Press release



September 2016

US Coast Guard type approval application filed for Alfa Laval PureBallast ballast water treatment system

After successful completion of land-based tests with marine, brackish and fresh water – all using the current ballast water treatment system design – a test report package for PureBallast has now been finalized by the independent lab DNV GL. Consequently, Alfa Laval has filed its type approval application with the US Coast Guard for the PureBallast 3 family.

Alfa Laval is headed for US Coast Guard type approval in ballast water treatment. As expected, the company completed all tests of PureBallast during the summer of this year. These were performed using the CMFDA/FDA (staining) method approved by the US Coast Guard and were conducted at DHI in Denmark. It is significant to note that the testing involved the same hardware, power consumption and flow as the already market-leading IMO-approved version of the PureBallast 3 family.

"We were confident that PureBallast would deliver high-performance results without any change to its components or system design," says Anders Lindmark, General Manager, Business Centre PureBallast. "Test results have now been submitted and they conclusively demonstrate that PureBallast provides reliable biological disinfection at full flow in all water salinities. The system has also met the rigorous mechanical and electrical testing verification schemes required by the US Coast Guard and IMO."

Alfa Laval has now filed its type approval application, including the CMFDA/FDA test results, with the US Coast Guard. The company looks forward to supporting customers globally in complying with their ballast water management obligations as determined by US Coast Guard legislation and the newly ratified Ballast Water Management Convention.

Meanwhile, Alfa Laval continues to support the efforts to validate the Most Probable Number (MPN) method, which the company sees as a preferable alternative to the CMFDA/FDA method for UV treatment systems. Alfa Laval's decision to proceed with CMFDA/FDA testing was based on the importance of providing customers discharging in US waters with a type-approved solution as quickly as possible.

To learn more about Alfa Laval PureBallast and Alfa Laval's approach to ballast water treatment, visit <u>www.alfalaval.com/pureballast3</u>

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Editor's notes

About Alfa Laval PureBallast

PureBallast, which was the first commercially available ballast water treatment system, is a chemical-free system sold and serviced by Alfa Laval. A vital component of the system is the Enhanced UV Reactor, which was developed jointly by Alfa Laval and Wallenius Water based on Wallenius Water Technology.

About Alfa Laval

Alfa Laval is a leading global provider of specialized products and engineering solutions based on its key technologies of heat transfer, separation and fluid handling.

The company's equipment, systems and services are dedicated to assisting customers in optimizing the performance of their processes. The solutions help them to heat, cool, separate and transport products in industries that produce food and beverages, chemicals and petrochemicals, pharmaceuticals, starch, sugar and ethanol.

Alfa Laval's products are also used in power plants, aboard ships, oil and gas exploration, in the mechanical engineering industry, in the mining industry and for wastewater treatment, as well as for comfort climate and refrigeration applications.

Alfa Laval's worldwide organization works closely with customers in nearly 100 countries to help them stay ahead in the global arena. Alfa Laval is listed on Nasdaq OMX, and, in 2015, posted annual sales of about SEK 39.7 billion (approx. 4.25 billion Euros). The company has about 17 500 employees.

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