COATING SOLUTIONS FOR Drill Ships

International

Korean shipyards are currently in the midst of a newbuilding boom for offshore drill ships. With the predicted opening up of exploration rights in the Arctic Circle, where it is believed about 30% of the world's unexploited gas and 13% of oil lie, drilling companies are busy future proofing their fleets.

Semi submersibles and jackup drill rigs were traditionally built in Singapore. However, with the move into deep water exploration, state-of-the-art drill ships are now necessary. Due to the complex nature of these vessels there has been a shift towards the more high tech yards of South Korea. Vessels are built at Samsung Heavy Industries and, more recently, Hyundai Heavy Industries and Daewoo Shipbuilding and Marine Engineering.

AkzoNobel, a supplier of coatings to all the major global drilling companies for over 30 years, has been working with a number of drilling businesses to help them upgrade their coating specifications. This includes Stena Drilling, Noble Drilling, Ocean Rig, Rowan Drilling and Songa Drilling, all of whom are taking a keen interest in the coating selection process taking place at each shipyard. With these companies working to very tight operational budgets, often embarking on six month drilling contracts in the expectation of striking oil or gas, long term coating efficiency is paramount.

Stena Drilling chose a coating system of Intershield® 163 Inerta 160, the first ice abrasion resistant coating to achieve class society Type Approval, to protect the hull of their ice strengthened Arctic drill ship Stena Drillmax ICE. Stena Drilling specifically requested Inerta because of its 35 year proven track record; with 1,300 applications to date it has been used by numerous marine and offshore customers. The vessel, which can operate all year round in 2.2 metre first year thick ice including old ice inclusions, was painted at Samsung Heavy Industries' shipyard with full AkzoNobel technical service support.

AkzoNobel's Intershield 300 also features on a number of drill ship ballast tanks. This includes four drill ships for Noble Drilling and four for Rowan Drilling, all being built at Hyundai Heavy Industries, and four semi submersibles for Songa Drilling, which are being constructed at Daewoo Shipbuilding and Marine Engineering.

"AkzoNobel are able to offer us a complete product range and full technical support, and with Intershield 300 we know we are using a product with an outstanding track record in the industry"

- Steve Durham, Songa Project Director

Ballast tanks play a crucial role in drill ship operations; they are critical to providing stability during drilling operations offshore. The tanks create a very corrosive environment as they experience cyclic conditions of wet (full) and dry (empty) periods. This means highly durable coatings are required. Increasingly, drill ship owners are looking for paint systems that will reduce the dry dock times for their assets. With current day rates for drill ships at close to US$820,000 a day, no owner wants to keep their asset in dry dock any longer than needed. Intershield 300 was selected for many of these vessels as it is the only product on the market that has demonstrated a 15 year performance in water ballast tanks without maintenance. This gives owners confidence that they are getting an excellent product for this critical area.

A further three drill ships for Ocean Rig have also been ordered. These will be built at Samsung Heavy Industries and are also protected with AkzoNobel products.

The onsite technical service that can be provided by AkzoNobel was a critical reason in the selection process of the paint vendor by Ocean Rig.

Besides newbuilding, AkzoNobel supports drilling customers with their maintenance and repair programs. "Our Interplan™ corrosion survey tool allows customers to monitor corrosion development and paint performance over their vessel's entire design life", says AkzoNobel's Upstream Oil and Gas Market Manager. "These onboard surveys take into account local and environmental issues on board an asset. The survey allows maintenance budgets to be carefully planned by both rig and fleet managers. Overall this approach is shown to be the most cost effective way of dealing with corrosion issues onboard offshore assets."

AkzoNobel