

*- advanced executive education -*

**For the first time in  
Malta after many years..**

**Dr. Carlo Scodanibbio  
and  
Ing. Joseph Micallef**

**jointly present:**

*Maximising Operational Excellence Through*

# **"Next Generation LEAN-MANUFACTURING"**

**19-21-23 July 2010 – San Gwann - Malta**

**100% Reduction of Customer Returns**  
**35%+ Saving of Wasted Manpower Time**  
**85% Reduction of Setup Time**  
**95% Reduction of Lead Time**  
**83% Reduction of Inventory**  
**0 Defects**

*The key behind these astonishing figures?*

**One Robust Principle...LEAN**

**NEXT GENERATION LEAN MANUFACTURING - A Training Course Developed And Presented By:**

**Dr. Carlo Scodanibbio – Ing. Joseph Micallef – email: [carlo@scodanibbio.com](mailto:carlo@scodanibbio.com)**

**[jmicallef@theiet.org](mailto:jmicallef@theiet.org)**

## The Fact .

*“The US financial crisis has spiralled into ‘the largest financial shock since the Great Depression’ and there is now a three-in-four chance of a full-blown global recession.”*

Manufacturers seeking to exploit global markets, will soon be hitting an ‘invisible’ but nonetheless debilitating wall; mounting complexity across the value chain and lacklustre business performance. As the economic pendulum swings on the opposite direction, cost cutting pressures are very likely to put Lean Thinking back in the spotlight.

### DIFFICULT TIMES DEMAND LEANER OPERATIONS

Yet, amid these mounting complexities, many forward thinking manufacturers are fully positioned for the challenge as they continue their quest for growth and profitability.

### THEIR SECRET WEAPON ... - LEAN MANUFACTURING -

### THE RESULT...

70% Reduction in Inventory >> 30-60% Slash of Direct Labour Cost >> 50% Savings of Overhead Labour >>  
40-60% Reduction in Direct Materials Cost >> 90-100% Less Defects >> 30-40% Cut in Capital Equipment and Capex

### BEHIND THE NUMBERS...

Amazing business success stories, steadily taking market share from price-cutting competitors, earning far more profit than any other manufacturers, and winning the accolade of business leaders worldwide. Intelligent moves in every corner of the operation, from product design and marketing to manufacturing and leadership.

### THE THIRST...

Many who have emulated this phenomenal system have seen double and triple digit productivity growth, as well as unprecedented inventory reductions. This included names like GE, Autoliv, Baxter, AMD, Solectron, Xerox.....

### TODAY...

Lean Thinking is bringing competitive improvements not just throughout the value chain, but throughout the company as lean principles are beginning to be applied to back-office functions as well.

### THIS ADVANCED MASTERCLASS...

Will divulge how to get beyond a focus on the surface tools and techniques of Lean by creating a Toyota-style culture of quality - by showcasing a *LEAN LEARNING ENTERPRISE*. You'll learn how to...

**OPTIMISE MATERIALS FLOW >> IMPROVE THE SPEED OF YOUR BUSINESS PROCESSES  
>> IMPROVE PRODUCT AND SERVICE QUALITY >> CUT WASTE TO THE ROOTS AND BENEATH  
NO MATTER WHAT YOUR INDUSTRIAL SECTOR IS**

**Lean Manufacturing isn't an option any more - it's a necessity!!!!!!**

**WALK AWAY HAVING POWERFUL GRASP OF WORKING SKILLS TO:**

- **Create** a Lean Culture within your organisation
- **Shift** organisational focus towards an effective lean strategy that relates to your own manufacturing situation
- **Examine** the Lean philosophy, performance goals and its success factors
- **Eliminate** waste and optimise profits and productivity
- **Apply** Lean Thinking in the DNA of your operations and business processes
- **Avoid** common pitfalls encountered during Lean implementation
- **Identify** Lean Manufacturing techniques to be implemented smoothly and effectively
- **Understand** Quality and Total Quality Management of the new millennium
- **Explore** the key requirements for successful employee involvement in Lean practices
- **Drive** the entire organisation to the 'Least Waste Way' of operating or continuous improvement
- **Use** lean ideas to see operational activities as a 'process' and to think about their improvement along the entire value-chain

