

BEMAC

BEMAC

CORPORATE PROFILE



Driven by passion, crafting infrastructure that endures

For a world where everyone can live in peace.

Building a steadfast infrastructure that never stops. That is BEMAC's mission.

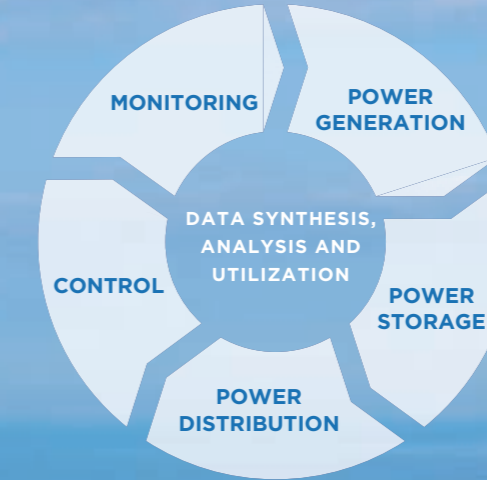
To fulfill this mission, we place great importance on meeting the challenges of our customers and responding to their wishes.

From marine transportation to industrial plants and EVs, we build the infrastructure that supports society and continues to support the lifelines of our daily lives.

We use the power of electricity and digital technology to propose optimal solutions for each plant and give new energy to corporate activities.

VISION

Addressing societal and user challenges through the power of electricity and digital technology evolving into a plant solution provider.



BEMAC generates, stores, and distributes electricity indispensable for vessels and industrial plants. Further, leveraging the strength of digital technologies like AI and data science, we control and monitor the flow of electricity. From engineering solutions based on our customers' challenges, through design, manufacturing, and commissioning to after-sales service, we consistently take on the task, driven by our mission to build plant solutions that continue to operate under any condition, powered by both electricity and digital innovation.

PHILOSOPHY

Beam Metrical Industry

The “Beam Metrical Industry” is a company that contributes to the social environment by supporting the lifelines of people’s lives from sea to land through technologies and products that create the flow of electricity.

WORLD-CLASS TECHNOLOGY

— With world-class technologies that explore marine electrical equipment, we fulfill our role as a solution provider that offers comprehensive solutions for all types of electricity and information.

ATTITUDE OF ESSENCE EXPLORATION

— Through our essential pursuit of electricity and digital technology, we realize total engineering spanning from ship operation and cargo handling to comprehensive management, meeting the trust of our customers.

CONTRIBUTION TO SOCIETY AND ENVIRONMENT

— We contribute to society and the global environment through electricity, not only in the offshore plant business, but also in power distribution control for various plants in the onshore business.

BEMAC WAY

Go forward —



Go forward — .

This is a word that Chuji Kitajima, the Meiji University rugby club coach for 67 years since 1929, kept on telling his team until 1996 when he reached the end of his days.

“Over and over again, one is crushed and rises again, and is again crushed and rises. Even such repetition, if it leads to a firm step towards the goal, then that is all we ask.”

This “go forward” principle is what we at BEMAC Uzushio Group have followed and continue to hold as our “philosophy.”

This short word tells us to “have a never give up spirit.”

In life and at work, the times we lose when losing seemed improbable, are when we give up. The times we win when winning seemed improbable, are when we did not give up until the end.

Behind our determination to compete in the global market, the word “go forward” lies in a place deep in our hearts.

History of BEMAC Uzushio Group has a repetition of overcoming multiple obstacles and bravely venturing into new businesses.

Based on our “go forward” philosophy, we will continue to challenge ourselves even further and strive very hard.

CEO & President **Masato Oda**



MaSSA

The **M**aintenance System for **S**oundness **S**ailing **A**bility.

Development Concept: Aiming to Realize a "Ship that Never Stops"

