

NK-O3 Ballast Water Treatment System (BWTS) Operations and Troubleshooting Course

With the Ballast Water Management Convention coming into force, the efficient functioning of the BWTS system on board has become extremely critical since any malfunction of the BWTS could have a direct impact on the vessels' ability to carry out cargo operations. The NK-O3 Ballast Water Treatment System (BWTS) - Operations and Troubleshooting Course is designed to provide a comprehensive understanding of the principles, components, and operation of the BWTS system used for disinfecting ballast water. The course covers the fundamental principles of the system, maintenance aspects and includes the functions and operations of its various components. Additionally, the course aims to prepare learners to identify and troubleshoot likely faults that may arise in the BWTS system's different components.



Program taught by
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Program Objectives

- ✓ Explaining the basic principles of the NK-O3 BWTS in disinfecting ballast water (Ozone Injection).
- ✓ Discussing the functioning and maintenance aspects of the various components of the BWTS system.
- ✓ Interpreting the Process & Instrumentation (PI) and the Flow diagrams and understanding the operation of the system.
- ✓ Identifying likely faults and troubleshoot problems that could occur with the various components of the BWTS system.
- ✓ Demonstrating steps for extracting & saving data in the NK-O3 BWTS system.

Program Contents

- ✓ Basic principles of NK-O3 BWTS in disinfecting Ballast water
- ✓ Functioning and detailed working of the various components and sensors / analysers within the NK-O3 BWTS system.
- ✓ Study of the P & I and Ballast Water Flow diagrams and familiarization with the operation of the system.
- ✓ Study of various relevant HMI screens.
- ✓ Start / Stop of Ballasting / De-ballasting Process Flow.
- ✓ Maintenance aspects for the components of the system.
- ✓ Various Alarms and Interlocks of the system.
- ✓ Likely faults and troubleshooting the problems that could occur with the various components.
- ✓ Additional regulatory requirements (USCG/VGP) regarding the landing / testing of de-ballasting water samples.
- ✓ Steps for extracting, saving and retrieving data.



Program Duration: 2 days

Target Participants: C/E, 1A/E, 2A/E, ETO, Master, C/O, 2/O