

Innospection's First Successful Subsea Pipeline Inspection in the Australian Waters

Innospection, a specialist solution provider of advanced and innovative inspection services, has successfully completed its first subsea pipeline inspection offshore in western Victoria, Australia.

As a part of the Offshore Inspection Repair Maintenance Project, Innospection was approached by the client to inspect several sections of the offshore gas pipelines suspected of having top-of-line corrosion, predominantly in the section of pipework from the wellhead to a distance of approximately 500m downstream.

Having extensive experience in subsea inspection in the North Sea on pipelines with similar anticipated corrosion at the 10:00 to 2:00 o'clock position, Innospection was able to readily offer an inspection solution.

The inspection objects were the 12" pipelines downstream of each inline tee with and the 6" tie-in spools with wall thicknesses of 18.1mm and 11.0mm respectively. All inspection objects were externally coated with 2.5mm three-layer Polypropylene material. The pipelines were located at a water depth of approximately 70m.

The inspection of the subsea pipelines was performed using the MEC-Combi Crawler. In areas of the pipelines near the tie-in spools unreachable by the MEC-Combi Crawler due to its size, a smaller marinised MEC M-PS150 Scanner was available. Both scanners utilise the advantageous fast scanning technique SLOFEC™ for the inspection.

After being deployed by ROV and brought into position at the predetermined circumferential position on the pipelines, the hydraulic drive unit enabled the MEC-Combi Crawler to crawl along the pipelines at an average speed of up to 10m/min while scanning.

Information on internal and external defects in term of size, severity of wall loss and locations were achieved. Additional absolute wall thickness measurement of the pipelines using the built-in Ultrasonic probe was also performed, which was also targeted for the verification of the SLOFEC™ findings.

The inspection results show excellent signal to noise ratio which confirmed the high detection capabilities of the MEC-Combi Crawler with limited preparation of the pipes.

Developed by Innospection, the MEC-Combi Crawler supports the inspection and lifetime assessment of subsea structures ranging in size and complexity from small diameter risers through caissons and pipelines, to platform legs and flat surfaces like ship hulls. The capabilities of the MEC-Combi Crawler, already proven in the North Sea, have once again been confirmed with this successful subsea pipeline inspection in the Australian waters.