

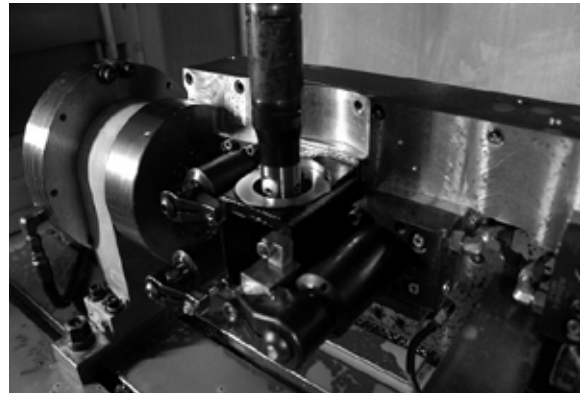
GLOBAL SHOP SOLUTIONS CASE STUDY

Nowak Machined Products

Founded in 1982, *Nowak Machined Products* is an ISO/TS 16949: 2009 certified CNC machine shop specializing in vertical and horizontal milling and CNC turning services. Operating out of 60,000 square feet of production space housing more than 50 CNC machining centers, the family-owned business serves a variety of industries, including agriculture, automotive, recreational vehicles (motorcycles, ATVs and other utility vehicles) and raw materials handling.



Inside Nowak Machined Products' 60,000-square-foot facility.



Boring operation for a lawn mower gear box.

Headquartered in Muskegon, Michigan, Nowak Machined Products has the experience and capability to supply its customers with ready-to-use machined castings, forgings, extrusions, and bar stock, for a one-stop sourcing solution. The company also offers painting, powder coating and surface finishing services to meet customers' product requirements. Whether Nowak handles the entire part from raw materials to finished product or performs only one part of a customer's production process, customers can count on quality machined parts at competitive prices.

Prior to implementing Global Shop Solutions ERP software, Nowak Machined Products used an outdated ERP software to manage production. Unfortunately, the system was rife with shortcuts and errors that the data couldn't be trusted. Based in part on sterling recommendations from several local companies, Nowak Machined Products chose Global Shop Solutions as its new ERP software.

"We like a lot of things about the software," says Kyle Baker, Global Shop Solutions Administrator for Nowak Machined Products. "It's easy to use, easy to customize, and it offers great support – both online and on the phone. We also liked the fact it's made by a family-owned business. But the main selling point was the system's comprehensive ability to handle everything we wanted to do and more."

Superb Traceability of Materials and Parts

One of the first areas Nowak Machined Products tackled with the new software was improving **raw materials and parts tracking** during the production process.

When receiving materials, Global Shop Solutions ERP software automatically assigns a lot number to every part. When machine operators machine a part, they issue the lot number to the work order, which shows when a box of parts has been machined. Once an operator finishes a box of parts, quality personnel perform the inspection and move the lot number from work in progress to finished goods. That way, managers can track when the box of parts went from machined parts to finished goods parts.

“Using the lot serial number, Global Shop Solutions makes it easy to track the part from beginning to end,” says Baker. “From one screen, we can see when a part came in, when it was machined and by whom, and when we shipped it out. More important, we know we can trust the data, which we couldn’t do before.”

65% Reduction in Inbound Freight Charges

Many of Nowak Machined Products’ customers insist on full traceability of parts and materials that go into their products. But Nowak Machined Products management is so impressed with Global Shop Solutions ERP software’s ability to track parts and materials that they use the same process even with customers that don’t require a high level of traceability.

“We track all materials and parts for every job because the information helps us in many ways,” says Baker. “It’s such a good system and so easy to navigate that we use it throughout the shop. I especially like the ability to check inventory levels using mobile devices. I can [log on to the system using my iPad](#) and instantly access inventory levels from anywhere in the shop.”

The superb tracking of material data also enables Baker to purchase to inventory rather than to the job. Received raw materials are assigned directly to lots in inventory, and then assigned to jobs as needed. Purchased tooling is assigned directly to a bin and issued by whoever is changing the tool or running the raw part. Managing inventory in the system has virtually eliminated stockouts, which has reduced the cost of premium inbound shipping charges by 65%.

“Buying to the job makes it difficult to see how much we have in raw inventory,” explains Baker. “Tracking inventory in Global Shop Solutions lets us know almost up to the minute how many raw parts we have waiting to be machined, how many are in the process of machining, and how many we have in finished goods.”

“When employees need a cutting tool,” shares Baker, “they know we will have it and exactly where to find it. Cutting down on last-minute purchasing and overnight shipping costs has saved a lot of money.”

Improving Production Efficiency and Quality

Having employees log their time and report job performance data through the [Shop Floor Data Collection](#) screens has allowed Nowak Machined Products to become a more data-driven company. Managers can review a variety of standard and custom reports to monitor production, while [quality personnel](#) can easily track scrap, rework and other quality issues. As a result, managers in all areas of the business can make decisions based on hard evidence rather than guesswork.

For example, every morning the plant manager runs the Performance by Workcenter report to see how many parts are coming off every workcenter on all three shifts. The report details exactly how many parts were produced, including how many bad ones and where they came from. This makes it easy to identify performance discrepancies between shifts and make adjustments to maximize production.



Nowak Machined Products employee loading parts onto an Okuma Horizontal Machining Center.

On the quality side, any time operators identify a suspect part they immediately enter it into the system, which automatically creates a quality record. The supervisor then gives it a scrap code to identify what's wrong with the part. Managers can then review the quality record and decide whether to rework, remake or totally scrap the part.



Coordinate Measuring Machine confirming the quality of a part.

The ability to customize Global Shop Solutions ERP software has also helped to track and lower **preventive maintenance** costs.

"Previously, all maintenance was tracked by hand, on paper," says Baker. "Now we create a work order in the system, issue all repair parts to the machine, and have employees log their time onto the work order. This provides a more accurate picture of how much we're putting into each machine every year. This, in turn, allows us identify machines that are costing too much to maintain and make better decisions about when to replace them."

Managing at the Micro and Macro Levels

According to Baker, Global Shop Solutions ERP software provides a rich mix of micro and macro data that makes it easy to manage shop floor details as well as big-picture issues at the senior management level.

On the micro level, Jillian Nowak, a second-generation family member who works in the sales department, uses the software to manage her **sales activity** on a day-to-day basis.

"I use it for detailed sales analysis of individual customers and their sales history," she says. "From one screen, I can get an quick snapshot of our business with each customer. I can run sales reports and review sales history or shipping reports to see the value of a specific customer."

"I also use the **CRM (customer relationship management) module**," continues Jillian Nowak, "which allows me to simplify the process of tracking my appointments, scheduling reminders for call-backs, and other sales activities. I can also add notes about customers to capture important details for our next conversation."

At the macro level, senior executives use Global Shop Solutions ERP software's **customizable Dashboards** to analyze high-level production and sales data. In particular, they look for trends in products and product lines as well as increasing or decreasing sales by customer. Senior executives can now spend more time analyzing data and making decisions because they're not wasting time hunting for the information.

"The software does a great job of integrating shop floor and back office information to ensure we're all working from the same page," concludes Baker. "The data is easily accessible, so everyone can view the same data in real time. Global Shop Solutions has simplified our entire business and fundamentally changed the way we evaluate jobs, employees, and processes for the better."