Flowserve Japan

Manufacture • Package • Test
Maintenance and Repair • On-Site Services
Parts and Components • Pump Retrofits and Upgrades

Experience In Motion
Global Reach, Local Presence

With approximately 15,000 employees in more than 50 countries, Flowserve Corporation (NYSE: FLS, headquartered in Dallas, Texas, U.S.), is a leading provider of flow control products and services for the global infrastructure markets, supplying products to refinery, power, coal, gas, chemical and other industries.

As part of the Flowserve worldwide network, Flowserve Japan is regarded as the main manufacturing base in the Asia-Pacific region.

Flowserve Japan

Name (Japanese)  | 日本フローサーブ株式会社
(English)         | Flowserve Japan Co., Ltd.
Established       | November 10, 1953 (Showa 28)
Holding Company   | US Flowserve Corporation
Scope of Business | Design, manufacturing, sales, maintenance of pumps, mechanical seals, solid-liquid separators, steam turbines, compressors and other rotating machines, and diagnosis of rotating machines
Registration      | Special construction contractor permit by Construction Minister (Toku-5) No. 15624; Installation of machinery and apparatus ISO 9001 (96QR039) Certified offices for high-pressure gas equipment testing and manufacturing
URL               | https://www.flowserve.co.jp
Since its establishment in 1953 (Showa 28), Niigata Worthington has been engaged in the design, manufacturing and sales of pumps, compressors and steam turbines for the refining, petrochemical, power, steel, shipbuilding, utilities and many other general industries, making great contributions to backbone industries in Japan.

Established in 1987, Niigata Equipment Maintenance Co. Ltd. (NEMCO), specialized in the maintenance of rotating equipment, which subsequently expanded its business scope to include manufacturing, equipment diagnostic capabilities, consultancy, repairs and maintenance of rotating equipment, earning themselves a high reputation in sectors such as refining, chemical, nuclear power and more. Among other developments, the company has also made progress in ultra-high performance centrifuges. Entering the 21st century, Niigata Worthington has been working on the development and manufacturing of various rotating equipment, to provide customers with efficient and effective solutions to maintain rotating their equipment. In 2008, Niigata Worthington became a Japanese subsidiary of Flowserve.

In December 2011, Flowserve Niigata Worthington merged with Flowserve Seal Business in Japan to form Flowserve Japan Co. Ltd., engaging in the manufacturing, sales and maintenance of mechanical seals. As a subsidiary of Flowserve, Flowserve Japan supplies world-renowned pump brands such as Worthington, Ingersoll-Dresser, Pacific, Byron Jackson, Pleuger and Durco.
**Timeline**

1840  Henry R. Worthington, an American mechanical engineer, invented the world’s first direct-acting steam pump.

1900  Kashivazaki sub-factory, Niigata Iron Works (now called Kashivazaki plant of Niigata Worthington) was opened by Nippon Oil Co. Ltd.

1923  Worthington (USA) supplied the world’s first centrifugal boiler feed pumps for a plant operating at 70 barg.

1953  Worthington (USA) and Niigata Tekkō established Niigata Worthington Co. Ltd. to manufacture and sell pumps, turbines and air compressors.

1954  Niigata Worthington developed and launched the first high-speed (greater than 3600 rpm), high-temperature and high-pressure process pump in Japan.

1971  Niigata Worthington developed, manufactured and launched the HDS and WTB as new types of high-temperature and high-pressure API process pumps.

1985  Niigata Worthington developed, manufactured and launched the world’s largest (3200 kW) septuplex plunger pumps.

Worthington (US) became a member of U.S.-based Dresser Industries, a world-class company engaged in the development of oil and natural gas resources.

1991  Niigata Worthington developed, manufactured and launched the barrel type, high-temperature and high-pressure process Type BP pumps.
1992 Dresser Industries and Ingersoll Rand combined their pumps businesses to establish Ingersoll Dresser Pump (IDP), with IDP in the U.S. as the holding company.

1996 Received ISO 9001 quality management and control certification.
   Kashiwazaki plant was certified in Nov. 1996.

1997 Niigata Worthington developed, manufactured and launched Type WXH ring-section, high-pressure multistage pumps.

1998 Niigata Worthington developed, manufactured and launched a high-performance, solid-liquid separator.

2008 Niigata Worthington became a Japanese subsidiary of Flowserve.

2011 The Flowserve Japan seal business, engaged in manufacturing, selling and maintenance of mechanical seals, merged with Niigata Worthington to form a new company: Flowserve Japan Co. Ltd.

2012 Introduced large type overhung pump 16HNN-27 for FCC bottom pump.

2017 Moved headquarters from Kawasaki to Kashiwazaki in Niigata.
**Pump**

**Horizontal Centrifugal Pump**
Used in the oil refinery, petrochemical and chemical industries.

**Vertical Centrifugal Pump**
Widely used in oil, hydrocarbon, liquid gas, condensate, LPG, industrial water and other fields.
**Plunger Pump**

Designed as high-pressure pumps for all industrial fields, and widely used in descaling, water press, coal liquefaction, ammonia, etc.

**Solid-liquid Separator**

The high-performance separator makes the best use of its vertical structure; they can smoothly and continuously separate ultra-micron products that are hard to be separated by traditional centrifuges.
Flowserve Corporation had been engaged in mechanical seal manufacturing for more than 90 years. In Japan, it has been manufacturing and selling mechanical seals for 40 years, supplying products to many industrial fields for pumps and other rotating machineries. Mechanical seals supplied by Flowserve were used in many different extreme conditions, ranging from ultralow to high-temperature, high speeds, high-pressure, dry running and high-concentration slurries.

**ISC2 Series Cartridge Seal**

ISC2 Series seals conform to various international standards, and are designed to fit many pump types supplied by major manufacturers in Japan. ISC2 Series seals provide solutions to many sealing problems due to their wide liquid specification and application range, which can be applied to shaft diameters of up to 200 mm.

**MSS Split Seal**

This economical split seal can be installed easily on mixers, reactors and other pressure vessel equipment. The MSS seal is highly adaptable and accommodating to old equipment with shaft deflections and eccentricities fitted with conventional seal packings.
Supported by the Kashiwazaki plant and Osaka QRC to provide excellent repair services and technical support, Flowserve Japan supplies rotating equipment, compressors and mixers, regardless of its manufacturer, with mechanical seals, components and related services ranging from repairs, upgrades, retrofits and root cause diagnostic analysis. In addition, the company can also provide engineers to perform on-site technical and field services to offer solutions as needed by customers.

**Aftermarket**

**Repair Service**

Perform equipment and components checks; test equipment and components in the Kashiwazaki plant or perform in-situ repairs.

**Upgrades, Re-rates and Retrofits**

Provide the latest “retrofitting scheme” combined with extensive professional experiences, upgrade and retrofit rotating equipment and accessories (auxiliary pippings, auxiliary equipments, etc.

**Benefits**

- Extend lifetime by replacing materials
- Increase efficiency with improved design
- Energy savings with applicable specifications
Parts and Components

With professional design and process techniques, Flowserve Japan can re-engineer and produce non-Flowserve components with quality, complying to OEM specifications.

Technical support

Flowserve Japan field service experts are available to set up pumps and other rotating machines on-site.

- Technical instructions and management of regular checks on rotating machines
- Assign engineers to assist customer’s plant construction

Diagnosis

Measuring and diagnosing rotating equipment, finding causes to malfunctions asset reevaluation, lifetime prediction and offering solutions.
Key Industries

Hydrocarbon Processing
Petrochemical Processing
Chemical Processing
Food Processing
Power Generation
Pulp and Paper
Steel Industry
General Industry