Best Technology Soultions **(BTS)**

Training Program

Cost Effective Maintenance & Reliability Best Practices

Introduction:

Maintenance & reliability best practices are critical for every successful individual and company. This course delivers many practical and new maintenance and reliability best practices concepts and tools. You will discuss these concepts and practice using practical tools in case studies and discussion groups.

The costs ssociated with equipment downtime and reduced production can be significant. Learning how to effectively manage all aspects of your industrial facility is a must. This course is a combination of instructor-led topic areas and class discussions. Interactive discussions will allow you to hear and learn best in class applications relating to maintenance planning and cost management strategies. You will have the opportunity to ask lots of questions in order to consider how best to apply these tools and techniques in your organization.

- Technical and people aspects are fully covered
- Hard and soft copy of practical improvement tools are provided
- Maintenance best practice improves competitive position
- Initiatives such as Six Sigma & Lean depend on reliable equipment
- Important points are reinforced by course sessions

Who Should Attend?

Reliability Engineers, Maintenance Managers, Engineers & Planners, Reliability and Maintenance Engineers, Facilities and Utilities Managers, Design Engineers, Top Level Maintenance Technicians, OE Champions, Predictive and Preventive Maintenance, Technicians & Supervisors, Planners, Maintenance Supervisors, Crafts and Tradesmen, Operations Supervisors, Process Engineers, Inspectors and Inspection Supervisors, Equipment Engineers Team Leaders and Professionals in Maintenance, Engineering and Production, Maintenance managers, reliability and maintenance Engineers, Production Managers, Plant Engineers, Design Engineers, Reliability Engineers and Technicians, Operators, Safety Engineers, Risk Engineers, Safety Engineers and anyone who is involved in Reliability Engineering strategies or methodologies to include design engineers for capital projects engineers, Foreman and Technicians, Mechanical, Electrical and Operational Personnel, Personnel designated as Planners, Key leaders from each maintenance craft, Key operations personnel, Technical professionals responsible for maintenance and repair of equipment, Professionals involved in inspection and maintenance and repair, professionals involved in asset & maintenance management auditing, Quality & Compliance Managers, Lead Auditors & Audit Team Members, Process Controllers, Maintenance Supervisors, Maintenance Planners, Predictive Maintenance Technicians & Supervisors, Materials Management Managers and Supervisors, Service Company Representatives, Asset owners & Asset Managers

Course Objectives:

By the end of this course delegates will be able to:

- Learn the Plan, Do, Review cycle of continuous improvement
- Apply the theory of this session using practical case studies
- Evaluate and justify your maintenance programs using Value = Benefit - Cost
- Apply Life Cycle cost and risk planning to your facility assets
- Target Maintainability and/or Reliability in the development of your facility maintenance plans
- Practice using improvement techniques

Course Outline:

Asset Cost Management Introduction

- Definitions of reliability, maintenance & asset management
- The total cost of maintenance
- Best practice reliability and maintenance processes
- Elements of asset management best practice
- Auditing performance
- Overview of TPM, RCM, BCM, QCM, and other asset management buzzword

Laying the Groundwork

- Team-work maintenance, operations, stores
- The importance of standards such as PAS 55, JA1011
- Corporate asset management expectations
- Asset performance expectations
- The forms of asset failure and degradation
- The causes and nature of asset failure and degradation
- The effects, cost and risks of asset degradation

Applying the Value-based Process

- Breaking the cycle of failure and degradation
- Select PM tactics on the basis of costs and risks
- How to determine PM intervals
- Condition based maintenance types and the PF-curve
- The four important reliability functions
- Implementing best practice maintenance programs
- Optimizing spares to support the maintenance program
- Maintenance program cost and risk based justification

Ensuring the Continuity of the Value-Based Process

- Complete the PLAN, DO, REVIEW Improvement cycle with FRACAS
- Failure Reporting, Analysis and Corrective Action System requirements
- Structure and code data collection to support reliability analysis
- How to quantify chronic failures and losses
- Use Pareto analysis and stratification to focus the value-based analysis
- Quantify losses in life cycle terms
- Hypothesize root causes of failure and verify on the basis of evidence
- Reliability Analysis Case Study

Supporting Process that Lower Life-Cycle Costs

- Planning and scheduling best practice
- Cost effective manpower and skills deployment
- Performance indicators to drive continuous improvement
- Overall review of concepts learned