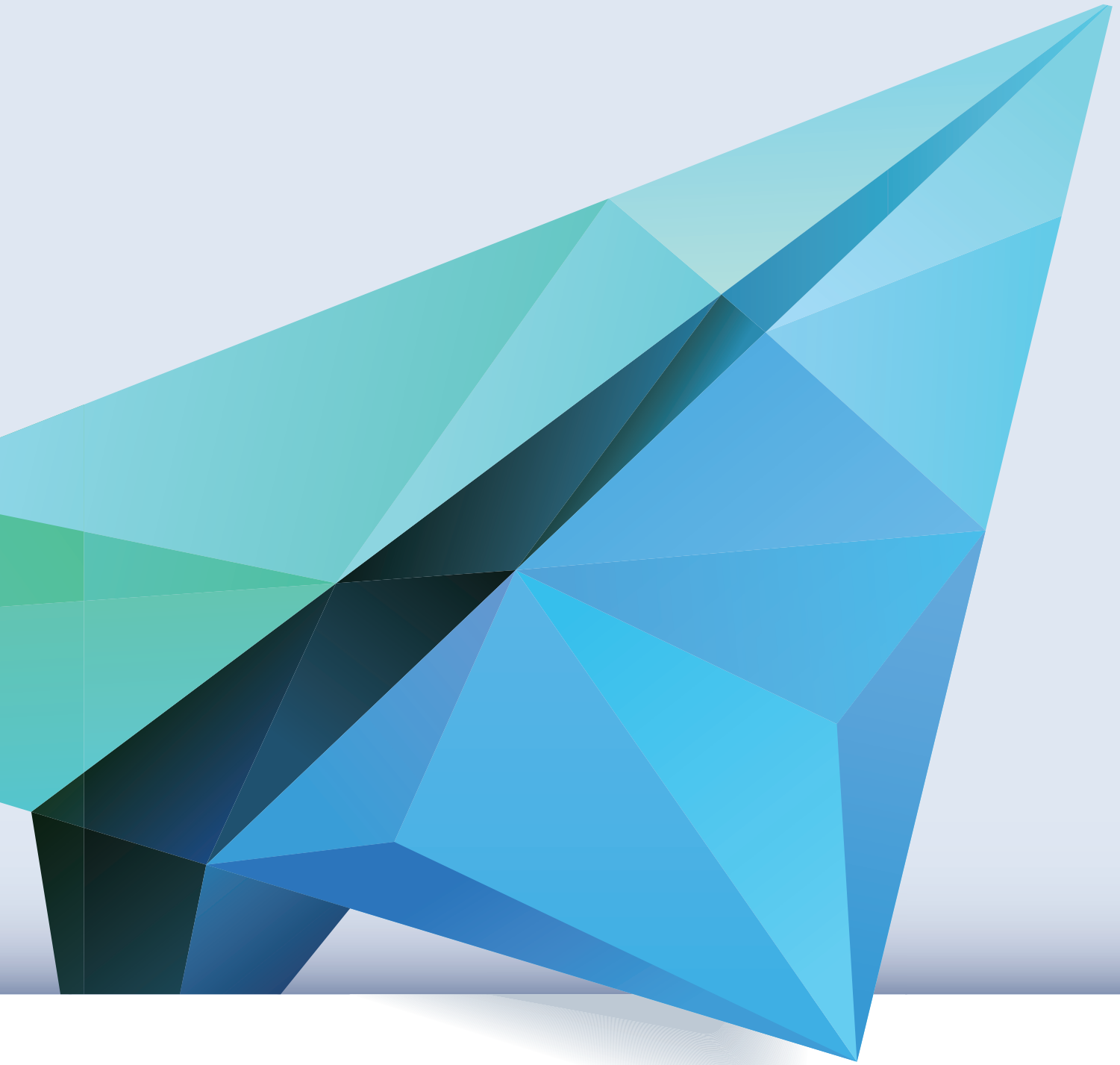


TORISHIMA COMPANY PROFILE

Digest Version



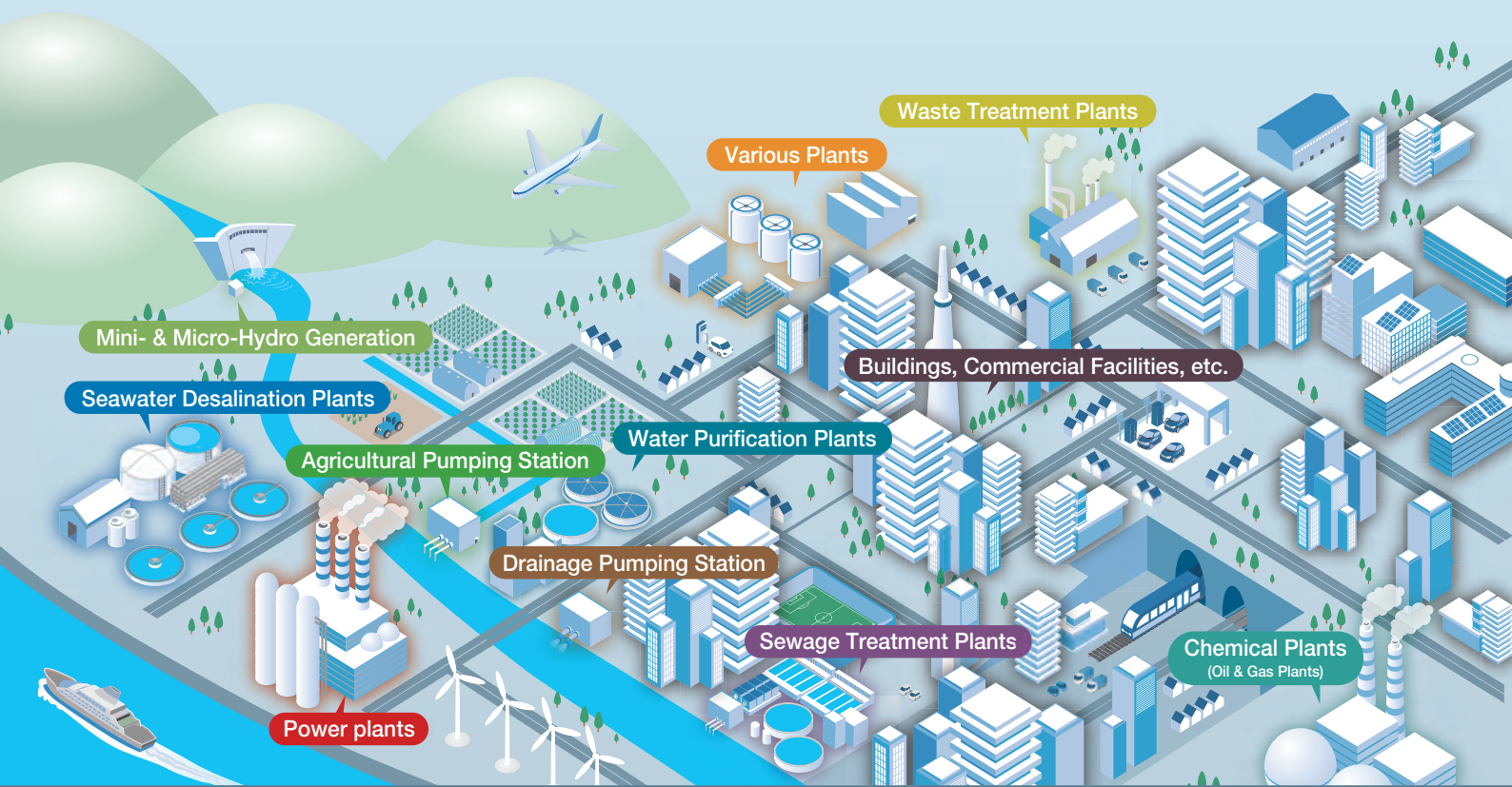
Torishima Pump Mfg. Co., Ltd.

Drawing on Torishima's strengths and technology, we will contribute to a sustainable society by connecting lifestyles, lives and the future.

Founded in 1919 in Japan, Torishima has developed into a leading pump manufacturer supplying centrifugal pumps. We remain committed to providing innovative and reliable pumping solutions that meet the increasingly diverse and sophisticated needs of customers.

We are dedicated to addressing various issues across the globe through pumps, while seeking out sustainable solutions that will enhance people's lives.





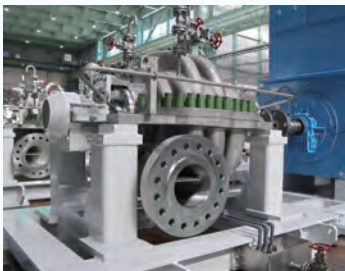
Torishima Pumps are everywhere.

Torishima offers a wide range of products and services centered on pumps in four business domains: High-Tech Pumps, Projects, Service Solutions and Renewable Energy & Environment. In addition to supporting a safe, secure, and comfortable lifestyle, we are also working to address social issues such as energy conservation and reducing CO₂ emissions through enhancing the efficiency of our products.

High-Tech Pumps



Torishima develops and supplies pumps that meet increasingly diverse and sophisticated needs in a wide range of applications, including seawater desalination plants, power plants, chemical plants, water and wastewater pumping stations and general industrial plants. Under the slogan “Go Green with Pumps” we are working to improve energy efficiency and reduce CO₂ emissions at plants through our high-efficiency pumps.



