



2013 Annual Report

Kat Goetz
Controller, TLX Technologies, Pewaukee

THE WISCONSIN MANUFACTURING EXTENSION PARTNERSHIP

Board of Directors, WMEP

The WMEP Board of Directors is a cross-section of the state's organizations that represent or assist Wisconsin manufacturers. Their guidance ensures that the initiatives undertaken by the WMEP are focused, targeted and fill an unmet need that will help Wisconsin manufacturing be the best in the world.

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Mary Isbister

Chair of the WMEP Board of Directors

As a long-time client and supporter of the WMEP, I encourage manufacturers in Wisconsin to access this incredible resource. The WMEP's experienced manufacturing specialists help manufacturers produce bottom-line business results that make them more competitive in an ever-changing and increasingly challenging business environment.

As president of GenMet Corp., a Mequon contract custom metal fabricator, I know firsthand the challenges faced by manufacturers. The benefits of a strategic partnership with the WMEP over the last decade cannot be overstated. As a firm believer in its mission to raise Wisconsin's manufacturing economy to a world-class level, it is an honor to serve as chairwoman of the WMEP's board of directors.

A handwritten signature in black ink that reads "Mary E. Isbister".

Mary E. Isbister
President, GenMet Corp.

Dear Manufacturing Champions,

I'm pleased to present our FY2013 Annual Report and the outstanding year it documents. We posted record impact and served as one of the strengthening resources for Wisconsin's small and medium manufacturers. Throughout the state we are engaging leaders to align and amplify the efforts focused on building up our manufacturing base and making Wisconsin the best manufacturing environment in the world.



Buckley Brinkman **WMEP Executive Director**

Brinkman addresses the sold-out audience of business leaders at the Manufacturing Matters! conference held at the Hyatt Regency in Milwaukee on February 28, 2013.

The conference was held in conjunction with the Manufacturer of the Year Awards, and together the events drew more than 1,000 Wisconsin manufacturing leaders for two days of learning, networking and celebrating the state's manufacturing accomplishments.

In 2014, the conference will be held on February 27, 2014 at the Hyatt Regency, and the Governor, leading manufacturing leaders and subject matter experts will share their unique insights to help Wisconsin manufacturing be the best in the world.

The WMEP posted a record \$597 million of impact for our clients. We also helped our clients create or retain 735 high-paying manufacturing jobs. These results were tallied from independent surveys performed after each of our engagements. It's one of the ways the WMEP is different: We measure our success based on the results our clients see from engaging us. That keeps us focused on improving clients' bottom lines and results in a 28:1 return on the state investment made in us.

Our public-private partnership model makes it possible for small and medium manufacturers to receive the same expert assistance that larger companies are able to afford. We use our public funding to create programs and approaches that generate outsized returns for our clients. For example, our Profitable Sustainability Initiative™ (PSI) used investments from the WEDC to create more than \$130 million in impact by showing manufacturers how to make green by being green. Likewise, our average ExporTech™ graduate sees a \$900,000 increase in sales in the year following participation in the program. The WMEP's ability to help manufacturers and generate great returns makes us a terrific resource to solve our manufacturers' problems.

No one organization can address all the issues faced by modern manufacturers. There are many terrific resources in the state and we are proud to engage with other organizations to align and amplify all of our efforts to improve Wisconsin manufacturing. We appreciate the diversity of resources available to help manufacturers and many of those resources are represented on our Board of Directors. Diverse resources bring the best answers to difficult problems and we embrace the portfolio of solutions other organizations bring to these problems. We know it is critical for us to help align and amplify the efforts of the many manufacturing experts in the state in order to create a rich environment for success.

Our mission is to make the Wisconsin manufacturing environment the best in the world. We are the No.1 manufacturing state in the country and accelerating change and global competition make it necessary for us to increase our abilities and to engage more and more manufacturers in improvement efforts. We remain committed to Wisconsin manufacturing and will continue to advance our capabilities and those of our great manufacturing base.

We look forward to another terrific year in FY2014. Enjoy the stories in these pages that show how the WMEP continues to be the best resource for small and medium manufacturers.

Thank you for your ongoing support!



Buckley Brinkman
Executive Director
Wisconsin Manufacturing Extension Partnership

Wisconsin Manufacturing Extension Partnership

Proven Results

The WMEP services sparked a \$597 million economic impact that helped create and save 735 manufacturing jobs in fiscal year 2013, according to results documented by 106 of the 633 clients served by the WMEP.

Andy Brown, press operator, Tailored Label Products, Menomonee Falls

The WMEP helps manufacturers gain a competitive advantage and drive growth through Next Generation Manufacturing services – a suite of services developed to promote the world-class performance essential to competing in today’s volatile and challenging economy.

