



CONVEYOR BELT TRACKING

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

FEATURES AT A GLANCE

THE AWARD WINNING TRU-TRAC SYSTEM

- Simple to install
- Maintenance free
- No contact with the edge of the belt
- Vibration free rolling action
- Operates in all conditions
- Proven patented technology
- Operates on reversible belts
- Can be installed inside or under the belt

ADVANTAGES AT A GLANCE

SIMPLICITY IS AN ADVANTAGE

- Improved safety
- Increased production and reduced downtime
- Reduced damage to conveyor belt edges and structures
- Increased conveyor life
- Reduced spillage and wastage
- Reduced labour involved in clearing spillages
- Reduced power consumption
- Reliable

“The Tru-Trac Belt Tracking System is a world leading innovation, which has been patented in all major mining countries.”



THE TRU-TRAC® TRACKING SYSTEM

One of the biggest challenges facing any manufacturer of conveyor systems is that no two conveyor set-ups are alike. The products supplied and installed on systems must be versatile enough to work across different belt types and environments and in varied conditions. It was agreed that in order to fulfil our clients' requirements our products:

- Should operate in both dry and wet conditions.
- Should be designed and installed to cause the minimum chance of damage to the clients' belts.
- Belt trackers should not rely on the edge of the belt to activate the tracking mechanism.
- Should be easily maintainable and in certain products like our trackers be maintenance free.
- Belt trackers should have vibration free rolling action.
- Should have a minimum of working parts.
- Should be simple to install.
- Should be durable.

All our products are made to exacting specifications using only the highest quality components and materials. The company operates from its factory and offices in Centurion, South Africa where all belt tracking products are manufactured on product specific machines.



PRINCIPLES OF OPERATION

The beauty of the Tru-Trac® Flat Return Tracker is its simplicity. The tracker is essentially made up of two parts:

An inner, stationary drum, attached to a pin that allows it to pivot laterally, on exactly the same plane as the belt and an outer drum that rotates around the inner assembly. The outer drum is tapered towards either end, creating a slightly smaller diameter on the outside edges than in the middle.

As the belt begins to drift off centre it comes into contact with the tapered side of the tracker. As the belt runs over the smaller diameter of the tapered side, there is a change in force, causing the tracker to pivot forwards, which steers the belt back towards the centre.

A major advantage of the Tru-Trac® Tracker is that its design ensures that trackers always finds the equilibrium between the forces on either taper, which occurs when the belt is running exactly in the centre. It does not rely on contact with the belt edge in order to guide the belt, instead the Tru-Trac® Flat Return Tracker activates automatically when the belt comes into contact with the tapers, to correct any belt misalignment.

The Tru-Trac® Dual Return, V-Return and Taper Trough Trackers operate on exactly the same principles as the Tru-Trac® Flat Return Tracker.

The Tru-Trac® Trough Tracker is used to align the load-carrying side of conveyor belts. Applying Tru-Trac® Flat Return Tracker principles of tracking in the horizontal plane, wing rollers were incorporated into the Load and Heavy Duty design to activate our standard central pivot system. The design ensures that no 90° contact with belt-edge occurs. As the belt moves off-centre the belt slides up the wing roll and thus causes the Tru-Trac® to pivot on its internal pivot and steer the belt back to centre with minimum force.



GUIDELINES FOR INSTALLATION

The Tru-Trac® Tracker need only be installed where misalignment occurs. One tracker is sufficient to control and align 50 meters of belt. On overland belts, spacing may be increased up to 100 meters.

