



Olympus NDT

Major manufacturer of non destructive test equipment

“Our enterprise-wide Lean Sigma journey is closely linked with our VISUAL enterprise wide business system. We selected this path because we knew we needed to keep improving operations, products, processes and people to remain competitive.”

MICHAEL CANTY,
GENERAL MANAGER & EXECUTIVE
DIRECTOR OF MANUFACTURING

Summary

To strengthen its position in the non destructive test (NDT) industry, Olympus Corporation made a strategic acquisition in June, 2005 that resulted in the formation of a new business called Olympus NDT comprised of five formally independent NDT companies.

Non destructive testing is accurate, reliable, and repeatable testing performed by transmitting ultrasound or inducing eddy current into a material from one side, making it unnecessary to cut or destroy parts. The technology uses ultrasonic frequencies and advanced eddy current (EC) magnetic fields to measure thickness, perform analysis, and expose defective hidden flaws in a variety of materials used in products in a number of industries. The company's high-mix/low-volume, MTS/MTO operations require constant vigilance of processes and quality to ensure fast and on time delivery, maximum profitability and total customer satisfaction.

Company: **Olympus NDT**

Address: **48 Woerd Avenue, Waltham, MA 02453**

Website: **www.olympus-ims.com**

Number of Employees: **Over 500 World Wide**

Products & Services: **Leading edge technologies include remote visual inspection, high speed video, ultrasound, ultrasound phased array, eddy current, and eddy current array.**

The Company

Olympus NDT was forged in 2005 from the blending of strategic acquisitions that broadened and strengthened the company's product offering in non destructive test (NDT) equipment. Despite the fact that the newly formed business was profitable and positioned for continued growth, management deliberately made the decision to put into practice a Lean Sigma strategy across all plants to sharpen its edge in the market.

The new company had a strong Infor VISUAL Enterprise solution foundation – with three of the five North American plants already running operations using VISUAL. The software's inherent functionality fit hand-in-glove with the Lean Sigma approach and allowed Olympus to aggressively pursue greater efficiencies, reduce waste and costs, and improve global competitiveness. In due course, all five plants were running VISUAL, operating multiple sites in the USA off a single, consolidated database.

“Linking our Lean tools with our software tools is critical,” says Michael Canty, general manager and executive director of manufacturing. “You need both. We already had experience with VISUAL – we just changed the way we were using it, adapting it to support our Lean Sigma approach.”

“Many companies try to eliminate software when they adopt Lean. Others fail to make the changes needed for the software to support a Lean approach. But we knew that software was required and saw that VISUAL could be used to complement our continuous improvement efforts, helping us to identify problems, support root cause analysis, and then to implement and monitor effective improvement strategies.”

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The company, Canty states, is dedicated to giving customers what they want, in the quantities they want it – when they want it. On-time delivery is a key performance indicator that’s monitored closely.

“Problems meeting delivery commitments are caused by breakdowns in the process,” Canty says. The company had been struggling to meet delivery dates – and to solve process problems that caused delays. Kaizen teams, focused on both business processes and shop floor processes, were empowered to identify improvement opportunities and make changes.

“We adapted VISUAL to track reason codes for late delivery. The team meets every morning to review performance and assess causes of delayed shipments,” he says. The team discovered that poor data accuracy at order entry – recording wrong due dates, wrong addresses, and calculating incorrect lead times – were the chief business process causes for late shipments. “If you’re going to have on-time delivery, it starts at order entry,” Canty affirms.

In support of improved delivery performance, Kaizen was deployed to the shop floor leading to shorter cycle times. New sales lead times for every product were developed and added to the VISUAL system to automatically assist in the assignment of delivery dates. Subsequently, the team closely monitored overall order process accuracy captured and reported by VISUAL to get the company on track in making steady, continuous improvement.

Another major company concern was the time it took to develop an accurate price quote on custom and special product orders. The process had been largely manual. “Customers were looking to get products in four to seven days – when it took us that long just to give them a quote,” Canty states. An improvement idea conceived during a Kaizen event led to an enhancement in the VISUAL Configurator module, building in effective rules and formulas to power it. Now, Canty reports, order personnel can generate a quote while the customer is still on the phone.

The proper assessment of quality data was another problem area. Again, an improvement program was designed to address the issue – with VISUAL Quality serving as the key tool for the reporting of a nonconformance and/or corrective action, and then for monitoring processes to ensure improvement.

Quality, delivery and cost have become the standard key performance indicators (KPIs) driving Olympus NDT. Linking the Lean Sigma strategy with VISUAL has yielded significant gains. These include:

- Up to 55 percent reduction in overall process cycle times
- Up to 30 percent reduction in direct labor costs
- Up to 60 percent reduction in WIP
- And steady on time delivery performance improvement – climbing from 72 percent to 95 percent – with much of the remaining delay unrelated to production.

“Customer expectations are going to continue to rise. You can’t expect them to wish for less. Costs and competition will continue to increase. And economic conditions will remain outside our control,” Canty says. “You have to work to continuously improve every part of your organization to ensure competitiveness – to give the customer what they want, in the quantity they want – when they want it.”