BUILDING A BETTER PRODUCT TANKER

According to Fernando Granda, it is standard procedure after the delivery of every newbuilding to perform a project review. The review summarises lessons learned during the shipbuilding process, and also includes internal suggestions for improvements and comments from the ship’s crew, all of which contribute to future design improvements. In the following, he describes some of the improvements that have been implemented in the latest newbuildings at GSI which are accomplished at the rate of approximately two vessels a year.

**Ergonomic bridge arrangement**
This optimisation has been carried out in two steps. First, we replaced the console-type arrangement used in our first vessel with an integrated bridge design. The second step was taken in order to comply with an IMO guideline on ergonomic criteria for bridge equipment and layout, which was also adopted as a requirement by the Danish Maritime Administration. This led us to improve bridge visibility and navigator ergonomics with well-defined working areas and a symmetrical design that produces an improved cosmetic appearance. The four consoles of our original design have been reduced to two in the new design to create a more ergonomic and spacious wheelhouse.

**Larger, more comfortable ship’s office**
The ship’s office has been optimised to enable up to six officers to work together in the same room. The main purpose of this large and ergonomic ship’s office is to provide room enough to allow officers to comfortably work together, rather than working separately in their cabins. The new features include improvement of the interior design and equipment.

**Updated galley arrangement**
One of the biggest challenges in China is to find a galley furniture maker able to deliver European-standard items. It took us more than a while to find the right maker, but finally we were able to replace the old stainless steel cabinets. Apart from a better cosmetic appearance, the new units make it easier to perform cleaning which is one of the biggest challenges in a ship’s galley. Now, all the doors can be easily removed to facilitate cleaning. Handles and latches have been improved as well. Flush-mounted electrical appliances are the second achievement in this galley optimisation. Now, all lamps, speakers, phones, and electric sockets are flush mounted and water splash proof. The previous arrangement looked more like an engine room than a living space. The new galley design has a clean and friendly appearance.

**IT café**
New vessels are now provided with an IT café, which includes three PCs and one printer. As the vessel is also equipped with a Sevsat antenna and a 24-hour Internet connection, crew members can use the café facilities to easily keep in touch with their families via e-mail, Facebook, Messenger, etc.

**Looking ahead**
In addition to these design improvements, LT will continue in the future to focus strongly on fuel optimisation in order to reduce our emissions and to mitigate our environmental impact.

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FERNANDO GRANDA, LAURITZEN TANKERS’ SITE MANAGER AT GUANGZHOU SHIPYARD INTERNATIONAL (GSI) IN CHINA, SHARES SOME OBSERVATIONS ABOUT OPTIMISATION OF VESSEL DESIGN.