

# Nearshore cable handling for offshore windfarm development

**ASSET**

Hornsea One offshore windfarm

**LOCATION**

Grimsby / Horseshoe Point, UK

Three tensioners in line over 3km beach to pull in export cables for the world's largest offshore wind farm

## **BENEFITS**

Versatile rental fleet provided three tensioner systems suited to cable and beach location

Technical support and advice throughout the project

Equipment with software capable of data logging all operations to ensure cable integrity

One subcontractor to deliver complete solution



## CHALLENGE

- Hornsea One is to be the world's largest offshore windfarm when commissioned
- The client was required to perform the shore approach to lay three cables from the CLV Ndurance cable laying vessel at 3.6km offshore to an onshore beach site
- Three cables were to be transferred from the vessel to the shore via a jack-up and two pontoons where tensioners were stationed
- Performance of each machine was to be logged to ensure cable integrity was not compromised. The work was required to meet a tight mobilisation schedule and timeline for completion.

## SOLUTION

- One 15Te tensioner was installed on a jack-up which involved designing some of the jack-up outrigger structure
- Two 10Te tensioners were installed on separate Linkflote pontoons which required design and supply of all the sea fastenings
- Manual and digital logs were taken for the activities during the pull ins with Sparrows PLC engineers implementing equipment upgrades to ensure data logging was performed
- Bespoke track pads were installed onto each of the tensioners with a special material to ensure higher friction was achievable and track pad to cable contact pressures were lower than the cables design limitations
- As well as supply of the tensioners, experienced Sparrows operators managed the equipment throughout the project.

## SUMMARY

### Equipment sale and rental

- Cable / pipe handling systems

1.



2.



3.



1. 15Te top loading tensioner and cable.
2. Cable runway.
3. 10Te tensioner on Linkflote pontoon.

Please visit [www.sparrowsgroup.com/contact](http://www.sparrowsgroup.com/contact) to find your nearest office

