

11 SVANEHØJ Deepwell pumps for first-of-a-kind LNG vessel

Proven technology and excellent support make SVANEHØJ a preferred partner for Wärtsilä Gas Solutions.

A newly developed containment system and vessel concept were brought to the LNG transportation market when Saga Dawn, a 45,000-cbm LNG carrier, launched in the summer of 2019.

The patented system, called LNT A-BOX, has been developed by LNG New Technologies, who aim to open up the construction of mid-size LNG carriers to a wider range of shipyards.

Close dialogue throughout the process

SVANEHØJ has been involved in the project as a supplier of six DW Cargo (Gas) pumps, three DW Fuel (Spray) pumps and two DW Fuel (Marine) pumps – in close collaboration with Wärtsilä, who has been responsible for delivering the ship's Cargo Handling System and Fuel Supply System.

According to Lars Nygaard from Wärtsilä Gas Solutions, the combination of proven technology and excellent support makes SVANEHØJ a preferred partner for new building projects such as Saga Dawn. And he emphasises the close dialogue between the parties throughout the process, from initial negotiation to delivery:

“With their experience, SVANEHØJ has been a good sparring partner in the sales phase, and they have helped us figure out which pumps would be best to use in relation to, for example, capacity and VFD. During gas trials SVANEHØJ’s engineers were on site to ensure that the pumps were started up and cooled down optimally. They were also ready to provide advice to the control logic and use of VFD”

– Lars Nygaard, product owner / advisor, Cargo Handling Systems, at Wärtsilä Gas Solution



Design with great benefits

Saga Dawn is one of the first ships to embark SVANEHØJ's new DW Fuel (Marine) pump, built on the well-proven technology and design of the SVANEHØJ DW Cargo (Gas) pump. One of the major advantages of SVANEHØJ's DW Fuel pump is that the electric motor is located outside of the fuel tank.

"It eliminates the excess heat and pressure, which may otherwise result in a significant energy loss when motors are located inside the fuel tank. At the same time, the pump is much faster and cheaper to install, and service and repairs can be carried out without emptying the tank," says Jens Peter Lund, Sales Director, Asia, at SVANEHØJ.

With the six SVANEHØJ DW Cargo (Gas) pumps onboard, Saga Dawn can perform a full-load discharge within 15 hours. For Jens Peter Lund, the choice of SVANEHØJ's electric DW pumps in the building of the Saga Dawn emphasises that shipyards have increasingly become aware of the advantages of the DW pump compared to a submerged pump:

"Our DW Cargo (Gas) pump handles all types of liquid gases at all temperatures and gravities. It is significantly less sensitive to impurities in the cargo. The motor is located on deck. This means there is no electrical installation or heat source below liquid level," says Jens Peter Lund.

The electric DW Fuel (Marine) pump is designed for a five-year service interval. And can actually be serviced without gas-freeing the tank. The pump is individually controlled by 50–60 Hz frequency converters in stepless control of the pump's rotational speed. This means the pump constantly adjust to the amount of fuel needed by the main engine, which reduces wear and tear of all systems components, as well as reducing the generator ratings onboard.

You can read more about SVANEHØJ's pumps at www.svanehoj.com

Customer name: Wärtsilä Gas Solution

Ship's name: Saga Dawn

IMO No:

Pumps installed:

6 Pcs. DW Cargo (Gas)

3 Pcs. DW Fuel (Spray) Pumps

2 Pcs. DW Fuel (Marine) Pumps



Learn more at svanehoj.com, contact us at svanehoj@svanehoj.com or give us a call on +45 9637 2200