

## THE POWER OF PREPARATION



# HALFDAN CRANE BOOM REPLACEMENT TOTAL DENMARK

On the Total Halfdan Platform in Denmark, the existing crane boom needed to be replaced because it was corroded, and its capacity has been downgraded. Conbit was awarded the contract to replace the boom without the use of a crane vessel.

The Halfdan Field, located approximately 250 km west of the Danish west coast in the North Sea near the German border, has two production complexes, Halfdan A and Halfdan B, as well as an unmanned wellhead platform, Halfdan CA. Conbit performed offshore lifting and handling services on the processing platform of Halfdan A.



*Picture: New crane boom lift with the help of old crane*

### PROJECT

- ✓ ENGINEERING
- ✗ PROCUREMENT
- ✓ INSTALLATION

Client  
Total

Project Number  
31393

Project Name  
Halfdan Crane Boom  
Replacement



# HALFDAN CRANE BOOM REPLACEMENT TOTAL DENMARK

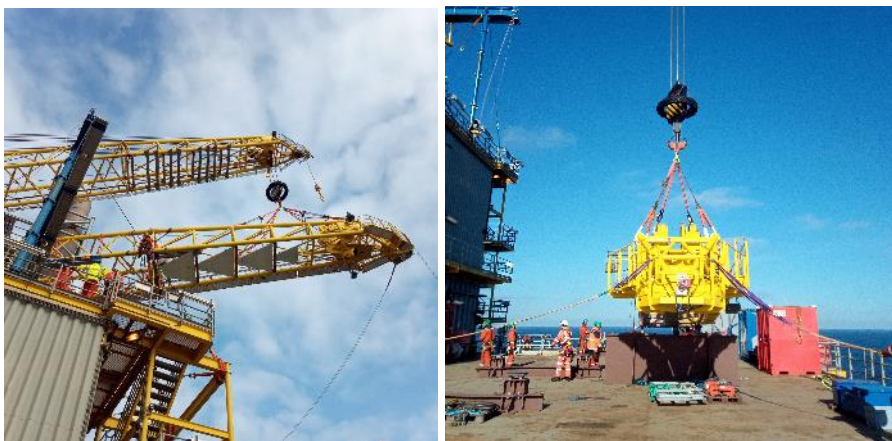
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*Pictures: Knuckle boom crane in operation, rope access on crane*



*Picture: North gantry lift with old crane boom*



*Picture: Lowering old crane boom to the gantry, lifting new crane boom*

## THE PREPARATION

After conducting a site survey and gathering the relevant information about the platform, two gantries were designed with the capacity to support the weight of both the existing and the new crane booms. The two crane booms shall be exposed to wind and other dynamic loads during the whole operation. This is why the structural load calculations for each phase of the project were a significant part of the preparation process. After meticulous preparation, a rock-solid project plan for the operation phase was ready.

## THE OPERATION

The operation was started with installation of the gantries. The existing platform boom was used to lift the 3 new boom sections from the supply vessel that were positioned on the two Conbit gantries afterward. The existing crane boom was lowered onto the support gantries from where it was disconnected from the pedestal. This disconnection was carried out by lifting the boom base and disconnecting it from the pedestal. The new crane boom was skidded into position for connecting to the pedestal. Once connected, all crane blocks and wires were installed. The old crane boom was removed in reverse order by the use of the new crane as a last step of the operation. Both the Conbit crew and the operator were satisfied with the result. The tailor-made solution was delivered successfully without any shutdown days or any incident in challenging times due to weather conditions and the pandemic.

**"AN IMPROVED WAY OF WORKING AND THE METICULOUS PREPARATION BY CONBIT RESULTED IN A SMOOTH OPERATION."**