire Rope Suspended or Garland styles for light duty through extra heavy duty service. Idler selection is therefore unbiased and based on what is best for the application.

**Slippage**

What to do
Increase the coefficient of friction between the belt and the pulley.

How to do it
By choosing the right type of Pulley Lagging the effective coefficient of friction can be increased and belt slippage problems can be eliminated. Metso provides a wide variety of Pulley Lagging in different rubber qualities and designs tailor made for maximum efficiency in all applications.

**Conveyor Roll Back**

What to do
Eliminate the disastrous reversal of a loaded conveyor.

How to do it
By installing a Trellex Holdback, the risk of a loaded conveyor reversing is eliminated. Locating a Trellex Holdback directly on the drive or head pulley shaft provides the highest reliability attainable. Value engineered for economical and dependable operation, the Trellex Holdback effectively protects against personal injury, flooded feed points and damaged equipment caused by a loaded conveyor running backwards.

**Splice Damage**

What to do
Use a high quality adhesive.

How to do it
Metso provides a wide range of primers, one and two component adhesives and belt splicing material for both hot vulcanizing and cold bonding of conveyor belt splices. Trellex Adhesive also provides excellent results when used for bonding pulley lagging.
Impact System

Impact Bar

Trellex Impact Bars are used when high levels of energy absorption are to be encountered and low friction drag is desirable. They are most often used at the conveyor’s loading point, where they replace traditional impact idlers. The T-bolt fixing system makes installation quick and easy. Trellex Impact Bars has no moving parts, thus avoiding problems with bearings that break down and rollers that freeze. Trellex Impact Bar dramatically reduces down time and maintenance costs, lengthens the service life of belts and conveyors and improves the work environment.

Mounting cradle

The strongest and most complete construction for installing Trellex Impact Bars is to use a mounting cradle. This replaces existing impact idlers. The sides of the cradle are articulated, making the installation of the system and replacement of worn-out Impact Bars simple and quick. The belt edge is given the support required to allow the Sealing System to work in the optimum way.

Adapter

The Adapter is a cost-effective product that simplifies the fitting of Impact Bars. The adapter is custom-made to fit straight into existing idlers. It is recommended for lighter applications than the cradle is used for. One major advantage is that the system does not contain any moving parts, considerably reducing the need for maintenance.
Belt Guiding

**Belt Conductor**
A centred belt is one precondition if the Sealing System at the loading point is to work. Reducing spillage increases revenue and provides a better work environment. The Trellex Belt Conductor is mounted on the return run of the belt and provides active restraint and constant control of the belt. This avoids damage to the edge of the belt and important parts of the frame. The edge rollers of the Belt Conductor sense any mistracking of the belt and the control roller centres the belt. No risk of pinching and minimal friction result in a practically maintenance-free solution.

**Heavy Duty Belt Conductor**
The same basic design as the Belt Conductor but more robust for heavier applications. Suitable for steel cord belts and for belt speeds of more than 3.5 m/s. The larger the belt and the higher the speed, the more quickly damage occurs and the higher the costs become. HD Belt Conductor provides great savings in the form of reduced wear and tear on the belt, rollers and conveyor frame. It also increases availability by reducing the risk of unplanned down time. Like the other models, it is easy to assemble and is practically maintenance free.

**Reversible Belt Conductor**
The greatest problems with uncentred belts normally appear on reversing conveyors. Most of the methods used on normal conveyors do not work well in this situation. Metso has developed a Belt Conductor that requires minimal space and is very easy to install. The edge rollers sense any belt mistracking and the control roller corrects the belt lateral movement. The Belt Conductor is fully adjustable for different belt widths. The Belt Conductor takes care of a constantly recurring maintenance problem, reduces operating costs and increases conveyor availability.
Sealing System

Clamp-on

Trellex Clamp-on sealing system is an efficient system for sealing belts in the loading zone. The blocks overlap one another to prevent material spillage at the joints between them. The polyurethane blocks are held in place by an aluminium profile that is locked in place using a quick-release fastener that makes assembly and adjustment quick and easy. The costs of service and maintenance is therefore lowered. The material in the blocks allows a long service life while also being kind to the belt. Reducing material spillage also reduces clean-up cost and improves the work environment.

Snap-on

A sealing system that is suitable for sealing along the conveyor’s entire length. The extruded rubber strip is available in long lengths, completely eliminating joints and reducing the risk of spillage. Fitting is quick and easy with the snap-on mechanism. Adjustments are very easy since the plate, on which the rubber strip is fitted, is installed using wedge bolts against the chute. When these are released, the sealing strip automatically slides down towards the belt. Then, the wedge bolts are fastened again. Maintenance is simplified and spillage is reduced.

