

01

Get to Know FURUNO

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Get to Know FURUNO

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Zero

Accidents at Sea!

We want to help people working on ships!

Maritime accidents and manpower shortage

Today, Japan is facing a declining birthrate, an aging and shrinking population, and a shortage of labor in all fields. Seafarers in coastal shipping, of which more than half are over 50 years old, are no exception. Furthermore, human error is said to be responsible for approximately 70 to 80% of maritime accidents. We believe that unmanned vessels can be one of the solutions to these societal issues.



Digital Transformation of the Marine Industry

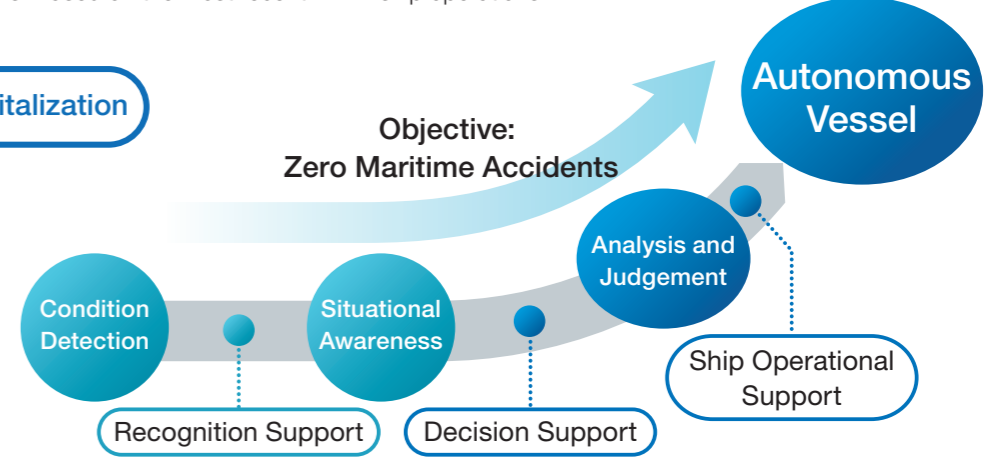
The Future

Autonomous navigation

Over the last few years, the shipping industry has seen a rapid increase in the use of cutting-edge digital technology to visualize operational status, on-board and off-board navigation, and engine systems. Based on the most recent

advancements in marine electronics and communications technologies, FURUNO is developing new technological innovations to achieve safer and more efficient autonomous ship operations.

The Future of Digitalization



Towards autonomous vessels

“Challenge the Invisible” is also FURUNO’s business theme. To contribute to the automatic operation of vessels, FURUNO is developing two types of support:

Support 1

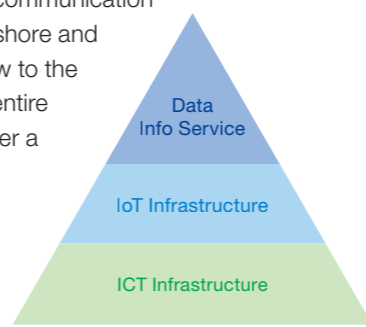
A Recognition Support system, which makes use of marine electronic equipment and unique sensor technology to provide a better understanding of the surrounding situation.

Support 2

A Decision Support system that analyzes collected data and helps the operator avoid dangerous objects based on enhanced situational awareness.

Towards remote management

Essential communications between ships and shore are becoming faster and more affordable, and marine electronics are more sophisticated and digital than ever before. FURUNO builds communication infrastructures between shore and onboard ships with a view to the future digital shift of the entire maritime industry. We offer a wide range of ICT/IoT solutions that meet the needs of our customers.



AR Navigation System, using AR to assist the recognition of surroundings.

For more information, visit our website <https://www.furuno.com/en/marine-dx/>



Co-creation
with
Partners

Providing Even More Value



MEGURI 2040: Fully autonomous ship program

This project aims to improve the circulation of distribution, people, costs, and traffic, and to have 50% of the vessels running in Japan unmanned by 2040. FURUNO joined the following consortiums.

Reduction of
Crew Burden

Towards Zero
Accidents



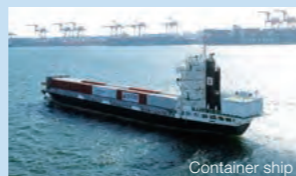
Let's change the oceans!

To contribute to our business vision "Achieve better safety, security and comfort," we launched the Autonomous Navigation System Development Department in 2019 to resolve maritime issues.

