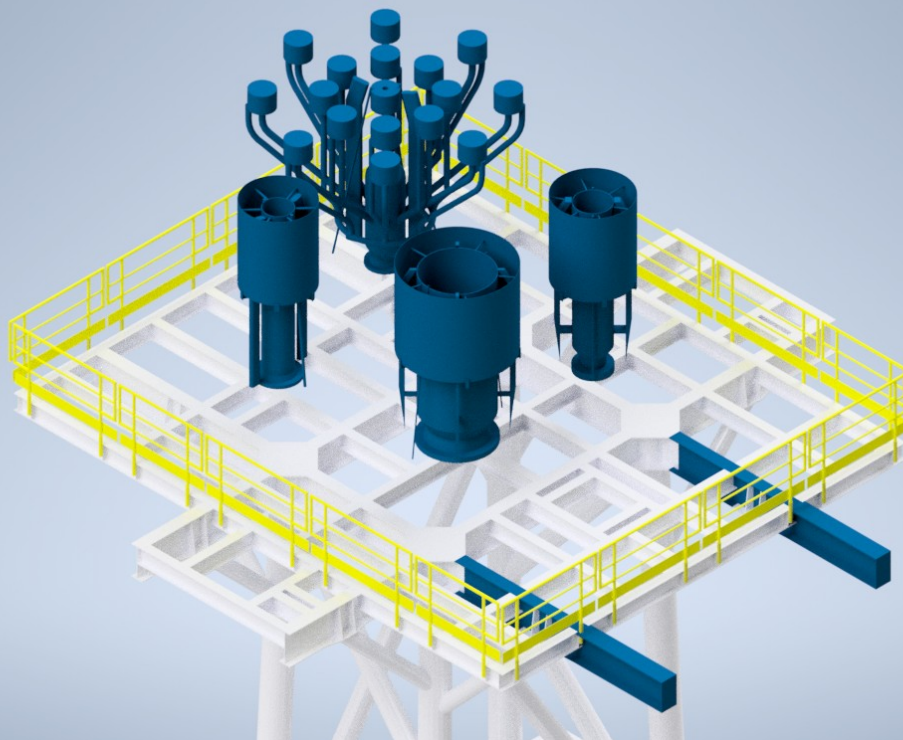




P80 FPSO FLARE TIP HANDLING STUDY

Conbit provided engineering support for the development of a handling methodology on the F80 FPSO in the Búzios field, Brazil. The four flare tips are located on a single flare tower top platform. The engineering study was developed to demonstrate how the flare tips could be removed and replaced during a future FPSO shutdown, following the lifting and handling routes predefined by the client. All flare tips will be lifted and transferred to the designated loading and unloading area on top of the pipe rack at EL. +60.202 m.



