

3D SCANNING, DESIGN & ENGINEERING PREPARE LPG TANKER FOR BWT RETROFIT

ALFA LAVAL PURE BALLAST 250 M³/HR

Goltens Green Technologies was asked to carry out a 3D laser scan and to deliver a preliminary design and a detailed engineering package for Komaya Shipping Co Pte Ltd. Komaya had selected an Alfa Laval Pure Ballast system for its LPG Tanker Chelsea and needed to make preparations for its eventual installation and wanted to prepare for and execute it in the most efficient manner.

The Goltens Green Technologies expert team flew to Curacao where vessel was undergoing drydock and completed the 3D scanning in one day.

Goltens then prepared a first draft of the proposed design to review and come to agreement with the owner and ship's engineers prior to moving forward with detailed engineering.

After a thorough review, the preliminary design was agreed upon and detailed engineering was performed with Goltens delivering detailed pipe isometrics, foundation drawings as well as a full installation manual.

BALLAST WATER TREATMENT RETROFIT WORK CONSISTED OF:

- 3-D Scanning and Modeling
- Creation of draft design for review/approval
- Detailed engineering inclusive of pipe isometrics, foundation drawings and an installation manual.

BWT RETROFIT PLANNING RESULTS:

This vessel is one of six that will be retrofitted from 2014 onward. The actual installation will most likely take place during normal operation of the vessel and the detailed and extremely precise drawings will allow for prefabrication of all piping and foundations so the installation time will be minimized with limited to no rework anticipated.

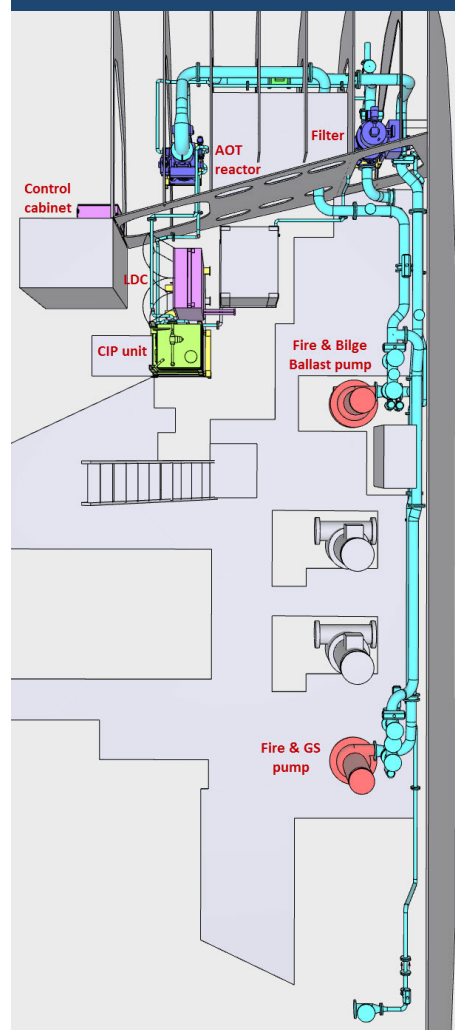
A second vessel for Komaya Shipping has recently been laser scanned as well. Unlike on sister vessels, this second vessel is quite different from the first one, so a new design will be required.

PROJECT FACTS:

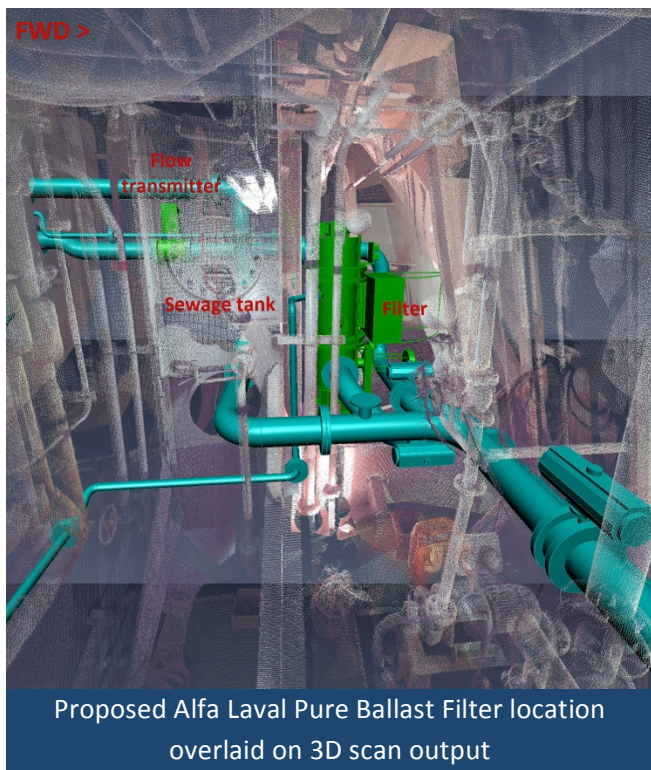
Vessel type:	CHELSEA
Ballast flowrate:	LPG Tanker
Total ballast water capacity:	200 m ³ /hr
Ballast treatment system:	3050 m ³
	Alfa Laval Pure Ballast
	250 m ³ /hr



3D PDF image of the vessel with Ballast Water Treatment



Sample Design Overlays on 3D Scan Output



3D PDF Images of the Areas depicted above

