

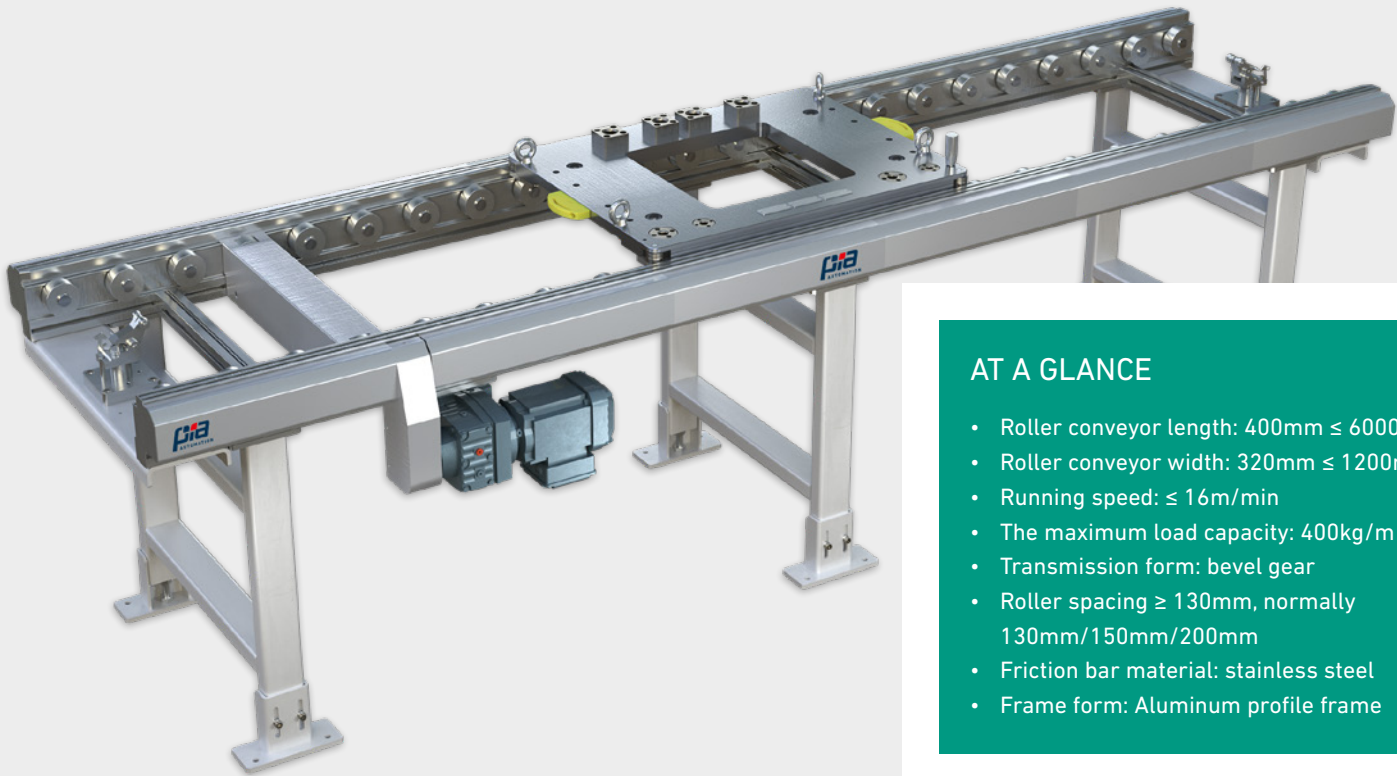
# PIA's customized conveyor systems – efficient and flexible



- Modular and Scalable Design
- Linear and Rotational Movement Options
- Maximum Load Capacity: 400 kg per meter (880 lbs/m)
- Operating Speed: Up to 16 meters per minute (52.5 ft/min)
- Compliant with ESD Standards
- Enhanced Flexibility for Reuse and Future Adaptability

Efficient handling of heavy-duty components on assembly lines demands conveyor systems that are reliable, flexible, and engineered for complex operations.





