GLOBAL SHOP SOLUTIONS CASE STUDY

FabCorp, Inc.

Located in Houston, Texas, FabCorp, Inc. is a large place – a sprawling 80,000-square-foot production facility with people in constant motion everywhere. With over 100 machines and workstations, and hundreds of workers to manage, keeping FabCorp on track for quality and on-time delivery is the job for their robust enterprise resource planning (ERP) software Global Shop Solutions.





For decades, FabCorp has maintained their sprawling plant facility with the productivity found through ERP software.

Jim Morris, the Engineering & Quality Manager at FabCorp, depends on ERP software to gain better data and improved shop floor control.

ERP Software as Home Base

Jim Morris, the Engineering & Quality Manager at FabCorp, enjoys showing off the latest laser cutting robots they've recently installed on their shop floor. "Watch this," he says as the robot arm lowers itself to the cutting surface below. The laser torch tip touches the material and brilliant sparks fly all about the enclosed safety area as the cutter guickly slices through the stainless steel. "Isn't that cool?" Morris asks with sincere interest.

Morris calls Global Shop Solutions ERP software his "home base" for total shop management.

"We implemented the software in June of 1994, so I've been working with Global Shop Solutions here in FabCorp for years," points out Morris. "My task is maintaining the system, learning all of the new features Global Shop Solutions introduces ever year, and making sure our people are trained on the software. We have around 50 users in our Global Shop Solutions system, and of course I use it all day long as well."

Over the years, the tremendous growth of FabCorp has been due, in part, to the continuous payback they have achieved through their Global Shop Solutions ERP software. For such a large operation with a multitude of shop and manufacturing capabilities, FabCorp runs remarkably smoothly when it comes to scheduling, inventory management, front office efficiency, and virtually all other areas of the company. A key reason: the holistic approach to shop connectivity that the software brings to the daily management of FabCorp.

The ease of use of the software, along with the wealth of information it processes and produces, means that the system achieves a greater acceptance and integration on the shop floor and in the front office before, during, and after implementation.



"Global Shop Solutions is a rugged system, and it's very friendly to the metalworking business we're in," states Morris. "Because it's easy for our workers to use, Global Shop Solutions is one of those things that helps us maximize the information we get off the shop floor in actually making the part, making it profitably, and shipping it out the door on schedule. It's a software system that allows us to easily keeping up with the information flow and use it the best we can for the best results."

Time and Attendance Simplified

When you have dozens and dozens of workers out on a shop floor that is nearly the size of two football fields, how can you really be sure someone on the clock is really on the job? It is a common malady for manufacturers when the activities of labor are unaccounted; waste is introduced into production and in-direct costs mount. The key to solving time and attendance monitoring issues is to be able to see worker on-job activity relative to their on-clock presence. In short, when a worker is on the clock they should be on a job and this information must be viewable in real time. FabCorp has reduced costs and increased bottom-line profits by keeping close watch on time and attendance.

"Everybody in the shop is on Global Shop Solutions, and all of the employees that are working on jobs clock into those jobs on the floor," states Morris. "For me, the work in progress screens, especially with the colored graphics display, allows me to see who's working on a job and who's not. With Global Shop Solutions, it's pretty easy to read time and attendance and to see where labor costs are being wasted, and this is very important for us. We can make sure our people are accounting for their time and accounting for it accurately and putting it on a job. It's real time, real life information that tells you what's going on out on the shop floor."

With customer needs for cost reduction and accountability an ever-increasing concern, any slight edge a manufacturer or job shop might



One of the many precision laser cutting machines in operation at FabCorp.

have over the competition in estimate versus actual costing might mean the difference between a sale won or lost. Global Shop Solutions helps FabCorp gain that competitive advantage through time and attendance accuracies.

"With Global Shop Solutions you can certainly see where the direct costs are and get a good sense of the in-direct costs too," observes Morris. "It is very much a kind of measure of efficiency, but more than that it's a system of accountability. If a worker knows he's being watched and is accountable for his actions, then he's going to try to be more accurate in his labor reporting. And, if he's more accurate, the company has better information. Over time, through the continued use of the ERP software, the quality of our labor information just keeps getting better and better for us."

FabCorp Delivers On Schedule

In addition to traditional job shop work, FabCorp manufactures a proprietary line of metal products within in the industrial scrap sector. Their catalog includes scrap recovery bins with names such as Hippo Hopper, Turtle Cart, Grizzly Box, Monkey Box, and Crane Hopper – a virtual menagerie of shop containers. With this line of products, and the job shop orders they receive for metal machining, fabrication, welding, cutting, and finishing, FabCorp has anywhere from 4,000 to 5,000 work orders going through their operation at any given time.

For a manufacturer like FabCorp, this volume could easily cause many worries about on-time delivery; the snowball effect is always a possibility when jobs get behind schedule push each other farther and farther down the schedule.



