



## Shipbuilding Business Overview Universal Shipbuilding Corporation

Universal Shipbuilding develops eco-minded ships for diverse customers worldwide, thereby contributing both to the global economy and environmental protection.

Following a planned merger with IHI Marine United in autumn 2012, the newly organized company expects to hasten its development of an enhanced range of ships that incorporate energy-saving, environmentally responsive technologies. Through continued research and development initiatives, the company looks forward to offering environmentally conscious ships that are truly appreciated by customers.

**Shinjiro Mishima**  
President & CEO

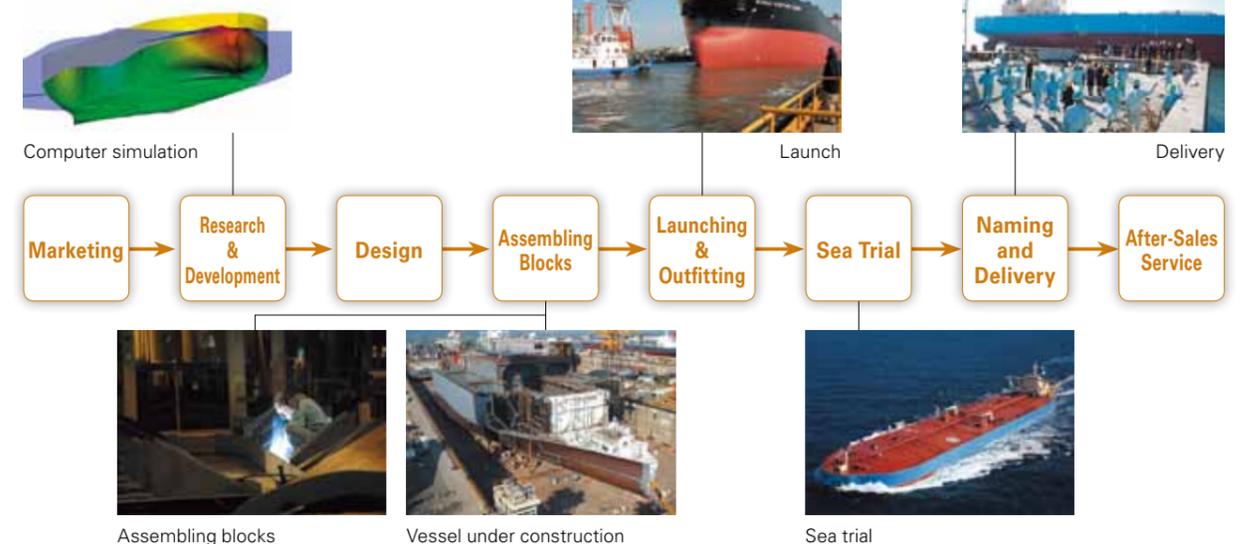
### Anticipating Customers' Needs

Conventional shipbuilding has generally centered on the construction of one-off vessels tailored to the particular specifications of each customer. For greater efficiency, however, Universal Shipbuilding uses its extensive experience and research capabilities to analyze the specific uses and routes of each ship and then develop specifications to satisfy exact needs. The company has already produced several innovative vessel types, including the Malacca-max VLCC oil tanker with maximum load capacity for the Straits of Malacca, the Setouchi-max 200,000-DWT bulk carrier and the Unimax Ore 300,000-DWT dedicated ore carrier. Going forward, Universal Shipbuilding will continue to introduce highly practical, state-of-the-art vessels that anticipate the ever-changing needs of the market.



