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COO MESSAGE

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TORISHIMA NEWS

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CEO 原田耕太郎

Building the Future with Enhanced Engineering and Manufacturing

Kotaro Harada Representative Director, CEO

CEO MESSAGE



Since celebrating its 100th anniversary in 2019, Torishima has continued to grow strongly over the past five years. Sales have increased every year, with a compound annual growth rate (CAGR) of 13%. Compared to five years ago, sales have increased 1.8 times, operating income has quadrupled, and our order backlog has exceeded 100 billion yen. This is the result of our sincere efforts to develop new pumps and expand our service activities in response to globalscale issues such as CO₂ reduction, carbon neutrality, increasingly severe water damage, water shortages, and food problems, which has earned us the trust of

our many customers. These achievements have only been possible thanks to the efforts of each and every employee. The cumulative results of their efforts are what has made Torishima what it is today. Thank you very much.

However, we are now facing a major challenge to our engineering and manufacturing capabilities. In FY2024, due to a surge in orders, increased rework and verification processes led to a rise in costs necessary to maintain delivery schedules and quality standards. As a result, despite revenue growth, operating income declined, which is a frustrating outcome. Repeated verification processes between sales and design departments resulted in frequent rework. The peak workload was concentrated in the final stages of the design process, resulting in an overall increase in workload (Fig. 1). In addition, by the time designs are completed, quality and cost requirements are almost finalized, leaving limited



options within time constraints. As a result, reliance on measures that don't directly address the root causes of issues, such as overtime and outsourcing, has become the norm (Fig. 2). This is a clear sign that further growth will be difficult with our current level of engineering and manufacturing.

This is why in FY2025, Torishima has embarked on a fundamental review to enhance our engineering and manufacturing capabilities. We are reconnecting all processes, from sales and design to procurement and production, and taking on the challenge of significantly improving productivity through frontloading (Fig. 3). Engineers are also reassigned to the frontlines of sales to accurately grasp customer needs and finalize specifications at an early stage. By minimizing verification processes and rework, the design team can concentrate on their core work of





producing added value through engineering. We have taken on the challenge of maximizing the in-house production ratio and building a highly profitable system through precise arrangements and strategic procurement and production.

The goal is not improvements focused on partial optimization of single departments. Led by the COO, the heads of each department adopted an overall optimization perspective and boldly restructured personnel allocation across the organization. In addition to fostering teamwork that transcends departmental barriers, a set of agile practices based on data-driven rapid cycles of planning, design, implementation, and testing, is essential. Establishing a common data platform (One Data One Source) that transcends departmental barriers, along with leveraging AI, has made digital transformation (DX) one of our most powerful assets.

Torishima has grown significantly by earning the trust of our customers. The next stage of growth towards our 110th anniversary will depend on our ability to transform and enhance our engineering and manufacturing capabilities. Change is never easy. However, beyond these challenges lies a stronger, more vital Torishima. Our newly enhanced engineering and manufacturing will help build that future.

> At the management policy meeting on March 20, 2025

Source : Fig. 1, 2, 3 are based on

『実践 エンジニアリング・チェーン・マネジメント-IoTで設計開発革新』 Satoshi Hino (Author), The Nikkan Kogyo Shimbun (Publisher) COO MESSAGE

Torishima Evolution: Building Momentum Toward Our 110th Anniversary

Alister Flett Director, COO

As Torishima continues its impressive journey of growth, our 2025 business plan sets a clear course toward our ambitious goals for the 110th anniversary in 2029. With five consecutive years of sales growth behind us, we stand poised to make 2025 our sixth year of continuous growth, further strengthening our position as one of the leading pump manufactures in the world.

Sales Growth 売上高の推移



% TGT : Torishima Global Team

The 1.10.100.1,000 Vision

Our medium-term management plan outlines bold targets for 2029: becoming number one in our field, achieving 100 billion yen in sales, 10 billion yen in operating profit, and maintaining a 10% operating profit ratio. The steady upward trajectory of both Torishima and our group companies since 2010 demonstrates we are firmly on track to realize these objectives.

