



Overview

Country or Region: United States

Industry: High-tech and electronics manufacturing

Customer Profile

WIKAI USA is the leading manufacturer of temperature and pressure instrumentation in the United States, with 600 employees and annual revenues of more than U.S.\$110 million.

Business Situation

WIKAI USA needed business management software that would support its maturing Lean Manufacturing efforts, improve responsiveness to customers, and reduce costs.

Solution

With Lean Enterprise for Microsoft Dynamics™ AX from eBECS® working in partnership with Avanade, WIKAI USA integrated its Lean Methodology into its IT systems and drives continuous operational improvement.

Benefits

- Increased customer responsiveness
- Faster inventory turnover
- Support for continuous improvement
- Solid foundation for growth

Instrumentation manufacturer enhances Lean efforts with new business solution

“Lean Enterprise for Microsoft Dynamics AX helps us drive continuous improvement to reduce costs and increase customer satisfaction.”

Michael Gerster, President, WIKAI USA

WIKAI USA is a leading manufacturer of pressure and temperature instrumentation. In 2001, the company decided to adopt Lean Manufacturing principles to increase customer satisfaction and reduce costs. The company’s ERP system at the time required significant modification to support the Lean efforts and, as a result of those modifications, was becoming difficult to maintain.

In 2006, WIKAI USA implemented Microsoft Dynamics™ AX business management software with a complete Lean Enterprise solution from Microsoft® Gold Certified Partner eBECS® working in partnership with Avanade. The new solution enhances WIKAI’s Lean program by making it easier for operations managers to

eliminate inefficiency, customers to plan their orders, and IT staff to modify and maintain the system.

Since the implementation, WIKAI reduced order lead times from several weeks to as little as five days and increased inventory turnover by a factor of 12.



Situation



Founded in 1946, WIKA is the world's foremost manufacturer of pressure and temperature instrumentation with operations in 27 countries and annual revenue of over U.S.\$500 million. The company's U.S. subsidiary, WIKA USA, maintains a 210,000-square-foot manufacturing facility in Lawrenceville, Georgia, where it makes mechanical and electronic instrumentation for the oil and gas, water utility, ethanol production, and pharmaceutical industries. The U.S. operation employs 600 people and generates U.S.\$110 million in annual revenue.

In 2001, WIKA USA decided to pursue Lean Manufacturing principles to more effectively compete with low-cost, overseas competitors. Not only would Lean Manufacturing allow WIKA USA to lower internal costs by eliminating inefficiencies, but Lean principles would also help WIKA USA respond more quickly to customer demands. "We realized that in order to move our operations to the next level, we needed to make some fundamental changes. That meant moving from a batch-oriented supply-chain and production process to a system based solely on customer demand," says Michael Gerster, President for WIKA USA. Under the new system, specific orders pulled inventory and components through processes so that production was based on actual demand instead of estimates.

By adopting Lean Manufacturing methodology, WIKA USA quickly reaped rewards in terms of space reduction, increased productivity, and reduced inventory. After adjusting its manufacturing operations, WIKA focused on applying Lean methodology to the business processes that support manufacturing, such as payroll, order entry, planning, receiving and shipping, warehousing, and quality assurance.

These business process changes required ungainly modifications to the company's enterprise resource planning (ERP) system, SyteLine, which slowed system performance and

complicated proposed software upgrades. "Every weekend, our IT staff went in and tuned the system so that it would perform adequately when operations started on Monday," recalls Gerster. WIKA USA even cancelled its support contract for SyteLine because its customizations prevented software updates from working correctly. When SyteLine announced it would no longer support that version of the software, WIKA USA management realized they needed a different solution.

Even with heavy modification, the SyteLine software did not fully support WIKA USA's new Lean processes, requiring the company to use paper-based processes alongside its ERP system. WIKA USA's management team knew that the company needed to fully align its Lean processes with its systems and material flows to continually improve operations. "The problem with many ERP software packages on the market is that they are built for batch-oriented manufacturing and support those types of complicated processes. As we progressed on our Lean Manufacturing journey, we needed a system that would enhance our Lean efforts and not constrain them," says Gerster.

