Streamlining Operations and Cutting Costs with Lean Inventory Techniques Training Course



09 - 13 Nov 2026

Cape town

4600 € (Per Person)

Ref: #IM6408_260603

Course Introduction / Overview:

This intensive Streamlining Operations and Cutting Costs with Lean Inventory Techniques Training Course is designed to equip professionals with the practical strategies needed to overhaul their inventory management systems. We know that excess inventory is a major source of waste, tying up capital, increasing storage costs, and masking underlying process inefficiencies—what Lean practitioners call Muda. The philosophy of Lean Inventory Management centers on maximizing efficiency and minimizing waste by maintaining only the essential minimum stock to meet customer demand, a concept deeply rooted in the Toyota Production System pioneered by Taiichi Ohno. This five-day course at BIG BEN Training Center delves into the core principles of Just-in-Time (JIT) inventory, demand forecasting, and value stream mapping to help participants implement a pull system where materials are supplied only as needed, rather than a less-efficient push system. Drawing on the foundational work in Lean Thinking: Banish Waste and Create Wealth in Your Corporation by James P. Womack and Daniel T. Jones, this training will provide a clear, step-by-step blueprint for complete inventory optimization. By focusing on continuous improvement and enhancing inventory accuracy, participants will learn to significantly reduce carrying costs, improve operational efficiency, and achieve superior inventory turnover. BIG BEN Training Center is committed to ensuring its participants master these proven techniques to convert their inventory system from a cost center into a competitive advantage, directly impacting the bottom line.

Target Audience / This Training Course is Suitable for:

- Inventory and Warehouse Managers seeking to apply Lean techniques to reduce costs and optimize stock levels.
- Supply Chain and Logistics Professionals responsible for end-to-end material flow and logistics management.
- Operations and Production Supervisors aim to eliminate waste in manufacturing processes and embrace JIT inventory.
- Finance and Procurement Analysts who need to understand the financial impact of inventory optimization and cost reduction.
- Continuous Improvement and Kaizen Specialists focused on organizational process standardization and efficiency.
- Consultants and Business Leaders driving organizational change towards a Lean culture and greater agility.
- Stock Controllers and Clerks responsible for inventory tracking and accuracy at the operational level.

Target Sectors and Industries:

- Manufacturing and Production, particularly those using large volumes of raw materials or components.
- Retail and eCommerce, which face challenges with high stockouts or excessive safety stock and need effective demand management.
- Healthcare and Pharmaceuticals, where expiry and precise tracking are critical regulatory requirements.
- Automotive and Aerospace, which rely heavily on complex, highly efficient supply chain management.
- Third-Party Logistics (3PL) and Distribution Centers, focused on optimizing warehouse capacity and inventory flow.
- Technology and Electronics, which deal with rapid product obsolescence and high inventory risk.
- Government Agencies and Equivalents, including public utility and defense logistics, seeking cost reduction and process efficiency.

Target Organizations Departments:

- Supply Chain and Logistics Department, focusing on lead time reduction and supplier collaboration.
- Operations and Manufacturing Department, aiming for a smooth pull system implementation and workflow efficiency.
- Procurement and Purchasing Department, for mastering Economic Order Quantity (EOQ) and vendor management.
- Finance and Cost Control Department, for calculating carrying costs and improving cash flow.
- Warehouse and Inventory Control Department, concentrating on inventory accuracy and physical waste reduction using the 5S methodology.
- Quality and Continuous Improvement Department, for driving Kaizen initiatives in inventory processes.

Course Offerings:

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

- Categorize the eight major forms of waste, or Muda, in inventory and logistics to initiate immediate waste elimination.
- Develop and apply a comprehensive value stream map to visualize the current state of inventory flow and identify non-value-added steps.
- Implement a Just-in-Time (JIT) inventory system, including Kanban and a pull system, to reduce excess stock.
- Utilize advanced demand forecasting techniques to improve inventory optimization and minimize safety stock requirements.
- Calculate and minimize the true carrying costs of inventory to ensure improved profitability and cost reduction.
- Design and execute an effective ABC analysis and cycle counting program to dramatically enhance inventory accuracy.
- Establish a culture of continuous improvement through the application of 5S and Standard Work in warehouse operations.
- Apply the principles of process standardization to inventory receiving, putaway, and picking to boost operational efficiency.
- Collaborate effectively with suppliers to reduce lead time variability and improve the reliability of the supply chain management.

