#### **GLOBAL SHOP SOLUTIONS CASE STUDY**

# P&S Machining and Fabrication

A family-owned business located in Burlington, North Carolina, P&S Machining and Fabrication provides precision CNC machining and sheet metal fabrication services to diverse industries around the globe.





A P&S Machining and Fabrication's machine bending a metal part.

One of many various metal components manufactured by P&S Machining and Fabrication.

Operating out of 50,000 square feet of manufacturing space, P&S Machining and Fabrication's manufacturing services include precision CNC turning, CNC vertical and horizontal machining, sheet metal fabrication, robotic welding, powder coating, assembly, and packaging services. Their products are used in industries ranging from gas and oil to aerospace, defense, biotech, electrical power transmission and distribution, solar energy and more. Their customers include some of the biggest names in industry, such as General Electric and Siemens.

Founded in 1965, P&S Machining and Fabrication has developed a reputation over the years for quality products backed by dependable and reliable service, with many of their customers having conducted business with the company for more than 25 years. Committed to the highest quality in every part, P&S Machining and Fabrication is both AS9100C and ISO 9001:2008 certified.

Having started long before the era of personal computers, it's no surprise that P&S Machining and Fabrication ran the business for years with handwritten job tickets, punch timecards and other manual processes. During a growth spurt in the late 1980s, those outdated systems began holding the company back. President and General Manager Mike Scoggins, who co-owns the business with his brother, Tommy, decided the time had come for a complete business management system upgrade, and began researching ERP software.

At the time, ERP software was an emerging industry, with far fewer vendors and software systems available to manufacturers. Even then, Global Shop Solutions stood out from the crowd.

"We were still on punch timecard basis, trying to track jobs based on employees' handwritten documentation," recalls Scoggins. "We couldn't figure out our true cost of operations, and we couldn't tell if we were making money on each job. We looked at what was available in the ERP market, and quickly narrowed it down to two products. We wanted a system that could keep up with the growth of the business, and Global Shop Solutions seemed like the more versatile and flexible of the two."

# **Simplifying the Production Process**

Prior to Global Shop Solutions ERP software, P&S Machining and Fabrication handwrote everything from job tickets and purchase orders for outside requirements to invoices and packing slips. With no system to bring all the information together, the company struggled to accurately tie raw materials, labor, and outside requirements costs to the job.



Because information resided in so many different places, P&S Machining and Fabrication also had no real work history for each job; at least none that could be easily accessed when trying to determine costs and other job performance factors.

"When we first implemented Global Shop Solutions, we wanted to get more efficient by eliminating as much of the manual processes as possible," says Scoggins. "More important, we really wanted to get our arms around tracking labor performance and identifying our true costs. If we quoted a job at \$1, we needed to know at the end of the job if it really cost a dollar or whether we should have quoted \$10. Prior to Global Shop Solutions we couldn't do that with any degree of accuracy."

"Global Shop Solutions made a huge difference right off the bat simply by tying all that information together and making it automatic through the system," says Scoggins. "It allowed us to speed up virtually every process by eliminating our handwritten documentation. And for the first time, we had real visibility into what was happening on the shop floor."

## **Tracking Inventory and Profitability**

With thousands of parts in its catalog, managing inventory represents a critical cost containment area for P&S Machining and Fabrication. To minimize carrying costs, P&S Machining and Fabrication doesn't inventory incoming materials, preferring instead to buy materials to the job.

However, when it comes to finished goods inventories, Global Shop Solutions ERP software has made a big difference.

In the past, P&S Machining and Fabrication kept track of finished goods inventory with handwritten cards. When someone needed to know the availability of a part, they had to walk down to the shop, find it, and check the actual inventory against the information on the card. Now, people never have to leave their workstations or desk. They simply log into the system and get the data they need with a few clicks of the mouse.



Various parts manufactured by P&S Machining and Fabrication.

Global Shop SOLUTIONS ERPSOFTWARE

But that's not the only way their ERP software helps with inventory. At the end of every month, Scoggins runs a report showing how many dollars went in and out of inventory. This number is then added to the bottom line when determining profitability.

