Root Cause Failure Analysis

Venue Information

Venue: London UK

Place:

Start Date: 2026-11-17

End Date: 2026-11-21

Course Details

Net Fee: £4750.00

Duration: 1 week

Category ID: METC

Course Code: METC-13

Syllabus

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Introduction

Our highly interactive Root Cause Failure Analysis program offers a modern approach to problem-solving in maintenance management. Based on recent research, participants will learn practical techniques rooted in first principles to enhance operational performance.

Objectives

Upon completion of this program, participants will be able to:

1. Develop and implement a sustainable world-class maintenance strategy.
2. Perform systematic Root Cause Failure Analysis.
3. Enhance understanding of various maintenance environment variables and their relationships.
4. Audit and optimize maintenance processes.

Day 1 - Problem Solving – Basic Principles

- Problem Identification and Terminology
- Decision Logic and Knowledge Types
- Maintenance Maturity Indexing
- Continuous Improvement Principles
- Exercises

Day 2 - Sustainable Maintenance Performance Improvement 1

- Modern Maintenance Practices Introduction
- SQC Performance Model
- Reverse Risk Analysis
- Maintenance/Operations Objectives Analysis
- Complexity, Risk, and Variability Models
- Delegate Problem Solving
- Exercises

Day 3 - Sustainable Maintenance Performance Improvement 2

- Cross-Referencing Operational Variables
- Maintenance Cost Ratio Analysis
- Data Maturity Stages
- Logical vs. Creative Problem Solving
- Case Studies and Exercises

Day 4 - Root Cause Analysis

- Maintenance Strategy Development
- Pitfalls in Maintenance Improvement Initiatives
- Problem Solving Techniques
- Root Cause Failure Analysis Methodology
- Exercises

Day 5 - Action Plan Development

- Introduction to TRIZ Methodology
- Review of Problem-Solving Techniques
- Development of Instant Problem-Solving Approach
- Application of Standard Questions