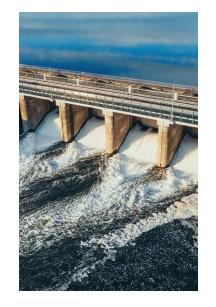


# TORISHIMA ABOUT US

Torishima is a leading pump manufacturer, founded in 1919 in Osaka, Japan. Our main objective is to contribute to society as a quality supplier of pumping equipment and services.

Our mission is to listen to our customers, understand their needs and meet their expectations. Therefore, we focus on maintaining a continuous investment in **research and development** to offer a **technology based on efficiency, safety and reliability** applied to our customers' projects and linked to our commitment to the **environment, in different industries**:







**WASTEWATER** 



IRRIGATION & DRAINAGE



OIL & GAS



**POWER INDUSTRY** 



GENERAL INDUSTRY



RENEWABLE ENERGY



SEAWATER DESALINATION

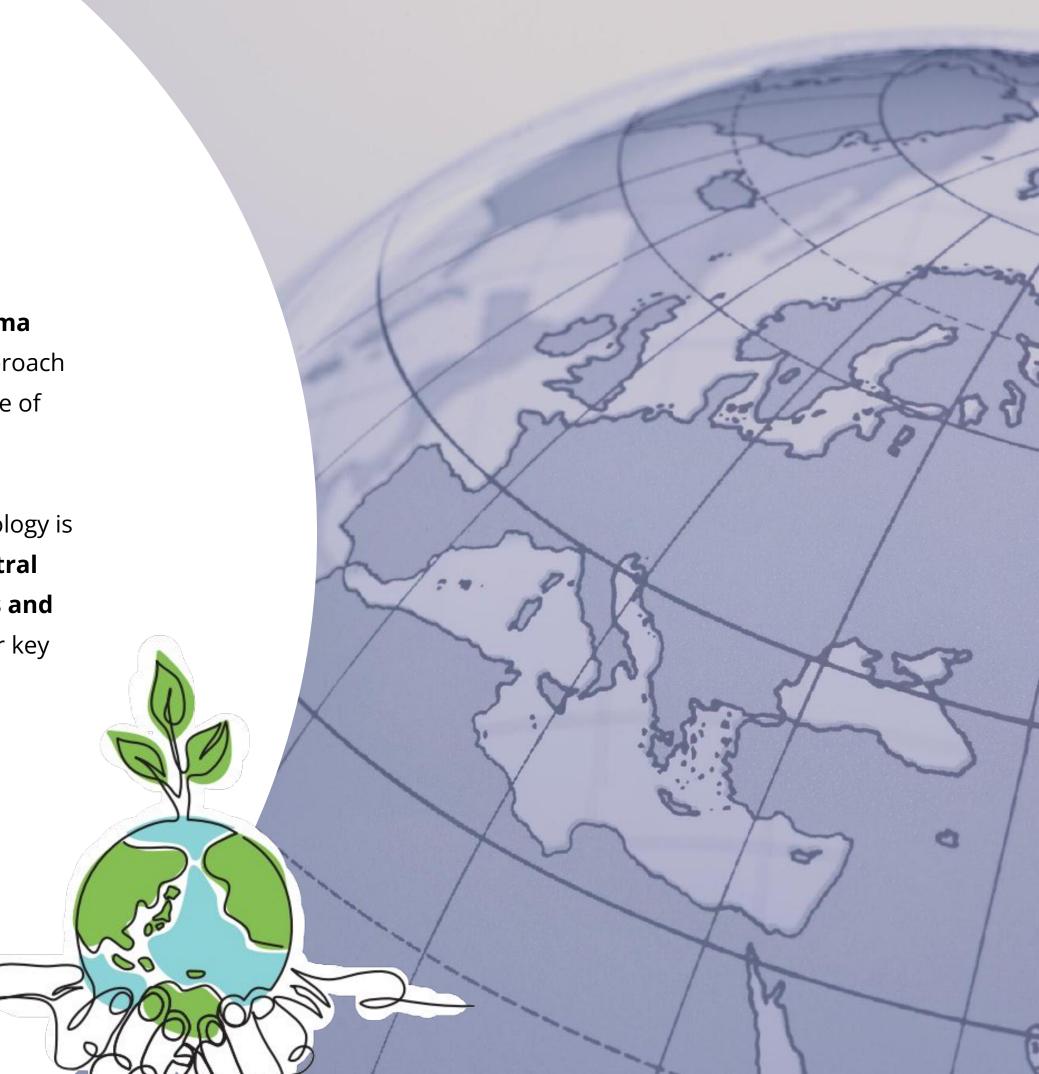




Torishima Europe, based in Glasgow has two main divisions **Torishima Pump and Torishima Service Solutions**, offering an innovative approach to the supply of new pumping units as well as the repair and upgrade of rotating equipment in different markets.

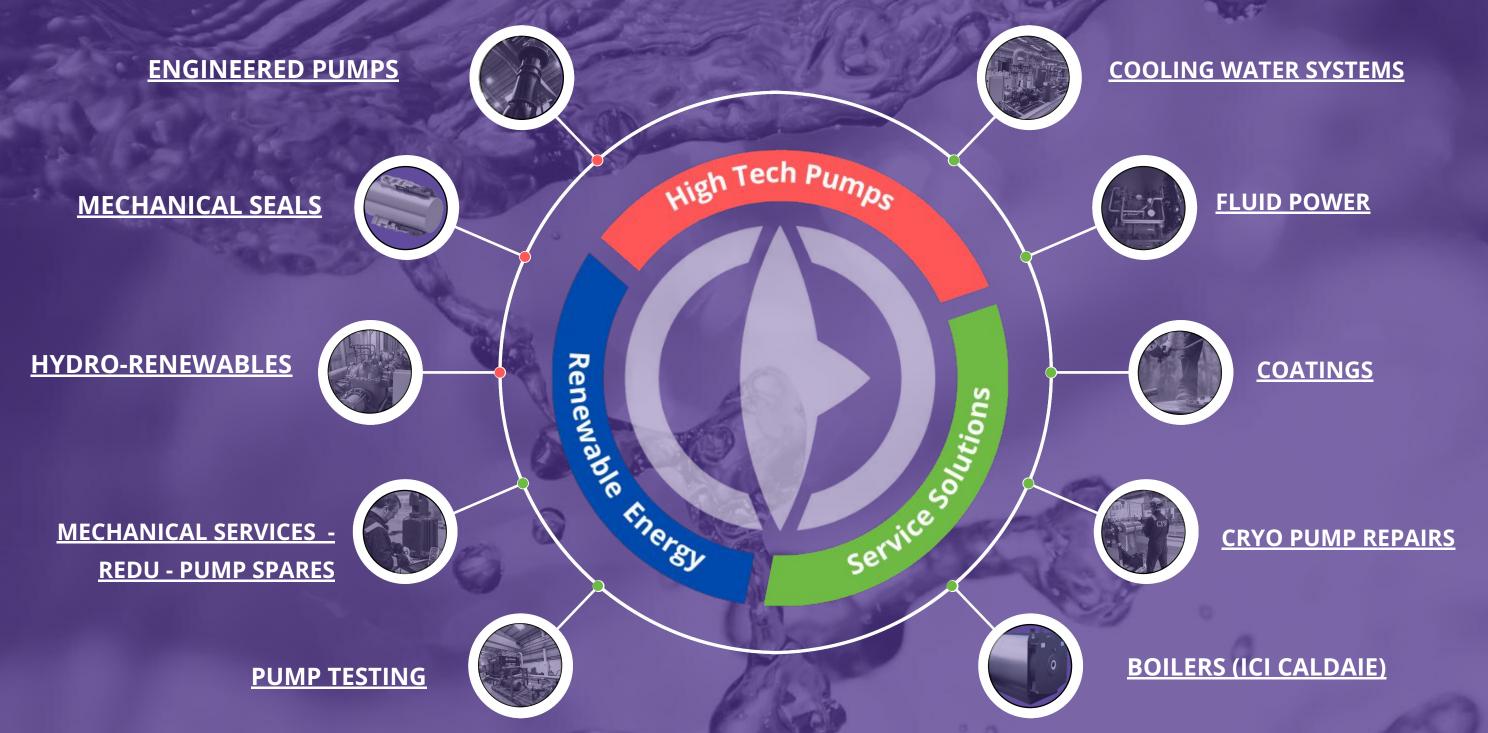
In addition, our aim to offer the most efficient and innovative technology is linked to Torishima's business philosophy of **providing carbon neutral solutions by maximising efficiency, reducing maintenance costs and conserving energy in all applications,** thus meeting another of our key objectives, the **reduction of CO2 emissions.** 

