



Dopeless® technology sets a ground-breaking record of rig time saving in Mediterranean project

An oil and gas operator successfully ran Alloy-28 Corrosion Resistant Alloys (CRAs) in stands and accomplished more than 25% savings in running time in the Mediterranean deepwater development.

Summary

A record-breaking campaign

In 2015, a major oil and gas operator announced the discovery of the largest gas field in the Mediterranean Sea, located at water depths of 1,500 meters in Mediterranean deepwaters.

A challenging fast track development campaign was announced, resulting in commercial gas production in less than 2.3 years from field discovery, setting a new world record for deepwater developments.

Tenaris worked side-by-side with the operator to meet the project's demanding requirements for complex products with tight deliveries. TenarisHydril Blue® connections with Dopeless® technology met the demanding operational requirements, and helped improving overall pipe-running operations and assured reliable and trouble free make-ups on both carbon steel and Corrosion Resistant Alloy (CRA) casing and tubing, even when run in stands.

Challenges

Efficient and improved operations

Deepwater drilling entails high operating costs, with rig spread rates that may exceed 1 million USD per day. An improvement in any of the drilling processes can potentially carry remarkable rig time savings that can be translated into monetary savings. Accordingly, the operator was looking for efficient technologies that could reduce costs, promote safety, ensure compliance with local regulations and be suitable for this field's demanding requirements.

PROJECT PROFILE

Location
Mediterranean Sea

Products highlighted

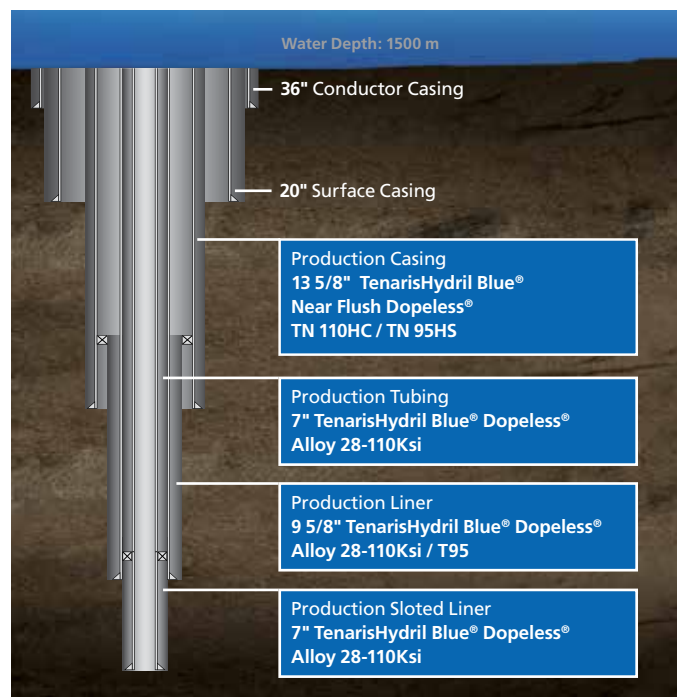
- TenarisHydril Blue® Series
- Dopeless® technology
- Corrosion Resistant Alloys

Type of Well and Field

Deepwater Gas Development

Services provided

- Technical Assistance and Field Services
- Demand Planning and Stock Management
- Liner Slotting and Accessories Supply



Solutions

Field proven technology

The operator chose Dopeless® connections to improve the running speed and simplify logistics and yard operations for carbon steel and CRA pipes.

This dry multifunctional coating is applied in a fully automated process at Tenaris mills. Dopeless® technology significantly reduces running times and virtually eliminates re-makeups and rejects, increasing the reliability of the running operations. In addition, this solution is a certified zero discharge technology that reduces the environmental impact of the operation. Dopeless® technology is the perfect match for CRA materials since the solution substantially reduces its galling tendency.

On-site support

Tenaris's certified field service specialists reduce operational risks and optimize running times by providing field technical support and running assistance. They worked side-by-side with the rig and running crews at the rig site to ensure the recommended practices were followed and products were properly installed.

Results

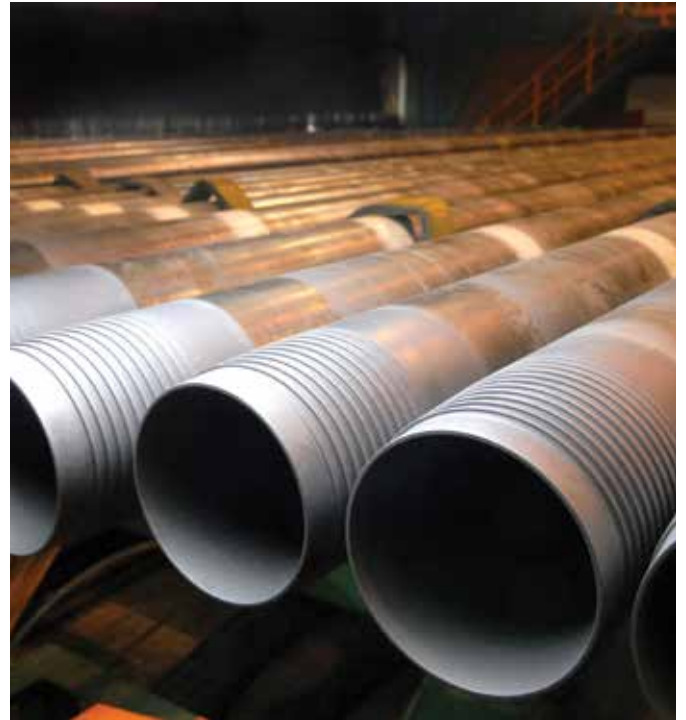
Setting new records

TenarisHydril Blue® Dopeless® connections were successfully run through the 13-well campaign on multiple casing and tubing sizes, including the 13 5/8", 9 5/8" and 7" carbon steel and CRA materials, providing substantial rig time and monetary savings.

To calculate the benefits provided by the Dopeless® technology, the running times achieved by these connections were compared to those registered for the standard (doped) versions of the connections run in the same campaign. The running time savings achieved thanks to the reliability of the Dopeless® coating were 24.7% for the 13 5/8" production casing, 28.8% for the 9 5/8" production liner, and 33.7% for the 7" CRA slotted production liner. The running savings were calculated by excluding all hidden None-Productive Time (NPT).

Despite the continuous interruptions caused by the installation of the control lines, the 7" completion string still produced a running time saving of 32.8% with Dopeless® technology on the connections.

The improvement in average running speeds in tubulars with Dopeless® technology represented a total **running time saving of 15.14 days** for the 13-well campaign.



▲ Dopeless® technology is a dry multifunctional coating that makes thread compounds obsolete.

A first for high nickel alloys

Since Dopeless® technology reduces the susceptibility to galling in Corrosion Resistant Alloys (CRAs), Alloy-28 CRA pipes were successfully run in stands for the first time in the world.

The running in stands of 3 and 4 joints of one string containing about 2,000 meters of 7" Alloy-28 CRA tubing with Dopeless® technology was successfully completed with zero re-make-ups and zero rejects related to connection issues. With an average speed of 16 jts/hr, 60.7% or 0.7 days in running time savings were achieved when compared to the running in singles of the same string. Potential running time savings of 11.29 days can be achieved if the completion string of the upcoming 8 wells of this project are fully run in stands.

The above results show the value that Dopeless® technology brought to the project, increasing operational efficiency and reducing costs in a challenging deepwater operation.



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