

LE 102 Principles of Lean Manufacturing for Job Shops



Quickly Learn how to Apply Lean Methods by Participating in a Hands-on Factory Simulation

LE102 is an accelerated learning workshop that conveys the benefits of using Lean in a transaction-intensive **engineer-to-order** production environment to achieve breakthrough business performance. Key deliverables include:

- Understand the business case for enterprise-wide improvement as a way to profitably meet rising customer expectations in a globally competitive market
- Understand how Lean methods can simultaneously reduce total lead time and operational costs while improving service and quality

Workshop Overview

Participants are empowered with an understanding of Lean concepts through a series of interactive presentations and team activities. The concepts are then applied in a live simulation that models a realistic factory characterized by low volume high variety assembly line operations. The hands-on format delivers a number of key “ah ha!” insights that are difficult to acquire through traditional learning methods.

Participants work together to build and deliver products via their roles in the simulation. The initial “business as usual” scenario includes high inventory levels, long manufacturing cycle times, poor quality, an inaccurate forecast and long travel distances between operations, all of which contribute to late customer deliveries.

Participants are challenged to improve the scenario by implementing Lean methods. Teams implement improvements by physically manipulating the simulation which reinforces

the group’s real-time team building and problem solving skills. Data that is collected during and after each simulation round is entered into a scoreboard application which graphically displays operational and financial performance results.

Through a progression of simulation rounds, participants achieve order of magnitude improvements to the scenario:

- Reduced total lead time
- Increased throughput
- Improved on-time delivery
- Reduced variation
- Improved product quality
- Reduced operational expenses
- Increased productivity
- Increased available capacity

Key Benefits

- This simulation is designed to empower employees with the fundamental concepts of Lean
- Employees quickly acquire and apply the skills they need to achieve bottom line results.

Target Audience: Managers and staff

Number of Participants: 12-18

Time Required: 8 Hours



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