

SUCCESS STORY



Extended Enterprise Management—a Next Generation Manufacturing Success Strategy

Design Specialties Wins with Innovative Partnerships



A strategy for growth focused on diversifying its customer base

Taking Lean to the Next Level

The employees of Design Specialties, Inc., a Milwaukee-based custom manufacturer of high quality glass fireplace doors, are believers in Lean. Since 2005, each major manufactured component has been the subject of a Value Stream Map (VSM) analysis to remove waste and time from every aspect of the manufacturing process, from order entry to shipping the finished product. According to company owner Pat Gengler, Design Specialties had gone as far as possible to increase efficiency internally. The next logical step was to look outside its walls at the operational performance of its suppliers.

“Our Value Stream Maps showed us we had a problem with the quality and on-time delivery rates of parts provided by our suppliers,” said Gengler. “In order to improve this metric, we needed to help our suppliers improve.”

Collaboration with suppliers

The first step to improvement is to understand the present state. To do this, Gengler invited each supplier to Design Specialties’ plant to review the Value Stream Maps and learn more about how their product fit into the overall process. The suppliers also were able to

Design Specialties Results:

- Reduction in inventory from \$660,000 in 2001 to \$140,000 in 2009 (despite a dramatic increase in sales)
- Better financial position results in access to credit in a recession

physically see how their part was used in fireplace door manufacturing in order to gain a full understanding of how everything worked together. Then, in collaboration with Design Specialties, each supplier developed plans for a future state in which all parts met specifications and were delivered on-time. This collaboration resulted in improvements to both Design Specialties’ processes and the suppliers’ processes. Some improvements occurred immediately; other changes required more time and greater modification to the manufacturing methods.

“Communication with our suppliers was greatly enhanced by this approach,” said Gengler. “We were able to leverage open communication to build strong



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supplier relationships that allowed us to continually improve speed, quality and flexibility – critical factors in a seasonal business like ours.”

Jim Fackelman, one of WMEP’s Value Stream Mapping experts, said, “The employees of Design Specialties quickly learned how to apply lean tools to other areas of the operation to replicate efficiency gains throughout the plant. They also learned the importance of forging deeper relationships with their suppliers to improve quality and performance. The results are shorter lead times, better on-time deliveries, reduced inventories and enhanced customer service.”

The project also generated financial benefits. In 2001, inventory levels were valued at \$660,000 vs. \$140,000 in 2009 despite a dramatic increase in sales. These numbers represent only a part of the benefit of extended enterprise management, a key success attribute of Next Generation Manufacturing. “Instead of going to the bank as a borrower, we worked with them as an investor,” said Gengler. “Last year, we built a facility twice the size of the building we had been leasing and bought a half-million dollars worth of equipment. We quickly got the loans we needed, at a favorable interest rate – right in the midst of the recession.”

The focus on innovation at Design Specialties goes far beyond the company’s manufacturing processes, said Fackelman. For example, the company developed a method to staff the plant with solid, reliable employees despite the seasonal fluctuations in work demand. By collaborating with another area manufacturer of seasonal products, Design Specialties is able to hire the best employees as they are released from the other business from year to year.

“Most seasonal businesses face a challenge recruiting and training employees,” Gengler said. “This collaborative effort has allowed us to get top-notch, proven performers coming back year after year. Its good for us, and it’s good for the employees, and it’s good for the community.”

Design Specialties demonstrates how original thinking and innovative partnerships can result in real impact and competitive advantage. By reaching outside of the company, Design Specialties accessed new capabilities and competencies they did not have internally to gain control of quality and turn-around. By working in partnership with suppliers, the company substantially raised the through-put of its value chain. As a result, Design Specialties is better positioned to respond to new opportunities in the marketplace and fluctuations in seasonal demand.

About WMEP

WMEP is a private, nonprofit consulting organization committed to the growth and success of Wisconsin manufacturers. During the past five years, WMEP-assisted manufacturers reported economic impact of \$977 million with 7,965 jobs created/retained. WMEP receives financial support from the Wisconsin Department of Commerce, and partners with many public and private organizations to serve Wisconsin manufacturers.

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