PROJECT

- ✓ ENGINEERING
- ✗ PROCUREMENT
- ✗ CONSTRUCTION

Client

Petrobras

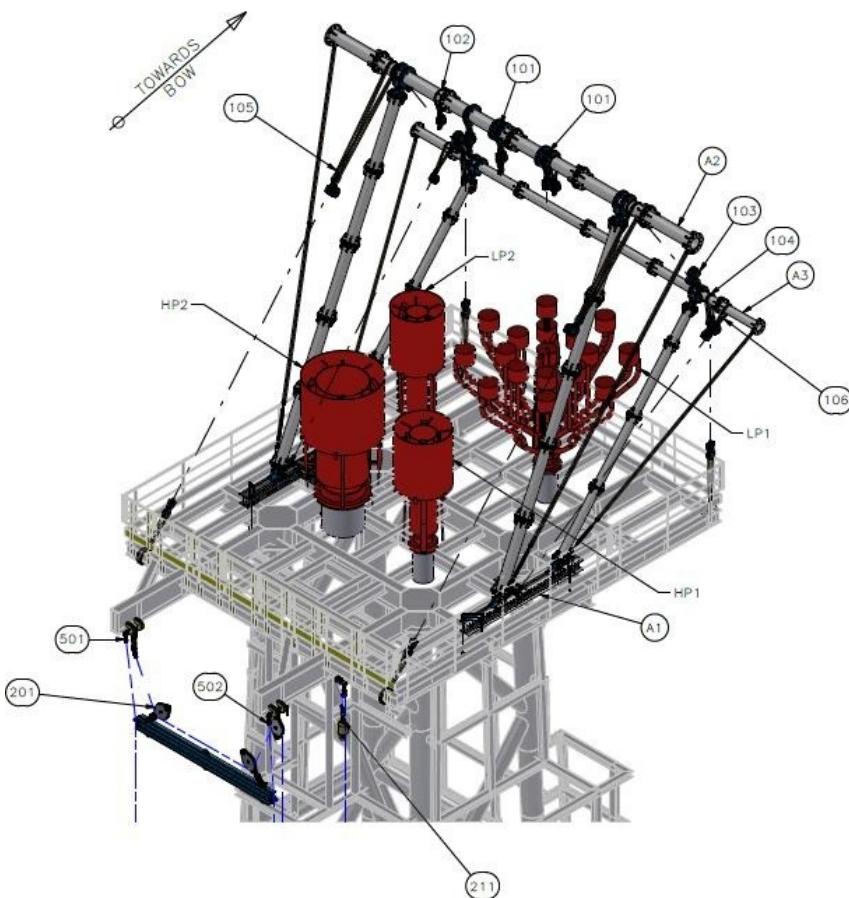
Project Number

31705

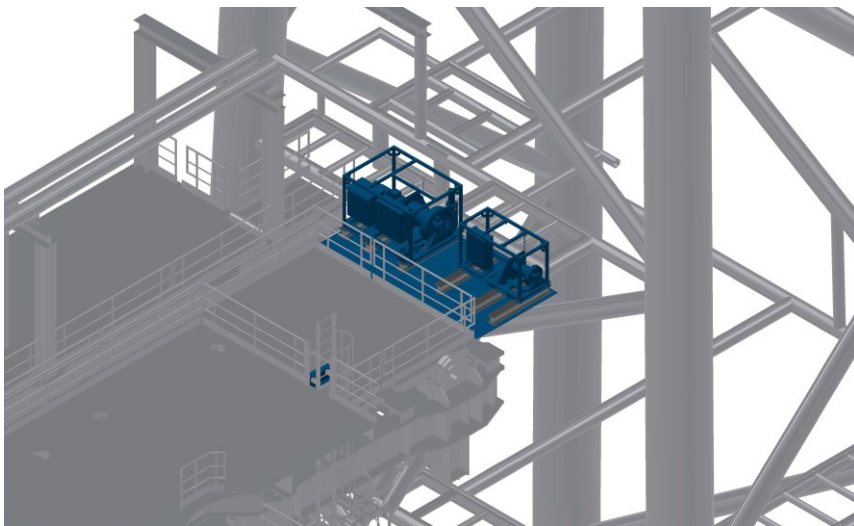
Project Name

P80 FPSO Flare Tip Handling Study





Engineered gantry system for flare tip replacement



Winches on deck extension

SOLUTION

Conbit engineered a gantry system for the replacement of all four flare tips. The system consists of a 9.7 m high gantry and a 6.9 m high strut. The gantry provides a maximum luffing distance of 7.7 m, creating the clearance needed to lift the largest flare tip, LP01, over the edge of the top platform and its outriggers. A main winch and service winch are positioned in the designated laydown area, while guidelines are used to control the flare tips throughout the lifting and handling operation.

CHALLENGES

The positioning of the winches required a deck extension at the designated location. The winches are mounted on base frames, which are bolted to the deck extension. The required interfaces for the guidelines were identified and aligned with the client to ensure compatibility with the existing platform structure. In addition, special cut-outs in the grating and heat shielding on the top platform were required to allow the base frames to be installed directly onto the main structural steel of the platform.

EQUIPMENT

A 6 mT winch was selected for the PLE design to handle the heaviest flare tip, which weighs approximately 2,700 kg. The lifting system was designed to provide the required clearance over the top platform edge and its outriggers, allowing all four flare tips to be safely lifted and transferred to the designated laydown area.