



We offer a complete range of belt tracking systems, all designed to steer the belt as it travels along a conveyor in order to correct any lateral movement and ensure optimum system performance.

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STEEL BELT TRACKING SYSTEMS FOR EVERY APPLICATION

TRACKING SYSTEMS FOR CONVEYORS, COOLERS, BAKE OVENS AND OTHER STEEL BELT INSTALLATIONS

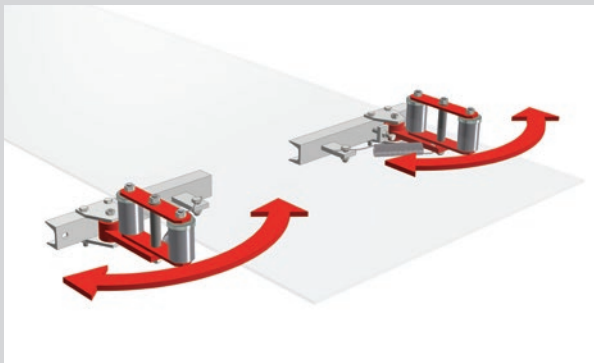
We produce a range of belt tracking systems designed to correct the lateral movement of steel belts under different environmental, loading and running conditions.

These range from passive solutions such as spring loaded guide rollers (SLGR), through integrated active tracking (AT) and separated

active tracking (CBT/SBT) systems, to dual action drum skew systems actuated by pneumatic or electrically-driven cylinders.

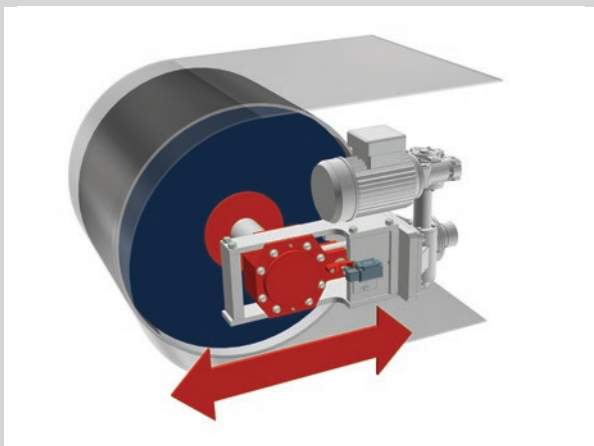
This guide is designed to support selection of the optimum tracking solution for a particular application.

Spring Loaded Guide Rollers (SLGR)



The benefit of the SLGR tracking system is its simplicity. It is well suited to less complex conveyor applications or applications where the belt is operating in extreme environments. There are no electronics, few moving parts and it is easily mounted to an existing conveyor frame with little modification.

Integrated Active Tracking (AT)

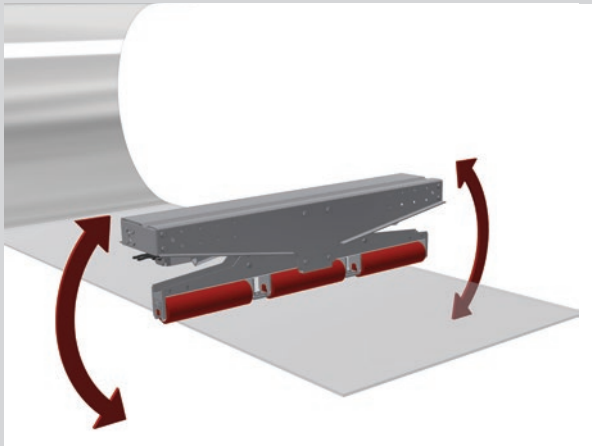


The AT unit is an active tracking system that angles the drum to create the desired belt tracking motion. Installation of AT is best suited to cases where an end station is being replaced or can be rebuilt, or for clean-sheet applications where the conveyor is being designed.

The tracking effect is achieved by adjusting the position for one of the drum bearing boxes longitudinally along the belt length. Note that belt running direction does not influence the tracking effect: the belt moves towards the side with the lowest tension.

