



SUBSEA PROTECTIVE STRUCTURE FOR EAST DAVY FIELD.

A bespoke solution drawn from Claxton's structural expertise.



THE PROBLEM

A major operator asked Claxton to provide technical advice and guidance for the design, specification, manufacture and supply of a structure to protect subsea distribution and umbilical termination assemblies for the Davy East field in the Southern North Sea.

The design of the structure needed to consider the seabed bearing strata and be fishing friendly so fishing nets and gravel boards could pass over it without snagging.



THE SOLUTION

Claxton designed the subsea protective structure to locate and fix to the seabed by means of its own weight. Four cruciform spikes under the protective structure aided fixing and prevented movement. These spikes were designed to cut into the seabed and anchor the unit in place.

The design also included extending legs that, had the protective structure sat higher than anticipated, would have dropped from the external structure to fill the gap between the unit and the seabed to avoid snagging areas for nets or gravel boards.

The protective structure was primarily fabricated out of rolled, whole-section structural steel. Internal steel plate grating panels facilitate access and equipment mounting. A premium-quality two-pack epoxy paint system with a shot-blasted surface preparation was applied to the structure's surface. As the unit could not be tied back to any existing cathodic protection system, it was fitted with sacrificial anodes to provide protection for its 10-year life.

Suitable points were provided to enable the subsea structure to be lifted using a single four-point lifting bridle. All the lifting points were certified as suitable for offshore/marine lifts. They were designed to avoid snagging of nets and gravel boards after installation.

Owing to its size, the structure was fabricated at a facility with quayside access so it could be loaded onto a vessel and shipped to its final delivery point of Hartlepool.

THE RESULT

The project, from contract award to delivery, was completed in three months and the structure remains in successful operation. The client commented favourably on the speed of Claxton's work and the technical merits of the design. Claxton completed the project ahead of time and on-budget.



The East Davy Structure during its onshore FAT.



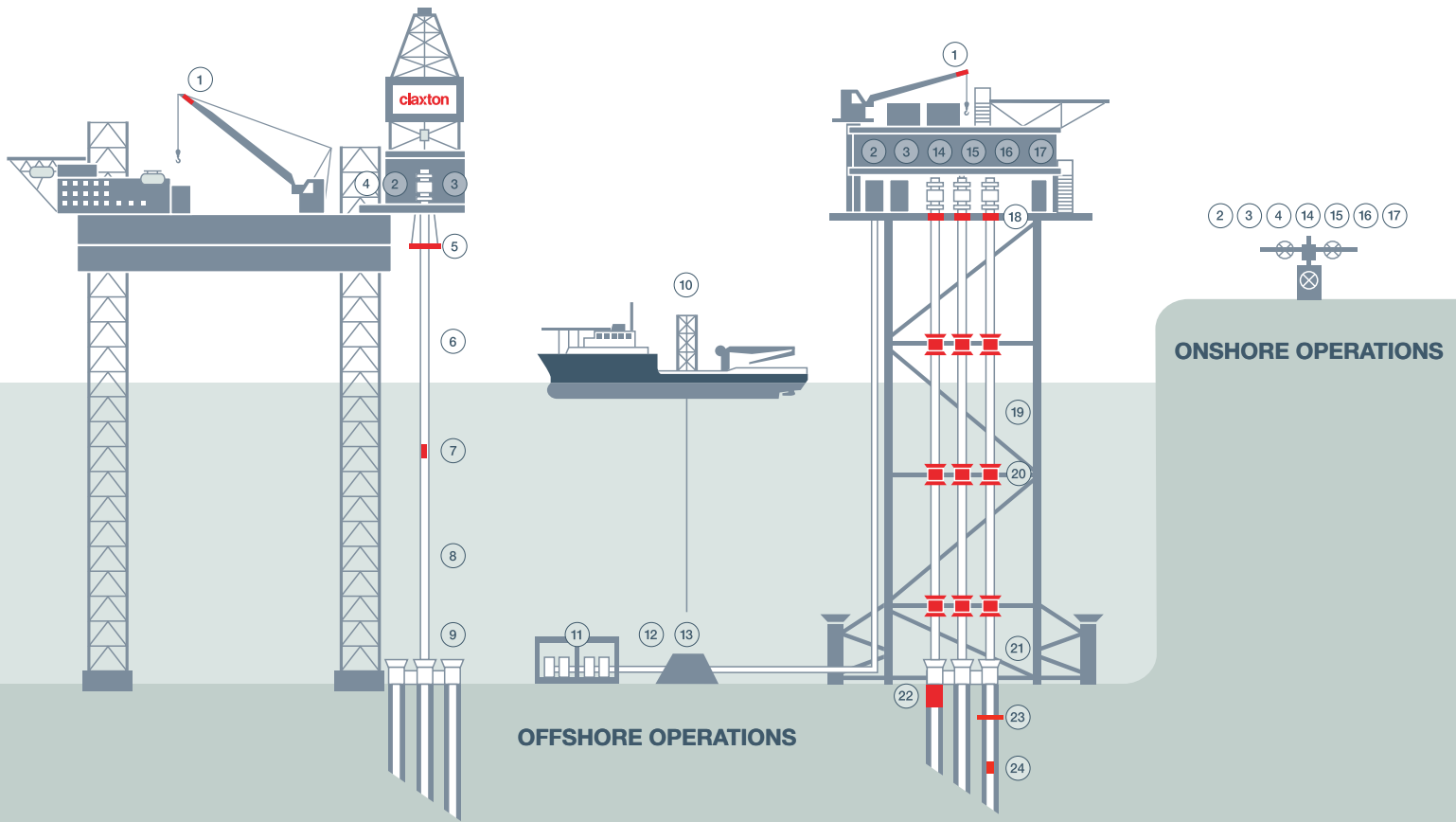
STRUCTURES FROM CLAXTON

Thousands of Claxton structural centralizers are in active use around the world and over 55 major developments benefit from our drilling templates – this experience in designing subsea structures extends to cost-effectively protecting your subsea assets.

MAKE IT HAPPEN.

Trust Claxton to make your project happen.

CLAXTON CAPABILITIES



Over 270 operators, contractors and rig owners have trusted Claxton to make their projects happen across the entire life of field – visit our website to find out why, or learn more about any of the products on this page.

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