**FURTHER INFORMATION:** Ing. Joseph Micallef – Email: [jmicallef@theiet.org](mailto:jmicallef@theiet.org) Tel 9982 2244

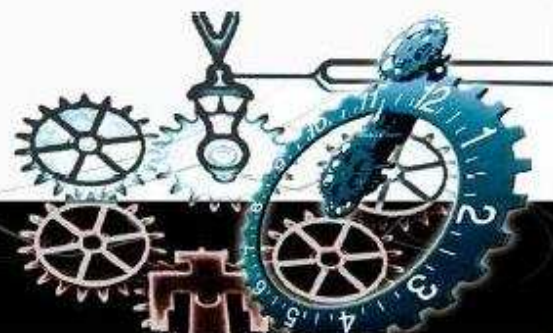
Dr. Carlo Scodanibbio – Email: [carlo@scodanibbio.com](mailto:carlo@scodanibbio.com) - Web: <http://www.scodanibbio.com> Tel 2166 2115 – Mob 7996 6056

**Training Grants ranging between 60 and 80% are available to eligible enterprises through the Training Aid Framework (TAF) administered by the ETC. Deadline for Application: 25 June 2010. For more details please contact the Course Leaders.**

**Course Trainers:**  
Dr. Carlo Scodanibbio and Ing. Joseph Micallef - Independent Consultants

**Course Dates:**  
19-21-23 July 2010

**Course Venue:**  
Malta Enterprise – San Gwann



## Course Outline .

*“Case studies shared during the course will illustrate productivity scores of between 35% and 120% and quality achievement of 0 defects”*

### Module 1 World Class Manufacturing Operations

- Understanding the scenario

### Module 2 Value Adding Management In Manufacturing Industry

- Focusing on the productive processes to maximise the output value
- Identifying waste in manufacturing operations

**Case Studies and Movie Time: “Spot The Waste!”**

### Module 3 Systematic Elimination Of Waste In Manufacturing Industry

- What is waste: Classification of waste
- The SOCO (5S) approach as a starting point for fighting waste
- Halting waste proliferation
- Reducing waste
- Eliminating waste

### Module 4 Productive Systems

- The “Batch” and “Line” types of operations
- The “push” and “pull” productive methods
- The Kanban approach to pull production
- Why the Kanban method is no longer to be considered “lean” and in which cases it should be adopted
- Effects of the “push” method

**Case Study - The “Stock” Issue**

### Module 5 Productive Process Time And Cost Analysis

- Identifying value-adding and non-value-adding activities
- Understanding “takt-time”, “throughput-time”, WIP (work-in-progress) and their inter-relationships

### Module 6 The Target

- Continuous Flow Production, or production with no waste

### Module 7 The Relationship Between

- JIT - Just in Time, LM - Lean Manufacturing and Flow Production
- The development of the Toyota Production System (TPS) into Lean Manufacturing – what are the main differences.

### Module 8 The Small-Lot Production Systems: The Smaller The Lot, The Less The Waste!

**Case Study - One-Piece Flow vs. Batch Production**  
**Interactive Exercise**

### Module 9 Flow Production In Three Different Situations

- Labour-intensive
- Machine-intensive
- Combination

**Case Studies and Movie Time**

### Module 10 The Stock Issue

- Why does stock pile up and (sometimes) flood the factory?

### Module 11 What Are The Necessary Requirements To Implement Flow Production

- Flow Production’s golden rules
- How to reduce drastically all lead times through flow production: Produce today what your customers ordered yesterday

### Module 12 Is Continuous Flow Production Suited To You?

- The product-quantity analysis
- Process mapping
- Process-razing studies

### Module 13 Cell Production And Group Technology

- Design of manufacturing cells: Principles and techniques
- When to consider One-Piece-Flow production and Cell Manufacturing
- How to improve productivity by a minimum of 35%, by eliminating the bulk of the waste

