Redefining flexible riser integrity management

- Best in class inspection and computational simulation
- Accurate damage detection and impact on design life
- Improved understanding of operational risk
- A fully integrated service for inspection, analysis, and data management

Bottom line: we deliver insight, not just data

Integrating FLEXAS™ and MEC-FIT™ for Flexible Riser Integrity

Improving risk assessment.
Increasing operational confidence.

A strategic alliance of industry leading inspection and simulation tools in the arena of flexible riser integrity management.
A COMPLETE OFFERING

- Risk-based integrity management and inspection planning
- State-of-the-art annulus testing
- Visual and MEC-FIT™ (Magnetic Eddy Current) inspection
- Dynamic riser simulation using detailed, multi-layered finite element models with FLEXAS™
- Intervention planning and construction management
- Life of field riser analysis and model updates

MEC-FIT™

- Combined DC magnetic and eddy current fields to detect single or multiple wire damage in up to 3 metallic layers
- Capable of detecting cracking, pitting, general corrosion, and wire misalignment and gaps
- Mapping wire layers and identifying details of individual findings
- No requirement for annulus to be flooded
- Deployment from topside or ROV

ANNULUS TESTING

- Positive pressure annulus test and riser vent path assessment
- Temperature calibrated for accuracy
- Gas sampling for corrosion assessments
- Secondary volumetric flow meter digital readout
- Improved quick connect kit to reduce pressure loss and eliminate leak paths

FLEXAS™

- More realistic simulations leading to increased accuracy for fatigue life predictions
- Single integrated flexible riser global analysis with detailed multi-layer models and direct stress recoveries
- Elimination of secondary local stress analyses with detailed segment models

VALIDATION

- Deepstar qualification program
- Independent operator experimental benchmarking
- Selected by NASA and qualified for mission-critical analysis for manned space flight

Stress Time History for Individual Armour Wires