

Tool activated and pipe flared into the Connector

Tool deactivated, Connector pressure tested Installation Tool removed – Quickflange connection complete



#### Quickflange Norway AS

Lagerveien 12A, 4033 Stavanger, Norway Phone: + 47 41 48 70 00 mail.no@quickflange.com

#### Quickflange Technology AS

Hovedgata 10. 4900 Tvedestrand, Norway Phone: +47 41 48 70 00 mail.no@quickflange.com

#### Quickflange UK Limited

Wellheads Industrial Centre Unit E27 Wellheads Crescent Dyce, Aberdeen. AB21 7GA, UK Phone: +44 (0) 1224 722265 mail.uk@quickflange.com

#### Quickflange Middle East FZC

P.O. Box 16972. JAFZA Dubai, United Arab Emirates Phone: +971 (4) 8808 436 mail.me@quickflange.com

#### AGENTS:

#### Red Rock Oilfield Services

14 Cocos Drive, Bibra Lake Perth WA 6163 Australia Phone: +(08) 9418 2544 quickflange@rros.com.au

#### Pipeline Repair Specialists Pte Ltd.

1 Tanglin Road, #03-03 Office Podium Block Orchard Parade Hotel, Singapore 247905 Phone: +65 96319471 contact@pipelinerepairspecialists.com

#### A LEADING PROVIDER OF SPECIALIST PIPING SOLUTIONS

Specialising in piping and pipeline repairs and rehabilitation, Norwegian-based Quickflange is one of the leading providers of high performance pipe connection systems to the oil and gas sector.

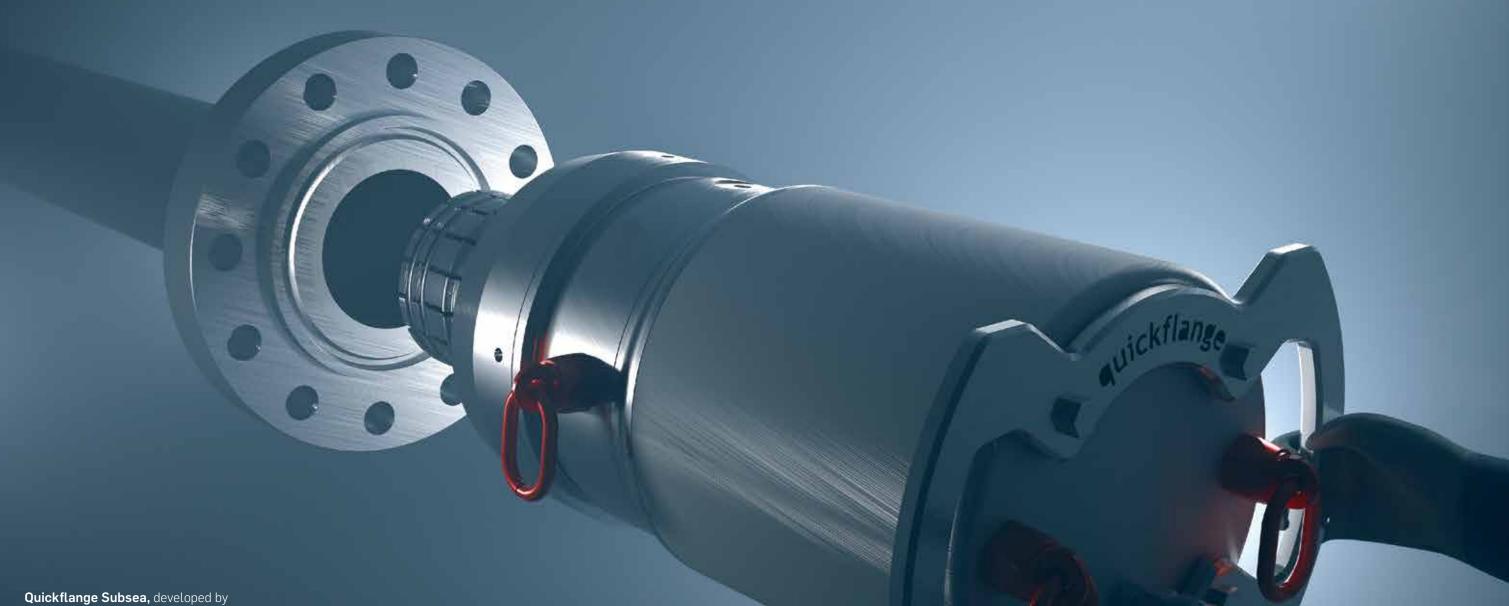
With operators seeking to maximise production and flow assurance as well as protect the integrity of their piping infrastructures, Quickflange's safe, flexible and cost effective flange-to-pipe connections are addressing these industry challenges head-on.

Headquartered in Norway and with offices in the UK and the United Arab Emirates, our vision is simple – to be the globally preferred supplier of weldless, flange-to-pipe connection solutions.

www.quickflange.com

Simple, Flexible, Reliable and Cost Effective Subsea Pipeline Repairs QUICKFLANGE SUBSEA

## Simplifying Subsea Pipeline Repairs



Quickflange Subsea, developed by Norwegian-based pipe connection specialists, Quickflange, revolutionises subsea pipeline repairs and flange-to-pipe connections.

The Quickflange solution is a modified, RTJ weld neck flange, with patented internal grooves machined in such a way that the flange can easily slide onto the pipe. A simple hydraulic tool is then used to fit the Quickflange onto the pipe by a process which flares the pipe into the Quickflange grooves. The process is completed within minutes with the resulting connection qualified to be every bit as equivalent as a welded connection.

In this way, operators that implement Quickflange Subsea will be able to enjoy low impact, flexible and cost effective subsea pipeline repairs as well as maximum reliability and robustness.

And at a time of increased subsea and deepwater activity, the timing could not be better!

- Improved Simplicity & Flexibility
- Significant Cost Savings
- Maximum Reliability & Robustness.

# Why Quickflange Subsea?

With its history of innovation and thousands of installed piping applications, Quickflange's subsea solution is the result of many years of testing and continual development with partners, such as the Norwegian Research Council, the University of Agder, and the National Hyperbaric Centre in Aberdeen.

Increased Simplicity & Flexibility. Up to 60% shorter than other sleeve connectors, Quickflange Subsea is easier to activate with straightforward diver operations and no specialist diver training, as well as the possibility of diverless operations in the future. The solution can be used on multiple pipe ranges with flexible material selection and the installation tooling fully retrievable and reusable – ideal for repair and EPRS (Emergency Pipeline Repair Systems) contingency situations. The fact that the flange is activated with a cold-forging tool also negates the need for welding habitats and equipment.

Significant Cost Savings. Quickflange Subsea delivers cost savings through reduced delivery times and faster implementation with a lowering of required dive r time and less pipe preparation, such as coating removal and deburial. Quickflange Subsea also comes with flexible rental options and installation tooling that reduce CAPEX.

Maximum Reliability & Robustness. With Quickflange Subsea, the cold-forging tool forces the pipe wall into the grooves, resulting in the assembled joint being as equivalent in strength as a weld and energised by natural relaxation 'springback'. Third party testing has demonstrated that the solution is equivalent to welded weld-neck flanges in terms of pressure retention and load resistance.

In addition, Quickflange Subsea has no moving parts, grips or other components, ensuring that less can go wrong. The result is subsea pipe repairs with unmatched robustness.

### Typical Subsea Applications

- Contingency during pipelay
- Subsea pipeline repair
- Decommissioning





