

1-Day Preventive and Predictive Maintenance By Joel Levitt

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This class covers the basics of PM and PdM in a convenient 1-day format. All aspects of PM are

considered including engineering, economics, management, and psychology.

This course offers a foundation for any organization wanting to improve or set-up a PM system.

Some of the specific things you will learn include:

- ✓ How to reduce waste in PM activity
- ✓ Slash breakdowns
- ✓ What changes to improve repeatability
- ✓ Accurate predictions of failures before they occur
- ✓ Plan and schedule PM to reduce excessive downtime
- ✓ How to evaluate existing task lists
- ✓ How things fail and its impact on PM
- ✓ Who makes the best PM Person?
- ✓ What are the basics of predictive maintenance?
- ✓ How can we use the P-F curve to choose inspection frequencies



Attendees in a longer version of the PM and PdM class held in Dubai. It included people from Saudi Arabia, Egypt, Nepal and the UAE

Agenda Day one Items in red are activities, case studies or exercises

- o Safety and reliability:
 - Four ways how PM avoids accidents. Report on research into maintenance worker accidents
- o Selling PPM to management: Battle for a share of the mind
 - Activity: What to say when selling PM to management (identify priorities)
 - Activity: PM Report Card and 10 Questions exercise introduction to the issues within the attendees organizations
 - Managing Iatrogenic failure
 - o How to use the P (Performance)/F (Failure) curve to improve MTBF
 - o PM Basics
 - Task lists and common PM Tasks
 - Activity: Critiquing current task lists
 - Distinguishing Mandatory versus Discretionary PM activity to stay out of jail
 - How things fail and the kind of PM needed for each failure style
 - How to use 3 different types of task lists for different failures and industries
 - Where to get started: the original Task List
 - PM frequency and PM clocks
 - o Task list analysis –analysis to avoid wasting money and precious time
 - o Predictive Maintenance
 - Questions before you start
 - Chemical and particle Analysis Predictive tasks
 - Vibration
 - Temperature
 - Visual techniques
 - IIoT wireless sensors
 - Management CMMS approaches to PM and PdM
 - Activity: PM as a percentage of hours a diagnostic exercise
 - Access to Equipment (what does it mean if you don't get it?)
 - Reduce downtime by using Interruptive maintenance and non-interruptive maintenance
 - Metrics
 - Activity: Short Repairs and high productivity develop a strategy for your facility
 - o People issues
 - What kind of personality to look for in a PM inspector
 - How to ensure that PMs are done as designed
 - o Create an action plan to cut costs, cut waste and improve reliability