Wear Liner

The Wear Liner is part of the sealing system, fitted to the inside of the chute to prevent loaded material from pressing directly onto the sealing strip. In this way, a space is created for dust and fine material only, making it easier for the sealing strip to do a good job. The Wear Liner consists of a pre-shaped 15 mm thick rubber-faced element that is reinforced with a steel plate. The lower edge consists of pure rubber which prevents damage to the belt. By lining the inside of the chute with rubber, a certain amount of noise-proofing is also achieved, further improving the work environment.

Glide Bar

Trellex Glide Bar is designed specifically for the trough-shaped sides on the conveyor belt. Trellex Glide Bar supports the edge of the belt and prevents sagging between the rollers, giving an even surface to seal against. Trellex Glide Bar has a surface of ultrahighmolecularweight Polyethylene, which has low friction and good wear resistance. Trellex Glide Bar can be installed in many different ways. Either in combination with Trellex Impact Bar on a cradle in the loading zone, or in lighter-weight applications on a formed plate that replaces the edge rollers. A third option is a special support. Angles, width and height are all adjustable. This means that the belt is given the best conceivable support and the sealing strip gets a flat surface against which to a seal. The design makes it possible to retain existing idlers since the support is fitted between them. Installation and replacement of worn elements are carried out quickly and simply.
**Conveyor Cover**

**Conveyor Enclosure**

The Trellex Conveyor Enclosure is a modular system, consisting of steel arches, support tubes, PVC-coated fabric as well as a Grip Strip and rubber ladders for attachment. The system is simple, quick to fit and permits belt and rollers to be inspected from both sides of the conveyor. The material being carried is protected against the wind and weather, the work environment is improved, and the environment protected because the material being conveyed stays on the belt.

**Hoods**

Our Hoods are a robust construction of aluminium or galvanized steel, which efficiently protects the material being carried from being blown off the conveyor. The work environment is improved while safety also increases. The strong design is also very suitable for cold climates where snow loads need to be considered.

On inclined conveyors which are not covered, rain can cause major problems because the material gets washed away. This problem is efficiently eliminated with Trellex Hoods. The sides can be opened easily, to permit inspection or roller replacement, simplifying maintenance.
Belt Cleaning

Pre-Cleaner

The Pre-Cleaner is positioned against the drive pulley immediately below the flow of material. It consists of a number of separate segments which are able to move independently of one another for maximum flexibility. The Pre-Cleaner blade is made of wear-resistant polyurethane, providing a long service life. The blades have a good scraping effect without damaging the belt. The individual blades are mounted in an aluminium cassette which makes fitting and replacing worn blades quick and easy. Spring Tensioners ensure that correct pressure is maintained against the belt, thus reducing the need for maintenance.

T-Cleaner

Remnants of fine materials may be left behind on the belt. In this case, a fines cleaner, such as the T-Cleaner, is fitted after the Pre-Cleaner immediately behind the drive pulley to obtain the best cleaning effect. If fine and dry material are being conveyed, a T-Cleaner alone may suffice. An aluminium cassette, the same as used for the Pre-Cleaner, is used for the T-Cleaner. The blade has hard metal vulcanized into flexible rubber, allowing the blades to move individually. A Spring Tensioner maintains the pressure and ensures that there is a minimal maintenance requirement. The T-Cleaner is also an excellent cleaner for reversible conveyors.

Arm-Cleaner

The Arm-Cleaner, like the T-Cleaner is a fines cleaner fitted onto the underside of the belt immediately behind the drive pulley. The scraper elements are fitted so that they overlap one another, reducing the risk of streaking. The hard metal blades are mounted on an arm that is fixed into a rubber body, providing individual flexibility. A Spring Tensioner provides the correct applied pressure for the entire life of the cleaner. The metal blades are more suited for higher temperatures and belt speeds than other types of cleaner blades.
Belt Cleaning

Belt Brush
An efficient Belt Brush for cleated belts carrying dry, fine materials. The belt is kept clean and spillage below the belt is reduced. This results in lower maintenance costs and less clean up. The brush is driven by a completely enclosed drum motor in which all motor parts are well protected and operate in an oil bath. The unit is very compact and safety is high since no external motors or V-belts are required for operation.

Easy Clean
This is a scraper strip supplied as a replacement for rubber strips, wooden planks or other simple solutions. Easy Clean consists of a wear-resistant rubber with a reinforcing layer of polyethylene on both sides. This means that a 90 degree scraping angle can be maintained for its entire service life, leading to more efficient belt cleaning than if a pure rubber strip was used.

