TAD SUCCESS TAT STORIES



DIRECTOR OF **CORPORATE OUALITY.** THERMA-TRU

"The partnership between Purdue's Manufacturing Extension Partnership and Therma-Tru has sparked a complete mindset change among all 700 associates at our Butler facility. Through this team-focused training in Six Sigma and Lean Manufacturing concepts, Therma-Tru is better positioned for growth. We are already seeing significant improvement on our bottom line and a better product for our customers."

MANUFACTURING EXTENSION PARTNERSHIP





PURDUE PARTNERSHIP LEADS DOOR MAKER TO HIGHER PROFITS, QUALITY

Midwest manufacturer Therma-Tru captured the attention of competitors 25 years ago when it introduced an entryway door that looked as beautiful as wood and outperformed the durability of steel.

Today, Therma-Tru is the nation's leading manufacturer and most preferred brand of fiberglass and steel exterior doors, with its lineup of entry and patio-door systems including decorative glass doorlites, sidelites and transoms and door components.

Officials at Therma-Tru, whose Indiana manufacturing facility in Butler employs 700 people, knew they couldn't sit still, particularly with the intense competitive pressures coming from all sides of the industry.

To cut costs, bolster production, streamline processes and establish metrics to gauge improvement, Therma-Tru partnered with Purdue University's Manufacturing Extension Partnership (MEP). Purdue had worked closely with Matt Kramer, Therma-Tru's Continuous Improvement Manager and a member of TAP's Advisory Committee for the Northeast Indiana Advanced Manufacturing (Lean) Network.

Building on that relationship, Therma-Tru took this message to all its Butler employees. More than 30 engineers and support personnel have been formally trained in Six Sigma and Lean Manufacturing concepts. And efforts are under way to expand that to more Therma-Tru employees. And why not? The results have been significant and immediate:

■ To address a defect problem that had hampered production for more than a decade, Therma-Tru adopted a new measurement system using Gage Repeatability and Reproducibility, or R+R,

methods. The defect was reduced by 95 percent in the first two years, with annual savings exceeding \$100,000.

- Therma-Tru cut by 50 percent the rate of returned doors, known as Return Goods Authorization, or RGAs. Officials say savings in labor and product costs from this effort have been substantial.
- To pinpoint the cause of a variation in cycle times for two molding presses, Therma-Tru implemented a new standardized process that is regularly audited. As a result, cycle times were reduced by 25 percent. And the process will be rolled out to Therma-Tru's other 22 presses over the next few years.
- By streamlining production and minimizing variability across its lines, variation has been reduced and productivity continues to climb. The plant has increased capacity by nearly 30 percent over the last two years.

"Since pioneering the fiberglass door market in 1983, Therma-Tru has redefined the industry with high style, high-performance products. That tradition of innovation and superior engineering in design continues today. Through our collaboration with Purdue, further improvements are possible with the advanced tools we have gained from MEP's Six Sigma and Lean Manufacturing training. Elimination of waste is our ultimate goal. The closer we get to this goal, the more it benefits the company, our employees and the customer."

Dan Gurney, Engineering Services Manager, Therma-Tru







ABOUT MEP

Purdue's Manufacturing Extension Partnership (MEP) programs assist Indiana companies through advanced manufacturing efforts and continuous improvement methods as core workforce training and production strategies. MEP served more than 350 Indiana companies with workforce training and production needs from July 2009 through June 2010. Purdue's Technical Assistance Program (TAP) is a NIST MEP network affiliate.