

Success Story

Lean Training, 5S Training, Value Stream Mapping, Shingo Prize User Group

Micron Manufacturing Company

Micron Manufacturing Receives a Goliath of an Award

Throughout the past 10 years, Micron Manufacturing has collaborated with the MMTC-West team to develop processes for continuous improvement, waste reduction and Lean initiatives in their organization. Today, the company and its operations team are known throughout the region as a model of Lean manufacturing and efficiency. The most recent recognition of the company's dedication to operational excellence was the awarding of the 2008 Shingo Silver Medallion for Operational Excellence. Often granted to large-scale companies such as Lockheed Martin and Raytheon, this award is a significant win for the 30-person company and for West Michigan manufacturing.



Micron Manufacturing Co., one of West Michigan's local precision machining manufacturers, produces precision machined components for the automotive, aerospace, hydraulic, gas and oil exploration, short-track racing and mass transit industries. Micron's machines convert 12-foot metal bars into parts used in the inner workings of everything from automotive speedometers, to flair systems on F-18 fighters to wheelchair lifts.

In 2000, the company began to evolve and embrace Lean concepts, embarking on an eight-year mission of overall business improvement. Since then, many Lean principles have been incorporated into the daily culture including 5S, set-up reduction, cross functional teams, daily 5 minute huddles, value stream mapping, and many more. For Micron, the quest has taken eight years, but company leaders say the payoff is worth it—for the company and its customers.

Some of the results achieved are as follows:

	2000	2008
Inventory Turns	9	17.2
Request for Quote - Win Rate	6%	24%
New Product Launch Preparation	5.8 days	1 day
Product on Pull System	0%	50%
Lead (order to ship) Time	49 days	12 days

"We quickly began to see dramatic savings through waste reduction, reduction in on-hand inventory, improved product quality, and overall flow improvements," stated Dan Vermeesch, Plant Manager for Micron

Manufacturing. "Each improvement drove our teams to take on greater Lean challenges, and as a result the majority of our sales are through pull systems of short-run, highly technical products."

Micron Manufacturing was first introduced to Shingo philosophies during Lean Champion Certification at Grand Rapids Community College. "About a year after completing the certification process, we began to ask ourselves, 'What would it take for us to go after Shingo?'" said Vermeesh. "We then discovered that MMTC-West offered a Shingo Prize User Group to assist with the preparation and application processes."

MMTC-West's Michigan Shingo Prize User Group offers participants a forum to discuss, share and understand methodologies that enhance a company's competitiveness, based on Shingo Lean philosophies. The user group taught the company what world-class lean efforts really were. Micron was already employing lean processes on the shop floor, but hadn't expanded the concepts to the entire company. Developing a quarterly strategic plan, empowering employees to do and improve their jobs, and enabling employees to effect changes in the company are basic steps to lasting corporate-wide efficiencies. "Our entire company is part of it," Vermeesch says, "and without that you do not win the Shingo award."

Micron's Silver Shingo Medallion was officially presented during the 21st Annual Shingo Prize Conference, May 5-8, 2009 in Nashville, Tennessee.

Micron has redefined its place in the market from that of a medium to high volume producer of relatively low-tech product to that of a very small to medium run company with very little high volume sales remaining. During that time Micron has also focused on more technically challenging products that require Micron's engineering support, high tech equipment and very short runs.

It is Micron's contention that this business is most resistant to market fluctuations, takeover risks from low cost producers and global pricing pressure. With that, it is Micron's strategy to partner with customers that exhibit the following characteristics:

- They are an OEM
- They are non-automotive
- They are in a growing market
- They are market leaders
- They support Micron's lean journey

Following these tenets, Micron's sales have grown to \$4,789,000 in 2007. These sales were accomplished, however, with only 31 employees for a throughput (sales/person) of \$154,000 when our industry average is less than \$120,000.

Micron Manufacturing Company

Established: 1952

Headquarters: Grand Rapids, Michigan

Employs: 30

Annual Sales: \$4.5 million ~ \$5 million

Products: Screw machine job shop; complete machining services; secondary operations and assembly

Markets: automotive, aerospace, hydraulic, gas and oil exploration, short-track racing and mass transit industries

"About a year after completing the certification process, we began to ask ourselves, 'What would it take for us to go after Shingo? We then discovered that MMTC-West offered a Shingo Prize User Group to assist with the preparation and application processes.'"

Dan Vermeesh, Plant Manager, Micron Manufacturing

