

MAINTENANCE 2015: FROM TPM to LEAN MAINTENANCE

17th - 18th, AUGUST 2015
Boulevard Hotel, KL



keeping
everything
running.



Register Now!!



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THE FACT

You are Maintenance Manager of a manufacturing plant. You have the responsibility of maintaining the plant equipment at a HIGH LEVEL OF REALIBILITY within a severely constrained budget.

How In The World Do You Get Your Arms Around This BEAST We Call Maintenance And Get It Under Control?

**When You Have Fixed Something, Fix It Again.
What Is THIS?**

The good news is that there is a wealth of information in books, magazine articles, and internet articles. It is also the **bad news because there is so much out there that it is overwhelming. It really does not tell you where to start.** In this 2 days Practitioner Workshop, the expert Dr. Carlo Scodanibbio will **explore ten of the most important concepts that every maintenance manager must know to put into practice.** These will provide a **springboard to more advanced concepts** that will provide **increasing value** to your organisation.

**Now You Have OPTION When You Have
The Secret Weapon**

“Lean Maintenance Operations Vs. Traditional Maintenance.”

This is an ideal training **move beyond talking a good story to the ability to learn the State-Of-The-Art Maintenance practices.** Most importantly is the ability to **create buy-in** and to **sustain these gains** over the long term.

Lean Maintenance provides a route map to deliver high levels of reliability and transform the role of maintenance from one of fixing breakdowns to one of releasing new value from operations technology.

Dr. Carlo Scodanibbio builds on those points **by discussing crucial concepts that both reinforce those foundational elements and provide guidance for ingraining them into your organisation.** Many of these concepts **address managerial tips and techniques that are NOT always addressed in company-sponsored management training programs,** but are essential for building an organisation that contains the requisite level of discipline for creating a world-class reliability program.

As a practical workshop, Lean Maintenance will **take you on a journey from uncovering waste, designing projects to address the waste, selling the projects to management and delivering the projects.** Every area in maintenance is covered, including your **Total Productive Maintenance (TPM) effort, storeroom, Preventive Maintenance (PM) tasking, work orders and computer systems.**

Partial Client List:

*Compounds (M) Sdn Bhd
Honda Malaysia Sdn Bhd
Jabatan Audit Negara
Keretapi Tanah Melayu Berhad
Labuan Shipyard & Engineering Sdn Bhd
Malaysia Airports Holdings Berhad
MTBE Malaysia Sdn Bhd
Negeri Sembilan Cement Industries Sdn Bhd
Padiberas Nasional Berhad
Pharmaniaga Manufacturing Berhad
Power Root (M) Sdn Bhd
PLUS Berhad
Sarawak Plantation Berhad
Sime Kansai Paints Sdn Bhd
T.A. Furniture Sdn Bhd
Tradewinds Plantation Berhad
UMW Corporation Sdn Bhd*

Look No Further... You will walk away with powerful skills to:-

- **UNDERSTAND** the basics of Modern Maintenance and Plant Management and the Lean Thinking Philosophy, Performance Goals and Critical Success Factors
- **UNDERSTAND** the real reasons of failure of maintenance operations managed and planned with a “traditional” style
- **TRIGGER** a different thinking mechanism suited to focus onto crucial issues of the planning process
- **EQUIP** your toolbox with lean planning tools and techniques
- **USE LEAN** ideas to see maintenance works as “waste-less flow processes” and to think about improvement of the whole maintenance function
- **LEARN** how to ensure maintenance works of any size/ scale will be accomplished in time, within budget and with overall satisfaction
- **LEARN** how to transmit lean concepts to your own people and to external parties such as maintenance sub-contractors
- **IMPLEMENT** strategies to increase Plant Performance through lean-thinking people assuring their job satisfaction

AGENDA DAY 1

0800 Registration & Welcoming Morning Coffee

0830 Course Commences

- Introductions
- Review of agenda and participants' expectations and key questions

0840 Session 1: Maintenance, history & main disciplines

- What is "Maintenance"- Definitions and classification of Maintenance operations
- Overview of main Maintenance Operations:
 - Reactive Maintenance (Breakdown Maintenance)
 - Preventive Maintenance (Scheduled Routine Maintenance)
 - Predictive Maintenance (Condition Based Monitoring)
 - RBI (Risk Based Inspection)
 - RCM (Reliability Centred Maintenance)
 - IPF (Instrument Protective Function)
 - Shut-down Maintenance
 - Outage Maintenance