Rising to Global Challenges

Torishima continues to develop innovative solutions addressing urgent global needs. Our portfolio now includes specialized pumps for extreme weather conditions with a full range of pumps including our patented immersible motor pumps. In the water security sector, we've achieved record sales and delivery of pumps for RO desalination plants, while also pioneering subsea RO technology.

Our commitment to sustainability and new energy sources is evident in our development of ammonia fuel pumps, liquid hydrogen pumps, LNG pumps, and boiler circulation pumps for blue hydrogen plants. These innovations position Torishima at the forefront of the transition to cleaner energy technologies.

Smart Solutions for a Digital Age

The launch of our Super Eco Pumps and increased b-Monitor sales highlight our focus on intelligent, energy-efficient solutions. Our investment in agile training and 3D manufacturing underscores our commitment to embracing digital transformation while maintaining manufacturing excellence.

Building Strong Roots: The Bamboo Approach

Our success has brought challenges — what we call "growing pains". We approach these challenges with what we call our "bamboo philosophy."

Just as bamboo spends years developing an extensive root system underground before suddenly growing at remarkable speeds, Torishima recognizes that addressing our growing pains now creates the essential foundation for future growth. By investing time and resources to strengthen our internal systems today, we establish the robust root network that will support our growth tomorrow.

For 2025, we are "Deepening Our Transformation" with targeted actions to address these issues, including improved customer documentation processes, enhanced project management, automated purchasing systems, test shop capacity expansion, and innovative production methods. Each solution we implement becomes another strong root ensuring that when we do reach 2029 goals, our growth will be sustainable.

Investing in Our Future

To fuel our continued growth, we are investing in six key areas: human capital, quality, innovation, productivity, digital transformation, and green initiatives. Our digital transformation efforts will streamline operations through single sign-on processes and other efficiency tools, while our productivity and infrastructure investments will ensure we can meet increasing demand.

Creating Our Future Together

As we move into 2025, our focus is on clear expectations supported by live data, strengthened teamwork, and recognizing individual contributions to our collective success.

At Torishima, we believe strategy isn't about predicting the future — it's about creating it. Together, we are building not just pumps, but a company that will continue to thrive and innovate for generations to come.

トリシマの進化 - 110周年へ向けた挑戦

取締役共同COO Alister Flett

トリシマは成長の歩みを止めることなく、2025年の事業計画においても、2029年の創業110周年に向けた明確な目標を掲げています。過去5年間にわたり売上は成長を遂げており、2025年度は6年連続の成長を成し遂げ、世界トップクラスのポンプメーカーとしての地位をさらに強固なものにしていきます。

「1. 10. 100. 1,000」ビジョン

中期経営計画では、2029年に向けて以下の4つの目標を掲げています。

- 業界でNo.1
- 営業利益率10%
- 営業利益100億円
- 売上高1,000億円

2010年以降、トリシマとグループ各社は着実な成長を続けており、このビジョンの実現に向けて確実に前進しています。



グローバル課題への挑戦

トリシマは、地球規模の課題に応える革新的な技術開発を進め ています。特許取得済みの耐水モーター体型ポンプや、過酷な環 境でも対応可能な特殊ポンプなど、多彩な製品を展開。

水資源の分野では、RO海水淡水化プラント用ポンプの納入実 績を更新し、海底ROの技術開発も先駆けて進めています。

また、持続可能な社会と新たなエネルギー源に向けた取り組みと して、アンモニア燃料ポンプ、液化水素ポンプ、LNGポンプ、ブルー 水素向けボイラ循環ポンプを開発。クリーンエネルギー技術の最前 線で存在感を示しています。

スマートソリューションで未来を切り拓く

高性能・高効率を誇る「スーパーエコポンプ」や、「TR-COM」 の販売拡大は、トリシマがスマートソリューションを重視していること を象徴しています。

さらに、アジャイルトレーニングや3D製造技術への投資により、 デジタル変革を加速しつつ製造の質を高め続けています。

成長を支える「竹の哲学」

急速な成長は、新たな課題ももたらします。トリシマでは、これを 「成長痛」と捉え、独自の「竹の哲学」で乗り越えようとしています。

竹が地中で広く根を張り、その後一気に成長するように、現在は 将来の飛躍につながる具体的な取り組みに着手。カスタマードキュ メントプロセスの改善、プロジェクトマネジメントの強化、調達の自動 化、試験設備の拡張、新たな生産方式の導入など、あらゆる面 で変革を進めています。

