Offshore (Subsea) Pipelines

Offshore (subsea) pipeline engineering is the core business of CyrusOGR. Offshore pipeline design is a multi-task process, taking requirements for hydraulic, flow assurance, thermal, mechanical, fabrication, installation, commissioning and integrity design into consideration.

CyrusOGR capability has global reach with design experience from shallow waters (less than 500m) to ultra-deep waters (greater than 1500m); from small diameter insulated flowlines to large diameter trunklines; from HP/HT pipelines to Pipe-In-Pipe (PIP) systems.

CyrusOGR provides the following expertise in the field of offshore pipe design:

- Route selection and design
- Limit State Design (pressure containment, hydrostatic collapse, buckle propagation, combined loading)
- Strain based design
- Reeled pipeline design including optimising the required wall thickness
- Freesapn analysis, design and mitigation measures
- On-bottom stability design
- Thermal and end expansion design

- Design against anchor dragging and fishing gear interaction
- Pipeline protection design
- Design against Upheaval Buckling (UHB) and mitigation measures
- Lateral buckling design and mitigation measures
- Design against pipeline walking and adopting mitigation measures
- Buckle arrestor design
- Bulkhead (component) design

In addition, CyrusOGR will provide fabrication and installation support for all methods of pipelaying including S-lay, J-lay, reel lay and G-lay.
See also our *Pipe-In-Pipe Systems* capability and *Reeled Pipelines* capability brochures.

*For further information, please contact us on* [info@cyrusogr.com](mailto:info@cyrusogr.com)