Essential Methodologies For Maintenance

Introduction:

Why do we have safety or environmental incidents? Why do we suffer mission failures or production shortfalls? Is there a relationship between maintenance and system availability? Can you improve operational performance and reduce maintenance costs at the same time? Strategic Maintenance is the key, not merely more maintenance. This reduces the risk of HSE incidents, mission failures or loss of production due to equipment unavailability. In this workshop, you will learn a logical and structured approach to achieve your (organisation's) objectives.

Business success depends on how well we manage risk, so we begin with a discussion of quantitative and qualitative risks. Human failures are more difficult to manage, but they matter a lot, so we will address this subject in some detail. This leads us to Advanced Strategic Maintenance Management techniques such as Failure Modes, Effects, Criticality Analysis and Reliability Centred Maintenance that help plan our work and improve our equipment reliability significantly. For less critical equipment, using the REM (Review Existing Maintenance) technique is a highly effective strategic maintenance management tool. In addition, the course will show how maintenance of safety-critical instrumentation is determined using the SIL (Safety Integrity Level) technique. The maintenance of static equipment is also given special consideration and the course will demonstrate how and where Risk-Based Inspection (RBI) should be

used. You will also learn about Root Cause Analysis, a powerful reactive problem-solving tool, and get a good understanding of where and how to apply the method.

Implementation of the results of these analyses is the key to reaping the benefits. Analysis is the easy bit; implementing the results always poses challenges. So we will see how to grind away at the hard parts - writing new maintenance routines, scheduling work, then doing it on time, recording history, and then reaping the rewards. Finally we will see how to implement change successfully. For this we need to understand critical success factors, change management, the importance of good communication and how to track progress. Sustained improvement needs a process to hold the gains.

Who Should Attend?

If you are a manager, supervisor, engineer, logistics specialist an academic or other professional seeking an answer to any of these questions, this workshop will be able to help you. It is aimed at people with a stake in Operational Success working in the Oil & Gas Industry, Manufacturing Plants, Chemical, Pharmaceutical Industries, Contractors and other Service providers. You will learn Strategic Maintenance Management techniques that will improve the performance of your plant as a result of better reliability and availability of your facilities.

Methodology:

This interactive Training will be highly interactive, with opportunities to advance your opinions and ideas and will include;

- Lectures
- Workshop & Work Presentation
- Case Studies and Practical Exercise
- Videos and General Discussions

Certificate:

BTS attendance certificate will be issued to all attendees completing minimum of 80% of the total course duration.

Course Objectives:

- To learn how to use Advanced Strategic Maintenance Management techniques to improve profitability and safety,
- To determine where, when and why each technique should be applied,
- To find out how to implement the analysis results effectively,
- To be able to determine value added by this work,
- To learn how to get started on the Improvement Program.

The structure and content of this workshop will help you formulate action plans that can significantly improve safety, production, mission success and cost performance.

Course Outline:

- Quantitative Risk
- Qualitative Risk
- Performance Measurement
- Human Error and its Causes
- Learning from Failures
- Performance Measurement
- RCM Principles and Methodology
- FMECA
- REM (Review Existing Maintenance
- Total Productive Maintenance
- RBI
- Safety Integrity Levels (SIL)
- Task-bundling
- Preventive Maintenance Routines and Maintenance Management Systems

- Scheduling
- Problem solving process - Root Cause Analysis
- Work execution
- Compliance
- Reward Systems
- Performance Monitoring
- Implementation
- Reporting Results
- Lateral Learning
- Holding the Gains