

Powergen Training Ltd. Technical Training Consultants

Training and Consulting Services for the Power Generation Industry

Advant Configuration Course 10 days

Course Objectives:

The course goal is to teach students how to configure and operate a running control system. Consisting of AC450 and AC160 controllers, operator interface OS520 or 800xA and ES100 engineering workplace.

The course will enable the participants to:

- Configure and operate the control system controllers
- Understand the basic elements and functional blocks for power plants (e.g. pumps, valves, FG, SEQ, etc.)
- Read and understand the plant specific documentation
- Explain the functions of the hardware components (CPU; Communication; I/O modules)
- Troubleshoot errors and replace faulty components
- Carry out regular maintenance tasks
- · Configure and operate the operator workplace
- Interpret control system error messages
- Configure an operator workplace
- Create process graphics and trend displays
- Use the engineering station and all its tools
- Design and read application programs
- Load the application software into the controller
- Test, simulate and analyze software
- Change functions on- and off-line

Course Contents:

- Overview and hardware components of the control system
- Software functions, such as basic analogue and binary elements, drive control functions, logical and sequential group control units and selectors
- APC software options and Type Circuits
- Features of the engineering workplace such as: creating project architectures, creating and modifying function diagrams, converting and downloading application programs, simulating and displaying live values
- Configuration of the operator workplace, such as creation of process graphics, curves and lists. Setting up a system from scratch and creating backups.



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Location:

• Onsite at your location of choice

Prerequisites:

- Plant Overview and Introduction Course (or similar experience)
- Operator Station Training (or similar experience)

Course Format:

- Classroom
- Group Exercises
- Q&A
- Site visits to electronic and control room
- Work on the actual equipment

Remark:

- It would be an advantage if you had your own training rack (typically built from spares, we can assist with the setup and identification of components required)
- At least one spare computer is required per 2 students to allow for installation of the engineering software already available.