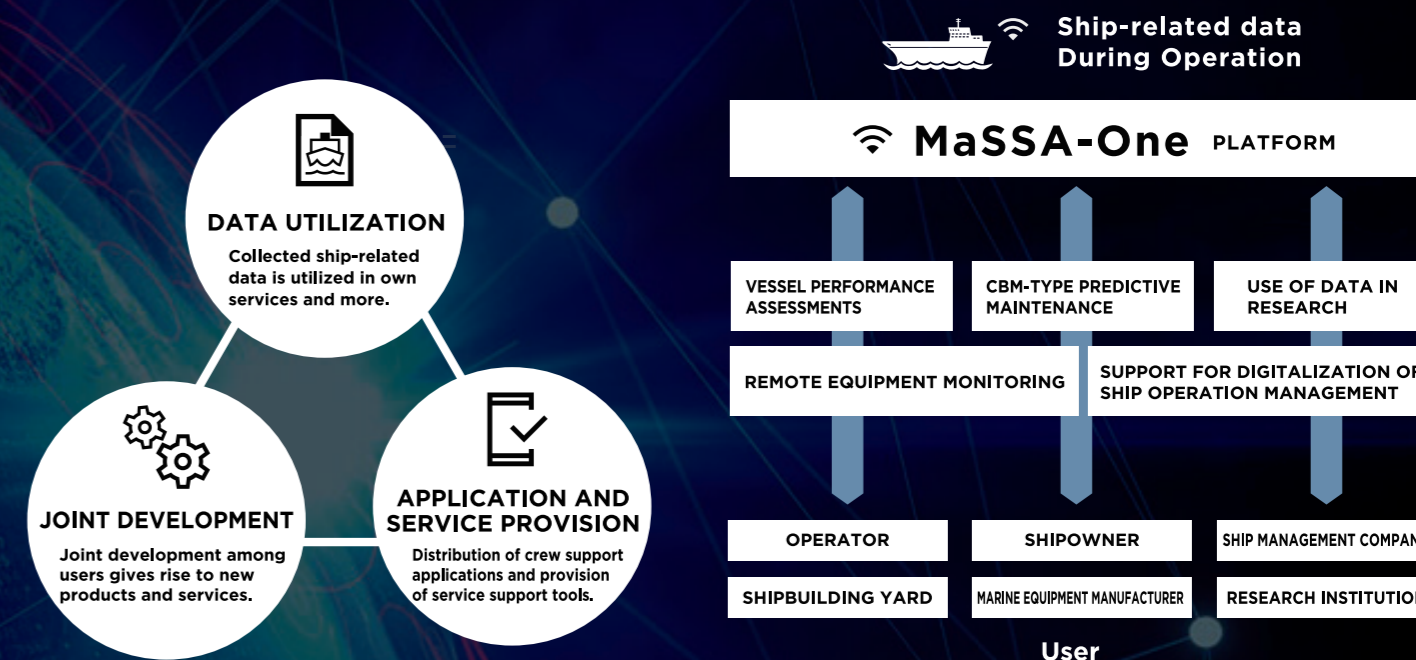
Our concept of "MaSSA" for our offshore plant business is to realize a "ship that never stops," which maintains the navigability of ships under any condition.

We provide products, systems, and after-sales service by utilizing information related to ships around the world in a secure environment and collaborating with many partners in our global network.

We support the lifeline of marine transportation, which is indispensable to society, by keeping ships moving without stopping.

MaSSA-One, A SHIP SUPPORT SOLUTION THAT REALIZES MaSSA

"MaSSA-One" is a data platform that automatically synchronizes with the onshore cloud by collecting and storing all kinds of onboard data such as engine, cargo handling, and voyage data through an "IoT data server." By sharing ship data and providing services to support ship operations, we build a win-win ecosystem for participating users.



MARINE

Marine Plant Business

As a leading manufacturer of electrical equipment for marine vessels, we are involved in the design, manufacturing, installation, and maintenance of all types of electrical equipment, including power distribution and control systems for ships. Utilizing a wealth of experience and a proven track record in this field, we are able to provide a comprehensive range of services, including engineering proposals based on customer issues and after-sales service. We also offer optimal solutions to meet the unique requirements of each vessel.

