



Office Locations:
 Boston, Lowell,
 Springfield, Westport
 Point, Woburn,
 Worcester

MASSACHUSETTS MANUFACTURING EXTENSION PARTNERSHIP (Mass MEP)
 The Massachusetts MEP, through its experienced staff of engineering, technology and business management professionals, assists small and medium-sized manufacturing firms implement changes that lead to greater productivity, increased profits, and enhanced global competitiveness. Contact: Jack Healy, 60 Prescott Street, Worcester, MA 01605, (508) 831-7020, Fax: (508) 831-7215, Email: director@massmep.org, Website: <http://www.massmep.org/>

**THE
 MANUFACTURING
 EXTENSION
 PARTNERSHIP
 IN MASSACHUSETTS**

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like Mass MEP, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

COMPANY CLIPS

OMNOVA Begins Thinking Lean

OMNOVA/Performance Chemicals division, located in Fitchburg, produces customized emulsion polymers using several specialty chemical applications. An estimated 39 employees work at this location. OMNOVA wanted to improve its production process to make a positive impact on quality, cost, and on-time delivery while maximizing utilization of current resources, people, and equipment at this facility. The company hoped to achieve this goal by instituting simple, standardized production processes that increase the company's customer-service flexibility. OMNOVA contacted the Massachusetts Manufacturing Extension Partnership (Mass MEP) for assistance.

Mass MEP engaged OMNOVA in a lean implementation program featuring education and training projects in targeted production areas. Mass MEP began by leading OMNOVA through a Lean 101 seminar to teach the company the basics of lean philosophy and implementation. Then Mass MEP conducted a value stream mapping exercise illustrating the present state of operations and identifying areas for improvement. OMNOVA utilized this learning to increase finished goods by 55 percent, reduce work-in-process by \$38,500 per month, decrease raw material inventory by \$255,000 and inventory supplies by 48 percent, and create a foundation for continuous improvements in other production areas.

Mass MEP then conducted a kaizen blitz focused on the 5S facility organization principle. OMNOVA also redefined utilization of its raw materials storage space through an internal/external kanban program. The plan provided much-needed space for staging of packaged outgoing products while providing a systematic replenishment system with a key

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STATE STATS

DATA* COVERS JANUARY TO DECEMBER 2001

Number of projects completed with firms	248
Number of firms served	121
Number of firms served for the first time	58
Federal cost share for current operating year	\$2,364,800
State/other cost share for current operating year	\$4,729,600

**Data as reported from center*

DATA** COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales	\$29,704,776
Client capital investment	\$15,194,230
Total cost savings	\$7,083,613
Jobs (created & retained)	209

***Source: Independent client impact survey*

**For additional information,
 contact Dede McMahon 301-975-5020**



raw material supplier. This activity created better utilization of cash reserves that otherwise would be designated for bulk raw material inventory not immediately consumed. OMNOVA continues to see improved workflow, improved visibility and utilization of raw materials, and improved utilization of cash.

Springfield Wire Implements Lean Pull System

Springfield Wire is a leading supplier of heating wire and elements to the appliance industry. The company, located in Springfield, has approximately 400 employees and has been in business for 80 years. One of the baseline products manufactured in the plant is heating wire. This wire is bulk shipped to customers, used internally in other products, and shipped to the company's biggest client—its own Mexican facility—for use in products manufactured in Mexico. Weekly shipments are sent via truck to Mexico, but they are only visible for one week due to the quick turnaround times required in the industry. With a production lead-time of 17.8 days, the company frequently shipped late items via costly airfreight to the Mexican plant to avoid penalties on late delivery items. Springfield Wire needed to improve its production lead times, increase visibility, and reduce shipping expenses. The company contacted the Massachusetts Manufacturing Extension Partnership (Mass MEP) for assistance.

Mass MEP assessed Springfield Wire's current situation and decided to establish a system of lean practices aimed at improving overall line performance. First, Mass MEP conducted basic lean training for key employees in the Springfield facility. It conducted value stream mapping of the heater wire manufacturing line, which revealed that a lean pull system could improve the line's performance. Mass MEP implemented the system, including the use of extensive visual signals and a hiejunka box, throughout the heater wire manufacturing area. Key employees from the Mexican facility came to Springfield to participate in the development process of a plan for improving communication between facilities.

With a new lean system in place, Springfield Wire found its heater wire could be produced more efficiently and in less time. Production lead-time decreased to 6.5 days, a 166 percent improvement. With products coming off the line on time, the company was able to eliminate its airfreight shipments to Mexico, saving approximately \$40,000 per year in extraneous shipping costs.