

PROCESS PLANT START-UP COMMISSIONING AND TROUBLESHOOTING PRE007

COURSE DESCRIPTION

The initial start-up of any plant, irrespective of size, type, or industry, is a unique occurrence, therefore, start-up poses some special problems. Lack of experience in dealing with these problems has frequently resulted in prolonged and costly start-ups.

The course covers estimating of start-up costs, personnel requirements, and resources. It defines the vital role of project management and plant personnel in the preparation and planning for successful start-up of any process plant. Emphasis is on effective planning and use of available resources, both material and manpower.

Troubleshooting performed during the actual start-up can be very expensive and must be done as effectively as possible. This course demonstrate how effective troubleshooting can minimize the time and cost of going from the initial start-up to full production. The last day will provide a review of techniques and discussion of numerous examples to develop skills in troubleshooting.

COURSE GOAL

To enhance the participants' knowledge, skills and abilities necessary to anticipate and avoid financial, technical, operational, and organizational problems associated with start-up.

COURSE OBJECTIVES

By the end of this course, participant will be able to:

- Become a troubleshooter.
- Develop a structured approach to troubleshooting and problem solving which uses a common terminology and shared understanding.
- Point the way to continuous improvement in the way you run your processes and make incremental efficiency gains.
- Understand the difference between having a techniques manual on the bookshelf - and actually making it work.
- Identify the "motivated" people who should be the champions of troubleshooting and problem solving - and who should just follow.
- Understand work practices which "allow" success in troubleshooting and problem solving thought reducing the variability of your process.

WHO SHOULD ATTEND

- Project Managers.
- Plant Managers.
- Plant Supervisors.
- Technical Staff.
- Contractor personnel involved in project execution and plant start-up in any process industry.

COURSE DURATION

5 Working Days

COURSE OUTLINES

1. Process Plant Start up and Commissioning: An Introduction

- Organization and roles.
- Supplementary topics.
- Cost estimation.
- Spare parts planning.

2. Commissioning Strategy

- Mechanical completion & integrity checking.
- Pre-commissioning and operational testing.
- Start-up/Initial operation, testing and acceptance.

3. Process Plant and Machinery Specific Issues

- Process Plant and machinery commissioning.
- Instrumentation and control systems.
- Preparing and isolating process plant.

4. Risks Management during Commissioning

- Trouble shooting and problem solving.
- Risk management.
- Managing safety and quality.
- Conclusion.

5. Main Concepts

- The nature of process problems affecting performance.
- Performance defined in terms of generic variables: speed, quality and cost.
- Working practices - empowerment or impairment?
- Developing troubleshooting and problem solving skills.
- Managing change.