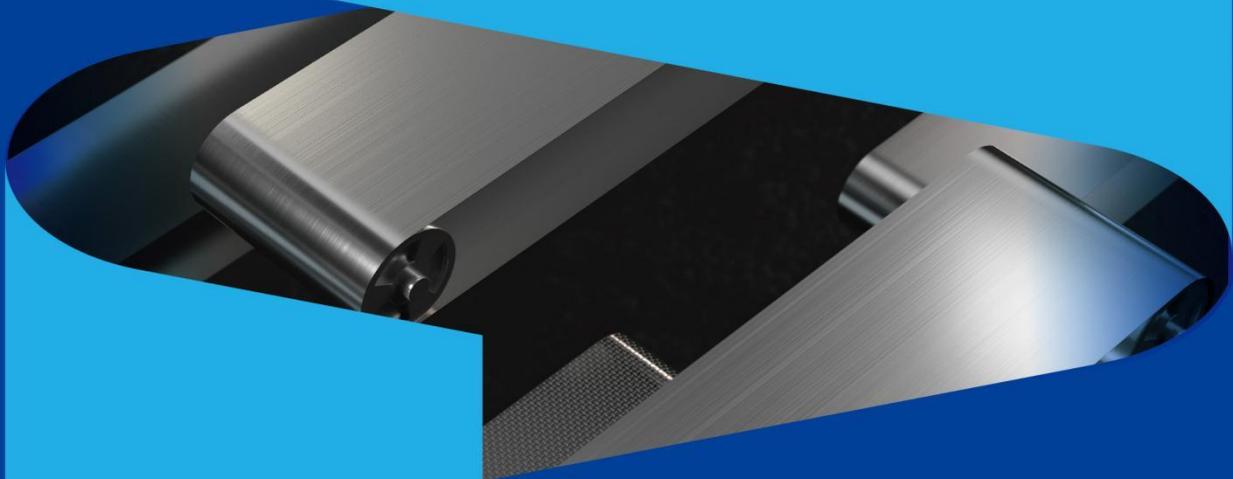


Steel Belt Tracking Systems  
钢带纠偏系统

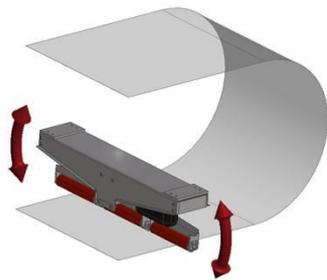


我们生产一系列的钢带纠偏系统，来控制钢带在横向的微量位移，旨在保证钢带在各种复杂环境的运行过程中保证稳定运行。本手册帮助客户理解在各种特定运行环境中，选择最合适的纠偏系统。

We produce a series of steel belt tracking systems to control the lateral movement of the steel belts, aimed at ensuring stable operation of the steel belts in various complex environments. This manual helps customers understand how to choose the suitable steel belt tracking system for a particular application.

### 紧凑推杆型自动纠偏 MKCBT

#### MingKe Compact Belt Tracking Device – MKCBT



当设备相对固化成型，需要加装纠偏系统，紧凑推杆型自动纠偏提供了有效的解决方案。

通过辊杆抬起一侧来抬起对应侧的钢带，来影响钢带的运转。钢带会向张力低的一侧移动。

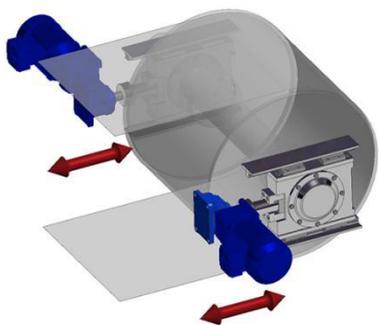
目前常见应用于隧道烤炉，食品冷冻，薄膜流延，烟草薄片，属于轻型负载钢带纠偏装置。

Where tracking system required on an existing conveyer ,MKCBT provides an effective solution. The steel belts operation is influenced by lifting the corresponding side of the steel strip by raising one side with a roller. The steel belt will move towards the side with lower tension.

This is commonly applied to tunnel ovens, food freezers, film extrusion, and tobacco flakes, and is classified as a light load steel belt tracking device.

