

# TRU-TRAC® IDLERS, PULLEYS & SAFETY



#### **TRU-TRAC® BRANCHES**

#### **SOUTH AFRICA:**

- Pretoria (H/O)
- Middelburg
- Steelpoort
- Richardsbay
- Rustenburg
- Kuruman
- Saldanha
- Port Elizabeth
- Springbok

#### **AFRICA:**

- Zambia
- Burkina Faso
- DRC
- Botswana
- Zimbabwe
- Mozambique
- Lesotho
- Swaziland
- Ghana
- Mali
- Tanzania
- Kenya
- Namibia

#### **INTERNATIONAL DISTRIBUTORS:**

- Australia
- New Zealand
  - China
- South East Asia
- North America
- Central America
- South America
- Europe
- Eastern Europe
- Middle East
- New Caledonia

## TRU-TRAC® GLOBAL FOOTPRINT

## ABOUT US TRU-TRAC®

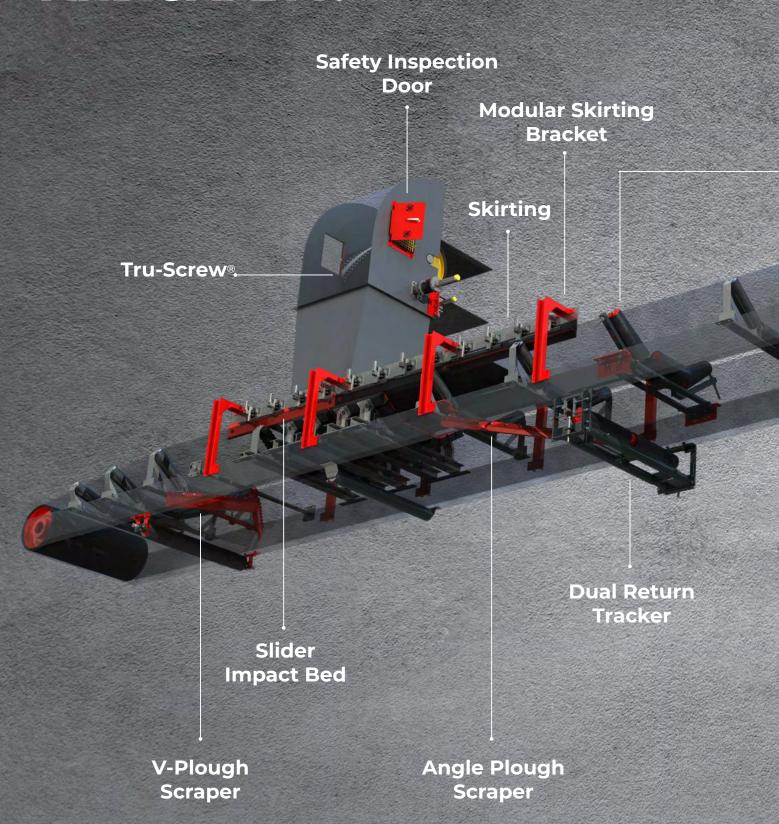
Tru-Trac<sup>®</sup> stands as a world-leading manufacturer and supplier of conveyor belt solutions and services, catering to the mining and bulk material handling industries globally. As a South African enterprise with a global reach, Tru-Trac<sup>®</sup> maintains a direct local technical sales and service presence across the African continent and a sales and distribution network spanning 80 countries.

