

Accuracy of the Future

increased confidence in welded joints



Challenge

- Fatigue lifetime uncertainty of welded joints is too large because of:
 - unintegrated models of crack initiation & growth;
 - discrepancy between experimental simulations & reality.

How

- Develop a Total Life Model based on one SN-curve for all welded joints in risers.
- Establish a relation between crack initiation and crack growth
- Validate conventional test rigs results with results from realistic Hexapod experiments

Impact

- Confidence in fatigue performance of risers
- Reliable and sustainable offshore structures
- Reduced maintenance costs

