Challenge

Traditionally, erosion monitoring is tailored and conducted specifically for each individual pipeline depending on flow and piping specifications. Wake frequency calculations (WFC) are delivered to determine conditions and the length of probe required, as well as to ensure a suitable probe is used to withstand the flow.

However, a major North Sea Operator was looking for an alternative solution to effectively monitor erosion on flowlines across a range of Southern North Sea assets. All flowlines had similar process conditions and pipe specifications, therefore the client was interested in a standardised sand erosion probe that could be made available to be bought in bulk as stock.

Solution

Stork and Emerson developed a standardised erosion probe for use across all asset pipelines as well as providing tailor made project packages.

Providing an intrusive erosion probe for a range of flow specifications was a new industry challenge which would not have been made possible without the combined effort of Stork and Emerson.

Client benefits

Through continuous communication and a strong partnership, Stork and Emerson were able to better define the varying conditions of the flowlines which this probe was to be used for.

This provided a range of benefits for the client:
- Affordable, efficient and tailored package
- Reduction in lead times for reviewing flow rates and pressures across all assets
- Major cost savings across repetitive items, including documentation, WFC and factory acceptance testing.

Project fast-facts

Project: Sand erosion probe standardisation
Client: Major North Sea Operator
Location: Southern North Sea installations
Service: Monitoring solutions
Date: 2015