未来への投資 – 6つの重点分野

トリシマは以下の6つの分野に重点的に投資し、持続的な成長を 支えます。

- 1. 人財
- 2. 品質
- 3. イノベーション
- 4. 生産性
- 5. デジタル変革
- 6. 環境対応

これらの取り組みにより、増大するグローバル需要にも柔軟に対応できる体制を整備していきます。

未来を共に創る

2025年に向けて、トリシマが大切にする3つのポイントは、

- リアルタイムデータに基づいた明確な目標設定
- ・チームワークの強化

• 個々の貢献を全体の成功として評価する文化の醸成

私たちは「戦略とは未来を予測することではなく、未来を創ること」 だと信じています。ただポンプを作るのではなく、次世代まで続く企 業をともに築いていきましょう。

Evolution of Infrastructure to Support Agriculture

Shinden Drainage Pumping Station, Lake Biwa Reclamation Dainaka Lake Land Improvement District



Shinden Drainage Pumping Station

Lake Biwa is the largest lake in Japan, and the Dainaka Lake reclamation area and Shinden Drainage Pumping Station are located on its eastern shore. There are more than 40 large and small inland lakes around Lake Biwa, the largest of which is Dainaka Lake, whose reclamation area covers approximately 1,300 hectares. Inland lakes, also known as lagoons, are lakes and marshes that are separated from Lake Biwa by sandbars, etc., but are connected by waterways.

Land reclamation projects that supported increased food production after World War II

Land reclamation in the Dainaka Lake area began in 1946, after World War II, in order to create farmland in the area of Dainaka Lake and produce food. When the land reclamation was completed in 1966, only rice cultivation was practiced. However, around 1970, raising of vegetables and livestock began. Today, the district has developed into a large-scale complex of rice, fruit, vegetable, flower, and livestock farming. In particular, about 7,000 beef cattle are raised in the district, accounting for approximately half of all Omi beef (a branded beef) produced in Shiga Prefecture.

The role of drainage pumping station in protecting reclaimed land

The water level in this reclaimed land is always lower than the level of Lake Biwa, so constant drainage is necessary to maintain the farmland, and in 1963 the Shinden Drainage Pumping Station was constructed as a state-run project. The station was expanded twice, but more than 50 years after its construction, it was plagued by frequent breakdowns and reduced drainage capacity, and the building's seismic strength was found to be inadequate. In 2015, a project for emergency measures for state-run facilities was initiated, and Torishima was awarded the contract to completely renovate the pumping station, completing the current drainage pumping station in 2019.



Lake Dainaka Reclamation Area



Constant Drainage Pump

A total of five Torishima pumps were delivered to the Shinden Drainage Pumping Station, of which two 800 mm horizontal mixed-flow pumps are constantly discharging water from the district into Lake Biwa for constant drainage. These pumps have the same specifications (drainage capacity of 1.30 m³/sec per pump) as those used at the old pumping station before the renovation, and it features a very rare design known as the snake shape. The suction side is equipped with Torishima's new Double Suction Bellmouth and Vortex Preventing Ring technology to prevent vortexes caused by the shape of the water tank, which adversely affect the pump.

Three 1,650 mm vertical mixed-flow pumps are designed to drain water during rainfall for flood drainage, with a drainage capacity of 6.32 m³/sec per pump, which can drain a 25 m pool of water in one minute. The motor is a radiator diesel engine, which cools the warmed cooling water with a separate outdoor radiator, eliminating the need for external cooling water replenishment. This makes it possible to continue operation even if the water supply is cut off in the event of a disaster, thereby improving the reliability of the pumping station.

