ABB Marine Academy course description
H882 – Azipod® XO technical training

Course goal
This course provides a deeper understanding of Azipod XO systems, and how to operate, maintain and troubleshoot the system components.

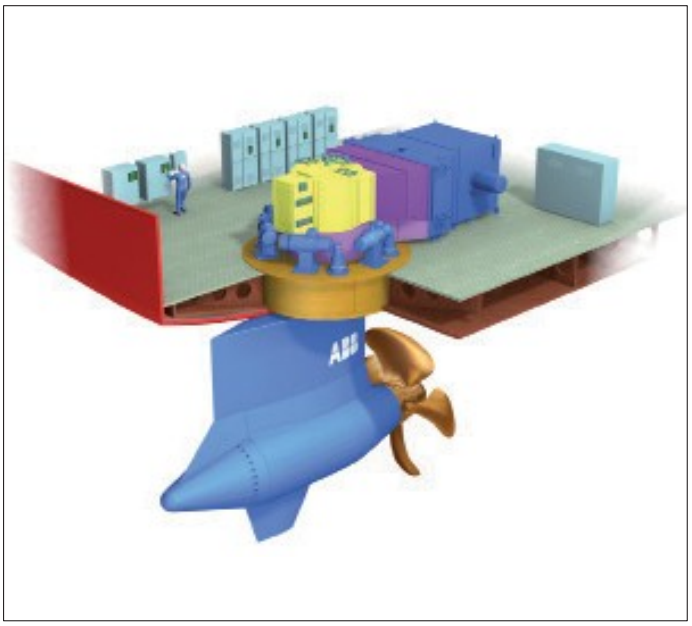
Learning objectives
Upon completion of this course the participant will be able to
- describe the functions of the different Azipod XO systems and how they interact.
- understand the importance of correct maintenance.
- understand the monitoring possibilities and how to troubleshoot the discussed systems.
- perform adjustments on specific system components e.g. ACS800 steering gear drive, shaft-line support unit.

Contents
- Safety procedures while working on the Azipod.
- Terminology and evolution of Azipod propulsion.
- ACS800 steering gear drive adjustment and troubleshooting.
- Electric steering gear.
- Slip-ring unit technology and maintenance.
- Power and data transmission system.
- Encoder signal fault tracing.
- Electric steering gear.
- Review of safety aspects inside the Azipod unit.
- Azipod vessel operation basics

Methods
Classroom lessons and discussions about Azipod X systems.
Lectures and demonstrations.
Workshop exercises with demonstration equipment.
Visits to Azipod Assembly, Motors & Generators and LV Drive production facilites.

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

Prerequisites
H850 Azipod Space Safety & H860 Marine power plant basics for technical staff, or similar, is advisable.



Duration
5 days

Venue
Helsinki

Additional information
Minimum 6, maximum 8 participants
On-site training is available on request.

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Course outline

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Day 1

- Course overview
- ABB marine systems overview
- Azipod XO overview
- Azipod assembly factory visit

Day 2

- Azipod XO propulsion module systems
- Steering module
- Data transmission
- Slip-ring
- Cooling

Day 3

- Electric Steering Gear overview and operation principle
- ACS800-04 inverter module construction, option modules and I/O extension
- Control panel CDP312 operation
- Electric Steering Gear software
- DriveWindow PC-tool
- Inverter module replacement and maintenance

Day 4

- AC800M controller overview and components
- PC-tools for AC800M, basic operation
- Operator panel PP865
- AC800M system SW loading and IP address setting
- AC800M application SW loading
- PP865 SW loading
- Troubleshooting

Day 5

- Azipod propulsion unit space safety discussions
- Exam and course evaluation