NORTH SEA DECOMMISSIONING PROJECT

Case Study October 2023

Project Overview

Mactech were engaged by our client to conduct operations on a North Sea Decommissioning project.

Activities associated with the project were conductor guide frame cut and recovery and conductor removal. There were two conductor guide frames with multiple cuts required and multiple 30” conductors with 20” casing as well as 30” conductors with 20” & 13 3/8” casing.

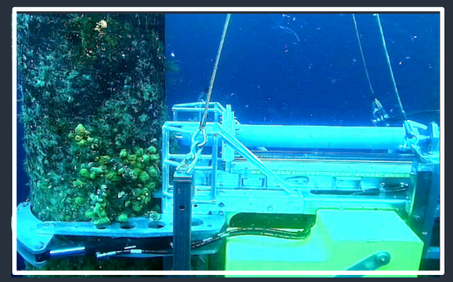
The Challenge

The mactech challenge was to produce cutting and drill and pin solutions that could carry out as much of the operations as possible with as few tooling spreads as possible.

Mactech carried our engineering support, cut analysis and clash checks of the tools and structure to ensure that the correct tools were assigned to the project.

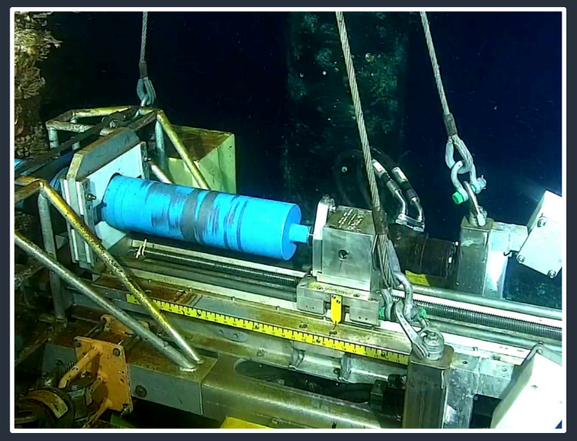
Due to the space constraints seen subsea mainly between the conductors, and the guide frames requiring angled cuts in order to ease the recovery process, mactech carried out the cutting operations with two different models of tool with a contingency tool for each.

Mactech also had two subsea drilling tools to assist with the pinning operations, this tool carried out all the hole coring operations to assist with the pin installation which would allow for safe recovery to deck as well as holding the inner strings in place ensuring there were no slippage of the product during recovery operations.



Mactech Supply

- 2 x 30” Diamond Wire Saws
- 2 x 48” Diamond Wire Saws with angled saddles to allow for 6 Deg angled cuts
- Zero Leak dual & quad port Hotstabs & Receptacles
- Offshore Supervisor and technicians



The Outcome

Mactech Europe manufactured multiple tools and buoyancy frames in a short time frame to meet the client project schedule. Normally the manufacturing time for all assets would have taken circa 8-10 weeks, however the operations team managed to design, build and test the full tooling spreads in a little over 5 weeks.

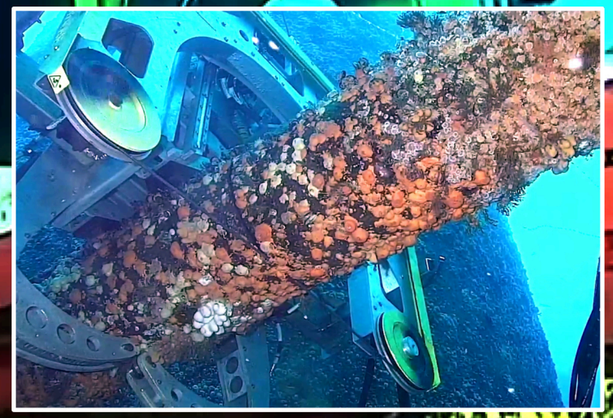
In a safe and successful scope that was completed ahead of schedule, Mactech Europe completed more than 60 cuts on various structures and 36 cores.