### Module 14 Plant, Equipment, Machinery, Layouts And Flow Production

- The relationship between Lean Manufacturing and Total Productive Maintenance (TPM)
- Lean Disciplines: TPM basic principles for the Manufacturing Industry
- Not all machines are suited for Flow Production: How to avoid the “super star galactica” cul-de-sac

### Module 15 Flow Production And Quick Change-Over: The Missing Link

- Lean Disciplines: The Quick Change-Over approach
  - How to improve set-up and change-over time by 50% to 80%
  - How to achieve “instantaneous change-over” situations
- Live Simulation**

### Module 16 Total Quality Management (TQM) and Lean Manufacturing

- TQM 2010: Customer focus attitude – The ISO system requirements – Typical Quality Assurance and Control Systems – Documented TQM Systems. The techniques: Reactive and Proactive Quality Systems – Process Control Techniques – Quality Reporting and Analysing – Quality Improvement Techniques
- Lean Disciplines: The 6 Sigma Methodology for drastic reduction of process variability – overview.
- The Poka-Yoke approach.

**Case Studies: The 100% Testing Approach In Manufacturing**  
**Interactive Case Study: The Poka-Yoke approach for Zero-Defects**

### Module 17 How To Deploy LM Techniques In The Manufacturing Industry

- Starting from the top or from the bottom?
- Can Flow Production be extended factory-wide? The mixed “push/pull” compromise

## Course Outline .

- Where and how to position the “coupling” between the “push/batch” and the “pull/flow” systems
- Basic Lean and Continuous Flow principles for the Continuous Process manufacturing industry and the highly mechanised/automated factory

### Module 18 Value Stream Management: A Global Approach To Lean

- The Value Stream Mapping technique: A practical deployment of all Lean Disciplines in an integrated fashion
- The VSM “storyboard”: A common, practical tool understandable both to Top Management and to Shop-floor people
- The “Milestone Charter” and the Kaizen approach to the implementation of Lean Improvement projects

### Module 19 New Operations Management Style for Lean Manufacturing

- Simple is beautiful!
- Small is beautiful!

### Module 20 People for Lean Manufacturing: Multi skill, Multi-function, Flexible, Responsible, Empowered

- New challenges for Human Resources Management, and new frontiers in people performance
- Management's and employees' approach to Lean Manufacturing
- TEI -Total Employee Involvement and Lean Manufacturing: The perfect symbiosis

### Lean Manufacturing: A Cultural Revolution

## Who Should Attend:

Managing Directors - General Managers - Plant Managers - Manufacturing Directors/ Managers - Operations Directors/ Managers - Production Directors/Managers - Quality Assurance Directors/ Managers - Industrial & Process Engineers - Chief Engineers - Technical Directors – Maintenance Managers - Procurement Managers - Logistic Managers - Planning Managers – Warehouse, Materials & Inventory Managers - Team Leaders – Improvement Champions

**From all Manufacturing Industries**

### Timings:

Registration will be at 08:00 on each day with the course beginning at 08:30. There will be a 15' break for refreshments in the morning and the afternoon (at approx. 10:15 and 15:15 respectively) and lunch will be served at 12:30. Each course session will conclude at 17:00. All timings are approximate due to the interactive and intensive nature of the course.

This highly interactive course is designed to provide participants with practical and 'hands-on' insights on Lean Manufacturing, along with effective techniques to achieve desired outcomes through practical case studies and live simulations. Derived from Dr. Carlo's extensive experience on Lean Manufacturing processes, this course will be conducted with a highly engaging and result-oriented approach that gives you immediate and substantial results.

## About your Facilitators .



**Ing Joseph Micallef** graduated in electrical engineering from the University of Malta in May 1992. He has been involved in the manufacturing industry since 1990. Initially starting his career within the medical devices and plastics processing manufacturing sector, he later moved on within the electronics manufacturing sector.

Throughout his career, Joseph has had experiences in a variety of industrial and automation processes, research and development projects, various manufacturing processes and occupied senior technical and management roles in research and development, process control, quality management, occupational health safety and business process management. For the last c. 14 years, Joseph has been occupying the position of Quality Manager within a very dynamic high tech electronics manufacturing industry sector. Apart from his broad industrial experiences gained through the last c. 20 years, Joseph has also paralleled his experience within the services sector through his various freelance projects which he has undertaken since the year 2000 when he had ventured into the freelance consultancy and mentoring/training business.