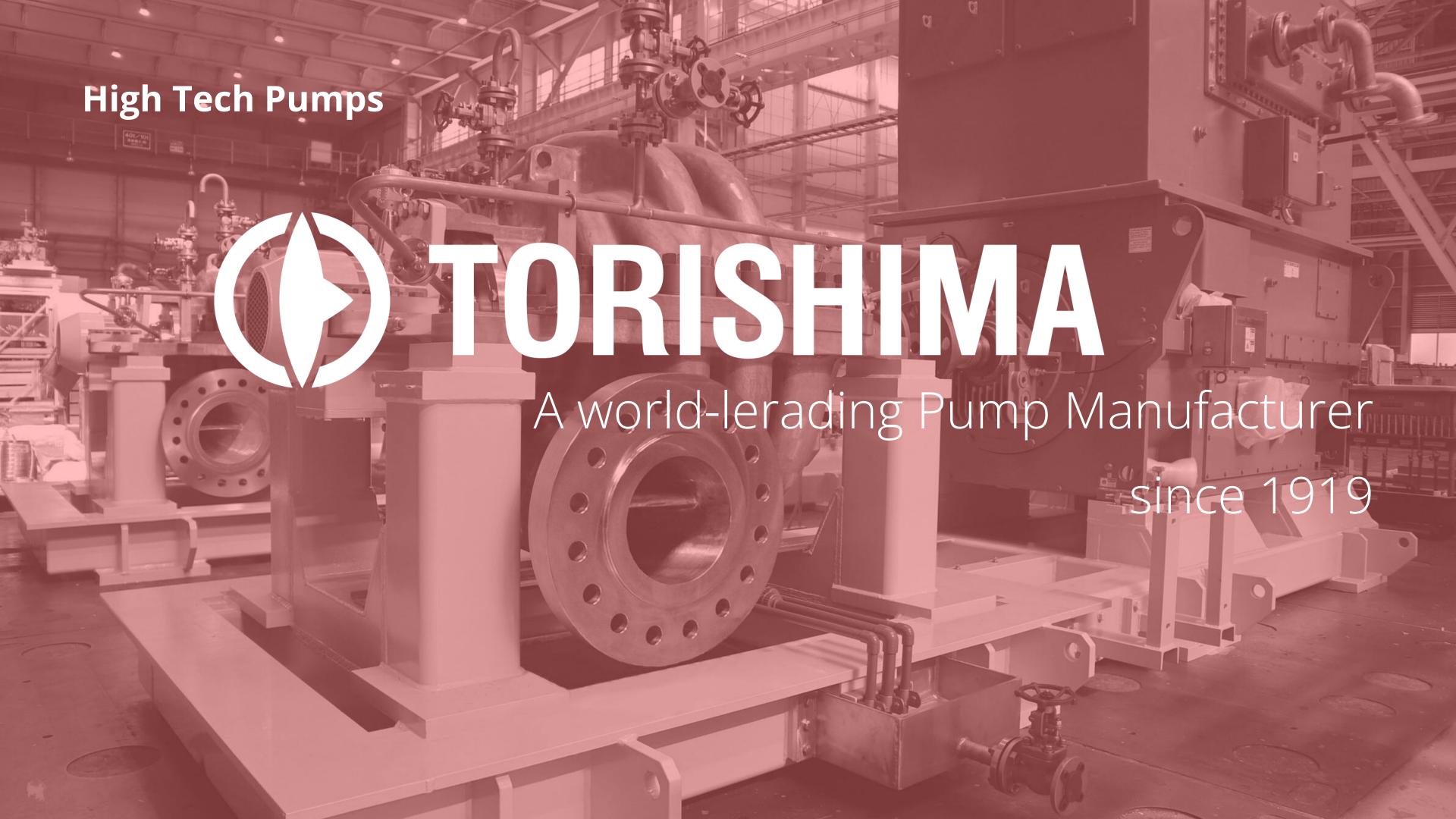






#### **BUSINESS DOMAINS**







## High Tech Pumps

We have been supplying innovative, efficient and reliable engineered pumps to a number of key markets around the world for decades. All Torishima pumps are custom built and constantly improved based on customer requirements and needs.

**WATER/SEWAGE** 

**SEAWATER DESALINATION** 

**POWER INDUSTRY** 

**GENERAL INDUSTRY**  **OIL & GAS** 







#### **MECHANICAL SEALS**

Torishima Europe offers the design, supply and installation of mechanical seals on any pump according to each application.

PRODUCT CATALOGUE





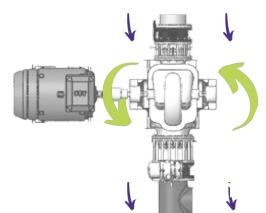


#### **HYDRO-RENEWABLES**

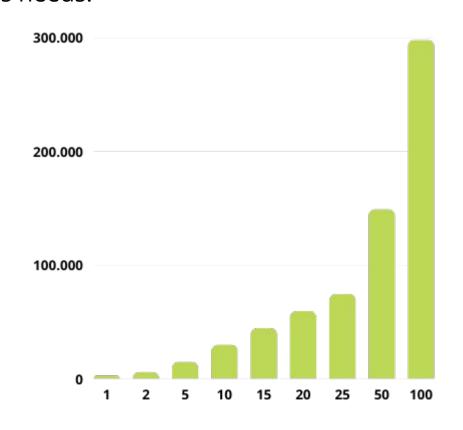
Torishima have designed, installed and commissioned several **Pump-As-Turbine** (**PaT**) applications for a host of customers in the UK and across Europe, helping them **reduce their carbon footprint**.

We are equipped to carry out an initial feasibility study and carry the project through to final install, generation and a lifetime of operation with innovative financial models to suit the customer's needs.















#### **MECHANICAL SERVICES**

From our dedicated facilities in Glasgow, TSSE mechanical services are available to carry out any in situ repairs, as well as inspections, overhauls and installations on a host of equipment, both rotating and static, across various industries.

Our engineering staff are specially trained to handle repairs and overhauls of pumps, motors, compressors, gearboxes, steam/hydro turbines, heat exchangers, fans, mechanical seals and valves.

**Re-Engineered Design Upgrade** 

Learn more about our **REDU**engineering philosophy and our

spare parts service.







#### IN HOUSE PUMP TESTING

Torishima's in house pump performance testing facility and pump hydraulic expertise is available to all our customers for both Torishima products and third party pumps ensuring optimum performance.

Our state-of-the-art, in-house test facility has been designed specifically to meet the requirements of ISO 9906 & Hydraulic Institute test standards..