MAERSK HAYAMA VLCC delivered in November 2011

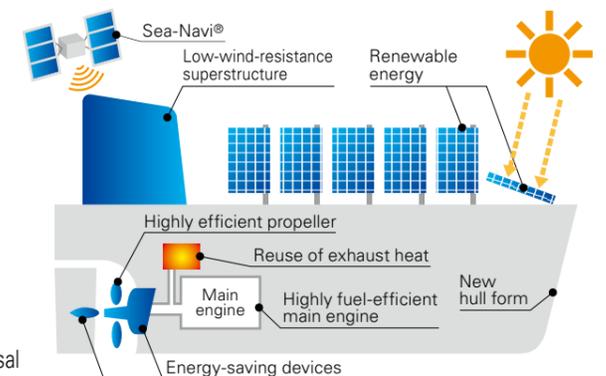
### Shipbuilding Process



### Developing Eco-Minded Ships

The development of energy-efficient technologies is an integral part of our mission. To date, we have patented a number of environmentally friendly technologies and equipment, including the LEADGE-Bow (an acutely streamlined bow that reduces wave resistance); the SSD and the Surf-bulb (energy-saving devices); Sea-Navi® (similar to car navigation systems); low-wind-resistance superstructures; and a hybrid electric-generation system.

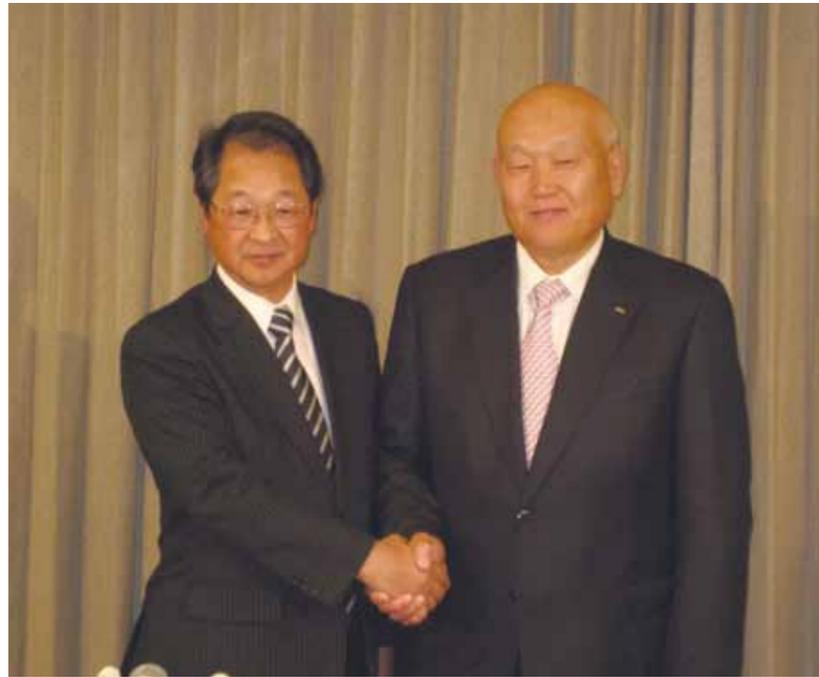
In fiscal 2011, we commenced marketing of our G-Series next-generation large bulk carrier, which reduces greenhouse gas emissions by 25%, and received orders for numerous ships. Universal Shipbuilding's technological capabilities have earned high acclaim, including the 2012 Japan Society of Naval Architects and Ocean Engineers' Award for a hybrid electric-generation system developed jointly with NYK Line and Mitsubishi Heavy Industries, Ltd.



# Universal Shipbuilding Corporation 2011 Highlights

## Joint Press Conference with IHIMU

Universal Shipbuilding signed a memorandum of understanding with IHI Marine United (IHIMU) to merge operations, aiming to secure long-term growth as an industry leader in terms of total strength.



## 297,000-Ton Ore Carrier Delivered by Ariake Shipyard

The company delivered the *ORE SAO LUIS*, which is now helping to meet the globally expanding demand for the transportation of iron ore. This vessel, which transports iron ore from Brazil, is equipped with unique energy-saving devices, including the Surf-Bulb and SSD.



## First FRP Minesweeper Delivered

Delivery of the *Enoshima* marked an important shift from the use of wood to fiberglass for minesweepers. As Japan's sole manufacturer of minesweepers, we will continue support the military with these key vessels.



## Completion of Third Painting Shop in Tsu Shipyard

We completed a new painting shop fitted for the Performance Standard for Protective Coatings (PSPC). The shop is one of the company's latest capital investments in environmental countermeasures.



