

➤ Flow Assurance

Peritus' capability is founded on leading industry personnel, with experience to develop innovative solutions for flow assurance. Flow assurance embraces the entire system in the development and the interaction of the hydrocarbons with the system elements and ensures successful and economical flow of hydrocarbon stream from reservoir to the point of sale. Flow assurance is extremely diverse, encompassing many discrete and specialised subjects and bridging across the full gamut of engineering disciplines. Besides network modelling and transient multiphase simulation, flow assurance involves effectively handling of solid deposits, such as, gas hydrates, asphaltene, wax, scale, and naphthenates. Flow assurance is the most critical task during deep water energy production because of the high pressure and low temperature involved. (Production interruption or asset damage due to flow assurance mishap can cause catastrophic blockage formation in pipelines and result in flow assurance failure).

Flow assurance is fundamental to designing a system that can be operated successfully and in an economic manner.

Key factors in the flow assurance work are reservoir type / characteristics, production profiles, produced hydrocarbon chemistry, number and type of wells and environmental conditions. Peritus strive to bring smart, high value and economic solutions whatever the development.




Capabilities include:

- Through life cycle engineering – appraise, select, define, execute, operation support, decommission
- Field development engineering
- Pipeline / Flowline sizing – steady state and transient
- Definition of transient start-up and cooldown temperature profiles for assessment of buckling and walking
- Hydrate prediction, prevention (inhibition) and remediation including chemical injection requirements for start-up, normal operation and shutdown – throughout the field life
- Insulation requirements definition, type and required performance characteristics
- Operational envelope development – minimum, maximum, ramp-up
- Production chemistry issue resolution, such as wax and asphaltines
- Slug prediction, sizing and slug catcher sizing
- Through life production system optimisation
- Production system operability analysis
- Development of operations manuals
- 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

