

TECHNICAL SPECIFICATION

Monitoring Solutions - Field Signature Method (FSM)

Stork has a strong track record in the delivery of Field Signature Method (FSM) systems, as part of its non-intrusive Corrosion Monitoring capability.

The latest version of the system, the FSMLog, offers even greater accuracy and reliability than any of its predecessors. Its high temperature and online logging capabilities make it one of the best available methods for the continuous monitoring of metallic structures.

The system uses a unique electric field signature to create a structure map of the pipeline's internals. This technique is ideal for monitoring hard to reach locations and detecting localised metal loss in high temperature locations (up to 500°C), as well as detecting deformations like pitting and cracking.

By installing a series of stud welded pins across the structure and injecting a controlled current, the potential voltage change is logged and used in tandem with control measures to calculate the metal lost.

The data produced during the measurement process is logged and automatically uploaded to a client PC where it is processed into calculated data. The calculated data includes the metal lost and corrosion/erosion rates. It can be reported in a number of formats including:

- XY Plots
- 3D Plots
- Values
- Analysis Reports
- Database
- Online Secure Web Portal

The FSM system can be installed with matrix designs consisting of 64, 128, 192 or 254 pins, depending on the application.

It is suitable for a wide range of applications, including:

- Process piping and vessels
 - Bends
 - Welds
- Buried pipelines
- Pressurised vessels and tanks
- High temperature applications
- Remote locations

