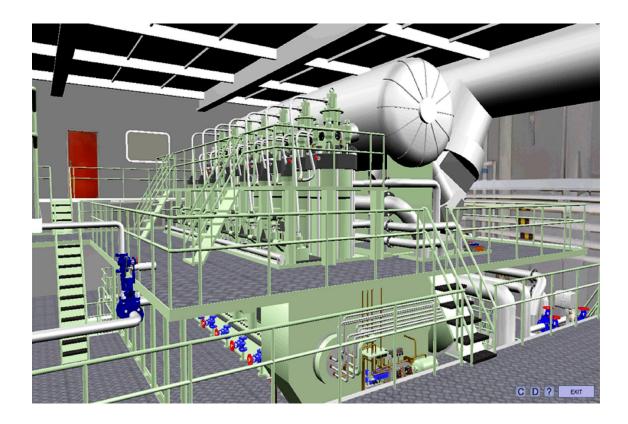
http://www.pcmaritime.co.uk



# Low Speed Engine Room – LER3D

3-D PC-based Engine Room Simulator

LER3D is a PC-based simulator modelled on a typical low-speed engine comprising a two-stroke main engine with a fixed pitch propeller. The engine room is fully re-created in 3D with associated multi-channel sound which can be listened to on 2, 4 or more speakers. The software provides a very realistic impression of working in the real environment.



## **LER3D** has been developed to comply with:

- STCW Code: Section A-1/12 and Section B-1/12.
- ISM Code: Section 6 and Section 8.

## Key educational benefits

- Comprehensive training in typical ship's engine room operating routines.
- Practical experience of engine room operation. the student can carry out any operational task starting from any set-up.
- Training in corrective action when faults occur. Faults can be injected into the simulator to test student knowledge.

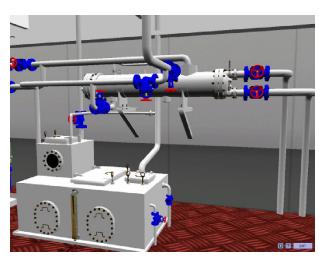
## Low Speed Engine Room 3D (LER3D)

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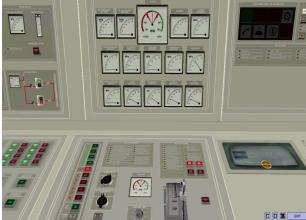
## **LER3D** simulates the following systems:

- Main Engine
- Fuel System
- Cooling System
- Lubricating System
- Compressed Air System
- Power Plant
- Steam System
- Sanitary Water System
- Bilge System
- Steering Gear
- Sewage Treatment Plant
- Water Mist System
- Refrigerating Plant
- AC Plant
- Incinerator
- CO<sub>2</sub> Fire Extinguishing



The 3D model includes very realistic virtual controls like switches, gauges and lamps.

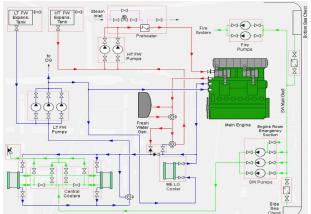
Control panels imitate the most important parts of the control room equipment.



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Mimic diagrams allow quick zooming to selected parts of the engine room.

The zooming technique makes it easy to access any part of the engine room and to open and close valves, set the position of switches etc.





The electric power plant is equipped with a modern power management system which enables automatic control of generators in relation to actual power demand.

The control room gives remote control of engine room equipment.



#### **LER3D** main features

- LER3D is a comprehensive and realistic simulator for ships engine room training. It can also be used as a low-cost pre-full mission training simulator.
- The mathematical model simulates a modern ships engine room with a 2-stroke, low speed engine with fixed pitch propeller.
- All vital auxiliary systems have been modelled.
- The user interface includes virtual controls and alarms for greater realism.
- The 3D virtual reality with valves, tank level indicators and selected digital gauges makes it easy to operate and monitor the simulated engine room.
- Multichannel digitised sound effects include: engine sound correlated with engine speed, the sound of a diesel generator starting and running, open indicator valve sound, alarm and machine telegraph buzzers.
- Emergency procedure training including fire simulations





Fire simulations

Please contact PC Maritime for further information. For serious enquiries we can provide a time-limited working version of LER3D so that you can trial it.