Lean Inventory Management and Waste Reduction Strategies Training Course



27 - 31 Dec 2026

Dubai

4800 € (Per Person)

Ref: #IM4379_242157

Course Introduction / Overview:

In today's competitive global market, efficient inventory management and the elimination of operational waste are no longer optional but are critical drivers of profitability and customer satisfaction. This course provides a comprehensive framework for transforming your supply chain and operational processes through the proven principles of Lean methodology. We will delve deep into the philosophies pioneered by figures like Taiichi Ohno, the architect of the Toyota Production System, exploring concepts from his seminal work, "Toyota Production System: Beyond Large-Scale Production". Participants will move beyond theory to gain practical skills in identifying and eradicating the eight deadly wastes (Muda) that plague many organizations, leading to reduced costs, improved quality, and faster delivery times. This program is designed to empower professionals to implement robust, sustainable systems for inventory control, such as Just-in-Time (JIT) and Kanban. At BIG BEN Training Center, we are committed to providing a learning experience that equips you with the tools and mindset to foster a culture of continuous improvement, turning your operations into a strategic competitive advantage and a model of efficiency. This journey will enable you to see your organization through a new lens, identifying opportunities for optimization at every turn.

Target Audience / This training course is suitable for:

- Supply Chain Managers.
- Operations Managers.
- Inventory Planners and Analysts.
- Warehouse Supervisors and Managers.
- Logistics and Distribution Professionals.
- Production Planners and Supervisors.
- Continuous Improvement and Process Excellence Specialists.
- Procurement and Sourcing Managers.
- Quality Assurance Professionals.
- Team Leaders and Department Heads.

Target Sectors and Industries:

- Manufacturing and Industrial Production.
- Retail and Consumer Goods.
- Logistics and Third-Party Logistics (3PL) Providers.
- Automotive and Aerospace.
- Pharmaceuticals and Healthcare.
- Food and Beverage.
- Electronics and Technology.
- Governmental and Public Sector Operations.
- Construction and Engineering.

Target Organizations Departments:

- Supply Chain Management.
- Operations and Production.
- Logistics and Distribution.
- Warehousing and Inventory Control.
- Procurement and Purchasing.
- Quality Assurance and Control.
- Finance and Cost Accounting.
- Process Improvement and Operational Excellence.
- Planning and Forecasting.

Course Offerings:

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

- Master the core principles of Lean thinking and its application to inventory management.
- Identify and systematically eliminate the eight wastes (Muda) from any process.
- Implement Just-in-Time (JIT) and pull systems to minimize inventory holding costs.
- Utilize Value Stream Mapping (VSM) to analyze and improve material and information flow.
- Apply the 5S methodology to create a clean, organized, and efficient workplace.
- Develop and manage Kanban systems for visual inventory control and replenishment.
- Conduct root cause analysis to solve recurring operational and inventory problems.
- Measure and improve key performance indicators related to inventory and waste.
- Foster a culture of continuous improvement (Kaizen) within their teams and departments.
- Develop a strategic roadmap for implementing a lean inventory system in their organization.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, engaging, and practical, ensuring that participants can immediately apply their learning in the workplace. We move beyond traditional lectures to create a dynamic learning environment that fosters deep understanding and skill development. The course heavily relies on real-world case studies from various industries, allowing participants to analyze complex challenges and successful lean transformations. A significant portion of the training is dedicated to hands-on workshops and group exercises where attendees will practice using key lean tools like Value Stream Mapping, 5S, and Kanban. Interactive simulations will be used to demonstrate the powerful impact of lean principles on inventory levels, cash flow, and customer service. Facilitated group discussions and brainstorming sessions encourage the sharing of experiences and collaborative problem-solving. Throughout the course, participants will receive constructive feedback from the instructor and peers, helping to refine their understanding and build confidence in applying these powerful waste reduction and inventory optimization strategies.

Course Agenda (Course Units):

Unit One: Foundations of Lean Thinking and Waste Identification

- Introduction to Lean Principles and the Toyota Production System.
- Understanding Value from the Customer's Perspective.
- Differentiating Between Value-Added and Non-Value-Added Activities.
- Detailed Exploration of the Eight Wastes (DOWNTIME).
- The Concept of Flow and the Ideal of One-Piece Flow.
- Introduction to Continuous Improvement (Kaizen) Philosophy.
- The Role of Leadership in a Lean Transformation.

Unit Two: Core Principles of Lean Inventory Management

- The Dangers of Excess Inventory and its Hidden Costs.
- Introduction to Just-in-Time (JIT) Production and Delivery.
- Contrasting Push Systems vs. Pull Systems.
- Implementing and Managing Kanban Systems for Replenishment.
- Calculating Safety Stock and Reorder Points in a Lean Environment.
- Techniques for Reducing Setup and Changeover Times (SMED).
- Supplier Relationship Management for Lean Inventory.

Unit Three: Value Stream Mapping (VSM) for Process Analysis

- Introduction to Value Stream Mapping as a Diagnostic Tool.
- How to Define a Product Family for VSM Analysis.
- Creating a Current State Map to Visualize Waste and Bottlenecks.
- Analyzing the Flow of Material and Information.
- Key Metrics in VSM. Takt Time, Cycle Time, and Lead Time.
- Designing a Future State Map with Lean Improvements.
- Developing an Action Plan to Achieve the Future State.

Unit Four: Practical Tools for Waste Elimination and Problem Solving

- The 5S Methodology for Workplace Organization (Sort, Set in Order, Shine, Standardize, Sustain).
- Poka-Yoke (Error-Proofing) to Prevent Defects and Mistakes.
- Root Cause Analysis Techniques. The 5 Whys and Fishbone (Ishikawa) Diagrams.
- Introduction to A3 Problem Solving for Structured Improvement.
- Conducting Effective Gemba (Go and See) Walks.
- Total Productive Maintenance (TPM) Basics for Equipment Reliability.
- Standardized Work as a Foundation for Stability and Improvement.

Unit Five: Sustaining Lean and Driving a Culture of Improvement

- Developing Key Performance Indicators (KPIs) for a Lean System.
- The Importance of Visual Management in Sustaining Gains.
- Leadership's Role in Coaching and Empowering Teams.
- Structuring and Running Effective Kaizen Events for Rapid Improvement.
- Overcoming Common Barriers to Lean Implementation.
- Integrating Lean with Technology (ERP, WMS).
- Developing a Personalized Lean Implementation Roadmap.

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 the principles of Lean, traditionally applied in manufacturing to reduce physical inventory, be adapted to eliminate 'information waste' and optimize 'knowledge inventory' in a service-based organization?

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

This course distinguishes itself by focusing on the strategic integration of waste reduction and inventory management as a unified discipline, rather than treating them as separate functions. While many programs teach the tools of Lean, we emphasize the development of a Lean mindset, enabling participants to see waste and opportunity in every process. Our curriculum is built around a practical, "how-to" approach, moving swiftly from theory to application through immersive simulations and hands-on workshops where participants use tools like Value Stream Mapping on realistic case studies. We place a strong emphasis on the cultural and leadership aspects required to sustain a Lean transformation, ensuring that the improvements are not temporary but become embedded in the organization's DNA. The content is designed to be universally applicable, providing clear methodologies for adapting these powerful manufacturing-based principles to diverse environments, including service, healthcare, and public sectors. Ultimately, this course provides not just a toolkit, but a holistic and sustainable framework for achieving operational excellence and a lasting competitive advantage.