Introduction to Lean Manufacturing – Small Groups

Onsite – 6 Hours – Optimum class size 6 - 8 students

Training Description:

The Introduction of Lean Manufacturing – Small Groups interactive training combines classroom instruction with intensive hands-on experience in a simulated shop-floor venue. This training exposes the frailty of traditional manufacturing concepts in a production facility. Through 4 rounds of assembly in the simulated environment, participants begin the experience with traditional thinking (Push Scheduling) before gradually transforming into a world-class Lean facility utilizing Lean Concepts (Cell and Pull) gained through lecture and demonstration. Participants experience the immediate and dramatic impact of the transformation process on themselves, their workplace roles, and the enterprise of which they are part. This training is delivered in person, onsite and includes both lecture and hands-on learning opportunities. Introduction to Lean Manufacturing – Small Groups is ideal for production staff.

Training Objective:

The objective of this introductory training will be to provide participants with a clear understanding of lean principles and how these principles can be applied within their company. Participants will learn terminology, concepts, and application methods which contribute to addressing needed improvements in a production environment. This introductory training will serve as a foundation for other training tools that will bring about significant improvements in quality and productivity.

Skill Attainment:

Upon completion of training, participants will have practiced an introductory knowledge of Lean Manufacturing principals. Topics include:

- Workplace organization (6S)
- The basics of standardized work
- Value Stream Map
- Visual Controls
- Set-up Reduction
- Batch Size Reduction
- Point-of-use Storage (POUS)
- Quality-at-the-Source
- Workforce practices
- Pull Systems
- Line Balance
- Plant Layout

This course will provide a clear understanding of the eight (8) wastes in manufacturing and how Lean Manufacturing can be used to minimize them. This training will give employees the opportunity to bring about change by eliminating waste daily. These skills are transferable within the company, industry and are highly desirable by any manufacturer.

Training Agenda

- Course and Simulation Orientation
- Introduction to Lean Manufacturing Terminology
- Round 1 of Simulation
    - Participants will be assigned roles in the simulation and be provided with very brief instructions and written work instructions
    - They will operate the factory as instructed and understand the initial problems with traditional manufacturing practices and review problems that took place
- Introduction to Lean Concepts
    - 6S and Workplace Organization
    - Visual Controls
    - Plant Layout
    - Introduce Standardized Work
    - POUS
    - Batch Size Reduction
- Round 2 Simulation
    - Participants run the simulation again with the incorporation of the training concepts identified above
    - Post-Simulation debrief of what was improved and what remains a problem
- Introduction of New Concepts
    - Quality at the Source
    - Set-up Reduction & Quick Changeover
    - Pull Systems
    - Batch Size Reduction/ One-Piece Flow
- Round 3 Simulation
    - Participants run the simulation again with the incorporation of the training concepts identified above
    - Post-Simulation debrief of what was improved and what remains a problem
- Implementing Demand Driven Production
    - Cross-Training
    - Takt Time
    - Cellular Flow & Line Balancing
    - Total Productive Maintenance (TPM)
- Final Simulation Round 4
    - Implement final concepts into the simulation to understand how all the Lean Principles discussed can impact the quality and volume of work completed on time
    - Discussion and wrap up