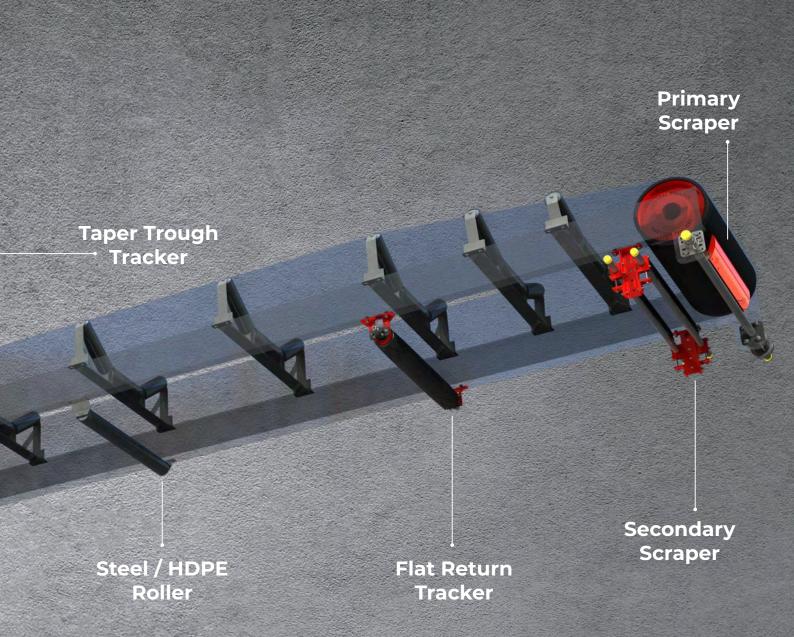
Conveyors serve as the lifeline for efficient bulk material handling operations, and for nearly 30 years, Tru-Trac<sup>®</sup> has been instrumental in assisting the world's prominent mining houses to process minerals with enhanced efficiency, reliability, and safety.

We have curated a repository of industry knowledge, technical expertise, and operational scale. This accumulation empowers us to assist our customers in overcoming nearly any conveyor system challenge they may encounter.



# MAXIMISE CONVEYOR SYSTEM PERFORMANCE, EFFICIENCY AND SAFETY.





The role of a conveyor system in a mining operation can be likened to an artery in the human body; both are essential for the efficient transportation of materials critical to the overall health and productivity of their respective systems. Similar to how the main artery carries oxygenated blood to different parts of the body, a conveyor system in a mine facilitates the transport of bulk material from one location to another, thereby supporting the seamless operation of the mining process. The effectiveness of a conveyor system is a pivotal factor in guaranteeing the efficiency and profitability of a mining operation.

## YOUR PROBLEMS

#### **O] BELT MISALIGNMENT**

The drift of the conveyor belt off-center results in belt damage, material spillage, structural damage, excess power consumption, and switch stoppages.

#### **SOLUTION:**

Tru-Trac® Trackers



#### 02 BELT CLEANING

Carryback refers to the material that adheres to the conveyor belt and dislodges on the return side, posing safety risks, environmental harm, cleaning expenses, and reduced efficiency.

#### **SOLUTION:**

Tru-Trac® Scrapers



#### 03 IMPACT DAMAGE

Safeguard your conveyor system from impact damage at transfer points to enhance safety and extend the lifespan of components.

#### **SOLUTION:**

**Impact Control Solutions** 



#### 04 DUST & SPILLAGE

Dust hazards can jeopardize operator safety and pose fire risks. Inadequate sealing at transfer points results in spillage, material loss, decreased production, and elevated costs associated with manual cleaning.

#### **SOLUTION:**

**Loading Zone Solutions** 



## OUR SOLUTIONS

#### 05 BELT REPAIRS

Conveyor belt repairs can lead to prolonged operational downtime, incurring significant costs during the offline period.

#### SOLUTION:

**Mechanical Fasteners** 



#### 06 SAFETY HAZARDS

Ensuring a safe working environment for staff is imperative to prioritize their safety and well-being.

#### **SOLUTION:**

**Conveyor Safety Solutions** 



## 07 MONITORING & PRODUCTION EFFICIENCY

Accurate flow rate measurement and reporting on conveyor belts are crucial for ensuring efficient business operations.

#### **SOLUTION:**

Belt Scales Speed Sensors Remote Monitoring System



#### 08 BELT SLIP

This problem arises when there is inadequate grip between the head pulley and the belt, often caused by a loss of friction.