Director Ikago and Chief Officer Fukai of the Lake Biwa Reclamation Dainaka Lake Land Improvement District, who cooperated with our interview, commented that the new pumping station has established an environment in which they can farm with peace of mind. They also said that they are paying more attention to the operation of the Shinden Drainage Pumping Station

Flood Drainage Pump

Pump Application	Constant Drainage Pump	Flood Drainage Pump	
Delivery year	2019 2019		
Type & Size	Type & Size SP800		
Quantity	2 units	3 units	
Discharge rate	1.30 m³/s	6.32 m³/s	
Total head	6.3 m	6.2 m	
Motor Output	Electric motor 115 kW	Diesel engine 570 kW	

because recent abnormal weather has drastically changed rain fall behavior, and damage caused by heavy rain has been increasing across Japan. To continue supporting stable agriculture and delivering safety and peace of mind to the local community, Torishima will provide inspection, maintenance, and operational support to ensure the reliable operation of its pumps.



Director Yoshinori Ikago (left) and Chief Officer Chikara Fukai (right) of the Lake Biwa Reclamation Dainaka Lake Land Improvement District

Project Highlights

01

Enhancing Equipment Reliability and Functionality Through Equipment Renewal in a Drainage Pumping Station

Received an order from Miyazaki Prefecture to maintain pumps and to renovate motors, reducers, and electrical equipment of Obuchi Drainage Pumping Station



Obuchi Drainage Pumping Station is located in the central part of Miyazaki Prefecture, in a nature-rich area with a warm climate. The area is also known for its vegetable production. The plains in the area produce green peppers, tomatoes, cucumbers, cymbidium, and early paddy rice. The highlands are home to livestock, tea leaves, and leaf tobacco. The river-bed and underground water of Hitotsuse River, which runs through the southern region of the town, is rich in minerals, making the region famous for eel aquaculture.

Obuchi Drainage Pumping Station was built in the Waterlogging Prevention Project of FY1988 to protect this frequently-waterlogged area from water damage. As the facility has been in operation for more than 30 years and has deteriorated over time, the number of malfunctions occurring is on the rise. The facility is facing various problems such as discontinuation of some of the equipment and difficulty in getting some of components.

In this construction work, the main pump will be maintained, and accompanying equipment such as the motors and reducers will be updated. The following improvements will also be implemented to de-water the facility and to ease the burden of maintenance and management.

- Pump shaft seal: Gland packing types, which require water injection, will be replaced with waterless mechanical seals.
- Motors: Water-cool types will be replaced with radiator types.
- Reducers: Water-cool types will be replaced with air-cool types.

Changes of external conditions including installation of new greenhouses due to crop switching are worsening the area's drainage conditions and causing waterlogging again, so we are reinforcing the drainage capacity from 240 m³/min to 250 m³/min per pump. These equipment repairs and renovations will improve the reliability and functionality of the entire facility, help reduce damage to crops, and protect safety of residents.

Pump Application	Drainage Pump
Type & Size	SP1350
Quantity	3 units
Motor Output	200 kW

Contributing to Stable Farming on Ishigaki Island

Received an order from Ishigaki Agricultural Water Management Office, Okinawa General Bureau to renew pumps of Futamata Pumping Station

Ishigaki Island is located 400 km southwest of the main island of Okinawa. With its white beach and emerald green sea, it is a famous tourist destination. Sugarcane, paddy-field rice, vegetables, and fruit have always been produced in the warm climate of the island, but in recent years branded beef, Ishigaki Beef, is gaining popularity, so the importance of pasture grass is increasing. Water resources are critically important for such livestock farming and agriculture. The annual rainfall of Ishigaki Island is over 2,000 mm, but most of it is brought by the rainy season and typhoons. The short river also releases the rainfall to the sea too quickly for effective irrigation. This environment forces agriculture to rely on rainwater and makes the area prone to drought during years with low rainfall. In 1971, a severe drought caused serious damage including most crops drying out, cows dying of starvation, and a shortage of drinking water.

To solve such water problems, a government- and prefecture-operated drainage project began in 1975 as a permanent water management project. In this project, five irrigation dams and water management facilities that take water from Mount Omoto, the highest mountain in the prefecture, were built. This project established stable supply of agricultural water and has been mitigating flood damage in the lower basin since.

In this construction work, two pumps of Futamata Pumping Station, which pump agricultural water obtained from Miyara River to Futamata Reservoir (farm pond), will be renewed. As this facility was built about 40 years ago and has deteriorated over time, its agriculture water pumping capacity has degraded. This renewal will restore and enhance the equipment functionality, and is expected to improve farmers' work efficiency and expand production of high-value products such as sugarcane, pineapples, and Ishigaki Beef that are specialties of Ishigaki Island.

