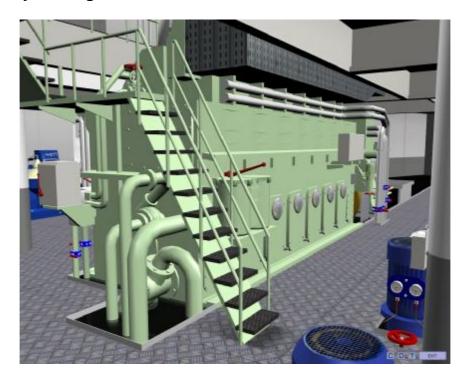


# Medium Speed Engine Room – MED3D

3-D PC-based Engine Room Simulator

MED3D is a PC-based simulator comprising a medium speed diesel engine, three diesel engine generators and one shaft generator. The engine room is entirely modelled in 3D with multi-channel sound to create a convincing learning environment. The 3D visuals are fully integrated with the mathematical model of the engine and its associated systems, providing true virtual reality training.



**MED3D** is Type Approved to STCW and has been developed to comply with:

 STCW Code: Section A-1/12 & Section B-1/12

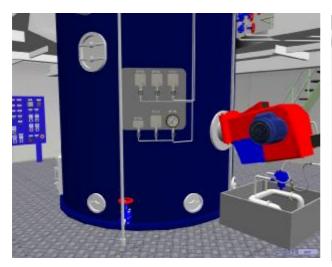
ISM Code: Section 6 & Section 8

## **Key educational benefits**

- Comprehensive training in modern 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.

### **MED3D** simulates the following systems:

- Main engine, controllable pitch propeller & reduction gear
- Main engine remote control system
- Fuel system
- Cooling system
- Lubricating system
- · Compressed air system
- Power plant (3 diesel generators, 1 shaft generator)
- Steam system
- Sanitary water system
- Bilge system
- Steering gear
- Sewage treatment plant





#### **MED3D** main features

The mathematical model simulates a modern ship's engine room with a **4-stroke, medium speed engine** based on MaK designs, reduction gear, controllable pitch propeller and all vital auxiliary systems.

The accurate 3-D presentation with active valves, tank level indicators and digital gauges makes a convincing environment in which to learn engine room operation and monitoring. It also makes the learning experience more enjoyable, leading to better retention of information.

Multi-channel digitised sound provides a realistic ship's engine feel. Sound effects include engine sound correlated with engine speed, a diesel generator starting and running, open indicator valve sound, alarm and machine telegraph buzzers.

#### Minimum PC requirements

At least 2GB RAM and 256 MB of video RAM for the graphics card (if video memory is shared then 3GB RAM is required).



The highly realistic 3-D modelling and zoom technique make it very easy to access any part of the engine room and to open and close valves, set the position of switches, push-buttons etc.



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

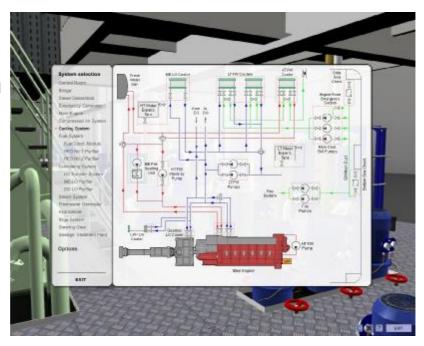


The control room allows remote control of engine room equipment.

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



Mimic diagrams enable quick zooming to a selected part of the engine and give students an overview of any particular part of the engine.



Please contact us for further information. For serious enquiries we can provide a time-limited working demo of MED3D.