Choso Iron Works Co., Ltd.



Manufacturing precision components for hydraulic pumps and valves used in construction machinery: A forte in leveraging extensive expertise to produce high-precision, high-quality products

Category Wind Turbine Manufacturing > Precision Processing of Machine Parts







Applying advanced technological capabilities and unique strengths to produce machinery components nearing single-micron precision

Manufacturing precision parts for hydraulic equipment is Choso Iron Works's core business, including the provision of hydraulic pump and valve components, compressor parts for pneumatic equipment, etc. The company also has experience manufacturing hydraulic parts for heavy machinery accelerators/decelerators. Realizing degrees of circularity of 1 μm and cylindricity of 1.5 µm, the company's products are characterized by extremely high precision. With a specialty in complex and delicate internal machining (inner diameter processing) as well, the company is capable of machining tiny holes with 1.6-mm diameters in hardened steel. Out of a passion to improve quality even further, Choso Iron Works even manufactures its own jigs and other tools. Maintaining high precision in inspections as well, the company uses its own inspection equipment

and quality control system reinforced by careful human inspection to keep even the smallest defects from being overlooked. Thorough performance tests are conducted for factors including operation, flow rate, pressure, and leakage to ensure high quality and good performance. Cleanliness is always maintained in production environments, as well as thorough temperature control, in the interest of preventing even the slightest environmental changes from affecting the micron-level precision processing. Choso Iron Works has established an automated mass production system to realize high quality and short delivery times while keeping costs down, showing an ongoing commitment to maintaining advanced technological capabilities to satisfy customers' specification demands, along with an earnest approach of strictly ensuring high quality and meeting delivery deadlines.

- Materials used: Iron, copper, aluminum, stainless steel, brass, Duracon, gun metal, etc. Manufacturing sizes: Primarily palm-sized products (ϕ 5- ϕ 80, with total lengths of 300 mm or less)
- · Machining precision: Circularity of 1 µm, cylindricity of 1.5 µm · Number of machining tools: Approx. 160 · Annual production: Approx. 2,000 item types (7 million pieces total)

Adoption Record

Hydraulic and pneumatic components not permitting even the slightest leakage



High precision is required for hydraulic and pneumatic valve parts, as they must be completely free of oil and air leaks. Never compromising on quality, Choso Iron Works always strives to satisfy customers' demands, producing highly reliable products. Offering proposals and technological innovations aimed at realizing even greater results as well, the company has earned the trust of many customers, including major corporations.

Self-developed management system facilitating strict adherence of deadlines



A proprietary delivery date management system is employed to realize batch management of the entire process from receipt of orders through delivery, helping to ensure high quality and strict adherence to deadlines. Using barcodes to realize aggregation and visualization of data concerning production status and inventory control, the system enables all company members to grasp the situations accurately and in real time.

Main Equipment and Machinery

- High Precision and High Efficiency 4-Axis Composite Processing Machines: NZX2000, etc. / 3 units
- CNC Automatic Lathes (with bar feeders): BNE-51, BNJ-51, Cincom M-32, etc. / 87 units
- CNC Lathes (without bar feeders): GN-4200, etc. / 32 units
- Machining Centers: NVX5080/40, etc. / 14 units
- Centerless Grinding Machines: MPC-600C-CNC, etc. / 5 units
- Ocylindrical Grinders: GE4Ai-50, etc. / 7 units
- Surface Grinders: PSG-64CA-iQ, etc. / 3 units

Company Information

Business: Manufacture of precision parts for hydraulic equipment and industrial machinery components Location: 1-11 Minato, Saijo, Ehime Prefecture, 793-0046 Established: 1973 Capital: 30 million ven Employees: 107 Representative: President Hiroyuki Kato Tel: 0897-58-2227 Offices: Including the Saijo headquarters factory, 6 factories Metropolitan Area Contact: Takuya Kato, Production Control Department Tel: 070-2626-3317 Email: takuya@choso-ir.com URL: https://www.choso-ir.net