"The problem with many ERP software packages on the market is that they are built for batch-oriented manufacturing and support those types of complicated processes... we needed a system that would enhance our Lean efforts and not constrain them."

Michael Gerster, President, WIKA USA



Solution

WIKA's global headquarters had already selected Microsoft Dynamics™ AX business management software as the corporate standard, but WIKA USA needed to ensure support for its new Lean processes. In 2006, WIKA USA management discovered the Lean Enterprise for Microsoft Dynamics AX solution from Microsoft® Gold Certified Partner eBECS®. The solution combined Lean methodology with traditional manufacturing and distribution functions, and provided the metrics WIKA USA needed to support Kaizen processes-continuous improvement of its lean efforts.

WIKA USA decided to implement Lean Enterprise for Microsoft Dynamics AX because of its support for Lean methods. With the Lean Enterprise solution, Lean processes are built into the system. And because Microsoft Dynamics AX is the corporate standard, WIKA can more easily transfer the Lean systems developed at WIKA USA to its other regional operations. WIKA USA worked with eBECS to pilot the new software and processes on a particular line of gauges before transitioning the entire production system over to Lean Enterprise for Microsoft Dynamics AX.

Integration between the Lean Enterprise modules and the core Microsoft Dynamics AX solution is flawless because the modules are written on the Microsoft Dynamics AX platform. And in March of 2007, Microsoft acquired Lean Enterprise for Microsoft Dynamics AX and tapped eBECS to help set up a new lean center of excellence for channel partners. This demonstrates Microsoft's commitment to Lean Manufacturing and further ensures solid future support for the Lean Enterprise for Microsoft Dynamics AX solution, which is now part of the Microsoft Dynamics Industry Solution for Lean Enterprise.

With valuable Lean Manufacturing expertise from eBECS, WIKA USA completed the implementation in just seven months. "The eBECS team understands Lean Manufacturing, and they took time to understand our business case and create a solution that meets our needs. Their approach was refreshing in that they totally came behind what we were trying to do-helping us define best practices and integrate them into IT," says Gerster.

With Lean Enterprise for Microsoft Dynamics AX, WIKA USA radically reconfigured its business processes to reflect Lean Manufacturing principles. Previously, WIKA USA compensated for lack of Lean support in its ERP system with paper-based processes, which meant that the company's 25 manufacturing cells used visual cues, called Kanban cards, to indicate inventory levels. Now, when salespeople enter orders into the system, it automatically triggers a string of events throughout operations-from shipping and manufacturing to the warehouse and suppliers. Communication between different operational elements is electronic so production capacity and inventory levels are visible throughout the company.

WIKA USA uses this operational visibility to allow customers and salespeople to easily forecast potential orders or return status on existing orders. WIKA USA built an Online Customer Center using the Enterprise Portal module in Microsoft Dynamics AX and information available through the Lean Enterprise solution from eBECS. Taking advantage of the electronic data interchange (EDI) capabilities in the Enterprise Portal, the Online Customer Center lets customers check inventory, product availability, lead times, account history, purchase orders, invoices, and UPS and FedEx tracking without having to contact their WIKA USA sales representative. WIKA USA is considering adding a purchase capability to the site so that customers can place orders online as well.

"The eBECS team understands Lean Manufacturing, and they took time to understand our business case and create a solution that meets our needs. Their approach was refreshing in that they totally came behind what we were trying to do-helping us define best practices and integrate them into IT."

Michael Gerster, President, WIKA USA

Benefits

WIKA USA enjoys numerous benefits from its new Lean Enterprise for Microsoft Dynamics AX implementation, including greater operational efficiency, more satisfied customers, new metrics for continuous improvement, and a more manageable IT system.