Pumps for 1.95-GW Natural Gas-fired GTCC Power Plant Aiming at Carbon Neutrality

Received an order for boiler feed pumps for Chiba-Sodegaura Power from Mitsubishi Heavy Industries

Mitsubishi Heavy Industries, Ltd. has signed a full turnkey contract to construct three 650,000-kW-class natural gas-fired gas turbine combined cycle (GTCC) power generators from Chiba-Sodegaura Power Co., Ltd., which is funded by Tokyo Gas Co., Ltd. A full-scope long-term service agreement (LTSA) has also been concluded.

For the core of these facilities, cutting-edge high-efficiency gas turbines, which allow co-combustion of hydrogen, will be installed aiming for carbon neutrality.



Considering the future development, the facility will also be prepared for conversion to hydrogen-only combustion with minimum alternations from the construction stage.

We have received an order for a total of 23 pumps, including the boiler feed pump that is one of the main pieces of equipment in the facility. The MHG-A boiler feed pump included in this order is highly reliable by flexibly responding to severe load fluctuations caused by combined-cycle power generation, and is equipped with highly efficient and superior suction capacity.

These facilities are scheduled to begin operation sequentially from FY2029. Major expectations are being placed on our company to contribute to the realization of stable power supply.

Pump Application	High and Medium Pressure Boiler Feed Pump	Low Pressure Boiler Feed Pump
Type & Size	MHG6/10A	MMK200/4
Quantity	6 units	6 units
Motor Output	4,150 kW	400 kW

11 other pumps, 23 in total

Project Highlights

04

Contributing to Stable Power Supply with a Spare Boiler Feed Pump

Received an order for a spare boiler pump for Yoshi-no-ura Thermal Power Plant from Okinawa Electric Power Company, Incorporated

Yoshi-no-ura Thermal Power Plant is located in Okinawa Prefecture, the southernmost end of Japan. On sunny days, the entire power plant can be seen from the World Heritage site Nakagusuku Castle with the background of the beautiful ocean.

This power plant is a high-efficiency combined cycle power generation plant and uses liquefied natural gas (LNG), which has relatively low environmental burden among fossil fuels. In this plant, many Torishima pumps, including four boiler feed pumps, are already in operation with ongoing scheduled maintenance. That has led to a stable operation without any major problems since their installation in 2012 even in Okinawa where the risk of salt damage is always present.

The spare pump ordered this time will play an important role when conducting an overhaul inspection of the boiler feed pumps. Previously, regular maintenance of each piece of equipment had to be completed within a limited inspection period, and it was difficult to schedule enough time to perform overhaul maintenance of the boiler feed pumps. The new spare pump will allow for rotation maintenance in which the pump being inspected is replaced with a spare, shortening the inspection period drastically. A spare pump will also help to quickly establish a recovery system in case of unplanned work outside of scheduled maintenance or when an emergency occurs. Off-site maintenance in our factory during off-peak season will also help to secure sufficient maintenance periods and allow for detailed inspection and servicing.

Since last year, Yoshi-no-ura Power Plant has been actively working to reduce CO₂ emissions by testing hydrogen co-combustion and other methods. With our forward-thinking initiatives and thorough maintenance, we are expected to contribute to stable power supply across Okinawa.

Pump Application	Boiler Feed Pump
Type & Size	MHG4/6
Quantity	1 unit
Motor Output	1,150 kW

Pumps for Entergy Corporation Thermal Power Plants, Supporting the Future with Clean Energy

Orders received for 70 pumps including boiler feedwater and condensate pumps for Entergy's thermal power plants from TSL Power Partners

Entergy Corporation is a Fortune 500 company that provides services in Arkansas, Louisiana, Mississippi, and Texas. The company invests in reliability, resilience, and the transition to clean energy, while working for over 100 years to bring economic benefits to the region.

Four new power plants are being constructed to meet increasing demand driven by significant economic and

population growth, as well as the expanding needs of AI data centers.

The new power plants will incorporate combined-cycle combustion turbines (CCCT) and dual-fuel technology. Natural gas will be the primary fuel, but the plants are designed to support hydrogen blended fuel in the future. This design will maintain reliable energy supply while significantly reducing carbon emissions. As a result, the plants will provide sustainable, resilient, and clean energy for the long term.

