

PROJECT SHEET

JOTUN A, NORWAY
ENGINEERING, LIFTING SERVICES AND
PROJECT MANAGEMENT SERVICES

BOSKALIS

Royal Boskalis Westminster is a leading global marine contractor and services provider. With safety as our core value, we offer a wide variety of specialist activities to the oil & gas and renewables sectors. These activities include marine installation and decommissioning, seabed intervention, marine transport and services, subsea services and marine survey. In addition, Boskalis is a global dredging contractor, provides towage and terminal services across the globe and delivers marine salvage solutions.

By understanding what drives our clients we are able to provide the solutions that enable them to meet their specific business goals. For this reason we are constantly looking for new ways to broaden and optimize our offering and are committed to expanding our proposition, supported by our financial strength.

With our committed professionals in engineering, project management and operations, 900 specialized vessels and an unprecedented breadth of activities in 90 countries across six continents we help our clients in the offshore industry push boundaries and create new horizons.

LIFTING TURRET SECTIONS JOTUN A

JOTUN A FPSO

The Jotun A FPSO, a 92,000 DWT FPSO capable of producing 70,000 bpd, began producing in 1999 on the Jotun field (Norway).

As part of Vår Energi's investment in increased oil recovery from the Balder field in the North Sea an upgrade of the Jotun FPSO is required. The Balder Future project will extend the life of the field (PL 001) by 2045, giving Norway's oldest license a lifetime of 80 years.

The upgrade was contracted under the coordination of Rosenberg Worley in Stavanger. The upgrade includes an overhaul of the turret, pipes, process equipment, hulls, marine systems, living quarters, control and security systems. The FPSO is scheduled to be re-installed between the Balder FPSO and the Ringhorne platform during summer 2022.

Boskalis performed the engineering and prepared the method statements for the lift off activities from the Jotun A FPSO its turret, gantries and turntable.

Due to the outreach, height and capability one of the few sheerlegs capable to execute same is the Taklift 4. The lifting was executed in Stavanger (Norway) by the Taklift 4 with 30 meters fly-jib assisted by AHT Sapphire, both Boskalis own

FEATURES

Client	Rosenberg Worley AS
Location	Stavanger, Norway
Period	August 2020
Contractor	Boskalis



A Marine Spread: Taklift 4 in Fly-Jib configuration, tug Sapphire and Smitbarge 11
B Lifting of upper Gantry



equipment, and under guidance of a Boskalis Heavy Lift Supervisor.

The lifting service was performed following the below sequence:

- **Step 1.** The upper Gantry (estimated weight 75 t ex. rigging)
- **Step 2.** The lower Gantry (estimated weight 135 t ex. rigging)
- **Step 3.** Lifting off the Turntable including lower part of Swivel (estimated weight 590 t ex. rigging)
- **Step 4.** Turret (includes torsion box with an estimated weight of 200 t, ex. rigging, and which may be executed as a separate lift) (estimated weight 1090 t ex. rigging)
- **Step 5.** Lifting Torsion box of Turret (estimated weight 200 t ex. rigging), after Turret is settled on quayside

After completion Boskalis was happy to receive client's positive feedback and complements on a job well done, well within the anticipated time frame.

SAFETY

The project was executed with an excellent safety performance by vessel crew's and project personnel achieving the safety targets set at the kick off of the project.

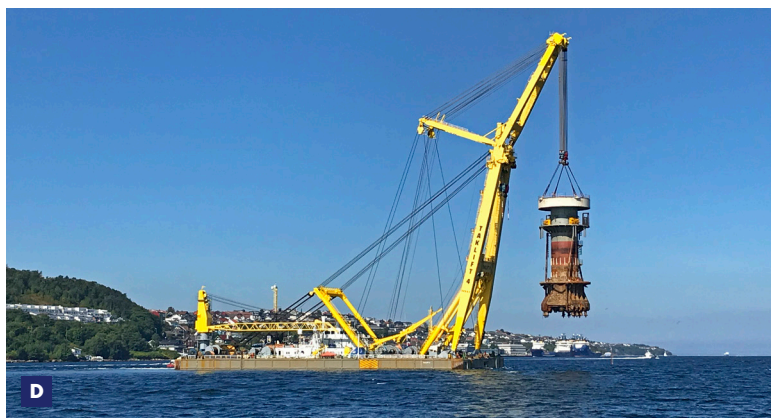
CONCLUSION

The project was an excellent example of the combined expertise of several departments within Boskalis.

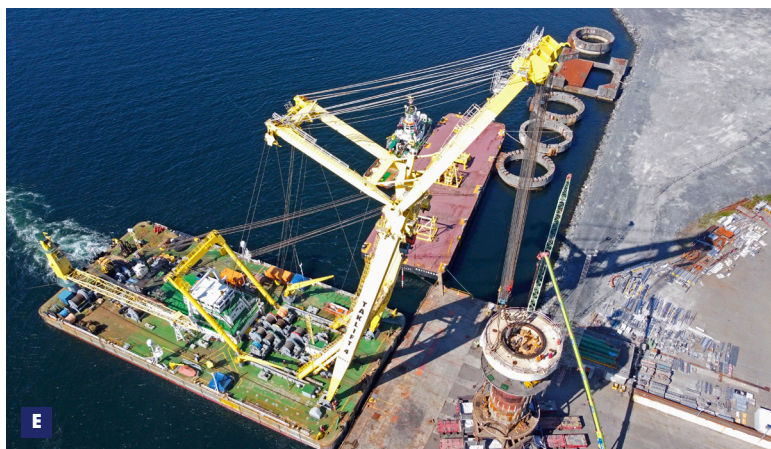
Maintaining the highest safety and sustainability standards, Boskalis provided innovative and competitive all round solutions to our clients in the civil construction sector.



C Lifting of turntable



D Turret safely removed and transported to quayside



E Lifting of Torsion box