## ROLLER CONVEYOR LINE - RCL 400

The roller conveyor line is a key component of the PIA conveying system, engineered to meet the demanding transport requirements of powertrain production - such as engine, transmission, and system assembly lines - as well as new energy automation, including drive motor, power battery, and energy storage equipment assembly lines. Designed for heavy-duty applications, the system delivers comprehensive, turnkey conveying solutions tailored to customer needs.

### PRODUCT FEATURES

- **Roller conveyor features a simplified structural design:** ensuring smooth, stable, and reliable transport performance.
- **Easy and efficient daily maintenance:** helps ensure continuous, stable operation of the production line.
- **Flexible and diversified conveyor path configuration:** linear units can be easily expanded and integrated with rotary conveyors.
- **Modular splice design:** enables quick on-site assembly and easy transport, significantly reducing installation time and labor costs.
- **Integrated accumulation and release functionality:** allows precise control of material flow, minimizing contact wear between rollers and pallet friction strips, and extending component service life.
- **Bidirectional conveying:** allowing material flow direction to be adjusted based on production requirements, enhancing process flexibility.
- **Highly adaptable and reusable:** the system supports long-term use across product iterations (depending on actual working conditions), helping to reduce equipment replacement costs.

### AT A GLANCE

- Roller conveyor length:  $400\text{mm} \leq 6000\text{mm}$
- Roller conveyor width:  $320\text{mm} \leq 1200\text{mm}$
- Running speed:  $\leq 16\text{m/min}$
- The maximum load capacity:  $400\text{kg/m}$
- Transmission form: bevel gear
- Roller spacing  $\geq 130\text{mm}$ , normally  $130\text{mm}/150\text{mm}/200\text{mm}$
- Friction bar material: stainless steel
- Frame form: Aluminum profile frame

### DETAILS (OPTIONAL)

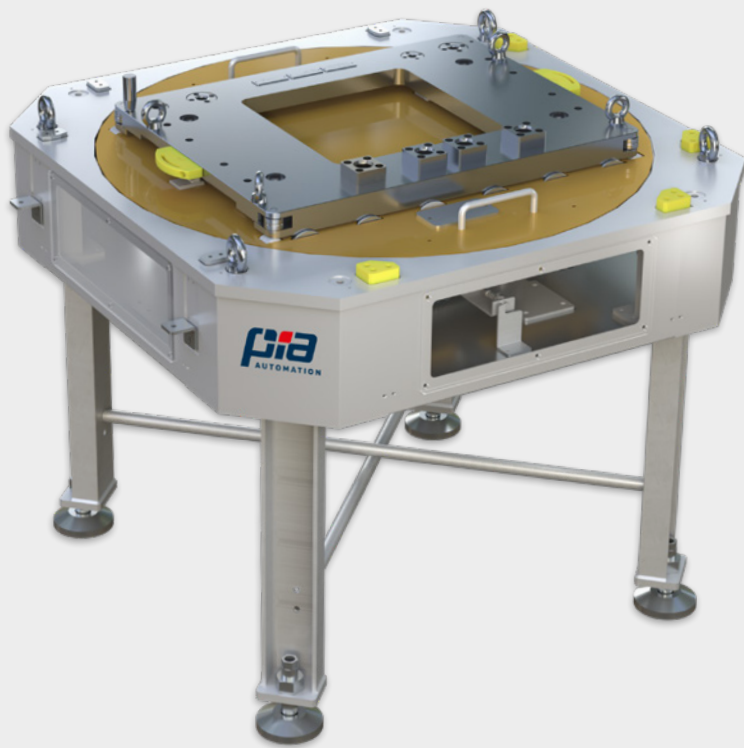
- Motor brand options include SEW, NORD, Siemens, and others as required
- Flexible motor installation configurations based on layout and application needs
- Adjustable running speed available — if required, a frequency inverter (VFD) can be integrated for precise speed control

### CUSTOMER BENEFITS

- Efficient, continuous, and stable material flow, even in complex environments, aligning with production line timing to increase throughput
- Lower equipment wear and reduced maintenance costs, resulting in improved operational efficiency
- Enhanced flexibility and reusability, allowing the system to adapt to future production changes and reducing the need for equipment replacement







