Snap-on Murphy, N.C. Plant Receives Shingo Award

Plant honored for world-class manufacturing excellence; looks ahead to continuous improvement

When Snap-on Incorporated moved its power tool operations from Sioux City, Iowa to North Carolina in 2002, it was an ideal opportunity to incorporate lean into the plant operations from day one.

Lean manufacturing focuses on expanding capacity and reducing costs in a manner that removes non-value-added processes, improves quality and increases efficiency. It is an alternative to the "batch-and-queue" methodology of mass production and requires transformation at every level within the organization.

As a result of the initial leg of its lean journey, Snap-on's Murphy plant has increased productivity by 10 percent per year since 2002. Late orders have been reduced by a staggering 99 percent and the rate of recordable incidents has dropped well below the industry average – indicating a safer work environment. In addition, overall customer satisfaction has improved in several key areas, and perhaps most importantly, the facility transformed itself from a money-losing operation to a significant profit-generator in just two years.

To accomplish all of this, Snap-on didn't make dramatic changes to its workforce or add a new line-up of bigger, faster machines. Instead, the plant realigned, toned up and got lean.

The first lean training and Kaizen events were held in 2003, just following the move to Murphy, and a vision and strategy were developed for the plant. Soon after, the Murphy facility's lean implementation – using Snap-on's Rapid Continuous Improvement (RCI) program – began to gain momentum and produce measurable results.

The company's RCI program helped the Murphy plant to garner its first award for commitment to employee training and development in 2006 when it was honored with the North Carolina Governor's Award for Excellence in Workforce Development.

Last year, the facility was recognized for its lean efforts when it received the Silver Level North Carolina Shingo Prize – an award honoring North Carolina companies that achieve excellence in world-class lean manufacturing processes. This program is administered by the NC State University Industrial Extension Service (IES) and is sanctioned by the North American Shingo Prize, which has been hailed as the "Nobel Prize" of manufacturing.

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To be considered for the NC Shingo Prize, the Murphy facility submitted a 70-page achievement report detailing what lean principles were enacted and what has been accomplished, including key metrics. The site was then visited by examiners who conducted extensive interviews and verified and rated processes.

"We are very honored and excited to have received the highly regarded Silver Shingo Prize," said Rob Hartman, plant manger of the Snap-on Murphy plant. "We knew that implementing lean, world-class manufacturing processes would take commitment and hard work, but we also knew that it would pay off, and it has."

The Murphy plant, part of the Snap-on Power Tools division of Snap-on Incorporated, manufactures a mix of Snap-on, Sioux and private label products including air tools and cordless impact wrenches. The 168,000 square-foot facility employs 180 associates and produces 300,000 tools per year.

"Snap-on quickly and successfully integrated lean manufacturing into their Murphy power tool plant, allowing for improvements to be made within the organization," said Wayne Tindle, program director, NC Shingo Prize Program. "Our assessment team was impressed with the depth of world-class processes deployed in such little time."

It was these world-class manufacturing operations and processes that really caught the eye of the Shingo examiners, who ranked this as one of the plant's highest scoring areas. Radical reorganization of work areas optimized flow and visual management on the shop floor helped to increase efficiency.

Winning the Silver Shingo Prize required not just a change in machinery and floor layout, but a change in culture. Engaging the associates and getting them on board with RCI was an integral, albeit challenging, part of transforming the Murphy facility. In the end, it was the sense of community in and surrounding the plant that helped engaged the associates.

"Murphy is a small community," Hartman said. "The people here strongly believe in American manufacturing and know the importance of keeping jobs in the area. Our footprint in Murphy is solid and we look forward to continuously working with our associates and the community to maintain a strong relationship."

While pleased with the successes, particularly in the areas of workplace safety, profitability and productivity, Hartman also recognizes the plant's opportunities for improvement.

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"We really want every part of this facility to be lean," he said. "We started this journey by looking at the big picture and changing things on a macro level. Now we are beginning to see opportunities for continuous improvement at the micro level."

Snap-on's Murphy plant is on its way to truly becoming world-class. By implementing lean principles, the facility has created increased capacity potential with 40 percent of the facility open for future growth. The plant's mission is to eventually produce more products and be more profitable so as to ensure a future for the business and those in the community.

In celebration of the Murphy plant's recent NC Shingo distinction, tours are now being offered at the award-winning facility on the second Tuesday of every month through November. The tour is available on a pre-registration, pre-approval basis. Interested individuals should contact Ms. Jean James at (828) 456-2462 or jean_james@ncsu.edu for more information or to register for a tour.

For more information about the Snap-on Murphy plant and its RCI program, please contact Rob Hartman, plant manager, at 828-835-4468 or Robert.L.Hartman@snapon.com. Visit the IES website to learn more about the NC Shingo Prize at www.ies.ncsu.edu/shingo.