#### **SOLUTION:**

**Pulley Lagging** 







Tru-Trac®

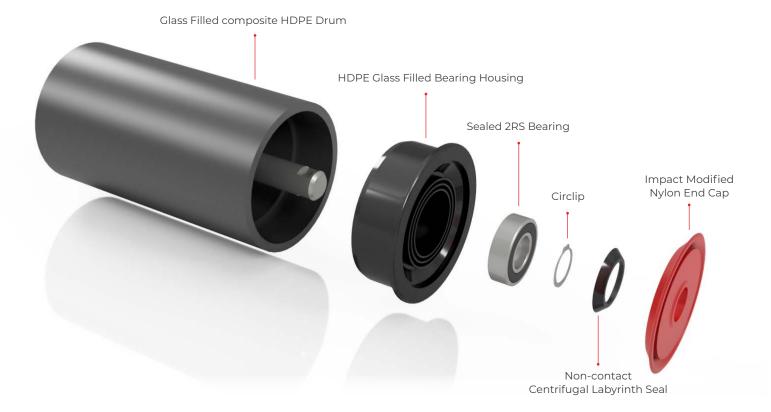
# CONVEYOR IDLERS & FRAMES

Idlers are vital for the conveying process, providing support to the belt and preventing strain. Tru-Trac® idlers are designed to minimize drag and break away mass, extending their lifespan. This reduces electrical consumption and protects the bearings from water and dust contamination.

- Improved belt stability and reduced strain
- Enhanced conveyor system efficiency
- Extended idler lifespan
- Reliable performance in challenging conditions
- Maximum bearing protection

## ABOUT HDPE IDLER

Tru-Trac® Poly-Max rollers are high-performance, lightweight composite rollers crafted with advanced polymer technology. They feature a reinforced HDPE shell and friction-welded composite bearing housings for durability, preventing separation under heavy loads, moisture, and thermal expansion. Equipped with greased-for-life bearings, non-contact centrifugal seals, and a rock shield, these rollers dissipate heat, reduce power demand, and offer noise reduction of 10dB compared to steel rollers.



#### **KEY PRODUCT BENEFITS AND FEATURES:**

- Quality Assurance: Manufactured to resist abrasion, corrosion, and chemicals.
- **Lightweight Yet Robust:** Weighs up to 50% less than traditional troughing steel rollers and 60% less than return rollers, while offering superb rigidity.
- Safety & Efficiency: Flame retardant and FRAS options, complemented by multi-labyrinth sealing and sealed for-life bearings.
- **Innovative Design:** A fixed face flinger prevents roller jams and ensures energy efficiency with diminished breakaway mass.
- **Versatility:** Ideal for demanding applications, from small quarries to large mining operations, covering heavy duty, high-speed, and abrasive conditions.
- **Customization:** Choose from a spectrum of shaft diameters (20mm-60mm) and shell diameters (114mm 219mm).
- **Precision Engineering:** Boasts a Total Indicated Runout (TIR) of just 0.2mm and a stringent out-of balance tolerance of 0.028Nm.
- Protection: Comes with a stationary full rock shield, safeguarding against roller damage from trapped rocks.

#### **TRU-TRAC® STEEL IDLER**

Tru-Trac<sup>®</sup>'s Steel Idlers are crafted for peak efficiency and longevity. By minimizing factors like rim drag, breakaway mass, and bearing misalignment, our rollers operate with reduced friction, ensuring both extended lifespan and quieter performance.

Produced with welded end housings, every idler guarantees smooth rotation, economic operation, and minimal noise. Emphasizing reliability, our unique manufacturing process ensures that Tru-Trac® Steel Idlers consistently deliver toptier performance and durability, offering clients tangible cost savings through fewer failures and less maintenance.

