## ABB Marine Academy course description H938 - Azipod® vessel operation in ice, including basic level Polar Code training, Management level

#### Course goal

Management level (STCW) workshop on twin- and three-Azipod vessel ice operation and handling, covering normal operation, malfunctions and bridge communication.

#### Learning objectives

Upon completion of this training, the participants will have deep understanding of the operational principles of diesel-electric Azipod vessels taking into account vessel safety, environmental and economical requirements and operational efficiency and maintenance needs. They will be able to fully utilize the flexibility of the propulsion system and to identify potential malfunctions of the propulsion system and to cope with them without sacrificing vessel safety. Bridge communication about the different aspects of vessel operation and handling in a clear and concise manner is emphasized.

#### Contents

NOTE: The actual content of each workshop is finalized according to the needs and requests of the customer and the participants.

Main topics include the following:

- Azipod vessel operation and propulsion system behavior in all conditions
- Azipod vessel system functionalities, power plant and propulsion system malfunctions
- Azipod vessel resource management and bridge communication
- Part of Basic Level Polar Code training (rest can be completed by e-learning by ABB training partner)

#### Methods

Training consists of discussions, lessons and full mission bridge simulator exercises with two- and three-Azipod vessel to ensure learning at top level



#### Student profile

Azipod vessel deck personnel at management level

#### **Prerequisites**

H883 - Azipod® vessel operation, operational level or good experience of Azipod vessel operations

#### **Duration**

5 days

### Venue

Aboa Mare Training Centre, Turku, Finland

#### Additional information

Maximum 6 participants

This workshop is run in conjunction with an approved maritime simulation center.

Simulator exercises consist: Harbor maneuvers, approaching ice, mode switch from bow first to stern first, running in broken lead, switch to bow first on entering open water, running in level ice, running in ridged ice field, berthing and unberthing in ice, drifting ice, following icebreaker, malfunctions.



# H938 - Azipod® vessel operation in ice, including basic level Polar Code training, Management level Course outline

Course outline
Day 1
Induced ration and all residues
- Theory: Ice Operations according to Polar Code basic level
Day 2
- Theory: Basics of Azipod controls, Speed controls
- Simulator: Familiarization, bridge team roles and communication. Operate with two Azipods
- Simulator: Operation exercises, operate with two Azipods
Day 3
- Theory: Ordinary operation of Azipod propulsion
- Simulator: Operation exercises, operate with three Azipods in all the
remaining exercises
Day 4
- Theory: Ordinary operation of Azipod propulsion
- Simulator: Operation exercises
Day 5
- Theory: Malfunctions
- Simulator: Malfunctions during operations
- Written test, discussion and wrap-up

