

GLOBAL SHOP SOLUTIONS CASE STUDY

AMG, Inc.

Headquartered in Lynchburg, Virginia, *AMG, Inc.* makes custom, precision-engineered components and fabrications for a diverse customer base, including aerospace, nuclear, military, medical, food processing, and fiber optic companies. Specializing in stainless steel fabrications, frames and sheet metal coverings, the company also provides tooling for nuclear reactor plants, surface analysis components for the military, and aircraft components.



AMG's state-of-the-art facility in Lynchburg, Virginia



AMG's facility is designed for efficiency to meet every customer demand.

Operating out of 60,000 square feet of precision machining space, AMG has the expertise and equipment to work with a large array of materials ranging from super alloys to plastics. In addition to its machining and fabrication services, the company also offers a full line of CNC milling & turning, laser cutting, wire and plunge EDM, assembly, power roller and press brake services. ISO 9001:2008 and AS 9100:C registered, AMG has been an ESOP company since 1987.

20% Increase In On-Time Delivery

As with many of today's manufacturers, on-time delivery presents a major challenge for AMG. [Global Shop Solutions ERP software](#) helps them solve it.

Since implementing the software, AMG has increased its on-time delivery rate from 75% to 95%. Throw out the occasional "one-day late" jobs and that figure climbs to almost 99%.

As a contract manufacturer, AMG has no control over when their customers need product. And with its extensive customer list, the firm often has multiple customers order products at the same time that require the same workcenters to produce them. Thanks to Global Shop Solutions ERP software's superb visibility of data, AMG can easily adjust its scheduling and workloads to consistently meet their on-time delivery goals.

"When a customer asks if we can deliver a project in a certain timeframe, the first thing we do is go into Global Shop Solutions to check our workload and available capacity in all the workcenters," says Greg Morris, President of AMG. "If we have sufficient capacity and labor availability, we'll commit to the job."

"Once a job is in progress, we know four days in advance, based on our [scheduling data in the system](#), if it will ship on time. If we experience a small hiccup, we can notify customers when a part will be late and by how much, allowing them to make other arrangements if necessary. Thanks to Global Shop Solutions ERP software, we rarely have to do that anymore."



Reducing Overtime

In today's manufacturing environment, quality is a given. You either get the part right or you don't get the business. The competition comes from how soon you can get the part to the customer and at what price.

Although on-time delivery has now become AMG's biggest competitive advantage, Morris believes that pricing comes in a close second. Here again, Global Shop Solutions ERP software lends a hand by helping to rein in overtime – a key factor in AMG's ability to offer competitive pricing.

AMG cross-trains its machinists to work on several different workcenters. As a result, many of them can shift from milling to turning, grinding or some other workcenter when the schedule demands. Using Global Shop Solutions' **capacity planning features**, AMG can determine labor requirements weeks in advance. This enables schedulers to minimize overtime by shifting personnel based on individual workcenter loads.

"Global Shop Solutions makes it easy to see the workloads for each workcenter," says Morris. "This helps determine when we need to move people from one department to another to reduce overtime or increase capacity in other areas. As long as we correctly input all the information in the job estimates and work orders, the system works very well. From estimating the part to receiving materials, order entry, and scheduling, we know exactly what's going to happen with each job and when."

Improved Estimating and Quoting

Global Shop Solutions ERP software has also simplified the critical **estimating and quoting** process.

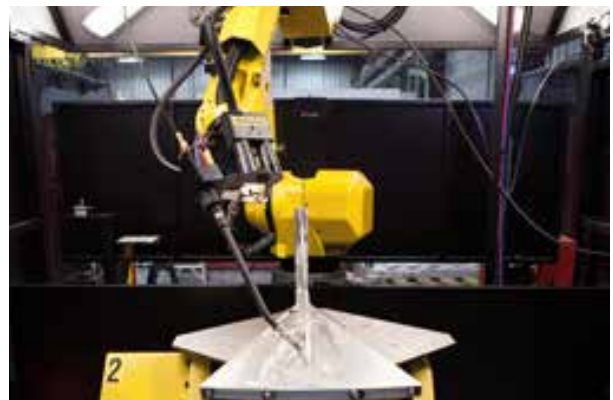
In the past, when customers asked for a quick quote, managers would pull out a legal pad, scribble a few numbers, and send a quote via email. Now they perform all quoting and estimating within Global Shop Solutions ERP software, turning it into a more disciplined process that has significantly improved its accuracy and accountability.

"Suppose a customer calls in with a change to the job and the person who prepared the estimate is out on vacation," says Morris. "In the past, we had to scramble to find his notes and try to decipher them. With Global Shop Solutions, everything is right there in the system for everyone to see. We can easily review the estimate and give the customer an adjusted price based on the changes they need."

"Global Shop Solutions ERP software also simplifies the process of quoting repeat orders. The data is already in the system, so all we have to do is click on the previous job and turn it into a new order. We issue a new work order, and auto purchasing automatically orders the material because the system created the demand. Instead of taking time to recreate the wheel, our salespeople can go sell something else."



A 4000-watt Trumpf Laser precision cutting carbon steel



AMG's Lincoln robotic welding center prepares to weld an assembly.

Getting More Out of Global Shop Solutions

To improve their understanding and usage of the software, AMG recently undertook a FastCHECK ROI. In this process, a Global Shop Solutions senior **ERP Consultant** analyzes the company's business processes and makes recommendations to utilize the system more effectively and simplify business processes.

In AMG's case, the ERP Consultant focused primarily on purchasing, inventory and capacity planning. Based on his recommendations, AMG began using the Auto Purchasing feature, which helped simplify purchasing and improve materials management. This, in turn, has resulted in lower inventory carrying costs, and enables AMG to buy materials to the job more efficiently. It has also helped improve the company's ability to track and manage their "reference-only" inventory, which consists of leftover materials bought straight to a job.

"In addition to helping us become more efficient in specific areas, the FastCHECK ROI process gave us a better understanding of how all the different parts of the system interact with each other," says Morris. "As a result, we can do a better job of utilizing the individual features to achieve our goals. It was definitely a worthwhile experience – so much so that we're considering doing it again."

Business Management Tool

As President of AMG, Morris uses Global Shop Solutions ERP software as a measuring tool to **inform key management decisions** on both the production and financial sides of the business.

For example, Morris starts each day by logging into the ERP system to check on late deliveries. He identifies all jobs that didn't ship to find out why, and then initiates appropriate corrective action. He also spends time in the **Financial application** to review the company's cash flow and see whether customers are paying on time.

The biggest benefit for AMG has come from using the system to improve on-time delivery. This is a direct result of scheduling work more effectively, understanding the loading on all workcenters, and knowing how and when to move people from one workcenter to another based on load. But Morris also believes that using Global Shop Solutions ERP software has instilled a new level of discipline throughout company operations.

"Our improved accuracy in overtime planning saves our company thousands of overtime hours," he notes. "The Supply & Demand feature in the Inventory application gives our account managers the ability review history and accurately determine lead times on short run jobs, allowing us to win more jobs. The list of improvements goes on and on."

"Perhaps most important, the capacity planning feature and its reports have disciplined us to trust the data. In fact, our on-time delivery performance is due in large part to the fact that we can trust the data. We can have up to 1500 open jobs at any one time, with a backlog of three to four months and some parts not due for a year. Global Shop Solutions enables us to efficiently organize and manage all that activity on the shop floor so we can ship on time almost every time."