Course Methodology:

The BIG BEN Training Center delivers this Streamlining Operations and Cutting Costs with Lean Inventory Techniques Training Course using a highly interactive and practical methodology. Our approach combines instructor-led presentations with real-world case studies drawn from various industries, ensuring theoretical concepts are immediately linked to practical applications. Participants will engage in structured teamwork exercises, such as simulating a value stream mapping session to analyze a logistics management process and identify opportunities for waste reduction. A significant component of the course involves hands-on workshops where participants will utilize tools like ABC analysis and EOQ formulas to perform practical inventory optimization calculations. We incorporate interactive sessions and group discussions to foster a deeper understanding of Lean culture and the challenges of change management, encouraging participants to share experiences and insights into effective process standardization. Immediate, constructive feedback is provided during all practical exercises to reinforce learning and ensure participants can confidently apply Lean inventory management principles upon returning to their organizations. The methodology emphasizes the critical link between inventory practices and overall operational efficiency and cost reduction, moving beyond simple theory to robust, implementable skills.

Course Agenda (Course Units):

Unit One: The Foundations of Lean and Inventory Waste

- Defining Lean, the Toyota Production System, and its link to inventory management.
- Understanding the three M's: Muda (waste), Muri (overburden), and Mura (unevenness).
- Identifying and classifying the eight forms of Muda specific to inventory and logistics management.
- Introduction to Value Stream Mapping as the starting point for waste elimination.
- Analyzing the true financial impact of excess inventory and high carrying costs on a balance sheet.
- The difference between push and pull systems in supply chain management.
- Case study: Recognizing hidden inventory waste in a distribution center operation.

Unit Two: Just-in-Time (JIT) and Pull System Implementation

- Core principles and requirements for effective Just-in-Time (JIT) inventory.
- Designing and implementing a Kanban system for material replenishment.
- Calculating the optimal number of Kanban cards and container sizes for inventory flow.
- Strategies for achieving material and information flow, minimizing waiting and motion.
- Heijunka (production leveling) and its crucial role in stabilizing the pull system.
- Practical application of takt time to synchronize production with customer demand.
- Overcoming common cultural and operational barriers to JIT adoption.

Unit Three: Inventory Optimization and Accuracy Techniques

- Mastering ABC analysis for inventory classification and prioritization.
- Developing an effective cycle counting program to ensure high inventory accuracy.
- Calculating and applying Economic Order Quantity (EOQ) and Reorder Points (ROP) for optimal ordering.
- Strategies for reducing and managing safety stock without compromising service levels.
- The role of effective demand forecasting and sales and operations planning (S&OP) in reducing stock errors.
- Techniques for managing dead stock, slow-moving items, and minimizing obsolescence.
- Implementing inventory tracking technology for real-time visibility and control.

Unit Four: Process Standardization and Continuous Improvement

- Implementing the 5S methodology (Seiri, Seiton, Seiso, Seiketsu, Shitsuke) in the warehouse and storage areas.
- Creating Standard Work for key inventory processes like receiving, picking, and shipping.
- Poka-Yoke (mistake-proofing) principles to eliminate defects and errors in inventory management.
- Techniques for root cause analysis, such as the '5 Whys', to address recurring inventory issues.
- Visual management and controls (Andon, visual metrics) to immediately highlight inventory problems.
- Designing an effective Kaizen framework for sustained continuous improvement in inventory processes.
- Practical workshop on creating and documenting Standard Operating Procedures (SOPs).

Unit Five: Supply Chain Collaboration and Strategic Alignment

- Strategies for collaborative planning with suppliers to reduce incoming lead time and variability.
- The vendor-managed inventory (VMI) model and its requirements for success.
- Integrating Lean inventory management with overall supply chain management strategies.
- Key performance indicators (KPIs) for monitoring inventory turnover, cost, and customer service levels.
- Developing a roadmap for cultural change towards a Lean culture across the organization.
- Leveraging technology (WMS, ERP) for streamlined logistics management and data accuracy.
- Action planning: Creating an implementation plan for a Lean inventory transformation.

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:

To what extent does the pursuit of zero inventory, as the ultimate expression of Lean inventory management, conflict with the financial need to mitigate risk and ensure immediate customer fulfillment in a volatile global supply chain management environment?

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

This Streamlining Operations and Cutting Costs with Lean Inventory Techniques Training Course offers a distinct, practitioner-focused deep dive into the 'why' and 'how' of Lean inventory management, moving beyond basic concepts to actionable, integrated techniques. The course does not merely present the theory of JIT inventory or Kanban; it provides participants with the skills to perform complex inventory optimization calculations, such as the revised Economic Order Quantity in a Lean context, and to implement a full value stream mapping exercise. We emphasize the critical connection between the shop floor's waste elimination efforts, like 5S and Poka-Yoke, and the strategic goals of cost reduction and improved cash flow for the finance department. The content is built around real-world logistics management and supply chain challenges, ensuring that every concept, from demand forecasting to inventory accuracy protocols, is immediately relevant. The BIG BEN Training Center's commitment is to foster a complete mindset shift, equipping professionals to build a Lean culture and drive continuous improvement, ultimately transforming the organization's approach to inventory from a liability to a powerful competitive tool that boosts operational efficiency and customer satisfaction.