



GLOBAL TECH 1 UMBILICAL PULL-IN

The Global Tech 1 is an offshore wind farm based in the German section of the North Sea. As part of the wind farm development, a new substation platform was constructed need to be installed and secured. The entire wind farm project is expected to generate 400MW capacity of onshore power.

Conbit was tasked with the removal job of all lifting equipment and aids used for lifting the substation and lowering the legs so it could be secured to the sea floor with suction anchors. Lifting booms were installed to reach areas out of reach from the platform crane and to be able to lift the wind turbine's electrical cables. The equipment was demobilized offshore.

THE POWER OF PREPARATION

Conbit prepared extensive plans and engineering designs for the lowering and lifting operations as well as how the equipment would be removed. Starting with the calculation reports and method statement, the project was prepared well in advance and all plans and engineering had to be approved by DNV GL – the marine warranty surveyor.



PROJECT

- ✓ ENGINEERING
- ✗ PROCUREMENT
- ✓ INSTALLATION

Client

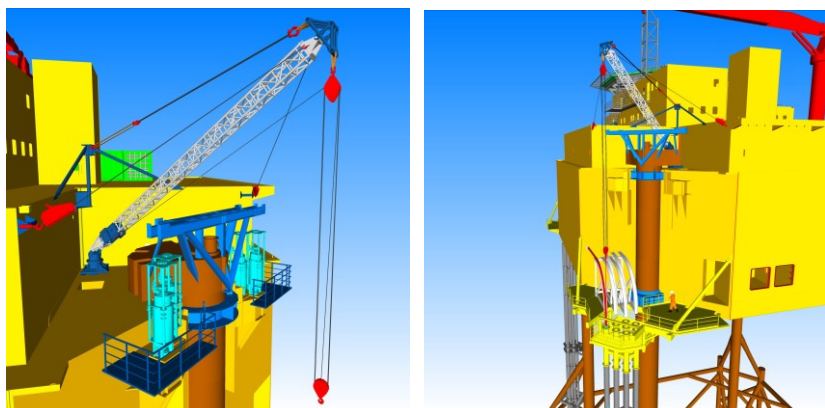
Keppel Verolme
Global Tech 1 GmbH

Project Number
30288

Project Name

Global Tech 1 offshore wind





Pictures: Profound engineering preparations



Pictures: Equipment preparation and installation



Picture: 2 corners equipped with a Conbit lift boom

INSTALLATION PREPARATION

As there was no sufficient crane capacity to install the electrical cables from the wind turbines into the substation, Conbit installed two lift booms onto the platform in the harbor of Keppel Verolme shipyard, each with a lifting capacity of 12t at a 11m radius. By positioning one boom in each of the two corners of the platform it allowed the installation of cables in both corners simultaneously and gave flexibility to the installation order offshore.

ADDING VALUE

Utilizing their in-house expertise, Conbit could performed the calculations to structurally reinforce the base of the crane. This was to ensure no further reinforcements were required in the hull.

Similarly, project efficiencies were increased and costs savings made as Conbit developed a crane that provided the extended capacity that could slew in locations that needed the lifting capacity. This additional reach could not be provided by the platform crane, which would've required costly upgrades.

**"OUR ENGINEERING
PLANNING AND CRANE
DEVELOPMENTS
ENABLED US TO ADD
VALUE TO THE PROJECT,
MAKING IT MORE
EFFICIENT OVERALL"**