

➤ Risers

Peritus' capability in Marine Risers is founded on leading industry personnel, with experience to develop innovative solutions. While our personnel have experience in the design and construction of conventional rigid riser systems in shallow and deepwater applications, our focus is on dynamic risers in deep to ultra-deep waters with challenging seabed conditions and current loadings. Our scope of work ranges from concept studies, FEED, through detailed design, to fabrication and installation engineering, supervision and management.

For many deepwater systems, risers are an integral part of the subsea development or export system. At Peritus, we adopt a system level overview to ensure individual components fit with the overall functional requirements. The interface between risers with subsea, flowline/pipeline, floating structure, for example, is constantly evaluated to ensure the most efficient and reliable system is adopted.




Capabilities include:

- Through life cycle engineering – appraise, select, define, execute, operation support, decommission
- Steel Catenary Risers (SCR), Flexibles and Top Tensioned Risers (TTR) ranging from small diameter flowlines to large diameter export system
- Hybrid risers, including freestanding riser towers and/or bundles
- Flexjoint, stress joint, keel joint, J or I-Tube and buoyancy tank concept evaluation and design
- Dynamic, floating and seabed founded riser base spools
- Static, quasi-static, dynamic (time and frequency domain) based analysis
- Clashing, interference and interaction analysis
- Material selection, fatigue evaluation, and safety factor calibration analysis
- Component design using advanced mechanics solutions, such as finite element methods and/or testing with statistical simulations, including test program design, implementation, management and supervision
- Development and implementation of inspection, maintenance and repair strategies
- Interface management

Experience:

Peritus' senior technical team consists of industry experts with extensive international knowledge and expertise in difficult or deepwater environments. Members of this team have worked on some of the most innovative projects of their time, in some of the world's most challenging offshore environments.



experts in difficult and deepwater environments

The Peritus mission is to provide high end system engineering services to the offshore oil and gas industry with a particular focus on deepwater and difficult environments for:

- Subsea Systems
- Subsea Pipelines
- **Risers**
- Floating Structures
- Flow Assurance
- Specialist Engineering
- Field Development

