

# **MAINTENANCE PLANNING AND SCHEDULING Best Practices**

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**THREE DAY WORKSHOP WITH RICKY SMITH, CMRP, CMRT, CRL**

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**PRESENTED BY:**  
RICKY SMITH CMRP  
WORLD CLASS MAINTENANCE



# OVERVIEW

*Learning through hands-on exercise or knowledge sharing.*

- RICKY SMITH, CMRP

This workshop is “activity based” (hands on) with the focus on “Best Practices in Maintenance Planning and Scheduling” with the focus on optimization of Maintenance Wrench-Time.

Who should attend this course:

- Maintenance Planners
- Maintenance Schedulers
- Maintenance Planner/Schedulers
- Maintenance Supervisors
- Senior Maintenance Technicians
- Maintenance Managers
- Maintenance Planning/Scheduling Managers/Leaders



FOR MORE INFORMATION OR TO REGISTER, EMAIL  
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# OVERVIEW

## THE OBJECTIVES

The objectives of this workshop for each attendee:

- Learn the Proactive Maintenance Process from “Work Identification to Work Order Close Out”
- Obtain the ability to Execute Proactive Maintenance Planning and Scheduling
  - Define how “Known Best Maintenance and Reliability Practices” impacts the Planning and Scheduling processes
  - Describe the objective, mission and attributes of Proactive Planning and Scheduling
  - Plan and Schedule through numerous “hands on” exercises
  - Learn how to Measure an organization’s current Wrench-time
  - Define Methods to Optimize Maintenance Wrench-Time
  - Create a Proactive Maintenance Planning and Scheduling Workflow Model which impacts Maintenance Wrench-time
  - Create Leading and Lagging Planning and Scheduling Metrics
  - Define how to transition from current state to a more Proactive Planning and Scheduling Process
  - Define how to measure and manage Maintenance Backlog
  - Learn to implement and manage a Proactive Kitting Process
  - Gain first steps in how to Manage Change
  - Create a Master Plan, with timeline for Proactive Maintenance Planning and Scheduling Implementation / Optimization

# TRAINING SCHEDULE

## DAY 1: MAINTENANCE PLANNING AND SCHEDULING OVERVIEW

- Instructor and Attendee Introductions
- Expectations from each attendee
- Expectations from instructor □ Course Objectives
- Daily Training Schedule
- Proactive Maintenance Workflow Model/Process
- World Class Maintenance Planning and Scheduling Case Study (Alumax/Alcoa Mt Holly – John Day PE)
- Definition of:
  - Maintenance
  - Reliability
  - Work Identification
  - Preventive Maintenance
  - Predictive Maintenance
  - Maintenance Planning
  - Maintenance Scheduling
  - Work Execution
  - Work Order Close Out
  - Backlog
- What is Wrench-Time and How Maintenance Planning and Scheduling Impacts it
- Maintenance Planning and Scheduling Vision, Mission and Guiding Principles
- Group Discussion – How does Maintenance Planning and Scheduling Actually Work?

# TRAINING SCHEDULE

## DAY 1: MAINTENANCE PLANNING AND SCHEDULING OVERVIEW (CONTINUED)

- Exercise: Process Map Development – Proactive Maintenance
- Exercise: Create a RACI Chart for Proactive Maintenance

**Reference Scheduling RACI**

Task	PM	PMd	PMm	PMs	PMt	PMv	PMw	PMx	PMy	PMz
Developing and Managing an Effective Maintenance Planning and Scheduling Process	R	A	C	I						
Planning and Scheduling Leading and Lagging KPIs	R	A	C	I						
Expectations from PM and PdM	R	A	C	I						
Failure Modes and how to manage and mitigate them	R	A	C	I						
Creation of the following Proactive Maintenance...	R	A	C	I						
Vision Statement	R	A	C	I						
Mission Statement	R	A	C	I						
Guiding Principles	R	A	C	I						
Repeatable/Effective Procedures	R	A	C	I						
Steps required to develop an Effective Planning and Scheduling Program	R	A	C	I						
Planning and Scheduling Roles and Responsibilities (RACI)	R	A	C	I						
Managing a Proactive Planning and Scheduling Program	R	A	C	I						

