HIGH-PERFORMANCE ROTARY JOINTS & SWIVEL JOINTS

INDUSTRIAL SEALING SOLUTIONS FOR MODERN MANUFACTURING

KEY FEATURES ICONS / BULLETS

- PATENTED TECHNOLOGY
- CUSTOMIZED SOLUTIONS
- GLOBAL INDUSTRIAL STANDARDS





About Us

Xuzhou Ruitus Import & Export Co., Ltd. is a leading source manufacturer and global provider specializing in patented rotary joints, high-pressure swivel systems, and critical fluid sealing technologies.

Backed by 20 years of R&D and manufacturing excellence, we operate a modern 10,000-square-meter facility equipped with advanced CNC production and testing lines to ensure strict quality control from raw materials to finished products .

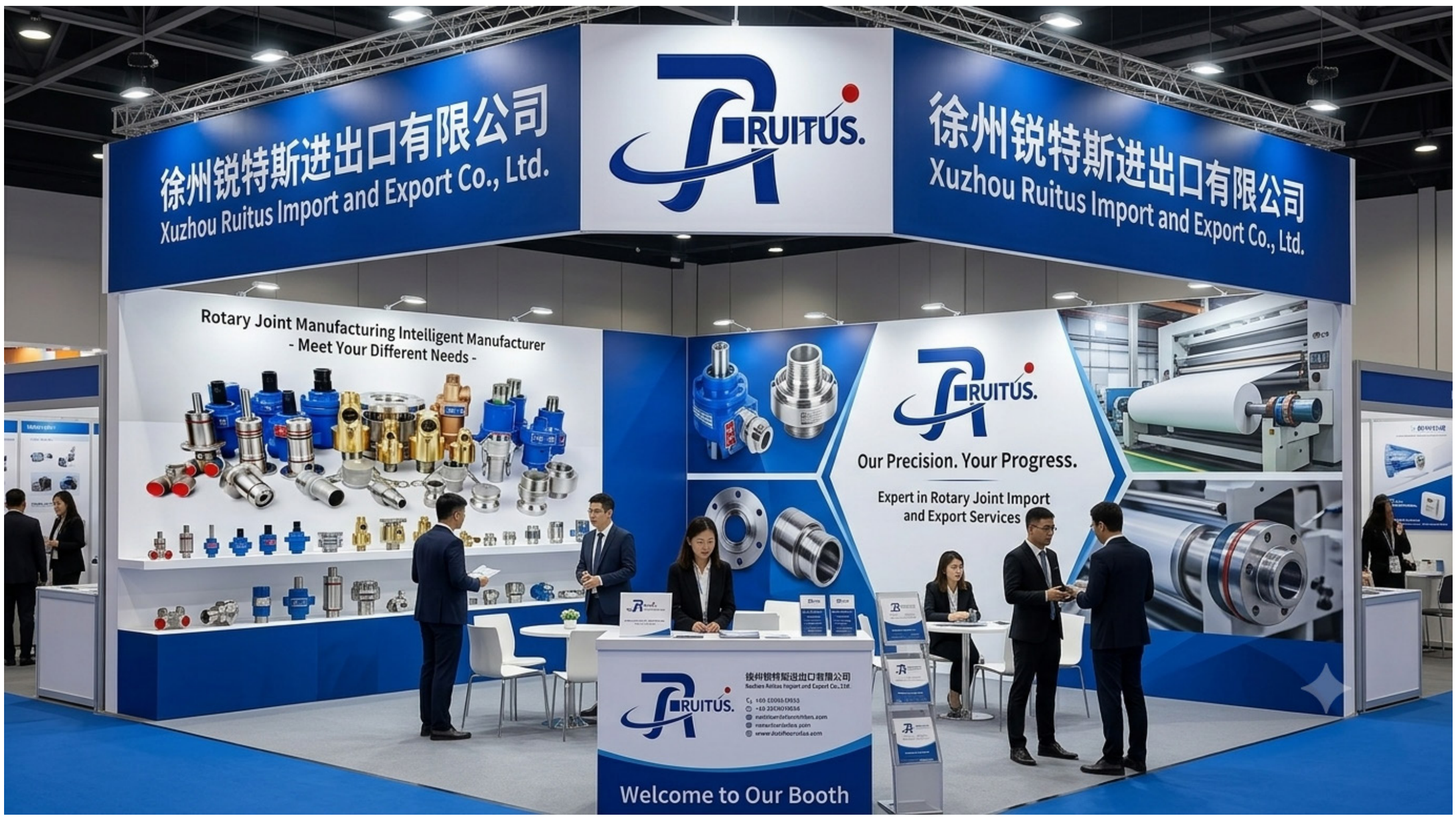




To ensure seamless global service and efficient international trade, Xuzhou Ruitus acts as our core global sales and operation center, working hand-in-hand with our dedicated manufacturing base (Shandong Ruitus Mechanical Technology Co., Ltd.). Together, our robust production infrastructure, professional export team, and proven global reach—delivering high-performance products to over 30 countries worldwide, including Vietnam, India, Turkey, and Saudi Arabia—bridge the gap between heavy-duty industrial engineering and worldwide client satisfaction, delivering direct-from-factory value with world-class commercial service.







