



Office Location:
Providence

RHODE ISLAND MANUFACTURING EXTENSION SERVICE (RIMES) Serving firms throughout the state. Contact: John Cronin, 35 Tourgee Street, North Kingston, RI 02852, Phone: (401) 294-3535 Fax: (401) 294-2300, Email: jcronin@rimes.org, Website: <http://www.rimes.org>

**THE
MANUFACTURING
EXTENSION
PARTNERSHIP
IN RHODE ISLAND**

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 RIMES, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

COMPANY CLIPS

Eliminating Waste At Providence Chain Company

Providence Chain Company is a family owned full service manufacturer supplying wholesalers and manufacturers. Since the mid-1860's, six generations of the Ourabhka family have been manufacturing jewelry. The Providence facility, currently employing 100 people, has been home to Providence Chain Company since 1949. The company manufactures over 3,000 styles of chain in karat gold, sterling silver, and several base metals, and sells by the foot or as finished products.

Providence Chain Company had to make some fundamental adjustments to its operations over the last decade as the U.S. jewelry industry began to shift away from base to precious metals. After changing the product mix from about 10 percent precious metals to 90 percent, the company completely overhauled the way it marketed and sold products. The company knew that it needed to improve performance to become more competitive in the chain industry. Providence Chain Company contacted Rhode Island Manufacturing Extension Services (RIMES) to have someone with outside manufacturing expertise review the manufacturing process and give critical feedback.

RIMES provided a fresh set of eyes and helped Providence Chain Company streamline its manufacturing processes in order to save time and money. The company wanted to become more efficient, cut out waste, reduce work-in-progress (WIP), and drive down delivery times while maintaining a high level of quality. RIMES arranged for company leaders to tour other Rhode Island manufacturers with lean operations, and then set up classroom exercises to introduce Providence Chain staff to lean manufacturing. Working in one department at a time, RIMES set up value stream maps that detailed the processes, then analyzed every step a chain takes to go from a spool of wire to finished product ready to ship. From those maps, everyone involved began to see the operations in a new way and immediately found areas where efficiency could be improved. Two minor operations modifications took changeover time from an hour and forty-five minutes down to just thirty minutes, and the team is working to reduce the time to ten minutes.

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STATE STATS

DATA* COVERS JANUARY TO DECEMBER 2001

Number of projects completed with firms
46

Number of firms served
87

Number of firms served for the first time
154

Federal cost share for current operating year
\$450,200

State/other cost share for current operating year
\$900,400

**Data as reported from center*

DATA** COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales
\$11,910,000

Client capital investment
\$4,013,000

Total cost savings
\$1,550,500

Jobs (created & retained)
77

***Source: Data as reported from center*



Another recent productivity savings occurred away from the shop floor when the lean team took an order entry process from 25 hours down to 25 minutes. The work with RIMES also opened up lines of communication within the company. Now all training, exercises, and projects are regularly bringing together all levels of the company for the first time, allowing staff to identify problems and freeing management to work on long-term planning.

Lean Efficiency Sparkles At George H. Fuller And Son Co.

George H. Fuller and Son Co., Inc. is a Pawtucket-based manufacturer of precious and semi-precious coins, jewelry, and findings. The company, founded in 1860, has about 38 employees and reported annual revenues of approximately \$9 million. Mr. F. Paul Mooney, President of George H. Fuller and Son, attended a meeting of the Rhode Island/Attleboro (Massachusetts) Jewelry Alliance, which sponsored a presentation about lean manufacturing by the Massachusetts Manufacturing Extension Partnership (Mass MEP). Mr. Mooney identified with some of the issues described in the presentation and wanted to know more about possible solutions. He scheduled a meeting at his company's facility. Mass MEP also engaged the help of the Rhode Island Manufacturing Extension Services (RIMES).

After discussion and a factory tour, the RIMES/Mass MEP lean team led Fuller Co. through a value stream mapping exercise to uncover non-value-added activities in its manufacturing processes and discover ways to reduce that waste. RIMES and Mass MEP trained Fuller Co.'s floor staff to recognize and implement lean manufacturing concepts in order to realize more cost and labor savings. Since the lean education process began, officials at Fuller have reduced the number of product defects at the end of the manufacturing process from 50 percent to 4 percent. Thanks to suggestions from Mass MEP and RIMES consultants, the company has also drastically reduced the amount of unused space on its shop floor, making more room to put in new machinery that speeds up the manufacturing process. By improving operational efficiency, the company has reduced its lead-time to less than four days.