Number of vessels with electrical outfitting work completed per year

167 vessels

Amount of wire used for completed vessels

Over approx. **9000**km

Domestic share of major products

Over approx. **50%**

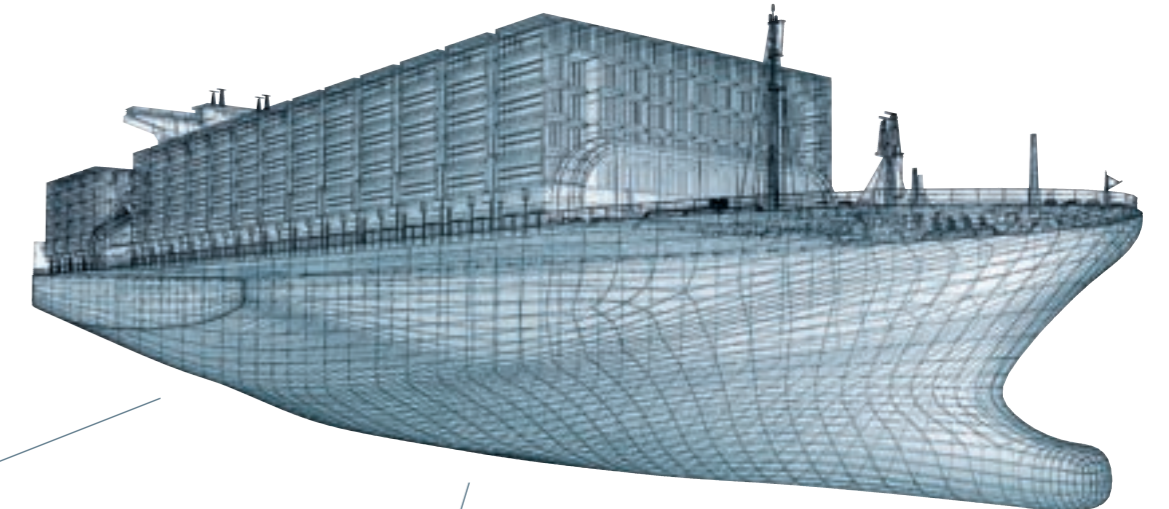
Annual shipments of main switchboards

289 units

※ Maximum number of shipments

PROPOSING PLANT SOLUTIONS BASED ON OUR EXTENSIVE TRACK RECORD

We offer solutions tailored to each ship, such as power management for conversion to next-generation energy, navigation support services using onboard data, and shipbuilding support by deploying subsystems.



NEW ENERGY POWER MANAGEMENT

We propose efficient operations for the conversion to next-generation energy sources to achieve zero-emission ships.

POWER MANAGEMENT

POWER DISTRIBUTION CONTROL SYSTEM

ELECTRIC PROPULSION/POWER ELECTRONICS

BATTERY MANAGEMENT

DATA CONTROL FOR AUTONOMOUS OPERATION

We create new value for ships through digitization by utilizing all kinds of data on board.

DATA PLATFORM

IOT DATA SERVER

SHIP SHORE COMMUNICATIONS

ANOMALY DETECTION/CAUSE ESTIMATION

SYSTEM INTEGRATION

We promote the deployment of function-specific subsystems and suggest solutions to support ship operations.

MONITORING & CONTROL

INTEGRATED AUTOMATION SYSTEM (IAS)

DYNAMIC POSITIONING SYSTEM (DPS)

DATA LOGGERS



GREEN ENERGY SOLUTION

Development of Green Energy Solutions

Due to tightening regulations on GHG (greenhouse gas) emissions, the world is accelerating its efforts to achieve zero-emission ships. At BEMAC, we are committed to fostering a sustainable society through offshore assistance projects for offshore wind power generation and marine resource development, as well as power supply initiatives that promote the adoption of new energy sources.

PROVIDING SOLUTIONS FOR MARINE RESOURCE DEVELOPMENT

Through our offshore support business, we offer integrated solutions for marine resource development in the waters surrounding Japan and for new energy projects like offshore wind power plants. These solutions include our in-house developed Dynamic Positioning System (DPS), power distribution panels, monitoring panels, and MaSSA-One.

The DPS is a system that maintains the vessel's position and heading at a constant level using only the vessel's onboard propulsion system. It efficiently controls the propulsion system against disturbances such as wind and tidal waves and keeps the ship at a fixed point while saving energy.



DEVELOPMENT OF GREEN ENERGY SOLUTIONS

With The Switch, a European generator manufacturer, as a group company, we provide efficient power supply systems with permanent magnet (PM) shaft generators and direct current (DC) distribution panels. We will develop energy solutions through wind power generation and ship energy efficiency in order to reduce greenhouse gas emissions. Through synergy with BEMAC's service network, we will build a reliable customer support system.



POWER ELECTRONICS CONTRIBUTING TO CO2 EMISSION REDUCTION



MARINE BATTERY DEVELOPMENT OF MANAGEMENT SYSTEMS

We aim to develop battery management systems that support sustainable energy use for ships and reduce their environmental impact.



HYBRID POWER SUPPLY DEVELOPMENT

We are working on the development of power supplies that can be interconnected to the AC electrical systems of ships. We are also working on the adoption of next-generation semiconductors and research and development of compact and efficient cooling methods.



HYBRID MOTOR DRIVE DEVELOPMENT

We are working on the development of highly efficient, compact, and inexpensive motor drive systems. We are also working on measures to address ship-specific issues such as noise and impact on other onboard equipment.



