

# Refrigeration and Air Conditioning Systems

The course aims to enhance the competency of engine personnel in the principles of refrigeration necessary to perform maintenance, troubleshooting and repair of refrigeration and air-conditioning systems on board ships.

## Training Outcome/s:

After the training, participants must be able to:

- Explain the fundamental operation of refrigeration and air-conditioning systems on board ships.
- Analyze the effects of the different tank accessories in refrigeration systems.
- Analyze the operation of the different types of refrigerant metering devices.
- Analyze the different system control components used in temperature and pressure control of refrigeration systems.
- Interpret superheat and subcooling values to troubleshoot a refrigeration system.
- Demonstrate electrical and mechanical maintenance and troubleshooting of a refrigeration system.

## Entry Standard/s:

Engine personnel