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# Building & Facilities Preventive Maintenance Strategies, Tools & Techniques Training program

## Introduction:

Building and facilities maintenance can be a headache when the focus of the organization is cost cutting instead of realizing the corporate strategy. That is why it is important that the building & facilities maintenance manager is able to show to corporate management the real added value of maintenance by creating a preventive maintenance strategy, so that the focus is changed to the contribution of maintenance in maximizing the operational performance and enhancing the return of investment of the buildings and facilities.

This course is designed to create a learning environment where we show you how to apply relevant best practices to organize and manage building preventive maintenance. The goal of this course is to balance the right performance (availability, reliability, safety, quality) and maintenance costs in such a way that the added value is maximized. Best practices like risk based preventive maintenance strategies, predictive maintenance tools & techniques, planning and workflow management and continuous improvement all contribute to this goal. This training course will highlight:

- Predictive maintenance
- Planning and workflow management
- The basic principles of building maintenance & asset management



- International standards on maintenance and asset management (ISO 55000)
- Risk based preventive maintenance strategies
- How to monitor the performance & continuous improvement

### **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 learn about:

- Choose and apply risk based preventive and predictive maintenance strategies
  for your building and facilities assets
- Understand the broader perspective of long term maintenance and investment planning, work preparation and planning and scheduling
- Explain how the organization can benefit from a building preventive maintenance strategy
- Understand the content and value of ISO 55000 as the international standard on maintenance and asset management
- Understand the principles of continuous improvement and set up an improvement plan for building preventive maintenance

# **Course Outline:**

#### Introduction to Maintenance and Asset Management Strategy Framework

- Maintenance & Asset Management as a business process
- Asset management landscape model, The asset management system
- Maintenance & asset management strategy framework
- Asset management roles



#### **Building your Preventive Maintenance Strategy**

- Identification & assessment of risk for building maintenance
- Risk management
- Risk matrix
- Risk register
- Stakeholder analysis, stakeholder risks
- Risk Based Maintenance concepts for building maintenance (RBM/FMECA)
- Run to Failure tasks
- Preventive maintenance tasks
- Predictive maintenance tasks
- Building your preventive maintenance strategy

#### **Identifying Predictive Maintenance Strategies**

- Potential Failure Analysis (PFA)
- Integration of PFA with FMECA & RBM
- Understanding the P-F Interval
- Decide which Technologies to Apply
- Predictive maintenance technologies
- Vibration analysis
- Visual inspection



- Infrared Thermography
- Temperature sensitive labels
- Megger tests
- Ultrasonics
- Oil analysis

#### **Planning & Workflow**

- The building maintenance workflow and how it relates to the preventive maintenance strategy
- Roles & responsibilities in work preparation, planning and scheduling
- Principles of work preparation & planning
- Principles of scheduling
- Network planning

#### **Continuous Improvement**

- Continuous improvement
- Measuring performance
- Performance Indicators & Key Performance Indicators
- Balanced scorecard



- Assessments
- Using benchmarking to improve
- Performance management, managing the behavior of people