Joseph's career spreads primarily in Malta, but he has been assigned several projects and training opportunities in various countries within Europe (UK, Scotland, Belgium, France, Finland, Italy), the US (Jacksonville, Houston) and the Middle East (Egypt).

Ing. Joseph Micallef is a corporate member of a number of institutions. In particular he is registered Chartered Engineer with the Engineering Council (UK) – *C.Eng.*, corporate member in the Institution of Engineering and Technology (UK) - *MIET*, European engineer through FEANI – *Eur.Ing.*, and warranted member within the Chamber of Engineers (Malta).

Ing. Joseph Micallef's highly qualified experience in the quality domain will reveal today's “state-of-the-art” approach to Total Quality Management suited for Lean deployment in the new millennium - showing an effective path for immediate, practical results.

## About your Facilitators .

**Dr Carlo Scodanibbio** is an internationally renowned Trainer, Speaker and Industrial Consultant with over 39 years of experience in Plant Engineering, Project Engineering, Project Management, Industrial Engineering and Operations Management. A free-lance Consultant since 1979, he has worked in a wide spectrum of companies and industries in many Countries including Cyprus, Italy, India, Saudi Arabia, Malta, Namibia, Kenya, Botswana, Malaysia, Mauritius, Romania, Turkey, Lebanon and South Africa. Carlo has co-operated, inter-alia, with several organisations such as Italian Chambers of Commerce and Industry, Cyprus Chamber of Commerce and Industry, Cyprus Productivity Centre, Malta Federation of Industry, Malta Chamber of Commerce and Industry, Mauritius Employers' Federation, Romanian Paper Industry Association, United Nations Industrial Development Organisation, Federation of Kenya Employers and University of Cape Town.



"An excellent course.... Fantastic Italian "Maestro" who takes you from zero to hero... Thank you Carlo !!  
S V R, CTI, South Africa

Enthusiastic, optimistic and a dynamic facilitator, Carlo has been a frequent instructor and speaker at seminars and courses attended by well over 14,000 participants. Carlo, holds a doctor degree in Electrical Engineering from Politecnico di Milano, and has written numerous articles and research papers which have been actively published in many manufacturing newsletters, bulletins and international magazines.

"Excellent course! Carlo is brilliant and liberates the mind from the chains of traditional thinking that inhibits any real progress in improvement in the workplace."  
Y M, Circuit Breaker Industries, South Africa

### FROM THE DESKTOP OF DR. CARLO SCODANIBBIO...

Dear Delegate(s),

*The Lean Philosophy is changing the way organisations operate. No longer stuck in the paradigm of "mass" thinking, many manufacturing enterprises have tried to adopt some portions of the Lean road. Many have failed. Many have rushed off, taken a course and pronounced themselves LEAN. Yet very few have tested the depths of overall performance enhancement and added competitiveness possible with a complete change of paradigms in the "lean" direction.*

*This course will be a shocking course for many of you, because it demystifies all traditional principles of the first industrial revolution which majority of manufacturing enterprises are built or operate until today. By presenting in rather great detail the philosophy of the second industrial revolution and the main tools and disciplines readily available to all manufacturing enterprises to perform in an "excellent" status, this course is a door-opener to lean practices for whoever is:*

*ready to listen to the message – prepared to abandon obsolete principles, formulas and approaches – willing to get to "lean" status.*

*This course will prove that competitiveness today can no longer be achieved by merely cutting costs or revamping technology: because cutting costs has a floor, while performance improvement through maximisation of value-added and waste elimination has no ceiling – and because technology alone does not generate the levels of output value enterprises and organisations need to tackle the challenges of the tough times ahead.*

*I GUARANTEE that you will leave this workshop with the knowledge and tools to improve the value proposition of your operations! See you soon in San Gwann!*

*Dr. Carlo Scodanibbio*

"An excellent, practical course with visual video proofs that the Lean Manufacturing technique works.  
This course teaches one to look differently at own work environment"  
H P, Cobra Watertech, South Africa

