Challenge

The Client identified two flanges with severely corroded bolts at its facility in the Southern North Sea. Stork was contracted to remove and replace the four-bolt flanges on the vent system without disruption to the plant.

The plant was sea-facing and the saltwater atmosphere had caused severe corrosion of unprotected steel structures and components, resulting in corroded bolts on both upstream and downstream flanges.

Solution

Stork’s Hot Bolt Clamp (HBC) system was mobilised from the local SNS base in Lowestoft. The innovative technique allowed the corroded bolts to be removed and replaced without depressurising or isolating the plant, which is time-consuming and costly.

“I would like to take this opportunity to express my sincere thanks to the team for the excellent service provided. The service and skills was first class and a credit to themselves and Stork.”

Client lead piping discipline engineer

Client benefits

Multi-million pound cost-saving

Stork prevented a deferment cost in excess of $8 million and a production delay of 300,000 boe by removing the requirement for a two-day shutdown.

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.

On time and on budget

The project was completed within the Client’s scheduled timeframe and budget.

Project fast-facts

Project: Corroded bolt removal and replacement
Client: Major operator
Location: Southern North Sea
Services: Hot Bolt Clamp
Date: 2015