

# Implementing Lean Maintenance 3 Day Workshop v2.1

## In House, "Hands on" Training Workshop



This 3-day workshop leads delegates through the theory and practices of Lean Maintenance. In addition to an explanation of how Lean theory applies to Maintenance routines, delegates work in teams to apply Lean Maintenance principles to up to 3 assets to create examples of:

- Lean Asset Care covering preventive maintenance, condition based inspection and servicing routines,
- **Lean Execution** covering standardisation, systemised workflows, use of data performance management and CMMS,
- **Lean Maintenance Centre of Excellence** covering skill development, performance management, Focussed improvement and engagement.

The lessons from the practical activities are used to illustrate how Lean Maintenance road map can deliver:

- Systemised asset care routines
- Improved maintainability and compliance,
- Increased stability of component life.
- Enhanced maintenance planning, scheduling and work control,
- Problem resolution and process optimisation.
- Information management and knowledge sharing.
- Learning and knowledge gaps,
- Accelerated wear and recurring failures,
- Engagement with continuous improvement.

#### The gains include:

- 1. Effective Maintenance Execution
- 2. Robust Process Stability
- 3. Enhanced Process Resilience
- 4. Improved Flexibility
- 5. Reduced Manufacturing Costs

Deliverables include the development of a bespoke Lean Maintenance route map to release maintenance resource to improve asset effectiveness.

In addition to the above benefits, incorporating Lean Maintenance within a Lean, TPM or Six Sigma programme has been shown to increase annualised gains by as much as 50%.



#### **Lean Maintenance Implementation**

**Location:** In House

**Cost:** £4500 plus VAT up to 10 delegates

Price includes all course materials, and Course Leader expenses.

#### Why attend the workshop?

This workshop provides a step by step guide to Lean Maintenance practices capable of delivering high levels of reliability and of releasing the value adding capability of the maintenance function to:

- Systematically reduce recurring breakdowns and increase equipment effectiveness.
- Increase machine reliability, optimise maintenance schedules and release maintainer resource to undertake value adding engineering improvements.
- Develop maintenance skills and site preventive maintenance capability.
- Improve data driven decision making through better use of CMMS systems and processes.
- Establish a common continuous improvement "mind-set" across all operational functions.

Delegates will use a comprehensive workbook containing briefing notes and supporting templates to assess current practices against Lean Maintenance benchmarks for best practice.

#### Who should attend?

The course is designed to mobilise maintenance improvement team activities and support the evolution of best practice to reduce effort required to sustain high levels of reliability. The content is relevant to:

- Engineering and Maintenance leaders,
- Lean Champions,
- Facilitators and Change agents,
- First Line Managers,
- Key maintenance personnel with an interest in increasing their understanding of how to release the full potential of the maintenance function.

The course is also recommended for those following the DAK Leader Guide to reduce minor stops and quality defects.

#### **Workshop Agenda**

- Day 1:
  - Introduction:
    - Learning goals and agenda
  - The power of Lean/Systems Thinking
    - Lean Manufacturing and Lean Maintenance
  - Lean Maintenance Added Value:
    - Preventive, Corrective, Process Quality
    - Industry 4.0 and the changing landscape of maintenance engineering
  - Lean Maintenance Road Map
    - Lean Asset Care,
    - Lean Execution,
    - Lean TPM Centre of Excellence.



#### Mini Pilot Session 1: Lean Asset Care

- Establishing Basic condition standards
  - o Condition appraisal and refurbishment planning
  - Asset Care Standards
    - Prevention, Inspection, Servicing
  - Dealing with accelerated wear hot spots:
    - Contamination
    - Human error
  - Skill development and compliance
- Day 2

#### Mini Pilot Session 2: Lean Execution

- Workflow
  - Planning, scheduling and work control
  - Lubrication
  - Work in progress
- Performance Management
  - o Cultural drivers and engagement
  - Early Problem Detection
  - Trouble shooting algorithms
- Use of data
  - o Recording, observation and problem prevention
  - Spares management
  - o CMMS

#### Mini Pilot Session 3: Lean Maintenance Centre of Excellence

- Standardising best practice
  - o Core and Intermediate task characterisation
  - Visual management
  - o Problem Prevention
- Systemising work routines
  - Enhancing workflow
  - Improving flexibility
  - Stoppage analysis and resolution
- Day 3
  - Feedback
  - Mini Pilot Session 4: Lean Maintenance
    - Lean Maintenance Maturity Assessment
    - Action Planning
      - 3-5 years, 12 month goals, 90-day action plan

#### **Workshop Leader**

The workshop will be led by Dennis McCarthy. Dennis has supported Total Productive Maintenance, Lean Thinking and Continuous Improvement programmes ranging in size from small single site applications to company-wide multi-site transformation programmes in Europe, USA, India and China. This has included support for well- respected and award winning companies such as 3M, Ford, General Motors, GE, RHM and Dow Corning.

Dennis co-authored Lean TPM a blueprint for change", with Nick Rich of Cardiff University Business School. Published by Butterworth Heinemann. He also wrote Early Equipment

Management, "Continuous improvement for projects" published by Productivity Press. Engineering aspects from both books feature in this course.



#### **Lean Maintenance Implementation Workshop Fees:** £4500.00 + VAT **Date/Venue** Workshop fees include all course materials, In House planning workshop and course leader expenses. **Timing** Full payment is required prior to the workshop Day 1: 9:00 to 17:00 date. Day 2: 9:00 to 17:00 Day 3: 9:00 to 16:00 Complete and return this booking form to Name Position **DAK Consulting, Chiltern House,** Company 45 Station Road, Henley on Thames, Address RG9 1AT Or contact Nadine Edmonds on Tel: +44(0)1491 845504 Nadine.edmonds@dakconsulting.co.uk Post Code Payment can be made by: Telephone 1. attaching a cheque made payable to "DAK Mobile Consulting" Email 2. requesting us to invoice your company Number of against purchase order delegates number: