

Passive Hydraulic Automatic Belt Aligning Idler

CORE COMPONENT FOR BELT CONVEYOR SYSTEMS | PASSIVE & MAINTENANCE-FREE



PRODUCT HIGHLIGHTS

✓ Self-Powered Operation

No external electricity or air source – powered by the belt's own motion, ideal for explosion-proof areas.

✓ Harsh Environment Adaptable

Fully sealed structure, dust-proof, waterproof, corrosion-resistant – suitable for mines, ports, and harsh industrial sites.

✓ Belt-Friendly Correction

Non-rigid friction-based design, no belt edge damage, extending belt service life by 30%+.

✓ High Efficiency & Reliability

≤2s fast response, $\pm 7.5^\circ$ correction angle, stable performance with minimal maintenance.

✓ Wide Compatibility

Fits 650-2200mm belt widths, compatible with all standard belt conveyors, easy to install & retrofit.

KEY SPECIFICATIONS

- Applicable Belt Width: 650–2200mm
- Belt Speed: 1.5–5.0 m/s
- Conveying Capacity: 100–3500 t/h
- Alignment Accuracy: $\pm 5\%$ ($\leq \pm 10\text{mm}$)
- Cylinder Stroke: 150mm
- Working Pressure: 0.3–0.8 MPa
- Operating Temperature: $-10^\circ\text{C} \sim +40^\circ\text{C}$ (extendable)
- Hydraulic Oil: 32#/46# Anti-wear

APPLICATION INDUSTRIES

Coal Mining • Metallurgy • Power Generation • Ports • Building Materials • Chemicals • Logistics

OPERATING PRINCIPLE (SIMPLIFIED)

1. Belt misalignment touches detection wheel →
2. Wheel drives hydraulic pump → 3. Pressurized oil actuates cylinders → 4. Idler frame rotates to correct belt → 5. Automatic reset after centering.

ORDERING & SUPPORT

Provide belt width, speed, capacity & mounting type for customization.
12-Month Warranty | 24/7 Technical Support | Original Spare Parts Supply

For Detailed Datasheet & Quotation, Contact Our Sales Team