## AT A GLANCE

- WPC length:  $400\text{mm} \leq L \leq 2000\text{mm}$
- WPC width:  $320\text{mm} \leq B \leq 1200\text{mm}$
- Running speed:  $\leq 16\text{m/min}$
- The maximum load capacity:  $400\text{kg/m}$
- Transmission form: bevel gear
- Roller spacing  $\geq 130\text{mm}$ , normally  $130\text{mm}/150\text{mm}/200\text{mm}$
- Structure material: carbon steel welding

## DETAILS (OPTIONAL)

- Motor brands available: SEW, NORD, Siemens, and others upon request.
- Stopper brands supported: Festo, SMC, and additional options based on customer requirements.
- Rotary table types:
  - Rotary table with encoders for high-precision rotation control
  - Adjustable running speed: Available with integration of a frequency inverter (VFD) for variable speed control

# ROTARY TABLE - RT 400

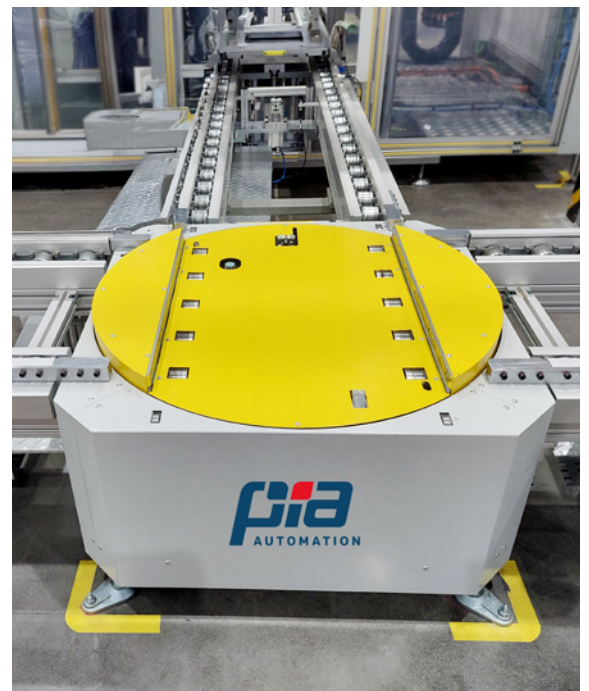
The Rotary Table is an integral component of the PIA conveyor system, engineered to meet the demanding transport requirements of powertrain production—such as engine, transmission, and system assembly lines—as well as new energy automation applications, including drive motor, power battery, and energy storage device assembly lines. Designed for heavy-duty use, it offers customers a comprehensive, flexible conveyor solution tailored to modern manufacturing needs.

## PRODUCT FEATURES

- **Compact design combined with high load capacity:** delivers efficient space utilization without compromising strength.
- **High-precision rotation and stable positioning technology:** ensure accurate, zero-error process transitions.
- **Adjustable speed:** with smooth, stable operation accommodates multiple production rhythms and cycle times.
- **Capable of rotating pallets  $90^\circ$  or  $180^\circ$ :** without altering their conveying direction, offering greater layout flexibility.
- **Bidirectional conveying and anti-shear safety design:** deliver both high efficiency and operator safety, meeting the complex demands of modern production lines.
- **Modular construction:** supports reusability and easier upgrades, enabling seamless adaptation to future production requirements.

## CUSTOMER BENEFIT

- Reliable, efficient, and stable material handling, even under complex production conditions; synchronizes with production line rhythm to boost throughput
- Minimized equipment wear and lower maintenance costs, contributing to improved system longevity
- Enhanced flexibility and reusability, supporting long-term adaptability to changing production needs and reducing equipment replacement investments



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PIA Automation Holding GmbH  
Theodor-Jopp-Straße 6  
97616 Bad Neustadt a.d. Saale  
Germany  
T +49 (0) 9771 6352 - 1000  
[info@piagroup.com](mailto:info@piagroup.com)

