

UV Ballast Water Management System
Purestream™

Atlantium Marine's Purestream™ Ballast Water Management System Heads for IMO and USCG Type Approval

Atlantium Marine announces that it has completed the installation of its proprietary UV-based ballast water management system (BWMS), Purestream™, onboard a 3,854 TEU container vessel — Zim Qingdao — and is now in the shipboard testing phase to acquire IMO and USCG type approval.

The installation of the Purestream BWMS system was completed while the vessel was in voyage in lieu of drydocking. Atlantium's unique ability to provide the Purestream system as a full turn-key solution made this installation possible. The Purestream complete solution is inclusive of 3D and engineering services, documentation generation for class approval, manufacturing of all piping, platforms and support, wiring, adding indicators to the existing valves to record any bypass, and complete system installation, integration and commissioning.

Purestream's small footprint and flexible design allows for a separate-skid installation of the ballast filter, system components and the vertical-mounted UV unit in the space constrained engine room.

Purestream uses filtration in combination with Atlantium's proven medium pressure ultraviolet (UV) technology to achieve unparalleled results. The system is validated to operate at minimum retention times (≤ 24 -hours) following treatment of 100% of the maximum flow under difficult water conditions with UV transmittance as low as 40% UVT.

Earlier this year, Atlantium announced the finalization of stages of the validation process — the readiness evaluation and the land-based validation in accordance with the IMO BWMS Code and the USCG Ballast Water Discharge Standard (BWDS), with Lloyd's Register (LR) as independent laboratory and Niva as the test facility in Norway.

Atlantium's Purestream BWMS is designed to limit the operational restrictions of the ballast process by enabling the treatment of the worst water conditions with minimal to no retention time restrictions. This is accomplished using a unique approach to fully automate control, minimizing restrictions on the flow and enhancing the filter back wash mechanisms to prevent filter clogging.