"Suppose we had a bad month and profitability was down," says Scoggins, "but Global Shop Solutions showed us that inventory increased \$50,000 because we manufactured several pending orders ahead of time. This tells us that profitability is actually better than it looks. Before Global Shop Solutions, we didn't have access to that kind of information."

"Even though we don't inventory incoming materials, Global Shop Solutions still helps when tagging them," he says. "We used to put manual tags on materials. Now we print a label that states where it was ordered and when it was received. When you're AS and ISO certified, all raw materials have to be certified back to the vendor. Labeling them with Global Shop Solutions makes materials tracking much easier."

### **Global Shop Solutions as A Sales Tool**

In a print-to-job shop like P&S Machining and Fabrication, every job stands on its own in terms of cost. According to Scoggins, one of the biggest benefits of Global Shop Solutions is not just the ability to determine the true costs of every job; it's using that information to avoid giving in to customer demands for unrealistic cost reductions. With his ERP software, he can quickly look at the part and tell customers, 'I'm sorry but it costs us this much to make. We can't reduce the price any further.'

In fact, Scoggins and his team actually use Global Shop Solutions ERP Software as a sales tool. When prospective customers come into the shop, they show them everything they do with Global Shop Solutions – from barcoding materials to labor performance. Customers can see for themselves that P&S Machining and Fabrication has the right controls in place, and they know the company isn't guessing on costs and charging \$10 when they should be charging \$5.

"When a prospective customer walks in our door, the first thing we talk about isn't our high-tech machines or the hundreds of thousand of dollars we spend on ISO, AS and quality equipment," explains Scoggins. "It's Global Shop Solutions. We take them over to a machine, pick up the job router and say, 'This is what we do on labor performance. This shows us the cost of operations from materials to heat-treating to plating to machining.' So we use that to build a foundation and demonstrate that we have control of our costs."

"When the customer comes back three months later and says they want a cost reduction, we do the same thing," he continues. "We say that our system shows it takes one minute to do this operation and 10 minutes to do that one. The heat-treating costs this much and the plating costs that much, so we can't lower the price and still make money on the job. It's hard for the customer to disagree because it's all there in detail."

## **Superior Service and Support**

In his 20+ years as a Global Shop Solutions user, Scoggins has seen a lot of changes in the software – many of which came about as a direct result of customer ideas and input.

"Back then, Global Shop Solutions didn't have the capability to link to drawings, setup sheets and that sort of thing," he says. "It didn't have the barcode labeling for raw materials, or the business intelligence features that let you quickly look at payables and receivables. But they've added all those and a lot more. One of the real benefits of Global Shop Solutions is they constantly add new features and capabilities that allow you to do a lot more with the software."







P&S Machining and Fabrication's four-station robotic welder for precision production welding

For example, the ability to customize reporting using Crystal Reports. Scoggins recently created a custom parts report that looks at current orders and shows how many of that part P&S Machining and Fabrication has on hand, whether there has been any partial shipments, the labor dollars invested, and any outside or material costs. He uses the report in production meetings to compare costs against sales and identify problem areas in real time rather than after the job is completed.

Aside from constantly upgrading the software to meet the needs of today's manufacturers, Scoggins believes that what really sets Global Shop Solutions apart is its flexibility, service and support.

"I love the way Global Shop Solutions ties everything together – from accounting through manufacturing – in one program," he says. "It offers the flexibility to build your own workcenters and customize many of the screens. And if I want to do something a bit different, the folks at Global Shop Solutions can make it happen."

"Plus, they consistently offer great service and support," he concludes. "When we call in with a problem, we don't get an answering machine saying 'please hold, you're call #50 in line,' and we don't wait three months to get an answer. Most of the time we can WebX with a customer support rep and get an answer on the spot. If not, they work on it and quickly get back to us with a resolution. With Global Shop Solutions, we know we'll get the support we need, when we need it."

