



Repsol runs BlueDock™ connectors in Trinidad and Tobago

Two strings of TenarisHydril BlueDock™ connectors were run with zero re-make-ups and rejects in the Teak, Samaan and Poui field, with Tenaris field service support.

Summary

Repsol has been operating in Trinidad and Tobago since 1995. The Spanish oil and gas company owns 70% of Teak, Samaan and Poui (TSP), a mature field with 14 offshore platforms operated in partnership with the National Gas Company of Trinidad and Tobago and Petrotrin (Petroleum Company of Trinidad and Tobago Limited.)

Repsol decided to be the first company to run TenarisHydril BlueDock™ connectors with elastomeric seals in the country. These weld-on connectors were used in both the conductor and surface casings of the Arima 2 well, located in the TSP Field. Tenaris field service was present before, during and after the running, and the result was a smooth operation with zero rejects, re-make-ups and repairs.

Challenges

Offshore challenges

The Arima 2 well was drilled with the Rowan Gorilla III platform, a Jackup platform in a water depth of 283ft. Running pipes with large ODs in an offshore environment with harsh weather conditions is not an easy task, among other reasons because they are heavy and difficult to handle.

On the path to a successful experience

Given the challenges, Repsol wanted to minimize the risks that might be involved before and during the running to ensure a smooth operation. In a previous operation in Trinidad, Repsol ran a connector manufactured by another company that did not fully satisfy its requirements, so this time the company wanted to ensure consistent and reliable results.

PROJECT PROFILE

Operator Repsol	Well Arima 2
Location Trinidad & Tobago	Products highlighted TenarisHydril Blue Dock™ connectors
Field Teak, Samaan and Poui (Oil & gas, offshore)	Services provided <ul style="list-style-type: none"> • Field inspection • Running assistance • Training on site



▲ TenarisHydril BlueDock™ connectors were used in both the conductor and surface casings of the Arima 2 well.

Solution

Innovative technology

TenarisHydril BlueDock™ connectors offer easy stabbing and trouble-free make-up for fast and reliable running, as well as 100% ratings in tension, compression and bending. They have undergone sealability tests based on ISO 13679 standards and have been subjected to full-scale make-and-break tests.

Up to three anti-rotational keys that prevent buck off can be installed in these connectors. Repsol decided to install all three as an alternative to the use of thread lock.

BlueDock™ connectors also offer high fatigue performance under bending and axial cycling loads.

These weld-on connectors can come with metal-to-metal seal up to 22" or elastomeric seal on all sizes. In this operation, both the 30" conductor casing and the 20" surface casing came with elastomeric seals.

Misalignment and difficult weather conditions are a challenge, but TenarisHydril BlueDock™ connectors minimize those risks because they offer fast make-up and a deep stab, to get the pin into the box easily.

Professionals on-site

Tenaris field service team works side-by-side with customers throughout the running, providing field technical support and running assistance. These specialists carry out visual inspections and help operators follow best practices on how to handle and store Tenaris products, thereby reducing operational risks and promoting efficiency.

Results

Simplifying operations at the rig-site

In this difficult context, the operator ran two strings of TenarisHydril BlueDock™ connectors. The conductor string was made of 19 joints of 30" x 1,000" X56 TenarisHydril BlueDock™ LR Elastomeric Seal, and the surface casing consisted of 39 joints of 20" x 0.625" X56 TenarisHydril BlueDock™ LR Elastomeric Seal.

TenarisHydril BlueDock™ connectors proved their value in Trinidad and Tobago. Both the 30" conductor casing and the 20" surface casing were installed with zero rejects at a total length of 771ft and 1,670ft, respectively. No joints had to be repaired and there were no re-make-ups in any of the strings. The elastomeric seals and anti-rotational-keys of TenarisHydril BlueDock™ connectors are pre-installed at Tenaris's mill, eliminating the need to send spare parts to the rig. This procedure prevents the loss of devices, saved running times and helped elude other operational problems.

A pressure test was conducted on the 20" surface casing. It was subjected to a pressure of 2,000 psi during 30 minutes without pressure loss, showing the sealing capacity of the elastomeric seal.

During the running of the 20" string, restrictions were found inside the well bore. Until that moment, the average running speed was 4 joints/hour, with a maximum of 6 joints/hour. From then on, circulation, reciprocation and slacking off weight were necessary to run each joint in hole and overcome well restrictions.

Presence that matters

Tenaris field service worked side-by-side Repsol throughout the operation.

Certified specialists were present when TenarisHydril BlueDock™ connectors arrived in Trinidad and Tobago to make sure the pipes suffered no damage during the transport. They also carried out a visual inspection of the connectors at Repsol's yard, before the pipes were shipped to the rig.

Tenaris experts provided technical assistance all the way through the running of both the conductor and surface casings. After Repsol's request Tenaris also provided training on best handling and storage operations with the aim of improving safety during the operation.

When the operation was over, Repsol stated it was satisfied with the product performance and services provided by Tenaris, highlighting how fast the running of the 20" string was.



For contact information, please visit our site:
www.tenaris.com