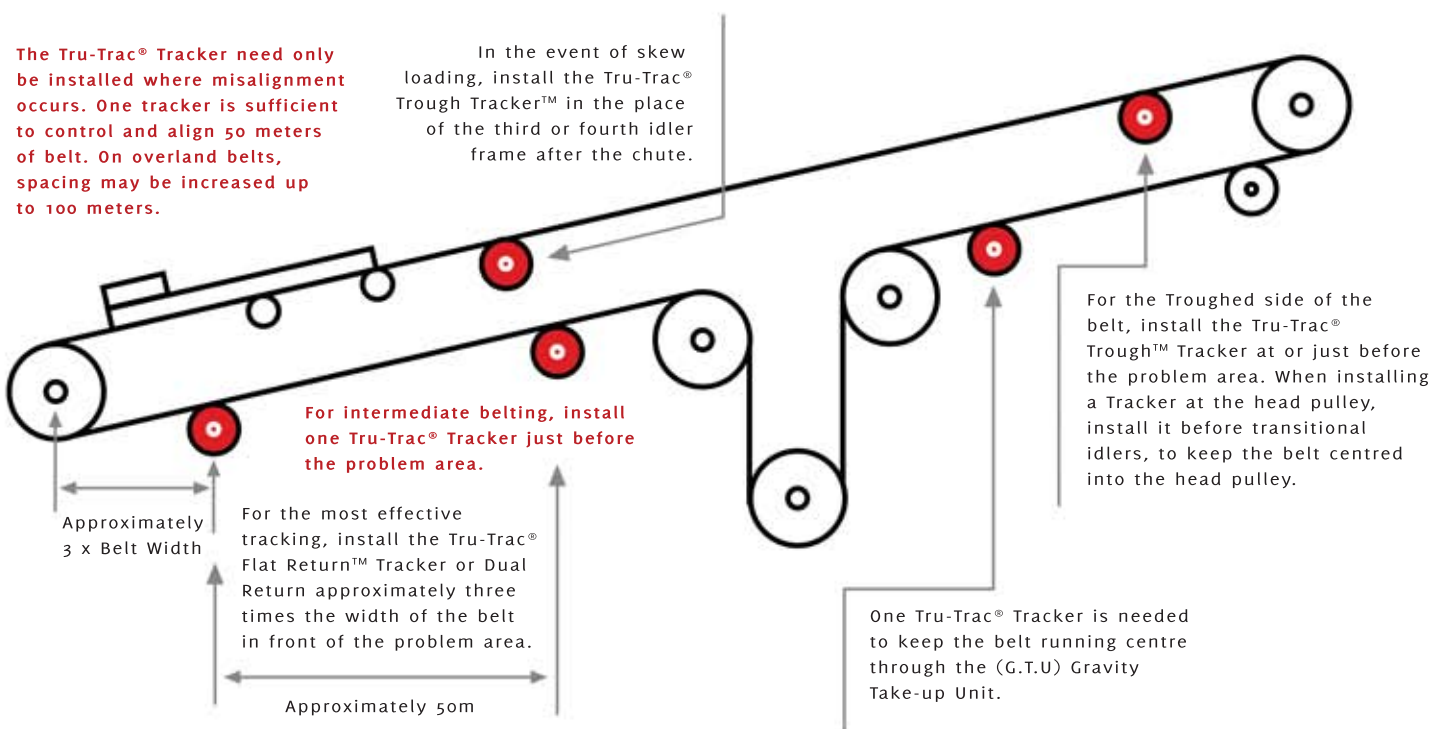
In the event of skew loading, install the Tru-Trac® Trough Tracker™ in the place of the third or fourth idler frame after the chute.

For intermediate belting, install one Tru-Trac® Tracker just before the problem area.

For the most effective tracking, install the Tru-Trac® Flat Return™ Tracker or Dual Return approximately three times the width of the belt in front of the problem area.

For the Troughed side of the belt, install the Tru-Trac® Trough™ Tracker at or just before the problem area. When installing a Tracker at the head pulley, install it before transitional idlers, to keep the belt centred into the head pulley.

One Tru-Trac® Tracker is needed to keep the belt running centre through the (G.T.U) Gravity Take-up Unit.



TRU-TRAC® STANDARD FLAT RETURN TRACKERS

Tru-Trac® Trackers are a patented design that offers the most reliable and effective conveyor belt tracking system available on the worldwide market. The center pivot is unique and simple, consisting of a stainless steel pin in a mild steel shaft, which is perpendicular to the plane of the belt, and its rubberised covered drum and tapered edge that ensures the tracker activates immediately as the belt moves off centre. The tracker continually reacts 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

- **Bearings** - Uses a pair of 6017 2RS bearings, which due to the size of bearings are well within the load and RPM specifications, complete with a nylon bearing housing and plastic end caps.

- **Maintenance Free** - Sealed bearings do not require any greasing

- **Lagging** - Covered with High Abrasive Natural Rubber, 12mm. Also available in Fire Retardant Polyurethane lagging.

- **Operates in all conditions** - Quick activation on both wet and dry belts, both above and below ground.

- **Versatile Installation** - Can be installed on the clean side of the belt, and then tension can be adjusted easily with the supplied mounting brackets.

