



GOEREE DIESEL TANK REPLACEMENT

Venko Offshore awarded Conbit a contract for the offshore replacement of two diesel storage tanks on the Goeree platform located in the Dutch sector of the North Sea.

The tanks, over 35 years old, were starting to show signs of corrosion. The platform's owner, RWS (Rijkswaterstaat) decided that the tanks needed to be replaced and assigned the project to Venko.

Conbit was given this project because of our below-deck lifting know-how and extensive experience in offshore operations. The project was executed during the winter.

Each of the new tanks, including its supporting structure, weighs approximately 9 tonnes, is 2.1 m in diameter and is 6 m long. The tanks are positioned under the helideck and supported by saddles and beams.



Picture: Preparing rigging and cutting steel

PROJECT

- ✓ ENGINEERING
- ✗ PROCUREMENT
- ✓ INSTALLATION

Client

Venko Offshore B.V.

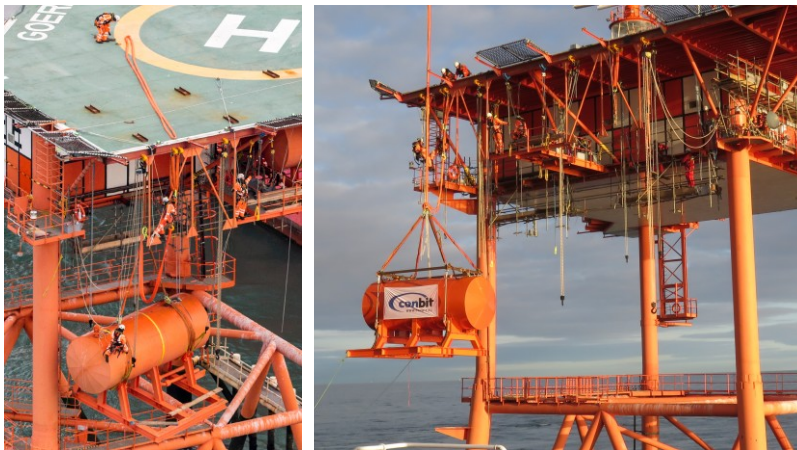
Year

2017

Project Name

Goeree Platform Diesel tank exchange

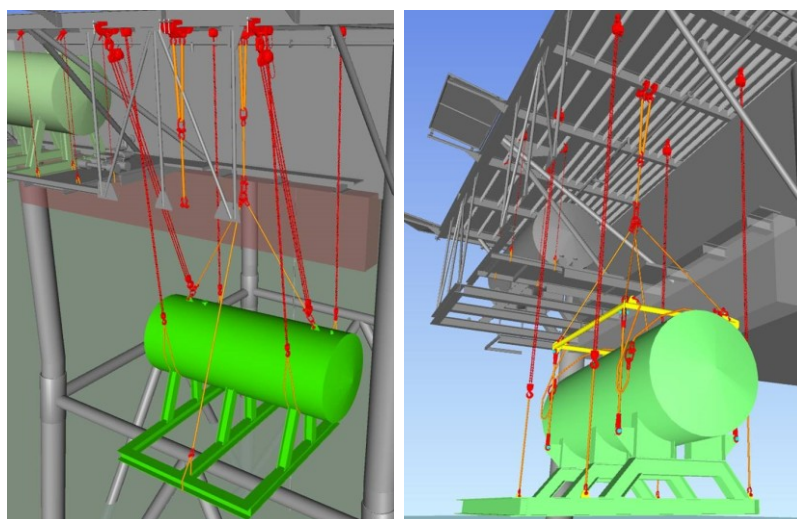




Picture: Rigging and handover



Picture: offshore lifting of diesel tank



Picture: 3d project preparation

WINTER EXECUTION

Executing a project during the winter requires a special mindset. Daylight is short and there is a limited weather window for executing overboard works and offshore lifting operations. Conbit analyzed various marine spreads to find the best mix of costs, availability and operational suitability. This resulted in the client's final choice to hire the DP2 vessel Normand Reach.

Conbit analyzed several alternative solutions for the tank-replacement procedure. The chosen procedure involved replacing the tanks and their entire supporting structures in a long series of rigging and lifting steps using several sling configurations. As the tanks were so heavy, we needed to identify sufficient strong points and rigging equipment to execute the procedure effectively and safely.

The most interesting, and weather depending step in the procedure was the in-air hand-over of the suspended tanks to the offshore lift. We arranged all the steps and equipment in such a way that the two tanks could be replaced in series or in parallel (i.e. simultaneously). Thus, we could optimize the offshore planning to the weather forecast at the time of project execution.

LIFT FRAME

With the old tanks we could use slings in an easy way because it did not matter that we damage these old tanks. With the new ones this was more challenging. The tanks are isolated with a thin metal covering shelf. The slightest impact will damage them. Therefore, we designed a dedicated lifting frame on top of the new tanks. Keeping the frame above the tanks in all the phases of the lifting procedure was the main design challenge.

"PREPARE WELL AND EXECUTE SMOOTH"