



Reliability and Maintenance Consultancy Firm Presents

# TPM Planned Maintenance Pillar

June 30, July 1 to 2, 2011, El Cielito Inn, Sta. Rosa, Laguna, Philippines



**Phase 1: Stabilize Mean Time Between Failure**



**Phase 2: Lengthen Equipment Lifetime**



**Phase 3: Periodically Restore Deterioration**



**Phase 4: Predict Equipment Lifetime**

## Reasons why you need to attend this training :

- **LEARN** how to start-up and organize your TPM Planned Maintenance pillar and what are the most important preparations you need to undertake in implementing Planned Maintenance in your plant.
- **LEARN** what support Autonomous Maintenance need from the Planned Maintenance pillar.
- **LEARN** the details on how to integrate RCM (Reliability-Centred Maintenance) into the higher Phases/ Steps of Planned Maintenance. Find out if TPM and RCM contradict or complement each other.
- **DISCOVER** what JIPM consultants are looking for in your Planned Maintenance activities.
- **LEARN** how to implement Planned Maintenance right the first time and avoid costly mistakes and seeing what works and not.
- **LEARN** how to prepare and develop the Planned Maintenance "MASTER PLAN".
- **LEARN** what it takes to implement Planned Maintenance right the first time
- **FINALLY** ask yourself, is my plant ready for the Planned Maintenance experience ?



**TPM Planned Maintenance Strategic Planning at Amkor Technology, November 1998**



**Planned Maintenance Training and Master Class, Sanyo Semiconductor, July 2007**

*While Autonomous Maintenance is the pillar of TPM with the most number of population involved, learn why Planned Maintenance should be the strongest pillar in any TPM implementation. What took me 7 years to know will take you 3 days to learn it all. Rolly Angeles*

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## Seminar Package Includes:

- Morning / Afternoon meals and Lunch
- Complete Handouts on the course
- Selected Articles on Planned Maintenance
- Exercises and Handouts on TPM-PM
- Case Study on Planned Maintenance
- Certificate of completion

## Who Should Attend:

- Maintenance Managers
- TPM Office, Facilitators and Coordinators
- Facilities Managers
- Preventive Maintenance Group
- Predictive Maintenance Groups
- Reliability Engineers and Managers
- Operations and Production Managers
- Top Management and Decision Makers
- Continuous Improvement Groups

## Feedback and Testimonies:

- *The thoughts and education of the training are taught clearly. It is a very important help for me and Sanyo if we are going to apply to apply the knowledge we learned. Mr. Rolly Angeles is a very inspiring person. His training is very well facilitated. Arigato Gosaimasu! From Vivian Grace Garcia / Technical Staff*
- *A very comprehensive topic discussion was imparted. The strategies and effective way of performing this type of maintenance was highly appreciated by all participants. From Jennifer Joy Siongco / Jr. Staff*
- *Facilitator is well adept on the subject matter.. Mr. Angeles is very good in presenting the subject matter as well as his knowledge regarding the subject. With respect to his experience, there is no doubt that Mr. Angeles is one of the best person around to teach the Planned maintenance concept. From Jeson Solis / Engineer*
- *The facilitator is good & familiar/expert with Planned Maintenance. It help us enlighten our knowledge in TPM and maintenance tasks. The subject is highly recommended to all maintenance personnel at any industry. From Joel Tomanan / Sr. Engineer*
- *The facilitator has a very good presentation and experience on the topics. I gained a lot of ideas and knowledge on how to plan for my machines to prevent breakdown. I am confident enough to train my subordinates with this kind of system. Thank you very much! From Conrado Alapit Jr./ Engineer*



**Planned Maintenance Master Class, Sanyo Semiconductor, July 2007**

*There are many things I have learned through the years driving TPM in an industry I used to work for that are not written in TPM books, but the most valuable lesson I have learned through my TPM experience is that doing Planned Maintenance is not about improving the equipment but rather it is improving the people that maintain the equipment, once the people improve the same goes with the equipment. . . Rolly Angeles*

