

PRESS RELEASE

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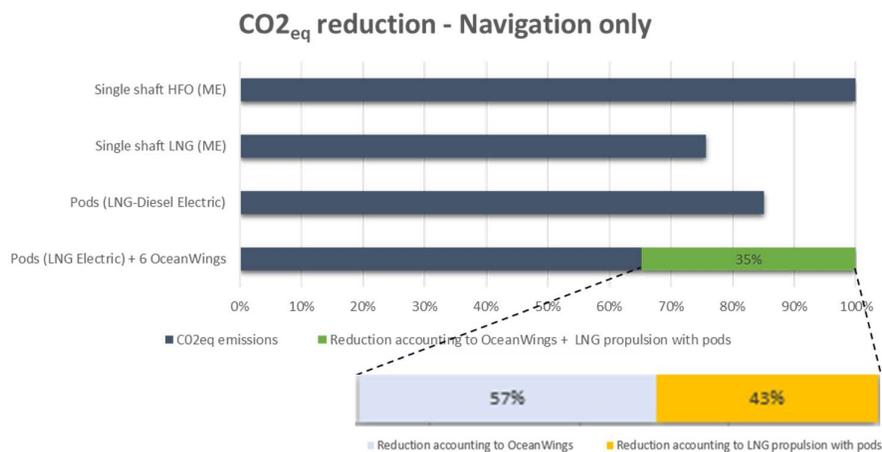
Innovative 2,500 TEU Container Vessel “Trade Wings 2,500” from VPLP Design, Alwena Shipping, SDARI and AYRO receives Approval in Principle from Bureau Veritas

The “Trade Wings 2,500”: an innovative container ship with a capacity of 2,500 TEU (Twenty-Foot Equivalent Unit), designed jointly by VPLP Design (France), Alwena Shipping (France), SDARI (China) and AYRO (France) has received Approval in Principle from Bureau Veritas. With an overall length of 197m and a breadth of 32m, the vessel offers a deadweight of 32 500 m tons.

It fosters the combination of a wind-assisted propulsion with six Oceanwings® with an LNG-electric propulsion with pods. The wingsails are installed on a vertical sliding mechanism to retract them partially while the vessel is in port, thus minimizing the impact on cargo operations. The LNG storage tank is based on GTT’ Mark III containment system and the LNG power plant is designed with pure gas 4-strokes gensets only. This architecture is a flexible platform offering possible upgrade to decarbonated fuels in the future such as Ammonia or Hydrogen.

Suitable to short sea shipping operations or feeder in Europe, Central America, Caribbean Islands and China, the Trade Wings 2,500 can also operate on transatlantic trades. The design minimizes time in port operations, as maneuverability is increased with the Pods, and the hatch coverless design further speeds up cargo operations.

On a typical transatlantic route of 4,000 Nm, the Trade Wings 2,500 will save on average 35% CO₂-equivalent emissions compared to a conventional design, with a 2-stroke engine, single shaft and without wingsails, at the same speed. Out of these 35% savings, the Oceanwings® accounts to 57%, the optimized LNG thermal propulsion delivering the remaining 43% savings.



This co-work to design the Trade Wings 2,500 sets the pathway for what could be the low emissions container vessels of the near future.

After reviewing the key drawings, on the 12th of May 2021, Bureau Veritas Marine & Offshore granted an Approval in Principle to the Trade Wings 2500 ‘ basic design.



Alex Gregg-Smith, Senior Vice-President Bureau Veritas for North Asia said: “Wind-assisted propulsion is a high-potential solution that can contribute to the long-term decarbonization of the marine industry. We have just released new wind propulsion system rules – and this innovative design, approved in principle by BV, including a sliding mechanism, demonstrates the feasibility of wind-assisted propulsion on board container ships with deck space limitations. Benefitting from a coverless hatch and LNG electric pod propulsion, the design provides both operational flexibility, improved efficiency and reduced carbon emissions, complying with, or exceeding, regulatory requirements. Bureau Veritas continues to address the challenges of the energy transition by providing solutions to the safety, risk and performance requirements for innovation in future fuels and propulsion systems.”

Notes to editors

About VPLP Design

VPLP Design is a long-established naval architecture firm, with a track record of proven mono and multihull sailing yachts, for cruising and racing. Since 2010, it has embarked into a journey of promoting maritime transportation decarbonization and actively proposes innovative designs by developing and promoting wind propulsion for commercial vessels.

For more information, please visit our website: www.vplp.fr and on [LinkedIn](#)

Contact: contact@vplp.fr

About Alwena Shipping

Based in Marseille with an office also in Shanghai, Alwena Shipping is a French consulting company providing shipowner and shipping stakeholders their expertise and knowhow in projects management such as vessels retrofits, new build, energy efficiency optimization and interim management.

For more information, please visit our website: www.alwenashipping.com and on [LinkedIn](#)

Contact : info@alwenashipping.com

About SDARI

SDARI is member of China State Shipbuilding Co. Ltd.,(CSSC), one of China’s largest merchant ship design institutes with the vastest variety of ship types, world’s leading technical edge, the most innovative and stable technical team along with the largest market share in domestic China. SDARI provides R&D and detail design for various types of Merchant Vessels, Marine Resources Development Vessels and Equipment, Marine Scientific Research Vessels and Special Vessels, covering all-rounded technical services that range from Feasibility Study, Conceptual Design, Basic Design, Detail Design to Product Design. Focusing on the intelligence upgrade, energy saving and emission reduction, SDARI makes endless efforts on the launch of new ship types that face the future shipping and lead the market by means of technology development and 3D design.

Relying on the numerical tank, Smart Ship Innovation Laboratory and study of new energy technology, SDARI’ s equipment and services cover Fan Duct, Fan Cap, SATRTM (SDARI Adapted Twisted



Rudder), DOSS ® (Digital Operation Support System) and data analysis service, FGSS (Fuel Gas Supply System) and Power Battery Pack as well.

For more information, please visit our website: <http://www.sdari.com.cn/> and follow us on [LinkedIn](#)

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About AYRO

AYRO is a French company that designs, manufactures and sells the wingsails Oceanwings® to be installed on cargo vessels and yachts, contributing to the reduction of CO2 emissions by reducing fossil energy consumption.

For more information, please visit our website: www.ayro.fr and on [LinkedIn](#)

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About Bureau Veritas

Bureau Veritas Marine & Offshore is a world-leading classification society with more than 190 years of expertise. We provide support and in-depth knowledge to protect people, ships and offshore structures, finding new ways to anticipate and manage risk across the industry, promoting safety and health, and protecting the marine environment.

The Bureau Veritas Group has 75,000 employees located in more than 1,600 offices and laboratories around the globe. Bureau Veritas helps its clients improve their performance by offering services and innovative solutions in order to ensure that their assets, products, infrastructure and processes meet standards and regulations in terms of quality, health and safety, environmental protection and social responsibility.

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