



ME190

Reliability Centered Maintenance & Total Productive Maintenance

Course Introduction:

Increased economic pressures have forced the maintainer to become more cost conscious. Further, the application of new technology and the implementation of new business practises mean that effective maintenance of plant and equipment requires ever-greater technical and managerial skill.

Reliability Centered Maintenance (RCM) & Total Productive Maintenance (TPM) are proven cost effective strategies for maintenance and achieve sharper maintenance policies, slimmer budgets, increased availability and a more motivated workforce. To ensure companies realize optimum maintenance they need to adopt strategies that maximize availability and safety and minimize operating cost.

These strategies can be delivered using RCM & TPM and this course will show you exactly how.

Course Objectives:

Upon successful completion of this course, the program will expose the maintenance and production personnel to understand the concept of RCM and TPM. The following advantages of RCM are ensured to the participants:

- Maintenance strategy optimization
- Extension of equipment life span
- Elimination of chronic machine problems
- Root Cause Analysis
- No preventive maintenance tasks to be performed unless it can be justified
- Recognize TPM

Who Should Attend?

This course is recommended to all senior and middle maintenance, reliability, engineering and technical support staff especially including leadership and management.

Course Outline:

Day 1:

Reliability Centered Maintenance

- Introduction of RCM
- RMA (Reliability, Maintenance and Availability) Concepts
- Functional Criticality Analysis
- RCM Stages and Tools – RCM, FMEA, FMECA, Road Map

Day 2:

Total Productive Maintenance

- TPM Overview – Breaking down Barrier, Hidden Losses, Cultural Change, New Mind-set
- TPM Initiation – Philosophy of Awareness, Improvement Program Study, Setting up Pilot Project
- TPM Planning – Agree & Assign Accountability, Design Zoning Policy, Critical Equipment Analysis
- TPM Action – Tagging, Cando Procedures and Standards, KPI, Develop Focus Project, Discipline Communication, Analytical Problem Solving, TPM Consolidation (Institutionalizing Practices, Personal Development Review)

Day 3

Business Process Re-Engineering

- BPR Overview – Functional Orientation, Losses, Methodology, Customer and Expectations
- Customer Expectations – Types of Customer, Core customer, Typical Expectations, Establishing Expectations, Objectives Measures and Targets
- Identifying Primary Process, Selecting Re-Engineering Projects, Mapping Activities
- Business Process Re-Engineering – Re-Engineering Process, Relational Mapping, Characteristics, Re-Engineering Principles, Issues, Process Assumptions and Constraints and testing

Day 4:

Applications & Implementation, Continuous Improvement

- Closed Loop Control
- Targets and trending
- Problem Solving

Implementation,

- Integrated Team
- Project Management
- Key Success Factor

Day 5:

Engineering

Getting Started – Assessment of Improvement potential,

- Benchmarking
- Plant Downtime Analysis

- Chronic and Acute Failures
- Overall Equipment Effectiveness
- Statistical Process Control
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Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self-Questionnaires
- Group Work
- Discussion
- Presentation

Course Fees:

To be advised as per course locations. This rate includes participant's manual, Hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:30	Recess (Coffee/Tea/Snacks)
13:30 - 15:00	Last Session