I .GENERAL & HIGH-SPEED INDUSTRIAL SERIES

Product 1

RTH Series Rotary Joint for Water/Coolant (Patented Product)

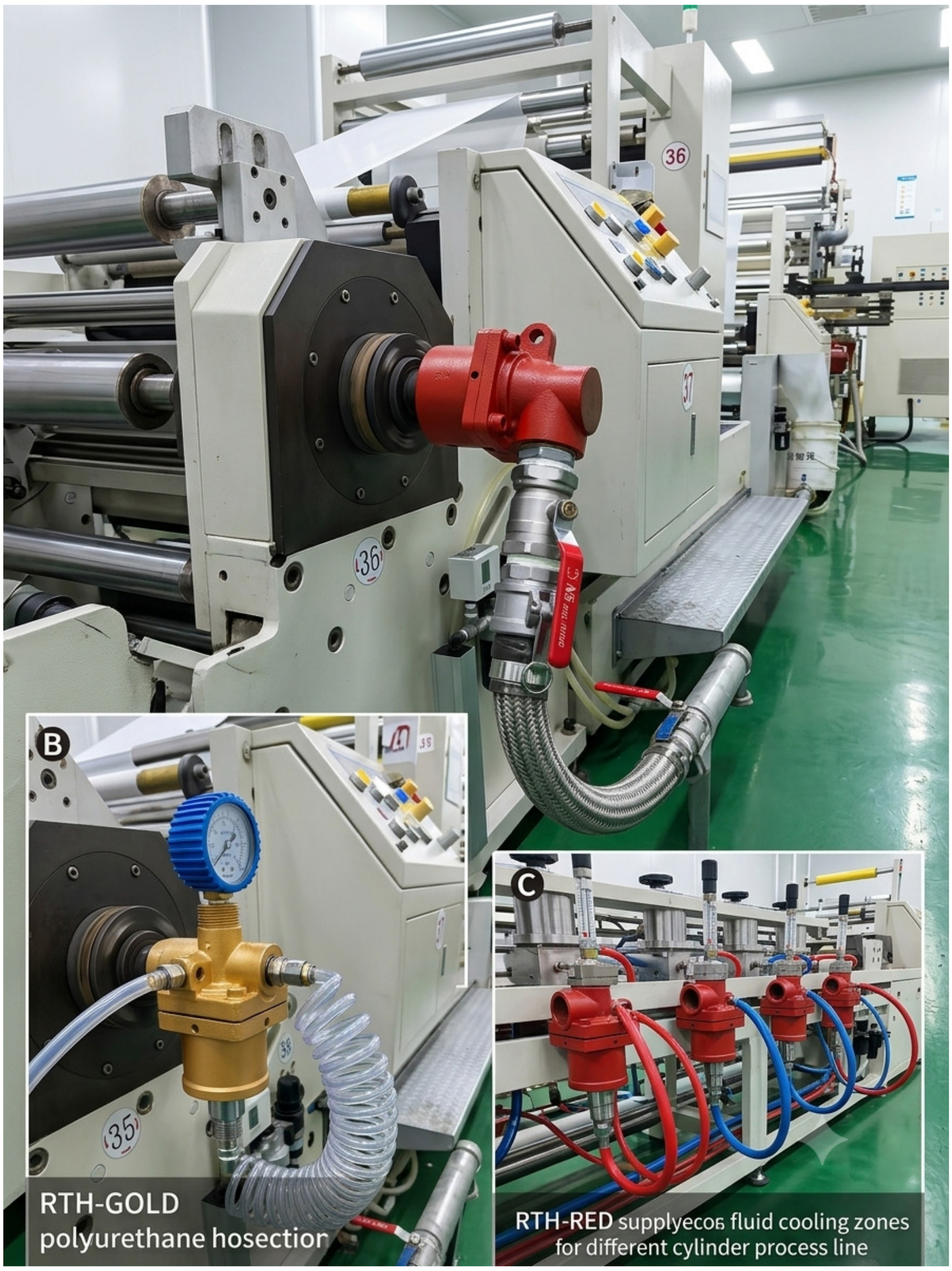
Structural Features:

The RTH series rotary joint is a patented product independently developed by our company based on conventional H-type rotary joints. It features an external multi-spring and balanced seal design, which ensures smoother media flow and uniform elastic compensation that is free from the adverse effects of scaling. The sealing friction pairs (moving and stationary rings) are easily replaceable, significantly reducing maintenance and operating costs for end-users. Furthermore, all internal components in direct contact with the media are made of stainless steel or have undergone specialized anti-corrosion treatments. While inheriting the advantages of traditional H-type joints—such as compact size, lightweight structure, and low frictional torque—the RTH series delivers enhanced sealing reliability and a substantially extended service life.