- **Reversing Belts** - Excellent performance

* Pipe Structure brackets also available

Available from 450mm – 1200mm



TRU-TRAC® HEAVY DUTY FLAT RETURN TRACKERS

Tru-Trac® patented Heavy Duty Flat Return Trackers are designed for wider heavy duty conveyor belts. The design of the shaft has been reinforced. The bearing housings and end caps have been upgraded to steel.

- **Heavy duty** - Steel bearing housings are welded into the barrel with a reinforced solid shaft.
- **Improved Rugged Sealing System** - Steel End caps are pressed into the bearing housings, these also function as a 'flinger' seal to prevent ingress of material.
- **Lagging** - Covered with High Abrasive Natural Rubber, 12mm thick. Also available in Fire Retardant Polyurethane lagging.
- **Also available in Extra Heavy Duty Tracker design.**

Available from 1350mm – 1800mm
(smaller sizes can be made to order)



* Pipe Structure brackets also available

TRU-TRAC® FLAT RETURN POLYURETHANE TRACKERS

Tru-Trac® Flat Return Polyurethane Trackers are a patented solution for high abrasive and aggressive material. The polyurethane provides excellent life in hard working conditions and operations which run 24 hours continuous.

- **Polyurethane Lagging** - Offers approximately 2 to 3 times longer life as compared to rubber lagging. Covered with High Abrasive Polyurethane, 12mm thick. Also available in Fire Retardant Polyurethane.
- **Thrust Bearings** - Available as an option with, 51117 Thrust and NU1017 Roller Bearing configuration for heavy duty and high speed applications
- **High Speed Belts** - Perfect for belt speeds exceeding 4m/s
- **Traction** - The polyurethane is fully diamond grooved to provide better grip in wet conditions.
- **Available in Standard, Heavy Duty, Extra Heavy Duty Tracker design.**

Available from 300mm – 1800mm



* Pipe Structure brackets also available

TRU-TRAC® FLAT LOW SPEED TRACKERS

Tru-Trac® Flat Low Speed Trackers are specifically designed for low speed conveyors running at 1m/s or slower. Activation guide rolls have been incorporated into the design to speed up the activation of the Tru-Trac Tracker.

- **Performance** - Excellent and reliable performance on low speed conveyors
- **No belt edge damage** - The design ensures that no 90° contact with belt-edge occurs. As the belt moves off-centre the belt slides up the guide roll and causes tracker to activate quicker.
- **Available in Standard or Heavy Duty Tracker design.**

Available from 300mm – 1800mm



TRU-TRAC® DUAL RETURN TRACKERS

Tru-Trac® Dual Return Trackers have been patented worldwide and have been developed to accommodate the excessive forces encountered with wide belts and heavy loads, as well as belts with speeds in excess of 4 m/s. An external central pivot mechanism was designed, obviating the need for a single, large drum, and enabling a concentric and balanced rotation to be achieved. This has resulted in extended bearing life and a very fast and effective tracking system.

The split configuration has resulted in a highly responsive tracking action and the individual tracking rolls can be easily replaced as wear occurs. Furthermore, the Dual Return Tracker offers the ability to set the degree to which the Tracker will swing.

- **Heavy Duty Robust Design** - Built specifically for heavy duty steel cord conveyor belts.
- **Improved Rugged Sealing System** - Steel End caps are pressed into the bearing housings, these also function as a 'flinger' seal to prevent ingress of material.
- **High Speed Belts** - perfect for belt speeds exceeding 4m/s
- **Individual rollers for easy replacement** - separate tapered tracker rolls are mounted onto the centre pivot which can be individually replaced as wear occurs
- **Enhanced Centre Pivot** - Highly reactive heavy duty pivot is designed with an internal thrust bearing which is greasable from the mounting bracket.
- **Tensioning Bolts** - Are incorporated into the bracket design, enabling the correct tension to easily be achieved
- **Lagging** - Covered with High Abrasive Natural Rubber, 16mm thick. Also available in Fire Retardant lagging.
- **Bearings** - Uses a pair of 6017 C3 2RS bearings, which due to the size of the bearings, are well within the load and RPM specifications
- **Thrust Bearings** - Available as an option with, 51117 Thrust and NU1017 C3 Cylindrical Roller Bearing configuration for heavy duty and high speed applications
- **Operates in all conditions** - Quick activation on both wet and dry belts, both above and below ground.
- **Versatile Installation** - Can be installed on the clean side of the belt, and then tension can be adjusted easily with the tensioning bolts which are incorporated in the mounting brackets. Total Height of tracker is 550mm.
- **Reversing Belts** - Excellent performance

Available from 1350mm – 2500mm
(smaller sizes can be made to order)



*Can be mounted on the topside or clean side of the conveyor belt.



