

# **AFLOAT REPAIRS**



## **Engine Overhaul and Customization Restores Bulk Carrier**

### Overview:

CTS was approached by the vessel owners to replace a damaged Yanmar 6EY22W engine onboard one of their bulk carriers. CTS, with their Yanmar specialist (twelve years of experience), compiled a six-man team to ensure that the overhaul went smoothly. The team was met with a challenge when it came to getting the new engine inside the engine room as the skylight was small, and the engine itself was over the safe working load limit of the vessel's crane. There were also no lifting points or standard procedure to lift the engine. However, after careful planning, the team was able to come up with a tailor-made solution.

## Scope of Works:

CTS conducted a risk assessment for the necessary lifting works, and new strong points were welded in the engine room to facilitate the transfer of the engine and to mitigate the risk to a minimum. Despite the restricted entry space for the engine, the team was able to solve the issue by dismantling the engine in the CTS workshop and customizing it to fit the existing bedplate. CTS specialists also designed and fabricated a structure to lift the engine vertically so it could easily pass through the skylight. Once the engine was mounted on the bedplate and built up, the electrical system was modified and made compatible with the new engine. The engine was commissioned, and all trials carried out were witnessed by the class surveyor.

#### Result:

The job was complicated by the limited space of the engine room; however, the CTS service team was able to adapt and worked efficiently to complete the overhaul. The scope of work was completed within seven days. The client appreciated CTS's professional and thorough approach and was satisfied with the team's quality work.

**CLIENT:** Vessel Owner

**VESSEL:** Bulk Carrier

**DATE:** September 2019

**LOCATION:** Singapore

140
MANHOURS

6
PERSONNEL

**7** DAYS

O ACCIDENTS

#### Client Feedback:

"The job was executed very safely and professionally. The team was experienced in their work. The engineer had an excellent knowledge of the engine."

- Vessel Manager