H866 – STADT x-AC-y-z Drive

The goal of this course is to train the participants in the safe operation, control, configuration, troubleshooting and maintenance of a STADT x-AC-y-z Drive.

Learning objectives:
Upon completion of this course, students will be able to locate the hardware components, to verify and replace the drive's parts and to perform preventive maintenance. DriveWindow is used as a programming and troubleshooting tool and is learned by practical exercises on our training drive.

Contents:
- General topics
  - Introduction to ABB Marine Services
  - Safety while working on the drive
  - In-depth theory of the Stadt x-AC-y-z Drive principles
- Hardware description (power electronics and-control)
  - Functions of components and PCB's (printed-circuit boards)
  - Hardware schematics and electrical drawings
  - Installation guidelines
- Water cooling system
  - Cooling circuit description
  - Direct IGBT water cooling principle
  - Importance of cooling water mixture
- Operation
  - Charging and discharging of the converter
  - Start/stop sequence using local control pan-els and DriveWindow tool
- Software introduction:
  - Application Motor Controller concept
  - PLC protection system
  - Detailed explanation and demonstration of alarm system
- Fault-tracing and troubleshooting:
  - Interpretation of alarm and fault messages
  - Replacement of PCB's and other components
  - Contacting ABB support

Methods:
Lectures with demonstration on our training drive; Practical exercises with the training drive.

Duration: 4 days

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

Prerequisites:
Marine Power Plant Basic for Technical Staff in ABB propulsion or similar knowledge is advisable.

Venue:
- Ulsteinvik, Norway
- Singapore

Additional information:
Minimum 4, Maximum 6 participants; On-site training on request.