



BELT SCRAPERS

PROVIDING THE BULK MATERIAL HANDLING
INDUSTRY WITH PRODUCTIVE, SAFE AND RELIABLE
CONVEYOR SOLUTIONS

GUIDELINES FOR EFFECTIVE CONVEYOR BELT SCRAPERS

Tru-Trac® recognises that conveyors are the lifelines to any plant or mine. It is essential that all conveyor systems run efficiently in moving products from one production unit to the next without failure or any unscheduled downtime. Belt scrapers are an essential part of any conveyor system. Belt scrapers help remove product carry-back and prevent it from falling off at various points along the return side of the belt causing various housekeeping and maintenance problems.

Carry-back can lead to:

- Excessive build up and wear/damage to the conveyor belt, idlers and pulleys
- Conveyor belt misalignment due to the artificial crown created by the carry-back
- Accumulation of material falling off idlers and structure to the ground or on buildings, vehicles or even people.
- Negative and unsafe work environment.

We have set high standards to help plants and mines minimise problems associated with material carry-back.

Our guidelines for effective belt scrapers are:

- Design for optimum clean with the least amount of pressure
- Position the blade out of the main flow of the material
- If possible, install the belt scrapers in the main chute or an area that will be easily cleaned and maintained.
- Primary scraper blades should be no more than the width of the material being conveyed.
- Engineered and designed to handle “worst case” conditions.
- Designed for ease of maintenance
- Quick and simple replacement blade change
- Tensioner to maintain tension throughout the life of the blade

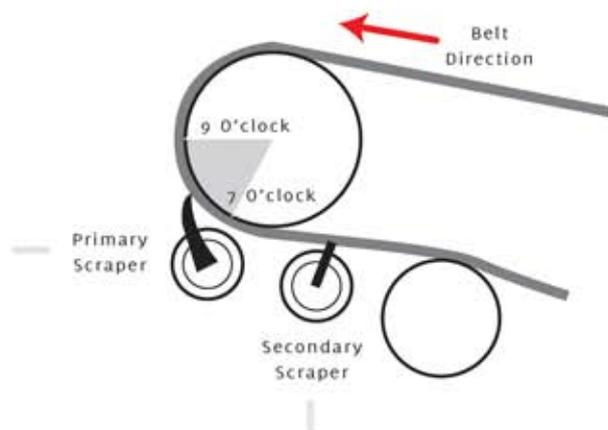
BULK MATERIAL CHARACTERISTICS AND BELT SCRAPER CONSIDERATIONS

The material to be cleaned from the belt affects the selection of the belt scraper system, so it is important to be able to define and classify the properties and characteristics of the bulk material. The basic elements of the classification system are: size, flowability, abrasiveness, moisture and other miscellaneous characteristics.

Because of the position of the head pulley, the material removed is most easily discharged into the main chute. Therefore this location is considered the Primary Location for belt cleaning. The second most practical location for belt scrapers is the space between where the belt leaves the head pulley and where it contacts the first snub pulley, bend pulley or return idler.

USE BOTH A PRIMARY AND A SECONDARY BELT SCRAPER FOR THE BEST CLEANING RESULTS

Primary Peeling-type belt scrapers are installed at the 7 to 9 o'clock position on the head pulley referred to as the primary position. These are the most common type of belt scrapers.



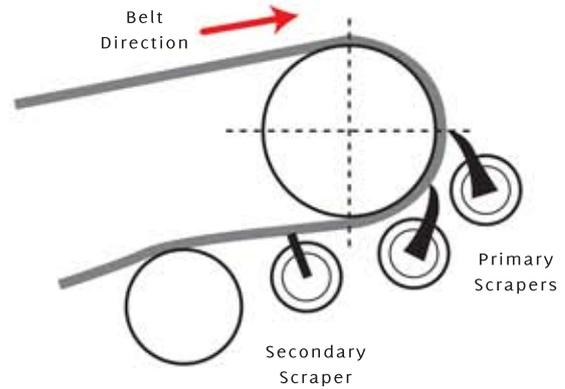
Secondary Scraping-type belt scrapers are installed after the tangent point where the belt leaves the head or discharge pulley, normally referred to as the secondary position. They are positioned against the belt at an angle that conforms to the direction the belt travels, commonly referred to as the “angle of attack”. These type of scrapers in essence act like a squeegee. They are used mainly when sticky fines cannot be removed by the primary scraper.

