



subsea
innovation



Subsea Engineering Services

J-Tube Seal Installation Tool

Innovative Design and EPIC Service Provision

ABB were facing a problematic subsea project whereby two of another supplier's passive J-Tube Seals had become detached from the j-tube following pressurisation.

ABB approached Subsea Innovation for advice. We presented a concept design of an Installation Tool that would hydraulically latch onto the flange of the bellmouth and had axial, tilting and gripping functions. This allowed the ROV operator to position the clamping module in the desired location and pick up the J-Tube Seal.

The seal was pulled back into the j-tube and mechanically held in position via two ratchet nuts.

Following review of the concept Subsea Innovation were awarded a contract for two tools to be installed into j-tubes side by side. This also presented a major design challenge due to the limited space available.

A full-scale prototype was manufactured and workshop testing was performed to simulate offshore conditions. In order to facilitate this a dummy j-tube seal and cables were manufactured. Once again proving beyond doubt the benefits of simulated workshop testing.

After successful testing of the prototype, two production models were mobilised and Subsea Innovation service engineers successfully oversaw the installation of both tools.



Subsea Innovation Limited

Unit 3, Roundhouse Road, Faverdale East Business Park
Darlington, Co Durham DL3 0UR United Kingdom
Tel +44 (0) 1325 385270 Fax +44 (0) 1325 385285
Email info@subsea.co.uk www.subsea.co.uk