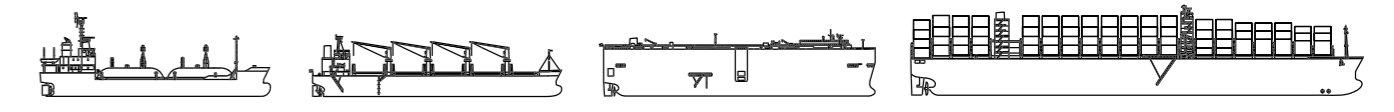
OUR FIELD

Business Domain

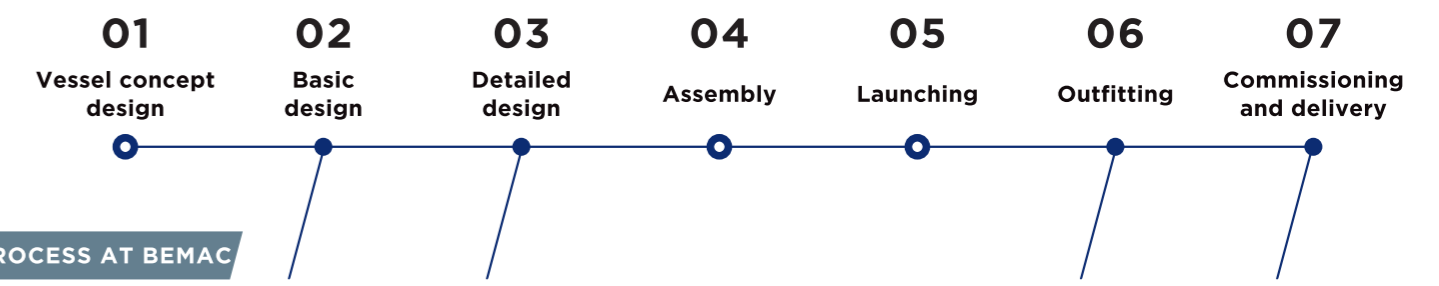
We provide design, manufacturing, installation, and after-sales services for major shipboard electrical equipment, including power distribution control, power management, instrumentation, networking, etc. Furthermore, our world-class manufacturing technology and one of the largest ship electrical installation departments in Japan enable us to achieve superior performance in terms of quality improvement, shortened construction period, and high responsiveness on site.

OFFSHORE PLANT BUSINESS COVERING A WIDE RANGE OF SHIPBUILDING OPERATIONS

We provide a wide range of services including optimized design of onboard electricity, electrical installation, and after-sales service for a variety of plant specifications, including mega container ships, bulk carriers, and chemical tankers.