Tracking starts when one of the edge sensors is activated by the belt edge. The tracking cycle is a pre-defined sequence that can be adjusted according to actual conditions.

Compact Belt Tracking (CBT)

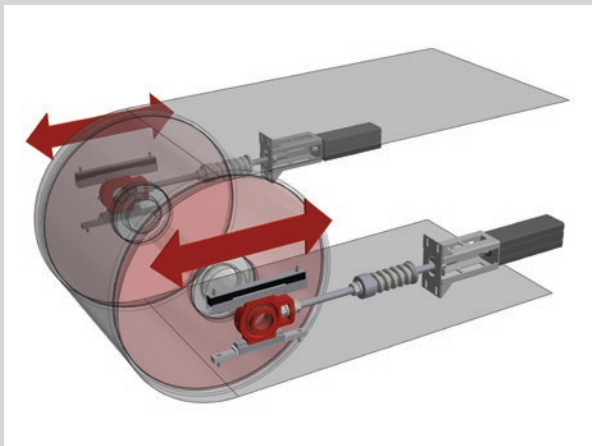


Where active tracking is required on an existing conveyor and a rebuild is not practical, an IPCO tilt roller tracking system provides an effective solution. These units can be mounted in a variety of positions to an existing conveyor and in most cases little modification is required to accommodate them.

The tracking effect is achieved by tilting (lifting one edge of) the belt, causing the belt to move laterally in the appropriate direction. Belt running direction influences the tracking effect: the belt moves to the side with the lowest tension.

When the belt edge is activating an edge sensor, a small logic relay controls the tilting in a pre-defined sequence that can be adjusted according to actual conditions.

Pneumatic Tracking (PT)



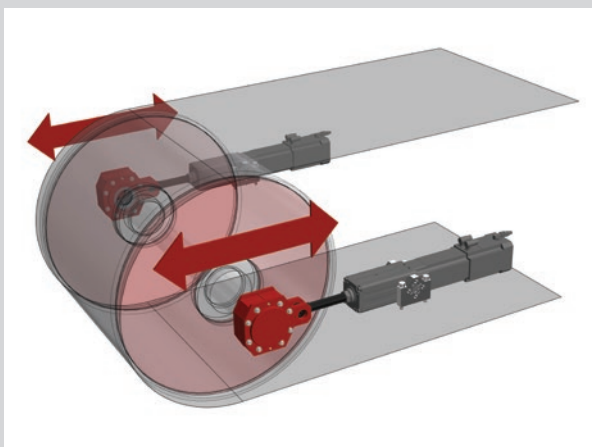
This stable and proven system provides pneumatic belt tracking control and belt tensioning, and can be used to correct belt misalignment on steel belts with and without V-ropes.

Real time detection of the position of the steel belt edge from one side is achieved by means of a contactless inductive sensor. This triggers an analog signal from the sensor, which actuates any necessary correction in the electro-magnetic positioner.

- Contact free detection eliminates risk of wear to steel belt edges.
- Reliable operation - inductive sensor is resistant to dirt.
- Basic belt tension is applied by the system at all times.
- Minimised wear and tear of the V-ropes (if installed).

NEW

High Precision Tracking (HPT)



The latest addition to our range of tracking solutions is the High Precision Tracking system. Originally designed for the digital printing segment, it can be used in any application where high precision is required.

Besides delivering the most tightly controlled tracking of all the standard solutions, the HPT also serves as a very simple and precise tensioning system thanks to its integrated load cells. The proprietary electronics package provides precision tracking and tensioning in one compact package.

- High precision tracking - accuracy to +/- 0.1 mm.
- Contact free optical sensors - no risk of wear to steel belt edges.
- Suitable for high speed conveyors.
- Integrated design - precision tracking and tensioning.

