Sailing Into the Future With the Latest Technology

Japanese marine technology firm BEMAC Corporation is redefining seagoing traffic with a range of next-generation, sustainable innovations.





With 11 billion tons of freight sailing all over the world every year, sea cargo remains the cornerstone of the modern global economy. Between 50,000 and 60,000 huge container vessels are at sea at any one time, and marine technology firm BEMAC Corporation hopes to change how these massive fleets operate in the future. Utilizing cutting-edge innovations in sustainable energy, data management and operations, the Japanese company has developed the game-changing MaSSA-One system, helping create what its leaders describe as "the ship that never stops."

The AI-integrated product has been hailed as the next big step in shipping operations, collecting data from the very early stages of shipbuilding to voyages, after-sales and maintenance, all the while improving efficiency, sustainability and safety. According to President and Group CEO Masato Oda, it could prove enormously beneficial to all shipping stakeholders. "MaSSA-One is an open platform that collects data on ships, which can then be used both on board and in office environments via the cloud. Remote management of ships using the MaSSA-One app and preventing problems via AI technology is the first step towards ships that never stop," said Oda. Powered by an IAS (Integrated Automation System) that integrates ship controls using 3D design, virtual simulations and analytics, the platform is one of the 78-year-old company's most high-profile innovations. However, its product line also spans a wide range of other sectors, including EV auto tricycles in markets such as the Philippines. The firm, which has a strong track record with its battery management system, is pioneering work with sustainably powered vehicles and ships. Its team has also developed a DPS (Dynamic Positioning System), described as a "digital anchor" to keep vessels in a stationary location. According to Oda, the company also has exciting plans for the immediate and long-term future of the energy and technology sectors. With an increasing

reliance on servers for the rollout of AI technology, Oda hopes to support a new wave of energy efficiency in global markets."The power used by AI is forecast to equal the consumption of all Japan by 2026. We would like to establish a base in the United States and help actors there reduce their consumption, utilizing our expertise,"said Oda. Despite its international presence and global ambitions, the firm cites its location in Imabari City, Ehime Prefecture, a region renowned for shipbuilding and maritime industry, as a key strength. "The city of Imabari is a major maritime port with many ship owners, manufacturers and marine-relate dcompanies nearby. It's an environment

where great innovation and projects can be completed, often including the expertise of outside actors, with great agility," said Oda.



Permanent Magnet Generator

