



Office Locations:
Beaverton, Medford,
Pendleton, Portland

OREGON MANUFACTURING EXTENSION PARTNERSHIP (OMEP) Serving manufacturing firms throughout Oregon. Affiliated with the Oregon Institute of Technology. Contact: Patrick Murphy, 18640 NW Walker Road, Suite 1052, Beaverton, OR 97006, (503) 725-2660, Fax: (503) 725-2661, Email: murphyp@oit.edu, Website: <http://www.omep.org>

**THE
MANUFACTURING
EXTENSION
PARTNERSHIP
IN OREGON**

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

COMPANY CLIPS

Lean Paints Gamblin Artists Colors In A Whole New Light

Gamblin Artists Colors Co. (GAC) of Portland was founded in 1980 and currently has 20 employees. The company manufactures artist-grade oil painting material. GAC wanted to grow its business. However, quality and delivery issues inhibited productivity. GAC's solution—building bigger batches and running its machines faster—didn't solve the problems. The company approached the Oregon Manufacturing Extension Partnership (OMEP) for assistance.

OMEP began with a process map, reviewing GAC's scheduling mechanisms in order to verify capacity bottlenecks. By systematically reducing setup time, standardizing lot sizes, and improving quality, OMEP reduced bottlenecks. These focused changes all improved production throughput. OMEP then worked closely with management to implement a simple production planning system based on kanban cards and standardized re-order points. After implementing the system, GAC saved \$200,000 in inventories, increased its product mix from 2 per day to 8 per day, improved its productivity by 25 percent, and brought its rate of on-time deliveries to 98 percent. A process of continuous quality improvement and employee training is now in place to ensure key indicators continue to get better and process knowledge is retained.

Rodgers Instruments Tunes Its Business Into Customer Demand

Rodgers Instruments LLC of Hillsboro manufactures keyboard musical instruments. The company was founded in 1958, and currently has 150 employees. Long manufacturing lead-times forced Rodgers to build product to forecast. The company found itself frequently building and stocking unneeded product configurations, while customers demanded and waited for others. Rodgers realized it needed to revise its production drivers, and asked the Oregon Manufacturing Extension Partnership (OMEP) for help.

Continued

STATE STATS

DATA* COVERS JANUARY TO DECEMBER 2001

- Number of projects completed with firms
117
- Number of projects completed with firms
125
- Number of firms served for the first time
81
- Federal cost share for current operating year
\$598,000
- State/other cost share for current operating year
\$1,196,000

**Data as reported from center*

DATA** COVERS JANUARY TO DECEMBER 2001

- Increased sales & retained Sales
\$4,560,000
- Client capital investment
\$2,724,305
- Total cost savings
\$1,746,400
- Jobs (created & retained)
71

***Source: Independent client impact survey*

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



OMEP first educated all of Rodgers' manufacturing employees on the benefits of lean manufacturing. Through weekly simulation exercises combined with firsthand anecdotes from the instructor and the director of manufacturing, the staff learned about lean principles. After attending simulations, OMEP encouraged Rodgers' employees to apply the principles they'd learned to their respective work areas, eliminating non-value-added activities and reducing lead-times. This education process provoked some dramatic improvements in work-in-process inventories (a savings of \$250,000 over six months), and set the stage for the second phase: the implementation of a build-to-order manufacturing system based entirely on a kanban (pull) method of production control. The company developed a new product for the pilot, a modular design enabling sub-assemblies to be built in small buffer stock lot sizes. OMEP trained staff to think in terms of kanban techniques, employing economies of scale as part of a continuous improvement effort.

The pilot program is still in the planning and implementation phase, but Rodgers is already seeing results from its employees. Trained now to "think lean," Rodgers employees are putting their new skills to practice to make lasting changes in business operations that impact scheduling, production planning, and purchasing.