



DR. ALASTAIR WALKER

Technical Expert

- Over 45 years' experience in the oil and gas sector
- Extensive experience in non-linear analysis and design of subsea pipelines
- Extensive experience in research and development of fundamental mechanics

Qualifications

FREng
BSc(Hons)
MSc Thermodynamics
PhD
DSc

Memberships and Associations

Fellow of the Royal Academy of
Engineering
Fellow of the Institution of
Mechanical Engineers

Contracts

ICE
Bespoke

Sectors

Energy
Marine
Oil and Gas

Geographic experience

Americas
Asia Pacific
Europe
Middle East
United Kingdom

Dr. Walker has extensive experience in the non-linear analysis and design of subsea pipelines, where he has led the development of Limit State and Strain Based design with practical applications to major offshore and onshore pipeline projects including high temperature and high pressure pipe-in-pipe systems.

He has over 45 years' experience in research and development of fundamental mechanics and analysis in the fields of non-linear structural and pipeline engineering. He has led the development of methods of static and dynamic analysis of advanced forms of structures and pipelines. He has been manager of a number of projects involving the advanced analysis and design of deep water and high temperature pipeline systems. He is experienced in the application of risk and reliability analysis relevant to structural components and pipeline systems. He has been lead engineer for pipeline weld strength assessments including Level 2 and Level 3 ECA's for girth welds in CRA lined and clad high temperature pipelines installed by reeling or S-lay.

He has acted as an expert witness giving evidence at the High Court in London and has prepared expert witness reports and provided technical support in a number of litigation cases concerning structural systems generally and offshore pipelines.

He has been lead engineer in the design of pipelines for requiring numerical analysis for lateral buckling and walking. He has been lead designer and a consultant for the development for methods for design of ultra-deep water pipelines. He has been the project manager for a number of Joint Industry Projects concerned with developing design methods for subsea pipelines on a wide range of topics, including upheaval buckling, strain based design and assessment of limit state design to accommodate high pressures and temperatures, span assessment.

This expert has been instructed by:

- Hogan Lovells International LLP