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## About Planned Maintenance

- This course covers the principles of TPM Planned Maintenance 4 Phases to Zero unplanned breakdown strategy.
- Phase 1 deals with Stabilizing MTBF, main activity involved here is restoration by establishing Equipment Basic Equipment Condition
- Phase 2 deals with Addressing Equipment Weaknesses in Design and addressing them to prolong the lifespan of parts
- Phase 3 and 4 of Planned Maintenance deals with developing a Maintenance Tasks Selection Diagram in order to classify which parts will fall on the different maintenance tasks available
- Phase 4 if Planned Maintenance is about Predicting Failures through a system known as Condition-Based Maintenance and the use of Diagnostic tools to monitor condition of parts

## Planned Maintenance Objective:

- 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
- Provide an understanding on what Planned Maintenance is and what it wants to achieve
- Learn how to implement the four phases of Planned Maintenance as well as understand the 6 failure patterns and how it affects us in our day to day maintenance activities

## About the Resource Speaker

**Rolly**, is a seasoned international reliability and maintenance consultant with 23 yrs of solid experience in the field. He had been invited in different countries and have conducted reliability and maintenance trainings in United Arab Emirates, India, Kuala Lumpur, Indonesia, Nigeria and Bangladesh. His portfolio of maintenance trainings include Maintenance Management courses on TPM, Lubrication, Tribology, Condition-Based Maintenance, RCM, RCFA, Planned Maintenance, World Class Maintenance Management, The Twelve Disciplines, Oil Contamination Control, Maintenance Indices and KPI's, Maintenance Management System and much more. Rolly previously worked with Amkor Technology Phils., as a TPM Senior Engineer, an industry engaged in the manufacture of IC products and spearheaded their Planned Maintenance organization compose of maintenance managers and engineers. He was responsible for the dramatic reduction of unplanned breakdowns in their TPM Journey as well as RCM implementation on their Facilities Air Handling Units and as well as their sub-station equipment. Rolly is currently working as an independent reliability and maintenance consultant. Rolly had released his first book on World-Class Maintenance Management - The 12 Disciplines a book that makes every maintenance feel proud that they belong to the maintenance function.

## PM4P Course Briefer :

This training covers the 4 Phases of implementing a Plant wide Planned Maintenance structured approach. The first two phases will provide us a detailed approach on how to reduce the breakdowns in our equipment while the remaining two phases covers on how to provide a sound and robust approach to improve the way we maintenance our equipment.

**ENROLL NOW !**



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## Planned Maintenance Day 1

- 8:00 – 8:30 - Coffee and Registration
- 8:30 – 9:00 - Welcome and Introduction of resource speaker
- Take Planned Maintenance Pre-post IQ Quiz
- 9:00 - 10:00 - Introduction : Changing The Maintenance Culture
- Domino Effect of being reactive
- 1000 - 1015 - Morning Break / Meals
- 1015 - 1200 - **Module 1 : Planned Maintenance Overview**
- Planned Maintenance defined
- 4 Phases of Planned Maintenance
- PM Preparatory Stage
- Planned Maintenance Versions
- Knowing MTBF and MTRR
- Comparing Planned Maintenance and other maintenance systems
- 1200 - 1300 - Lunch
- 1300 - 1500 - **Module 2 : Phase 0 - PM Preparatory Stage**
- Establishing PM Vision and Mission
- Importance of Machine Ranking
- Phase 0 Roadmap of Activities
- 1500 - 1515 - Afternoon Break / Meal
- 1500 - 1700 - **Module 3 : Phase 1 Stabilize MTBF**
- The need to restore
- Roadmap of Activities for Phase 1
- 1700 - End of Day 1

## Planned Maintenance Day 2

- 0830 - 1000 - **Module 4 : PM Phase 2 Addressing Design Weakness**
- Addressing design weaknesses
- Roadmap of Activities for Phase 2

