



CONTINUING EDUCATION

Principles of Lean Manufacturing (Lean 101)

CEQAL 591

A Lean Enterprise produces more with existing resources by eliminating non-value added activities. Manufacturers are facing increased worldwide competition and the stakes are high. The winners in this competition work to eliminate overproduction caused by traditional scheduling systems and only make what customers want when they want it. Lean establishes a systematic approach to eliminating these wastes and creating flow throughout the whole company. It also helps you develop and implement a long-term plan to streamline your operations for success.

Who Should Attend:	All employees interested in how to utilize lean operating Systems to eliminate waste and improve profitability.
Prerequisite:	None
CEU'S Credit:	.8
Duration:	1 day course – 8 Hours.
Course Description:	At this workshop you'll learn the principles of Lean Manufacturing and how to apply them. During the simulation exercises-as a member of the production team for Buzz Electronics-you'll apply Lean concepts such as standardized work, visual signals, batch-size reduction, pull systems, and more. Experience firsthand how Lean improves quality, reduces cycle time, improves delivery performance, and reduces Work-in-Process (WIP) and enables Buzz to show a profit. Previous participants have been able to immediately apply the principles that were learned in this course and began seeing financial impact.

Benefits:

- Reduce cycle time
- Reduce inventory
- Reduce Work-in-Process (WIP)
- Reduce costs
- Increase capacity
- Improve lead times
- Increase sales
- Increase productivity
- Improve quality
- Increase profits

Course Outline:

- Overview of Buzz Electronics
- Assignment of plant jobs

Round One Simulation

- Typical manufacturing layout (non-Lean)
- 20 minute simulation
- Debrief

Introduction to Lean Manufacturing

- Lean definitions/terminology, history and concepts
- Eight Wastes of Lean

Introduction to Lean Components

- Standardized Work
- Work Place Organization/5s
- Visual Controls
- Plant Layout

Round Two Simulation

- Application of Lean concepts
- 20 minute simulation
- Debrief

Continued Introduction of Lean Components

- Teams- importance of cross-training/multi-skilled employees
- Quick Changeover
- Batch Size Reduction
- Point-of-Use Storage (POUS)
- Quality at the Source

Round Three Simulation

- Application of Lean concepts
- 20 minute simulation
- Debrief

Continued Introduction of Lean Components

- Pull/Kanban- Pull vs. Push System
- Cellular Flow- Setting up Workcells
- Calculating Takt time
- Line balancing
- Total Productive Maintenance (TPM)

Final Round Simulation

- Application of Lean concepts
- 20 minute simulation
- Debrief

Review/Wrap up

- Continuous Improvement and Barriers
- Success Factors
- Typical Benefits of Lean
- Overcoming Objectives
- Value Stream Mapping
- Lean vs. Traditional

Each participant will receive a comprehensive manual and a Certificate of Completion at the close of the seminar