1015 Networking and Refreshment Break

1030 Session 2: Total Productive Maintenance and The Cultural Change

- The impact of the TPM (Total Productive Maintenance) discipline in the Maintenance domain
- "Traditional" TPM goals– today's TPM goals
- Why TPM is considered the starting point of Lean Maintenance and how does it contribute to the lean target
- TPM Basic techniques: **TEAM EXERCISE**
- TPM Core techniques:
 - TPM Autonomous Maintenance: the heart of TPM
 - Standardisation and Equipment Maintenance Standards
 - Maintenance Planning & Maintenance Records

CASE STUDY: A TPM Implementation

1100 Session 3: Viewing Maintenance as project Works, the missing link

- All Maintenance Activities– not only major Maintenance Works– are Projects Works! As such, they must be planned and managed accordingly
- Planning, Scheduling, Controlling Projects: the "traditional" approach
 - Basic reasons for planning
 - The traditional PBS (Project Breakdown Structure)
 - The Project Program (Gantt (Bar) Diagram)
 - Project Risk Management

1300 Networking Lunch

1400 Session 4: Traditional Planning vs. Lean Planning

- **TEAM EXERCISE:** Traditional Planning vs. Lean Planning– see the differences
- **Analysis:** Why do we plan "by impulse"? Why don't we have enough time to plan "lean"? Is it really a matter of time or rather of "style of thinking"? Why do we miss the "crucial" points and overlook that "something really important"? Why do we discover "unforeseen/s" and "surprises" during works executions?
- **Analysis of the weaknesses and failures in traditional planning:** why so many projects are completed late, with cost overruns and dissatisfaction? Why "project performance: is often poor?"

CASE STUDY

1430 Networking and Refreshment Break

1500 Session 5: The Second Industrial Revolution

- The root of poor performance date back to over 2 centuries ago. We have gone into 21st century, with enterprises in the 18th & 19th centuries to perform well in the 20th...
- Is our Industrial DNA still polluted by those obsolete principles that gave birth to the first Industrial Revolution?
- **CASE STUDY**
- Introducing the core principles of the Second Industrial Revolution

1630 Open Forum On Day 1 Topics

Open forum & review of participants' expectations and key questions

1700 End Of Day 1



Our World Class Trainer

Dr. Carlo Scodanibbio

Born in Macerata, Italy in 1944, holds a **doctor degree in Electrical Engineering** from Politecnico di Milano in 1970. He has over **45 years of experience in Plant Engineering, Project Engineering and Project Management**, as well as **Industrial Engineering and Operations Management**.



He has been an **Independent Industrial Consultant and Human Resources Trainer** since **1979** and has worked in a **wide spectrum of companies and industries** in many countries including **Southern Africa, Italy, Cape Verde, Romania, Malta, Cyprus, Lebanon, Mauritius, Kenya, Saudi Arabia, Malaysia and India**. His area of expertise lies in **World-Class Performance for Small and Medium Enterprises** in the **Project, Manufacturing, and Services** sectors.

He has co-operated, inter-alia, with several **Italian Chambers of Commerce and Industry, the Cyprus Chamber of Commerce and Industry, the Cyprus Productivity Centre, the Malta Federation of Industry, the Mauritius Employers' Federation, the Romanian Paper Industry Association, the United Nations Industrial Development Organisation, the Federation of Kenya Employers and the University of Cape Town**.

His courses and seminars, conducted in English, Italian and French, have been **attended by over 19,000 Entrepreneurs, Managers, Supervisors and Employees**. They feature a **very high level of interaction**, and are **rich in simulations, exercising and real case studies**. The approach is invariably **"hands-on"** and addressed for **immediate, practical application**.

AGENDA DAY 2

0800 Registration & Morning Coffee

0830 Session 6: Lean Thinking and The Origins of Lean Maintenance

- Today's key to World-Class Performance in all Industrial Sectors: Lean Thinking– Basic Core Principles
- Deploying Lean Thinking principles in the Maintenance domain, in the Project world and in the planning area.
Targets: Elimination of Waste– establishment of flow
- What is **Lean Project** and **Lean Maintenance Project Management**. Where does waste hide in traditional projects– where does waste hide in maintenance works and how to identify the main items of waste: idling, walking, talking, moving, excessive handling, double-handling, searching, unnecessary work steps, making errors and mistakes, fixing errors and mistakes, misunderstandings, trial-and-errors approaches, overlooking, inadequate or excessive or unnecessary supervision/control, waste in paperwork, waste of materials and Why maintenance works do not flow?

