







# TPM's Planned Maintenance 4 Phases to Zero Unplanned Breakdowns

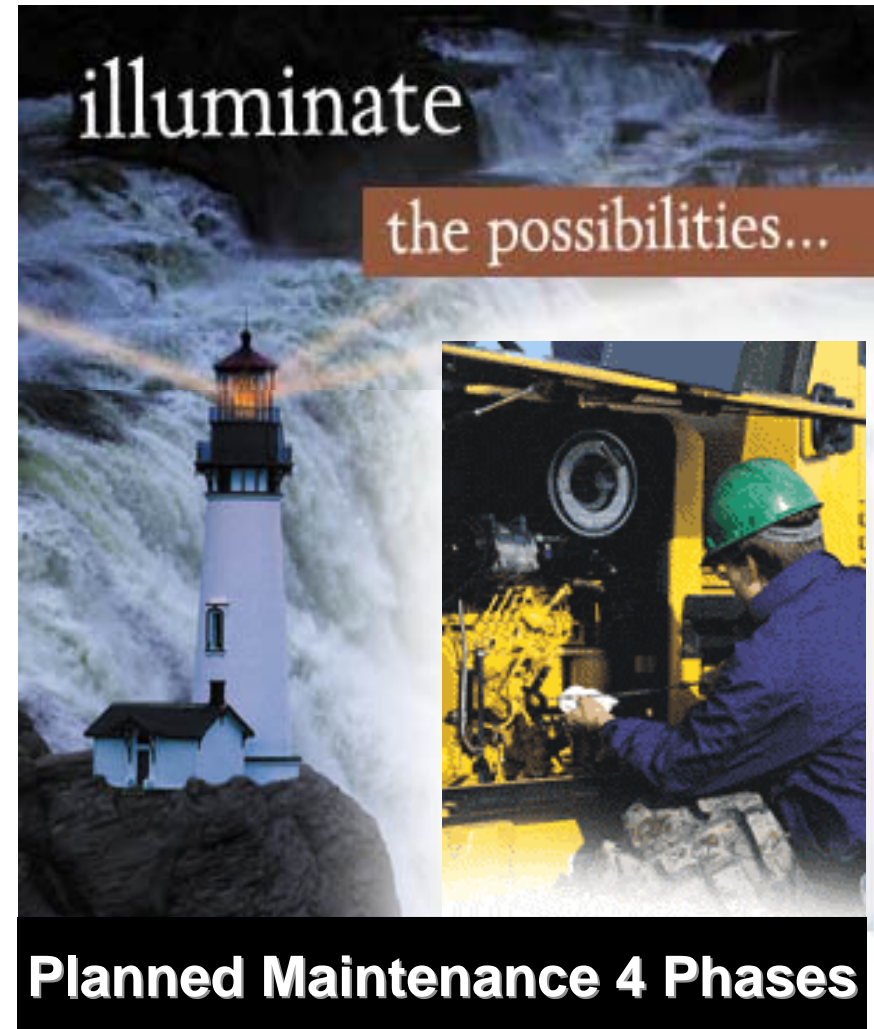
			
<b>PHASE 1</b> Stabilize MTBF	<b>PHASE 2</b> Lengthen Life span	<b>PHASE 3</b> Periodically Restore	<b>PHASE 4</b> Predict Life span

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## Objective Of this Course :

- Provide a detailed and structured approach through the application of TPM's Planned Maintenance
- Realize the importance of establishing basic equipment condition in our equipment's
- Provide an understanding on what Planned Maintenance is and what it wants to achieve
- Learn how to implement the four phases of Planned Maintenance
- Learn the 6 failure pattern and how it affects us in our day to day maintenance activities





## TPM Planned Maintenance Course Module :

Day 1

### Introduction : The Need To Change The Maintenance Culture

- Problems facing our industry
- Are we accepting failures in our plant
- Starting an improvement reliability strategy

### Module 1 : Planned Maintenance Overview

- Planned Maintenance defined
- 4 Phases of Planned Maintenance
- PM Preparatory Stage
- Planned Maintenance Versions
- Knowing MTBF and MTTR

### Module 2 : Phase 0 : Preparatory Stage

- Establish PM Vision and Mission
- Importance of Machine Ranking
- What constitute of breakdown ?
- Pilot Machine Selection
- Phase 0 Roadmap of activities

### Module 3 : Phase 1 : Stabilize MTBF

- The Need To Restore
- Three main activity for Phase 1
- Phase 1 Roadmap of Activities

Day 2

### Module 4 : Phase 2 : Lengthen Equipment Lifespan

- Addressing Design Weaknesses
- Types of Wear / Deterioration
- Phase 2 Roadmap of Activities

### Module 5 : Phase 3 : Periodically Restore Deterioration

- Preparing FMEA
- Understanding consequence of failure
- Maintenance Algorithm

### Module 6 : Phase 4 : Predict Equipment Lifetime

- Condition-Based Maintenance
- Other Maintenance Tasks
- Phase 3 & 4 Roadmap of Activities

### Module 7 : Applying the 4 Phases of Planned Maintenance

- Workshop on Planned Maintenance
- JIPM Report on Planned Maintenance

### Closing Remarks

Day 3