- 1000 - 1015 - Morning Break / Meals
- 1015 - 1200 - Understanding Wear
- Perform Exercise on Wear
- 1200 - 1300 - Lunch
- 1300 - 1500 - **Module 5 : PM Phase 3 Periodically Restore Deterioration**
- Preparing FMEA
- 1500 - 1515 - Afternoon Break / Meal
- 1515 - 1700 - Continuation of Module 5
- Understanding the Consequences of Failure
- Consequences Exercise
- 1700 - End of Day 2

## Planned Maintenance Day 3

- 0800 - 1000 - **Module 6 : PM Phase 4 Predict Equipment Lifetime**
- Understanding Predictive Maintenance
- P-F Curve
- Run To Fail, Modification, Stand-by
- Planned Maintenance Decision Diagram
- Phase 3 and 4 Roadmap
- 1000 - 1015 - Morning Break / Meals
- 1015 - 1200 - Phase 3 and 4 Workshop
- Team Presentation
- 1200 - 1300 - Lunch
- 1300 - 1500 - **PM WORKSHOP 2 : Perform Phase 3 and 4 Activities**
- 1500 - 1515 - Afternoon Break / Meal
- 1515 - 1600 - Continue PM Workshop
- Actual Case Study : JIPM Planned Maintenance Report at Amkor Phils.,
- 1600 - 1630 - Take Post Quiz on PM
- 1630 - 1700 - Starting an Improvement Reliability
- Awarding of Certificates
- **Summary and Closing**
- 1700 - End of Seminar

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## Training Investment Costs:

Costs include WCM Book

- 1 Delegate: Php 23,000.00 + 12% VAT
- 2 Delegates: Php 45,000.00 + 12% VAT
- 3 Delegates: Php 63,000.00 + 12% VAT
- 4 Delegates: Php 82,000.00 + 12% VAT
- 5 Delegates: Php 100,000.00 + 12% VAT

This book is available only through RSA Reliability and Maintenance Consultancy Firm only.

## Payment Procedure and Policy:

- Payment can only be accepted through cash or check basis. For payments in check kindly Pay to RSA Reliability and Maintenance Consultancy Firm. Kindly complete the name of the firm on the check.
- An Official Receipt will be provided after issuance of complete payment for this event.
- Payment should be done during registration, kindly advise the delegates to carry with them the payment for this training. To avoid future problems on our part. No payment, No entry policy would be enforced on this seminar workshop.
- 2% tax will be deducted provided industry joining the event to provide BIR form 2307 together with the payment

## How To Register for this Event:

- Step 1: Send us an email on the following:
- Full Name of Delegates: (FN, MI, LN)
  - Position or Designation / Department
  - Name of Industry
  - Type of Industry
  - How is payment to be made Cash or Check
- Step 2: Once we have confirmed the names of those you will send, we will provide a confirmation email.

## Cancellation, Postponement Policy

- For delegates who will not complete the duration of the training seminar and workshop, RSA Reliability and Maintenance Consultancy Firm will offer no refunds regarding this matter, certificates of attendance will only be provided to those delegates that will complete the three day seminar and workshop
- In the event that the seminar will be cancelled as a result of unforeseen events such as Acts of God or other uncontrolled reasons, RSA Reliability and Maintenance Consultancy Firm shall assume no liability whatsoever in the event this seminar and workshop be cancelled, postponed, move or rescheduled due to this fortuitous and unforeseen event.
- In case of a low turn out of delegates for this event, RSA Reliability and Maintenance Consultancy Firm reserves the right to cancel the event. An email will be sent to concerned parties regarding the cancellation.
- In the event you would like to cancel your participation in this seminar, kindly send us an email one week before the event is due. If you have made an advance payment and your delegates did not attend and have not informed us one week before the event, you will be charged with the full amount of the training fee.
- In case the delegate register for this event will not make it on this event, kindly notify us be email the changes in the name of the delegates.

## 100% Money Back Guarantee



If for any reasons you were not happy or satisfied with the outcome of the training. Our small firm offers you **Unconditional 100% Payment Back** and you keep the WCM Book and all the materials provided during the training provided payment had been received during the registration period.

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