Operating Conditions:

- Applicable Media: Coolant, hot water, cold water, oil, compressed air, low-pressure steam
- Max Pressure: 1.6 MPa
- Max Temperature: 120°C
- Speed Range: 200 rpm to 3,000 rpm (Maximum operating speed varies depending on the port size and specifications)



Product 2

RTQ Series Low-Speed, High-Temperature Rotary Joint (Patented Product)

Structural Features:

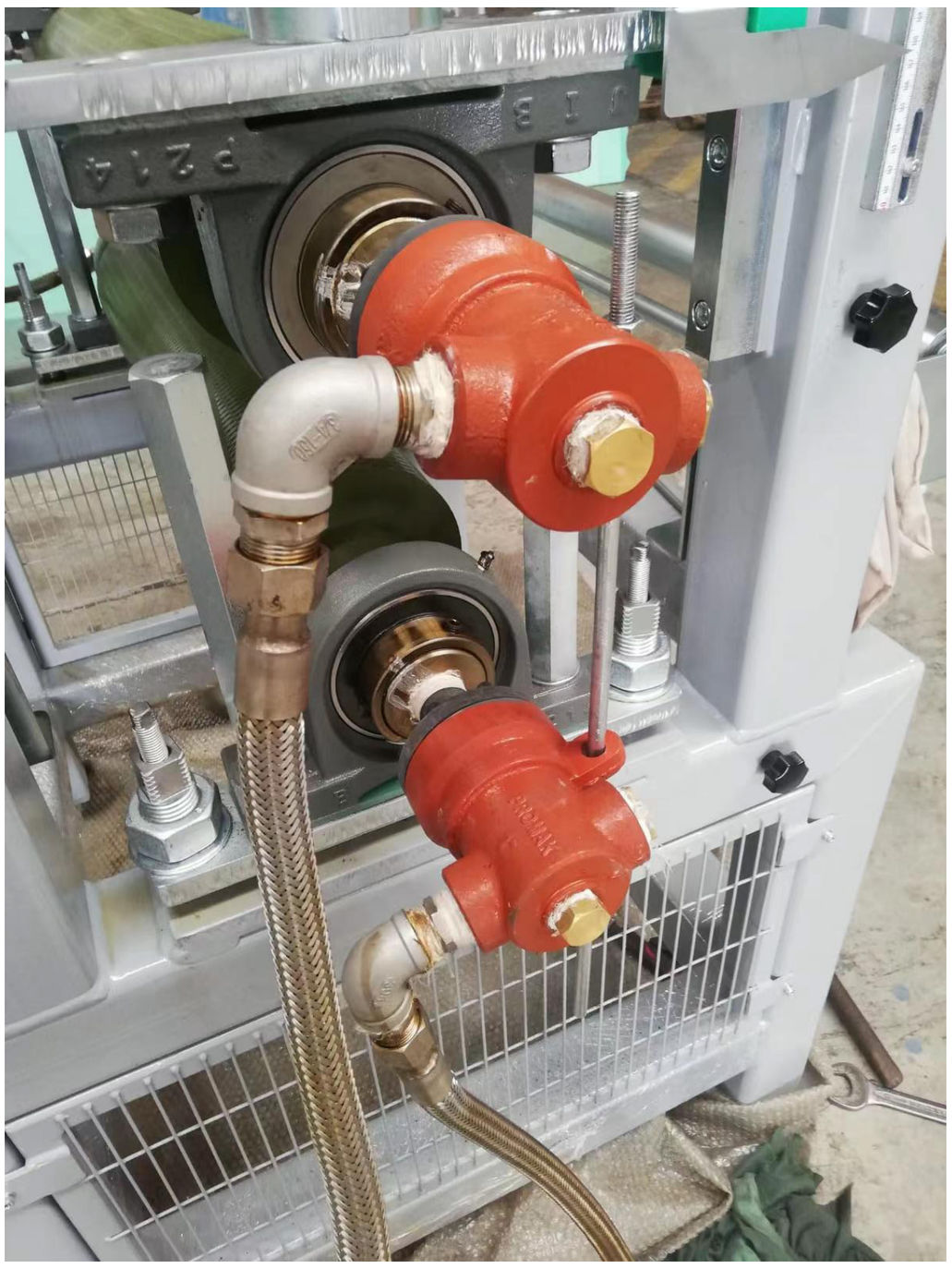
The RTQ series rotary joint is a patented product independently developed by our company to address and improve upon the limitations of conventional Q-type rotary joints. It features an integrated guide ring that provides superior concentricity. The dual-spherical design utilizes imported antimony-impregnated graphite for the sealing rings, while the springs are made of imported Grade 631 stainless steel, offering enhanced high-temperature resistance. The rotor is crafted from heat-resistant alloy steel and has undergone surface polishing and carbonitriding (nitrocarburizing), resulting in extremely high operating parameter thresholds and exceptional durability.



Operating Conditions:

- Applicable Media: Hot water, steam, thermal oil (heat transfer oil)
- Max Pressure: 2.0 MPa
- Max Temperature: 350°C
- Speed Range: 50 rpm to 200 rpm (Maximum operating speed varies depending on the port size and specifications)

Usage Scenario:





Ⅱ.IMPORTED ALTERNATIVES & PRECISION SERIES

Product 3

RT-DE Series Rotary Joint for Water/Coolant (Interchangeable with 55-57 Series)



Structural Features:

- Applicable Media:

  Coolant, hot water, cold water, oil, compressed air, low-pressure steam
- Design Options: Single-passage and dual-passage designs available
- Support Type: Self-supported or bearing-supported rotary joint
- Seal Type: Balanced mechanical seal
- Drain Ports: 3 drain ports
- Housing Material: Forged brass housing
- Rotor Material: Stainless steel rotor









Special Options:

- Threaded-connection drain ports with low-torque design
- Silicon carbide (SiC) balanced mechanical seal

Operating Conditions:

- Water Pressure: 1.6 MPa
- Saturated Steam Pressure (Intermittent): 1.5 MPa
- Speed (NPT Threads): 5,500 rpm
- Speed (Straight Threads): 5,500 rpm
- Max Temperature: 120°C