- Flow rates up to 2000 m3/hr
- Maximum power capability: 500 kW
- Pump branch sizes up to DN600 / 24"NB
- LV/MV Drives
- Full string testing capability
- Variable speed/off synchronous speed testing
- Regenerative drive for testing Pump as Turbine
- 15 tonne lifting capability







## **Service Solutions**

# SURFACE ENGINEERING & SPECIALISED COATINGS

As leading providers in integrated surface preparation and coatings services, our experience allows us to accurately define a customised solution to best match the customer requirement.

Surface preparation methods:

 Grit Shot-Blasting, Hand Preparation, Power Tools, Hydro-Blasting & Abrasive Blast Cleaning

Coating methods we use;

Phosphating, Xylan, Epoxy & Everslik







#### **COOLING WATER SYSTEMS**

TSSE Centre of Excellence specialising in the provision of **bespoke Engineered Cooling Water System (CWS)** design, equipment supply and services required.

Utilisation of **latest 3D design software** and Design for Manufacture techniques in the provision of plant layout, manufactured components and control philosophy

**Our current system range includes:** 

Sizes from 2" to 12".

Flows of over 980 m<sup>3</sup>/hr.

Heat loads +5600kW.

Plug and play standard desing.

Skid mounted up to 10", 12" and above support provide.

Installation and comissioning support provided.







#### **FLUID POWER**

Our engineering capabilities cover consulting, project management, design, manufacturing, and commissioning of complex hydraulic and control systems, including:

- Hydraulic Power Units (HPUs)
- Flushing & Testing Rigs
- Control Panels
- Lubrication Systems

We have a proven track record of delivering high quality hydraulic systems on time and on budget.

Torishima Fluid Power is registered with the National Fluid Power Centre as an 'Advisory & Strategic Planning Group'.







#### **CRYO PUMP REPAIRS**

CPR Ltd is a wholly owned subsidiary of TSSE with over 30 years' experience in the inspection, maintenance, installation and commissioning of submersed motor, cryogenic pumps, for the liquefied gas industry.

- Workshop services: Grangemouth Facility
- Field Service
- Spare Parts

Part of the Torishima Group









## **Service Solutions**

#### **ICI CALDAIE**

ICI Caldaie are one of the largest manufacturers of boilers in Europe - their UK operation is part of the Torishima Group.

Their comprehensive range of commercial boiler products covers low temperature condensing boilers and low temperature high efficiency hot water boilers.