OVERVIEW OF PRIMARY & SECONDARY SCRAPERS

We generally recommend multiple belt scrapers be installed to provide effective cleaning on a conveyor system.

Primary Scrapers

Installed at a positive angle, these belt scrapers should be mounted directly against the head pulley below the normal trajectory path of the material. If a secondary scraper cannot be installed, we recommend that a second primary scraper be installed.



- **E-Z Torque™ Tensioner (lifetime warranty)** - made of all 304 stainless steel mounting plates, collars and springs allows the blades to self-adjust throughout the entire life of the blade and is the most robust and accurate belt scraper tensioner in the industry.

- **Torque Spring** - provides a greater degree of tensioning per mm of blade, versus compression springs which require more tensioning adjustment for the life of the blade.

	PRIMARY SCRAPER BLADES		
			
Blade Type	IV	HT	UHT
Colour	Red	Black	White
Material	Polyurethane	Polyurethane	Polyurethane
Durometer	85	85	95
Temp Range (Deg)	Minus 28 - 82	Minus 28 - 107	Minus 28 - 148
Max Belt Speed	4 m/s	6 m/s	6 m/s

Secondary Scrapers

Installed after the point where the belt leaves the head (discharge) pulley or anywhere on the return side of the belt where it can be cleaned and maintained effectively. If a primary scraper cannot be installed, we recommend that a second secondary scraper be installed.

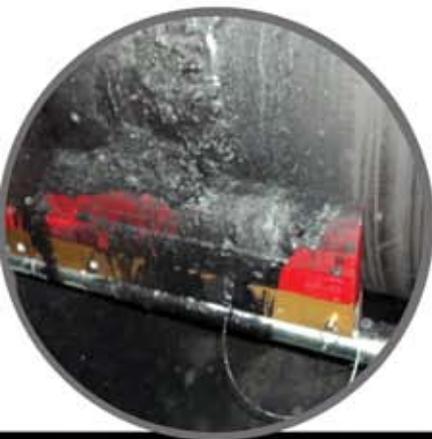


TRU-TRAC® PRIMARY SKALPER™ SCRAPER

SUPERIOR PRIMARY BELT SCRAPER SYSTEM FOR EVERY APPLICATION

Our original Tru-Trac® Primary Skalper™ Scraper has been installed and has solved carry-back problems all over the world. The simple and highly effective belt scraper removes carry-back effectively and efficiently.

- **Excellent Performance** - Our patented Skalper™ Blade design maintains an effective cleaning edge throughout the life of the blade and can be changed for the optimum in blade coverage across the belt's material carry path for better cleaning efficiency.
- **Quick-Change Blade** - Stainless steel pin blade change-out system is a one-minute, no-tool operation.
- **E-Z Torque™ Tensioner (Lifetime Warranty)** - Made out of stainless steel allows the blades to self-adjust and is the most robust and accurate belt scraper tensioner in the industry
- **Improved Blade Profile** - With renewing edge lines.



TRU-TRAC® PRIMARY SUPER SKALPER™ SCRAPER

SUPERIOR PRIMARY SCRAPER SYSTEM FOR TOUGH APPLICATIONS

The Tru-Trac® Primary Super Skalper™ Scraper can tackle the toughest carry-back applications. The massive blade provides carry-back removal for high-speed belts, large head pulleys and large sizes and volumes of material, typically found in below and above ground mining.

- **Extremely Rugged Heavy-Duty** - Mounting tube and massive blade can handle extreme carry-back conditions.
- **Super Skalper™ Scraper Blade** - Is a massive 256mm high blade and is designed to maintain an effective cleaning edge throughout the life of the blade.
- **Quick Change Blade** - Stainless steel pin blade change-out system is a one-minute, no-tool operation.
- **E-Z Torque™ Tensioner (Lifetime warranty)** - Made out of stainless steel allows the blades to self-adjust and is the most robust and accurate belt scraper tensioner in the industry.
- **Dual E-Z Torque™ Tensioners** - Are standard for belt widths 1200mm and above.
- **Improved Blade Profile** - With renewing edge lines.