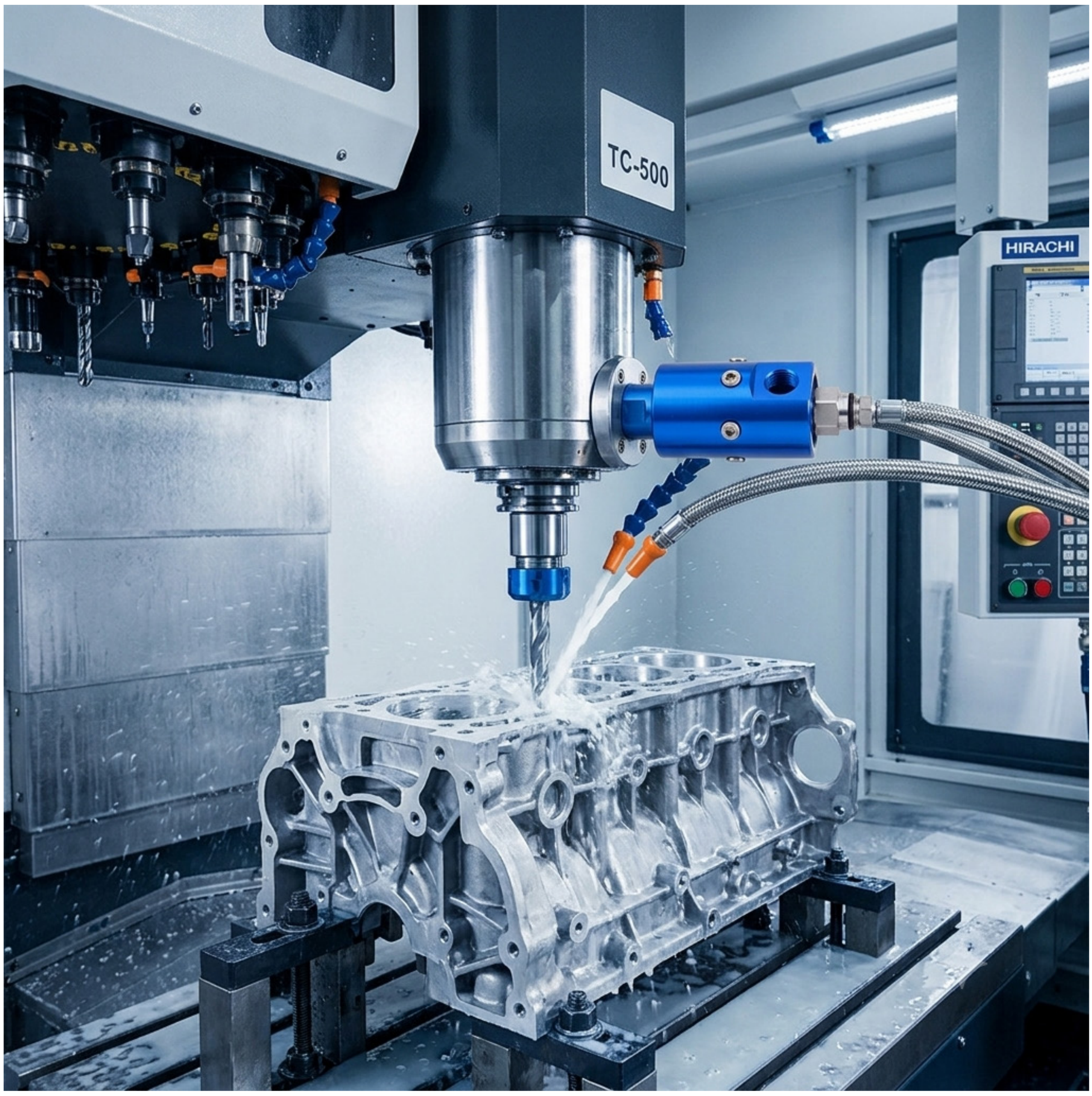
Product 4

High-Speed Rotary Joint with Through-Spindle Coolant for CNC Machine Centers



Structural Features:

- Single-passage for coolant or MQL (Minimum Quantity Lubrication)
- Closed seal design, suitable for automated production line applications
- Full-flow design prevents clogging from debris and burrs
- Bearing-supported design with threaded rotor for easy installation
- Deep groove ball bearings ensure smooth operation
- Labyrinth system and large leakage port designed to protect the ball bearings
- Balanced mechanical seal made of silicon carbide (SiC)
- Guarantees extended service life even under demanding operating environments
- Corrosion-resistant anodized aluminum housing



Operating Conditions:

- Pressure: 10 MPa
- Water-based Coolant: 10 MPa
- MQL (Oil Mist) Max Speed: 10,000 rpm
- Max Temperature: 100°C



