MAJOR NORTH SEA OPERATOR

# HOT BOLT CLAMP ROPE ACCESS

## Challenge

The Client identified corroded bolts on 29 four-bolt flanges on the fire water ring main of its floating production platform.

As the safety critical system cannot be isolated, depressurised and drained, even during shutdowns, the flange bolting could not be changed out using conventional hot bolting techniques.

The bolting was in poor condition due to the salt water atmosphere which caused severe corrosion of unprotected carbon steel components. The height and position of the flanges meant that scaffolding could not be easily constructed for access.

## Solution

Stork's innovative Hot Bolt Clamp (HBC) technique and rope access solutions allowed the corroded bolts to be removed and replaced without disruption to the safety system.

A number of flanges were located under the helideck and careful planning was required with the platform's heli-admin team to avoid sim ops with helicopter operations.

The project was staggered to allow the HBC team to manage the deck level flanges first, then the rope access team mobilised to work on the difficult to reach flanges.

*"It was a good scope with positive feedback from the platform, an excellent option for those always hard to do joints due to isolation restrictions etc."*
**Client engineering coordinator**

## Client benefits

**Quicker, quality delivery**

Using the Hot Bolt Clamp in conjunction with rope access reduced labour costs by six days, completing the scope ahead of the scheduled timeframe and well within budget

**Safe and secure operations**

The work was delivered without interruption to plant operations, zero safety incidents and no harm to the environment

**Plant integrity restored**

Plant integrity was fully restored to 'as new' condition depressurising or isolating the plant, which is time-consuming and costly.

## Project fast-facts

**Project:** Removal and replacement of corroded bolts on fire water ring main
**Client:** Major operator
**Location:** Central North Sea
**Services:** Hot Bolt Clamp and multi-disciplined rope access
**Date:** 2015