Offshore Riser Inspection and Splash Zone Inspection

The need for the inspection of pipelines and risers is growing as the worldwide infrastructure related to pipelines and platforms is ageing. Moreover, regulations today require periodic inspections. Corrosion of splash-zone risers, caissons, conductors and spoil pieces of sub-sea pipelines can be severe because coatings degrade and cathodic protection becomes inefficient. It is highly recommended that these areas are inspected to detect corrosion prior to failure. Traditional visual and UT wall thickness techniques are often not practical due to restricted access and limited information is obtained using these techniques. Advanced NDT methods are required to limit human intervention in a high-risk area and obtain better inspection data for further analysis so that structural-integrity case studies can take place.

THE Applus+ SOLUTION

Managing and safeguarding the integrity of client assets has been a prime concern for all operators of refineries, chemical plants and power plants for decades.
For over 75 years, Applus+ has been a trusted partner providing customers with clear in-site data via its high-tech NDT services. Working closely with our clients gives us a full understanding of their requirements, thereby allowing Applus+ to tailor the NDT inspection solution to the specific task.

Applus+, with its own Application Centre, can custom build specialised robotic tooling for a particular inspection project, adding value to the services we offer whilst helping the client to reduce costs.

For riser inspections, we offer numerous specialist products, including but not limited to: internal visual inspection tools; UAV for external HD visual inspection; long-range ultrasonic; pulsed eddy current; tethered intelligent pigging inspection solutions; automated corrosion mapping; automated TOFD systems; sub-sea ACFM; and riser cleaning and inspection tools.

Applus+ has numerous patents dating back to 1940 - a testament to our commitment to research and development in the field of non-destructive testing.

**Target customers**

Statistical data collected over the last 30 years indicate corrosion as the main cause of failure in risers.

Existing offshore assets are at the end of their product life-cycle. Companies wanting to extend the life of their assets are turning to comprehensive inspection and maintenance programmes.

Statutory regulations are also applying pressure for assets to be inspected on a more regular basis so as to meet the rigorous safety and environmental requirements that will enable an offshore asset to operate safely throughout its extended life-cycle.

**Key customer benefits**

Advantages of using our various riser inspection tooling systems include:

- Tooling is custom-built to meet client requirements
- Improved safety and cost savings through eliminating the need to work within the splash-zone area
- Significant time/efficiency savings resulting from automated systems
- No costly access requirements
- Reduced down-time of plant
- Ultra-high-definition footage for visual inspection
- 100% surface area coverage
• Quantitative data for ultrasonic tooling
• Qualitative data for long-range ultrasonic and pulsed eddy current
• HP cleaning and visual/ultrasonic inspection with a single tool
• Inspection possible through thick coatings and marine growth
• Unmanned aerial vehicle (UAV) systems designed to inspect hard-to-access and confined areas