GETTING LEAN WITH CrescentOne CONSULTING

Relentless pressure for quality, cost and time-based improvements are leading manufacturers to embrace next generation Lean solutions.

Lean principles make sense to almost everyone:

- Always Create Value for the Customer
- Religiously Identify and Eliminate Waste
- Continuously Improve Processes

The issue is "how?"

- How exactly will lean initiatives support achievement of company business strategies, goals and objectives?
- What are the primary obstacles that constrain business performance today?
- What are the specific opportunities for substantial performance improvements?

Effective improvement strategies and execution are also needed to:

- Actually realize benefits - reduce costs, compress lead times, and improve responsiveness, quality and consistency
- Sustain process and performance improvements
- Assure that improvements continue

Further adding to the complexity are customer expectations for improvements, demanding timetables, the reality of current processes and the need for effective information support. Companies need more than simple philosophies and techniques to solve today's problems so they are drawing on CrescentOne's Lean Consulting and System Solutions to help them assess, plan and implement Lean.

Getting Lean with CrescentOne

Since CrescentOne's extended ERP suite, GLOVIA G2, had its inception as Xerox Chess—a Lean production tool in the 1970s—it has enabled manufacturers to realize the tremendous benefits of Lean. This vast experience working with mid-market manufacturers has enabled countless customers to turn challenges into opportunities.

CrescentOne's unique insight provides strategic actions that manufacturers can adopt to create a competitive advantage.

CrescentOne Consulting and Systems Solutions have been key enablers of Lean success, providing the means for manufacturers to streamline operations. The solution provides the necessary information to streamline and control processes, coordinate enterprise-wide activities, monitor quality and measure improvements as effectively as possible to enable and complement the key technical elements behind Lean Manufacturing.

The table below lists the technical elements of Lean Manufacturing and illustrates how GLOVIA G2 modules support these elements:

Attribute	Supporting Modules GLOVIA G2	Functionality
Visual Control	• Shop Floor Data Collection • Factory Planning	• Real-time data collection for historical analysis and continuous improvement • Displays load graphics and timelines for jobs and provides visibility throughout the factory
Standardized Work	• Transform • Engineering • Costing	• Provides access to documentation anytime, anywhere • Manages BOMs and Routings • Reports actual vs. estimate costs to help develop cost effective work standards
Set-up Reduction and Total Productive Maintenance (TPM)	• Engineering • Engineering Change • Estimating • Factory Planning • Shop Floor Data Collection	• Improves information management for Product BOMs • Streamlines Engineering Change Notice (ECN) process and verifies change can be made • Enables Progressive Engineering and supports evolving BOM • Schedules jobs to minimize set-up times and changeovers • Provides real-time monitoring of cells for reporting and visibility
Cellular Production	• Engineering • Repetitive Manufacturing • Shop Floor Data Collection	• Flattens BOMs and links components to operations to reduce processing steps and compress cycle time • Helps establish and manage production cells; supports backflushing and pull techniques • Provides real-time monitoring of cells for reporting and visibility
Mistake Proofing	• Transform • Repetitive Manufacturing • Tool & Gauge • Engineering Change • Work Orders • Shop Floor Data Collection	• Makes “best practice” documentation easily available to workers to reduce defects • Allows workers to stop manufacturing line to fix a defective process and quickly reschedule • Controls and tracks movement of all tools and gauges used in manufacturing • Enables company to simulate and analyze effects of proposed product change • Backflushes only for affected or selected components • Provides real-time reporting of defects for analysis and signals downstream processes about disruptions
“Takt” Time (cycle time for all manufacturing)	• Engineering • Factory Planning • Shop Floor Data Collection	• Identifies problems associated with routings • Smoothes variable demand; allows for assembly and component level analysis to help establish and adjust “Takt” time • Provides real-time feedback from factory floor to ensure production can meet demand
Continuous Flow	• Repetitive Manufacturing • Shop Floor Data Collection	• Adjusts repetitive production schedules based on changing demand and flow rates without the need for work orders and paperwork • Real-time feedback
Leveled Production	• Factory Planning	• Sequencing capability schedules blocks of work together
Pull System	• Factory Planning • Shop Floor Data Collection • Kanban • Repetitive Manufacturing • Inventory	• Smoothes variable demand; schedules and synchronizes subassembly productions • Provides real-time reporting; triggers Electronic Kanban signals and demand-based supplies • Automates flow of materials using pull methods • Provides backflush capabilities for low-mix, flow- based manufacturing • Provides sophisticated Min/Max inventory control for lower-cost components

CrescentOne PROFESSIONAL SERVICES STRATEGY TO SUPPORT A LEAN ENTERPRISE

CrescentOne consultants have the skills to assist manufacturers' deployment of GLOVIA G2 to support Lean initiatives, not only in manufacturing, but across your entire enterprise. CrescentOne's Lean Enterprise offering is typically delivered in five stages

1 Lean Assessment: Identify the Opportunity

Stage 1>> Lean Assessment: Identify the Opportunity

- CrescentOne works with the customer to understand their business performance requirements, assess the customer's current state, and identify opportunities for performance improvement and Lean System tools to support the improvement process.
- CrescentOne delivers a report outlining the assessment conducted, findings, recommendations and a proposed course of action.

2 Conduct Lean Concepts Workshop

Stage 2>> Conduct Lean Concepts Workshop

- CrescentOne provides the customer a Concepts Workshop to review Lean principles and examine the capabilities and required involvement in implementing GLOVIA G2 Lean Manufacturing modules.
- CrescentOne creates a document summarizing the results of the workshop as well as a training plan for users.

3 Value Stream Mapping: Calibrate and Validate

Stage 3>>Value Stream Mapping: Calibrate and Validate

- Define the specifics of the customers current "As-Is" value fulfillment process (value stream)
- Identify and quantify specific areas that constrain performance and require improvement
- Define a future "To-Be" state enabled by GLOVIA G2 Lean Manufacturing modules
- Develop a detailed testing and implementation plan for an initial project and subsequent rollout

4 Prepare and Conduct Training

Stage 4>> Prepare and Conduct Training

- Training will be tailored to specifically support the Lean program
- Users involved in the project will receive training on Lean Manufacturing and related Lean capabilities, including setting-up the training environment and related data using GLOVIA G2 Lean functionality.

5 Implement, Operate, Measure and Improve

Stage 5>> Implement, Operate, Measure and Improve

- Test and implement the initial project including installation, setting up and deploying GLOVIA G2 Lean Manufacturing related functionality
- Once test simulations are completed and approved, the physical implementation, testing and approval will take place leading to the overall implementation of GLOVIA G2 Lean capabilities in production.
- CrescentOne will assist with a plan for ongoing monitoring and measuring, thus ensuring the Lean program objectives are met.

Companies of virtually any size pursue Lean Manufacturing strategies to lower costs, increase responsiveness, reduce lead-times, improve customer service levels and increase success in the marketplace. Manufacturers can use Lean capabilities found in GLOVIA G2 to realize the most dramatic success and, ultimately, profit. Many leading manufacturers have turned to CrescentOne to achieve their Lean Manufacturing goals and with CrescentOne Consulting and Systems Solutions assistance you can too.