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ME184:
Maintenance Management Best Practices Systems, Tools & Techniques

Training Description:

We in the maintenance and reliability (M&R) field are constantly challenged to implement the best way to ensure assets are available when we need them at a reasonable cost. We have come to call these our "best practices". But it is not as simple as putting something into effect. Truly implementing a best practice requires learning, relearning, benchmarking, and realizing better ways of ensuring high reliability and availability of assets, equipment and systems. This course is designed to support that learning process of implementing best practices in maintenance and reliability management covering the various systems, tools and techniques.

Maintenance (M) is concerned with maintaining assets through the use of proactive and corrective maintenance techniques combine with how quickly assets can be returned to operating condition after they have failed. Improving maintenance is a tactical task. In the other hand, reliability (R) is concerned with predicting and preventing failures to ensure assets will perform to their required or designed functions. Improving reliability is a strategic task.

Both tactical and strategic tasks cost money, which is usually limited in M&R management. Therefore, understanding and implementing M&R best practices in a cost-effective way becomes essential. The key objective of this course is to provide proper understanding of M&R "best practice" and to focus on lowering the life cycle cost of assets.

This intensive training course covers a complete and up-to-date overview of maintenance management best practices covering the various systems, tools and techniques.

The course will provide participants with an up-to-date knowledge on maintenance management best practices covering the various systems, tools and techniques. It covers planning and scheduling of work management; materials, parts and inventory management; measuring and designing for reliability and maintainability; the role of operations; PM optimization; managing performance; workforce management; maintenance and reliability (M&R) analysis tools; reliability estimation and application; life cycle cost; maximizing maintenance best practice with a profit– centered approach; determining profit-and customer–centered maintenance operation; developing CMMS as a true maintenance business management system; the profit-and customer-centered maintenance operation, validating best practice results with the maintenance excellence index; and the journey toward maintenance excellence.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Apply best practices in maintenance management covering the various systems, tools and techniques
- ✓ Carryout best practices of maintenance and reliability
- ✓ Plan and schedule work management as well as apply materials, parts and inventory management
- ✓ Measure and design reliability and maintainability and identify the role of operations, TPM, 5S and metrics in performance measures
- ✓ 3Optimize PM and manage performance and workforce
- ✓ Recognize maintenance and reliability (M&R) analysis tools as well as employ reliability estimation and application
- ✓ Interpret life cycle cost and maximize maintenance best practices with a profit– centered approach

- ✓ Determine profit-and customer–centered maintenance operation and develop CMMS as a true maintenance business management system
- ✓ Operate profit-and customer-centered maintenance and validate best practice results with the maintenance excellence index

Training Designed for:

This course is intended for Maintenance Managers, Maintenance Engineers, Maintenance Supervisors, Maintenance Foremen, Asset Managers, Housing Services Supervisors, Property Managers, Maintenance & Engineering Consultants, Project Managers and those who are involved in maintenance and operations (M&O) in consultant, contractor or operating companies.

Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ PRE-TEST
- ❖ Introducing Best Practices
  - What is a Best Practice?
  - Understanding Maintenance & Reliability
  - Examples of Maintenance & Reliability Benchmarks
  - Basic Test on Maintenance & Reliability Knowledge
  - Key Terms & Definitions
- ❖ Work Management: Planning & Scheduling
  - Workflow & Roles
  - Planning Process
  - Scheduling Process
  - Turnaround & Shutdowns
  - Measures of Performance
- ❖ Materials, Parts & Inventory Management
  - Types of Inventory
  - Physical Layout & Storage Equipment
  - Optimizing Tools & Techniques
  - Performance Measure & Indicators
- ❖ Measuring & Designing for Reliability & Maintainability
  - Defining & Measuring Reliability & Other Terms
  - Designing & Building for Maintenance & Reliability
- ❖ The Role of Operations
  - The Role of Operations

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- Total Productive Maintenance (TPM)
- Workplace Organization: 5S
- Performance Measures: Metrics

DAY TWO:

❖ Maintenance Optimization
- Understanding Failure
- PM Optimizing Tools

❖ Managing Performance
- Identifying Performance Measures
- Benchmarking & Benchmarks
- Data Collection & Data Quality

❖ Workforce Management
- Employee Life Cycle
- Understanding the Generation Gap
- People Development
- Workforce Management

❖ M & R Analysis Tools
- Analysis Tools
- Computerize Maintenance Management System

❖ Reliability Estimation & Application
- Redundancy
- Burn-In Testing
- Preventive Maintenance Analysis
- Reliability Allocation
- Reliability Growth Testing
- Repairable System Analysis
- Multiple Censored Data Exercise

❖ Life Cycle Cost
- Objectives, Functions, & Processes
- The Economics of Reliability & Maintainability & System Design
- Organizational Considerations
- Data Sources & Data Collection Methods

DAY THREE:

❖ Maximizing Maintenance Best Practices with a Profit–Centered Approach
- A Profit–and Customer-Centered Maintenance Strategy
- Key Requirements for Profit–and Customer-Centered Maintenance
- Four Real Maintenance Challenges We All Face

❖ Determining Where You are as a Profit-and Customer–Centered Maintenance Operation: The Scoreboard for Maintenance Excellence
- The Scoreboard for Maintenance Excellence
- Guidelines for Conducting a Scoreboard for Maintenance Excellence Assessment
- Strategy for Developing a Corporate-Wide Scoreboard
- Case Study: The Scoreboard Self-Assessment: Just Do It

DAY FOUR:

- Implementation
  - Next Steps
- Developing Your CMMS as a True Maintenance Business Management System
  - Maximizing the Value of CMMS for Profit–Centered Maintenance
  - CMMS Functional Requirements that Support the Business of Maintenance
  - Case Study: Quantitative & Qualitative Factors for CMMS Selection
  - Maximizing Your IT Investment with the CMMS Benchmarking System
  - Case Study: Effective CMMS Plus Best Practices: A Powerful Combination for Profit at Argentina's Largest Steel Maker
- The Profit-and Customer-Centered Maintenance Operation
  - Improving Craft Productivity: An Essential Strategy for Profit & Customer Service
  - Introducing OCE as a New Buzzword: The Overall Craft Effectiveness (OCE) Factor
  - The ACE Team Benchmarking Process: A New Benchmarking Tool
  - Profit-and Customer-Centered Best Practices
  - Maintenance Quality & Customer Service
  - Case Study-Critical Asset Facilitation: A Lesson Learned at Boeing Commercial Airplane Group
  - PRIDE in Ownership with Operator-Base Maintenance
  - Case Study: Developing an Effective Preventive Maintenance Strategy
  - Today's Predictive Maintenance Technology: Key to Continuous Reliability Improvement
  - Auto Identification Strategies to Support Maintenance Storeroom Excellence
  - Case Study: Planning for Maintenance Excellence in Action at Lucent Technologies
- Practical Sessions
  - This hands-on, highly-interactive training includes simulator, real-life case studies and exercises

DAY FIVE:

- Validating Best Practice Results with the Maintenance Excellence Index
  - Determine & Quantify Benefits & Gained Value
  - Developing your Maintenance Excellence Index to Validate Results
  - Non-Traditional Return on Investment for Improving Your Maintenance Return on Investment
- The Journey Toward Maintenance Excellence
  - Developing and Implementing a Profit –Centered Action Plan
  - Achieving PRIDE in Maintenance
  - The Journey Towards Maintenance Excellence: Where Will You Go Now?
- Course Conclusion
- POST-ASSESSMENT and EVALUATION

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:
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