



**CASTINGS,
PRECISION MACHINE PARTS
& ASSEMBLIES**

www.rbibearing.com + 1-800-708-2128





Castings, Precision Machine Parts & Assemblies

Wuxi Precision Machine Co., Ltd. and AFC Precision Manufacturing Co., Ltd. are part of the family of companies that operate under the RBI umbrella. Our two factories share the same plant with the same engineering and management team, and both are ISO/TS16949:2009 certificated. This allows us to operate efficiently and communicate project status effectively at our weekly project meetings at the factory level.

Three production segments:

- Investment casting
- Precision machining parts
- Assemblies

Other customized services:

- Laser Labeling
- Heat treatment
- Surface treatment
- Global warehousing

We have produced a range of products including hydraulic components, rotary motion products, fasteners and customized connecting pieces, that are applied in various industries like Automotive, Food & Beverage Processing Equipment, Medical Equipment, and Marine parts.

Investment Castings

Wuxi AFC Precision Manufacturing specializes in the production of investment castings. The process of investment casting involves making the fusible wax patterns and coating them with refractory slurry. The coated shell will become a molded housing after hardening and de-waxing. By filling the shell with molten metal and removing the shell, the new metal part can be made.

We use Taiwan-made fully automatic machines with medium temperature wax imported from the US to produce the wax mold and ensure stability and size consistency. Our shell is made of several layers of zircon sand & zircon powder, a special fire-resistant material from Australia, that ensures good surface quality. We also provide value-added surface treatment to castings, such as mirror polishing. Our annual production capability is approximately 600 tons.



Investment casting allows complex shapes for greater flexibility.

Ensured stability and size consistency

- Automatic wax injection machine
- Medium temperature wax imported from the US

Good surface quality

- Ceramic shell made of 7 layers of zircon sand & powder imported from Australia
- Automatic shell making line

Strict material verification

- Chemical composition analysis conducted for each furnace.

Material testing capabilities

- Chemical analysis, Corrosion Testing, Hardness Testing and Tensile testing
- 3rd party Metallurgical Analysis

Production Capabilities

Material processed	Stainless steels
	Carbon steels
	Alloy steels
	Copper alloys
	Aluminum alloys
	High temperature alloy
Size	Cast Iron
	15mm*10mm*10mm –
	600mm*400mm*400mm
Weight	0.01~50kg (1oz to 110lbs)
Tolerances	CT 6 (100mm±0.5 mm)
Surface roughness	Ra 3.2 ~ 6
Surface finishes	Mirror Polishing
	Electropolishing
	E-Coat
	Powder Coat
	Black Oxide

Precision Machine Parts

Wuxi Precision Machine specializes in the design, development, and production of precision machine parts used in applications that demand high quality and precision components. Our machining facility utilizes advanced devices, including CNC Lathes, CNC Machining Center, Multitask Turning Center and different types of grinding machines. Besides these key machining methods, our strong outsourcing power for linear cutting, stamping as well as heat treatment and different types of surface treatment, enables us to provide our customers with integrated precision machine part solutions.



Production Capabilities

Material processed	Stainless steels
	Carbon steels
	Alloy steels
	Copper alloys
	Aluminum alloys
	Titanium alloys
	Zinc alloys
Size	Plastics
	Dia: .197" – 23.62" (5 - 600mm) Len: .39" --39.37" (10 -1000mm)
Surface	Ra: 0.2 - 1.6
Tolerances	M-2768 +/- .00039" (0.001mm) - Micro level
Machining	CNC Milling
	CNC Lathe turning
	Grinding
	Laser lettering
	Linear cutting
	Stamping

Machines	Process	Machine Model / Brand	Maximum Size Range
High Precision CNC Lathe	Turning	FCL-140 / Chevalier	X*Z φ250mm*320mm
		FBL-200 / Chevalier	X*Z φ288mm*450mm
		SJ45 CNC / Sin Shuo	X*Z φ460mm*275mm
		MT52-450/ Matech	X*Z φ280mm*450mm
		LA200 / Takisawa	X*Z φ320mm*300mm
		LA250 / Takisawa	X*Z φ450mm*765mm
		LA300 / Takisawa	X*Z φ580mm*1150mm
Dual Spindle Multiplexing Turning & Milling Composite Machine	Dual Spindle Multiplexing Turning & Milling	LA250YS / Takisawa	X*Y*Z*B 370mm*800*(+65mm-50mm)*735
CNC Vertical	Milling	FALCON-2033VMC / Chevalier	X*Y*Z 850mmx510mmx510mm
		GX1000 / Hardinge	X*Y*Z 1000mmx600mmx550mm
		V12GL / Hardinge	X*Y*Z 13000mmx600mmx600mm
		V10GL / Hardinge	X*Y*Z 1050mmx600mmx600mm
Vertical	Tapping	GT3-231 / General	M20
CNC OD	Grinding	JMA3065CNC / Wende	φ290*650mm
CNC Sawing	Sawing	GZ4250 / Zheng Chuan	φ500mm
	Ultrasonic Cleaning Line	KPD25-3240W / KPD	Washing tank size 800-600-400mm