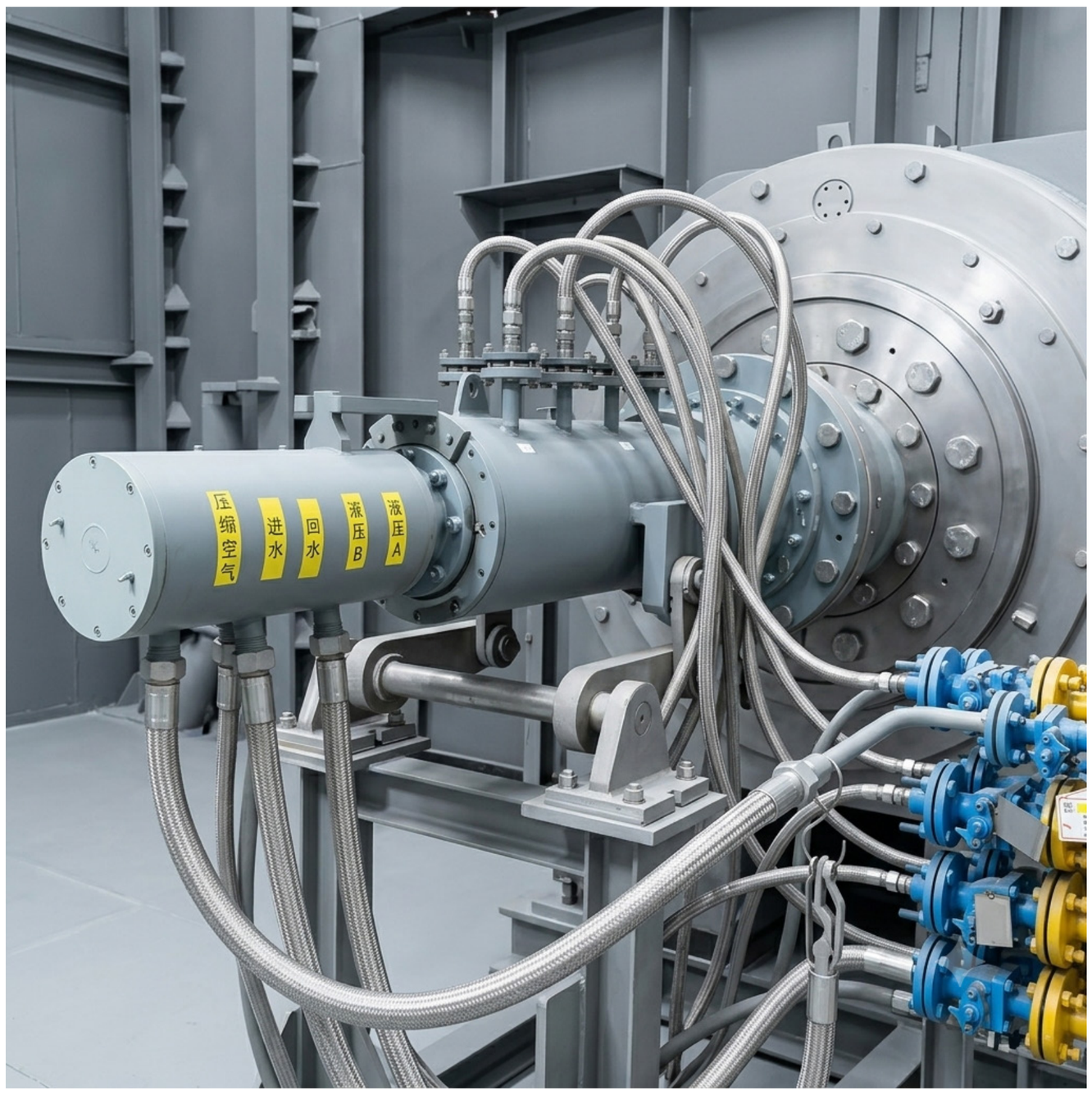
Ⅲ.HYDRAULIC & STAINLESS STEEL SERIES

Product 5

RT-GY Series Rotary Joint for Hydraulic Applications

Structural Features:

The RT-GY series hydraulic rotary joint is primarily used on rotating equipment for the transmission of hydraulic oil or compressed air, supplying hydraulic power to the hydraulic actuators on the rotating machinery. According to customer requirements, multiple passages can be manufactured, with each passage operating independently. This rotary joint can withstand high pressures (up to 35 MPa) and has a wide range of applications, such as center swivel joints for construction machinery, sheet metal coil-ers and uncoilers, and hydraulic chucks for CNC machine tools, among many others.



