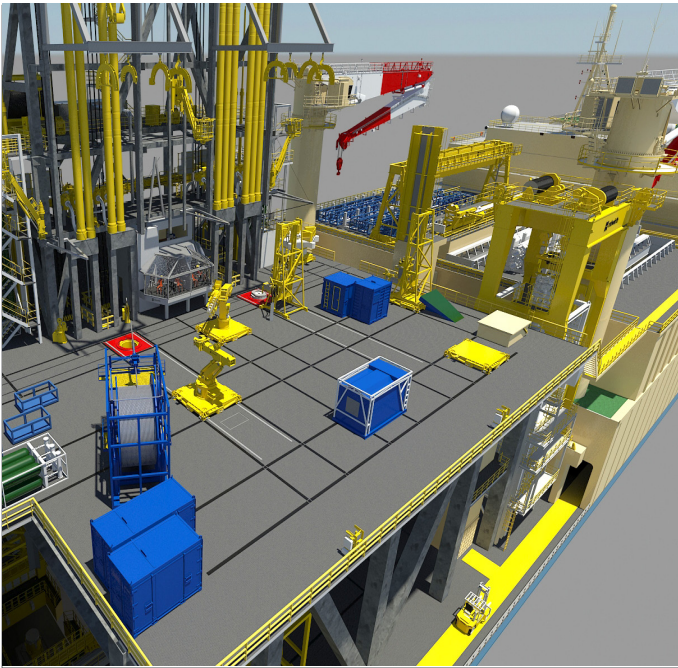


Engineering Services

Studies | FEEDS



MHWirth 3D Max

Designing Rigs and Solutions for the Future

- FEED engineering
- Design and documentation of optimal drilling concepts, functionality and operation
- System and area responsible for drill floor, substructure and moon-pool, derrick/ram guide, pipe, riser and storage decks, mud, bulk and treatment areas

Capabilities

- Management, interface, change and weight control
- Multi discipline 3D modelling
- Drilling process, hydraulic and utility systems

Project	Customer	Eng. Scope	Remark
Cat B, D, J	Statoil	Concept + FEED	Cat B included well intervention systems/area
Johan Sverdrup	Statoil	Concept	Feasibility study; Johan Sverdrup East for Lundin
Troll A	Statoil	FEED	Modular drilling rig
Mariner	Statoil	FEED	Includes concept study
Browse	Woodside	FEED	Modular design
Malikaii	Shell	FEED	Support structure mobile drilling unit
20K Drillship	Maersk Drilling	Concept study	Included 3D modelling of the complete vessel
Yu.Kuvykin	Lukoil	Concept study	Joint Venture Rambøll Oil & Gas, arctic climate
Hebron	Exxon Mobile	Pre-FEED	Cold climate design
Amauligak	Conoco Phillips	Feasibility study	Arctic/cold climate design (including permafrost)
Arctic Jack-up	Hydro	Feasibility study	Arctic/cold climate design
Cat I	Statoil	Concept study	Arctic/cold climate design