TRU-TRAC® DUAL RETURN POLYURETHANE TRACKERS

Tru-Trac® Dual Return Polyurethane Trackers are your patented solution for high abrasive and aggressive material. The polyurethane provides excellent life in hard working conditions and operation which run 24 hours continuous.

- **Polyurethane Lagging** - Offers approximately 2 to 3 times longer life as compared to rubber lagging. Available in High Abrasive Polyurethane 12mm or 19mm thicknesses. Also available in Fire Retardant Polyurethane.
- **Thrust Bearings** - Comes standard with Thrust and Roller Bearing configuration for heavy duty and high speed applications
- **High Speed Belts** - perfect for belt speeds exceeding 4m/s
- **Traction** - The polyurethane is fully diamond grooved to provide better grip in wet conditions.

Available from 1350mm – 2500mm
(Other sizes can be made to order)



TRU-TRAC® V-RETURN TRACKERS

Tru-Trac® V-Return Tracker is patented and has been designed for V-Return conveyors belts. The V-Return configuration offers excellent performance, without the requirement to flatten the belt before installing the tracker.

- **V-Return Configuration** - Comes standard with 10 degree angle, compatible with 5 and 15 degree angle belts
- **Lagging** - Available in High Abrasive, Rubber Lagging 16mm thick or Polyurethane Lagging 12mm / 19mm thicknesses. Also available in Fire Retardant lagging.
- **Bearings** - Standard or Thrust and Roller Bearing configuration available

Available from 1350mm – 2500mm
(Other sizes can be made to order)



TRU-TRAC® DUAL LOW SPEED TRACKERS



Tru-Trac® Dual Low Speed Trackers are specifically designed for heavy duty low speed conveyors running at 1m/s or slower. Activation guide rolls have been incorporated into the design to speed up the activation of the Tru-Trac Tracker.

- **Performance** - Excellent and reliable performance on low speed conveyors
- **No belt edge damage** - The design ensures that no 90° contact with belt-edge occurs. As the belt moves off-centre the belt slides up the guide roll and causes tracker to activate quicker.
- **Lagging** - Available in High Abrasive, Rubber Lagging 16mm thick Also available in Fire Retardant lagging.
- **Bearings** - Standard or Thrust and Roller Bearing configuration available

Available from 1350mm – 2500mm
(Other sizes can be made to order)



TRU-TRAC® COMPACT DUAL RETURN TRACKERS



Tru-Trac® Compact Dual Return Tracker has been designed for heavy duty conveyors with low height clearance. The compact design has all the benefits of the Dual Return Tracker design and will now fit into confined spaces. Ideal solution, for installing inside horizontal take-up units.

- **Compact Frame** - Total Height has been reduced to 300mm
- **Adjustable Mounting** - The mounting centres are adjustable, for more flexibility on fitting on non-standard structures and special brackets can be custom manufactured, if required.
- **Heavy Duty Robust Design** - Built specifically for heavy duty steel cord, high tension conveyor belts
- **Lagging** - Available in High Abrasive, Rubber Lagging 16mm thick or Polyurethane Lagging 12mm / 19mm thicknesses. Also available in Fire Retardant lagging.
- **Bearings** - Standard or Thrust and Roller Bearing configuration available

Available from 1050mm – 2500mm (Other sizes can be made to order)



*Inverted
Compact Dual*

TRU-TRAC® TAPER TROUGH TRACKERS

The patented Tru-Trac® Taper Trough Tracker offers the ultimate in tracking performance on the load-carrying side and is the result of over 10 years of design and innovation. This design is highly responsive and quick to activate on both loaded and unloaded conveyors.

As the taper wing rollers are inline, it operates on both Uni-directional or Bi-directional conveyor belts. The tracking is done by the tapered wing rollers which are lagged and is compatible with 35° and 45° belts. The tapered wing rollers activates the tracker immediately, as the belt moves off centre, ensuring that there is no 90 degree contact with the belt edges.

