

RETROFIT—BALLAST WATER TREATMENT SYSTEMS



January 2020

From July 2019 onwards Conceptia has completed 02 Ballast Water Treatment System Retrofit projects of the UV type systems: Optimarin as well as Bio-Sea. While the installation of the Optimarin system has been stated for April 2020, the engineering has been completed by Conceptia well ahead of scheduled docking. The Bio-Sea system is already under installation in Poland.



Image Credits: Bio—Sea®

The Optimarin system installed is for a large tanker. We have been able to find space to accommodate the filter and the UV reactor (02 numbers each) in the pump room of the ship. The system uses the existing Ballast Water Pump and the new operating point of the Ballast Water Pump has been determined using Pipe Flow® software. The electrical load balance analysis showed that the available power is sufficient to operate the system both in IMO mode as well as in the USCG mode.

The most challenging job has been to prepare the new layout of pipes and cable trays; this has been achieved by working with CADMATIC by importing the 3D point cloud scan. All collision has been determined and renewed. New foundations have been created and production drawings issued, complete with all BOM, inclusive of bulk material.



Image: Piping 3D Model.

To know more about Conceptia's BWTS Retrofit: [Click Here.](#)

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