€TRAINING

Production Facilities Control Room Operation

29 July - 2 August 2024
London (UK)
Landmark Office Space

Production Facilities Control Room Operation

REF: E1573 DATE: 29 July - 2 August 2024 Venue: London (UK) - Landmark Office Space Fee: 6375 Euro

Introduction:

This training program provides participants with comprehensive knowledge and practical skills for operating control rooms in production facilities. It equips individuals with the expertise needed to ensure smooth and efficient operation of production processes while maintaining safety standards.

Program Objectives:

At the end of this program, participants will be able to:

- Analyze and anticipate the behavior of main control loop structures DCS and SIS systems architecture and functionalities,

- Explain production equipment, process operating parameters, and perform troubleshooting,

- Implement proactive, anticipatory control room operation and acquire a safety mindset,

- React and act in a structured manner to anomalies and plant upsets,

- Enforce safety guidelines during downgraded and critical situations.

Target Audience:

- Operators in production facilities.

- Control room supervisors.

- Maintenance technicians.

- Process engineers.

- Plant managers.

Program Outlines:

Unit 1:

Getting Started - DCS Functionalities for Proper Analysis:

- Familiarization with HMI functions and operations.

- Review of DCS tools.

- Study of control loop structures: cascade, split-range on the simulator.

- Introduction to programmable logic controllers and automated sequences.

- Monitoring start-up sequence compressor through MMI.

- Description of Safety Instrumented Systems SIS: PSS, ESD, HIPPS, and F&G systems.

Unit 2:

Wells & Production Lines Operation:

- Well start-up ramp-up and shutdown.

- Analysis of automatic gas control.

- Monitoring and detection of abnormal conditions in wells.

- Operation of rotating machinery: centrifugal pumps and compressors.

- Review of technology, process lines, protection systems, and operating parameters.

Unit 3:

Process Upset Management:

- Management of alarms: priorities and decision making.

- Anticipation vs. on-alarm action.

- Utilization of trend views to predict process disturbances.

- Implementation of routine checks roadmap for global plant performance checks.

- Role-play situations for shift reports and structured reaction to process upsets.

Unit 4:

Safety in Operation:

- Operating the plant in critical situations and making adequate decisions.

- Simulation exercises: handling gas leakage, inhibition, and downgraded situations.

- Manual ESD activation following leakage detection.

Unit 5:

Production Start-Up:

- Analysis of production facilities start-up philosophy.

- Safe plant start-up procedures.

- Implementation of start-up procedure on the simulator.

- Anticipation of process upsets and handling malfunctions.

- Weekly continuous assessment tests on the simulator.