#### **MAIN FEATURES**

- Conforms: to international standards
- Standard lengths: follow SANS 1313, but customization is available.
- Seal Design: Multi-labyrinth with an external contact seal.
- Housing: Sturdily built with welded pressed cap.



#### TRU-TRAC® IMPACT ROLLERS: OPTIMAL PROTECTION & EFFICIENCY

Tru-Trac<sup>®</sup> Impact Rollers shield conveyor belts from damage caused by falling materials, which can impair the belt's cover or ply, particularly in loading zones. For best results, position these rollers in reinforced frames and retainer plates. Each roller, with rubber discs, is mounted on a steel tube for durability.

#### **MAIN FEATURES**

- Robust Design: Tailored for high-impact zones.
- Versatility: Ideal for heavy conveyor loading and transfer points.
- **Belt Protection:** Protects against impact damage.
- **Diameters:** Varied roll diameters available (e.g., 133Ø, 152Ø, 159Ø).
- Shaft Variability: Different shaft diameters (e.g., 25Ø, 30Ø).

#### **Available Options:**

- Standard Impact Idler: Has a steel bearing housing with a 101mm inner tube diameter.
- Heavy Duty Impact Idler: Features a nylon bearing housing, a 127mm inner tube, and is built for
  greater impacts. Its larger bearing size ensures longevity, and its compact rubber rings boost durability.



#### TRU-TRAC® IDLER FRAMES

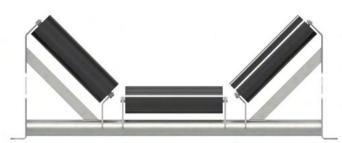
Tru-Trac® offers a variety of idler design configurations according to industry standards such as SANS 1313, DIN, CEMA, while also accommodating custom specifications.

#### **KEY FEATURES**

- Broad Range: Idlers designed for belt widths ranging from 450 mm to 2400 mm.
- Customizable Designs:
  - 1, 2, 3, or 5 roll designs
  - Options for offset or inline
  - Top-mounted or underslung configurations
- Precision Manufactured Frames: Our frames are crafted using jigs from graded materials, ensuring symmetry for consistent and accurate idler positioning across the conveyor system. This precision prevents idler bounce or vibration, allowing for seamless belt movement.
- **Operational Adaptability:** Idler frames are specifically designed to accommodate the conveyor's operational loading characteristics. Their design guarantees that loading and deflection limits are always met.



5 Roll Tubular Frame



3 Roll Tubular Frame



5 Roll Impact Tubular Frame



2 Roll V-Return Idler-Frame

#### **SLIDER TROUGH FRAMES**





Slider Design enables quick replacement of worn idlers Tru-Trac® Slider Trough Frames provide the ability to change troughing rolls under the conveyor without having to lift the belt or remove adjacent belt idler frames. This design is intended to fit into tight or confined spaces, ensuring proper belt rolling support and easy replacement.

#### **MAIN FEATURES**

- Quick maintenance: Sliding mechanism allows for quick and easy access to change worn idlers.
- **Perfect for confined spaces:** The compact inline design allows the unit to be installed and maintained in hard to access areas.
- Rugged design: Heavy duty design can be installed under loading chutes.
- **Corrosion protection:** The entire frame is electro-galvanised to provide corrosion protection throughout the lifespan of the Slider Frame.
- Customised and manufactured: to fit any manufacturers' rollers.
- Compatible: with all Idlers and Impact Idlers.



#### SAFETY PRODUCTS

# CONVEYOR SOLUTIONS FOR A SECURE WORKPLACE.

#### Tru-Trac®

## SAFETY PRODUCTS

At Tru-Trac®, workplace safety is paramount. We have developed a range of conveyor safety products specifically designed to reduce job-related injuries and hazards. Our dedication to safety propels our innovation, ensuring workers' well-being in every industrial environment. With Tru-Trac®'s conveyor safety products, you can have peace of mind knowing that you have taken proactive measures to protect your workforce and mitigate potential risks.