Consortium
1

Designing the future of full autonomous shipping

More than 30 Japanese companies are working together to develop a fully autonomous navigation system for container ships. The consortium is taking an open-innovation approach with the aim of practical implementation.



Consortium
2

Verification testing of fully autonomous technologies

The consortium is developing fully autonomous navigation systems for container ships and ferries. This will include an automated navigation function for within the harbor, including automated berthing and unberthing, etc.



Successful unmanned vessel operation

FURUNO conducted a demonstration test simulating the actual operation of a future unmanned vessel on a 790km round trip between the ports of Tokyo and Tsu-Matsusaka. The vessel was connected via satellite and ground

communication lines to a land-based support center equipped with functions to remotely operate the vessel from land, including a function to predict mechanical abnormalities.



FURUNO to protect oceans!

Thanks to the efforts of our members, the Nippon Foundation, and collaboration with other companies, we are now seeing the practical application of the autonomous navigation system. I would like to see FURUNO technology used not only in Japan but also in ships around the world to realize safety and security at sea.



Towards achieving objectives

My team participated in a consortium of 30 companies that realized the unmanned operation of a container ship. FURUNO oversaw information collection and integration for autonomous navigation, action planning, and the development of a land-based emergency response system. Working with other companies was a great experience to see our work as cooperative yet competitive, with the same goal of protecting the safety of seafarers.



Collaborating with other companies

Our team collaborated with other companies and succeeded in the unmanned operation experiments. We oversaw recognizing the surrounding conditions during the operation. It was meaningful for us to collaborate with other companies to create a new system and to talk with the ship's crew, which allowed us to take a fresh look at FURUNO's technologies.



2
Get to Know FURUNO

Always with Marine Customers!

For fishermen and shipping companies around the world!

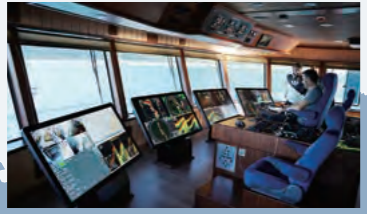
From Japan to the World

FURUNO has been striving to expand its electronic equipment for the fishing industry around the world. To assure proper equipment training and support, FURUNO has established its own subsidiaries, both in Japan and overseas.

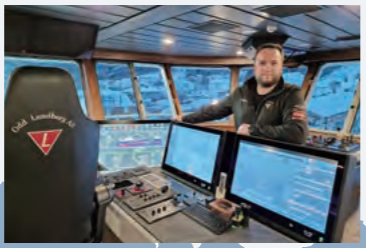
In the merchant vessels market as well, service support at major bases around the world is indispensable, and so FURUNO has developed its own bases.

Today, with sales offices in more than 80 countries around the world, we are a leading manufacturer of marine electronics equipment and are expanding our business worldwide.

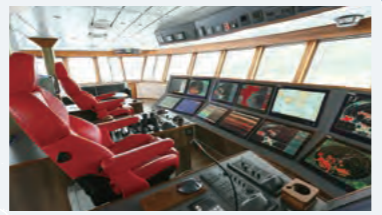
FURUNO Around the World



Latest smart bridges on fishing boats (left: Turkey, above: Norway)



Two types of marine radar installed on pleasure boats



Large fishing boat bridge in EU



Sailing yacht in France

Coverage of Europe

Europe is home to many of the world's leading merchant shipping and fishing nations, and FURUNO has established many subsidiaries in these countries. Here are some of them.

FURUNO ITALIA (Italy)

Italy is the world's largest builder of luxury yachts. Together with France, famous for its sailing yachts, Italy forms a major production center for pleasure boats. FURUNO ITALIA S.R.L. was established in Italy in 2014, and together with FURUNO FRANCE S.A.S., plays a key role as an important base in the European pleasure boat market.



FURUNO HELLAS (Greece)

Greece is the largest shipping country in the world in terms of number of shipping companies and number of ships they own. FURUNO HELLAS S.A. was established in 2009 to strengthen local sales activities, improve technical services, and further enhance customer satisfaction.



FURUNO NORGE (Norway)

Norway, a country with territorial waters six times the size of its land, catches and cultivates 2.7 million tonnes of marine products annually. FURUNO first sold products to Norway in 1959 and established its first overseas subsidiary, FURUNO NORGE A/S, in 1974.



FURUNO CYPRUS (Cyprus)

Cyprus has been attracting shipping and ship management companies as a national policy and is now one of the world's major hubs. FURUNO CYPRUS LTD. was established in 2012 and is always striving to increase customer satisfaction.





FURUNO Employees Work Globally!

