

Process Troubleshooting and Problem Analyze and Solving





# Process Troubleshooting and Problem Analyze and Solving

## Introduction:

Excellent Troubleshooting skills are considered a core competency for 'Best-in-Class' industrial companies. If your company goals include minimizing downtime then this workshop is a must because it delivers rapid, safe Troubleshooting.

# Course Objectives:

At the end of this course the participants will be able to:

- Apply the appropriate knowledge and cross-functional resources in addressing issues.
- Consider alternatives and chooses the best, workable solution i.e., considers the pros and cons, trade-offs, timing, available resources.
- Make effective decisions by balancing analysis with decisiveness.
- Fully understand problems by gathers relevant information.
- Integrate information from a variety of sources to arrive at optimal solutions.
- Apply accurate logic to facts; detects inaccuracies or flaws in reasoning.
- Create alternative ideas & innovative thinking.
- Focus on how to become a 'Top Gun' Troubleshooter
- Develop a structured approach to Troubleshooting and Problem Solving which uses 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 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

## Targeted Audience:

- Employees who are responsible for leading and directing people to achieve and improve productivity levels
- Those faced with the challenge of solving plant-related problems
- Production, Maintenance Engineering, and Process Engineering personnel
- Supervisors who are involved in the Operations / Maintenance function
- Planners, Coordinators, Engineers, and Technologists

## Course Outlines:

#### Unit 1: Concepts:

- The nature of process problems affecting performance
- Performance defined in terms of generic variables: Speed; Quality; and Cost
- Effort inputs in context Asset-based or Business Process-based
- Structured approach The Operations Process redefined



- Configuration; Operation; and Optimization
- Maturity Indexing: Planning; Control, Congruence, Empowerment
- 6 Big Losses, 7 Wastes

# Unit 2: Tools and Techniques - Practical Experience:

- Interactive and Dynamic variable relationships analysis
- Techniques introduction
- Tools introduction
- Problem Analysis
- Practical Use of Tools and Techniques
- Case Studies
- Tools & Techniques selecting the right one

# Unit 3: People Issues:

- Working practices empowerment or impairment?
- Group dynamics
- Individual motivators
- Developing Troubleshooting and Problem-Solving skills
- Managing change

# Unit 4: Operator, Maintainer, Designer Interface:

- Cross-functional and Teamworking
- Introduction to the Theory of Inventive Problem Solving
- · Auditing your process to a dynamic standard
- Effect of Maintenance/Operations strategy
- Development of Standards and Key Performance Indicators
- Life Cycle Costing, Design for Operation, Design for Maintenance

# Unit 5: Open Forum:

- Revisit Concepts, Tools, and Techniques
- Your Problems Case Studies
- Your Action Plan
- Wrap up