The K-Sim Engine Steam Propulsion Dual Fuel model simulates the steam propulsion plant of a typical modern, large LNG tanker machinery. The steam plant model is based on an actual LNG tanker. Model performance and dynamic response is very close to that of the actual ship.

The simulation model has focus on systems that are unique to dual fuel steam plants: boilers, turbine, condensers, condensate system, fuel oil system, fuel gas system. In addition to sophisticated propulsion control and boiler management systems, the model provides an understanding of how boil-off gas is used in order to keep safe and economic operations on-board.

Training objectives
The K-Sim Engine SP Dual Fuel model is designed to be a valuable tool in the basic and advanced training of marine steam engineers. The training objectives are to train junior engineers in basic engine room operations, senior engineers in emergency operations and trouble shooting, and to train senior and chief engineers in optimal operation, fuel economy and energy conservation. This is achieved by controlled training, leading to better understanding of the total plant operation, as a result of realistic simulation of a real engine room.

Compliant with industry requirements
Kongsberg Digital simulator models exceed requirements in the STCW convention, Regulation 1/12 and fulfill DNV GL's standard DNVGL-ST-0033 for Maritime Simulator Systems.
MODEL MAIN SPECIFICATIONS

High fidelity engine room systems include:
- Fuel Oil Service System
- Boil Off Gas Supply System
- Boiler 1 and 2 - Fuel Supply
- Boiler 1 and 2 - Burner System
- Boiler 1 and 2 - Air/Flue Gas System
- Boiler 1 and 2 - Water/Steam System
- Main Turbine - Throttle Control System
- Main Turbine - Drain/Heat System
- Main Turbine - Gland Sealing System
- Main Turbine - Lubrication Oil System
- Main Turbine - Safety System
- Ship Propulsion/Ship Load
- Main Condenser System
- Condensate Feed System
- High Pressure Feed System
- Boiler Feed Water Pumps
- Back Pressure Steam System
- Boiler Steam Lines
- Boiler Steam Dump System
- General Service Steam System
- Sea Water Cooled Distiller Condensate Cooled Distiller
- Electric Power Plant
- Turbo Generator no 1 and 2
- Remote Panel
- Main Turbine Remote Panel - Boiler 1 and 2 Control
- Remote Panel - Boiler 1 and 2 Burners
- Boiler Feed Water Control
- Boiler Combustion Control
- Boiler Temperature Control

Datasheet version:
K-Sim Engine SP Dual Fuel,
July 2018

Note: Specifications subject to change without any further notice.