However, with Global Shop Solutions' Advanced Planning & Scheduling (APS) application, FabCorp is able to take all of their work orders, in various stages of planning, use, or utility, and book them into the system for future scheduling.

Why is this one the most important features of Global Shop Solutions for FabCorp?

"Because it tells us material demands," states Morris. "If you have the next six months of work orders that you know about in the system, that tells our Purchasing area how much steel to buy, or what different kinds of steel or aluminum we might need. This allows us to be more efficient and to get better pricing in finding the right amount steel and having it to the work center precisely when we need it. In short, we don't want inventory just sitting on the floor or on the shelf, and we never want to run out of material. With Global Shop Solutions at the heart of our Purchasing and Inventory management, everything we do is centered around those reductions in cost that increase our profit margins."

In addition, APS offers FabCorp an instantaneous and real time overview of shop operations and how they figure into notions such as capacity, throughput, and scheduling.

"APS is an advanced tool, and it's helped us see better our operation and how it's connected through its various parts," says Morris. "Before we had APS, a machine operator – let's say a lathe operator – usually wouldn't think about who sawed the bar stock before it got to the lathe or worry about the process after him. As result, the parts of the shop operated in isolation from each other and never thought about the "big picture." But, Global Shop Solutions APS requires that everyone think about the big picture, which is nice because it gives the planners a more conscious view of what's going on in the shop, as opposed to just looking at one work center or one job. Everyone looks at all operations as related to each other; it's an absolutely holistic view of our operation. Without Global Shop Solutions' APS, you might as well be wearing blinders."

Ease of Use Means Shop Floor Integration

It's one thing to research, review, demo, and purchase ERP software, it's another to get shop floor people to actually use it. Many manufacturers and job shops find out this lesson the hard way, with costly installations going unused because they're too complicated and difficult to learn. Resistance to the new system rises and the efficiencies originally envisioned by the acquisition are never fully realized. However, with Global Shop Solutions ease of use and training support, FabCorp workers participate in the information input and flow process every step of the work order. Morris believes this is a key reason for the success FabCorp has had in implementing and integrating Global Shop Solutions ERP software.



FabCorp production staff work on building a heavily armored military vehicle superstructure.



A military truck in armored in a variety of ways in order to maximize troop protection in battle zones.



"Global Shop Solutions is easy to use and it's an efficient system, and there's no doubt that the ease of use has made the system used pretty widely by all of the employees here," Morris states. "Everybody in the shop, in the accounting and administrative offices — everybody's on Global Shop Solutions. For example, there's no doubt that the software has reduced our front office costs. When a sales order comes in, our process is to immediately enter it into Global Shop Solutions. From there, the engineering people can pull it up and make sure we have everything set up. This includes not only part numbers, but also the BOM and the routers that go with each BOM, and the processes that go with each router. Because Global Shop Solutions is so easy and efficient, we can have as little error as possible. This is where it helps us a lot, and ease of use is where they're very strong for us."

With as large an operation as FabCorp is, the opportunities for enhanced communication within and between areas means more gains through efficiency. This philosophy is expressed with clarity in FabCorp's use of Document Control. In Document Control, what used to be the arduous process of routing and re-routing paper schematics, details, pictures, and images is replaced by an on-line communication system that is constantly available and instantly update-able. With ever-shrinking lead times and customer spec often changing on the fly, Document Control is an invaluable module for FabCorp, especially in its ability to save time and money.

"For us and the way we operate, Document Control is central to our shop operating system," says Morris. "It's necessary because it gives the visual cues we need, it gives us all of the outside information such as a quality plan for a customer, a load test, or inspection criteria at the operator's fingertips. We can also send along new or updated drawings, pictures, and weld maps for any job. So, anybody who has a need for that sort of information can pick it up through Global Shop Solutions, look at it on the screen, print it if they need to, and then use it with the work order. It's just another part of the software that helps us cut down our in-direct costs associated with labor time."



Parts wait for finishing on the FabCorp line.

The final key in the door of success for FabCorp is found in the screen most used by Morris himself: Supply & Demand. Before Global Shop Solutions ERP software, Morris was one of those manufacturing administrators who are always searching for the right data set in a variety of vast spreadsheets and computer applications. Integration of information was only a dream and one that couldn't be realized soon enough.

When compared with Supply & Demand screens in other ERP software, Global Shop Solutions sets the higher standard for both functionality and ease of use.

"I've used other systems," Morris states," and with every other one you go to the Supply & Demand screen, and then hop back to another screen for more information and then to another, and so on. By the time you finish, sometimes you've forgotten what you started out to do. But with Global Shop Solutions ERP software, it's all there, and if you need other available screens you can open them up while always having the original screen still running right there along with the others."

Ease of use, strength in function, cost savings efficiencies – with Global Shop Solutions ERP software at the heart of their operations, FabCorp sees a successful outlook for their business today, tomorrow, and for many years to come.

