H868 – HV Power Distribution System – General

The major objective of the course is to provide the participants with in-depth theory, and train them for safe operation, maintenance and testing of switchgears, breakers and relays.

Course objectives:
After completing the course successfully, the student will have a comprehensive background of the marine power plants and will be able to operate, maintain and work safely with circuit breakers (SF6, Vacuum, Emax), contactors and relays. Participants are given detailed theoretical coverage alongside practical exercises for better understanding of switchgears and Emax breakers.

Contents:
- Introduction to marine power plants
- Safety procedures working w/ switchboard
- Power distribution systems (transformers, generator and motors)
- Protection systems
- Voltage and frequency regulation
- Droop control
- Power management
- Switchboard
  - Components, accessories and inter locks
  - Installation activities
  - Assembly procedure
  - Maintenance and periodical checks

Methods:
The course will include practical demonstrations on various switchboard models, hands-on experience on device operation, and a visit to production facility.

Duration: 5 days

Student profile:
Marine engineers and electro-technical personnel at the operational and management level.

Prerequisites:
Marine Power Plant Basic for Technical Staff and Marine High Voltage Safety course from ABB Marine Academy or similar knowledge is advisable.

Venues:
- Genoa, Italy
- Rotterdam, Netherlands
- Houston, USA

Additional information:
Modified on-site training on request;
Minimum 6, maximum 8 participants.