## ABOUT SAFETY PRODUCTS

Tru-Trac<sup>®</sup> has long recognized the importance of ensuring safety in the workplace. The safety of your workers is as important to us as it is to you. Our line of conveyor safety products is specifically designed to help prevent on-the-job injuries and minimize the hazards associated with conveyors.

All exposed moving parts of a conveyor that present a hazard to employees should be mechanically guarded, while still maintaining essential ease of access or approach to conveying equipment to assure proper and continuous usage.

#### **TYPICAL CONVEYOR HAZARD POINTS**

- Nip points
- Shear points
- Pinch points
- Spill points
- Areas under construction
- Passage areas under conveyor





#### **SAFETY SOLUTION**

TRU-TRAC® SAFETY PRODUCTS





#### SCAN THE QR CODE FOR:

- · Application Videos
- Application Images
- Data Sheets



www.tru-trac.com



## ABOUT TRU-LIFT BAG

The Tru-Lift Bag is an innovative belt-lifting system, designed to simplify idler maintenance on belt conveyors. Using a simple low-pressure pneumatic pump, it's ideal for 3-roll idler frames.



#### **MAIN FEATURES**

- Belt widths: 450 to 2100 mm, with wider belts available upon request.
- Low Inflation Pressure: Max required is around 0.34 bars or 5 psi.
- **Light weight:** Ranges from 4 kg (BW450 800) to 20 kg (BW1800 2100).
- Durable: Built to withstand the rugged and demanding conditions in harsh environments.
- Efficient Maintenance: Operations are quick and straightforward.
- Single Operator: The TRU-LIFT Bag facilitates safe and easy idler replacement.
- Portability: Light and easily transportable, enhancing work conditions.
- Adaptable: Available for other support types and can be used without the base.
- Lifetime: 5000 cycles.

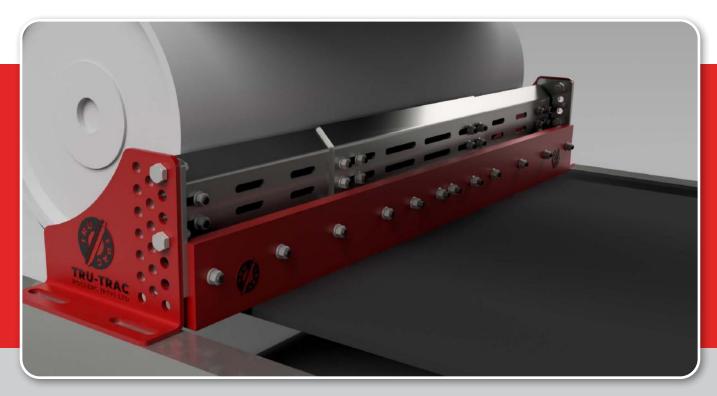




#### ABOUT NIP GUARD

#### Tru-Trac® Nip Guard - The Ultimate Solution for Pinch Point Safety!

The Tru-Trac<sup>®</sup> Nip Guard is an innovative safety device designed to enhance worker safety when operating around head, tail, and drive pulleys. Its primary function is to effectively eliminate the risk of worker exposure to pinch points, significantly reducing the likelihood of accidents and injuries. By creating a physical barrier, the Nip Guard provides a reliable and durable solution that enhances workplace safety and ensures peace of mind for workers in industrial settings.



#### **MAIN FEATURES**

- Simple Installation.
- Low Maintenance.
- Operates in all conditions.
- Robust Design: ensures a long product life.
- Distinctive adjustable guard: maintains consistent distance between conveyor belt and guard.
- Installation: can also be done on bi-directional conveyor belts.



