Most of the world’s remaining oil and gas resources lie offshore and in water depths of more than 2000 meters. Such subsea conditions require for all components to meet a very high level of reliability. To avoid hazardous and expensive incidents, virtual testing is imperative.

The longstanding partnership between two expert companies with both 25 years of experience in their fields embodies the perfect combination of system simulation and engineering expertise in the oil & gas industry. ITI provides the proven software platform SimulationX with specialized modules for simulating subsea and offshore equipment. It has been developed in close collaboration with the international offshore/subsea engineering consultancy Agito.
High performance for all depths

SimulationX is an intuitive 1D to 3D software platform for physical modeling, simulation and analysis of mechatronic systems. Engineers all over the world trust in this solution for design and virtual testing of subsea and offshore technology.

- **System behavior** | Analysis and evaluation of dynamic component and system behavior in oil and gas production and distribution processes
- **Dynamic modeling** | Model-based development of high-tech equipment and system solutions for eco-friendly exploitation and processing of natural resources
- **Multi-domain simulation** | Multidisciplinary modeling of heave compensators as well as launch and recovery systems (LARS)
- **In-the-loop applications (HiL, SiL, MiL)** | Virtual testing of controller hardware and software for subsea production, drilling and subsea processing
- **Risk Assessment** | Sensitivity analysis of subsea production systems for identifying weak points and degradation trends

The SimulationX SubSea libraries for hydraulics as well as for power and communication analyses are specially designed for the needs of the oil and gas industry. The ready-to-use subsea component models and the modular concept make it easy to learn the modeling process and provide maximum flexibility. The experts at Agito’s worldwide offices offer highly qualified on-site support for all oil and gas clients.

Throughout all major oil and gas regions, global oil companies and equipment suppliers use SimulationX to model and simulate dynamic system behavior.

e.g. Aker Solutions, Baker Hughes, Cameron, Expro Group, CNPC, CNOOC, FMC Technologies, GE Oil & Gas, Petrobras, National Oilwell Varco, TTS Group

“Model-based design helps reduce both time and costs during the development of machines that meet the highest standards.”

Morten K. Bak
MHWirth