

# Shinjiro Mishima

President & CEO



# Japan Marine United

## Supporting society with technology and manufacturing to be a leading shipbuilder.

As a Japanese shipbuilding company, we offer a diverse array of products with our large expertise in research, development, technology and sales. We were an early developer of energy-saving and low-impact technologies for advanced solutions that have been praised highly by customers. Our ships satisfy evolving needs in the maritime industry by offering superlative performance and high quality. As a member of Japan's maritime cluster, we are dedicated to the advancement of maritime logistics and safety.

## Advanced PCTC offering achieves excellent fuel consumption and low CO<sub>2</sub> emissions

We now build strategic products at each of our shipyards to take advantage of our special capabilities in development and design, which were enhanced by our merger. In the first half of 2016, we delivered our first pure car/truck carrier (PCTC) and then a 14,000 TEU container ship. M/V DRIVE GREEN HIGHWAY, built for Kawasaki Kisen Kaisha ("K" Line) at our Ariake Shipyard, is a next-generation PCTC with an extra-wide berth suited to the expanded Panama Canal, enabling a substantial increase in cars carried by one ship. Furthermore, fuel-saving technologies reduce CO<sub>2</sub> emissions per vehicle by approximately 25% compared to existing ships. The deck structure accommodates not only passenger vehicles, but also heavy-duty and construction machinery, railway cars and more. It now serves as the flagship of "K" Line's Drive Green Project promoting enhanced environmental performance in shipping.



## Sea-Navi® wins efficiency award from Natural Resources and Energy Agency

Sea-Navi®, a voyage support system developed by Japan Marine United, won the Agency of Natural Resources and Energy Director's Award in the FY2015 Energy-Efficient Machinery Awards program. Sea-Navi® increases energy savings during voyages by searching for courses of least resistance in terms of wind, swells and currents. Optimizing routes by accurately estimating fuel consumption

and performance with an original route search technique, it can significantly reduce the amount of fuel consumption when navigating any ocean. Already installed in a large number of ships built by Japan Marine United, it has been verified to reduce fuel consumption by an average of two to five percent compared to conventional navigation methods, and it helps cut harmful emissions of CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>x</sub>.

## Highlights 2015

2015

- June ● Received order for 10 multipurpose vessels for Republic of Philippines
- July ● Koichiro Matsumoto presented the National Maritime Award by Japanese Prime Minister;
- Masanobu Toyoda and Takuma Shinya presented the Maritime Industry Award by Japanese Minister of Land, Infrastructure, Transport and Tourism

August ● Launched JS Kaga helicopter destroyer (DDH)

September ● Order received from Japan's Maritime Self-defense Force for guided missile destroyer (27DDG)

November ● Takuma Shinya won Monodzukuri Nippon Grand Award

December ● NIVAGA III cargo/passenger ship delivered to Tuvalu

2016

- February ● DRIVE GREEN HIGHWAY low-fuel, low-emissions PCTC christened and delivered
- NYK BLUE JAY 14,000 TEU energy-saving container ship delivered
- Sea-Navi® won Energy-Efficient Machinery Award