# SCAN THE QR CODE FOR: Application Videos Application Images Data Sheets WWW.tru-trac.com

#### TRU-TRAC® SURE GRIP BELT CLAMP

The Patented Sure Grip conveyor belt clamps offers exceptional belt clamping for all types of conveyor belt maintenance. Sure Grip Belt Clamps provide a positive even pressure across the entire width of the conveyor belt



#### **MAIN FEATURES**

- Unique design: of our patented Sure Grip allows for a positive gripping force that far exceeds all competitive solutions.
- Provides even tensioning across the entire belt width: different clamps, bars available in different widths..
- **Design:** constructed from high-grade light weight steel components.
- Easy to transport and assemble: the bolt is not removed from the clamp and the Sure Grip stays assembled to minimise damage/loss.
- Available: in 7 and 7 tons.

#### **TRU-TRAC® SAFE GUARD**

The patented Tru-Trac® Safe-Guard Return Idler Guard is designed to be installed over existing idlers to prevent injuries from pinch points and to catch the return idler if it should fall. It is recommended to install the Safe-Guards over idlers installed above passage areas.



#### **MAIN FEATURES**

- Durable UHMW slotted cage: helps prevent material build-up.
- Easy Quick Access: to replace worn idlers using the stainless steel quick release pins which open the side of the cage to facilitate ease of maintenance.
- Nip & Pinch point protection.
- Corrosion Protection: made from powder coated A-36 steel.
- Available: for 100mm 180mm diameter rolls | Available to fit most belt conveyors.

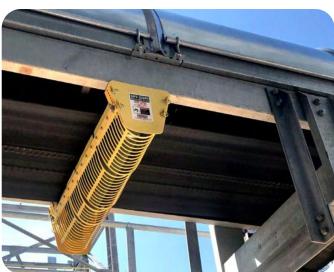
#### **TRU-TRAC® INSPECTION DOOR**

Tru-Trac® Chute Inspection and Access Doors are a necessary part of any transfer point to allow for safe inspection and quick access to maintain conveyor belt cleaning systems.



#### **MAIN FEATURES**

- Safety: bolted inspection screen guard provides the ability to safely inspect equipment while it is operating.
- Redesigned Frame: has a 45-degree flange to shed fines, preventing it from accumulating on the interior of the door.
- Low profile steel construction: along with a dual EPDM dust steel that can withstand temperatures from 40 - 95 degrees C.
- Available: in two standard sizes | 300mm x 450mm and 450mm x 600mm.





BELTING, PULLEYS & LAGGING

DRIVING YOUR CONVEYOR, ELEVATING PERFORMANCE.

# Tru-Trac® BELTING, PULLEYS & LAGGING Tru-Trac® provides a curated selection of top-quality conveyor belts, pulleys,

and pulley lagging from globally renowned manufacturers. Our extensive product range ensures efficient plant operations for our customers.

## ABOUT TRU-GRIP LAGGING

#### TRU-GRIP DIAMOND RUBBER PULLEY LAGGING



True all rounder - premium pulley lagging suitable for drive and non-drive pulleys, wet and dry conditions, pulleys of any diameter in almost all applications.

#### **MAIN FEATURES**

- Diamond profile: minimises vibration, even on small diameter pulleys.
- For drive and non-drive pulleys.
- Suitable: for pulleys of any diameter.
- CN bonding layer: for high bonding strength to pulley surface.
- Reduces slippage: between belt and pulley.
- **Protects:** the pulley from wear and corrosion.
- Also available: in Fire Retardant or Food Grade Rubber.

#### TRU-GRIP PLAIN RUBBER LAGGING



Tru-Grip Lagging is supplied in standard 500mm width rolls of various lengths.

#### **MAIN FEATURES**

- Ideal: for light-duty pulleys and idlers.
- **CN bonding layer:** for high bonding strength to pulley surface.
- Available: in Fire Retardant or Food Grade Rubber.

#### TRU-GRIP DIAMOND CERAMIC LAGGING



Maximum performance lagging for drive pulleys in medium to heavy-duty applications, featuring high traction, anti-resonance, and anti-vibration design.

