

## GLOBAL SHOP SOLUTIONS CASE STUDY

# Galaxy Technologies

Located in Winfield, Kansas, *Galaxy Technologies* is a leading tooling supplier for aerospace, defense and plastic markets, making the tools these industries need to manufacture parts for their products. From design engineering to manufacturing, sub-assembly, assembly and installation, Galaxy offers turnkey solutions for complex design and manufacturing challenges.



*Galaxy's 150,000-square-foot facility located in Winfield, Kansas.*



*Staffed with 200 employees, Galaxy can support the current schedule demands in this fast paced market.*

Founded in 1985, Galaxy custom-designs its products, which include assembly jigs, hot form dies, tool bonds and more. Major customers include Boeing, Spirit Aerosystems, Northrop Grumman, Lockheed Martin, Rubbermaid and Coleman.

An approved supplier to leading industry OEMs, Galaxy maintains AS9100 and ISO 9001:2000 quality system certifications, and meets multiple customer quality standards.

To manage their shop floor operations, Galaxy used a different ERP system that did not offer full business management capabilities. Seeking an ERP package that could integrate the shop and workflow into one system, the company selected Global Shop Solutions.

"Global Shop Solutions is one of few ERP products that offers inventory control, production control and accounting all in one integrated system," says Jerry Bolack, Director of IT for Galaxy. "It handles everything we need to run the business, from purchase and sales orders all the way through invoicing."

### **Simplifying Scheduling**

Galaxy offers its customers an average lead-time from design through production of only two to eight weeks. In addition, its large projects often require up to 100 details running through the shop floor at the same time on many different machines. So it's no surprise that efficiently scheduling jobs presents the firm's #1 shop floor challenge.

However, unlike most Global Shop Solutions ERP software users, Galaxy doesn't schedule directly in the [Advanced Planning & Scheduling \(APS\)](#) application. Instead, they use an internal scheduling program that interfaces directly with APS and allows them to manually adjust the schedule when necessary.

"Every job that runs through our shop floor is different," says Bolack. "They never take the same path from one machine to the next. And instead of creating separate work orders for each detail, we make them all off the same work order. All of which creates some interesting scheduling challenges. Our system interfaces directly with APS and allows us to see the data in our own viewer. This makes it easier to manipulate the schedule and move jobs around when necessary."

“The ability to adjust the system to our scheduling needs is one of the more remarkable features of Global Shop Solutions. Most ERP systems force you to do things their way. Global Shop Solutions is flexible enough to adjust to your specific manufacturing environment.”

### Getting Rid of Paper

One of the first areas of improvement came from revamping the [sales order/work order](#) process. Previously, all work orders and routers were paper-driven. Now, they’re all done inside the system. As a result, paper documents on the shop floor have become a rare sight.

“We build our work orders and routers a bit differently,” says Bolack. “For example, suppose we’re doing five identical details for the same project. Instead of creating five separate work orders or one work order with quantity of five, we’ll put five line items on a single work order, which simplifies how we run our schedule. This is another good example of how Global Shop Solutions adapts to the way we like to organize workflow.”

“We’re currently using Global Shop Solutions in so many areas of the business that there’s [very little paper left](#) anywhere,” continues Bolack. “All we have to do is log into the system to see what’s going on anywhere in the plant.”

### Simplifying Finance

Thanks to its superb integration of data, Global Shop Solutions ERP software offers far more than just a production management system. According to Vice President of Finance Rick Yaussi, the software has simplified the [accounting](#) side as well.

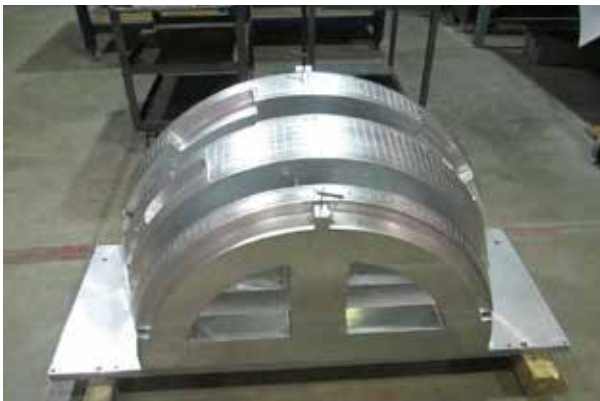
Accounting personnel can invoice a closed work order that’s being shipped without interacting with anyone else because the system tells them what’s happening. Financial reporting is faster and more robust. And Yaussi and his team can easily import and export data in and out of Excel (rather than having to use a PDF reader) to manage the numbers more efficiently.

