CASE STORY

PureBallast 3 means cost-effective compliance for years to come

Customer: WALLENIUS SOL, Sweden & Finland

The new joint venture WALLENIUS SOL is establishing an open cargo liner service for Swedish and Finnish industries around the northern Baltic Sea. Its fleet will soon be expanded with two LNG-fuelled Mega RoRo vessels, which will have the highest ice class of any RoRo vessel worldwide. They – and eventually the rest of the company's fleet – will rely on Alfa Laval PureBallast 3 for ballast water treatment.

Formed in 2019 by Wallenius Lines and Svenska Orient Linien (SOL), WALLENIUS SOL is creating an independent – and green – shipping infrastructure for paper mills and other businesses along the Gulf of Bothnia. “The environmental aspect is paramount,” says Ragnar Johansson, Managing Director of WALLENIUS SOL. “Our main clients are in forest industries, and the environment is essential for them. Their supply chain needs to be as neutral possible.”

The green ambitions are evident in the RoRo vessels that will be delivered to WALLENIUS SOL in 2021. Weighing in at 27,000 DWT each, the vessels will be LNG-fuelled but prepared for multifuel operations. “These vessels will be around for the next 30 years, so we need them to be equipped with the best and most sustainable technology available,” says Johansson. “We see LNG as a bridge to becoming fossil-free. In the future, when biogas and biodiesel are more available, we can start blending in those fuels.”

Sustainability matched with reliability

In fact, the RoRo vessels will have a wide range of sustainable technologies on board. They will use battery power to manoeuvre in port, for instance, and be able to connect to the local grid during port stays – rather than generating electricity with the engines.

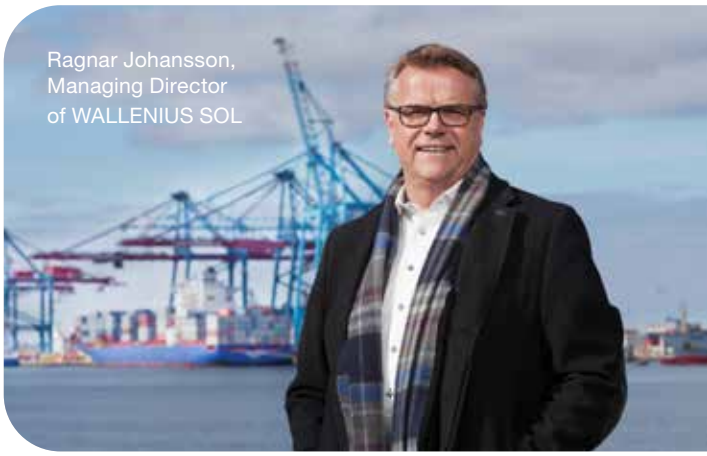
However, trouble-free operations will be just as important as sustainability. The vessels will be key to smooth logistics in the cold and brackish Baltic waters, which is why they will have ice class 1A Super. In addition, they will rely on UV technology for ballast water treatment. Unlike electrochlorination systems, which become less efficient as the temperature drops, UV systems like PureBallast 3 are unaffected by salinity and cold.

Keeping costs low and uptime high

PureBallast 3, like the other equipment for the RoRo vessels, was chosen after thorough investigation. Naturally, energy efficiency and other technical strengths were benchmarked. “OPEX is, of course, very important,” explains Johansson. “The purchase price is one thing, but the system will cost money every day. So energy consumption is extremely important.”

When it came to OPEX, however, one of the biggest strengths was the supplier behind the solution. According to Johansson, long-term access to service and spare parts was a crucial factor.

“We want to make sure the vessels are never lying around idle, waiting for parts or anything else,” Johansson explains. “There are cheaper makers than Alfa Laval, but we will need services and spare parts for the next 30 years or so. We want a maker that is present in the area we operate in, and that can guarantee reliable access to service technicians and spare parts. Alfa Laval is a strong, innovative and stable Swedish company.”



Ragnar Johansson, Managing Director of WALLENIUS SOL

Experience matters – especially in retrofits

Even beyond service, Alfa Laval’s strength and experience will be important for WALLENIUS SOL in coming years. Besides being installed on the RoRo newbuilds and two sister vessels if optioned, PureBallast 3 will retrofitted on the company’s three existing vessels when the time is due.

“Especially in retrofits, engineering is a big part of the total cost,” says Johansson. “Alfa Laval helps with that, using all the experience they have doing hundreds or maybe thousands of vessels. Alfa Laval is the company used most when it comes to retrofits, because they have excellent technicians and offer outstanding services when it comes to retrofit projecting.”

Whatever the project, newbuild or retrofit, Johansson concludes, “Alfa Laval’s experience plays a significant role.”