

BOSKALIS ENERGY SOLUTIONS

Boskalis is a leading global dredging and marine expert. With safety as our core value we provide innovative, sustainable and all-round solutions for our clients in the energy market. Realizing projects in remote locations with a heightened environmental focus is one of our specialties. Under the brands Boskalis, Dockwise, Fairmount, VBMS and Smit Lamnalco we offer more services than any other company in our industry, making us your next one-stop solution provider.

We support the development, construction, maintenance and decommissioning of oil and gas import and export facilities, fixed and floating exploration and drilling facilities, pipelines and cables, and offshore wind farms.

COROCORO CPF PROJECT

Corocoro is an offshore block located in the Gulf of Paria to the west of Trinidad. The field development provides for the drilling of 24 oil wells and the installation of the required structures such as platforms, temporary and permanent floating production units, the Nabarima FSO for storage and loading, and 44 kilometers of submarine pipelines.

The Central Production Facility platform (CPF) consists of three main structural elements, a main platform where 27 pieces of equipment are located including the main cranes and the integrated control room.

PROJECT SHEET

COROCORO CPF TOPSIDE

OFFSHORE TRANSPORT AND INSTALLATION

FEATURES

From	VHICOA, Puerto Ordaz, Venezuela
То	Gulf of Paria, Venezuela, via the Orinoco river
Client/Operator	PetroSucre (PDVSA 74%, Eni 26%)
Execution period	2010 - 2011
Vessel	Boa Barge 29 / Boa Barge 30

(3rd party equipment)



A Map towing route

B Float-over barge pre-positioned for final installation of the CPF module





COROCORO CPF TOPSIDE OFFSHORE TRANSPORT AND INSTALLATION

TRANSPORT AND INSTALLATION

Corocoro was one of the first projects for which Dockwise (and its consortium partners Dynamic Industries and Vhicoa) was asked to provide services such as project management, engineering, project execution, subcontracting, etc.

The project comprised the river and sea transport towage, float-over and hook-up of a Central Production Facility (CPF) and the installation of an interconnecting bridge between the CPF platform and a Wellhead platform (WHP), which was installed by ODL/OKI in 2005.

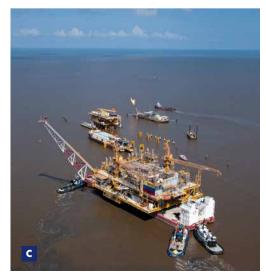
The Corocoro float-over was performed in a unique manner, as the very shallow water required Dockwise to use hydraulic equipment to lift the 7,400 mt topside prior to positioning it onto the piles.

ENGINEERING SCOPE OF WORK

Dockwise performed the transport engineering and detail installation design of the CPF topside and bridge between the CPF and WHP. The scope included river and sea transportation and float-over of the CPF, as well as the bridge load-out, transportation and offshore lifting and related engineering works. Dockwise also provided the field support during the operational phase of the project.

Key Details:

- Detail installation design of 7,400 t CPF topside in extremely shallow water;
- Mooring design for the whole mating process, including entry, mating and exit;
- Bridge installation design.



CARGO PARTICULARS

Туре	Central Production Facility Topside
Weight	7,400 t
Length	77.00 m
Width	53.00 m
Height	12.40 m

LOAD-OUT OPERATION

Discharging

Float-over installation



CONCLUSION

The Corocoro project shows that the services of Dockwise go beyond providing clients with semi-submersible vessels with unique capabilities and that the company can perform as an installation contractor for challenging projects. The extensive know-how that Dockwise has developed during the execution of numerous projects has proven to be a key asset in installing an offshore topside in a challenging environment.

Dockwise and its consortium partners were capable of controlling a wide spectrum of variables, such as the shallow water depth of only 6 m, the swell existing in the area and the coordination of all the subcontractors involved.

Corocoro is a typical example of a fast track project that demonstrates Dockwise's ability and flexibility to deal with challenging and rapidly changing circumstances, even without the use of Dockwise vessels.

- C Positioning of barge carrying the CPF module into pre float-over position; at the left the earlier installed WHP
- D Installation of interconnecting bridge between the CPF and WHP

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