High-pressure seawater supply pumps for desalination plants



Long-distance pumps for transporting drinking water at desalination plants



Boiler feed pumps for power plants



Ammonia dispensing pumps for power plants



Cooling water pumps for petrochemical plants



Stormwater drainage pumps for drainage pumping stations



Boiler feed pumps for incineration plants



Eco-Pumps for general industry applications

Projects



Torishima has a long history of supplying pump stations as an EPC contractor and not just as a pump supplier. We provide turnkey services to customers in which we design, engineer, procure, construct and commission all equipment in a pumping station. Torrential rain caused by climate change and other factors have become more common in recent years, causing severe damage in many areas. Torishima contributes to ensuring safe and secure lives through our proprietary technologies for disaster prevention and mitigation.



Stormwater drainage pumping stations



River drainage pumping stations



Water transmission pumping stations



Irrigation pumping stations

Torishima's unique technology helps prevent and mitigate disasters caused by torrential rain.



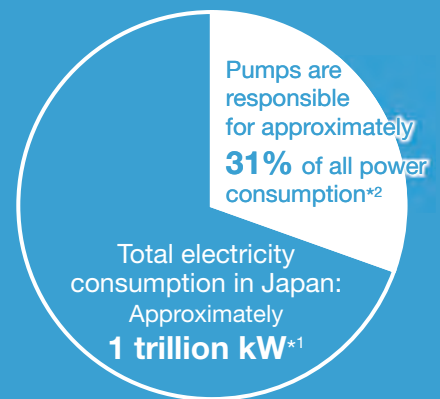
Pump body with vortex prevention technology



Integrated pump with water-resistant motor

Furthering the drive toward carbon neutrality through energy-efficient pumps

Pumps are important equipment that support social infrastructure and industry. In such systems, numerous pumps are operated over extended periods, consuming enormous amounts of energy. It is estimated that pumps consume approximately 30% of the total electric power in Japan. As such, using energy-efficient pumps can significantly reduce power consumption and CO₂ emissions for Japan as a whole. Not only does Torishima develop and supply Eco-Pumps designed for advanced energy efficiency, but we also focus on “Go Green with Pumps” initiatives to promote Eco-Pumps as part of our contribution toward carbon neutrality.



Eco-Pump designed for energy efficiency



Go Green with Pumps seminar

*1 Source: Global Energy Statistics Yearbook 2018, Enerdata

*2 Source: FY2014 Report on the Infrastructure Development Project for the Promotion of Rational Energy Use (Survey on Actual Conditions of Use and Systems for Industrial Equipment, etc.), The Energy Conservation Center, Japan

Service Solutions



Torishima is constantly evolving to provide the best solutions to customers, even in aftermarket fields. To ensure efficient use of pump equipment, we provide optimal solutions for every situation from a diverse range of services. These include periodic maintenance and diagnostics, as well as overhauls and repairs at the Torishima factory, to confirm pump performance through detailed inspections and performance tests.



Maintenance of pumps at Torishima's factory



On-site maintenance of pumps



Maintenance and inspection (monitoring of machine conditions)



3D scanning of casings

REDU[®]

Re Engineering & Design Up

REDU (Re-Engineering and Design Up) is Torishima's unique service system. Through this system, we offer optimal solutions for every case, from re-examining pump equipment specifications, optimizing materials, and extending service life to restoring or replacing aging or damaged parts.

■ REDU example with a vertical-shaft volute pump



Before



After

The hydraulic parts of the existing pump made by another manufacturer were replaced to improve pump efficiency.

Pump Manufacturer's Proprietary IoT Vibration Monitoring Solutions

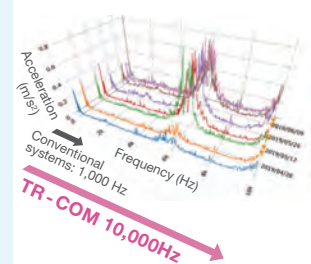
Torishima's TR-COM rotating machinery monitoring system uses IoT technology to provide enhanced support for the operation and maintenance of pumps and other rotating machinery.

Utilizing IoT sensors to measure machine vibrations makes it possible to detect signs of a potential malfunction, allowing early action to be taken to prolong the healthy lifespan of the machinery.

TR-COM is promoted by the Ministry of Economy, Trade and Industry's Smart Security Technology initiative.



Measurement of vibration frequencies at up to 10,000Hz



Example of a frequency spectrum for detecting initial flaws in bearings

Renewable Energy & Environment



Torishima is also involved in renewable energy — an essential aspect of achieving a carbon-neutral society. As a pump manufacturer, we leverage our strengths in the field of mini and micro-hydro generation by offering highly efficient reverse-rotated pump turbines.



Reverse-rotated pump turbines



Vertical-shaft reverse-rotated pump turbines

Global Network

(as of August 2023)



Domestic Network

(as of August 2023)



Company Name: Torishima Pump Mfg. Co., Ltd.

Founded: August 1, 1919

Head Office: 1-1-8 Miyata-cho, Takatsuki-shi, Osaka 569-8660, Japan

Capital: 1,592.77 million yen

Website: <https://www.torishima.co.jp/en>

