



D.P. Associates

Intuitive, Intelligent and Diverse Training Solutions

The number of LNG steam turbine powered ships in commercial fleets is expected to increase by over 30% in the next few years, but there's a shortage of engineers with the experience to operate them. The MPRI LNG Steam Propulsion Plant Simulator™ closes the skills gap by providing realistic, PC-based training that covers everything from basic to advanced engine room operations.

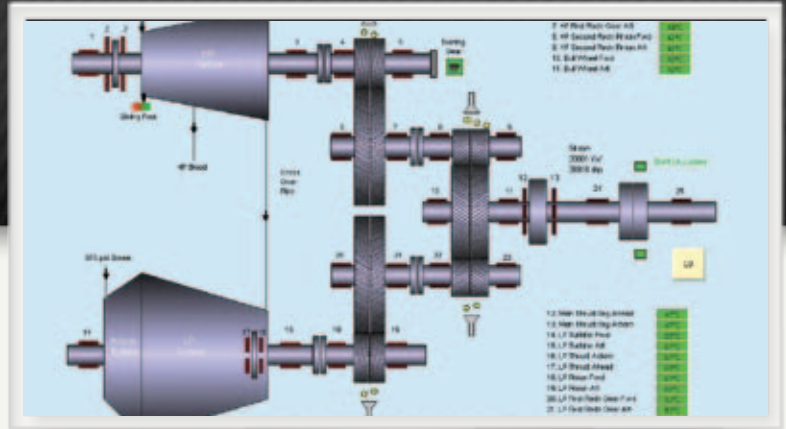
SAFETY AT SEA BEGINS WITH COMPREHENSIVE TRAINING

Approximately 80% of maritime accidents are the result of human error. Simulation training, in a controlled environment, gives marine engineers the opportunity to learn, experiment and interact with a variety of realistic situations that would be dangerous or expensive to recreate in real life.

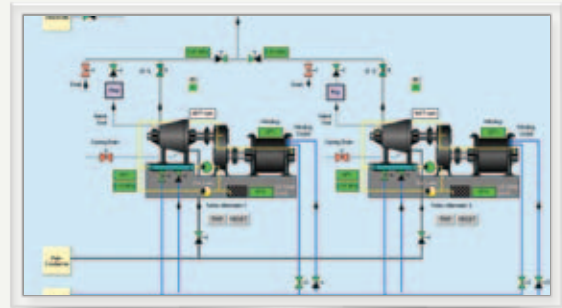
Our LNG Steam Propulsion Plant Simulator offers critical benefits:

- Increased Safety at Sea
- Lower Running Costs
- Reduced Insurance Premiums
- Specialized Crew Training
- STCW Certification for Crew and Engineering Officers
- Crew Recruitment and Evaluation

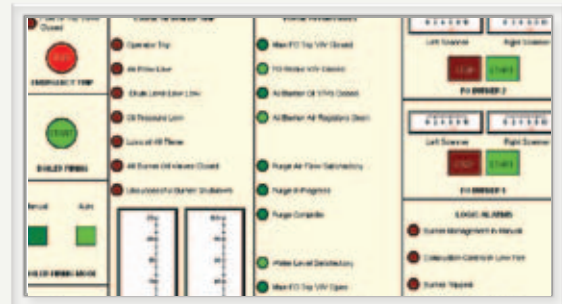
LNG STEAM PROPULSION PLANT SIMULATOR



The propulsion plant consists of a High-Pressure (HP) turbine and a Low-Pressure (LP) turbine driving the propeller shaft through a double reduction gear train.



MIMIC diagram of a Generator Fuel Oil Supply system.



MIMIC diagram of a Lube Oil Purification system.



LNG STEAM PROPULSION PLANT SIMULATOR

Military, Government, and Commercial Clients

The DPA LNG Steam Propulsion Plant Simulator™ reproduces the operational functions and reactions of a marine steam propulsion plant using Diesel Oil, Heavy Oil or LNG derived from cargo boil-off as possible fuels. The simulator covers auxiliary plant and engine room machinery including gas valves, piping, burners, purge and ignition sequences, controls and interlocks, as well as the energy released by burning gas in raising steam. The system meets the requirements of STCW Code Section A-1/12 and Section B-1/12 and ISM Code Sections 6 and 8 as applicable for PC-based simulators.

The LNG Steam Propulsion Plant Simulator™ can be used as a stand-alone system on a single PC, or networked in a classroom setting. The system can be configured so students can work individually, or together as a class. The instructor can change many parameters including environmental conditions, fuel calorific value and contaminants, either before or during a training exercise.

DESIGNED TO RECREATE REAL-WORLD CONDITIONS

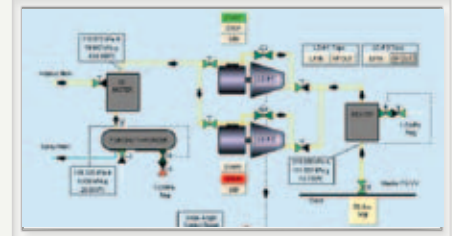
- Simulates a modern LNG carrier
- Use on a single PC or network in a classroom
- Trains engineers with a wide range of abilities, from basic to advanced
- Realistic, interactive and user-friendly displays
- Over 200 simulated fault conditions

The steam plant simulator is a very realistic training aid.

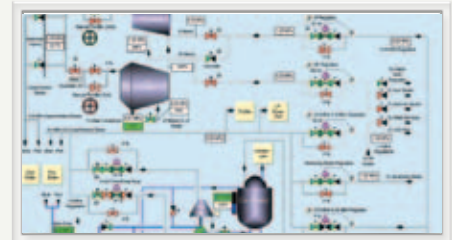
—Azalea Maritime, Netherlands

We would highly recommend this simulator as a teaching/training aid for courses related to the operation and management of a marine steam plant.

—Warsash Maritime Academy, UK



LNG boil-off is compressed and heated before being supplied to the boiler as fuel.



Steam from each boiler supplies a common steam line feeding the HP Ahead and LP Astern throttles. Steam extracted.



The instructor can change environmental conditions, fuel calorific value, fuel contaminants.

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