FURUNO has 60% of its sales overseas, offices in 85 countries, and 35% of its employees at overseas bases. Many overseas employees help local operations run smoothly.

Marcela Ureta
Marketing Manager
FURUNO FRANCE S.A.S.

Multilingual in five languages. I also worked in Spain and South America. For almost 20 years, I have built my career mainly in marketing. Currently in charge of marketing activities in France, Italy, and Spain.



“Enjoy change and keep challenging yourself

The goal in life is to keep learning. I have always been open to learning new things, whether it be getting a master’s degree or learning video production. Since joining the company, I have been given many new projects, all of them started from scratch. That’s why we can try different approaches.

FURUNO is a very attractive place to work because it gives you the possibility to grow and learn. The work-from-home, flexible hours and the support of others make it possible to balance work and home life.



Jon Closson
Product Manager for Fishing Vessels
FURUNO U.S.A., INC.

I’m in charge of sales for fishing boats in the U.S. and Canada. I was so fascinated with fish that I wanted to become a biologist and have conducted research on river ecology. I’m a fishing and outdoor expert and a big fan of FURUNO products.



“I want to bring the excitement of being in contact with nature through fishing

I have loved fishing and marine sports since I was a child, and I still often go fishing on my days off. In my daily sales activities, I am more than happy to share even the smallest ideas and insights with the development team, give them shape, and help

satisfy customers’ expectations. I feel very fortunate to be at FURUNO because I can combine what I love with world-class technology and work with people who are boldly pushing forward towards their goals.



Chae Woo Lee
Assistant Service Manager
FURUNO KOREA CO., LTD.

Expert with experience in engineering work at Korean shipyards, including repair and performance verification of merchant ships equipment. I’m committed to customer-oriented services.



“It’s a lifetime asset to meet people worldwide!

I wanted to work for a global company, so I decided to join FURUNO. I make at least one business trip a week to understand what customers are looking for and build relationships of trust. I keep my explanations brief and simple, which is the secret to

improving customer satisfaction. I am working on a global stage, being in contact with teams at the headquarters and other overseas subsidiaries, which is very rewarding.



3
Get to Know FURUNO

We Protect the Seafood Culture!

Delicious Fish Forever!

For a sustainable fish-eating culture

There is a need for a sustainable and stable supply of fish and food, and aquaculture is one of the solutions. However, aquaculture is facing challenges, such as management pressure due to feeding costs and the lack of successors, which has led to concerns about a decline in the industry.

The aquaculture support business

FURUNO aims to create a service so that even newcomers to the aquaculture business can start immediately. In 2020, FURUNO launched the Fish Farming Management Support Service to contribute to reducing feeding costs. FURUNO will continue to develop new services that are close to customers and created together with them.

MESSAGES

Shigeru Asami



Aquaculture Business Support & Development Office
Marine Electronic Products Division
Office Manager

It has been about four years since I first imagined the aquaculture support business, and we are finally at the starting line. But it's only the beginning. I will continue to focus on getting closer to customers and assure they are satisfied with our services.

Wataru Sato



Aquaculture Business Support & Development Office
Marine Electronic Products Division

When I joined this business as a new graduate, I was a little apprehensive, but with encouragement from customers and company members, I was able to tackle my work with a positive attitude. I will continue to work hard to provide services one step ahead of the competition!

Fish weight estimation camera

Measurement and weight estimation using AI automatic analysis.



Camera in the fish tank Recording bluefin tuna

Co-creation with partners

The measurement results (fish weight, tailstock length, etc.) can be viewed. More than 20 customers including Nissui and Maruha Nichiro are using this service.



Joint R&D in Norway

With its subsidiary in Norway, FURUNO is developing cutting-edge R&D, promoting field tests and information exchange in a huge fish tank.



4
Get to Know FURUNO

FURUNO: Always Here for Fishermen!

The industry is in trouble due to the pandemic

COVID-19 has affected various industries in many ways. In the fisheries industry, fishermen suffered greatly because the marine products they have worked so hard to catch had no place to go. FURUNO wanted to do something about it, so we launched a website to introduce fishermen to potential business partners.

To bring you delicious fish

From North to South, there are many rare fish and seafood products that can expand your experience. FURUNO hopes that many people will be able to enjoy delicious fish.



TOPIC

Employees and fishermen who helped with the website



It was rewarding to get thanks from fishermen!

Let's work together to make the industry more prosperous.



The website will promote fishermen!



It strengthened our relationship with our customers.