- Planning and Scheduling Leading and Lagging KPIs
- Expectations from PM and PdM
- Failure Modes and how to manage and mitigate them
- Creation of the following Proactive Maintenance...
  - Vision Statement
  - Mission Statement
  - Guiding Principles
- Developing and Managing an Effective Maintenance Planning and Scheduling Process
  - Planning and Scheduling Workflow Process
  - Steps required to develop an Effective Planning and Scheduling Program
  - Repeatable/Effective Procedures
  - Planning and Scheduling Roles and Responsibilities (RACI)
- Managing a Proactive Planning and Scheduling Program

# TRAINING SCHEDULE

Maintenance Planning and Scheduling Leading and Lagging KPIs

Maintenance Planning and Scheduling Dashboards

- Exercise: Create Definitions for Maintenance Planning,

Maintenance Scheduling, Parts and Material Kitting

- Group Question: 1 thing each person learned today

## DAY 2: MAINTENANCE PLANNING

- Review of Day 1

- Proactive Maintenance Planning Process

- Maintenance Planning Definition

- Requirements of Maintenance Planning

  - Planned Job Requirements

  - Repeatable Procedure Definition

  - How to create Repeatable Procedures

  - Parts Requirements/Kitting Process

    - Definition of Kitting

    - How to establish a Kitting Process

    - Parts Ordered from Vendor vs Storeroom Stock

    - Security of Scheduled Work Parts/Material

- Exercise: Create Maintenance Planning Vision and Mission

- Exercise: Create Guiding Principles for Maintenance Planning

- Developing an effective Maintenance Planning process

- Maintenance Planning Roles and Responsibilities

- Maintenance Planning Leading and Lagging KPIs

- Creating Leading and Lagging KPIs for Maintenance Planning

- Exercise: Creating a Process Map for Maintenance Planning

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# TRAINING SCHEDULE

## DAY 2: MAINTENANCE PLANNING (CONTINUED)

- Exercise: Create RACI Chart (Roles and Responsibilities for Maintenance Planning)

Why Repeatable Procedures are critical

Examples of Repeatable procedures for Preventive Maintenance  
How to create a Repeatable Procedure

Exercise: Create a Repeatable Procedure for Replacement of a pump Provided

- Proactive Maintenance Scheduling
  - Maintenance Scheduling Definition
  - Requirements of Maintenance Scheduling
    - Requirements for Daily and Weekly Scheduling
  - Roles and Responsibilities for Scheduling
  - Leaderships expectations of Maintenance Planning and Scheduling



- Exercise: Create Maintenance Scheduling Vision and Mission
- Exercise: Create Guiding Principles for Maintenance Scheduling
  - Developing an effective Maintenance Planning process
  - Maintenance Planning Roles and Responsibilities

# TRAINING SCHEDULE

- Creating a Workflow Process for Maintenance Scheduling
- Creating a RACI Chart for Maintenance Scheduling
- Lessons Learned from Day 1 and 2
- Preliminary plan to implement what you learned from the past 2 days.

## **DAY 3 : MAINTENANCE PLANNING AND SCHEDULING ALIGNMENT**

- Managing Maintenance Planning and Scheduling Exercise
- Knowledge Assessment (Test)
- Role Play - Group Exercise: Real World “Proactive Maintenance Process” exercise
  - Players include: Maintenance and Production Leadership, Maintenance Planner / Scheduler, Storeroom Person, Maintenance Technician
- Maintenance Scheduling Exercise: Create a Weekly Maintenance Schedule with the following players: Maintenance Planner, Maintenance Supervisor, Production Management (4 Hours)
  - Pulling Maintenance and Planning into the Real World for you when you return (Think about this day as if you had all the control and power do anything do anything that is required for success)
  - Create a Maintenance Planning and Scheduling Mission, Vision and Guiding Principles for your organization
  - Create Leading and Lagging KPIs for your organization
  - “The Wall” (what is it and how will it impact success)



## **DAY 3 : MAINTENANCE PLANNING AND SCHEDULING ALIGNMENT (CONTINUED)**

- Risk Mitigation Planning
- Expectations from Leadership
- Common Mistakes and Miss-steps when moving into Proactive Maintenance Planning and Scheduling
- Why Maintenance Planning and Scheduling Implementations fail and what to do to mitigate these mistakes
- EXERCISE: Create a Plan when you return (individually with my guidance)
- Course Evaluation
- Course Completion Certificates