Press release

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Odfjell chooses Alfa Laval OceanGlide to enhance energy efficiency and reduce emissions with fluidic air lubrication

Odfjell Ship Management has partnered with Alfa Laval in their decarbonization effort by selecting the Alfa Laval OceanGlide fluidic air lubrication system to be installed on one of their tankers. Alfa Laval OceanGlide is the name of Alfa Laval's newly acquired air lubrication system, which is based on patented fluidic technology. This technology is the latest addition to Alfa Laval's sustainable portfolio, aimed at supporting shipowners in addressing fuel and emission challenges.

Alfa Laval has signed an agreement with Odfjell, a leading chemical tanker company, to install OceanGlide on one of their tankers, later this year. Odfjell is known for embracing new technologies for improving the energy efficiency and sustainability of its global deep-sea fleet. By installing OceanGlide, Odfjell aims at enhancing further its tanker operations by gaining the advantage of this new innovative technology.

OceanGlide integrates fluidic technology into air lubrication to optimize energy saving. This patented and class-approved system utilizes fluidic oscillators to generate an even layer of micro air bubbles across a vessel's entire flat bottom, reducing friction and drag. By reducing the vessel's resistance, the OceanGlide system offers a proven method for reducing fuel consumption and CO₂ emissions.

"We are delighted that Odfjell has selected OceanGlide to enhance their vessel's energy efficiency," says Anders Lindmark, Business Unit President, Heat & Gas Systems, Alfa Laval. "We strive to develop and bring innovative and environment-friendly technologies, such as OceanGlide, to our customers which support them in meeting their decarbonization targets and enable them to sail efficiently."

"Odfjell has installed more than 130 energy-saving devices on its vessels since 2014. In Q1 2023 we reported a historical low carbon intensity – more than 50% below the IMO baseline for our fleet. Our decarbonization efforts do not stop with this achievement - now the time has come to start deploying more enhanced technologies. We believe fluidic air lubrication technology is a natural next step for us, and we look forward to deploying the OceanGlide system to further reduce our carbon intensity", says Erik Hjortland, Vice President Technology at Odfjell.

Leveraging the power of air lubrication based on fluidic technology

One of the key advantages of Alfa Laval OceanGlide is the ability to regulate power consumption through oscillation bands. OceanGlide uses fluidic technology to create streamlined sections on the vessel's flat bottom, each with its own fluidic band that generates bubbles. The independent steering of each band allows a more controlled and streamlined flow of air bubbles for ensuring optimal efficiency, maximum coverage, and reduced compressor power.

"The unique configuration of bands into sections for a regulated flow of air bubbles is a distinguishing feature of the OceanGlide system. This set-up allows for precise control and

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optimization of power consumption, and we look forward to documenting its energy-saving effect on our chemical tankers," says Erik.

The OceanGlide fluidic air lubrication system's high efficiency in producing bubbles not only ensures an effective air layer with fewer compressors but also provides the added advantage of conveniently positioning them anywhere on board. The system requires no structural modifications or vessel recertification, which makes it ideal for retrofitting as well as for new builds. The fluidic bands, designed with a low profile and no moving parts, can be configured underneath the ship at any shipyard with ease.

Enabling adherence to environmental regulations

Air lubrication technology is recognized by the International Maritime Organization (IMO) as an "Innovative Energy Efficiency Technology" to lower carbon emissions. The technology supports compliance with Energy Efficiency Existing Ship Index (EEXI), Energy Efficiency Design Index (EEDI) and the reduction of carbon intensity to meet IMO's carbon Intensity Indicator (CII) requirements. Besides this, the innovative fluidic air lubrication technology minimizes CO2 emissions thereby helping in limiting CO2 tax.

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

To learn more about Alfa Laval's environmental technologies and approach to sustainable shipping, please visit: <u>www.alfalaval.com/marine</u>

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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 & 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

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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. https://www.alfalaval.com/

Odfjell Group

The Odfjell Group is one of the leading players in the global market for seaborne transportation and storage of chemicals and other speciality bulk liquids. The Odfjell fleet comprises of approx. 70 chemical tankers that trade both globally and regionally, while the tank terminal division consists of four tank terminals at strategic ports in the US, Korea and Belgium. Odfjell is headquartered in Bergen, Norway, and employs around 2300 seafarers and shore colleagues around the world.

Read more at https://www.odfjell.com/.