

LARS Interface Frame

Installed on Floating Production Facility Operating in North Sea

Sector: Offshore

Client: Red 7 Marine & Offshore

Value: Unknown

Completion: 2015

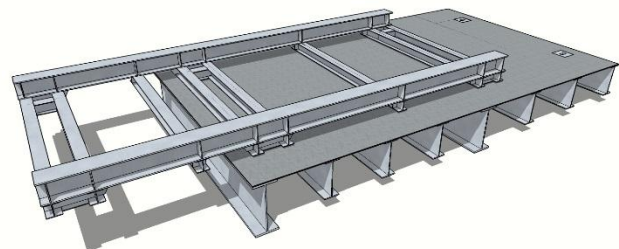
Technicus Consulting was appointed by Red 7 Marine and Offshore to provide structural design and consultancy services for a Launch and Recovery System (LARS) interface frame to be installed on the deck of a Floating Production Facility (FPF).

The interface frame was required to facilitate the installation and operation of both Diver LARS and ROV LARS units (independently) on the FPF deck. Due to reach limitations of the LARS unit available, The Divers LARS was required to cantilever over the edge of the FPF deck to provide clearance to an existing lower deck access stair at the side of the vessels hull.

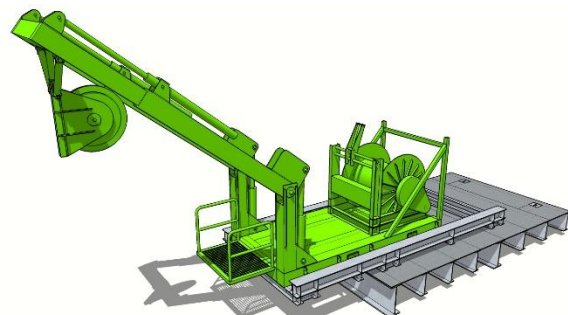
The interface frame was required to support the lifting loads generated by the operation of both LARS units, along with transportation and acceleration forces generated by the movement of the FPF. It's main function being to distribute these loads to the supporting FPF deck structure without causing overstressing in the deck beams.

The frame is designed to support both LARS units independently. This is achieved by rotating the interface frame through 180 degrees dependant on the LARS unit being installed. This was necessary to account for different base fixing points for each LARS unit, and differing clearances based on the reach and operation of each unit.

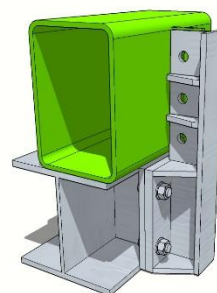
The interface frame also needed to be easily demountable so that the LARS units could be easily and quickly swapped. To facilitate this the frame is attached to the FPF deck using Twist-Lock ISO type container fittings which attach to key-plates on the underside of the frame and trimmer beams in the FPF deck structure.



LARS Interface Frame



Interface Frame with LARS Installed



ROV LARS Fixing Bracket