TRU-TRAC® PRIMARY E-Z SKALPER™ SCRAPER

UNDERGROUND PRIMARY SCRAPER

The Tru-Trac® Primary E-Z Skalper™ Scraper provides effective carry-back removal in the toughest underground environments, where an aluminium free design is required. The patented blade is designed for removing high volumes of material and for quick and easy maintenance.

- **Excellent Performance** - Our patented E-Z Skalper™ Scraper Blade design is available in a 1-piece blade or segmented blades that can be changed for the optimum in blade coverage across the belt's material carry path for better cleaning efficiency.
- **Advanced Composites** - Uses polyurethane composites designed to handle the toughest environments
- **E-Z Torque™ Tensioner (Lifetime Warranty)** - Made out of stainless steel allows the blades to self-adjust and is the most robust and accurate belt scraper tensioner in the industry
- **Aluminium Free Design.**

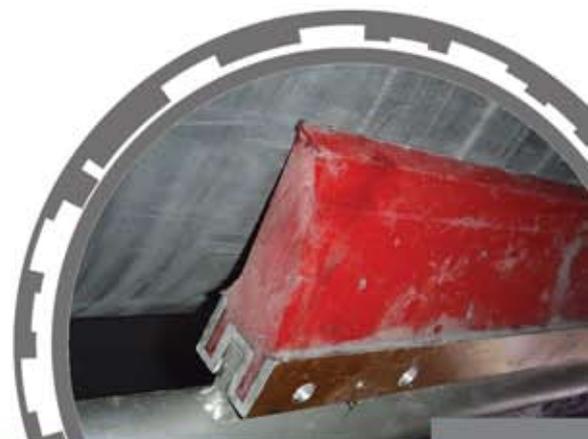


TRU-TRAC® PRIMARY MINI-SKALPER™ SCRAPER

GREAT SOLUTION FOR SMALLER DIAMETER PULLEYS

The Tru-Trac® Primary Mini-Skalper™ Scraper is designed for use where space and size is a factor. This belt scraper is great when the head pulley is less than 400mm in diameter or in tight locations.

- **Excellent Performance** - Our patented Mini-Skalper™ Scraper Blade design maintains an effective cleaning edge throughout the life of the blade and can be changed for the optimum in blade coverage across the belt's material carry path for better cleaning efficiency.
- **Quick-Change Blade** - Stainless steel pin blade change-out system is a one-minute, no-tool operation.
- **E-Z Torque™ Tensioner (Lifetime Warranty)** - Made out of stainless steel allows the blades to self-adjust and is the most robust and accurate belt scraper tensioner in the industry.



TRU-TRAC® SECONDARY RAZOR-BACK™ SCRAPER

SUPERIOR SECONDARY BELT SCRAPER SYSTEM

The Tru-Trac® Secondary Razor-Back™ Scraper features tough self-adjusting replaceable tungsten carbide blades for extremely effective belt cleaning. Once you try the Razor-Back™ it will be the only secondary belt scraper you'll ever buy again.

- **Abrasion Resistant** - Tungsten carbide blades provide and maintain a great cleaning edge against the belt.
- **Impact Absorbing Tension Cushions** - Tension each individual blade to the belt for a controlled and effective belt cleaning across the entire width of the belt.
- **Compact Design** - Allows for an installation that requires less than 175mm clearance to be installed and maintained.
- **Quick Change Blade** - Stainless steel pin blade change-out cartridge system is a one-minute operation.
- **Mechanical Splices? No Problem** - The Razor-Back™ Scraper can be installed on belts with mechanical splices, due to the laid-back wiping blade angle and impact-absorbing tensioning cushions, allowing the mechanical splices to pass without damaging the belt scraper or the splice.
- **Also available with Spray Bar.**



TRU-TRAC® SECONDARY RAZOR-BACK HD SCRAPER

SUPERIOR CLEANING FOR THE TOUGHEST MINING APPLICATIONS

The Tru-Trac® Razor-Back HD is a secondary heavy duty belt scraper designed for high speed and high tonnage mining conveyor systems running in the most aggressive environments. The heavy-duty replaceable carbide nickel chrome tip blades together with heavy duty cushions, effectively clean the conveyor belt with our dual action tensioning system that maintains effective pressure across the entire belt surface.

