Introduction to Lean Manufacturing with Simulation

written by Lauri Moon | February 7, 2025

Introduction to Lean Manufacturing with Simulation

(6-hour, in-person, Altoona, PA)

This program starts in:

In today's fast-paced, competitive environment, **improving efficiency and eliminating waste** is crucial for long-term success. This 6-hour Lean Manufacturing course is designed to equip participants with a fundamental understanding of Lean principles that **drive real, measurable improvement** in company operations. Participants will dive into essential Lean tools and methods, such as Value Stream Mapping, Workflow Analysis, Pull Production, 5S Workplace Organization, Visual Management, and more. You'll explore how each technique **solves specific problems and contributes to smoother workflows, reduced waste, and improved bottom lines**. With hands-on exercises in a simulated environment, attendees will not only learn the theory behind these tools but also apply them in

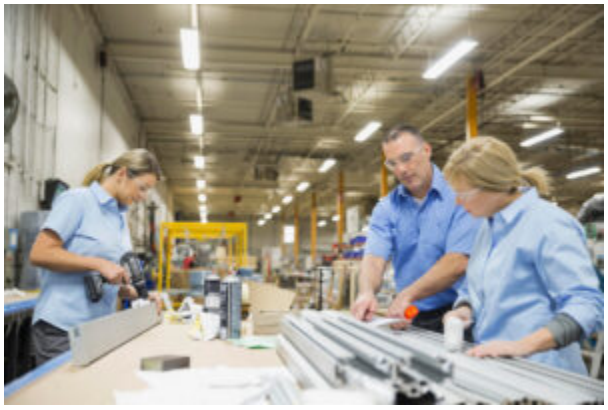
practice. By the end of the course, participants will understand how to assess improvement opportunities, choose the right techniques for your organization, and **implement strategies that ensure success**.

Register

Register now for only $389 per person!

Learning Objectives:

- Understand and apply the 5 core principles of Lean thinking to drive continuous improvement.
- Differentiate between value-added activities, non-value-added activities.
- Recognize the eight types of waste and develop strategies to reduce them for optimal efficiency.
- Use value stream mapping to identify bottlenecks and improve flow across processes.
- Gain insights into key Lean methods and learn how each technique addresses specific operational challenges.
- Apply Lean tools in a hands-on, simulated environment to experience real-world impact.



Course Outline:

- Introduction to Lean Manufacturing
    - Understand the fundamentals of Lean principles and their impact on

operational efficiency.

- Simulation – Round 1
  - Apply traditional manufacturing practices in a simulated environment to observe current processes.
- Round 1 Debrief
  - Analyze results from Round 1 and discuss key learnings and opportunities for improvement.
- Overview of Traditional Manufacturing
  - Examine traditional manufacturing practices and understand how Lean differs and improves upon them.
- Introduction to Process Improvement & Systems Thinking
  - Explore the importance of viewing processes holistically and understanding interdependencies for continuous improvement.
- Key Lean Tools: Value Streams, Standard Work, Flow, and Visual Management
  - Learn to identify value streams, implement standard work, and apply visual management techniques for better organization and flow.
- Simulation – Round 2
  - Apply new Lean concepts in the simulation to create measurable improvements.
- Round 2 Debrief
  - Review the results of Round 2 and identify areas for further refinement.
- Advanced Lean Techniques: Pull Scheduling, Batch Size Reduction, Setup Reduction, TPM, and Cellular Flow
  - Delve into more advanced Lean methods designed to optimize production scheduling, reduce waste, and improve machine efficiency.
- Simulation – Round 3
  - Implement the advanced techniques in the final simulation to test improvements and optimize flow.
- Round 3 Debrief
  - Reflect on the outcomes of Round 3 and discuss final adjustments for continuous improvement.

- Strategies for Successful Lean Implementation
    - Learn how to effectively implement Lean practices in your organization to ensure long-term success.
- Course Conclusion
    - Recap key takeaways and next steps for applying Lean manufacturing techniques in the real world.

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Who Should Attend:

Operators, Technicians, Engineers, Supervisors, and Managers

Why Attend:

Elevate your manufacturing operations by attending our “Introduction to Lean Manufacturing with Simulation” workshop. Here’s why this opportunity is essential for your business:

- **Master Lean Principles:** Gain a comprehensive understanding of Lean methodologies to drive continuous improvement and operational excellence.
- **Identify and Eliminate Waste:** Learn to pinpoint inefficiencies within your processes and implement strategies to reduce waste, leading to cost savings and enhanced productivity.
- **Enhance Workflow Efficiency:** Discover how to streamline workflows, minimize bottlenecks, and improve process flow to boost overall efficiency.
- **Hands-On Experience:** Engage in practical simulations that allow you to apply Lean tools and techniques in a controlled environment, ensuring you’re ready to implement them in your operations.
- **Boost Customer Satisfaction:** Implement Lean strategies to improve product quality and delivery times, resulting in higher customer satisfaction and loyalty.

Don’t miss this chance to transform your manufacturing processes and achieve sustainable success. Join us and take the first step toward a Leaner, more efficient future.

Want more? Click to learn more about our Lean Manufacturing Practitioner Certification program starting May 12th!

Instructor:

Max Krug, Owner and Change Management Champion at Future State Engineering, has 30 years of experience in operations, and his range of expertise and experience includes manufacturing operations, distribution, and project management environments. His expertise is assisting organizations achieve Operational Excellence by utilizing Theory of Constraints, Lean Management, and Six Sigma methods. He works with companies to develop corporate strategy and provides hands-on implementation support of the tactics required to achieve Operational Excellence utilizing these techniques. Max holds several certifications in Theory of Constraints, Lean, and Six Sigma in addition to a B.S. in Industrial Engineering from Alfred University and an MBA from St. Bonaventure University.

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This program is WEDnetPA eligible.

IMC Central PA Lean Roundtable Call

written by Lauri Moon | February 7, 2025
IMC would like to touch base with our “Continuous Improvement Community”, those who have been thru IMC’s lean training programs.

We would like to hear from you and discuss a little about:

- The Current Condition
- The Role of Continuous Improvement Advocates
- Possible Paths for Future Improvement Training and Support from IMC

Register

Once registered, you will receive login information for the conference call.

IMC Central PA Lean Roundtable Call – Williamsport Group

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Accelerate and Sustain Lean with Today's Digital Plant

written by Lauri Moon | February 7, 2025
Learn how today's digital plant and its connected workforce accelerate and sustain Lean initiatives to drive greater productivity and efficiency, lower cost of ownership, and increase profitability.

Discover how a code-free, centralized environment to aggregate, visualize, and analyze data in context across plant systems facilitates Lean and other programs as well as helps to maintain the momentum from process improvements.

This webinar will include four case studies demonstrating the digital plant in action. With digital technologies and greater insights, you can gain a modern foundation for optimizing operations, improving efficiency, and reducing costs.

Speakers

Ranbir Saini, Sr. Director – Automation, GE Digital

Ranbir Saini is the senior director of product management for Automation Software

at GE Digital, which includes the industry-leading iFIX and CIMPLICITY HMI/SCADA software used by thousands of organizations around the world. Ranbir has nearly 20 years of experience delivering industrial automation, operations management, and media content-creation software to OEM, municipal, and enterprise customers. He has a passion for designing compelling and innovative solutions in the physical and digital space that make a meaningful difference to customers, human experiences, and society. Outside of work, this passion has led him to venture into architectural design such as residential houses and doors as well as having an ongoing pursuit to create the perfect cup of chai.

Steve Pavlosky, Principal Product Manager, Historian, GE Digital

Steve Pavlosky is the Principal Product Manager for GE Digital's Proficy Historian and Data at the Edge program. With more than 30 years serving in automation and industrial data management, Steve is an Industrial Internet pioneer and firm believer in the value and power of data. His career spans the introduction of GE's CIMPLICITY HMI/SCADA software to leading the company's edge-to-cloud connectivity device portfolio. Having worked with hundreds of customers, Steve is passionate about enabling organizations to get the most performance and reliability from their assets – which starts with secure and efficient collection and storage, contextualizing asset data, and distributing data to the users and applications that derive value from the data.

Hosted by IndustryWeek Sponsored by GE Digital

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It's Time to Automate Your Quality Management System

written by Lauri Moon | February 7, 2025

Does your Quality Management System give you a complete picture of the compliance and quality landscape? Or is the view more like a broken mirror reflecting fragmented, disconnected images? Do you know immediately if and when you are non-compliant, or do you hope for the best?

Manual Quality Management Systems are rapidly becoming a thing of the past. In their place, a new generation of automated QMS solutions is stepping up to fully connect all operational areas of your business, producing a true, 360-degree view that ensures all requirements, standards and regulations are met.

We invite you to join us for a special IndustryWeek webinar on the enormous benefits that this revolution in Quality Management Systems presents to your business and the manufacturing industry.

Hear about the digital transformation that occurred in the quality department of ContiTech, a $7B, 50,000 employee division of Continental tasked with integrating information from nine SAP instances and over 250,000 quality and compliance rules across the division into a single EQMS (Enterprise Quality Management Solution) solution providing a 360 degree view of quality and compliance in real time.

You will learn :

- Why automating individual processes of a manual QMS solves some problems while creating others
- The benefits of a truly end-to-end, cloud-based quality solution
- How connectivity is achieved between processes and associated recordkeeping
- Why an EQMS solution is the best approach to maintain complete compliance and quality

This is an information-packed webinar that can help your manufacturing operation take a positive and vital step forward in the areas of compliance and quality.

Speakers

Melanie Lees, Industrial Fluid Solutions – Global Head of Quality, Contitech

As Global Head of Quality for Industrial Fluid Solutions, Melanie is responsible to assure and continuously improve best in class Quality of product and business processes across the worldwide manufacturing locations of the business unit while aligning with the policy and strategy of ContiTech AG and Continental AG. With quality experience ranging from Plant Quality Manager to Global Six Sigma Lead to Global Head of Quality, Melanie has been focused on data-driven problem solving to improve quality for many years. In her previous role as Head of Operations Quality for the ContiTech Division, Melanie was the Project Manager for the selection and implementation of ComplianceQuest and in her current role she is both a user of CQ and gaining the benefit of oversight data that is collected and managed in the system.

Chaitanya Sonarikar, Vice President of Manufacturing Practice, Gerent

Chaitanya Sonarikar brings more than 25 years of manufacturing management and IT implementation experience to Gerent. He has served in several management positions in manufacturing units at a variety of companies. As CIO of a global manufacturing facility, he led a number of digital transformation initiatives in a

global environment. Chaitanya is currently building a manufacturing practice at Gerent that includes Enterprise system road mapping, system architecture design and implementation of a Salesforce.com software platform. Chaitanya's prior work has been in the development of automation software and implementation in steel manufacturing facilities. He also implemented several major projects in steel plants as a project manager. Chaitanya's major infrastructure project at a steel plant in Canada received a nomination and recognition as "Best Brownfield Project" by the American Metal Market. He holds a MS degree in Control System Engineering from the Birla Institute of Technology & Science, Pilani, one of India's most prestigious universities.

Loring D. Andersen, Director of Manufacturing Industry Alliances, Salesforce

In his role as Director of Manufacturing Industry Alliances, Loring works with Salesforce's consulting/systems integration partners and independent software vendor (ISV) partners to develop solutions and solution accelerators that expand the capabilities of Salesforce products to more completely meet the needs of customers in Discrete and Process Manufacturing, Automotive, Oil and Gas, and Utilities industries. Prior to Salesforce, Loring led industry marketing and partner alliances for the Manufacturing Industry at Microsoft.

Paul Sanderson, Manager of Solutions Engineering, ComplianceQuest

Paul has been working in the life science quality and compliance space for over 15 years. As a Solutions Engineer, Paul has worked with hundreds of companies, exploring their unique requirements to recommend appropriate QMS solutions that solve the correct problems with available resources. During this time, Paul has witnessed the changing landscape of technology in the QMS software space as it's evolved from client server to on-premise browser based to modern cloud. Working with hundreds of different clients has brought real world, practical insight into the challenges and benefits this transition brings to highly regulated life science

organizations.

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Machine Vision

written by Lauri Moon | February 7, 2025

Improve your manufacturing operations through application of machine vision.

Do you have a significant amount of visual inspection, measurement, or tracking and tracing requirements in your operation? If so, you could benefit from machine vision technology to improve your process effectiveness and efficiency.

Join our fellow Manufacturing Extension Partnership (MEP) sister centers: Catalyst Connection, CMTC, FuzeHub, and Impact Washington for Machine Vision 101: an Introduction to Industrial Machine Vision. The webinar will be presented by Raminder Sandhu, Advanced Automation Practice Lead, for CMTC in California.

Topics to be covered:

- What is machine vision?
- Key players in the industry

- Line Scan, 2D and 3D Vision Systems
- What are good places to apply machine vision on the factory floor?
- Artificial Intelligence vs Traditional Machine Vision Software

Presenter:

Raminder Sandhu, Advanced Robotics and Automation Practice Lead, CMTC

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Take Control of Your Manufacturing Operations

written by Lauri Moon | February 7, 2025

Running a production manufacturing facility brings multiple levels of complexity that need to be managed in order to remain profitable. Whether it's responding to your customers' changing demands or just keeping machines up to support your delivery commitments, you must have an effective control mechanism that can account for change. Can your manual, paper-based system maintain control of the revolving door of operators and ensure that all the quality inspections and compliance that your customers demand are followed? And with all the moving parts to make production sing, do you have visibility into what is actually happening—in real-time—so your management can monitor and respond as required?

Can your traditional ERP system do all that? Doubtful. But a Manufacturing Cloud that was designed by manufacturers for manufacturers can.

Learn how you can begin your journey to digital transformation by simply digitizing your operations on a single source of truth. Getting your house in order by getting rid of paper is the first step toward productivity, visibility, and control!

Speaker

Stu Johnson, Director of Product Marketing, Plex Systems

Stu Johnson has more than 25 years of experience in the manufacturing industry since beginning his career as a mechanical design engineer. He moved into the enterprise software space working in various roles providing solutions for global manufacturers in the consumer, aerospace, automotive, and heavy equipment industries. Currently, Stu serves as Director of Product Marketing for Plex Systems and focuses on the future of manufacturing software working with the Manufacturing Enterprise Solutions Association (MESA), Smart Manufacturing Workgroup exploring topics like the Industrial Internet of Things and Industrie 4.0.

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Transforming Operator Productivity with Industrial IoT

written by Lauri Moon | February 7, 2025

The industrial IoT enables operators to upgrade their static, PDF-based work instructions to dynamic, 3D CAD data contextualized with work order, machine, and smart tool data. This unification of IT and OT, delivered in real-time, helps operators spend less time looking for the right information, and enables them to focus on completing the tasks at hand.

Vestas, a wind turbine design, manufacture, and installation company, is using ThingWorx Operator Advisor to develop contextualized digital work instructions. During this webinar, you'll hear from Vestas on how they are:

- Replacing paper-based work instructions with 3D CAD files, accessed directly from PLM
- Reducing training time by simplifying SOPs for operators
- Identifying and proactively correcting quality defects in real-time
- Improving shop floor visibility with real-time dashboards and reporting

Speakers

Mark Jaxion, Senior Strategy Specialist for IoT & Industry 4.0, Vestas

Mark is the Senior Specialist (Director) leading Vestas Power Solutions Industry 4.0 strategy for PLM Development. He is responsible for IIoT framework and system infrastructure within the organization and leads a global team which develops next-gen solutions for Vestas Wind Systems A/S. Previously, he worked as a system specialist within supply chain and financial information systems sectors, where he has over 12 years experience in delivering innovative solutions to users throughout the value chain.

Jordan Chaisson, Manager of ThingWorx Product Management, PTC

Jordan is a Product Manager for the ThingWorx Manufacturing Apps. Her responsibilities include ensuring a great product user experience, defining manufacturing use cases, and overseeing our newly expanded free trial program.

Before joining PTC, Jordan was a Senior Technical Product Manager at GE responsible for delivering software solutions from ideation to implementation, spanning corporate to factory initiatives. She has a Bachelor's Degree in Management Information Systems and an executive degree in business administration from the Kelley School of Business at Indiana University.

Register

The 5 Steps to Selecting & Implementing Manufacturing ERP Software

written by Lauri Moon | February 7, 2025

Has your business grown past what QuickBooks can handle? Are you tired of juggling multiple spreadsheets and rekeying data? Need a better way to manage inventory? Attend this 30-minute webinar and learn the 5 Steps of Selecting &

Implementing Manufacturing ERP software. A fully integrated Manufacturing ERP System can provide real-time coordination of activities across your entire business.

IMC has partnered with Empower Business Solutions for this educational webinar. Empower has been deploying ERP systems for small and midsize businesses since 1989. Based in Altoona, PA, Empower has built a reputation of solving customers' issues and eliminating barriers to future growth using ERP software.

Register

The Future of Manufacturing: Transformational Technology & Your Workforce

written by Lauri Moon | February 7, 2025

Manufacturers are implementing new technologies such as artificial intelligence, advanced automation, and data analytics to transform their operations now and for the future. While these technologies drive increased operational efficiencies and overall productivity, they also impact the workforce by providing the opportunity for upskilling and helping to attract new talent.

This webinar will explore how advanced technologies are transforming the manufacturing industry and the workforce.

During this webinar, you will:

- Learn from the Manufacturers Alliance for Productivity and Innovation why

manufacturers need to be building digital strategies for the future
- Gain insight from The Information Technology & Innovation Foundation on how technology is transforming the industry
- Understand how digital transformation is changing the future of work for the manufacturing workforce

Speakers

Stephen Gold, CEO and President, Manufacturers Alliance for Productivity and Innovation (MAPI)

Stephen Ezell, Vice President, Information Technology and Innovation Foundation (ITIF)

Kylene Zenk, Director of Manufacturing Practice, Kronos

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