CASE STUDY: How to reduce waste drastically?

0900 Session 7: Maintenance and Flow, new frontiers in the approach to Maintenance

- The starting points: how should maintenance project's processes be planned for subsequent, lean implementation
- How to conceive and visualize flow working processes
- The role of Creativity in planning– the relationship between **Creative Thinking and Lean Thinking**
- The difference between traditional “automated”, reactive thinking and “lean”, proactive and projective thinking

EXAMPLES, CASE STUDY AND OPEN DISCUSSION

1030 Networking and Refreshment Break

1040 Session 8: Operational approaches to Lean Maintenance Planning

- Lean Planning operationally
- The concept of the Last Planner. How to eliminate all waste in Project and Maintenance works
- How to make maintenance work flow, work-package after work-package, how to conceive “realistic assignments”, how to plan them, how to assure a high PPC (Percent Plan Complete), how to improve the PCC even further by using the 5 Why techniques

EXAMPLES AND CASE STUDY

1300 Networking Lunch

1400 Session 9: Lean Maintenance in Practice

- The “lean” approach to Preventive/ Scheduled Maintenance works: Why Maintenance Personnel should be Last Planners
- The “lean” approach to large-scale and Shut-down Maintenance Operation– the Concurrent Engineering approach– Lean Risk Management or deploying Risk Reduction techniques to assure regular work-flow and respect of the time parameter
- The “lean” approach to management of external maintenance subcontractors integrating them in the works flow. Integration of sub-contractors and suppliers

EXAMPLES AND CASE STUDY

About Maintenance Planning Software: is it really beneficial? Under what conditions? Open debate

1500 Networking and Refreshment Break

1530 Session 10: A new breed of People is required for Lean Maintenance

- **Lean Planning, Lean Maintenance and People**
- A new breed of people is required in the modern maintenance world
- The “multi-skill” and “multi-function” factors
- The “**empowerment**” factor– self-planning & self-control
- Should everybody be a “last planner”?

1650 Open Forum On Day 2 Topics

Open forum & review of participants' expectations and key questions

1715 Presentation of Certificate of Attendance/ Achievement by Organizer

1730 End of Day 2

Who Should Attend

This programme is carefully designed for business executives, engineers, managers, directors who currently are involved in maintenance functions and activities. Maintenance workers and technicians who have come up through the ranks to supervisory positions. Maintenance technicians who are looking forward to promotion to managerial positions. These positions include :

Asset and material management managers
Chief engineer,
Electrical Engineers/Technicians
Facility Maintenance Managers/Supervisors Maintenance Planners,
Schedulers & Controllers
Mechanics & Instrumentation Mechanics
Millwrights/Craftsman/Tradesman/Artisans
Operation, Maintenance & Production Directors
Operation Managers, Maintenance Managers
Plant/Site/Engineering Managers
Project & Shutdown Managers/Leaders
Project & Shutdown Planners/Coordinators
Project System Engineers/Risk Manager
Technical Service Manager/Foreman
Reliability Engineers Production

Testimonials From Our Delegates

“Dr. Carlo has a lot of experience and I would like to start by selecting the best type of Maintenance in my mill to be applied. I learnt Project Management, the concepts & tools in TPM.” **Ahmad Shukri B. Mohd Khirrudin, Operation Engineer, Padi Beras Nasional Bhd**

This course really is World Class! I really like the Lean concept in broad & general idea presented and the examples are great!” **Ezwan Ismail, Senior Executive, Engineering Department, Pharmaniaga Manufacturing Berhad**

“Dr. Carlo is extremely experienced & knowledgeable on Lean subjects. He speaks in an impromptu confident manner – like his non-reliance on slides to speak! What I like best is his style & movie presentations.” **Randolph Wong, Head of Operations, Power Root (M) Sdn Bhd**

“Carlo is a highly experienced trainer in Lean Maintenance in general. During his course, I learnt on Total Productive Maintenance (TPM) and the cultural change. What I like the best for his course is the informative latest method of maintenance and cultural revolution.” **Abdul Hakim Abdul Rashid, Manager, Maintenance Operation, PROPEL Bhd**

“Carlo taught us about Lean Maintenance approach & strategies. What I like best is about Lean (Transformation from traditional to Lean) plus his presentation for Total Predictive Maintenance.” **Armizan Muhamad, Maintenance Manager, KTM Bhd**

“An excellent course, more than I expected. This was the toughest yet the most informative and best course I ever attended.” **Sanet Flocks, Senior Systems Planner, Matla Colliery South Africa**