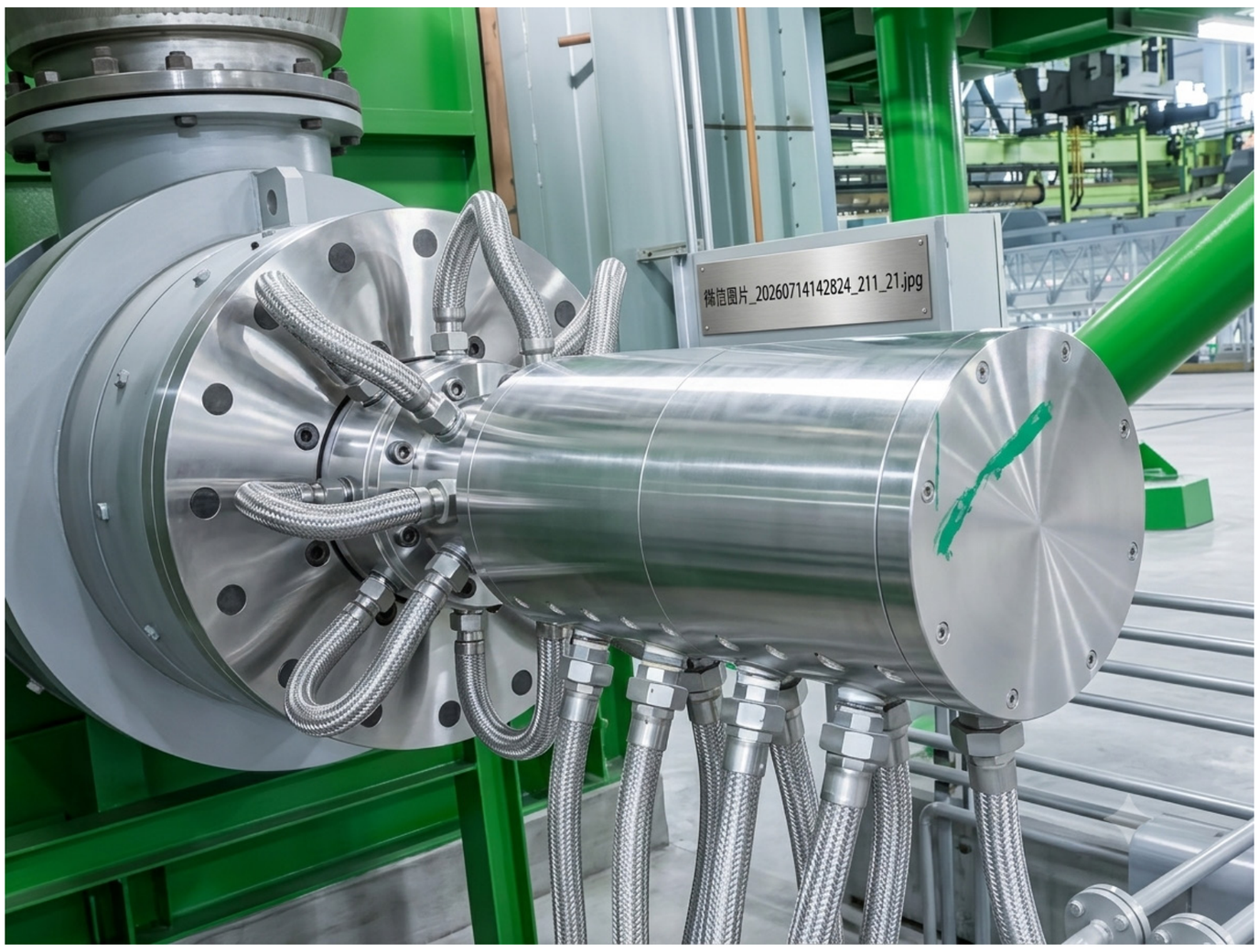






Operating Conditions:

- Applicable Media: Coolant, hot w ater, cold water, oil, compressed air
- Pressure: 100 MPa
- Water-based Coolant: 100 MPa
- Speed Range: 200 rpm
- Max Temperature: 80°C

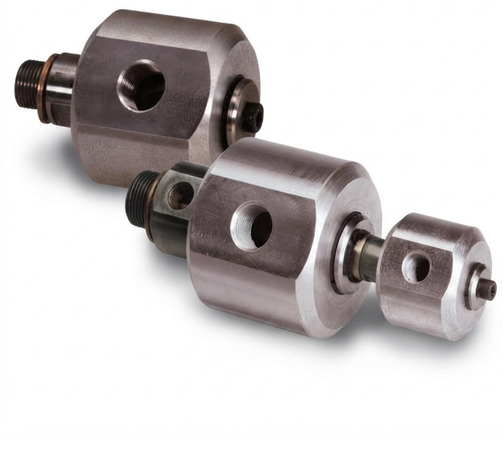














Product 6

RT-JG Stainless Steel Series (Interchangeable with DSTI / Deublin 55 Series)





Structural Features:

- The RT-JG series rotary joint is meticulously developed by our company as a direct alternative to the German Maier DP series and the American Deublin 55 series. Featuring a precision-cast stainless steel housing, it offers higher strength and superior corrosion resistance compared to cast brass housings. It adopts an external multi-spring and balanced seal design, ensuring smoother media flow and uniform elastic compensation that is free from the adverse effects of scaling. Furthermore, all internal components in direct contact with the media are made of stainless steel. The combination of a disc-type static sealing ring and a pin-style anti-rotation mechanism provides enhanced sealing stability, excellent adaptability to poor water quality, and a substantially extended service life.





Operating Conditions:

- Applicable Media:

  Coolant, hot water, cold water, oil, compressed air
- Pressure Steam Pressure: 1.6 MPa
- Temperature: 120°C
- Speed: 5,500 rpm (Maximum operating speed varies depending on the port size and specifications)





- Note: Higher operating parameters can be achieved by replacing the materials or models of certain components (such as bearing models, graphite grades, rubber O-rings, and spring materials). Customers in need of custom specifications are welcome to contact our technical department for detailed discussions.

Product 7

JL-DD / JL-DC Right-Angle Hydraulic Swivel Joints

Structural Features:

The JL-DD and JL-DC series hydraulic swivel joints are designed for high-pressure applications with low rotation or oscillation frequencies. They feature a compact size and easy installation, are constructed entirely of stainless steel, and utilize oil-free composite bearings for support in larger sizes. Typically used in ambient-temperature hydraulic oil circuits with a maximum pressure of 20.5 MPa, they are suitable for low-speed rotation or swiveling movements.