"WIKA USA is at a stage where we are continually refining our manufacturing and business processes. Lean Enterprise for Microsoft Dynamics AX helps us drive continuous improvement to reduce costs and increase customer satisfaction," says Gerster.

Increased customer responsiveness

Lean Enterprise for Microsoft Dynamics AX helps WIKA USA differentiate itself from the competition through better customer collaboration and responsiveness. Since adopting Lean Methodology, WIKA USA has reduced lead times from six weeks to as little as five days. In terms of customer service, the Lean Enterprise solution makes the sales order the key identifier throughout the system so that salespeople can easily determine

Benefits *continued*

the status of any order. Before the implementation, WIKA USA salespeople had to contact the planning department to find that information.

Customers appreciate the ability to check order status for themselves using the Online Customer Center, based on the Enterprise Portal in Microsoft Dynamics AX. Because the customer portal provides access to real-time information about WIKA USA's operations, customers can see if predicted lead times match their needs without having to call a sales representative.

Faster inventory turnover

Because Lean Enterprise for Microsoft Dynamics AX integrates Lean Methodology into the business management software, WIKA USA can maximize Lean processes like production cell bins. The Lean Enterprise solution automatically pulls inventory from the warehouse to the production cell when needed, so WIKA USA expects to further reduce inventory stored at the production cell and free more space. In some manufacturing cells, inventory cycles through 44 times each year.

"We've already managed to increase our warehouse inventory turnover by a factor of 12 through Lean Methodology. Lean Enterprise for Microsoft Dynamics AX lets us accelerate and extend these efficiencies, not only for our own operations, but throughout the supply chain in collaboration with our suppliers and customers," says Gerster.

Support for continuous improvement

With Lean Enterprise for Microsoft Dynamics AX, WIKA USA now has the tools to pursue continuous improvement in its Lean initiative. The Lean Enterprise solution specifically supports the iterative process evaluations and incremental improvements that are part of the Kaizen continuous improvement methodology. WIKA USA's continuous improvement team uses the metrics gathered through Lean Enterprise for Microsoft Dynamics AX to track progress and keep up momentum in the company's Lean efforts.

Production planning continues to yield improvements at WIKA USA as planners spend more time on value-added tasks, such

as handling exceptions in customer demand. Increased visibility into customer demand also helps planners refine forecasts for products with long lead times; more accurate forecasts result in even lower inventory levels.

Solid foundation for growth

Microsoft Dynamics AX offers WIKA USA a simplified, solid foundation for future growth. Instead of hampering the company's Lean efforts, Microsoft Dynamics AX supports those efforts with Lean Enterprise modules from eBECS.

WIKA USA plans to pilot a quality-assurance module in Lean Enterprise for Microsoft Dynamics AX that will eventually be rolled out globally, and is considering Microsoft Dynamics CRM 4.0 customer relationship management software to help further improve customer service. "Microsoft Dynamics AX is a flexible system that will allow us to continue to grow and improve our business. As our needs evolve, Microsoft provides the right infrastructure and tools to help us reach our goals, and eBECS provides the in-depth knowledge and expertise to help us with implementation," says Gerster.

"We've already managed to increase our warehouse inventory turnover by a factor of 12 through Lean Methodology. Lean Enterprise for Microsoft Dynamics AX lets us accelerate and extend these efficiencies, not only for our own operations, but throughout the supply chain in collaboration with our suppliers and customers."

Michael Gerster, President, WIKA USA



eBECS is a specialist in the design and delivery of solutions for manufacturing, distribution and the extended supply chain using Microsoft Dynamics AX and CRM. For contact details please visit our website or email us.

www.ebecs.com email: info@ebecs.com

Offices in: United Kingdom | North America | Kingdom of Saudi Arabia | Jordan | China

This case study is for informational purposes only. eBECS and Microsoft make no warranties, express or implied, in this summary.