



## Process Troubleshooting and Problem-Solving Training Workshop





# Process Troubleshooting and Problem-Solving Training Workshop

## Introduction:

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

To wrap up and advance their troubleshooting and problem-solving skills, participants will explore the essence of troubleshooting and problem-solving certification, which marks a professional's ability to approach and resolve issues within technical and process-driven environments systematically.

This comprehensive troubleshooting training seminar, enriched with practical problem-solving workshops, elevates the participant's knowledge and hands-on troubleshooting experience. Through this seminar, attendees will learn the difference between problem-solving and troubleshooting and be equipped with the skills and techniques necessary to navigate and resolve workplace challenges efficiently.

## Understanding Troubleshooting and Problem-Solving:

Before diving into the details of the workshop, it's essential to differentiate between troubleshooting and problem-solving. Problem-solving is a broader term that involves identifying a problem and finding a logical solution. On the other hand, troubleshooting is a form of problem-solving specifically aimed at finding and fixing a problem's cause, especially within technical systems.

The ability to distinguish and apply problem-solving and troubleshooting techniques can greatly improve operational efficiency and reduce downtime, making this an indispensable training for technical roles and management.

## Targeted Groups:

- Employees are responsible for leading and directing people to achieve and improve productivity.
- This process troubleshooting and problem-solving workshop is for those facing the challenge of solving complex problems.
- Production, Maintenance Engineering, and Process Engineering Personnel.
- Supervisors are involved in the operations/maintenance function.
- Planners, Coordinators, Engineers, and Technologists seek to elevate their troubleshooting and problem-solving capabilities.

## **Workshop Objectives:**

Participants of the process troubleshooting and problem-solving workshop will be empowered to:

- Apply appropriate knowledge and cross-functional resources to address issues.
- Consider alternatives and choose the best, workable solution i.e., consider the pros and cons, trade-offs, timing, and available resources.
- Make effective decisions by balancing analysis with decisiveness.
- Understand problems by gathering relevant information.
- Integrate information from a variety of sources to arrive at optimal solutions.
- Apply accurate logic to facts; detect 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 that uses common terminology and shared understanding.
- Point to Continuous Improvement in how you run their processes and make incremental efficiency gains.
- Understand the difference between having a techniques manual on the bookshelf - and making it work.
- Identify the "motivated" people who should be the champions of Troubleshooting and Problem Solving - and who should follow.
- Understand work practices that "allow" success in troubleshooting and problem-solving.

## **Targeted Competencies:**

Target competencies of this process troubleshooting and problem-solving workshop conference will be empowered to:

- Analytical thinking.
- Problem-solving.
- Decision making.
- Change management.

## **Workshop Content:**

### **Unit 1: Concepts:**

- The Nature of Process Problems Affecting Performance.
- Performance is 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 is redefined.
- Configuration, Operation, and Optimization.
- Maturity Indexing: Planning, Control, Congruence, Empowerment.
- 6 Big Losses, 7 Wastes.

## **Unit 2: Tools and Techniques:**

- Interactive and Dynamic Variable Relationships Analysis.
- Technique introduction.
- Tools Introduction.
- Problem Analysis.
- Practical Use of Tools and Techniques.
- Tools and 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 Team Working.
- 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:**

- Concepts, Tools, and Techniques applied to problems.
- Configuration Management.
- Commercial Programs.
- The Critical Stages of Data Maturity.
- Case Studies and Action Plans.