

# Bacton Gas Terminal

Lindapter Girder Clamps provided a weld free solution for installing a new roof to existing steel trusses.

## Project Background

**Location:** Bacton, Norfolk, UK

**Product:** Type CF and Type AF Girder Clamps

**Market:** Oil & Gas - On Shore

**Client:** Shell UK

**Contractor:** Munnings Construction Ltd

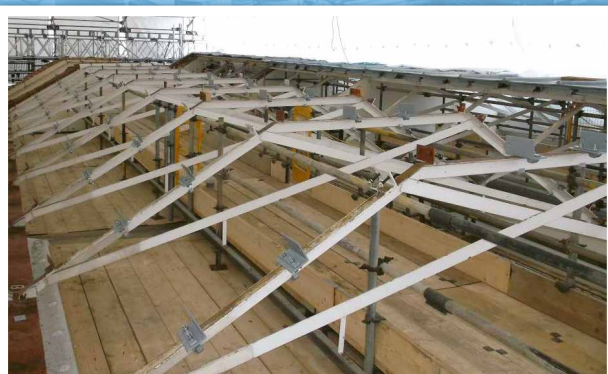
Bacton Gas Terminal, which covers an area of 180 acres, opened in 1968 to receive gas from three offshore pipelines in the North Sea to process into natural gas. The plant is of strategic national importance supplying up to one-third of the UK's gas supply as well as importing and exporting gas from Europe.

## Client Requirement

The gas terminal was over 50 years old and in need of multiple improvements and upgrades in order to prolong the life of the facility to gain three further decades of production. The first phase of the project involved the replacement of a dilapidated roof on the main administration building. Shell wanted to mitigate onsite risks in this Tier 1 COMAH facility and so asked bidding companies to remove hot works, such as welding, from their tender proposals.



Purlin support cleat secured to existing RSA



Weld free connection eliminated hot works in the field



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## Design Solution

Lindapter worked with Munnings Construction to design a weld free connection using high slip resistance Type CF and Type AF girder clamps for securing new rolled steel angles (RSA) to the existing steel roof trusses.

On one side of the assembly Type CF clamps hook onto the edge of the existing angle toe whilst on the other side Type AF clamps connect to the flat side of the angle.



## Installation

A temporary construction shelter was erected over the building before Munnings Construction could begin to remove the old roof. Once stripped and the existing steel trusses were exposed the new RSA purlin support cleats could be attached to them.

The Lindapter clamps made connecting the cleats quick and simple using just standard hand tools, which eliminated hot works in the field. New timber purlins were then laid across the supporting steel and fastened to the angle cleats to create the new roof structure.



## Result

Lindapter's clamps provided a weld free connection that eliminated hot works in the field and their associated risks. The girder clamps have independent technical accreditations, including the CE mark (ETA-13/0300), and TÜV approval, in addition the Type AF has ICC-ES approval.

These accreditations verify the load and slip capacities that led to a safe and successful installation. The client was impressed by the solution and has since awarded Phase Two of the project to Munnings Construction.



## Key Benefits



- ✓ High slip resistance for tensile and frictional loads
- ✓ No drilling or welding required
- ✓ Hot Dipped Galvanized finish offers a cost effective, low maintenance solution

[Click here for Type AF data >>](#)



[<< Click here for Type CF data](#)