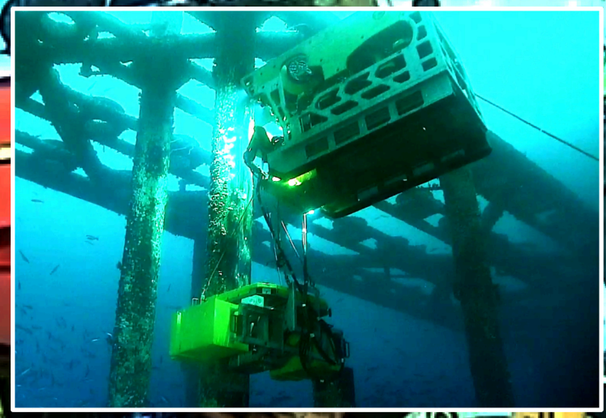
On average the 30” condcutors were being cut in 2.5 to 3 hours, the 48” cuts on the guide frames were taking in the region of 3.5 to 4 hours, with the coring operations also taking 3.5 to 4 hours.

All of the operations were completed quicker than anticipated and in comparison to the on-shore trials

All tools were set up to be ROV operable, with the majority of the tools having an in air weight of 400-500kgs, Mactech Europe managed to get the in water weight of the tools all below 95kgs with custom buoyancy design and modules due to the space constraints making it easy for the ROV to handle and locate onto the targeted cut or drilling location.

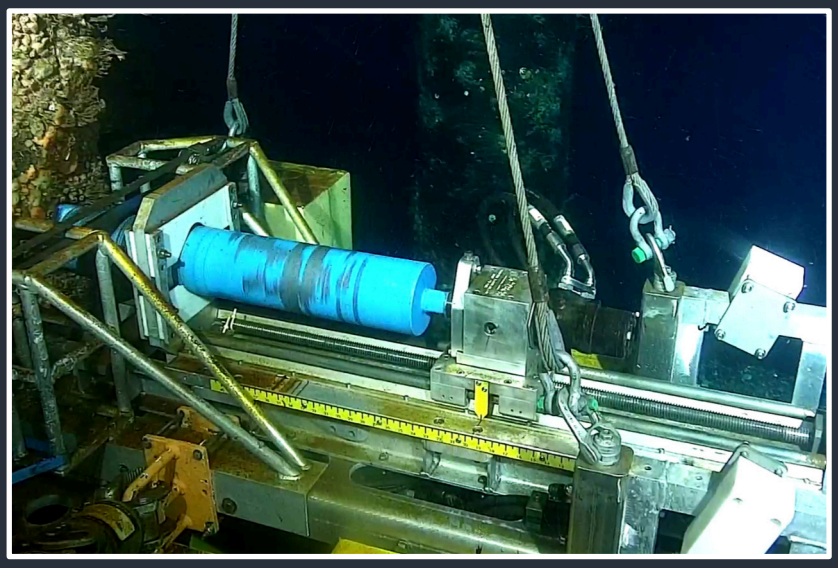
All cuts and coring operations were carried with 100% ROV operations with the contingency deck spread only being used for deck testing. The drilling operations allowed for the ROV to install lifting pins into the conductors to allow for safe recovery to the topside.





Mactech
(EUROPE) LIMITED

Why Choose Us?



Mactech Europe's experienced multi-skilled technicians specialise in providing the best services possible in the most challenging environments

From standard applications to rope access, hazardous area, subsea or restricted access applications, Mactech Europe can develop a solution to meet our clients' requirements.

UK HEAD OFFICE

Mactech (Europe) Ltd.
Mactech House Riverdane Road
Eaton Bank Trading Estate
Congleton
Cheshire
CW12 1PN

+ 44 (0) 1260 281431
info@mactecheurope.co.uk

MACTECH ABERDEEN

Mactech (Europe) Ltd.
Mactech House
Howe Moss Drive Dyce
Aberdeen
Scotland
AB21 0GL

+ 44 (0) 1224 722666

MACTECH HOLLAND

Mactech (Europe) BV.
Mmoerbel 16
3371 NZ
Hardinxveld-Giessendam
Netherlands

+31 (0) 653 153 826

www.mactecheurope.co.uk