

ROXBY



Training Solutions

Speedtronic Mark IV Maintenance

Course Content

Aim

The Mark IV Maintenance Course offers a curriculum that emphasises a hands-on approach to learning the process of monitoring, maintaining, improving the availability of the Mark V Control System. Upon the successful completion of the course, the participants will be able to:

- Have a good knowledge of the Mark IV Control System components.
- Carry out troubleshooting and maintenance using the operator interface.
- Have a good knowledge of the Mark V documentation.
- Understand the flow of control signals in and out of the Mark IV
- Carry out calibration and maintenance of servo valve regulators and feedback devices.
- Use the control sequence program to understand the control system.
- Understand the synchronizing system for generator drive turbines.
- Manage alarms and customise alarm messages.
- Understand the operator interface displays, edit and create displays.

Pre-Requisites

Control and Instrumentation Technicians and Engineers with a basic knowledge of turbine technology and personal computers.

Course Duration

This course is of 10 days in duration

Optimum Numbers

Maximum of 6 candidates is recommended.

Training Aids

PowerPoint Presentation, course notes, hand-outs and discussion.

Course Syllabus

Control Panel Overview

- System architecture
- Hardware identification and description

Introduction to HMI

- Windows NT basic information
- Cimplicity program description
- Toolbox program description

- Typical ports

Mark VI Controller

- Hardware configuration
- Controllers
- Protection module
- I/O cards
- Terminal boards
- Practice

Toolbox

- General description and features
- Software structure description
- Modify sequence
- Adding I/O signal
- Downloading the new configuration
- Ethernet global data
- Trend recorder
- HMI configuration
- Practice

Cimplicity Project

- Cimplicity project configuration
- Standard screen description
- Modify the screen
- Practice

Troubleshooting

- Troubleshooting tools description
- Practice

Fuel Demand Philosophy

- Startup
- Acceleration
- Speed/load
- Temperature
- Shut-down

Protection

- Overtemperature
- Overspeed
- Vibration
- Loss of flame