### ABB Marine Academy course description H861 – General course for deck staff

#### Course goal

The goal of the course is to familiarize the participants with ABB diesel electric Azipod® propulsion basic features including remote control system, power plant and distribution to Azipod® units.

#### Learning objectives

Upon completion of this course the participant will be able to

- understand and effectively utilize the technical capabilities of the propulsion system
- communicate in a clear and concise manner the technical and operational features of the system
- understand the operational envelope and limitations of the system

#### Contents

- Diesel electric Azipod® propulsion system main components and their functions
- Power generation, distribution and consumers
- Azipod® propulsion system terminology
- Frequency converter propulsion with power plant overview
- Azipod® units technical overview
  - Azipod® unit user recommendations
  - Steering gear mechanics and actuation technology
- Alarm conditions
  - Emergency actions in the  $\mathsf{Azipod}^{\circ}$  unit space
  - Bridge operator safety signals and alarms
- Remote control units and operation
- Bridge backup/emergency operation
- Azipod® propulsion occupational safety basics

#### Methods

Lectures and demonstrations
Visits to machine factory and Azipod® assembly factory

#### Student profile

Deck personnel at support, operational and management level

#### Prerequisites

None

#### Duration

4 days



#### Venue

Helsinki

#### Additional information

Minimum 6, maximum 8 participants Modified on-site training is available on request



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## H861 – General course for deck staff Course outline

Course outline
Day 1
Course overview
ABB marine systems overview
Electrical machines
Visit to machine and drive factories
Day 2
Day 2 Azipod® propulsion system evolution
Main mechanical componets
Azipod® propulsion systems
Visit to Azipod® assembly factory
Day 3
Steering gear system
Remote control system
Propeller hydrodynamics
Day 4
Occupational safety
Assessment

 $\ensuremath{\mathsf{Azipod}}^*$  is the registered trademark of ABB Oy.