- **Longwearing Abrasion Resistant** - Tungsten nickel chrome carbide blades provide superior cleaning and extended blade life.
- **Quick Change Blade** - Stainless steel pin blade change-out cartridge system is a one-minute operation.
- **Durable Construction** - Consisting of a combination of stainless and corrosion-resistant steel parts and heavy duty cushions to endure the toughest and most extreme mining environments.



TRU-TRAC® XD V-PLOUGH™ SCRAPER

DISCHARGE FUGITIVE MATERIAL TO BOTH SIDES OF THE CONVEYOR

The Tru-Trac® XD V-Plough™ Scraper is designed for the toughest mining environments. The V-Plough effectively keeps material from being trapped between the tail and take-up pulleys, and prevents build-up of material on the pulleys thereby reducing belt alignment problems.



- Keeps material from becoming trapped between a tail or take-up pulley and the conveyor belt.
- Protects and Reduces Damage - The V-Plough protects the conveyor belt from puncture damage and its three-point suspension keeps the plow parallel to the belt.
- Self Adjusting - No maintenance needed, adjusts by gravity.
- Double the Blade Life - Blade can be easily swapped, when one side is worn.
- Blade Type - Polyurethane.



TRU-TRAC® ANGLE PLOUGH™ SCRAPER

REDUCES BUILD-UP ON TAIL AND TAKE-UP PULLEYS

Tru-Trac® Angle Plough™ Scrapers are designed to discharge fugitive material to one side of the conveyor. The angle plough is built of a rugged steel structure to hold up in the toughest environments.

- Provides Effective Cleaning - Of the return side of the belt, protecting the tail pulley and the conveyor belt.
- Reversing Conveyors - Are not a problem for the diagonal plough.
- Easy Maintenance - Simple and easy to install and maintain.
- Blade Type - Polyurethane



TRU-TRAC® TORO™ SCRAPER

EFFECTIVE SECONDARY REVERSING BELT SCRAPER

The Tru-Trac® Toro™ secondary belt scraper is an effective flexible secondary belt scraper that is also suitable for reversing conveyor belts. The tungsten cartridge blade system allows for easy blade change-outs.

- **Designed for Reversing Conveyors** - Such as shuttles or conveyors that roll back, trippers, due to its unique two-way rubber cushions.
- **Complete Cleaning** - The tungsten carbide tips are independently tensioned by its own rubber cushion to maintain a consistent blade-to-belt pressure whichever way the belt is running.
- **Quick Change Blade** - Stainless steel pin blade change-out cartridge system is a one-minute operation.
- **Tensioned** - By either our standard stainless steel Bolt-Up™ tensioner or stainless steel Duo-Spring tensioner for constant blade pressure, reducing blade re-tensioning maintenance and ensuring high cleaning efficiency.



Toro™ Scraper
Utherane

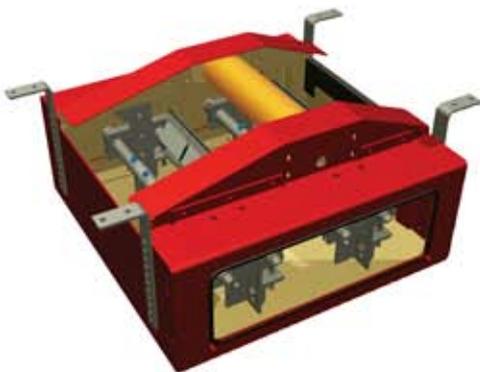


TORO™ Scraper C-Tip
Tungsten Carbide Blade

TRU-TRAC® SCRAPER WASH BOX™

The Tru-Trac® Scraper Wash Box™ is installed as a secondary conveyor belt scraper and is designed to work on the return side of the conveyor belt. Each steel enclosed box is equipped with a combination of pressure rollers, spray bars and Razor-Back™ belt scrapers. The nozzles apply a spray of water which softens the bulk material carry-back and lubricates to maintain effective cleaning pressure. The Tru-Trac® Scraper Wash Box provides the highest quality in belt cleaning technology.

