

GLOBAL SHOP SOLUTIONS CASE STUDY

Goetsch's Welding & Machine Inc.

Goetsch's Welding & Machine Inc. is an ISO 9001:2008 certified supplier of OEM machined and welded parts and assemblies. Founded in 1969 by professional welder James Goetsch, the company started out making fabricated components for large agricultural construction equipment companies such as Case and Caterpillar. Since then, Goetsch's Welding & Machine has expanded into heavy construction equipment, paving, medical supply, and other general industries, and also builds custom production machinery for the automotive and specialized paper industries.



Goetsch's Welding & Machine's Toshiba BTD-200QH in their machining department.



Goetsch's Welding & Machine's machining department produces quality parts.

Operating out of 40,000 square feet of production space in Merrill, Wisconsin, Goetsch's Welding & Machine's products include ready-to-assemble weldments and complete painted fabrications, as well as chassis for specialty vehicles, metal frames for 3D printers, and other specialty products. The company also offers a variety of services including machining, welding, fabricating and finishing.

When Goetsch's Welding & Machine began searching for a sophisticated ERP system to help support its future growth, management wanted a fully integrated system that could efficiently manage production while integrating shop floor and back office information. They found it in Global Shop Solutions ERP software.

Fast, Accurate Quoting

In today's manufacturing environment, fast response time can often make the difference between winning or losing a job. Global Shop Solutions ERP software helps Goetsch's Welding & Machine respond quickly to customer RFQs by simplifying the process of **building BOMs** and routers.

"Global Shop Solutions offers a systematic and methodical way to build the BOMs and routers needed to quote a job," says General Manager Craig Kowatch. "In fact, once we do the upfront data entry for the cost of the raw materials and components used in a job, the system practically builds our BOMs for us. As a result, we can build up the cost of a job very quickly. Depending on the customer and the part, we can often get a quote out in the same day we receive the RFQ."

The easy access to **job costing** information also helps to adjust pricing when necessary.

"When customers try to beat us up on price, I can easily review the cost history of a job and analyze where it might be costing too much," adds Kowatch. "I can also determine which process comprises the biggest percentage of the cost, identify which labor steps we're losing on, and look for ways to improve those processes."

Scheduling Labor More Efficiently

When workflow fluctuates due to seasonal variations, Kowatch uses the Dispatch List to manage labor hours and costs by determining the total man-hours required for each department and **scheduling the appropriate amount** of people.

“The Dispatch List gives me quick overview of what will happen in our facility in the upcoming week,” he explains. “This allows me to see where we might have excess labor or a shortage. If we get a sudden influx of orders that are due three weeks from now, I can see how many people we need to have in the plant to get those jobs done, including bringing in temps if necessary.”

“Global Shop Solutions allows us to plan for what’s coming up so we use our labor more efficiently,” adds Kowatch. “It’s much better than arriving at next week and suddenly realizing I should have done something two weeks ago to address the labor situation.”

Managing Outside Finishing

At Goetsch’s Welding & Machine, shipping parts to outside finishing vendors is an important phase of the production process. In fact, the company sends more than two-thirds of its 60,000 parts per year outside the company to receive painting, zinc plating or other finishing processes. Using Global Shop Solutions ERP software to build an op code catalog has greatly simplified this process.

“Global Shop Solutions allows us to develop an unlimited number of customer- or vendor-specific op codes,” says Kowatch. “It takes some upfront work to enter all the data. But now all we have to do is enter an op code for a part and the system automatically includes all the instructions and specs on the outside vendor purchase order. This saves us from having to look up the instructions for every part, and helps to more efficiently manage the process of sending the parts out and getting them back.”

Managing ECNs With GAB

Like many Global Shop Solutions ERP software users, Goetsch’s Welding & Machine frequently uses the **Global Application Builder** (GAB) module to create custom programs or scripts to enhance production processes. For example, because of the type of work they do, Goetsch’s Welding & Machine often has to contend with engineering change notice (ECN) requests. Using GAB, they built a custom ECN request program to simplify this process.

Previously, engineers managed ECNs using handwritten slips of paper. Even something as simple as making a small change in setup time on the router had to be manually written down and distributed to everyone involved with the part – a slow and cumbersome process. Now, engineers enter every ECN request into the custom program, run them all on a report produced by the program, and collectively review them as a committee.

“The old manual process made it very difficult to track and manage ECNs,” says Kowatch. “Now we can look at each request and see who submitted it, why it was submitted, and then approve it and log the changes into the system. It’s much faster, and it gives us a detailed history of every ECN.”

Taking Advantage of the ARC Store

In addition to creating their own GAB programs, Goetsch’s Welding & Machine also borrows custom programs other Global Shop Solutions ERP software users have created. These are available on the ARC store, an online portal with more than 1,000 custom programs that can be downloaded at no cost. Users can install the custom programs and use as is or customize them even more to fit their needs.



Fixturing for complicated welding jobs is aided by the use of welding fixture tables.

For example, to keep up with today's rapidly evolving manufacturing environment, Goetsch's Welding & Machine provides ongoing training for all employees. To track all the training, they downloaded a custom program from the ARC store, and are in the process of adding additional features to it.

"When we're done, this program will allow us to log and manage all our training activity within Global Shop Solutions," explains Kowatch. "We'll be able to set up training schedules for each employee, including tracking what training they've had and what they need. The program will even notify us when an employee's training or certification expires and needs updating."

"We looked at several external software programs to do this, but they were very expensive and couldn't integrate with our database," says Kowatch. "That's one of the real advantages of Global Shop Solutions – the ability to customize the system to do things the way we want without a lot of time or expense."

Superb Process Control

To Kowatch, the overriding benefit of Global Shop Solutions ERP software comes through the integration and visibility of data, which leads to vastly improved process control.

Through the ever-popular **Supply & Demand** screen, he can easily drill down to see the status of any job in production. He can review custom reports that indicate which components for a job haven't been completed, allowing him to keep jobs on track. Meanwhile, the person on the floor teeing up jobs can see at a glance what has been done, what needs to be done, and whether jobs are ready to ship.

"Chasing down this information used to require a lot of legwork," says Kowatch. "Now we can instantly see what needs to be done instead of scrolling through mountains of paper lists detailing all the different subcomponents. We can get any information we want from Global Shop Solutions. And with the ability to customize Crystal reports, we can get it exactly the way we want to see it."

"From initial quote to setting up the routers and work orders, producing the job and shipping it out the door, Global Shop Solutions reduces the amount of office hours and production labor hours to get the job done," concludes Kowatch. "Your overhead goes down, and as soon as a job is complete, you can see whether you made or lost money."



Their laser operators are skilled in CAD programs to allow the smooth transition from blueprint to the finished product.



Pictured is Kevin, James and Bruce Goetsch. Goetsch's Welding & Machine was founded in 1969 by James and is now owned by his sons, Kevin and Bruce.