Full Assemblies

As a value added service we offer full assembly operations integrated with our manufacturing capabilities within a temperature controlled setting. Rapid and high consistency assembly equipment with customized auto-line and semi-auto and Manual assembly with trained technicians.

- One company to oversee product production and assembly reduces overhead and cost
- All parts assembled in-house
- More accurate tolerances and variances by eliminating 3rd party manufacturers
- Advanced quality control
- Time savings
- Duty cost savings





Engineering & Quality Control

Wuxi Precision Machine Co. and Wuxi AFC Precision Manufacturing Co. are ISO/TS16949: 2009 certified. Both factories utilize the APQP (Advanced Product Quality Planning) system to develop products that exceed the demands of our customers. We also manage our production and logistics process with our ERP system (Enterprise Resource Planning) and the Japanese 5S methodology. With these proven quality control methods and our proprietary self implemented quality control system and proficient testing and inspection equipment, we can ensure efficiency of our processes and the quality of our products.

We have established and implemented high quality control and assurance standards. We have well-structured inspection procedures in place for all critical stages of our production processes to identify and prevent potential defects in the products.

Our Quality Control Procedure consists of the following:

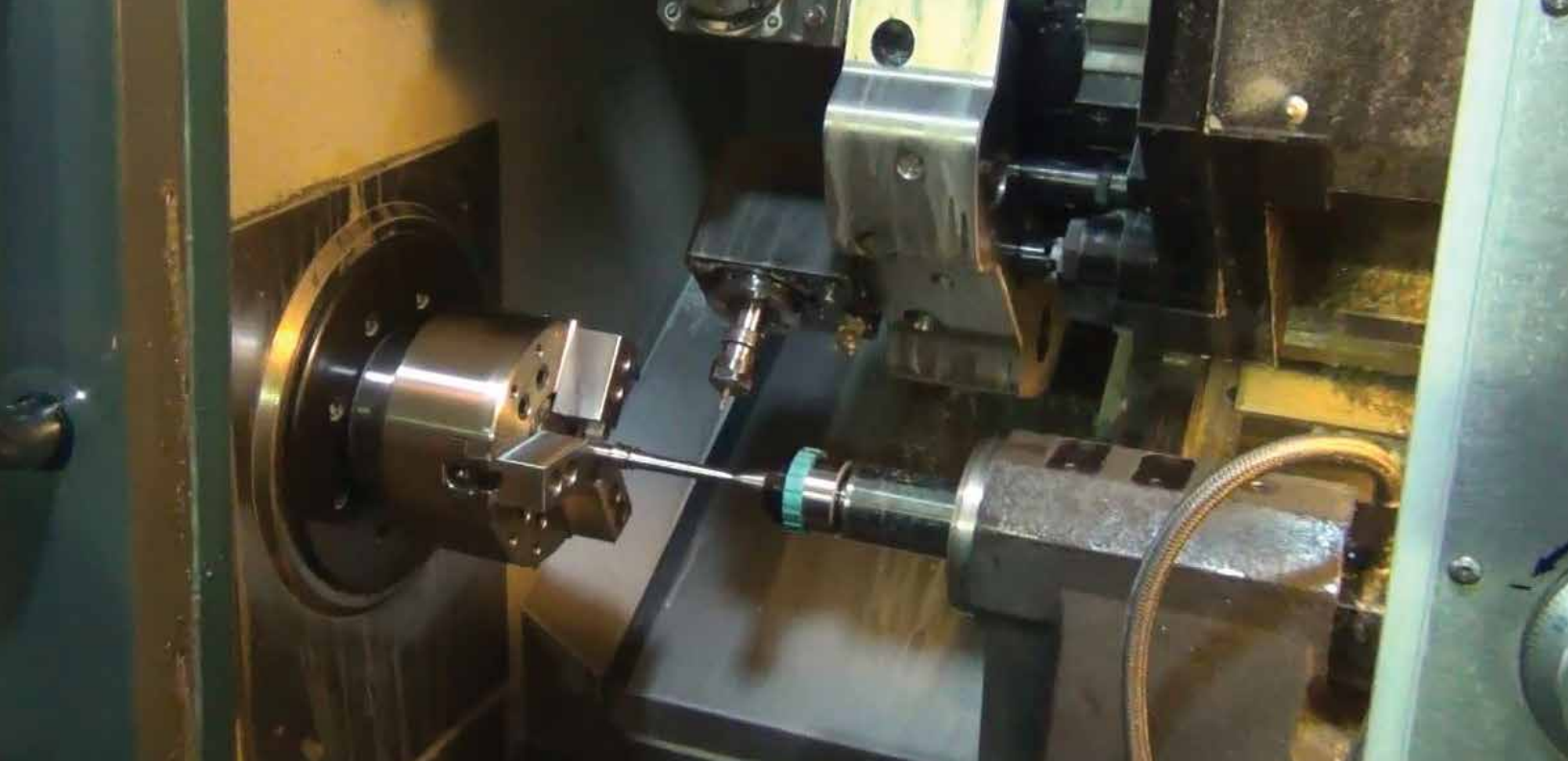
Raw Material Inspection:

Our Quality Control Department examines all of our raw materials upon delivery to ensure that they meet our requirements before they are used for production of parts.

Process Control:

We have implemented various quality control measures at each of the key stages of our production process. We conduct first piece inspection, in process inspection, and final inspection to ensure the quality of the products before they are delivered to our customers.





- Shortened Production Lead Times
- Meet Demanding Tolerances
- Increase Productivity by Producing Multiple Precision Machined Parts Simultaneously
- Eliminate Extra Operation Costs
- Delivering Quality Consistent Precision Machined Parts
- Advanced Design and Testing Methods
- Metallurgical Analysis
- Quality and Inspection Verification
- Failure Analysis
- Corrective Action Assessment
- ISO9001:2000 Certified
- TS16949 Certified
- Value Engineering
- Advanced Quality Planning System (APQP)
- Enterprise Resource Planning System (ERP)
- 5S Methodology Process
- In Process Quality Control System
- Source Management
- Performance Data
- Lot Number Traceability System

Inspection Capabilities

Metrology Inspection Equipment	Zeiss CMM
	Vision Systems
Material Testing Equipment	Profilometers
	Spectrum
	Salt spray test lab
	Tensile machine
	Rockwell Hardness
	Brinell Hardness testers



Managing Information and Product Movement

We have mastered the art of information flow between our sales and distribution located in Hanover Park, IL. and our factories in Wuxi, China. The information flow involves transmitting our customer requirements, drawings, orders and delivery status. Product movement involves the packaging, shipment and tracking of containers coming overseas to North America. Once the containers have reached North America they travel by rail, air, or truck to the final destination - our 25,000 sq. ft. warehouse in the midwest.



- Cross Culture Integrated Management System
- Fluent Cross Culture Communication
- Logistics Solutions
- Port Clearance and Local Transportation
- Special Packaging Requirements
- Regular Container Deliveries



North American Sales, Warehouse & Distribution

Our distribution warehouse is located in Hanover Park, IL. Once shipments reach our warehouses, the skids are checked in and assigned storage space in our warehouse through our WMS (Warehouse Management System). When shipments are scheduled for your products we know exactly how much stock is left and where the your product is stored in our warehouse. We can efficiently pull and package your order for shipping.

- FIFO (1st in 1st out) Inventory Program
- Lot Number Tracking System
- Package / Skid Quantity Programs
- Air and Sea Freight Forwarding
- Centrally Located Warehousing
- Special Packaging Requirements
- Custom Packaging / Private Label
- Custom Stocking Programs
- Consignment Programs
- Bar Coding
- Provide Visits to RBI Facilities for Tours and Audits
- Global Sourcing Capabilities
- Low Minimum Order Quantities for Special Products
- Engineering & Technical Support
- Experienced Sales Staff
- Reliability/Customer Satisfaction
- Competitive Pricing
- Competitive Payment Terms



