

# Jacket Launch & Template Levelling Systems

AmClyde Norson Engineering, part of the National Oilwell Varco group, has years of experience with Jacket Launch & Template Levelling Systems. In this time we have provided Pin Release Systems for jacket lift rigging, Upending Control Systems for righting and lowering barge launched jackets to the seabed and Template Levelling Systems for accurate positioning of subsea drilling templates. These systems can be operated by stored energy or by hydraulic power via an umbilical.

Jacket Launch & Template Levelling Systems

## Upending Control System



Typical Barge Launched Jacket being towed for installation in the Caspian Sea.

AmClyde Norson Engineering has installed, commissioned and tested over 100 valves on the jacket structure and ran over 4km of tube bundles.

Primary power source is nitrogen gas with back-up hydraulic power via an umbilical supplied from a support vessel.

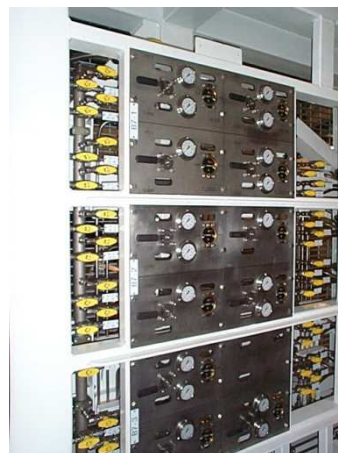
All umbilicals, winches and power units are supplied as a complete work package.

Valves positioned within individual compartments in each leg can be opened or closed from the Control Centre, allowing the jacket to be trimmed to the true vertical position, before being lowered to the seabed.

The Control Centre is designed to withstand the slam forces during the launch and protect the equipment prior to use. It is equipped with a bull's eye levelling gauge as well a two electronic tilt devices. These devices ensure the jacket is installed within allowable tolerance limits.



Walk-in view of typical Upending Control Centre



Panel & Isolation Valve layout



Commissioning Vent Valves within Jacket Legs

[www.amclyde-norson.co.uk](http://www.amclyde-norson.co.uk)  
[www.nov.com](http://www.nov.com)

[ANE.sales@nov.com](mailto:ANE.sales@nov.com)

7 Kirkshaws Road, Coatbridge,  
Lanarkshire ML5 5EY, Scotland, UK  
Tel : +44 (0)1236 428774  
Fax : +44 (0)1236 428166

 NATIONAL OILWELL VARCO

 AMCLYDE  
NORSON ENGINEERING

© Copyright – AmClyde Norson Engineering

# Jacket Launch & Template Levelling Systems

## Jacket Launch & Template Levelling Systems

### Template Levelling System



Typical Drilling Template being lowered to the seabed.



Typical ROV Panel and Jacking Cylinder used within the levelling system

Drilling Templates are used to allow pre-drilling operations to be carried out prior to the installation of the Drilling Platform. AmClyde Norson Engineering installed, tested and commissioned the hydraulic pipework, panels and cylinders on the template structure prior to carrying out a rigorous land based witness and acceptance test procedure on the Levelling System.

### Pin Release System



Pin Release System mounted from Jacket Lifting Beam.



Jacket Clevis with Lifting Beam installed and Lift Pins engaged.

Typical Lifting Beam connections for a Jacket lifted from the transportation barge by crane and placed in the sea before being trimmed and lowered to the seabed. AmClyde Norson Engineering can supply the complete turnkey package of Pin Release and Upending Control Systems.

Visit our Web Sites  
[www.amclyde-norson.co.uk](http://www.amclyde-norson.co.uk)  
[www.nov.com](http://www.nov.com)

#### Contacts:

For more information please contact:  
[ANE.sales@nov.com](mailto:ANE.sales@nov.com)

7 Kirkshaws Road, Coatbridge,  
Lanarkshire ML5 5EY, Scotland, UK  
Tel : +44 (0)1236 428774  
Fax : +44 (0)1236 428166

 NATIONAL OILWELL VARCO

**AMCLYDE**  
NORSON ENGINEERING

© Copyright – AmClyde Norson Engineering