

# Maintenance Techniques and Analysis

3 Day Course

RGC-MTAC03



Rylson Group

Course Outline

Maintenance Techniques and Analysis	
<b>Objective</b>	Provide participants with the necessary tools and knowledge to enhance and improve the maintenance function within their organisation.
<b>Benefits</b>	<ul style="list-style-type: none"><li>▪ Staff able to manage maintenance effectively.</li><li>▪ Optimise maintenance costs.</li><li>▪ Increased equipment availability and reliability.</li><li>▪ Improved plant safety and profitability.</li><li>▪ Enhance maintenance management knowledge.</li><li>▪ Greater awareness of maintenance improvement opportunities.</li><li>▪ Ability to develop and implement optimal maintenance strategies.</li><li>▪ Increased analytical skills to measure and improve maintenance.</li></ul>
<b>Who Should Attend?</b>	This course is designed for <b>Managers, Maintenance Planners, Supervisors, Leading Hands, Production Personnel</b> and anyone who deals with Maintenance and wants to improve cost effectiveness and profitability.
<b>Course Outline</b>	Introduction to theoretical and practical aspects of Root Cause Analysis using the RCA Rt process including application of the RCA Rt process to a current workplace problem, distinguish between different types of problems in the workplace and provides problem solving methodologies and focuses on the RCA Rt three-stage process of 'Focus, Find, Fix Forever'.



## 1.0 WELCOME AND INTRODUCTION

Welcome and introductions  
Course content  
History of maintenance

## 2.0 IMPLEMENTING CHANGE OF THE MAINTENANCE FUNCTION

Develop a strategy for maintenance change  
Identifying the key elements of implementing change  
Practical tools for implementing change

## 3.0 TEROTECHNOLOGY AND OPTIMISING COSTS

Definition of Terotechnology  
Life Cycle Costing (LCC)  
Maintenance/production costs  
Achieving the Optimum Cost Point

## 4.0 FUNDAMENTALS FOR A MAINTENANCE PROGRAM

Maintenance management policy  
Systems and procedures required  
Resource management

## 5.0 MAINTENANCE PROGRAM DEVELOPMENT

Identification of plant  
Building a Plant Index  
Prioritising



Introduction of FMECA

## 6.0 EQUIPMENT FUNCTION AND PERFORMANCE

Determining performance and function

Derivation of functional and performance statements

## 7.0 FAILURES AND FAILURE PATTERNS

Determine what constitutes failure

Hidden and multiple failures

Root Cause Analysis (RCA)

Failure patterns

## 8.0 FAILURE CONSEQUENCES AND RISK ASSESSMENT

Cost of production loss and secondary damage

Task frequency optimisation

Relationship between failures and production loss

## 9.0 IDENTIFYING MAINTENANCE TASKS

Identify the required maintenance to minimise the consequence and risk

## 10.0 DEVELOPING MAINTENANCE PROCEDURES

Suggested layout of a maintenance procedure

Need for feedback



## 11.0 PLANNING AND SCHEDULING MAINTENANCE

- Discerning the difference
- Shutdown planning
- Nesting of calendar based tasks
- Resource levelling
- Use of contract labour

## 12.0 INTRODUCTION TO PROJECT MANAGEMENT (PM)

- Project life cycle
- PM organisation
- Key elements of PM
- PM tools

## 13.0 PERFORMANCE EVALUATION

- Key Performance Indicators (KPI's)
- Individual Desk Top Audit of the Seven Key Maintenance Program Elements
- Taking action on the findings