



Strategic Lean Manufacturing Tools for Waste Reduction Training Course

Ref: #QUA1906



Course Introduction / Overview:

In today's competitive landscape, efficiency and value are key to success. This training course is designed to provide professionals, engineers, and managers with the frameworks and practical skills to apply Lean manufacturing principles and tools to achieve waste reduction and drive continuous improvement. It goes beyond a simple focus on process mapping to explore the strategic application of Lean to create a more efficient, agile, and profitable organization. We will explore how to identify and eliminate the eight types of waste (DOWNTIME), implement a 5S system to organize the workplace, and use Value Stream Mapping to visualize the flow of value. The curriculum is informed by the foundational work of global academics like Dr. James Womack, whose book "The Machine That Changed the World" introduced Lean principles to a global audience. His work on the Toyota Production System provides a valuable lens for understanding how a culture of continuous improvement can lead to sustainable gains. This program provides a clear blueprint for turning a complex process into a streamlined operation that delivers maximum value with minimum waste. BIG BEN Training Center is committed to empowering professionals to achieve operational excellence.

Target Audience / This training course is suitable for:



- Manufacturing engineers and supervisors.
- Operations and production managers.
- Continuous improvement specialists.
- Supply chain managers.
- Process owners.
- Quality assurance professionals.
- Executive leaders.

Target Sectors and Industries:

- Manufacturing.
- Automotive.
- Aerospace and defense.
- Food and beverage.
- Logistics and supply chain.
- Healthcare.
- Government agencies and public services.

Target Organizations Departments:

- Operations and Production.
- Continuous Improvement.
- Supply Chain Management.
- Quality Assurance.
- Engineering.
- Maintenance.
- Corporate Leadership.

Course Offerings:



By the end of this course, the participants will have able to:

- Identify and eliminate the eight types of waste.
- Apply Lean principles to a variety of processes.
- Create a Value Stream Map to identify opportunities.
- Implement a 5S system to organize the workplace.
- Use Kaizen to drive small, continuous improvements.
- Develop a plan for a Lean transformation.
- Lead a cross-functional improvement project.
- Communicate the benefits of Lean-to stakeholders.

Course Methodology:

This training course uses a highly interactive and case-based methodology to ensure participants gain actionable skills in Lean manufacturing and waste reduction. The program incorporates detailed case studies of companies that have successfully implemented Lean to achieve significant business results, as well as those that have struggled with implementation. We will use interactive workshops and simulations to practice critical skills like creating a Value Stream Map, conducting a 5S audit, and running a Kaizen event. The course includes a hands-on group project where participants will work together to apply Lean principles to a fictional manufacturing process. BIG BEN Training Center believes that hands-on training is essential for mastering these new ways of working. Our expert facilitators will guide discussions and provide personalized feedback, ensuring that participants leave with the confidence and practical experience needed to lead a Lean transformation.



Course Agenda (Course Units):

Unit One: Foundations of Lean Manufacturing

- The history and principles of Lean.
- The eight types of waste (DOWNTIME).
- The Toyota Production System.
- Connecting Lean to business strategy.
- The human element of a Lean culture.

Unit Two: Tools for Waste Reduction

- Value Stream Mapping.
- 5S system for workplace organization.
- Visual management and boards.
- Introduction to Kanban.
- Creating a standard work sheet.

Unit Three: Driving Flow and Pull

- The principles of flow and pull.
- Just-In-Time (JIT) production.
- Eliminating batch and queue.
- Creating a pull system.
- Takt time and cycle time analysis.

Unit Four: Continuous Improvement and Kaizen



- Kaizen philosophy.
- Leading a Kaizen event.
- Problem-solving with Lean tools.
- Developing a Kaizen culture.
- The role of leadership in sustaining improvement.

Unit Five: Implementing and Sustaining Lean

- Steps for a Lean transformation.
- The role of leadership and team empowerment.
- Sustaining the gains from Lean.
- Integrating Lean with other methodologies.
- Developing a personal action plan.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can an organization, which is often focused on maximizing production volume, successfully shift to a Lean culture that prioritizes value and waste reduction to deliver long-term results?



What unique qualities does this course offer compared to other courses?

This training course is a highly specialized program that focuses on the practical application of Lean manufacturing principles, which sets it apart from more theoretical or academic courses. We go beyond a simple focus on tools to provide a holistic framework for a professional who can lead a Lean transformation and create a culture of efficiency. Our curriculum is tailored to address the specific needs of modern professionals, providing them with the frameworks to manage not just the processes but also the people who are essential for success. The course distinguishes itself by emphasizing not only the technical skills needed to create a Value Stream Map but also the strategic and leadership skills required to build a sustainable culture of waste reduction. By focusing on both the practical and the cultural aspects of Lean, this program provides an invaluable skill set that is essential for any professional committed to a career in operations or continuous improvement.