

# High-quality instrumentation for cooling water systems

## OEM Torishima benefits from reliable products and local service



For over 100 years, Torishima has been an engineering solutions provider and original equipment manufacturer of some of the world's most advanced high-energy machinery. The company's European arm, Torishima Service Solutions Europe, based in Glasgow, has a wealth of experience in mechanical services, pumps, cooling systems, coatings and hydraulic systems. Torishima takes great pride in its after-sales service and also offers a range of maintenance services.

"The products suit our requirements, the delivery suits me, and I'm more than happy to continue working with Endress+Hauser."

Tom Coutts  
Projects and Operations Director  
Torishima



Tom Coutts



Torishima's cooling water systems

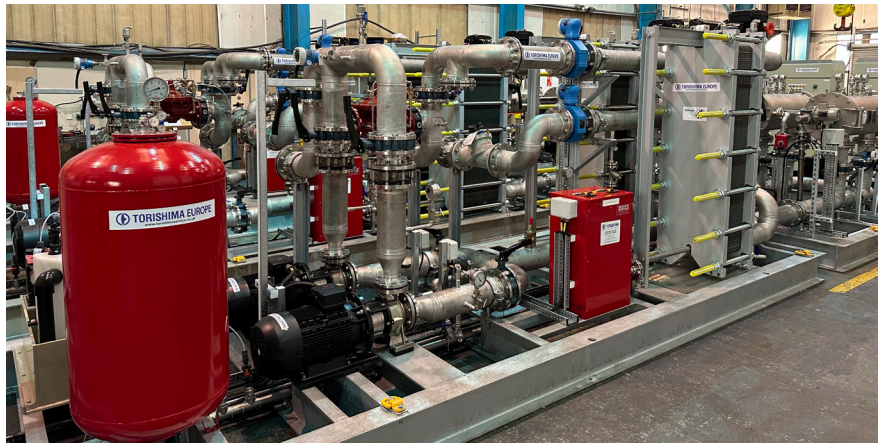
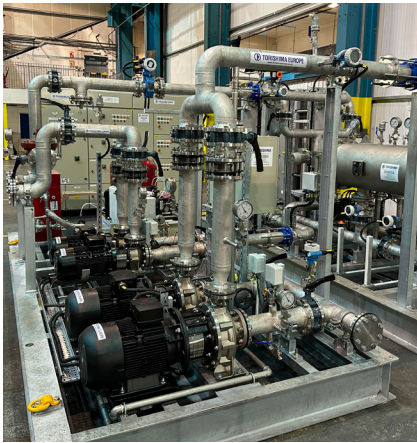
**The challenge** Torishima designs, builds, installs and commissions large cooling water systems for municipal water customers in the Middle East, predominantly the Kingdom of Saudi Arabia government's Saline Water Conversion Corporation (SWCC). Cooling water systems (CWS) are essential to ensure the safe, efficient and reliable operation of pumps and various consumer equipment, as overheating can damage components, affect performance and compromise the overall stability and reliability of the pumping station. Torishima sources all of its measurement instrumentation for the CWS skids from Endress+Hauser due to the reliability and performance of the products. "These systems have to operate for 25 to 30 years, and breakdowns can be a major problem," explains Projects and Operations Director Tom Coutts. "Sending a service engineer from Glasgow to the Middle East to carry out repair work can be very expensive, so I want good, reliable equipment."

**The solution** Endress+Hauser supplies temperature transmitters,

pressure transmitters, point level switches, flowmeters and flow switches for the skids, all of which can be accessed remotely from the control room. "Nowadays everybody wants everything remote-operating," confirms Tom Coutts. "Especially in the Middle East where the weather can reach over 50 degrees in the summer months, you don't have to spend time in the pump stations to deal with any alarms or make adjustments. They can fully operate the system from the SCADA control room."

In such demanding conditions, the quality and durability of the instrumentation is important. "Everything has to be stainless steel and to the strict specifications of the end user," explains Tom. "If a cooling system goes down, it has a huge effect on the local community if the flow of water supply is affected. The financial penalties in the event of a breakdown are very serious."

**The benefits** Torishima is looking for two key things from its suppliers: reliability and quality. "Some



Cooling water systems are essential to ensure the safe, efficient and reliable operation of pumps and other equipment

companies could be two or three months late with an order, but I've never had that problem with Endress+Hauser," says Tom. "If I've got a problem I can pick up the phone and get the local agent to come in and discuss the situation. I prefer companies with a local presence, because it's not always possible to explain the severity of a problem over the phone or by writing an email."

On top of the need for exemplary customer service, the instrumentation has to perform in line with the clients' specifications. "The products suit our requirements, the delivery suits me, and I'm more than happy to continue working with Endress+Hauser," says Tom. "I'm very pleased with the quality of the equipment and the service."

As a full-range manufacturer, Endress+Hauser is able to supply instrumentation across a range of parameters, including:

**Proline Promag W 10 electromagnetic flowmeter**

- Reliable measurement at constant accuracy with 0 x DN inlet runs without pressure loss
- Sensor with fixed or lap-joint process connections for maximum flexibility
- EN ISO 12944 corrosion protection for underground or underwater installation
- Operation with mobile devices and Bluetooth or display with touch screen
- Integrated verification without process interruption using Heartbeat Technology

**iTHERM ModuLine TM131 intrinsically safe temperature sensor**

The TM131 can be supplied with an optional head transmitter with all the common communication protocols – including Bluetooth – and features the iTHERM QuickNeck tool for easy recalibration as well as a vibration-resistant and fast-response sensor, thermowell technology and hazardous area approvals.

- Universal range of application
- Measuring range: -200 to +1,100°C
- Pressure range: up to 100 bar
- Protection: up to IP68
- Vibration-resistant sensor elements

**UK**

Endress+Hauser Ltd  
 Floats Road  
 Manchester  
 M23 9NF  
 Tel: 0161 286 5000  
 Fax: 0161 998 1841  
 info@uk.endress.com  
 www.uk.endress.com