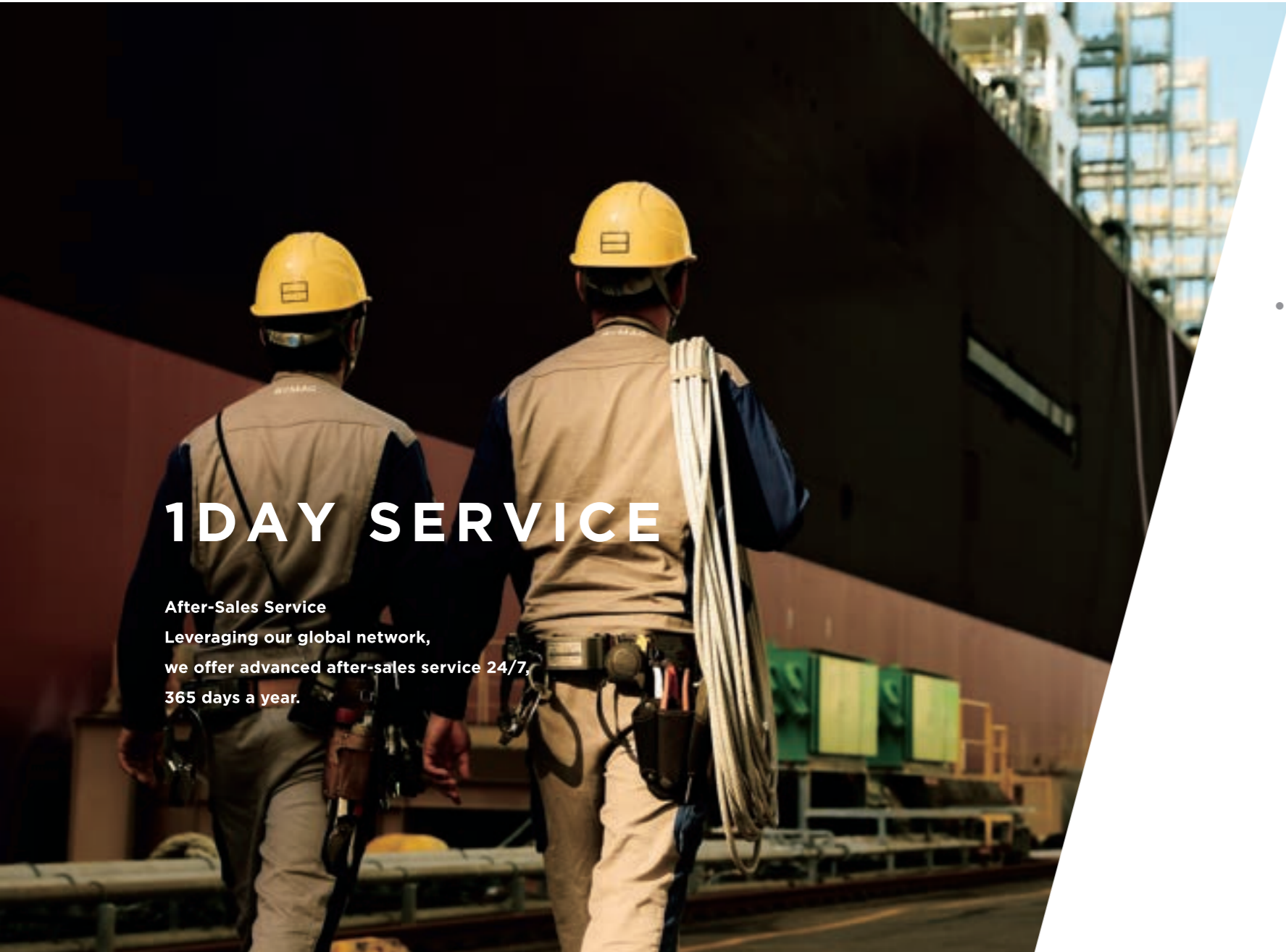
SHIPBUILDING PROCESS



PROCESS AT BEMAC



- Engineering Proposal (Planning and Research)**
 We make engineering proposals based on issues by conducting market research in the industry and understanding customer needs.
- Basic and Detailed Design**
 Based on the plant construction specifications, we understand the connections of each piece of equipment. By designing switchboards and monitoring panels, we aim to optimize the ship's electrical system.
- Manufacturing and Procurement**
 We manufacture switchboards and monitoring panels and procure and support radars, autopilots, and generators from other manufacturers.
- Electrical Outfitting Work**
 Utilizing ICT, we efficiently carry out the full range of electrical outfitting for vessels, from the installation of electrical circuit materials to the placement of electrical equipment.
- Commissioning**
 From the installation and calibration of equipment to its trial run and operation explanations, we provide quality evaluation and verification so that customers can use equipment with confidence.
- After-Sales Service**
 Leveraging our global network, we offer advanced after-sales service 24/7, 365 days a year.



1DAY SERVICE

After-Sales Service
 Leveraging our global network,
 we offer advanced after-sales service 24/7,
 365 days a year.

1DAY SERVICE NETWORK



- After Service
- ISES(International Ship Electrical Service)
- BEMAC Group Company

- 1** ACTech Ltd.
- 2** FAR EAST MARINE SERVICES,LLC
- 3** Fuji Trading (Marine) B.V.
- 4** Singapore Daito Engineering (Pte) Ltd.
- 5** Mackay Marine, Inc.
- 6** Marine Electrical Technical Services
- 7** Maritronics
- 8** Maritronics India Pvt. Ltd.
- 9** Metalock do Brasil Ltda.
- 10** Reson Electronics INT'L INC.
- 11** Sole Solution
- 12** BEMAC Corp. Europe
- 13** BEMAC PANELS MANUFACTURING VIETNAM CO., LTD.
- 14** BEMAC STAR ASIA PTE. LTD.
- 15** BEMAC CONTROL (DALIAN) INC.
- 16** SHANGHAI BRANCH
- 17** BEMAC Kiden CO., LTD.

INDUSTRY

Industrial Plant Business

In addition to supplying switchboards and electrical equipment for industrial plants, we also offer system integration for various plant facilities based on customer requests.

