

Oil and Gas Industry Maintenance Planning and Work Control

Work Order Scheduling, Asset Management, and Failure Analysis

Introduction

Equipment life-cycle expenses are now more of a focus for maintenance management than they have ever been because of decreased income brought on by reduced gas and oil prices. The difficulty for maintenance managers is to provide the same standards of equipment availability, safety, and dependability on a reduced budget. The practical tools and techniques that the oil and gas industries must implement to reduce the life-cycle costs of their equipment are covered in this training course on maintenance planning and work control in the industry.

Through proper planning and control of the maintenance activities, the Oil & Gas training course on Maintenance Planning and Work Control emphasizes the most effective strategies, policies, tactics, and practices that are required to guarantee the physical assets' dependability, integrity, and durability throughout their life cycle.

The following will be covered in this Course N Carry Oil and Gas Industry Maintenance Planning and Work Control training course:

- Features of Oil and Gas Asset Failure and Degradation
- Classification of oil and gas assets into the criticality matrix for task identification
- Asset deterioration and failure
- Setting priorities for tasks and linking the Organization Structural Domain to the Work Breakdown Structure
- Plan your activities.
- Preventive Techniques and Resources to Lower Maintenance Expenses
- Analysing Failures to Concentrate Cost-Reduction Activities
- Using Work Management to Increase Resource Efficiency

Objectives

Upon completion of Oil and Gas Industry Maintenance Planning and Work Control training course, you will be able to:

- Recognize the causes of oil and gas assets' failures.
- Determine the tasks required to maximize the life of your assets.
- Use the appropriate maintenance technique for every asset.

- Plan your workday.
- During maintenance, manage the scope, budget, and time.
- Evaluate the maintenance's performance.

Training Methodology

Topic areas guided by the lecturer and class discussions are used to offer this Maintenance Engineering training course on Maintenance Planning and Work Control. The inclusion of case studies, examples, and practical exercises enhances this training course even further. Following the seminar, each delegate has access to the templates, examples, and exercises as a resource for additional learning, practice, or research. This guarantees a high degree of retention of information and skills.

Organizational impacts

The company will

- Learn where the money for upkeep comes from.
- Be able to concentrate its efforts on the activities that cause the most expenses
- Manage the life and performance of assets.
- Thoroughly evaluate the scope, timeliness, and effectiveness of maintenance tasks

Personal Impact

The individual will be capable of:

- Recognize machine deterioration and failure
- Recognize how a significant contributor to the cost equation is poor dependability.
- Put in place the proper maintenance schedule to increase dependability.
- Control the scope and expense of the maintenance during execution.
- Evaluate every maintenance task using the relevant metrics.

Who should attend?

- Attending this Course N Carry Oil and Gas Industry Maintenance Planning and Work Control course is strongly advised for personnel involved in maintenance, reliability, engineering, and technical support, as well as for leadership and management. Moreover, encompassing:
 - Planning Managers
 - Supervisors
 - Engineers
 - Managers and Leaders of Maintenance Teams
 - Managers and Leaders of Operations Teams

Course Outline

Day 1

Maintenance Types and Asset Pairing

- Definitions of Reliability, Asset Management, and Maintenance
- Degradation and Material Failure
- Predictive-Preventive Upkeep
- The Failure Rate Mathematics and Reliability-Centred Maintenance
- Life Cycle Expenses and Upkeep

Day 2

WBS-OBS Planning

- Work Order (WO) System for Scheduling
- Structure of Work Breakdown (WBS)
- Structure of Organizational Breakdown (OBS)
- Planning Materials
- Planning of the Workforce

Day 3

Principles of Scheduling

- Preventive maintenance intervals that are scheduled
- Intervals for Maintenance Based on Conditions
- Plant Life Cycle Optimization: General Overhauls and Maintenance Period
- Key Path Method (CPM) – PERT Evaluation

Day 4

Control of Expenses, Time, and Quality of Work

- Observe Time Domain using Gantt Charts
- Ways to Stay Within Your Budget
- Management Reserve and Contingency
- Acceptance of Work Scope in Compliance with ISO/API Guidelines

Day 5

Planning for Maintenance and Analysing Work Control Performance

- Control of Information Transfer
- Indicators of Performance
- Indicators of Workload Performance
- Organizing Performance Measures
- Indicators of Cost Performance and Effectiveness
- Archiving Maintenance Data
- Answers to Management