PU Strips
Made from our wear-resistant ESA95 material, these scraper strips provide long service life. They are made in a wide variety of thicknesses, widths and lengths for fitting existing or new applications. The stiffness of the material means that the scraper strip does not bend so a good scraping angle can be maintained throughout its service life.
Pulley and Roller Lagging

Griplag
Trellex Griplag has a unique design that prevents slippage while also being self-cleaning, thus preventing material build-up and misalignment. Trellex Griplag can take up the relative movement between the drum and the belt, caused by the difference in belt elongation on the carrying and return side of the belt. This gives Trellex Griplag a very long service life. A lot of time and money is saved because Trellex Griplag can be installed and replaced without having to remove the pulley from the conveyor.

Traclag
Trellex Traclag is intended for lining pulleys to prevent slipping and misalignment. It is suitable for all types of drive, turn and breaker pulleys. Trellex Traclag is made in many different thicknesses and grades of rubber and the top is available with a diamond pattern, herringbone pattern or completely smooth. Trellex Traclag is bonded onto the steel drum and the back is available either with removable protective plastic or a pre-treated contact layer.

Pulley Bars
Trellex Pulley Bars are designed to be strong and are made of a wear-resistant rubber material providing a long service life. Pulley Bars can be used on inclined conveyors and elevators. The symmetrical design also means that the Pulley Bar is suitable for use on reversible conveyors. The Pulley Bars are bolted onto the pulley using self-tapping screws, which make installing and replacing worn out bars simple and quick.

Roller Sleeve
Trellex Roller Sleeve is an elastic rubber sleeve that is mounted on return rollers. The elasticity of the rubber counteracts the build-up of material on the roller thus preventing misalignment. The rubber also protects the rollers against corrosion and wear, lengthening their service life and reducing the risk of damage to the belt. Trellex Roller Sleeve is simple to install using an adapter and compressed air.
Other Products

Holdback
The risk of uncontrolled reversing of the conveyor is eliminated in the event of a motor or gearbox breakdown by installing a Trellex Holdback. For maximum reliability, the Holdback is fitted directly onto the axle of the drive pulley. Designed for economic and dependable operation, the Trellex Holdback gives effective protection against injuries to persons, flooded loading stations and ruined equipment.

Pinch Guard
The Trellex Return Roller Guard has been produced to reduce the risk of body parts and loose clothing getting caught between the return rollers and the conveyor belt. It is a simple and economic measure for reducing the risk of pinching injuries while working around the conveyor. Safety is increased, the work environment is improved and operating costs are reduced. The pinch guard is made of a special plastic material, designed in such a way as to prevent the material build up and damaging rollers and belts.

Inspection Hatch
The Trellex Inspection Hatch makes it easy to inspect and maintain items such as belt cleaners, brushes and vibrating screens. The hatch fits most conveyors, chutes, screens etc. It is made of strong, elastic polyurethane. The hatch is connected to the associated steel frame by means of four wing screws and can be opened quickly and easily without the use of special tools.

Edge Roller Sleeves
The Edge Roller Sleeves are made of our wear-resistant ESA78 polyurethane material providing a long service life. Wear on the shell of the roller is eliminated and the life of the roller is extended. Damage to the belt edge due to worn through edge rollers can be avoided. The sleeves have a snap-on fixing, making installation simple and quick.

Rollers
Our rollers are designed to handle the toughest applications and work environments, while maintaining high levels of operating reliability. Shells and end caps are precision welded into one very strong unit, which guarantees maximum precision and minimum imbalance. The ball bearing is protected both internally and externally by seals with low rolling resistance, which effectively prevent penetration by any contaminants into the bearing. The roller’s long service life reduces operating and maintenance costs.

Rubber Solutions
Also included in our range are products for splicing conveyor belts, bonding pulley lagging and rubber sheeting as well as different metals and rubber primers. Trellex adhesive T2 and T3 is a two-component old/hot vulcanization material which is recommended for splicing belts and bonding pulley lagging where there are high requirements for strength. For best adhesion when bonding rubber to steel, Trellex Steel Primer should be painted onto the shot-blasted or milled and degreased metal surface before Trellex adhesive T2 and T3 is applied. Trellex one component Contact adhesive 4284 is suitable for use when applying rubber sheeting to larger surfaces.
Trellex Conveyor Components

Our range:
- Adhesives
- Air Knife Cleaners
- Belt Brushes
- Belt Guiding Systems
- Belt Scrapers
- Belt Splicing material
- Conveyor Enclosure
- Conveyor Hoods
- Conveyor Rollers
- Conveyor Sealing Systems
- Glide Bars
- Hold Backs
- Idlers
- Impact Bars
- Impact Table
- Pinch protection
- Pulleys
- Pulley Lagging
- Roller Sleeves
- Wear Liner

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