Component: Connecting Piece
Industry: Food and Beverage



Component: Connecting Pieces
Industry: Food and Beverage



Component: Connecting Pieces
Industry: Food and Beverage



Component: Connecting Piece
Industry: Marine



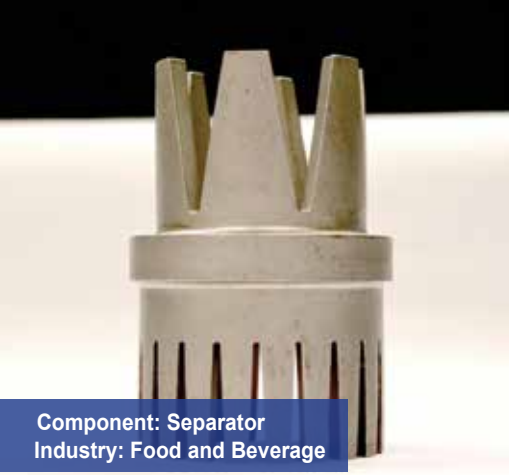
Component: Rotor
Industry: Food and Beverage



Component: Slider Block
Industry: Marine



Component: Connecting Piece
Industry: Marine



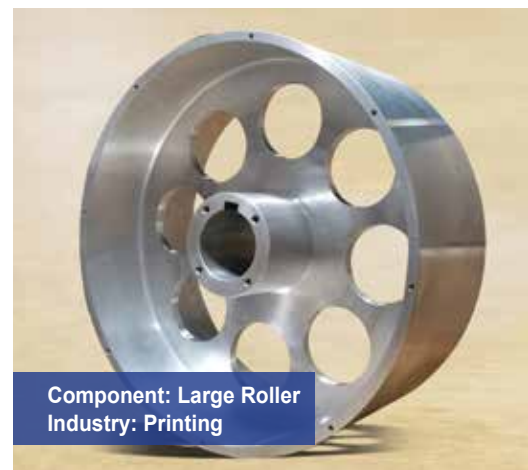
Component: Separator
Industry: Food and Beverage



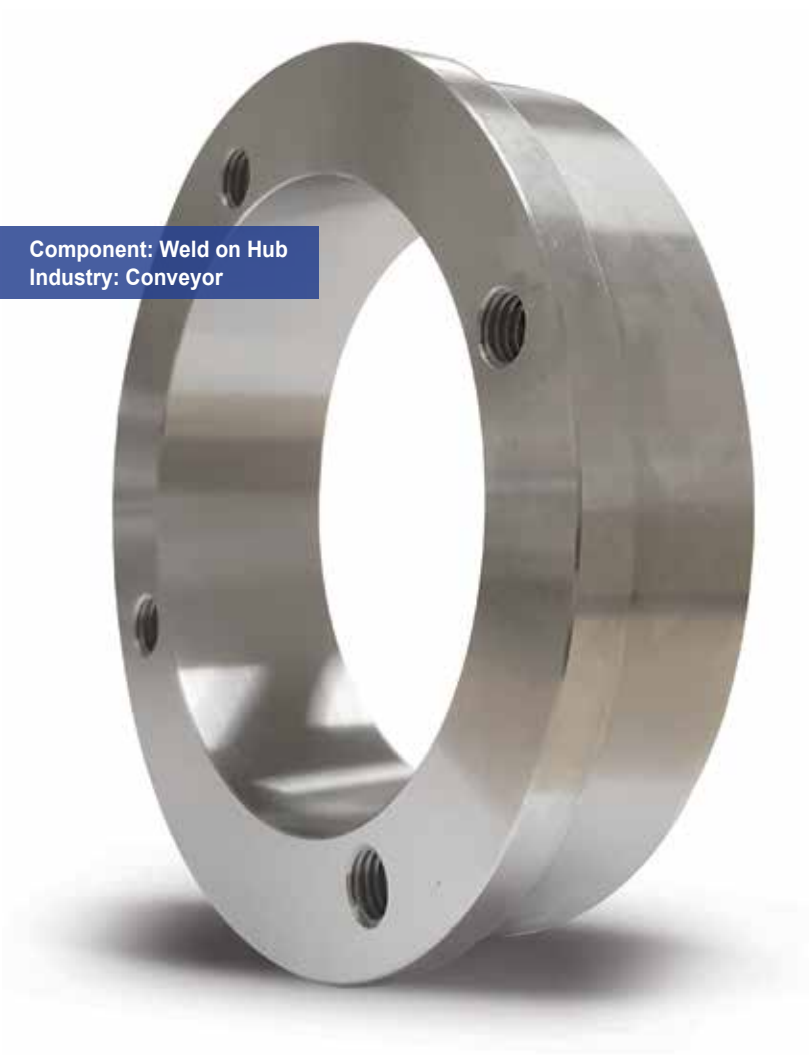
Component: Roller Chain Attachment
Industry: Agriculture