- **Fully Enclosed** - The Wash Box system provides excellent belt cleaning while containing the wash waste liquid.
- **Removable Inspection and Service Doors** - On each side, with wash down hose included.
- **Dual Sets of Razor-Back™ Secondary Belt Scrapers and dry wipe.**
- **Two Spray Bars, Nozzles and Valves** - Softens the bulk material carry-back and provides gentle cleaning.
- **Equal Pressure** - Snub idler provides equal pressure on both Razor-Back™ scrapers.
- **Available in Powder Coated, Galvanized or Stainsteel Steel.**



TRU-TRAC® EXCALIBUR™ FOOD GRADE SCRAPER

LIGHTWEIGHT SCRAPER FOR FOOD PROCESSING INDUSTRY

The Tru-Trac® Excalibur™ Food Grade Scraper uses a unique blade, holder and tensioning mechanism. Excalibur™ is particularly suited for light duty, thermoplastic belts. Excalibur™ is designed and configured to meet the most stringent sanitary requirements of the food manufacturing industry and uses FDA approved materials.

- Ideal for flexible modular plastic table top conveyor belting.
- FDA/USDA compliant materials, meets all sanitary requirements.
- Features a unique blade, holder and tensioning mechanism
- Snap-on/off conveyor belt scraper blade
- 300 Series Electro-polished stainless steel
- Complete disassembly in seconds. No tools needed to install/replace blades.
- Precision tension selection with torsion spring tensioner.
- Can be mounted as a Primary or secondary scraper.
- Various blade materials available: UHMW, FDA Oil impregnated, Nylon, Dual Durometer Polyurethane.