Our exceptional internal expertise helps our clients become more efficient, focused, innovative and nimble. We also engage a range of partners who have the specific expertise to assist clients with unique or specialized needs. These partnerships allow clients to access an array of services to drive positive change and increased competitiveness.

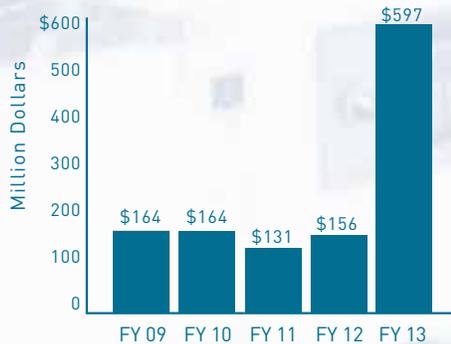
The WMEP drives results for its clients and is delivering a 28:1 ROI for every dollar of state funds invested in the WMEP. Investment in the WMEP:

- ▶ Improves the competitiveness of Wisconsin manufacturers
- ▶ Fuels economic growth
- ▶ Protects and grows high-wage manufacturing jobs
- ▶ Creates innovative approaches to improve Wisconsin manufacturing
- ▶ Generates additional tax revenues

We take pride in our results and our ability to advance our mission—to elevate the Wisconsin manufacturing economy to be the best in the world.



Five Year Economic Impact



Five Year Jobs Created/Retained



FY2013 Economic Impact



Wisconsin manufacturers rely on the assistance provided by the WMEP. This year, four manufacturers credited the WMEP with providing an average of more than \$63 million in impact to each of their companies by helping them prepare for ISO certifications and assisting them to drive operational efficiency. These changes can literally be a matter of survival for many Wisconsin manufacturers.

Wisconsin Leadership

Greg Monson, operations manager for Flambeau's injection molding operations, Baraboo



The PSI process is a defined progression to profitable, sustainable improvement:

Diagnostic (30 days): discovers and prioritizes the manufacturer's primary opportunities for profitable, sustainable improvement.

Assessment (60 days): drills down into the opportunities revealed by the diagnostic to identify current conditions and determine the feasibility of specific improvement opportunities. The output of the assessment process is a rigorous cost/benefit analysis used to prioritize improvements based on sustainable impact, payback period and ROI.

Implementation (6-24 months): Based on the assessment, the manufacturer selects specific project(s) such as: re-designing manufacturing processes to optimize energy use; reducing raw material use and minimizing scrap; replacing old machinery; updating lighting and optimizing freight routes and shipping schedules—just to name a few.

The Profitable Sustainability Initiative™ is a practical, three-step approach to savings and sustainability that offers manufacturers clear ROI and reduced environmental impact. In less than three years, 176 companies have achieved more than \$130 million in impact.

When Greg Monson took over as operations manager of Flambeau Inc.'s Baraboo injection molding operations, he embarked on a detailed examination of the operational costs of the business.

"What I saw is that we had a lot of electrical power consumption and it was impacting the bottom line," Monson said.

In an effort to cut costs while providing a benefit to the environment at the same time, Flambeau got involved with the Profitable Sustainability Initiative (PSI), a statewide program launched in 2010 by the Wisconsin Economic Development Corporation.

With the Wisconsin Manufacturing Extension Partnership (WMEP) serving as the lead, the program is able to introduce key resources to organizations in the areas of energy efficiency, logistics and transportation, and project financing.

PSI offers a business case for reducing a company's impact on the environment. It involves a three-step process that includes a diagnostic look at a company's operations, a subsequent assessment, and then the implementation of any recommended steps. Through the PSI, the WMEP has been able to achieve a **positive impact of more than \$130 million** for its clients.

Founded in 1947 by W.R. Sauey, Baraboo-based Flambeau manufactures plastic products for use in consumer items, as well as in industrial, medical and automotive applications. Flambeau's involvement in PSI led the company to replace the existing chilled water system in its Baraboo Injection Molding Plant. In addition, energy efficient lighting was installed, an air compressor was replaced, and the company purchased equipment to handle on-site compacting of cardboard in the nearby Blow Molding Plant.

The new chiller system has resulted in a 60 percent reduction in energy costs for chilled water, Monson said.

Butch Greenwood, operations manager for Flambeau's blow-molding division, noted that Flambeau had been paying a firm to transport corrugated cardboard from its plant in Baraboo. The installation of the on-site compactor has resulted in a cost savings of \$1,700 per month, he said.

Monson credited the WMEP with leading Flambeau through an environmental sustainability program that is having a positive effect on the company's profitability.

"WMEP gives a good blueprint to follow for any manufacturer to eliminate waste and improve operations," Monson said.