Component: Hydraulic Cylinder Parts
Industry: Hydraulic



Component: Large Roller
Industry: Printing



Component: Weld on Hub
Industry: Conveyor



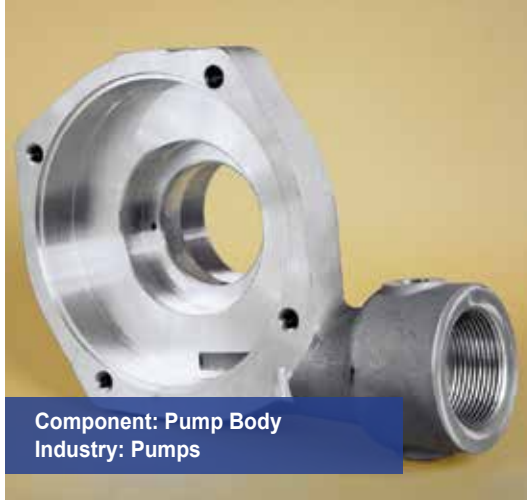
Component: Black Oxide Shaft
Industry: Fitness Equipment



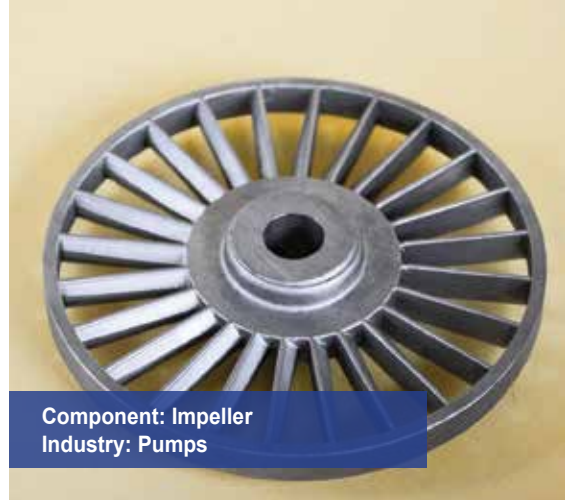
Component: Sealing Stud
Industry: Various



