

TURNKEY OPTIMARIN BALLAST WATER TREATMENT RETROFIT

SCANNING, DESIGN, PREFABRICATION AND INSTALLATION OF AN OPTIMARIN OBS SYSTEM

A leading seismic survey vessel operator selected Optimarin's 334m³/hour OBS ballast water treatment system for one of its research vessels. Goltens had previously completed two successful retrofits for this owner and was awarded this retrofit as well. The timeline was relatively short with only a 3-month window between project kick off and completion of the installation.

SCOPE OF WORK:

Having completed hundreds of ballast water retrofits on systems much larger with greater design challenges, Goltens was confident it could meet the deadlines. The scope was for a turnkey delivery inclusive of:

- 3D scanning & vessel survey
- · Basic and detailed engineering
- Class approvals
- Procurement & Prefabrication
- Project Management
- System installation and Commissioning
- Installation supervision

EXECUTION:

Goltens completed the 3D scanning onboard in a single day and delivered the baseline concept design to the client 11 days later. Moving quickly to get agreement on the conceptual design, Goltens design engineers delivered the detailed engineering less than 30 days later.

With roughly a month remaining prior to the planned start of the installation, Goltens moved quickly to acquire the necessary materials and prefabricate the pipe spools, brackets, valves and other materials and get them delivered to Norway.

Goltens deployed a Supervisor, an electrician and 3 pipe fitters to the vessel and completed the installation from end to end in only 15 days.

TIME LAPSE VIDEO:

To see a time lapse video of the installation phase of the project please visit: https://youtu.be/cUGJek8ty7Y

PROJECT FACTS:

Ship Type: Location: Retrofit Shipyard: BWTS System:

Turnkey BWTS Retrofit

Research Survey Vessel Stavanger, Norway Rosenberg Shipyard Optimarin 334m³/hr



Figure 1: Research vessel at shipyard in Stavanger

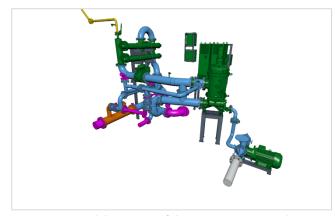


Figure 2: 3D Model overview of the Optimarin system design



Figure 3: Prefabricated materials delivered to the shipyard





Figure 4: Goltens' team rigging piping into place



Figure 5: Making required adjustments to deck plate supports

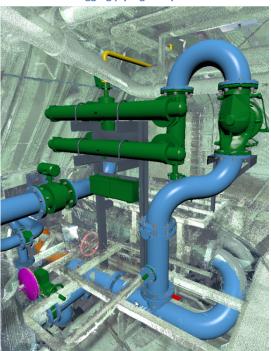


Figure 6: 3D model overlaid on 3D scan



Figure 7: System installed onboard as modeled

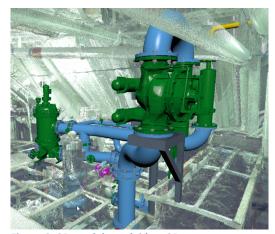


Figure 8: 3D model overlaid on 3D scan



Figure 9: System installed onboard as modeled