

THERMA-TRU

BUTLER, INDIANA



John Clarke Director of Corporate Quality Therma-Tru

L 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 teamfocused 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.



Purdue partnership leads door maker to higher profits and 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 MEP'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 were formally trained in Six Sigma and Lean Manufacturing concepts with efforts 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% in the first two years, with annual savings exceeding \$100,000.

- Therma-Tru cut by 50% 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%. The process was to be rolled out to Therma-Tru's other 22 presses in the following 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% 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," says Dan Gurney, Engineering Services Manager at Therma-Tru. "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."











Purdue Manufacturing Extension Partnership (MEP) provides high-value solutions to help Indiana businesses maximize their success. As advocates for Indiana's thousands of manufacturers, our staff identifies areas of improvement, streamlines processes, and ultimately increases competitiveness. Purdue MEP serves hundreds of companies annually by implementing continuous improvement principles in the areas of productivity, growth, and technology.