Electricity demand continues to grow, and new clean and efficient power plants will continue to be built. Torishima will help address the challenges society faces through its pump technology.

Pump Application	Boiler Feed Pump	Condensate Pump	
Type & Size	MHG6/8A	MMTV250/5	
Quantity	10 units	10 units	
Motor Output	9,300 HP	1,600 HP	

50 other pumps, 70 in total

Contributing to Sustainable Water Resource Management and Safe Drinking Water Supply in Australia

Received an order for 36 pumps for Alkimos Seawater Desalination Plant

Torishima received an order for 36 pumps to be delivered to Alkimos Seawater Desalination Plant in Perth, Australia. Water Corporation has formed an alliance with ACCIONA Agua Australia, ACCIONA Construction, and Jacobs Group Australia to design, construct and operate the desalination plant.

Stage 1 of the plant will have an initial capacity of 150,000 m³ per day, with an additional capacity of 150,000 m³ per day planned for Stage 2. When Stage 1 is completed, the plant will supply up to 50 billion liters of clean, safe drinking water to millions of Western Australians each year.

The plant uses the principle of reverse osmosis (RO). Part of the high pressure required to separate salt and water is provided by 6 high-pressure MHH pumps, each with a pump input power of 2,200 kW. These radially split units offer a capacity of more than 1,000 m³/h with high efficiency. This type of pump is easy to service and has proved successful in numerous pumping plants all over the world.

Reduced rainfall and increased population in Western Australia has made it necessary to establish new water sources. Based on current trends, Western Australia will need an extra 75 to 125 billion liters of water per year by 2035. Torishima will help make up this shortfall by providing our best pumps to Alkimos Seawater Desalination Plant and provide a safe, reliable, and economically feasible water source. This is part of Torishima's Purpose for Society, to contribute to a sustainable society by connecting lifestyles, lives, and the future.

Pump Application	Intake Pump	Intermediate High Pressure Pump	High Pressure Pump	ERD Booster Pump
Type & Size	SPV800	CBR250-380	MHH300/3	CBR300-460
Quantity	5 units	5 units	6 units	6 units
Motor Output	450 kW	780 kW	2,200 kW	280 kW
Pump Application	Intermediate ERD Pump	Second Pass Pump	Drinking Water Pump	
Type & Size	CAW350×300K3	CDM350×250	CDM600×500	
Quantity	5 units	6 units	3 units	
Motor Output	400 kW	450 kW	2.630 kW	

Project Highlights



Highly Efficient RO Pumps for Indian Desalination Plants Contribute to Carbon Neutrality

Order received from VA TECH WABAG for highly efficient RO pumps for desalination plant at solar power manufacturing unit

VA TECH WABAG (WABAG), an Indian multinational group that is a leader in water treatment technology, has won an order from Indosol Solar Pvt. Ltd. for a 100 MLD sea water desalination plant for their solar PV manufacturing facility in Nellore, Andhra Pradesh, India.

WABAG will be responsible for engineering, procurement, and construction for the plant. This includes design, engineering, supply, installation, testing, and commissioning which will be executed over a 38-month period, followed by a 15 year operation and maintenance contract. This plant will be built with the state-of-the-art desalination technologies, designed for superior energy efficiency and production of water to meet the requirements of the 10 GW integrated Solar PV manufacturing unit of Indosol Solar in Andhra Pradesh, India. Torishima has received a pump package order from WABAG for 6 RO High-Pressure units for this seawater desalination plant.

Water and power demand has increased in India due to rising population and urbanization in recent years. To meet these growing needs, an increasing number of desalination projects are underway to provide safe and sustainable sources of clean water. Torishima is providing our flagship multistage RO high pressure pumps with state of art technology and proven track record to support desalination projects in India. In this way, Torishima is helping to meet the demand for clean water driven by urbanization.