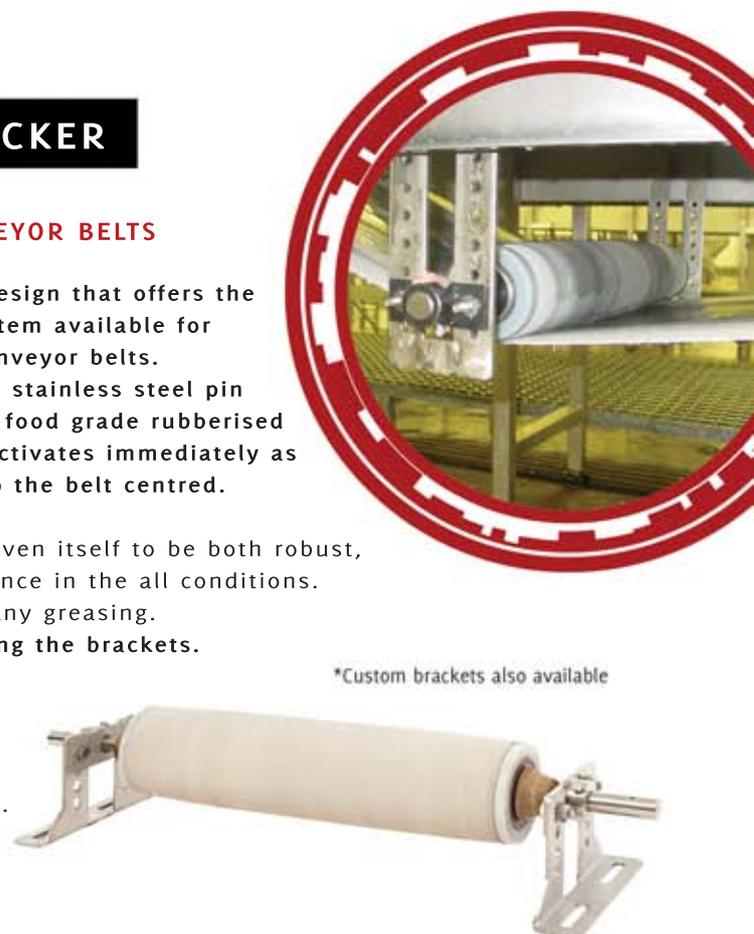
TRU-TRAC® FOOD INDUSTRY TRACKER

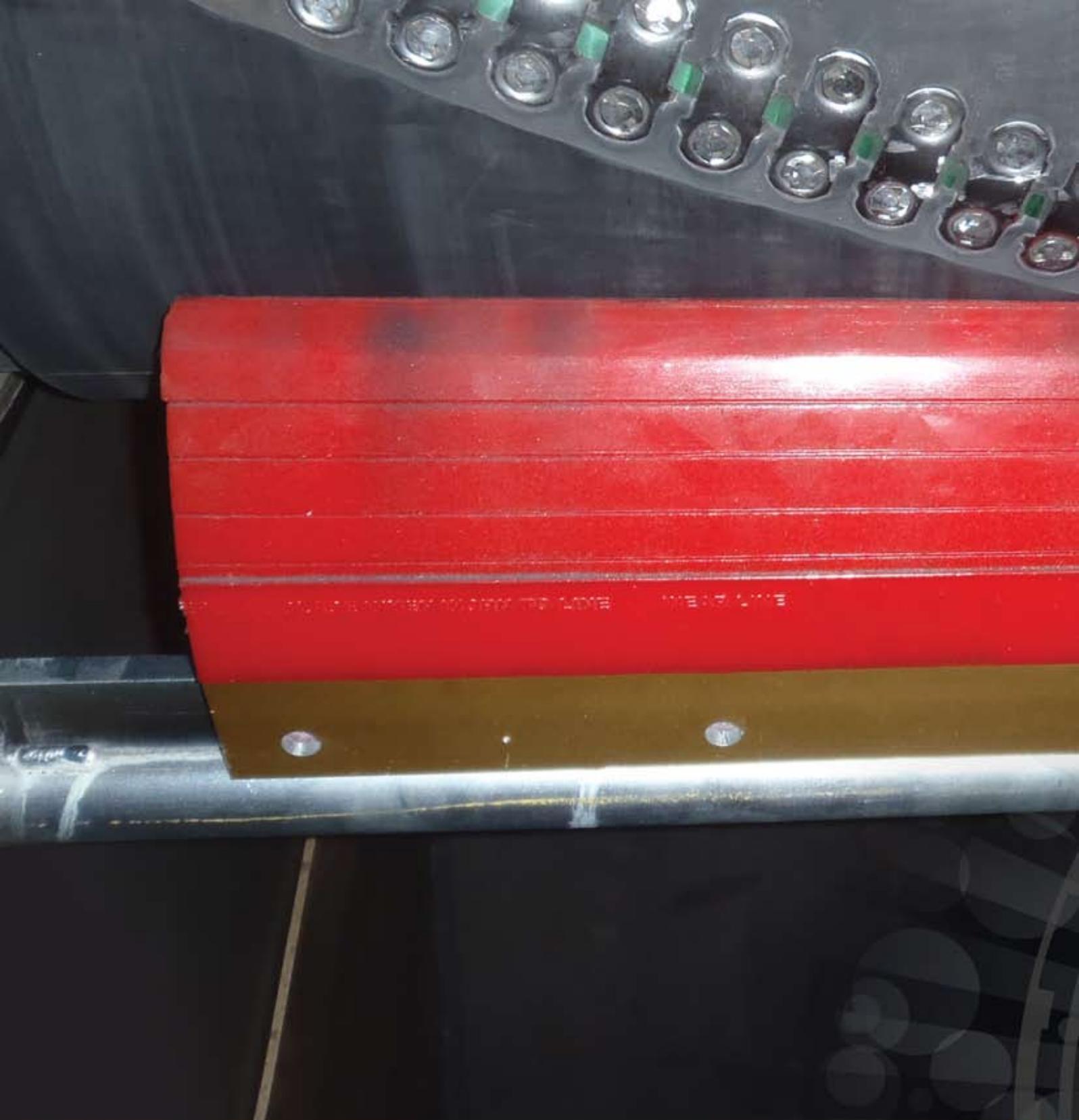
SOLVES MISALIGNMENT ON LIGHT WEIGHT CONVEYOR BELTS

The Tru-Trac® Food Industry Trackers are a patented design that offers the most reliable and effective conveyor belt tracking system available for centralising lightweight food industry slow moving conveyor belts. The center pivot is unique and simple, consisting of a stainless steel pin that is perpendicular to the plane of the belt, and its food grade rubberised covered drum and tapered edge ensures the tracker activates immediately as the belt moves off centre. It's always reacting to keep the belt centred.

- **Reliable Performance** - The Tru-Trac® Tracker has proven itself to be both robust, reliable, long lasting and provide effective performance in the all conditions.
- **Maintenance Free** - Sealed bearings do not require any greasing.
- **Manufactured with 304 - 316 Stainless Steel, including the brackets.**
- **Lagging** - Covered with FDA Approved Food Grade Polyurethane.
- **Operates in all conditions** - Quick activation on both wet and dry belts.
- **Versatile Installation** - Can be installed on the clean side of the belt, and the tension can be adjusted easily with the supplied mounting brackets.

Available from 200mm - 1600mm





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