#### **MAIN FEATURES**

- Narrow tiles and reduced gaps: boost belt life, ensuring uniform belt conformity.
- Diamond pattern: and circumferential grooves expel water and fines, suitable for all speeds.
- **Rubber:** is strong, elastic, and abrasion-resistant.
- **Automated spraying:** yields 100% rubber tear strength bond on ceramic tiles.
- Ceramic back: enhances bond shear strength.
- Lagging features: CN bonding layer for robust pulley adhesion.
- Also offered: in Fire Retardant Rubber.



#### **PULLEYS**

Tru-Trac<sup>®</sup> takes pride in offering a versatile range of pulleys designed to meet various requirements. Whether for light-duty tasks or customized solutions for demanding heavy-duty operations, our pulleys are crafted with precision and resilience. Each pulley reflects our commitment to quality, ensuring optimal performance and longevity, even in harsh conditions. Trust Tru-Trac<sup>®</sup> for innovative and reliable pulley solutions that can handle any challenge.



#### **MAIN FEATURES**

- Drive, Tail and Bend pulleys: Available in all sizes with masses.
- Ensuring pulleys: are manufactured to meet customer specific applications and according to the highest quality standards.
- Designs of pulleys: can be verified using Finite Element Analysis (FEA).
- Include made to SANS 1669 specifications.

#### **BELTING**

Tru-Trac<sup>®</sup> collaborates with top global belt manufacturers to improve plant efficiency and safety. We offer a range of belts from Class 250 to 2000, with widths spanning from 300mm to 1500mm. Our selection includes Polyester-Nylon and Steel cord belts in various grades, such as Oil, Flame, Heat, and Chemical Resistant, all meeting essential conveyor belt specifications.



#### **BELT TYPES AVAILABLE**

- Steel Cord Reinforced Belting
- Textile Reinforced Belting
- Fire Retardant Belts
- Steep Incline Belts
- Cover Grades
- Heat Resistant Belting
- Chevron Conveyor Belts
- PVC/PVG Belting

- Application Images
- Data Sheets



www.tru-trac.com

## FIELD SERVICES

Tru-Trac® provides integrated solutions and support services to optimise and sustain conveyor systems, enabling customers to reach their financial and operational objectives.

#### **HOW IT WORKS**

Tru-Trac<sup>®</sup> has been offering conveyor maintenance services for over 15 years, and is uniquely positioned to offer customers a comprehensive scope of conveyor service and maintenance solutions.



#### INSTALLATION & COMMISSION

Tru-Trac<sup>®</sup>'s skilled **conveyor technicians** ensure products are **expertly installed** and perform optimally, meeting **local safety standards** and tailored to your site's needs.

#### **BENEFITS:**

- Ensure Optimal Installation:
   Guarantees best performance of new equipment.
- On-Site Training: Equips your personnel with hands-on knowledge.
- Reduce Downtime: Faster installation and troubleshooting.
- Installation Reporting: Comprehensive updates for peace of mind.



## PLANNED SHUTDOWN SERVICES

Tru-Trac® works closely with clients to ensure efficient planned shutdowns. We excel in optimizing installations and repairs through meticulous planning and resource coordination, consistently meeting project timelines and budgets.

#### **BENEFITS:**

- **Efficient Planning:** Boosts efficiency and safety through careful scheduling.
- **Resource Allocation:** Optimizes the use of manpower and equipment.
- **Cost & Time Savings:** Ensures budget-friendly, on-time completion.
- Proactive Maintenance: Prevents breakdowns and extends equipment life.

## CONVEYOR MAINTENANCE SERVICE PACKAGES

Tailored to your needs, we offer 4 Service Packages featuring flexible commercial models, customizable Scope of Work, payment options, inventory plans, reporting requirements, and contract periods.

Our close collaboration ensures continuous improvement and optimization of your conveyor performance.