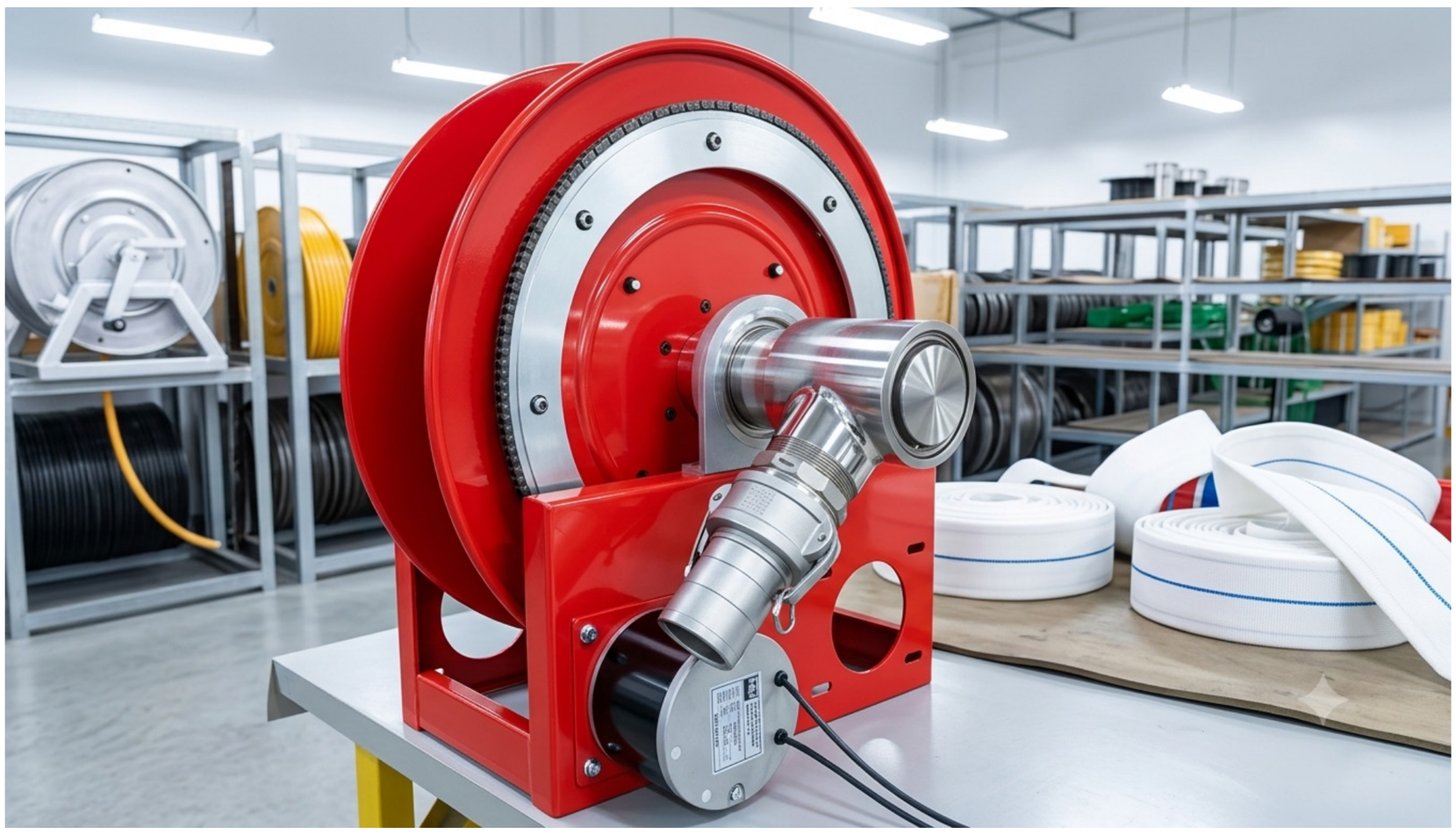


Operating Conditions:

- Applicable Media: Coolant, hot water, cold water, oil, compressed air
- Pressure: 35 MPa
- Water-based Coolant: 35 MPa
- Max Speed: 100 rpm
- Max Temperature: 100°C







IV.STEEL & METALLURGY SPECIAL SERIES

Product 8

Rotary Joint for Metallurgical Continuous Casting (M-Series)

Structural Features:

The M-series rotary joint is an embedded-type rotary joint specifically designed for continuous casting machines in the metallurgical industry. It features oil-free bearing support and a balanced sealing structure, making it maintenance-free.



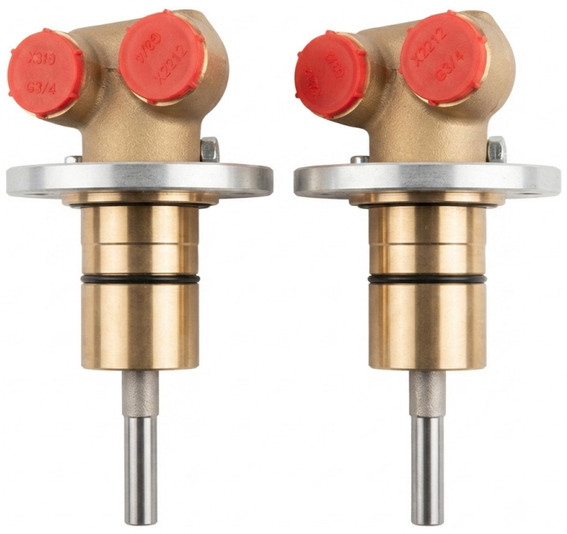
Operating Conditions:

- Applicable Media: Coolant, hot water, cold water
- Max Pressure: 1.5 MPa
- Max Temperature: 100°C
- Speed Range:

  100 rpm to 200 rpm (Maximum operating speed varies depending on the port size and spec

  ifications)







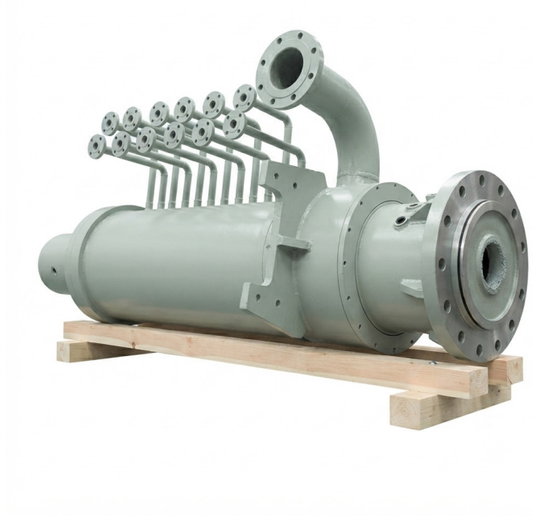






Product 9

Rotary Joint for Metallurgical Converters, Mud Guns, and Ladle Turrets





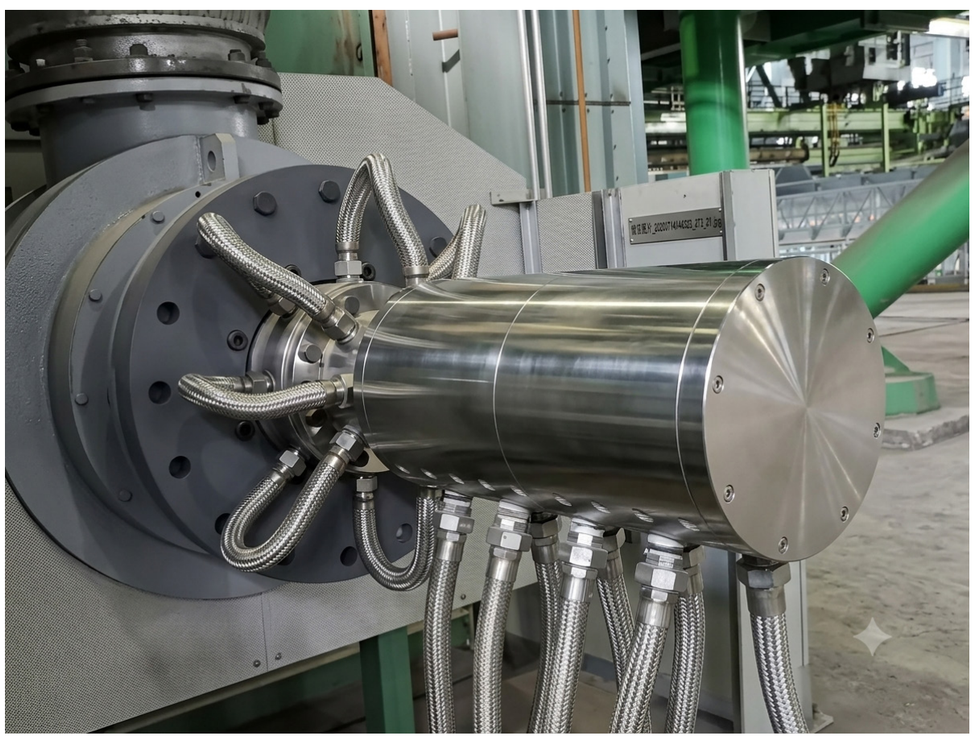


Structural Features:

This type of rotary joint is specifically designed to meet the operational require-ments of ladle turrets and converters in the steel industry, independently handling the entry and exit of oil, water, and air across various passages. The product utilizes imported sealing components, with friction surfaces undergoing honing, polishing, and carbonitriding treatments to ensure exceptional wear resistance. This achieves superior and reliable sealing performance along with an extended service life. De-pending on the equipment specifications and configurations, the slip ring can be designed with anywhere from several passages to over twenty passages. We can also customize matching products based on customers' specific equipment require-ments.

Operating Conditions:

- Applicable Media: Coolant, hot water, cold water, oil, compressed air
- Max Pressure: 35 MPa
- Speed Range: 0 to 200 rpm
- Max Temperature: 80°C



Product 10

Spherical Rotary Joint for Steel Plant Walking Beam Heating Furnaces

Structural Features:



The RT-QT spherical rotary joint is a key component applied to the evaporative cooling systems of walking beam heating furnaces in steel plants. It connects the cooling components performing periodic movements on the heating furnace with the stationary components, allowing for both rotation and angular oscillation to achieve the synchronized and continuous movement of the furnace's active sections. The sealing sphere is made of stainless steel with a polished and hardened surface, while the sealing element adopts PPL (Polyphenylene) material, providing superior wear resistance and high-temperature tolerance, reaching the international standard for similar products.



Operating Conditions:

- Applicable Media: Water, steam, superheated water
- Max Temperature: 350°C
- Max Pressure: 4.0MPa
- Flange Standard: JB/TB2/1-94
- Max Swing/Rotation Angle for Low-Speed Shaft: 30°





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