

CHAIN REMOVAL COMPLETED ON A MAJOR PLATFORM WITHOUT THE USE OF AN AHV

ACTEON

InterMoor, a Moorings and Anchors brand in Acteon's Engineering, Moorings and Foundations division, was contracted by a major operator to remove the platform and installation chain on a floating production unit in ultra-deep water. The project work scope for engineering, procurement, and fabrication was expanded to include offshore operations. The team used Claxton's* Diamond Wire Surface Saw. Offshore operations were successfully completed in July 2022.

THE CHALLENGE

The project scope was challenging as the chain was installed on the platform permanently with no intention of removal during the operating life. This required extensive research and engineering to identify the optimum removal methodology, tools, purpose-designed and built aids before cutting and removing the chain. Structural aids were designed and fabricated by InterMoor such as to require no modification to existing structures.

The scope of work expanded throughout the project to include most parts of the service line offered by InterMoor across project management and engineering, fabrication, shore base services, logistical support, and offshore personnel. Additionally, two third-party vendors were contracted to support the offshore operations. Coordination of the various service lines and third-party vendors to execute the offshore work with the ongoing challenges of COVID was especially challenging.

CUSTOMER GOAL

The operator's primary goal for this project was to safely remove nearly one mile (5,200ft) of 5in chain from the platform to increase the available topside payload. The driver behind this goal was to increase the tieback capability of the floating production unit (FPU).

OUR SOLUTION AND ITS COMMERCIAL BENEFITS TO THE PROJECT

We develop market leading services and integrated solutions.

- InterMoor's engineers developed a procedure to completely remove the chain without the use of an anchor handling vessel (AHV) or a heavy lift vessel. This was the major advantage of the selected methodology and a major win for the team. To that extent, this was a novel methodology and had to be qualified in great detail.
- In-house structural engineers, working closely with installation engineers, to design structural aids with human safety and structural safety in mind were also used.
- The structural aids were fabricated at InterMoor's Morgan City, Louisiana fabrication facility.

We work at scale with a proven track record for delivery

- InterMoor is well-known for delivering mooring life extension projects of this nature. Their global track record is available here.

We optimise the project to increase commercial value

- Confidence in InterMoor's offering and their diligence in reminding the client of their service lines when the need arose, made the client comfortable in expanding the scope of work for the benefit of the project.

PRODUCTS USED

- InterMoor used Claxton's* Diamond Wire Surface Saw on one of the four column tops due to hot work limitations on that column top. A Tyrolit SB pulling saw was used to avoid any potential sources of ignition and it was completely man-portable and easily wheeled into location for the cuts. The remote nature of the operation of the saw allowed for personnel to stay out of the line of fire of the very heavy chains, allowing for safe operations. The small footprint and robust spread are easily customizable for a range of cutting challenges.
- The team used Integricert, a portable load testing company, for a lifting beam for use on each column top. InterMoor's structural engineers worked closely with Integricert and installation engineers to expand the capabilities of the lift frame to make it fit for purpose.

* Claxton is a Cutting and Decommissioning brand in Acteon's Energy Services division



We optimise the project to increase commercial value

Chain guide fabrication