“Many ERP products require the use of a separate accounting system,” says Yassui. “Global Shop Solutions saves us time and money by integrating it into one system. Everyone else says they can do that. But not many systems have this kind of [inventory](#) control, financial control, and work order/sales order management all in one system.”

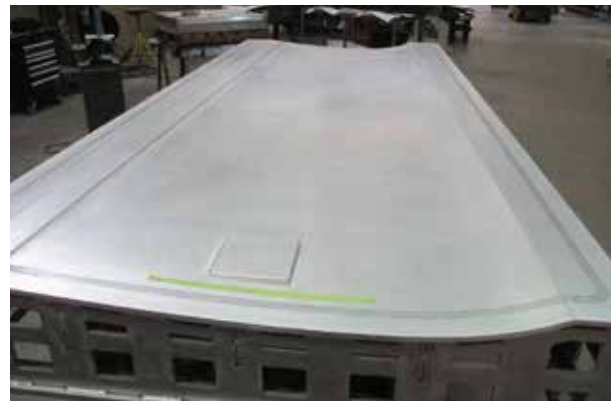
### Real-Time Job Costing

Global Shop Solutions ERP software also excels at [job costing](#). When Galaxy machinists electronically clock into work orders using the [Shop Floor Data Collection](#) stations on the shop floor, the labor costs are automatically applied to the work order. This allows managers to see accurate job costs for work in progress.

“When a purchase order is issued for material, the system automatically charges it to the work order,” says Yassui. “At any time, we can log in and see who’s clocked into the work order and how much time is being spent. The costs are all there in real time; there’s nothing left to guess.”



*An aluminum NC vacuum holding fixture commonly used in the aerospace industry to machine skins for various parts of the aircraft.*



*An aluminum layup mold used to develop composite skins for the aerospace industry.*

How does live job costing information help make better management decisions?

“In our daily production meetings, we look at the costs for each work order,” says Yassui. “The system updates the data every about every five minutes, so it’s constantly pulling in the costs as they happen. This allows us to make sure people are working on the right job at the right time. We can also compare actual costs versus estimated while the job is in progress. We don’t have to wait for accounting to do anything; we just look at the reports.”

### Easy Customization

To further adapt the ERP software to its specific needs, Galaxy makes frequent use of one of the software’s most popular features – the **Global Application Builder (GAB)**. This flexible tool enables system users to create custom screens and applications without a lot of expensive coding.

A recent Galaxy GAB project enables estimators to quickly and easily research old projects that have similarities to new ones. Estimators can review the old job bid and adjust the new quote to fit the current project. The GAB program also displays a 3D drawing on the screen so they can get pictures of the tool as well as the numbers.

“This GAB program saves a lot of time because we don’t have to reinvent the wheel,” says Yaussi.

Galaxy is currently working on GAB program that will create an electronic login system tied to the plant’s doors. Once in place, workers will scan their badges at the door, which will clock them into Global Shop Solutions ERP software at the same time. Meanwhile, Bolack has created dozens of custom Crystal reports to allow financial personnel to see the data in their preferred formats.

“Most of these reports deal with how we look at **employees and payroll**,” says Yaussi. “For example, we have several custom reports that allow people to access general payroll data, such as anniversary dates and attendance reports, without seeing sensitive financial information.”

### Flexibility, Integration the Key

When asked to identify the ERP software’s strongest feature, Yaussi points to the real-time job costing.

“With our old ERP system, we had to wait until end of month to close anything and start seeing costs,” he says. “With Global Shop Solutions, we can see costs as they occur. No matter where we’re at in the shop or what we’re doing, everything is tied together with instant data.”

“Better still, the system doesn’t make you do it only one way,” continues Yaussi. “You can leave all the work orders open and wait until all the costs come in. Or you can ship it and close it. If something comes in later, you can run it through late costs and still get it on the work order for historical data. Global Shop Solutions gives you many ways to do the same thing.”

As the IT guru, Bolack focuses on the ease of customization.

“For me, the key benefit is the ability to customize the software to help others do their jobs more efficiently,” he says. “With Global Shop Solutions, you’re not locked into doing things a certain way. Whether it’s a GAB script or a custom report, we can come up with our own way that works the way we need it to.”



*Recent improvements added much needed square footage and clearly marked safety lanes.*