



JONES BROTHERS

Walney Off Shore Windfarm Enabling Works Fabrication Works

APRIL 2017 TO JUNE 2017

Walney Off Shore Windfarm Fabrication Works Case Study

The Walney Off Shore Windfarm Enabling Works was undertaken by Jones Brothers at ABP Docks Barrow-in-Furness. The works involved the installation of eight pontoon guide columns, installed off the side of the dock wall and bedded into the sea bed.

Fabrication Works

Phoenix Engineering (Phoenix) was commissioned by Jones Brothers to undertake fabrication of the eight pontoon guide columns for use in the Walney Off Shore Wind Farm Enabling Works.

Each column was approximately 11m long, comprising a 2.3-ton steel universal column galvanized to marine standards. Each column was supported off the dock wall using an arrangement of fixed and adjustable brackets and bearing plates. The fixed brackets comprised rolled steel angles and the adjustable brackets comprised an arrangement of fixing plates and pin turnbuckles, each weighing approximately 100 kg.

Each interconnecting steel bearing plate or bracket comprised several individually manufactured steel parts, welded together to form the overall unit. The individual parts

were manufactured using water jet cutting to avoid adversely affecting the structural integrity of each part and the complete unit.

All steel fabrication was undertaken at the Phoenix Fabrication Unit. Completed units were sent off for galvanizing to marine standards, which included sand blasting all fabricated parts prior to galvanizing.

Once all parts had been galvanized and returned they were individually weighed and labelled, packed and then transported to site for installation by a specialist diving company.

All fabrication work was undertaken to BS EN 1090-1 with execution class 2, integrated with our ISO 9001 and 14001 procedures to provide Jones Brothers with a complete audit trail for its quality and environmental records.



Transportation

All fabricated structural members were weighed, labelled and transported to site for installation.



Pontoon Support Columns

The pontoon support columns were installed by a specialist diving company.