Process Troubleshooting and Problem Solving

INTRODUCTION

- Excellent Troubleshooting skills are considered a core competency for 'Best-in-Class' industrial companies. If your company's goals include minimizing downtime, extending Asset Life and Safety, then this training course is a must because it delivers rapid, holistic Troubleshooting Skills enhancement.
- The Process is the core of Operations! The Process Troubleshooting and Problem-Solving training course follows a broad approach in order to address the complexities of the modern industrial environment. Many of the problem-solving techniques and tools that will be taught are generic and principle-based. It is therefore an excellent training to attend if you are interested in advancing your career opportunities and to improve your self-confidence.
- This training course systematically moves from a "Reactive" (what went wrong?) approach to a "Pro-Active" (We have done everything we could. What else can go wrong?) focus. This is exactly what an organization striving for World-Class performance standards does.

PROGRAMME OBJECTIVES

- Understand the post commissioning aspects of operations
- 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 enable consistent progress towards World Class performance standards

WHO SHOULD ATTEND?

- Supervisors who are involved in the operations function and who are responsible for leading and directing people to achieve and improve productivity levels
- Those faced with the challenge of actually using the various techniques of Troubleshooting and Problem Solving to reduce downtime and waste and improve run efficiencies will benefit
- It is of equal importance to Production, Maintenance Engineering and Process Engineering personnel

TRAINING METHODOLOGY

- The training course will be conducted in a facilitative style with a combination of lecture, practical experience in the use of techniques, case studies and a high level of lively debate and sharing of ideas. Delegates will be encouraged to introduce problems of their own for discussion and analysis. Copies of all lecture materials, case studies and workbooks will be provided.

PROGRAMME SUMMARY

- This Process Troubleshooting and Problem-Solving training course covers the essential basic skills required for problem identification, analysis and resolution. This approach will allow the delegates to understand how to change the culture of the organization from "REACTIVE" to "PRO-ACTIVE". The advantages of moving towards World Class performance standards are undeniable in terms of Safety, Cost Reduction, Quality, and Increased Output.

PROGRAM OUTLINE

Post Commissioning Activities

- Asset Classes – A holistic Analysis
- Pro-Active vs. Reactive Problem Solving
- Modelling of the Operational Process to simplify operations
- Single Task Performance measurement defined in terms of generic variables: Speed; Quality; and Cost
- Complexity and Complex Systems Performance measurement
- Pyramid of Excellence - The Operations Process redefined
- Configuration, Operation and Optimization
- Maturity Indexing: Planning; Control, Congruence, Empowerment
- A World Class Operations Case Study

Tools and Techniques – Practical Experience

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

People Issues – The Glue that holds everything together

- Risk Management
- Group Dynamics
- Individual Motivators
- Developing Troubleshooting and Problem-Solving skills
- Managing Change – Transition Matrix

Operator, Maintainer, Designer Interface

- Cross functional and Team working
- Introduction to the Theory of Inventive Problem Solving (TRIZ)
- Auditing your process to a Dynamic Standard (Discussion session)
- Effect of Maintenance / Operations Strategy
- Development of Standards and Key Performance Indicators
- Life Cycle Costing, Design for Operation, Design for Maintenance

Open Forum

- Six Primary and Four Secondary Maintenance Tactics
- Outsourcing of Operational Functions
- Revisit Concepts, Tools and Techniques
- Your Problems - Case Studies
- Your Action Plan