

Successful Inspection of Flexible Risers in the North Sea

Following years of R&D and qualifications, Innospection Ltd successfully completed its first flexible riser inspection in the North Sea in February 2013. The inspection of the flexible risers was performed using the sophisticated self-crawling inspection system named MEC-HUG, wholly developed and built by Innospection.

An Aberdeen based advanced NDT specialist and solution provider for subsea and topside inspection tasks with extensive field experience, Innospection is providing new ways of deploying advanced electromagnetic inspection technologies, particularly the SLOFEC™ technique, in the most challenging inspection environment.

The MEC-HUG riser inspection system was deployed from the platform and brought in position above the splash zone by rope access personnel. After the MEC-HUG inspection tool was in place, as the name implies, the inspection tool "embraced" and moved along the risers through the splash zone to perform the inspection.

Although the inspection system could move down to -70m, the inspection task was to scan the production risers only from -30m to +5m with the focus on potential damage at the dedicated areas. The aim of the inspection was the detection of defects and wall loss in the first and second tensile armoured layer

caused potentially by cracks or pitting corrosion in the single wires or multiple wire areas.

As the required scans per work scope were performed within a single shift, this inspection job has proven that the technology and its mechanical hydraulic driving mechanism allow an effective and fast scanning.

Excellent signal to noise ratio of the electromagnetic inspection technique SLOFEC™ enabled a high detection sensitivity setup, for the identification of cracks and pitting corrosion in the tensile armoured wire layers while scanning the risers above, through and below the splash zone.

The scans demonstrated excellent signal response not only for clean wire conditions but also at a known potential area with shown indications which allowed the assessment of the wire condition. Due to the technology capability, it was additionally possible to determine the wire layer from which the indications were reflected.



MEC-HUG riser inspection system in deployment from the installation and in operation at flexible riser in the North Sea

The MEC-HUG inspection system is scheduled to be deployed to Australia in Q2 of 2013 for a subsea pipeline inspection job and thereafter to Equatorial Guinea for the next flexible riser inspection job in Q3 of 2013.

Apollo Scores Highly on FPAL Verify

Apollo Offshore Engineering has successfully completed FPAL's advanced registration questionnaire and verification audit, thus reducing the need for purchaser led supplier audits.

Apollo scored an impressive 8.4 for competence and training, and achieved similarly high scores in all other areas. The scorings reflect Apollo's development of an innovative project risk assessment system born out of its commitment to engineering competency, and gives the wider purchasing community confidence in its delivery of safe, appropriate engineering design and analysis solutions.

Apollo's Managing Director Jonathan D'Arcy commented:

"Few of our competitors have opened themselves up to this level of scrutiny, and our verification audit scores simply reflect a management led commitment to engineering excellence."

Auditing is a familiar theme at Apollo, with the company undergoing ISO 9001:2008, BS OHSAS 18001:2007 and ISO 14001:2004 audit under the BSi PAS99:2012 integrated management system standard in the coming weeks.

Apollo has recently moved to much larger premises in Aberdeen's Waterloo Quay. Nautilus House comfortably

accommodates the existing team of 30 staff, and has the space to allow for projected growth in Aberdeen based staff numbers to upwards of 50 in 2015.

Apollo grew impressively in the last financial year to September 2012 by increasing revenues some 400%. With UK wide staff numbers now approaching 40 the ambitious outfit is on target to double turnover to over £3M this financial year, which is in line with a domestic and international growth plan to employ 100 staff and generate profitable revenues of £10M by the end of 2015.



Aquatec's Hot Stab HYDROlogs Delivered to South East Asia

Aquatec Group have recently integrated their HYDROlog 2000 Hydrotest Data Logger instruments with a hot stab connection to provide a simple ROV-deployable and retrievable solution for a major pipeline pre-commissioning company in South East Asia.

The HYDROlog range was developed to provide a pressure and temperature record of pipeline hydrostatic test procedures that take place during the pipeline pre-commissioning phase.

A steady pressure record that remains above the required minimum test pressure allows the contractor to sign off on the installation. The temperature record is used to account for pressure variations due to changing ambient temperature.

By coupling the instrument to a hot-stab, it can easily be removed by an ROV immediately after the minimum pressure hold time has been met, and taken to the surface for data download and analysis, thus saving valuable ship time.

The integral hot stab is one of several methods for deploying the HYDROlog instruments. Other solutions include the use of subsea ROV-readable displays, real-time optical data links, and acoustic data links. Models are currently available to monitor test pressures up to 1400 bar.



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