## Repair of Ship Damaged in Great East Japan Earthquake

Work performed at the Innoshima Shipyard from May to July restored sections of the outer hull of the *Coral Ring*, a ship damaged by the earthquake and tsunami on March 11, 2011.



## Shigeyoshi Koga Awarded for Outstanding Service

Pipe welder Shigeyoshi Koga was chosen for the autumn Medal of Honor, which is presented to persons to recognize their longtime contributions to society and dedication to their work.

## Construction of Multipurpose Offshore Support Ships

Following the construction of multipurpose anchor-handling tug supply vessels (AHTSVs) at its Keihin Shipyard, Universal Shipbuilding built Japan's first platform supply vessel (PSV) at its Maizuru Shipyard in August 2011. AHTSVs and PSVs, which support drilling rigs and production platforms, are helping to meet growing needs due to the global boom in offshore oilfield development.

Photo: POSH CHAMPION



April 2011	May	June	July	August	September	October	November	December	January 2012	February	March
<ul style="list-style-type: none"> <li>Established new Technology Administrative Division at head office.</li> <li>Tsu Works began overseeing operation of the Kumozu Hotel &amp; Conference complex.</li> </ul>	<ul style="list-style-type: none"> <li>Signed agreement for Goliath cranes at Ariake Shipyard.</li> <li>Restoration of <i>Coral Ring</i> vessel damaged in March 11 disaster began at Innoshima Shipyard.</li> <li>Tsu Shipyard completed <i>SHIN KOHO</i>, world's first vessel with hybrid turbocharged electric generator.</li> </ul>	<ul style="list-style-type: none"> <li>Energy Conservation Conference held.</li> </ul>	<ul style="list-style-type: none"> <li>Third specialized painting plant compliant with PSPC standard completed in Tsu city.</li> <li>General Manager Matsumoto of Technology Research Center received Maritime Merit Award.</li> <li>Joined Construction and Transport Ministry's Investigative Commission on New Shipbuilding Policies.</li> </ul>	<ul style="list-style-type: none"> <li>Consolidated structural design functions at head office.</li> <li>Developed G-Series large bulk carrier that reduces greenhouse gas emissions by 25%.</li> <li>Maizuru Shipyard completed Japan's first platform supply vessel.</li> </ul>	<ul style="list-style-type: none"> <li>850-ton auto-drive vehicle for transportation of large-scale blocks completed at Ariake Shipyard.</li> <li>Ariake Family Festival held.</li> <li>Conducted disaster, earthquake and tsunami evacuation drills at head office.</li> </ul>	<ul style="list-style-type: none"> <li>Shipbuilder Leaders' Conference (JECKU) held on Cheju Island, Korea.</li> </ul>	<ul style="list-style-type: none"> <li>Shigeyoshi Koga of Ariake Shipyard awarded Yellow Ribbon Medal for outstanding service.</li> <li>Keihin Shipyard received letter of appreciation from Japan Maritime Self-Defense Force.</li> <li>Maizuru Shipyard received order for four platform supply vessels.</li> <li>The <i>Chichijima</i>, our second fiberglass minesweeper, launched at Keihin Shipyard.</li> </ul>	<ul style="list-style-type: none"> <li>Order received for Hakone Lake Ashi Sightseeing Cruise vessel (replica medieval ship). Contracts concluded for two ships financed by Japan Bank for International Cooperation.</li> <li>Developed multiple G-Series large bulk carriers that cut greenhouse gas emissions by 25%.</li> </ul>	<ul style="list-style-type: none"> <li>Signed memorandum of understanding and held joint press conference concerning merger with IHI Marine United.</li> </ul>	<ul style="list-style-type: none"> <li>Technology Research Center's General Manager Matsumoto received Monozukuri Japan Award in maritime category.</li> </ul>	<ul style="list-style-type: none"> <li><i>Enoshima</i>, first fiberglass minesweeper, completed at Maizuru Shipyard.</li> <li>Iron-ore Carrier <i>ORE SAO LUIS</i> delivered by Ariake Shipyard.</li> </ul>