

LEAN PRODUCTION PLANNING & VALUE-CHAIN MANAGEMENT

FOR HIGH-/MID-/FRONTLINE-LEVEL MANAGERS FROM MANUFACTURING

10-12-14 October 2011 - Malta Enterprise - Malta

COURSE TIMETABLE

DAY 1

Manufacturing Yesterday – Manufacturing Today And Tomorrow

- The main parameters of change – the market change – the impact on manufacturing operations
- Manufacturing Operations: definitions – main parameters and metrics.
- Understanding “*takt-time*”, “*throughput-time*”, *WIP* (work-in-progress) and their inter-relationships
- The fundamental difference between “**Catalogue**” **Manufacturing** and “**Contract**” **Manufacturing**.
- Manufacturing styles: “PUSH” and “PULL”. Movie time: effects of the “push” method - the “stock” issue – case studies.
- Manufacturing Methods: “BATCH/LINE” vs. “FLOW” - The *Small-lot Production Systems*: the smaller the lot, the less the waste! Movie time: one-piece flow vs. batch production - case study.

Production Planning Yesterday (“Traditional” Planning)

- MRP: Materials Requirement Planning – overview
- MRPII: Manufacturing Resources Planning – overview
- CRP: Capacity Requirements Planning - overview
- ERP: Enterprise Resources Planning – overview
- Other Planning methods: overview

World Class Manufacturing Operations

- Understanding the scenario after the change. Understanding the new Market’s features.
- Manufacturing Performance today: the prerequisites.

The Impact Of Lean Thinking And Value Adding Management In The Manufacturing Industry

- Focusing on the productive processes to maximise the output value.
- What is **waste**: classification of waste
 - Identifying waste in Manufacturing Operations – Movie time: “spot the waste!” - case studies. Halting waste proliferation - Reducing waste - Eliminating waste
- What are **Lean Manufacturing** and **Continuous Flow Production**, or Manufacturing with no waste.
- Why “traditional” planning methods are no longer adequate: even worse, they may contribute substantially to perpetuate a wasteful situation! What needs to be changed. Remember: a manufacturing enterprise is like a “*lawn mower*”! The consequent limitations and constraints.

DAY 2

Lean Productive Systems – The Planning Approach

- 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. Towards Lean: “**Intelligent**” **Kanban** and Paced Withdrawal.
- Planning for *Continuous Flow Production*: “*simple is better...*”, “*...simple is beautiful!*”
- **Flow Production** golden rules: the *macro-mix/micro-mix* planning approach.
- How to reduce drastically all lead times through Flow Production: “*produce today what your customers ordered yesterday*”.
- How to cope with high demand volatility and variability through Lean Production and Lean Planning.

How to Deploy Lean Planning Techniques In The “Catalogue” Manufacturing Industry

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

How To Switch-Over From Traditional Planning To Lean Planning: Value Stream Management, A Global Approach To Lean Planning

- The **Value Stream Mapping** technique: a practical deployment of all Lean Disciplines in an integrated fashion. The *Flow of Materials* and the *Flow of Information* in the “present” state and in the “future” state: an integrated guideline to future, **Lean Production Planning**.

DAY 3

The Lean Value Chain and Lean Production Planning

- Understanding the “*Value-Chain*” principle in manufacturing and its strategic role both in the “*supply*” side and the “*demand*” side
- Lean Supply Side: new relationships with suppliers and sub-contractors - Suppliers evaluation, classification, rating and grading: overview - Lean approaches to Supply Chain management - Integration of Suppliers and Sub-Contractors in the Production Planning Process. Is “*co-makership*” suited to you?
- Lean Demand Side: the integration of Distributors, Wholesalers and Clients in Product Development and Production Planning – the QFD (***Quality Function Deployment***) approach, or “*listen to the voice of the customer*”.
- Lean Logistics: how to cut drastically all waste inherent in logistics on both the supply and demand side – case study.

Lean Production Planning: The Software Issue

- Why Traditional Production Planning and Control Software is nowadays considered inadequate. Case study: can IT become a major draw-back for an enterprise aiming at world-class status?
- “Transition” SW for switching-over from Traditional Production Planning to Lean Production Planning: “paper-less” and “wip-less” Kanban, or “how to transform an existing, “push” style, MRP-based Production Planning system into a “pull”, Kanban-based system first and then, gradually, into an “Intelligent Kanban” and eventually into a “*Continuous Flow*” type of Planning system.

Specific Lean Planning Methods for “Contract” Manufacturers

- Contract Manufacturing is ***Project Work!*** As such, it cannot be planned with “traditional” planning techniques!
- ***Lean Planning*** - workshops and case studies. The concept of the ***Last Planner***: how to eliminate all waste in Project/Contract Manufacturing works.
- How to make contract 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 PPC even further by using the *5Why* technique.
- Lessons learnt from Lean Manufacturing: the ***Quick Set-Up*** discipline and its deployment in Contract Manufacturing.
- Movie Time: a world-class contract-driven enterprise - case study.

Lean Production Planning – Lean Value-Chain Management: a cultural revolution!

For further, comprehensive details, please visit
<http://www.scodanibbio.com/malta2011/>