CONTINUOUS IMPROVEMENT

Making an Impact on U.S. Manufacturing



LEAN AND CONTINUOUS IMPROVEMENT

Lean manufacturing is a continuous improvement model that strives to eliminate non-value-added activities. Continuous improvement is an organizational mindset that focuses on an ongoing effort to improve. There are a number of continuous improvement-type approaches that firms can adopt. Manufacturers that embrace an attitude of continuous improvement can be transformed into agile, more competitive, and more profitable businesses.

MEP centers have a strong record and solid reputation for continuous improvement-related assistance.

Through a wide range of services, MEP helps small and mid-sized manufacturers cut costs, improve existing processes, become more innovative and responsive to new opportunities, plan for the future, and attract supply chain partners. MEP's unique approach is specifically tailored to clients, enabling small and mid-sized manufacturers to easily adopt and implement changes across all aspects of their businesses. Continuous Improvement efforts at MEP include:

Lean. Lean establishes a systematic approach to eliminating waste (non-valueadded activities) and creating an efficient flow throughout the company. Through lean, companies develop and implement a long-term plan to streamline operations with a focus on growth and innovation. MEP centers provide resources, coaching, and training in a number of lean-related areas including value stream mapping, kaizen, 5S system, pull systems, quick changeover, setup reduction, total productive maintenance, lean office and lean certification.

Toyota Kata. The Toyota Kata management and leadership approach builds upon the philosophy of lean. It helps companies to further develop the people skills (thinking and behavior) necessary for continuous improvement, thus transforming a firm's culture. Kata means pattern, routine, habits or way of doing things. The kata coaches train people within organizations to deal with obstacles systematically and cultivate their ability to develop solutions. Companies that embrace this approach become highly adaptable and innovative.

Quality-Related Services. MEP is a leader in providing training and implementation support in quality-related programs, which help companies to continuously improve their processes and products.

ISO Quality Management standards are a proven way to differentiate a company in a crowded marketplace by communicating to supply chain partners a commitment to quality processes and products. Companies that adopt ISO standards or achieve certification also benefit from reduced cycle time and inventory as well as improved customer satisfaction.

MEP centers also offer other quality-related services such as Lean Leadership, Root Cause Analysis, Six Sigma, Total Quality Management and Training Within Industry.

MEP • MANUFACTURING TENSION PARTNERSHIP



Measuring Results

Impacts are based on clients receiving lean services in EY2014



\$1.4 Billion **Retained Sales**



\$874.6 Million Investments



22,739 Jobs Created and Retained

NEXT STEPS



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CONTINUOUS IMPROVEMENT



FINISHER CREATES GOLD PLATED CULTURAL CHANGE

Tanury Industries was founded in 1946 as a high volume plating company located in Lincoln, RI. Tanury has grown to 200 employees and has become the leading finisher for the jewelry industry by emphasizing specification plating, quality, waste management and environmental responsibility. Tanury serves the automotive, aircraft, writing instrument, and eyewear industries.

Situation. Tanury management realized they needed a cultural change about 5 years ago. They experimented with new methodologies with unsatisfying results. Tanury was already an ISO certified company and had very little employee turnover. However, their mature staff was reluctant to adopt new work methods and resistant to management instruction.

Solution. The company sought a vehicle for making real change and contacted Polaris MEP (a NIST MEP affiliate) to help them implement the continuous improvement methods of Lean, including Value Stream Mapping and Flow Analysis. The methodology used teamwork development to improve cooperation and employee relationships. The model was driven from the top down and has created lasting cultural change.

Polaris MEP's Lean implementation resulted in streamlined product flow and minimized travel on the shop floor. Tanury was better able to meet schedules as orders moved through each and every department in the facility. Ten problem solving teams met weekly to innovate specific areas such as gold conservation, waste reduction, and process chemistry improvements. The Polaris MEP and employee teams brainstormed a system to monitor gold baths in real time. Production schedules are now broadcast throughout the plant to monitor progress and improve communication. With

Hired 25 new employees Increased sales by 35% Increased throughput by 25-30% Returns decreased to 0.125%

tangible impacts and long lasting culture improvements, lean implementation is one area Tanury, a leading jewelry-grade finisher, never considers finished.

JOIN THE DISCUSSION



Visit www.nist.gov/mep and join the conversation on MEP's *Manufacturing Innovation Blog* at nistmep.blogs.govdelivery.com. "We signed up to bring about cultural change but the benefits we got were far different. The successes we achieved are a testament to the power of the tool (Lean) and the people who engaged in the process."

Michael Akkaoui, President / CEO

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