5
Get to Know FURUNO

FURUNO is not just boats and fish! On Land and in New Fields

Medical equipment

Biochemical analyzers and reagents

These devices measure a wide range of items, from the familiar to trace elements such as tumor markers. FURUNO provides high-quality, high-performance instruments and reagents in Southeast Asia, and contributes to the improvement of the medical environment.



Biochemical analyzer at Chayapmura Hospital (Thailand)

GNSS timing

Time synchronization

GNSS receivers for time synchronization provide time information comparable to atomic clocks using signals from satellites. FURUNO's high-precision time synchronization technology contributes to the operation and maintenance of critical infrastructure.



5G mobile base station



Tsukuba City Board of Education wireless network

Wireless LAN

Access points

The Tsukuba City Board of Education has been working since the mid-2000s to create an ICT environment to enable classes to use learning terminals. Currently, access points have been installed in regular and special classrooms, including gymnasiums, of about 750 classes in 45 schools in the city, and a network has been constructed.

Note: From the Tsukuba City Board of Education case study on the FURUNO SYSTEMS website.

New Challenges: FURUNO's New Business

Construction tech

Wi-Fi system for construction

FURUNO released a system that creates a Wi-Fi environment throughout an entire tunnel construction site where cell phones cannot be connected. This system is used to improve construction efficiency.



MESSAGE

Shotaro Ishino
Research Department 2
Research and Innovation Center

The construction industry is facing many problems, and there is no time to spare to reform the way of working through DX. We are finally establishing "connections" with customers and distributors, and we hope to continue proposing solutions that will please the field.

Offshore wind power generation

Coexistence of safe and secure offshore wind power generation projects with the fishing industry

Offshore wind power is expected to become a major source of renewable energy. FURUNO provides total support, from the provision of equipment for assessment prior to construction to the management of offshore areas after operation begins.

MESSAGE

Kiyoshi Furuno
Executive Officer
Marketing Head Office
General Manager and Domestic Marketing Department
General Manager
Marine Electronic Products Division

We had to participate in the offshore wind power generation project in Japan, which is now 20 years behind Europe, because the key word was "offshore." At first, we assumed we would provide surveillance radar and offshore civil engineering support, but in fact, our activity lied in symbiotic measures with the fishermen operating in the surrounding areas, as we have been close to the fishing industry.





6
Get to Know FURUNO

Where Value Co-creation Begins

New R&D building "SOUTH WING"

SOUTH WING, completed in November 2021, is a base for R&D that combines an experiment area with an office area, where we can take on the challenge of innovation. We can meet and connect with a wide range of people, and together we can create new value.

Blending with the residential area

SOUTH WING was built on the south side of the headquarters. The exterior of the building blends in with the surrounding residential complex, and the street trees surrounding the site provide a lush green landscape.



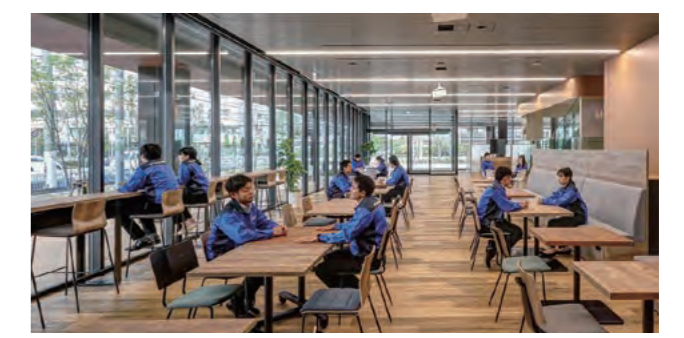
SOUTH WING was created with the concept of "a place where people and information naturally gather and connect."

Connect and be creative

The office floor consists of common areas such as meeting rooms and refreshment areas gathered in the center, surrounded by desks and workspaces. The single floor, which has no walls between departments, creates a flat environment for interaction. Having a variety of meeting spaces just a short walk from any seat is a strong benefit. They can be used casually and are perfect for quick gatherings. Solo workspaces are also available. Being able to choose a place to work can improve performance in an environment that suits every employee.

Co-creation with external parties

The lobby on the first floor is an open space for actively promoting interaction not only within the company but also with people outside the company. It can be used for lectures, seminars, and other events for more than 100 people.



TOPIC

Received Kinki New Office Promotion Award



SOUTH WING received the Kinki New Office Promotion Award, which is given to offices that have been created with the following criteria in mind: what is important to the company, where it aims to go from here, what kind of work style it wants to achieve, whether the office can serve as a place where people can enjoy a comfortable lifestyle in addition to working, and whether the office is considerate of the global environment and local community.