### 紧凑电机型纠偏 MKAT

#### MingKe Automatic Motor Tracking device – MKAT



AT单元是一种主动跟踪系统，通过调整轮毂角度来影响钢带运动。

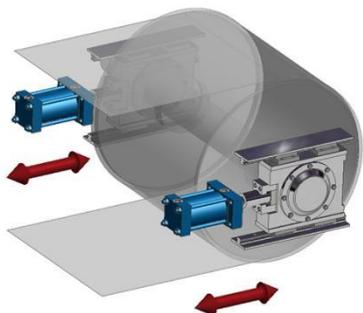
安装AT最适合于以下情况：更换或可以重建末端，或者在全新设计钢带机时。通过沿着钢带长度方向调整其中一个轮毂轴承箱的位置，实现跟踪效果。请注意，钢带的运行方向不会影响纠偏效果：钢带朝着张力最低的一侧移动。当边缘传感器之一被钢带边缘触发时，纠偏动作开始。跟踪周期也可以根据实际情况进行调整。

The AT unit is an active tracking system that adjusts the angle of a drum to generate the desired tracking movement of a conveyor belt. Installing an AT unit is most suitable for applications where the end station is being replaced or rebuilt, or for new conveyor designs. Tracking is achieved by adjusting

the position of one drum bearing box along the length of the conveyor belt. Note that the direction of conveyor belt movement does not affect tracking: the conveyor belt moves towards the side with the lowest tension. Tracking begins when one of the edge sensors is triggered by the conveyor belt edge. The tracking cycle is a predefined sequence that can be adjusted according to the actual situation.

### 液压型自动纠偏 MKHST

#### MingKe Hydraulic Station Tracking Device – MKHST

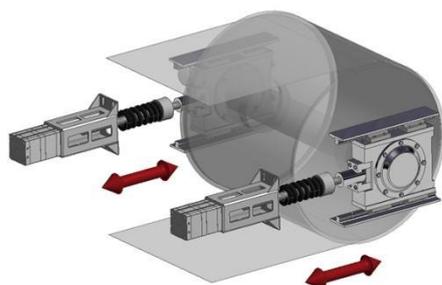


液压纠偏单元是一种主动跟踪系统，通过调整轮毂角度来影响钢带运动。最适合于以下情况：需要钢带高张紧力下运行，更换或可以重建末端，或者在全新设计钢带机时。通过沿着钢带长度方向调整其中一个轮毂轴承箱的位置，实现跟踪效果。请注意液压力量调整合适范围，钢带的运行方向不会影响纠偏效果：钢带朝着张力最低的一侧移动。当边缘传感器之一被钢带边缘触发时，纠偏动作开始。跟踪周期也可以根据实际情况进行调整。

The MKHST unit is an active tracking system that adjusts the angle of a drum to generate the desired tracking movement of a conveyor belt. Installing a MKHST unit is most suitable for belt high tension applications where the end station is being replaced or rebuilt, or for new conveyor designs. Tracking is achieved by adjusting the position of one drum bearing box along the length of the conveyor belt. Note that the direction of conveyor belt movement does not affect tracking: the conveyor belt moves towards the side with the lowest tension. Tracking begins when one of the edge sensors is triggered by the conveyor belt edge. The tracking cycle is a predefined sequence that can be adjusted according to the actual situation.

### 气缸型自动纠偏 MKPAT

#### MingKe Pneumatic Automatic Tracking Device – MKPAT



这个稳定且经过验证的系统提供钢带跟踪控制和钢带张紧，可用于纠正带有或不带V型胶条的钢带不对齐问题。通过非接触式感应传感器实现从一侧实时检测钢带边缘的位置。这会触发传感器的模拟信号，从而在电磁定位器中触发任何必要的修正。

- 无接触检测消除了对钢带边缘的磨损风险。
- 可靠运行-感应传感器耐污垢。
- 系统始终施加基本的钢带张力。
- 最小化V型胶条的磨损和损耗（如果已安装）。

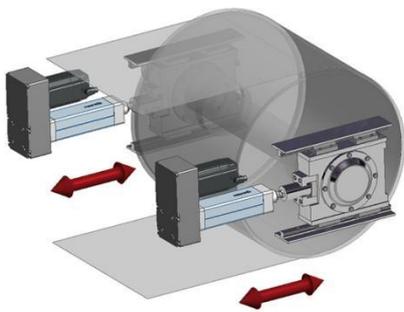
This stable and validated system provides steel belt tracking control and tensioning, which can be used to correct misalignment issues in steel belts with or without V-rope.