#### **KEY SERVICES:**

- Installation and Commission: Expert setup for optimal performance.
- Planned Shutdown Services: Scheduled maintenance without downtime.
- Full Conveyor Maintenaince: Comprehensive care for long-term reliability.
- Breakdown Emergency Services: Rapid response for unplanned events.





### FULL CONVEYOR MAINTENANCE

Tru-Trac<sup>®</sup>'s **full maintenance service agreements** offer expert **on-site resources**, ensuring **optimal conveyor system performance**, cost control, and adherence to high standards.

#### **BENEFITS:**

- On-Site Teams: Combines dedicated and trained conveyor maintenance teams on site.
- Operational Efficiency: Daily reports, spare parts management, & improved planning for maximized uptime.
- Proactive Care: Preventative maintenance and enhanced safety protocols
- Focus: Concentrate on your core business operations while we handle conveyor maintenance.



## BREAKDOWN -EMERGENCY SERVICES

Tru-Trac<sup>®</sup>'s **local service teams** promptly handle **emergency call-outs** in your region, efficiently diagnosing and resolving issues to **safely restore production** in minimal time.

#### **BENEFITS:**

- Fast Expert Support: Get help when you need it most.
- Decrease Downtime: Quick resolution of issues.
- Customizable Support: Tailored to your specific needs.

#### CONVEYOR TRAINING

#### TRU-TRAC® CONVEYOR TRAINING: Empowering Your Team for Excellence

At Tru-Trac®, we believe that offering high-quality products is just the beginning. Ensuring your team knows how to maximize these tools is where real progress begins. Dive deep with our specialized conveyor training modules, designed not only to address the how-tos but also to impart a comprehensive understanding of common conveyor issues and their solutions.

Invest in training that promises more than just theory. With Tru-Trac<sup>®</sup>, empower your employees to bring innovative and efficient practices back to the heart of your operations.



#### **COURSES OFFERED INCLUDE:**

- Conveyor 101
- Conveyor Maintenance and Safety
- Conveyor Belt Alignment
- Effective Conveyor Cleaning
- Tru-Screw Splicing Training
- Tru-Trac<sup>®</sup> Product Installation and Maintenance Training courses



#### WHY CHOOSE TRU-TRAC® CONVEYOR TRAINING?

- Broad Understanding: Equip your team to identify and correct common conveying challenges.
- **Safety First:** Prioritize and enhance safety protocols in your conveyor operations.
- Regulatory Compliance: Stay ahead with practices that meet industry regulations.
- Boost Productivity: Learn strategies to ramp up production.
- Operational Cost-Efficiency: Drive down operation costs with informed decision making.



#### **TRU-TRAC® ONSITE TRAINING:**

Tru-Trac<sup>®</sup> provides onsite training for its customers in remote areas, ensuring that they receive the same degree of experience and technical competence as those who attend training at the Tru-Trac<sup>®</sup> training facility at our Head Office in Centurion.

This hands-on training is provided by certified trainers who are sent to a specific area to assist customers in running their plants efficiently and effectively.

#### **ABOUT** MOBILE SHOWROOM

#### The Tru-Trac® Mobile Showroom showcases the full range of Tru-Trac® products

Our mobile showroom is fully equipped with our products and you will be able to handle and inspect our products for both quality and features. Your team will have the opportunity to engage with our conveyor experts and discuss any conveyor related issues that they might be grappling with.



#### **ABOUT** CONVEYOR SURVEYS

Tru-Trac® offers comprehensive conveyor system surveys using our proprietary digital Conveyor Audit reporting system. Our technicians conduct holistic audits, providing real-time feedback via email. You'll receive detailed reports, including component condition, performance, photos, maintenance needs, and optimization recommendations.

- Highly experienced and trained technicians conduct our conveyor inspections.
- Conveyor audits are carried out daily at customer sites across the African continent.
- Digital reports are directly distributed to relevant parties.
- Inspection records are stored centrally for easy reference.







- **C** +27 12 661 9531
- sales@tru-trac.com
- www.tru-trac.com