Success Story: Federal Foam Technologies

Profile

Location: New Richmond, WI
Headquarters: Division of Federal International in St. Louis
Years in Business: 10 years
No of Employees: 125 employees
Product: A variety of products that incorporate foam are produced at the plant. These products are used to cushion, protect, reduce noise and vibration, filter and/or insulate. Demand for the products has been strong; however, competition is also increasing.
NWMOC Projects: Principles of Lean, Value Stream Mapping, and Cellular Flow Implementation

“On-time delivery of product has been significantly improved. The assistance of the NWMOC staff was very helpful. We could not have done the project without them. Their input changed our view of manufacturing.”
Dan Sikorski, Production Manager

Situation
During the last months of 2003, one of Federal Foam Technologies’ (FFT) major customers strongly encouraged its suppliers to adopt Lean Manufacturing principles. The customer wanted quality parts delivered on-time and in-the-batch size it needed that day. Since this order size could vary from day-to-day, its production system had to become more flexible and responsive to significant variations in batch size. FFT at New Richmond was not ready to meet these requirements and their customer recommended that they contact the Northwest Wisconsin Manufacturing Outreach Center (NWMOC) at UW-Stout for technical assistance.

Project
After visiting the FFT plant and discussing the need with company representatives, NWMOC Project Managers planned and conducted a Principles of Lean Manufacturing Workshop for employees from the back panel production and supporting areas. A week later the Project Managers facilitated a Value Stream Mapping Event in which these employees developed current and future state Value Stream Maps (VSM) and a Value Stream Plan for the back panel production process. Implementation of the future state map was carried out in a Cellular Flow Implementation project in which an employee team, with the assistance of the NWMOC Project Managers, designed a new manufacturing layout for producing the back panel. The future state VSM was used to determine the work sequence, balance the process, and modify the facility layout. The cell was designed in two days and three days were needed to relocate equipment. On the sixth day the cell “went live” and operated effectively. The production team continues to monitor and improve the performance of the cell. NWMOC Project Managers continue to coach the team.

Results
- Sales increased.
- Significant decrease in labor required.
- Inventory was reduced by $48,000.
- Lead time was reduced by 47%.
- Required floor space was reduced by 1000 square feet.
- Essentially reduced expediting costs to zero.
- Approach is being applied to other production areas.