

Project Datasheet

Clients	Stemat (VMBS, NKT, Van Oord)
Project	Gemini Cable Storage
Scope	Temporary storage of several subsea cables

1. Project Overview

The Gemini project is a 600MW offshore wind farm located at approximately 85km north/northwest of the Wadden islands Schiermonnikoog and Rottumerplaat, in the Exclusive Economic Zone of the Netherlands. The wind farm is constructed in the period 2015 - 2016. It consists of 150 wind turbines, the total installed capacity of 600MW produce electricity for 785.000 households.



Figure 1 • Cable loading of Blue Offshore's system 'BC02' on storage barge Stemat 92.

2. Scope of Work

Ultimate client NKT requested the provision of a flexible cable storage facility. Blue Offshore provided the client a complete cable storage and installation system consisting of a 23m outer diameter basket carousel able to carry 5,000Te of product, a loading tower assembly with loading arm, a 15Te tower tensioner and control system, a deck tensioner and other associated equipment, together with operational assistance. Stemat provided the storage barge. During the course of the project, the basket carousel was loaded and offloaded several times. The system consisting of the barge with the loaded basket carousel has been towed to various facilities for cable loading, re-spooling and storage purposes.

The scope of work included the following elements:

- Project management and engineering;
- Provision of a basket carousel and related equipment;
- Equipment mobilisation and commissioning;

- Deck layout, support for deck-strength, mooring and stability analyses;
- Sea fastening analysis;
- Provision of documented procedures for cable loading, re-spooling and storage;
- Crew to operate the basket carousel system during loading and unloading of product;
- Monitoring equipment during storage period;
- Support of client with cable monitoring and testing during storage period.



Figure 2 • Loading arm from within basket carousel.



Figure 3 • Basket carousel while being loaded.

3. Project Schedule

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|---|---------------------|
| • Start of rental period | Early December 2014 |
| • Cable storage, loading and re-spooling operations | January - July 2015 |
| • End of rental period | July 2015 |



Figure 4 • Project team during storage inspection.

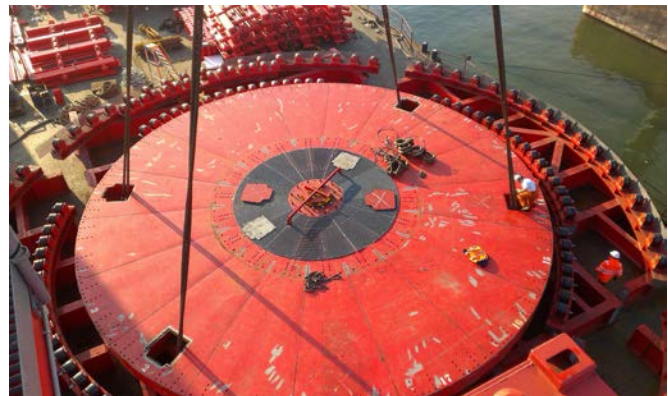


Figure 5 • Demobilisation: lifting the carousel floor.