NEW

Tracking systems at-a-glance

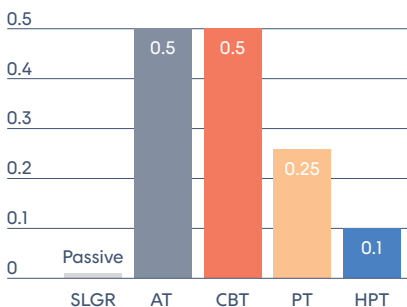
Tracking system	SLGR	AT	CBT/SBT	PT	HPT
Tracking principle	Mechanical resistance	Single action drum skew	Tilt roller	Dual action drum skew	Dual action drum skew
Actuation	Spring tension (max. spring force 150 N)	Screw jack, electric	Linear actuator, electric	Pneumatic cylinders	Electric cylinders
Sensors	-	Inductive (multiple)	Inductive (multiple)	Inductive (single)	Optical
Belt edge sensing method	Contact required	Contact required	Contact required	Contact free	Contact free
Belt width (range)	Any	Any	600 to 1500mm (1500 mm+ by special order)	≤2000 mm	600 to 2000mm (2000 mm+ by special order)
Max. belt speed	≤50 m/min	≤50 m/min	≤50 m/min	≤180 m/min	≤200 m/min
Operation temperature range	-	from -15 to +80°C *	from -15 to +80 °C	from +5 to 60 °C	from -20 to +40 °C
Max. lateral movement Typical conditions Ideal conditions **	+/- 50 mm +/- 30 mm	+/- 10mm +/- 5 mm	+/- 10 mm +/-5 mm	+/-5 mm +/-1 mm	+/- 1 mm +/- 0.1 mm
Installation	Typically welded to frame	Integrated into end station design	Typically bolted into place acting on the bottom belt strand, near the drum	Integrated into end station design	Integrated into end station design
Suitable applications	Bake ovens, other conveyors	Bake ovens, dryers, other conveyors	Bake ovens, dryers, other conveyors	Standard IPCO coolers; other conveyors	Digital printing; higher belt speed conveyors
System price	★	★★	★★	★★★	★★★★
Key benefits	Cost effective. No electronics.	Most efficient steering method. Simple, reliable and effective design.	Easy retrofit into existing systems. Efficient and reliable design.	Stable, proven system. Low required input voltage. Analog system. Real time detection of belt position.	Tightest control of belt positioning. Quickest reaction time. Integrated load sensors for precise belt tensioning/ tracking.

* Special system for extreme cold (to -65°C) also available.

** Tracking accuracy depends on belt edge straightness for all systems except the HPT.

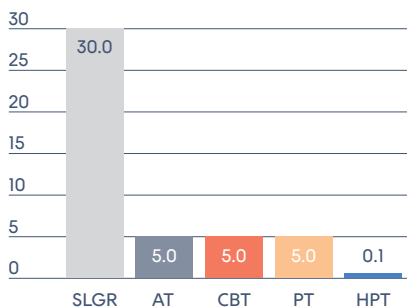
System reaction time (s)

Theoretical

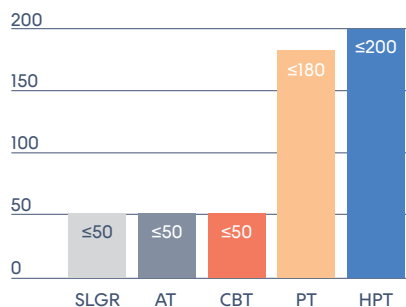


Steering accuracy (mm)

Max. deviation, ideal conditions

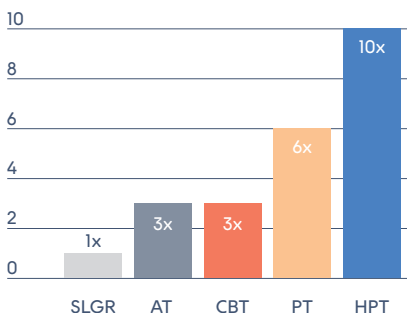


Acceptable belt speeds (m/min)



Price (€)

SLGR as base



Ease of installation (1 = easiest)