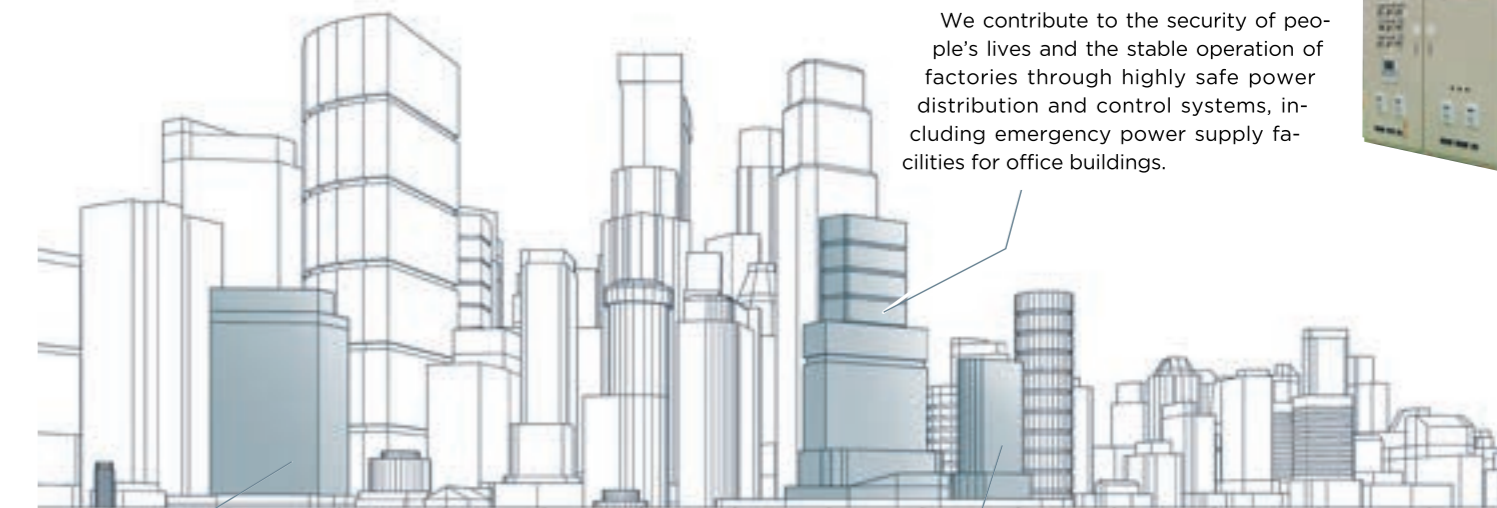
As the demands of the times shift towards environmental sustainability and energy conservation, we provide solutions that delve deeper into addressing the challenges of plant operations.

FROM DESIGN, MANUFACTURING, AND ELECTRICAL WORK TO AFTER-SALES SERVICE PROPOSING TOTAL ENGINEERING OF ELECTRICITY SUITED TO THE FACILITY

We support the stable operation of plants by offering solutions such as solar power generation equipment, emergency power supply systems, and monitoring and control systems. Through these efforts, we underpin various infrastructures that safeguard society and everyday life.

EMERGENCY POWER SUPPLY FACILITIES

We contribute to the security of people's lives and the stable operation of factories through highly safe power distribution and control systems, including emergency power supply facilities for office buildings.



MONITORING AND CONTROL SYSTEMS

We build power distribution facilities and monitoring and control systems for entire facilities, supporting social infrastructure through remote monitoring of operational status.



SOLAR POWER GENERATION EQUIPMENT

We also contribute to the reduction of CO2 emissions by delivering clean energy equipment such as solar power generation systems and supplying highly efficient energy through cogeneration systems.





OUR FIELD

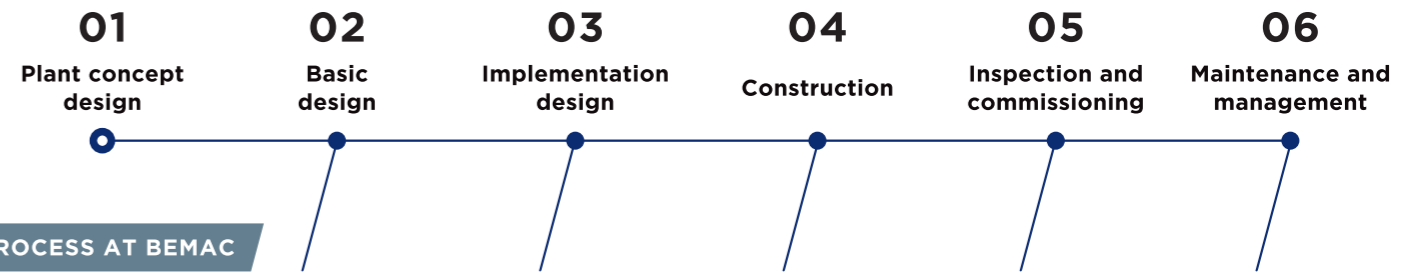
Business Domain

In addition to emergency power generation equipment, we handle cogeneration systems and other regular power generation equipment. We consistently manage the engineering proposals, design, manufacturing, sales, installation, and after-sales service of power distribution and control systems that are integrated into various types of plant power equipment.

