

Press Release

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Stena Bulk unveils InfinityMAX concept vessel design, challenging conventional thinking

Electric, modular hybrid bulk carrier designed to meet the world's need for sustainable, zero carbon, efficient, and flexible seaborne transportation.

08 March 2021, Gothenburg – Leading tanker shipping company Stena Bulk has today unveiled its concept InfinityMAX hybrid bulk carrier design, pushing the boundaries for zero carbon, multi-modal vessel design in shipping.

The InfinityMAX concept, which is designed to carry both dry and wet cargoes in modular compartments, is built with several new core principles that, accumulatively, represent a paradigm shift in cargo transportation.

The ultra-flexible, zero emissions design has been created in response to the huge challenges that the global shipping industry must overcome in the coming decades. The design envisions a world in which the shipping industry plays a crucial role in supplying the world with renewable energy, chemicals, materials, and consumables for its never-ending needs.

In a proposed advancement that could be considered as impactful as containerisation was for intermodal freight trade, the creation of standardised and modular cargo units that can carry dry bulk, liquid bulk or liquified gas products - such as methane, hydrogen or ammonia - will significantly streamline the process of transporting wet and dry bulk cargoes.

Each of the InfinityMAX's modular cargo units are designed to be totally self-sufficient in terms of their energy use, with wind turbines and solar panels generating all the electricity needed for internal systems. The modular units have also been designed to be able to be dropped off outside of ports and picked up by tugs, avoiding congestion and reducing call times dramatically. The InfinityMAX concept will use hydrogen as a marine fuel and wind turbines to generate further energy. Collapsible wing sails and a shark skin hull have also been incorporated in the concept design to significantly improve efficiency.

Although the vessels will be crewed for safety and flexibility reasons, Stena Bulk has designed the InfinityMAX concept to be semi-autonomous and meet the future demand of efficient operations without compromising safety. InfinityMAX will also improve crew wellbeing on board, for a sustainable working environment. As a result, InfinityMAX has the potential to change the role of onboard crew, with less hard labour and more focus on monitoring and interaction with operators ashore.

Speaking on the announcement, Erik Hånell, President & CEO, Stena Bulk, said: "We are extremely proud to unveil our InfinityMAX concept vessel design, which we believe pushes the boundaries for the future of our industry. What we are proposing here is innovative, provocative and would radically reshape the way we think about bulk trade, rationalising two segments with complimentary expertise into one shipping segment that is ready for the challenges of the future.

"The application of advanced technologies – including hydrogen fuel and other efficiency measures – means that this is a vessel concept that proves our core philosophy that innovation is key to commercial success, given the challenges that we all face. We will continue to work closely with our innovation partners, leaving no stone unturned to ensure that the right advances happen to make the InfinityMAX concept into a reality."

In effect, the InfinityMAX drives improved world fleet utilisation and the potential for more standardised supply chains, as well as reduces the unnecessary environmental impact of empty tanks being shipped around the world in search of new cargo.

By 2050, the growing need for transportation of energy from areas with abundant renewable supply to areas with large energy demand - carried as hydrogen, methanol, methane, and ammonia - will be a defining part of international trade. This, combined with the requirement to transport sustainable, edible oils and chemicals, and carbon dioxide from carbon capture facilities, as well as bulk commodities, requires a vessel design that is up to the challenge of a radically reformed global economy.

With the right level of matured technologies, Stena Bulk believes that an InfinityMAX vessel could come into service between 2030 and 2035. To achieve this, a strengthened and sustained collaborative spirit between industry and technology leaders is a necessity in the coming years.



For further enquiries, please contact:

Erik Hånell

President & CEO, Stena Bulk
erik.hanell@stenabulk.com

About Stena Bulk: With offices in seven countries, Stena Bulk is one of the world's leading tanker shipping companies. The company controls a combined fleet of around 110 vessels. Stena Bulk is part of the Stena Sphere, which has more than 20,000 employees and sales of SEK 60 billion. www.stenabulk.com

About Stena Sphere: Stena is one of the largest family-owned business groups in Sweden and operates worldwide within different businesses such as Ferry Operations, Offshore Drilling, Shipping, Property, Finance, New Businesses and Recycling. Head office is in Gothenburg, Sweden. www.stena.com