

WALL THICKNESS MONITORING

PROJECT INFORMATION

Date: 2022

Location: North Sea

HSEQ Statistics: No loss of time or safety incidents

FACTS & STATS

- Delivering a range of sensor technology to monitor the integrity of your assets
- Delivering for our clients in over 20 countries worldwide
- Over 30 years LTI free

With over 40 years' experience, Stork's Monitoring Solutions department is uniquely positioned to deliver a range of traditional and advanced techniques for monitoring the rate of degradation on a wide array of infrastructure including but not limited to; pipelines, vessels and storage tanks. Our capabilities are unprecedented, offering an array of innovative solutions from a range of different manufacturers to offer an all-in-one solution for our clients.

SCOPE OF WORK

We were challenged by a North Sea Operator to deliver new technology which would produce repeatable and reliable pipeline wall-thickness monitoring for asset management purposes.

Our experts presented several sensor package options to our client, who ultimately decided upon the Inductosense WAND thickness measurement sensors. The sensors were to be installed to enable repeatable ultrasonic testing (UT) measurements during maximum production periods.

STORK'S SOLUTION

Following successful sensor selection, our experts initiated a four stage approach to this workscope, which included:

- Application Design
- Procurement
- Sensor Installation
- Execution Training

Utilising the correct knowledge and expertise was crucial to project execution and led to an effective installation of the sensors on several flowlines. Stork managed the full scope of the sensor installation and commissioning which included pipe preparation to ST3 standards, chloride testing and the application of Stopaq coatings, a permanent corrosion preventative coating.

Platform personnel were fully trained to perform data acquisition, software upload and data analysis.

RESULTS & BENEFITS

- Cost effective continual monitoring system
- Accurate corrosion rates over time to enable predictive maintenance
- Repeatable measurements, removing any human error or inaccurate readings
- Empowering our customer to quickly acquire accurate wall thickness data and reduce the man power required on site
- Monitoring can now be carried out in previously inaccessible locations
- High volume of monitoring points can be measured quickly and as frequently as needed
- No specialists are required after installation, onsite personnel are able to acquire the measurements once full training has been carried out
- Radio-frequency identification (RFID) tags are applied per sensor, which removes measurement point identification issues

Inductosense's product, the 'WAND', is a single point ultrasonic corrosion monitoring solution.

This solution can be employed most effectively with the support of Stork's expert technicians for optimal planning, preparation, and installation. Ensuring the sensors can independently provide real-time data for timely detection of defects.