COVERING A BROAD SPECTRUM OF BUSINESS DOMAINS, FROM MANUFACTURING TO MAINTENANCE, FOR VARIOUS TYPES OF PLANTS

We provide a wide range of services, from manufacturing, installation, and maintenance of power distribution and control systems for a variety of plants, including stadiums, airports, hospitals, waste treatment facilities, water treatment facilities, as well as commercial buildings and factories.

PLANT CONSTRUCTION PROCESS



PROCESS AT BEMAC



- Engineering Proposal**

We delve into the challenges of plant operation and make proposals considering the optimal combination of various facilities and their ease of use at the site.
- Basic and Detailed Design**

We offer solutions tailored to a wide range of specifications. While taking into account our customers' needs, we optimize the design specifically for the plant.
- Manufacturing**

We consider ease of use and maintenance from the user's perspective for power distribution boards, monitoring boards, etc. We respond flexibly to on-site requirements.
- Electrical Construction**

We provide a complete set of on-site electrical work, including installation of power distribution boards, piping work, electrical wiring work, and network construction.
- Trial Operation and Delivery**

From installation and adjustment of equipment to trial operation and operation explanation, we evaluate and verify products so that customers can use them with peace of mind.
- After-sales Service**

We provide highly technical 1-Day Service 24 hours a day, 365 days a year. We also flexibly respond to specification changes and parts updates after delivery.

EV

EV Business

Utilizing the electrical control technology cultivated over many years in the marine and industrial plant business, we have developed the electric tricycle “E-Trikes” for the Philippine market. To date, we have manufactured and sold more than 4,000 units in the Philippines, contributing to the reduction of air pollution and the creation of new businesses. Based on these experiences and achievements, we are providing EV powertrains developed by our company to ASEAN countries and promoting efforts to realize a carbon neutral society.

REALIZING A CARBON NEUTRAL SOCIETY THROUGH EV

E-TRIKES BUSINESS

Targeting the Philippine market, we manufacture and sell our original “68VM” vehicle. By converting from conventional gasoline tricycles to electric tricycles, we aim to reduce air pollution, create new businesses, and improve the living environment by increasing drivers income.



EV POWERTRAIN SALES BUSINESS

We will supply EV powertrains from the Philippines to electric tricycle manufacturers in Southeast Asia, utilizing the technology accumulated through the development of E-Trikes and know-how gained through market development in the Philippines.



EV CONVERSION BUSINESS

We convert existing gasoline-powered vehicles to electric vehicles and coordinate the technical elements required by users, creating new value in CO2 reduction and effective use of resources through our EV conversion business.



GREEN SLOW MOBILITY BUSINESS IN JAPAN

We will expand the market for green slow mobility to all regions of Japan. We will provide new vehicles that are environmentally friendly and safe at low speeds to local governments, transportation companies, welfare-related companies, tourism companies, etc. that are friendly to local communities.



HISTORY

A history of our challenges

1946

Started charging and selling storage batteries for fishing boats

1951

Began ship outfitting work

1952

Began production of marine switchboards

1961

Began installation and sales of radios and radars

1975

Signed a service contract with De Hoop in the Netherlands

1982

Developed data logger UMS-35

2001

Announced the management philosophy "Beam Metrical Industry"

2003

Released BEMAC product brand BE-Data series

2010

Started joint development of lithium-ion battery products for marine use

2011

Entered EV business

2019

Released "BEMAC IoT Data Server," a data server on board

2020

Released MaSSA Insight WADATSUMI

1977

Entered IP business

1984

Launched power management system (UGS-10)

2002

Released corporate brand "BEMAC"

2006

Formed a business alliance with Schneider Electric for high-voltage switchboards for marine use

2016

Received order for 3,000 E-Trikes from the Philippine Department of Energy

2018

Announced the concept of MaSSA (Ship that Never Stops)

2021

Released "MaSSA Ship Manager"

2022

Joined Maritime Clean Tech, Europe's largest environmental maritime cluster, as the first Asian company



1946

Established Uzushio Denki Shokai
Founder Shigeru Oda

1964

Established Namikata Factory

1956

Reorganized as Uzushio Electric Co., Ltd.

