

Next Generation PECT for Corrosion Under Insulation Inspection of Coated Splash Zone & Subsea Assets

A provider of advanced and innovative inspection services and solutions, Innospection is offering the next generation PECT technique for the detection of corrosion under insulation (CUI) in coated splash zone and subsea assets.

Corrosion under insulation is one of the most well-known phenomena in the process industry. It is also a big challenge for inspection and asset integrity management. Subsea assets such as subsea pipelines are typically reinforced with concrete coating which are often further reinforced with bars or wire mesh placed in the middle of the concrete coating.



Semi-Automatic Scanning Ring

Next Generation PECT

Pulsed Eddy Current Testing (PECT) is an inspection technique used for the inspection of corrosion under insulation in carbon steel structures. The ability of the PECT technique to inspect through thick coatings without the need for coating removal makes the technique uniquely suitable for offshore, splash zone and subsea inspection applications.

A static technique, PECT is able to measure spot percentage variations in the steel thickness through any non-conductive and non-magnetic material such as air, insulation material, concrete, coatings, paint, sea water and marine growth between the sensor and steel surface.

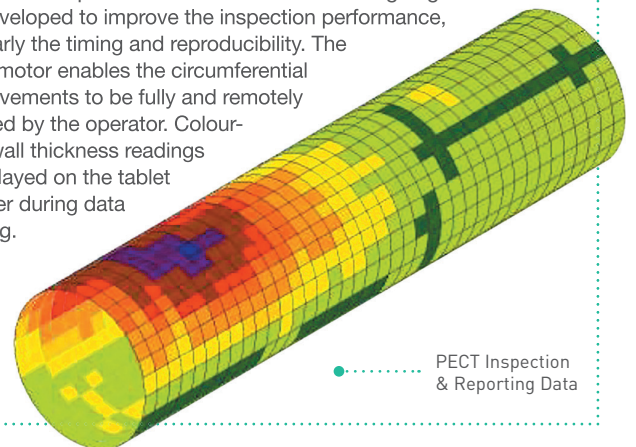
Benefits of PECT

The next generation PECT technique from Innospection offers enhanced wall loss detection capability with the ability to inspect through 250mm of coating to detect corrosion and defects beneath. The highly repeatable results make PECT well suited for the wall thickness monitoring of coated assets.

Concrete-coated Subsea Pipeline Inspection

For the inspection of concrete-coated subsea pipelines with OD from 12" to 20" and coating thickness up to 250mm, the M-PECT DSA 12-20 Scanner has been developed and offers detection from 10-20% wall loss and defect size from OD 40-50mm for each footprint area.

The diver or ROV deployable PECT Scanner consists of a ruggedised, splash water tight tablet computer connected to a data acquisition unit and subsea probe. A semi-automatic scanning ring has also been developed to improve the inspection performance, particularly the timing and reproducibility. The electric motor enables the circumferential step movements to be fully and remotely controlled by the operator. Colour-coded wall thickness readings are displayed on the tablet computer during data recording.



PECT Inspection & Reporting Data