"An excellent course, a fantastic launch pad for lean. Participants leave feeling energetic and enthusiastic"  
L C, Sasol Dyno Nobel, South Africa





# Registration .

(Online Registration: <http://www.scodanibbio.com/nglm/onlinereg2.html>)

## Course Fees, Discounts, Terms and Conditions

### Fees and Discounts Structure

(prices are per Delegate excluding VAT)

- Price per 1 Delegate €460-00
- 2 Delegates: less 5% €437-00
- 3-5 Delegates: less 10% €414-00
- 6-9 Delegates: less 15% €391-00
- 10+ Delegates: less 20% €368-00

### Deadline for Registration

**09 July 2010**

### Early Bird Registration

Register and settle Course Fees by 02 July, 2010 and get **an additional 10% discount** on the applicable price (as per Fees Structure)

**Please complete and sign this Form, scan it and email it to [jmicallef@theiet.org](mailto:jmicallef@theiet.org) or [carlo@scodanibbio.com](mailto:carlo@scodanibbio.com)**

### DELEGATE/S DETAILS

(please write in BLOCK CAPITALS)

- 1 Delegate Name \_\_\_\_\_  
Position \_\_\_\_\_  
Email \_\_\_\_\_
- 2 Delegate Name \_\_\_\_\_  
Position \_\_\_\_\_  
Email \_\_\_\_\_
- 3 Delegate Name \_\_\_\_\_  
Position \_\_\_\_\_  
Email \_\_\_\_\_
- 4 Delegate Name \_\_\_\_\_  
Position \_\_\_\_\_  
Email \_\_\_\_\_
- 5 Delegate Name \_\_\_\_\_  
Position \_\_\_\_\_  
Email \_\_\_\_\_

(More than 5 Delegates: Please add separate schedule)

**NB: Training Grants** ranging between 60 and 80% are available to eligible enterprises through the Training Aid Framework (TAF) administered by the ETC.

**Deadline for Application: 25 June 2010**

### ORGANISATION DETAILS

(please write in BLOCK CAPITALS)

Organisation \_\_\_\_\_  
Nature of Business \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ P/Code \_\_\_\_\_  
Country \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_

We are registering \_\_\_ Delegates @ € \_\_\_\_/each

Total amount € \_\_\_\_\_  
Less 10% Early Bird Discount € \_\_\_\_\_

Net amount to be invoiced € \_\_\_\_\_

### Authorising Manager

Name \_\_\_\_\_ Position \_\_\_\_\_

Date \_\_\_\_\_ Signature \_\_\_\_\_

(This Registration is invalid without a signature)

### TERMS OF PAYMENT

**Fees include:** participation to the 3-day Course "Next Generation Lean Manufacturing" to be held at Malta Enterprise in San Gwann on 19-21-23 July 2010 – Refreshments and Lunches – Course Notes and Documentation – **Certificate of Achievement** (*Certificate of Successful Completion*, against satisfactory results in the course's final exams) signed by Dr. Carlo Scodanibbio and Ing. Joseph Micallef – One free e-consulting Advice by Dr. Carlo Scodanibbio.  
Upon receipt of a duly completed and signed Registration Form, a **Confirmation Letter** and **Invoice** will be sent to you by the organisers.  
Payment of Course Fees is strictly **on presentation** and is required **within 5 working days** from date of Invoice.

### METHOD OF PAYMENT

Payments may be done by cheque or Bank Transfer in favour of Ing. Joseph Micallef, who acts as the official Course Organiser.

To arrange for payment after receiving **Confirmation Letter** and **Invoice** kindly contact Ing. Micallef directly on (+ 356) **9982 2244** or email [jmicallef@theiet.org](mailto:jmicallef@theiet.org)

### CANCELLATION POLICY

All Cancellations of Registrations must be made in writing.  
Due to contractual obligations, a cancellation charge of 30% of the invoiced amount applies if the cancellation is received 10 days or less before Course starting date. However, a complete set of documentation will be sent to you. Substitutions are welcome at any time.  
Should the course be cancelled by force-majeure or for any other reason, you will receive a full refund of the paid Course Fees.