Encouraging the Next Generation of Manufacturers

October is Manufacturing Month in Wisconsin, and in 2013, more than 3,000 students, parents, teachers and the public toured manufacturing facilities throughout the state. This effort leveraged the resources of the WMEP, state agencies and WMC.

October was proclaimed "Manufacturing Month" by Governor Scott Walker, kicking off an unprecedented number of events throughout the state designed to draw students into manufacturing facilities so they could see first-hand the incredible careers available in manufacturing.

Manufacturers in Wisconsin cite the "skills gap" as a major obstacle to growth, and this effort is a key step in the effort to build the highly skilled workforce manufacturers need, both today and in the future.

Nationally, the recently-completed 2013 Next Generation Manufacturing Study suggests that few manufacturers are taking the initiative to address talent shortages: 69 percent of manufacturing executives state that they have the leadership and talent to drive world-class innovation, but only 37 percent state that they have talent development programs in place to support world-class innovation in the future.

This unique Wisconsin effort to promote "Manufacturing Month" helps to address that issue, and the WMEP's efforts to promote manufacturing were key to the success of the initiative.

The WMEP's support included producing a 28-page newspaper entitled "Manufacturing Today." This publication was sent to every public school in the state, a circulation of more than 70,000 teachers, counselors, administrators and school staff. This publication was very well-received and resulted in a dramatic increase in the number of schools participating in manufacturing events.

In addition, a roster of events attended by the Governor, Lieutenant Governor, state agency heads, legislators and others were held throughout the month, drawing additional publicity to manufacturing as a hot career choice for young people in middle school, high school or technical college.

Several of the WMEP's clients held high-profile events, including a Grand Opening celebration on October 1st at TLX Technologies' new facility in Pewaukee. The event drew a large number of dignitaries, including Lt. Gov. Rebecca Kleefisch, DWD Secretary Reggie Newson, WMEP CEO Buckley Brinkman, State Senator Paul Farrow and many other local dignitaries. In addition, more than 150 students from local schools toured the facility.

As the Governor noted in a press release proclaiming October as Manufacturing month, Wisconsin's manufacturing sector employs nearly 450,000 workers and contributes \$50 billion to the state's economic output. Manufacturing workers in Wisconsin earn an average pay of approximately \$52,400 per year, or more than \$10,000 per year higher than the average pay for all Wisconsin private-sector workers.

Madeline Copeland, 12th grade home school student and mentor for the FIRST Lego Team in Waukesha, toured the new TLX Technologies facility on October 1, 2013.



The TLX Technologies ribbon-cutting on October 1st, 2013:

- Buckley Brinkman, Executive Director, WMEP
- Susa Siy, Director of Business Development, TLX Tech.
- Lora Klenke, VP of Int'l Business Development, WEDC
- Katrina Goetz, Controller, TLX Technologies
- Neil Karolek, President, TLX Technologies
- Lt. Governor Rebecca Kleefisch, State of Wisconsin
- Senator Paul Farrow, 33rd Senate District
- DWD Secretary Reggie Newson

J&R Machine: The Next Generation

Parker Tumanic, vice president of engineering and second generation employee of J&R Machine, Shawano



J&R Machine turned to the WMEP in an effort to “China-proof” its business.

J&R looked to the WMEP for assistance in making productivity improvements on the shop floor. The implementation of lean manufacturing principles enabled J&R to consolidate equipment, clearing room for newer technology. These changes allowed for a reduction in direct labor costs from 18 percent to 10 percent, according to Parker Tumanic, vice president of engineering

Over time, J&R has shifted to producing more complex parts and away from commodity-type items. It also offers more value-added services and assembly operations in order to be less vulnerable to competitors in China and other countries that tend to offer low-cost manufacturing services.

Tim Tumanic’s message to his staff has been that J&R has been transformed into a service company that “just happens to be a machine shop.”

J&R Machine of Shawano is a Next Generation Manufacturer. Roaring back from the brink of disaster, CEO Tim Tumanic engaged the WMEP to address strategic and process issues, and today, the \$11 million company is rapidly growing and hiring.

“We’ve been involved with the local high school for about 10 years now,” said Tim Tumanic, president of J&R Machine in Shawano, a rapidly-growing 30-person company that makes complex metal parts. “One of our challenges is to find employees with technical aptitude and the right work ethic,” he said. “Unfortunately, it seems with all of the tight budgets for schools, the industrial arts programs are the first to be hit with cuts and are completely strapped for funds and resources.”