1970

Established Onishi Factory
Appointed Michitoshi Oda as president

1975

Opened Tokyo Office

1986

Opened Osaka Office to strengthen IP business

1999

Osaka Kiden Co., Ltd. became a group company
Established Saijo Factory

2004

Established local subsidiary in Dalian, China

2004

Established the first overseas production factory in Hanoi

2006

Established FutureRays Co., Ltd.
Appointed Masato Oda as president

2009

Established a subsidiary in Singapore

2010

Completed MIRAI Factory

2012

Established a subsidiary in Shanghai, China

2013

Established a local subsidiary in Manila to serve as a base for EV business

2018

Relocated Tokyo office to Hibiya, Established Tokyo Data Lab

2019

Changed company name to "BEMAC Corporation"

2019

Opened representative office in Amsterdam to serve as a European base

2021

Completed construction of a new factory (SHIKAKU building) on the MIRAI Factory site

2022

Completed Bakushin Base (achelor dormitory)

2024

The Switch, a European generator manufacturer, became a group company

2024

Opened Tokyo Integration Base (TIB) in Ochanomizu



Imabari Head Office Mirai Factory

CORPORATE PROFILE

Official Name	BEMAC Corporation
Found	April 1946 (Company established in July 1956)
Head Office Location	Imabari Head Office 105 Noma, Imabari-city, Ehime 794-8582 JAPAN TEL +81-898-25-8282 FAX +81-898-25-3777 Tokyo headquarters 32ndFl. Hibiya Mitsui Tower, Tokyo Midtown Hibiya, 1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006 JAPAN TEL +81-3-6550-8211 FAX +81-3-6550-8212
Capital	90 Million Yen
Representative	CEO & President Masato Oda
Employees (BEMAC)	1,124 (As of February 2024)
Employees (Group)	1,969 (As of February 2024)
Businesses	Marine Plant Business, Industrial Plant Business, EV Business, Food & Beverage Business
Business Locations	Factories : MIRAI (Imabari), Onishi, Namikata, Marugame, Saijo, Mihara Sales and Operations Offices : Tokyo / Tokyo Data Lab, Osaka, Hakata, Takamatsu Sub-branches : Toyohashi, Uwajima, Saizaki, Akitsu, Shinkasado Representative office : Amsterdam



GROUP COMPANIES

Uzushio Enterprise Co., Ltd.

Location 105 Noma, Imabari-city, Ehime 794-0082

TEL +81-898-23-8888 FAX +81-898-23-8887

Businesses Business management of group companies, fund management, procurement management of materials and equipment



BEMAC Kiden Co., Ltd.

Location 4-10-1 Tsukuda, Nishiyodogawa-ku, Osaka 555-0001

TEL +81-6-6472-1651 FAX +81-6-6472-1833

Businesses Total engineering of industrial plant business

FutureRays Co., Ltd.

Location 217 Oe Building, 2-8-1 Nishitenma, Kita-ku, Osaka-city, Osaka 530-0047

TEL +81-6-6265-4781 FAX+81-6-6265-4782

Businesses ICT consulting services, development and implementation of applications and packages



The Switch Engineering Oy

Location Yrittäjäntie 11, 65380 Vaasa, Finland

TEL +358-20-783-8200

Businesses Development, manufacture, and sale of special electric machines and high-power converter products for marine, wind and industry applications



BEMAC STAR ASIA PTE. LTD.

Location 1 Maritime Square, #09-31 & 32 Harbourfront Centre Singapore 099253 TEL +65-6884-7989 FAX +65-6884-7980

Businesses Sales, engineering, and after-sales service operations for marine electrical equipment throughout Asia

BEMAC PANELS MANUFACTURING VIETNAM CO., LTD.

Location Plot B-17, Thang Long Industrial Park, Dong Anh Dist., Hanoi, Vietnam TEL +84-24-3951-6412 FAX +84-24-3951-6413

Businesses Design and manufacture of switchboards, starters, monitoring panels, and instrumentation for ships and industrial plants

BEMAC CONTROL (DALIAN) INC.

Location #2014 Foreign Economic & Trading Building, 219 Huanghe Rd., Xigang, Dalian, China TEL +86-411-8378-0472 FAX +86-411-8378-0473

Businesses Development of various types of software for marine computers, electrical outfitting design of vessel, and on-site adjustment of equipment

BEMAC CONTROL (DALIAN) INC. SHANGHAI BRANCH

Location #1002, Long Yu Tower, 1036 South Pudong Rd., Pudong, Shanghai, China TEL +86-21-6876-6927 FAX +86-21-6876-6928

Businesses Maintenance and after-sales service of marine electrical equipment in general

BEMAC ELECTRIC TRANSPORTATION PHILIPPINES, INC.

Location Lot 8 Block 14, 9th Street, Golden Mile Business Park, Barangay Maduya, Carmona, Cavite 4116, Philippines TEL +63-46-443-5447

Businesses Planning, development, manufacture, and sales of main electric tricycle products and related equipment for Southeast Asia

