Training Title

MAINTENANCE TASK ANALYSIS (MTA)

Training Duration

5 days

Training Dates & Venue

REF RM030	Maintenance task analysis (MTA)	5	16 – 20 Sept '18	$4,250	Dubai, UAE

Training will be held at any of the 5 star hotels. The exact venue will be informed once finalized.

Training Fees

- **4,250 US$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch**

Training Certificate

Define Management Consultancy & Training Certificate of course completion will be issued to all attendees.

TRAINING OVERVIEW

TRAINING DESCRIPTION

MTA is the identification of the steps, spares and materials, tools, support equipment, personnel skill levels as well as any facility issues that must be considered for a given repair task. Also included in the MTA are elapsed times required for the performance of each task. MTAs cover both corrective and preventative maintenance tasks and, when complete, identify all physical resources required to support a system The Maintenance Task Analysis (MTA) when completed will detail the resources required to implement effective corrective and preventative maintenance tasks for a system and/ or equipment The MTA is a detailed analysis performed for each of the corrective and preventative maintenance tasks. These maintenance tasks were earlier identified in the LSA process. Consideration would be given to all the support resources that will be required to conduct each of the maintenance tasks.

TRAINING OBJECTIVES

A well prepared MTA would provide critical input to support and address the needs other ILS elements, such as training and technical publications development. The technical publication would utilize data such as the detailed task description, which also provide valuable input for the development of maintenance training courses and support material.

WHO SHOULD ATTEND?

This program is intended for personnel who wish to get a comprehensive understanding and practical job skills for Maintenance Management function. Supervisors, engineers, planners and Managers who are assigned the maintenance management or involve in maintenance practices, and opportunities for improvement, Maintenance cost, equipment and unit reliability. Attendees should have an understanding of their plant's current performance.

TRAINING METHODOLOGY

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions, and motivate everybody find the right answers. The delegates will also be encouraged to raise their own questions and to share in the development of the right answers using their own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

DAILY OUTLINE

Day 1
INTRODUCTION
Effective maintenance Management

1. **Not Knowing What You Have**
2. **Over or Under Maintenance**
3. **Improper Operation**
4. **Improper Risk Management**
5. **Sub-optimized Asset Management Systems**

The Maintenance Task Analysis (MTA)

- **Introduction**
- **Task analysis**
- **Hierarchical Task Analysis**
- **Identifying each step of the repair process**
- **Understanding the Task Requirements**
  - **Task analysis**
  - **The data collected**
  - **Establishing baseline data**

Day 2
MTA Descriptionand Investigation Resources

- **Person or persons participating**
- **Time duration of each person's participation**

- Tools or support equipment required
- Parts and materials needed for the step Analysis the task done
- time for the task
- The skill level
- additional training
- Any facility implications

Day 3

Corrective Maintenance Task Generation

Supportability Analysis

Staffing Optimization

MAT output

- Job role specifications;
- The competencies, skills, and knowledge required to perform these duties;
- A suitable organisational structure providing adequate supervision and support;
- Communication and user requirements;
- Training and continued performance requirements;
- Ergonomic designs and layout for equipment; and
- A change management plan

Day 4

Reliability and Maintenance

Introduction

The purpose of maintenance

Function of maintenance

Type of Maintenance Strategy

Maintenance Methods

Failure-Based or Breakdown Maintenance

Scheduled or Preventive Maintenance

Predictive Maintenance

Proactive Maintenance

Summary of Predictive and Proactive Practices

Condition-Based Maintenance (CBM)

Reliability-Centered Maintenance (RCM)

Total Productive Maintenance (TPM)

Computerized Maintenance Management Systems (CMMS)

Day 5

Techniques of Failure Analysis

Equipment Failure

Where to Start: Equipment Criticality Or Risk

Reliability Centered Maintenance (RCM) Overview
Failure Analysis - Closing The Loop
- **Root Cause Failure Analysis (RCFA)**
- **Failure Hierarchies**

FMEA & FMECA
- **Introduction**
- **Purpose and objectives of the analysis**

Failure modes and effects analysis
- **General considerations**
- **Preliminary tasks**
- **Benefits of FMEA**
- **Summary of procedures for FMEA**

Building a system for equipment condition indicating
- **a) Equipment data**
- **b) Failure data**
- **c) Maintenance data**
- **d) Data format**
- **Failure and maintenance notations**
- **Failure descriptors**
- **Failure causes**
- **Method of detection**

Case Studies, Group Discussions, Last Day Review, Assessments will be carried out.

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