

Electronic Governor System Training DEGO II-III User Training

ELE41



DEGO II

Course Venue

ABB Rotterdam, Netherlands

Course Duration

The duration is 5 days. (Negotiable, program can be tailored to the owners actual installation)

Description

Course goal is to learn the basic operation of the DEGO II electronic governor system, as well as an introduction to trouble shooting, tuning and basic repairs.

Student Profile

Ship's engineer, chief engineer, electrician.

Prerequisites and Recommendations

Basic knowledge of diesel engine speed control and power generation is required. Basic knowledge of electrical systems is recommended.

Course Objectives

Upon completion students will be able to:

- Understand the DEGO II electronic governor system
- Identify abnormal behaviour of the system
- Locate faults in the different units
- Repair by replacement and perform recalibrations
- Make fine tunings to the system
- Perform basic maintenance and repairs on ASAC actuators

Main Topics

Theory:

- Basic theory of electronic governors
 - Propulsion application
 - Single engine arrangement
 - Twin engine arrangement
 - Generator application
 - Isochronous
 - Speed droop

- Load control
 - Fuel-servo and actuator
- ABB DEGO II governor concept
 - Propulsion control units QHFD 11x series
 - Generator control units QHFD 12x series
 - Multi generator power plant control units QHFD 55x series
 - Fuel-servo control units QHFD 4xx series
 - Auxiliary units QHFD 5xx series
 - Actuators type ASAC
- Trouble shooting techniques and repair
 - Basic fault tracing
 - Repair by replacement
 - Calibrations and adjustment

Practice:

- Adjustment of propulsion governor
- Adjustment of generator governor
- Adjustment of fuel-servo
- Troubleshooting of most common failures
- Basic repair of ASAC actuator

Training units available:

- QHFD 111
- QHFD 122S
- QHFD 420
- QHFD 500
- QHFD 552A
- ASAC 70 actuator
- ASAC 200 actuator
- Twin-engine propulsion simulator
- Two-engine generator simulator

DEGO III

Course Venue

ABB Rotterdam, Netherlands

Course Duration

The duration is 5 days. (Negotiable, program can be tailored to the owners actual installation)

Description

Course goal is to learn the basic operation of the DEGO III electronic governor system, as well as an introduction to trouble shooting, tuning and basic repairs.

Student Profile

Ship's engineer, chief engineer, electrician.

Prerequisites and Recommendations

Basic knowledge of diesel engine speed control and power generation is required. Basic knowledge of electrical systems is recommended.

Course Objectives

Upon completion students will be able to:

- Understand the DEGO III electronic governor system
- Operate the PC based tool DEGO III AID
- Identify abnormal behaviour of the system
- Locate faults in the different units
- Repair by replacement and perform recalibrations
- Make fine tunings to the system
- Perform basic maintenance and repairs on ASAC actuators

Main Topics

Theory:

- Basic theory of electronic governors
 - Propulsion application
 - Single engine arrangement
 - Twin engine arrangement
 - Generator application
 - Isochronous

- Speed droop
 - Load control
- Fuel-rack actuator
- ABB DEGO III governor concept
 - Propulsion /generator control units QHFD 11x series
 - Multi generator power plant control units QHFQ 55x series
 - Software basic functions
 - Software options special functions
 - Power supply units QHFQ 4xx series
 - Actuators type ASAC
- Trouble shooting techniques and repair
 - Basic fault tracing
 - Repair by replacement
 - Calibrations and adjustment

Practice:

- DEGO III AID handling (off-line / on-line)
- Adjustment of propulsion governor
- Adjustment of generator governor
- Troubleshooting of most common failures
- Basic repair of ASAC actuator

Training units available:

- QHFD 111
- QHFD 113
- QHFD 115
- QHFD 410
- QHFD 552
- ASAC 70 actuator
- ASAC 200 actuator
- Single-engine propulsion simulator
- Twin-engine propulsion simulator

Two-engine generator simulator