This chronic lack of support is what spurred Tumanic to donate two Haas Computer Numerical Control (CNC) machine tools to the Shawano Community High School. (Haas provided a \$15,000 discount on the machines). The school serves more than 900 students planning to attend four year or technical college, the military, as well as those who will immediately enter the work force after graduation. To complement Tumanic’s donation of the \$70,000 state-of-the-art machines, the Shawano County Job Center donated another \$10,000 to provide the programming software and a high-end Computer Aided Design (CAD) application. These donations are the basis of a whole new machine shop curriculum for the school.

As an employer and a community member who has worked with the schools for more than a decade, Tumanic sees a mismatch between the general view of what a manufacturing career offers, and what a manufacturing career actually entails. “The perception of students is that manufacturing is dirty and nasty,” said Tumanic. The reality is that manufacturing is technologically demanding, infinitely variable, continuously improving and well-compensated.

For example, Tumanic cited the career path of one J&R’s employees. Hired in 2005 after high school graduation, he began as a CNC machine operator, working full-time while attending Northwest Technical College to train for a career in the building trades. After two years, this employee decided that manufacturing was a better career choice. Soon, he was promoted to 2nd Shift Supervisor, and today, he is a Production Manager, earning substantially more than Wisconsin’s median household income of \$52,000 per year at age 27. “The company is growing so rapidly that I expect him to continue to advance – he’s now learning the ‘business side’ of our operation, so the sky’s the limit,” said Tumanic.

Great wages are just the start at J&R Machine - the company provides an extensive list of benefits, including an in-house workout room. The average age of employees at J&R Machine is just 28, and the company is growing rapidly. “We expect to hire another 15 people in the next 5 years,” said Tumanic, “We look to the local high school for students with the right attitude and skills.” Tumanic prefers to hire high-school graduates in order to train them in the methods that have made J&R Machine a very successful company.

The Wagner Companies

Whether by expanding its export operations or embracing environmental sustainability initiatives, The Wagner Companies is focused on growing its business in a profitable manner.

The effort has been bolstered by a deepening relationship with the Wisconsin Manufacturing Extension Partnership, which has assisted The Wagner Companies through programs such as ExporTech™ and the Profitable Sustainability Initiative™.

The Milwaukee manufacturer of handrail systems and components for handrails faced “downward pressure in the domestic market,” prompting a closer look at exporting opportunities, said Roxanne Bauman, director of global engagement for the WMEP.

In order to develop a more defined exporting strategy, The Wagner Companies became part of the first class of ExporTech, a program offered by the WMEP since 2009.

Prior to its participation in ExporTech, Wagner exported products mostly to Canada and England. Now, the company is exporting to countries like Qatar and the United Arab Emirates.

“We never thought they’d be viable for us,” said Richard Kettler, president of The Wagner Companies. “The big deal is to go and engage the global marketplace.”

Results

In aggregate, graduates of ExporTech have achieved sales increases averaging \$900,000 within six to nine months after completing the program and developing a customized, action-oriented expansion strategy.

The success The Wagner Companies has found through ExporTech is notable, but the manufacturer’s relationship with the WMEP has extended into other areas. Over the course of several years, the WMEP has worked with Wagner on Value Stream Mapping, ISO 9001, Lean Office, Green Belt Training and the Profitable Sustainability Initiative.

Embracing environmental sustainability initiatives has fostered a culture change at The Wagner Companies while boosting its bottom line.

“We looked at all aspects of our business and how they pertained to sustainability,” said Mike Skelton, manager of manufacturing services at The Wagner Companies.

The WMEP’s Profitable Sustainability Initiative (PSI), launched in 2010, offers a business case for reducing a company’s impact on the environment by taking a diagnostic look at a company’s operations, a subsequent assessment, and then the implementation of any recommended steps.

“With WMEP as the lead, we are able to introduce key resources to organizations in the area of energy efficiency, environmental gains, logistics and transportation, and project financing,” said Randy Bertram, director of sustainability services for the WMEP.

The Wagner Companies examined electric and water usage, along with packaging, transportation and manufacturing processes.

Mike Skelton, manager of manufacturing services, The Wagner Companies, Milwaukee



Sustainable savings

Switching to a fiber laser from a water-jet process increased the company’s material utilization by 15 percent and no longer required it to dispose of garnet, a byproduct of the water jet operation. Before the switch, it shipped 132,000 pounds of garnet to landfills each year. The fiber laser also has led to a decrease in lead times and inventories, according to Skelton.

Wagner also has been involved in the city of Milwaukee’s ME3 program, an environmental initiative aimed at small and midsize manufacturers and for which the WMEP serves as a main partner.

“WMEP brings to the table their experience from the PSI initiative and its diagnostic and assessment tool,” said Matt Howard, environmental sustainability director for the city of Milwaukee.

Through its overall sustainability initiatives, Wagner also has reduced energy consumption by 20 percent and water consumption by about 92,000 gallons per year.