- **Exceptional Performance** - The combination of the tapers and unique centre pivot, provide fast, reactive and continual tracking in all conditions
- **Individual rollers for easy replacement** - both the taper wing and centre roller can be individually replaced as wear occurs
- **Enhanced Centre Pivot** - The unique heavy duty pivot design provides instant activation to centralise the belt to keep it running centre.
- **Bearings** - Standard Deep Groove Ball bearings and Spherical Roller bearings.
- **Maintenance Free** - Bearings do not require any greasing
- **Lagging** - Available in High Abrasive, Rubber Lagging 12 mm thick or Polyurethane Lagging 12mm Also available in Solid Rubber Ring lagging and Fire Retardant lagging.
- **Operates in all conditions** - Quick activation on both wet and dry conveyor belts,
- **Versatile Installation** - Minimum tension is required on the centre rolls, which can be easily adjusted with the supplied mounting brackets.
- **Reversing Belts** - Excellent performance

Available from 450mm – 2500mm

(Other sizes and Troughing angles can be made to order)

Standard Taper Trough Tracker



Pipe Structure Taper Trough Tracker



Extra Heavy Duty Taper Trough Tracker
for belt speeds above 4m/s



TRU-TRAC® LOAD TROUGH TRACKERS

The patented Tru-Trac® Load Design Trough Tracker was specifically developed to accommodate the load carrying side of the belt. The offset wing rollers are incorporated into the design to activate our standard central pivot system. The wing rollers are compatible with 35°- 45° belts, ensuring that there is no 90 degree contact with the belt edges.

- **Reliable Performance** - The Tru-Trac® Tracker has proven itself to be both robust, reliable, long lasting and provide effective performance in all conditions.
- **Bearings** - The centre roller uses a pair of 6017 2RS bearings, which due to the size of the bearings, are well within the load and RPM specifications, complete with a nylon bearing housing and plastic end cap.
- **Lagging** - Available in High Abrasive, Rubber Lagging 12 mm thick or Polyurethane Lagging 12mm. Also available in Fire Retardant lagging.

Available from 450mm – 1200mm



* Pipe Structure Load Design Trough Tracker also available



TRU-TRAC® HEAVY DUTY TROUGH TRACKERS

The patented Tru-Trac® Heavy Duty Trough Tracker was developed to accommodate wide belts and heavy loads, as well as belts with speeds in excess of 4 m/s. The offset wing rollers are incorporated into the design to activate our standard central pivot system. The wing rollers are fixed at 70 degrees. As the belt moves off-centre the belt slides up the wing roll thereby activating the tracker. The design ensures that there is no 90 degree contact with the belt edges.

- **Heavy duty** - The combination of strengthened shaft and double pipe base prevents the shaft from bending. Steel bearing housings are welded into the barrel.
- **Improved Rugged Sealing System** - Steel End caps are pressed into the bearing housings, these also function as a 'flinger' seal to prevent ingress of material.
- **High Speed Belts** - perfect for belt speeds exceeding 4m/s
- **Lagging** - Available in High Abrasive, Rubber Lagging 16 mm thick or Polyurethane Lagging 12mm. Also available in Fire Retardant lagging.
- **Bearings** - Uses a pair of **6017 C3 2RS bearings**, which due to the size of the bearings, are well within the load and RPM specifications
- **Thrust Bearings** - Available as an option with, **51117 Thrust and NU1017 C3 Cylindrical Roller Bearing** configuration for heavy duty and high speed applications.

Available from
1350mm – 2500mm
(Other sizes can
be made to order)



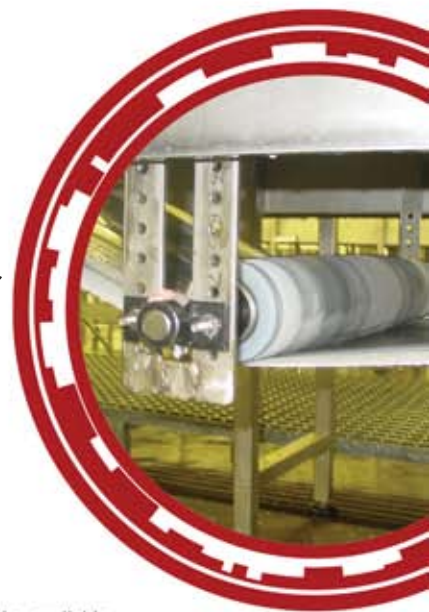
TRU-TRAC® FOOD INDUSTRY TRACKER

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



For additional information about our products and services please contact us:

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