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Kumiai Navigation to retrofit LPG tanker with Alfa Laval OceanGlide fluidic air lubrication system

Alfa Laval OceanGlide has been selected by Kumiai Navigation (PTE) LTD to be installed on one of its LPG tankers as a retrofit. The company's decision to leverage fluidic air lubrication technology is rooted in its ambition to reduce the vessel's energy consumption, improve its overall performance and comply with environmental regulations.

Alfa Laval has been selected for installation of its OceanGlide fluidic air lubrication system on a 54k DWT LPG tanker owned by Kumiai Navigation, a Southeast Asian LPG tanker and bulk carrier company. With this order, Alfa Laval has added LPG tankers to vessel types that can benefit from OceanGlide fluidic air lubrication system. The system can be installed on both new and existing ships with ease.

Trusted partner in the sustainability journey

As shipowners worldwide navigate the dynamic landscape of maritime sustainability, Alfa Laval OceanGlide offers a uniquely efficient and easy-to-install air lubrication solution. This patented system uses fluidic technology to generate an even, controllable air layer across a vessel's entire flat bottom, reducing friction and drag. By decreasing the vessel's resistance, OceanGlide offers a proven method for reducing fuel consumption and CO₂ emissions.

"In these challenging times, we recognize that reliable partners such as Alfa Laval, are needed to achieve our sustainability goals," says **Tomo Kuroyanagi**, Managing Director, Kumiai Navigation. "We want to invest in green shipping practices to help us lower our power consumption and comply with upcoming environmental regulations. In this effort, OceanGlide fluidic air lubrication is currently one of the best available solutions that offer remarkable gains in improving vessel performance and meeting our environmental targets."

The decision to choose OceanGlide originates from the customer's ambition to reduce the vessel's energy consumption and emissions, coupled with the company's trust in Alfa Laval's solution to make a significant impact on vessel's carbon footprint.

"We are pleased to partner up with our customer, Kumiai Navigation, to serve the LPG tanker segment with our fluidic air lubrication system, OceanGlide," says **Rajiv Sarin**, Head of Air Lubrication, Alfa Laval. "We value the trust our partner has in our technology and collaboration to help them achieve their goal of sailing sustainably. As the market for OceanGlide fluidic air lubrication grows, we are happy to support our customers in their efforts to reduce CO₂ emissions and improve energy efficiency of their fleet as a retrofit or a new build installation."

Alfa Laval is a trademark registered and owned by Alfa Laval Corporate AB. Alfa Laval reserves the right to change specifications without prior notification.



Proven technology with multiple benefits

OceanGlide uses fluidic technology to create and control streamlined air layer sections on the vessel's flat bottom, each with its own fluidic band. The independent steering of each band allows a more controlled airflow to reduce friction between the hull and water. These individually controlled sections serve to minimize drag and ensure maximum coverage, eliminating passive cavities along the vessel's underside.

Energy expenditure is minimized because there are few compressors and the bands add almost no drag when switched off. Air distribution bands are installed easily with minimal hull penetrations, which reduces shipyard time and costs, even as a retrofit.

OceanGlide is proven to reduce specific drag by 50–75% and can provide reliable fuel savings of up to 12% under real-life conditions. The actual amount of fuel savings achieved can vary depending on vessel operations & operator priorities.

The technology also supports compliance with EEDI/ EEXI and CII requirements laid down by the International Maritime Organization (IMO) to reduce greenhouse gas emissions.

"OceanGlide serves our goal of adopting advanced new sustainable technologies to remain competitive in this challenging market. We are excited to take advantage of the fluidic air lubrication technology to help us decarbonize and contribute towards our carbon reduction roadmap," says **Tomo** from Kumiai Navigation.

For further details about Alfa Laval OceanGlide fluidic air lubrication system, please visit: www.alfalaval.com/OceanGlide

Explore Alfa Laval's sustainable solutions & technologies: [Sustainable shipping solutions and technologies | Alfa Laval](#)

For more information, please visit the Alfa Laval Marine webpage: www.alfalaval.com/marine



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Editor's notes

This is Alfa Laval

Alfa Laval is a world leader in heat transfer, centrifugal separation and fluid handling, and is active in the areas of Energy, Marine, and Food and Water, offering its expertise, products, and service to a wide range of industries in some 100 countries. The company is committed to optimizing processes, creating responsible growth, and driving progress to support customers in achieving their business goals and sustainability targets.

Alfa Laval's innovative technologies are dedicated to purifying, refining, and reusing materials, promoting more responsible use of natural resources. They contribute to improved energy efficiency and heat recovery, better water treatment, and reduced emissions. Thereby, Alfa Laval is not only accelerating success for its customers but also for people and the planet. Making the world better, every day.

Alfa Laval has 20,300 employees. Annual sales in 2022 were SEK 52.1 billion (approx. EUR 4.9 billion). The company is listed on Nasdaq Stockholm.

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