Real-time detection of the steel belt edge position is achieved through non-contact inductive sensors from one side. This triggers an analog signal from the sensor, which in turn triggers any necessary corrections in the electromagnetic locators.

- Non-contact detection eliminates the risk of wear on the steel strip edge.
- Reliable operation - inductive sensors are resistant to dirt.
- The system always applies basic steel strip tension.
- Minimizes wear and tear on V-shaped rubber strips (if installed).

### 电缸型自动纠偏MKEMC

### MingKe Electromechanical Cylinder Tracking Device – MKEMC



我们最新推出高精度纠偏系统。该系统可用于任何需要高精度的应用中。除了提供所有标准解决方案中最紧密控制的跟踪外，还由于其集成的负荷传感器而作为一个非常简单和精确的张力系统。专有的电子设备包提供了一种紧凑的解决方案，可实现精密跟踪和张紧。

- 高精度跟踪-精度可达 $\pm 0.1$ 毫米。
- 无接触光学传感器-不会磨损钢带边缘。
- 适用于高速运行。
- 集成设计-精密跟踪和张紧。

We have recently launched a high-precision tracking system that can be used in any application where high accuracy is required. In addition to providing the most tightly controlled tracking among all standard solutions, it also serves as a simple and precise tensioning system thanks to its integrated load sensors. A proprietary electronics package provides a compact solution for achieving precision tracking and tensioning.

- High-precision tracking - accuracy up to  $\pm 0.1$  mm.
- Contact-free optical sensors - no wear on steel belt edges.
- Suitable for high-speed operation.
- Integrated design - precision tracking and tensioning.

钢带纠偏是辅助系统，需要建立在钢带机的本身良好整机系统基础上，尤其轮毂加工精度，几何平行度，以及合适的机架强度。

Steel belt tracking system is an auxiliary system, which needs to be established on the basis of a good overall system of the steel belt machine itself, especially the machining accuracy of the drum,

geometric parallelism, and appropriate frame strength.

## 钢带纠偏系统 Steel Belt Tracking Systems

|  |  |  |   |   |   |
|--|--|--|---|---|---|
| 纠偏系统<br>Tracking system                | 紧凑推杆型自动纠偏 MKCBT<br>MingKe Compact Belt Tracking Device – MKCBT | 紧凑电机型纠偏 MKAT<br>MingKe Automatic Motor Tracking device – MKAT                    | 液压型自动纠偏 MKHST<br>MingKe Hydraulic Station Tracking Device – MKHST               | 气缸型自动纠偏 MKPAT<br>MingKe Pneumatic Automatic Tracking Device – MKPAT   | 电缸型自动纠偏 MKEMC<br>MingKe Electromechanical Cylinder Tracking Device – MKEMC                        |
| 驱动 Drive                               | 电动 Electric  | 电动 Electric  | 电动 Electric   | 气动 Pneumatic  | 电动 Electric   |
| 钢带边沿<br>Steel belt edge                | 接触式<br>Contact-type  | 接触式<br>Contact-type  | 接触式<br>Contact-type   | 非接触<br>Non-contact  | 非接触<br>Non-contact  |
| 钢带张力范围<br>Tension range of steel strip | 5-30KN   | 5-100KN  | 10-350KN  | 5-80KN  | 5-350KN   |
| 纠偏精度<br>Correction accuracy            | ±10mm  | ±5mm   | ±4mm  | ±10mm   | ±2mm  |
| 应用<br>Application                      | 隧道烤炉、食品冷冻、薄膜流延<br>Tunnel oven, food freezing, film casting     | 隧道烤炉、食品冷冻、薄膜流延、化工<br>Tunnel oven, food freezing, Film casting, chemical industry | 钢带加工、薄膜流延、双钢带压机<br>Steel belt processing, film casting, double steel belt press | 化工单钢带冷却机、化工双钢带冷却机、食品冷冻<br>Chemical single steel belt cooling machine, chemical double steel belt cooling machine, food freezing | 矿石烧结、食品冷冻、薄膜流延、烟草薄片、隧道烤炉<br>Ore sintering, food freezing, film casting, tobacco foil, tunnel oven |
| 系统价格<br>System price                   | ★  | ★★   | ★★  | ★★★   | ★★★★  |