Innovative solutions for difficult-to-inspect offshore and subsea assets

Innospection's foundation strategy is to provide clients with optimum integrity assessment support solutions

innospection

CONDITION REPORTING

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While corrosion poses a substantial threat to the integrity of ageing offshore and subsea assets such as caissons, risers, flexible risers and subsea pipelines, the harsh subsea environment where access is difficult, often makes the inspection and lifetime assessment of the subsea assets challenging and costly.

Despite that, there is an increasing requirement for subsea inspection in order to determine the integrity and fitness-for-service of the ageing assets located downstairs as well as for lifetime extension and condition monitoring.

It is as a result of this market need that Innospection has developed a series of innovative integrity support solutions that are both smart and cost effective.

The electromagnetic NDT technique . . . Magnetic Eddy Current (MEC) . . . has been developed and used by Innospection as a key tool for integrity assessment support.

Utilising a magnetic field in combination with a controlled high-frequency eddy current, the MEC technique is capable of detecting the smallest pitting corrosion, general corrosion and cracks in coated and non-coated subsea steel structures.

The ability of the MEC technique to inspect through the coating while having similar defect detection capabilities as In-line Inspection (ILI) gives the technology an edge as a valuable solution for the external inspection of non-piggable subsea pipelines.

This provides asset operators with substantial cost saving as much subsea pipeline infrastructure is non-piggable. That has meant that internal inspection involving the use of the costly installation of subsea launchers and receivers has traditionally been performed.

To deploy the MEC technique while targeting subsea accessibility challenges, a range of robust MEC-Combi inspection tools has been designed and built. These tools have self-crawling ability in both axial and circumferential orientation and are capable of making the most effective use of costly diver time and work-class ROV systems. Alternatively, these tools can also be deployed from the installation itself.

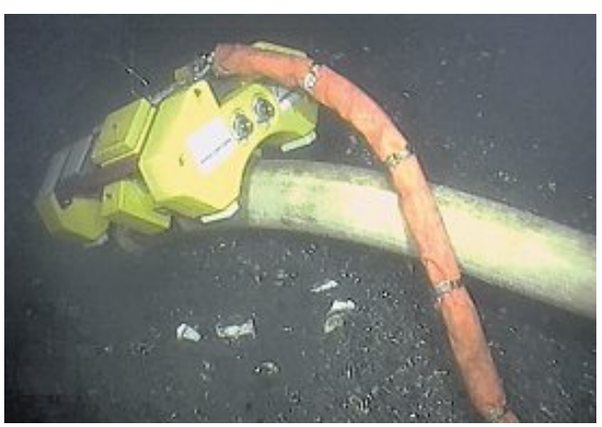
In addition, versatile MEC-Combi inspection tools enable the incorporation of additional inspection techniques such as PEC, high resolution UT, laser and camera system to provide reliable qualitative and quantitative inspection data within a single deployment.

As a "Combi" concept, an advanced marine growth cleaning system can also be incorporated for a time-saving simultaneous cleaning and inspection operation.

As an integrity support specialist, Innospection's foundation strategy is to bring to the market innovative technologies, application developments and advanced equipment to provide our clients with optimum integrity assessment support solutions.

Andreas Boenisch is group MD at Innospection

MEC-Hug Crawler being deployed onto flexible risers



MEC-Combi PipeCrawler (v2) inspecting a flexible pipe on seabed

MEC-Combi PipeCrawler (v1) inspecting a subsea pipeline

New Fugro ship wins work

Fugro has been awarded an inspection, repair and maintenance (IRM) contract by Petrobras in Brazil.

Under the contract, Fugro will deploy its new 83m ROV support vessel, Fugro Aquarius, for the IRM activities. The contract duration is one year with an option for an additional year.

According to the company, Fugro Aquarius has been designed specifically for operations in the challenging conditions offshore Brazil.

Capable of operating in water depths to 3,000m, the vessel was built in Brazil and the local content was more than 60%. Specialised equipment on board includes two 150hp Fugro FCV3000 work class ROV systems.

Dril-Quip opts for Singapore R&D

Dril-Quip is establishing a research and development facility in Singapore, focusing on materials and products suitable for high pressure and high temperature (HPHT) applications.

The new facility, which is expected to open next year, will serve as an additional hub for research and development activities for the company.

Capital investment is expected to be about $15million. Dril-Quip already has a significant presence in Singapore and the company says the investment will allow it to leverage that presence and "take advantage of Singapore's exceptional workforce".

This will be the company's first R&D centre outside the Americas.

Bluewater sinks into red

Bluewater, which majors on the provision and running of production ships (FPSOs), has posted a loss of $99million for Q4 2015, compared to a profit of $2.8million for the equivalent period in 2014.

The Q4 2015 EBITDA for the FPSO part of the group was $47.7million, resulting in an EBITDA of $169.9million for the FPSO division for the overall versus to $150.1million EBITDA for 2014.