Part of the Torishima Group





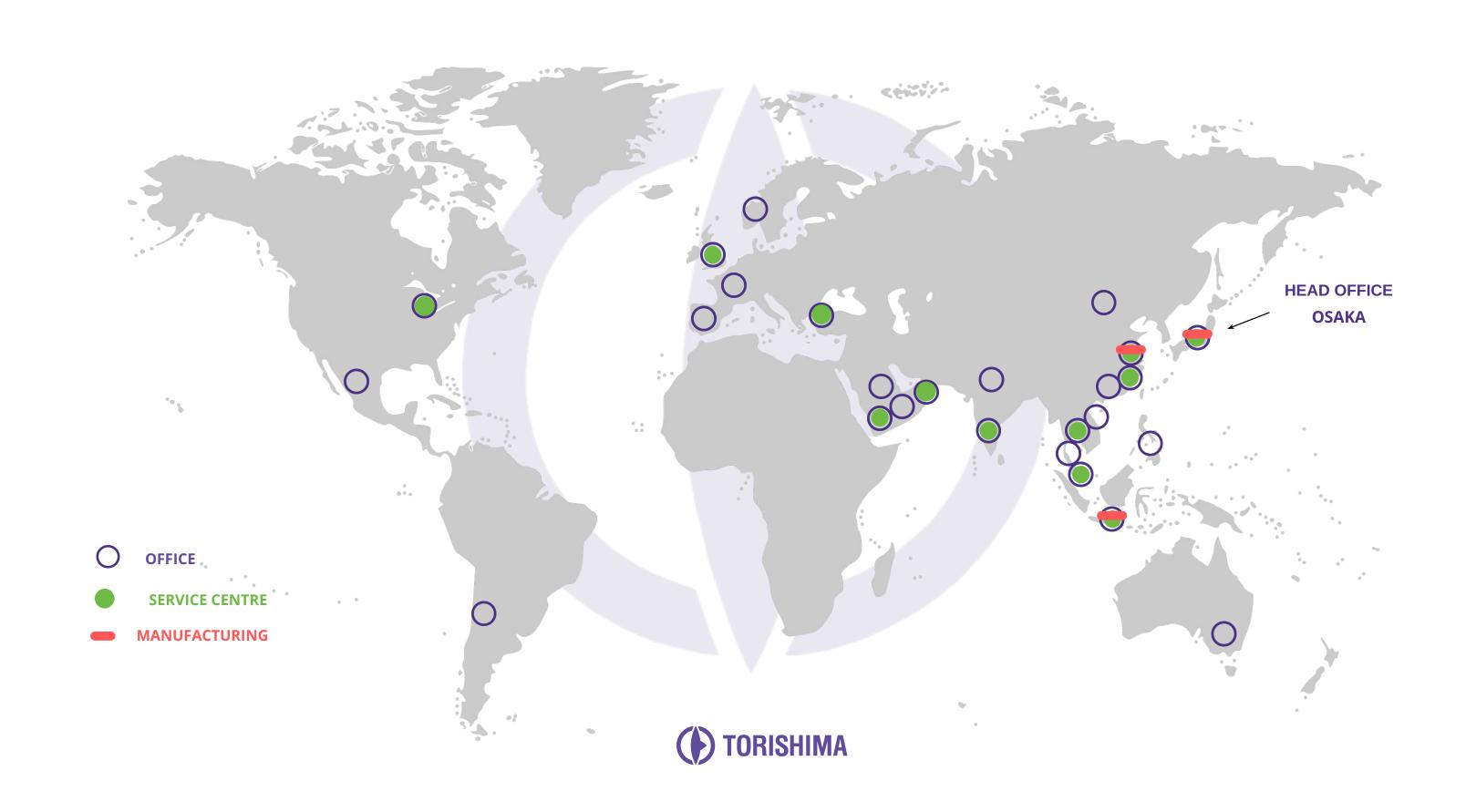


# Renewable Energy

All design, maintenance and repair services for rotating equipment in different industries are focused on improving the efficiency of the equipment and therefore reducing the carbon footprint. But we also offer services within the renewable energy industry including **wind power generation and mini and micro hydro generation systems** using reverse rotation pumps that reuse energy from water/wastewater.



### **OUR GLOBAL NETWORK**





## Service Network

#### **EUROPE & MIDDLE EAST**

#### TORISHIMA SERVICE SOLUTIONS EUROPE. LTD

(Glasgow, UK - 2010)







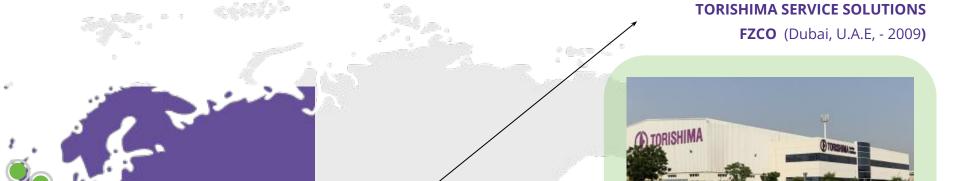
**CRYO PUMP REPAIRS (TSSE)** 

**TORISHIMA SERVICE SOLUTIONS** 

TURKEY (Istanbul - 2022)

(Grangemouth, UK - 2021)

**FLUID POWER (TSSE)** (Leamington Spa, UK - 2017)



TORISHIMA SERVICE SOLUTIONS KSA. LTD

(Dammam, SAUDI ARABIA - 2016)







Evolving to meet the demands of an ever changing world

www.torishimaservice.co.uk