Component: Assembled Pump
Industry: Pumps



Component: Pump Body
Industry: Pumps



Component: Impeller
Industry: Pumps



Component: Impeller
Industry: Pumps



Component: Valve Body
Industry: Pumps



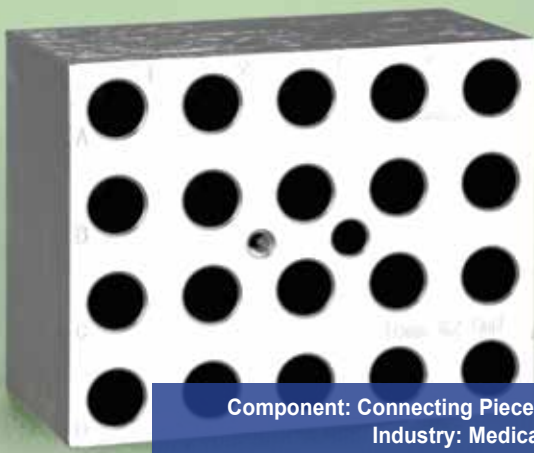
Component: Air Valve
Industry: Pumps



Component: Valve Connector
Industry: Pumps



Component: Valve
Industry: Pumps



Component: Connecting Pieces
Industry: Medical



Component: Connecting Pieces
Industry: Medical



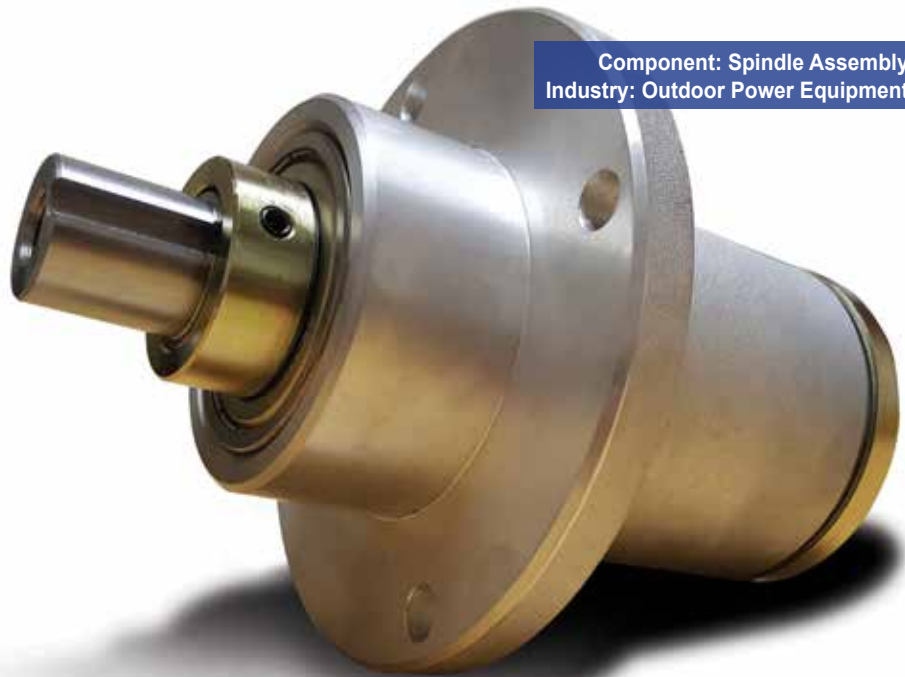
Component: Bearing Housing
Industry: Various



Component: Connecting Pieces
Industry: Medical



Component: Bearing Housing
Industry: Various



Component: Spindle Assembly
Industry: Outdoor Power Equipment



Component: Bearing Accessories
Industry: Various



Component: Bearing Housing
Industry: Various



Component: Shim
Industry: Automotive



Component: Connecting Piece
Industry: Automotive



Component: Roller Carriers
Industry: Automotive



Component: Automatic Valve Body
Industry: Automotive



Component: Connecting Piece
Industry: Automotive



Component: Connecting Piece
Industry: Automotive



Component: Support Piece
Industry: Automotive



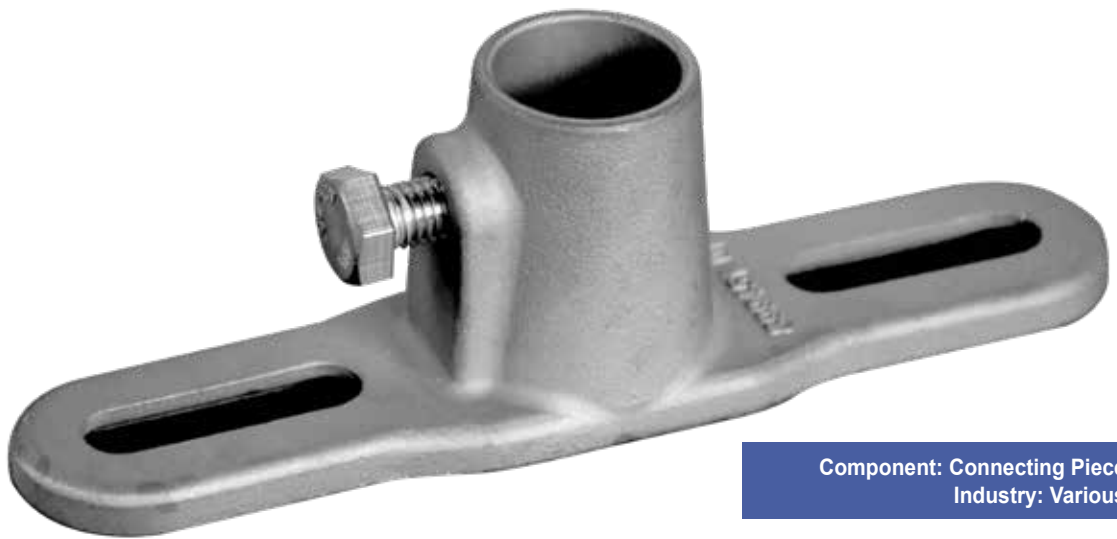
Component: Tube Valve
Connecting Piece
Industry: Various



Component: Hardware
Industry: Various



Component: Diesel Engine Nozzles
Industry: Automotive



Component: Connecting Piece
Industry: Various



Component: Valve Stem
Industry: Hydraulic



Component: Connecting Piece
Industry: Marine



Component: Gas Burner Cover
Industry: Various



Component: Bushing and Hub
Industry: Various



Component: Connecting Piece - Handle
Industry: Various



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