Pump Application	RO High-Pressure Pump	
Type & Size	MHH250/4	
Quantity	6 units	
Motor Output	2,000 kW	

TORISHIMA NEWS | Feb. - May. 2025

Behind the Scenes of Liquid Hydrogen Pump Development – Documentary Released

In 2021, Torishima began developing a high-flow, high-efficiency liquid hydrogen pump with a superconducting motor. In March 2024, the pump was successfully tested with real liquid hydrogen at the Japan Aerospace Exploration Agency (JAXA)'s Noshiro Rocket Testing Center.

We have now released a documentary video that shows the behind-the-scenes story of this innovative project. It highlights the team's challenges, efforts, and the tension of test day. To accompany the release, we also filmed a special interview with Program-specific Professor Taketsune Nakamura from the Graduate School of Engineering at Kyoto University and Tomohito Miura, General Manager of Torishima's R&D department. They share their thoughts on the project and the future of liquid hydrogen technology. We invite you to watch both the documentary and the interview to learn more about this exciting step toward clean energy.



Development of a Liquid Ammonia In-Tank Pump System – Successful Operational Testing with Actual Liquid Ammonia at Commercial Scale



P. T. TORISHIMA GUNA ENGINEERING内での試験

From January to February, Torishima successfully conducted operational testing of its newly developed commercial-scale in-tank pump using actual liquid ammonia at the factory of its Indonesian subsidiary, P.T. Torishima Guna Engineering. The confirmed flow rate matches the discharge capacity required for a 40,000-ton tank, demonstrating the pump's suitability for large-scale fuel ammonia applications.

As Japan moves toward carbon neutrality by 2050, fuel ammonia is gaining traction as a clean energy source that emits no CO₂ when burned. Recognized alongside hydrogen in the government's Green Growth Strategy, ammonia is key to next-generation energy infrastructure. Public-private partnerships are accelerating efforts to build supply systems and co-firing technologies for thermal power generation. Column Pipe

Liquid Ammonia Pump

To meet the demands of large-scale fuel use, systems must safely handle high volumes of toxic liquid. Torishima developed a submersible in-tank pump that minimizes ammonia leakage during maintenance. Its structure minimizes ammonia gas leakage from the column pipe opening when the pump is lifted from the storage tank for maintenance. In addition, leveraging its experience with drainage pump technologies, the system delivers strong suction performance, ensuring minimal liquid remains in the tank.

The test demonstrated that the pump delivers both high performance and safety in real-world conditions. Torishima will promote this technology in domestic and international ammonia projects, helping drive the transition to clean energy and a carbon-neutral society.

Recruitment Commercial Released

Available at the top of our careers site https://www.torishima.co.jp/en/careers/



Official Partner of UNESCO World Engineering Day

As a global leader in pump technology, Torishima is proud to be an official partner of UNESCO's World Engineering Day for Sustainable Development (WED) 2025. This year-long campaign celebrates the vital role of engineering in building a sustainable future and achieving the 17 Sustainable Development Goals (SDGs). For our part, we are especially focused on SDG 6 — ensuring access to clean water and sanitation — and the actions we are taking to support it.

Water is essential for life and the sustainability of our planet. At Torishima, our pumping technologies support efficient water management at every stage of the water cycle, from source to purification and supply. Supporting



SDG 6 is deeply embedded in our mission and our commitment to society. We are proud to celebrate World Engineering Day and highlight the vital role of engineering in tackling the world's water challenges.



WED official website https://worldengineeringday.net/partner-stories/torishima/



Torishima Exhibits at Deskless Work DX EXPO

From April 23 to 25, Torishima participated in the "Deskless Work DX EXPO," part of Japan DX Week 2025, one of Japan's largest IT and digital transformation trade shows, held at Tokyo Big Sight. At the event, Torishima showcased its vibration monitoring solution TR-COM (Rotating Machinery Monitoring System), which enables predictive maintenance through the integration of DX and rotating machinery technology.

Induction Ceremony for FY2025

On April 1, Torishima welcomed 57 new employees (including Kyushu Torishima) at the FY2025 induction ceremony.

CEO Harada's Message (Summary):

"Congratulations, and thank you for choosing Torishima. Your presence brings great energy to our company. Like the human heart, pumps are hidden but vital — they support our daily lives by moving water and wastewater in homes, industries, and agriculture. Because they run continuously, they consume a great deal of energy. Energy efficiency and the shift to clean energy like hydrogen and ammonia are key. Here, you can do meaningful work that contributes to the world. To succeed, become a professional through steady effort. We will support your growth. Remember the Valuable Human Beings Torishima respects:

- 1. Be healthy in mind and body.
- 2. Become professionals.
- 3. Acquire the habit of hard work.
- 4. Observe the rules of society.
- 5. Give back to society.

Let's work together to make a difference in society."



Employment Oath

On-Site Improvement Presentation Meeting

On March 26, Torishima held its annual joint improvement presentation meeting at the Head Office and Kyushu Torishima. Teams shared their initiatives to enhance efficiency and quality. In FY2024, topics included process optimization and data-driven strategies to improve productivity. The event showcased creative ideas and kept judges engaged. The Grand Prize went to the Medium and Small Casting Group for their innovative approach to improving long-established casting processes, offering fresh insights into future reforms.



Medium and small casting group, Foundry section Theme: Reducing finishing work hours through changes in casting methods



Management group, Machining section Theme: Implementation of a new delivery management system for external machining suppliers



Testing section Theme: Load reduction measures for a test facility

Transport section, Production control department Theme: Improvement of pump nameplate production process



Small-size group, Assembly section Theme: Improvement of bearing case assembly work

Design group, Mechanical seal section Theme: Improvement of repair quotation operations



Process design group, Production engineering section Theme: Save the digital refugees!

Quality assurance section, Kyushu Torishima Theme: Reducing time for photo documentation using digital whiteboards

FY2024 Financial Results

Billion ye				
	FY2023	FY2024	Year on Year	
Orders Received	88.0	95.6	+7.6	+8.7%
Sales	81.1	86.5	+5.4	+6.7%
Gross Profit (Gross profit margin)	23.1 (28.5%)	23.5 (27.2%)	+0.4 (▲1.4pt)	+1.7%
Operating Profit (Operating profit margin)	6.8 (8.4%)	5.4 (6.2%)	▲1.4 (▲2.2pt)	▲20.6%
Ordinary Profit	6.3	4.5	▲1.8	▲28.6%
Net Profit	6.2	4.1	▲2.1	▲33.9%

On May 14, we announced our FY2024 results. Orders and sales hit record highs, while operating profit declined year-on-year. We are steadily working to improve profitability with a focus on long-term growth.

In FY2025, we will focus on improving profitability. We aim to achieve our mid-term management goals by FY2029: sales of ¥100 billion, an operating profit margin above 10%, and ROE above 10%.

Strengthening Engineering and Manufacturing Capabilities

We will enhance profitability by increasing in-house production through both "Front-loading*" and "Production capacity expansion". We are also considering enhancing machining capabilities, shifting production of core products, and pursuing M&A, leveraging both domestic and international subsidiaries.

Strengthening Service Business

By building a track record with high-tech pumps and establishing service bases closer to end users, we aim to grow high-margin service business to raise overall profitability.

* Please refer to the CEO message on page 1-2 about Front-loading.

New Employee Training at Wakasa Bay

From April 7 to 9, new employees participated in a three-day training program at the National Wakasawan Youth Outdoor Learning Center.

Through outdoor experiences and group activities, the program focused on building teamwork and strengthening bonds among peers.





• Afternoon group work: Each group made a poster based on the theme, "Dreams and goals for 2050."

Hiking
Outdoor Cooking

Team sports

(volleyball)

Program

Day

1

Day

2

Day

3







Cutter boat training





Voices of New Employees



I'm confident I was the loudest voice during the cutter boat training! Even spending time gazing at the sea during breaks, with no signal around, made it a great experience overall.

Being in a tough environment made me feel the importance of teamwork, since even with people I had never spoken to before, we naturally worked together. I had a very fulfilling time experiencing various things with people of different ages and nationalities.

I found this training very meaningful and rewarding because I was able to experience firsthand how each individual fulfilling their role within a group leads to great results, reflecting the company's growth process.



Torishima Pump Mfg. Co., Ltd. Head Office: 1-1-8 Miyata-cho, Takatsuki-shi, Osaka 569-8660, Japan www.torishima.co.jp/en Torishima is Bronze Partner of the Expo Site Development Participation in Expo 2025, Osaka, Kansai, Japan.



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