

## GLOBAL SHOP SOLUTIONS CASE STUDY

# Gear Motions

*Gear Motions is a custom gear manufacturing company that supplies high-precision gearing to companies in the commercial air compression, specialty automotive, motorcycle, medical device, packaging, oil and gas, mining and industrial pumping industries. Composed of three divisions located in western New York – Nixon Gear in Syracuse, and Oliver Gear/Pro-Gear and Niagara Gear in Buffalo – the company offers the management expertise and financial strength of a large company while maintaining the unique service aspects of smaller regional shops.*



*Gear Motions' Precision Gear analysis center*



*Gear cutting machine*

Gear Motions distributes its products domestically and abroad, while offering an array of precision manufacturing services, including gear grinding and cutting, turning, milling and drilling, broaching and keyseating, ID and OD grinding, ID honing, and inspection. The firm's precision-ground or cut helical and spur gears, cut sprockets, splines, straight bevels and worm gears can accommodate gear diameters ranging from a fraction of an inch to six feet. An ESOP (employee stock option plan) company, Gear Motions is ISO-9001:2008 certified at all three of its production facilities.

For years, Gear Motions managed the business with an ERP system that lacked the ability to track data in real time. Seeking to improve scheduling, [job costing](#) and other areas of the business, management upgraded to Global Shop Solutions ERP software, primarily for its visibility of data and robust [Advanced Planning & Scheduling \(APS\)](#) application.

"We liked a lot of things about the software, including the user-friendly interface," recalls Plant Manager Dan Bartelli. "But APS really sold us on the system. It gives us the ability to execute more effectively and make appropriate staffing decisions whether planning for the short term or 12 months down the road."

### **Meeting Customer Needs Through Enhanced Scheduling**

As a custom manufacturer, one of Gear Motions' biggest shop floor challenges involves staffing appropriately in order to execute at a level needed to satisfy customer demands. According to Bartelli, Global Shop Solutions ERP software makes it easy to identify what needs to be done so managers can put together an effective plan to keep their customers satisfied.

"Customers want product a lot quicker than they used to," he says. "Jobs that used to take us eight to 10 weeks to complete, customers now want in three to five. Scheduling with APS allows us to execute more effectively because it gives detailed views from a job, department, and entire shop floor perspective. It affords many different ways to slice and dice the data, so we can tell what we need to do and when to meet tighter shipping deadlines."

“Global Shop Solutions helps us get product out quicker by providing a more global view of all aspects of the shop floor environment,” adds Suzanne Waters, Director of Accounting and IT. “It also helps us order and purchase materials more efficiently by showing what we have in inventory, how much we need to order, and the lead times for purchasing those materials.”

### Visibility of Data = Better Decision Making

Gear Motions constantly uses the software to drive process change throughout the organization while making more informed decisions. In particular, Bartelli appreciates the ability to make adjustments in the moment to meet customer deadlines.

Using Global Shop Solutions ERP software, managers can quickly tell if they’re on track to meet the commitment to the customer. If they see a problem within their finite scheduling windows, the accuracy of the data gives them the confidence and ability to make adjustments.

“The system automatically updates the data every five minutes, so we can see exactly what’s going on in the shop in real time,” explains Bartelli. “This allows us to act in the moment rather than looking at a report a month later and saying we should have done something differently.”

“From a longer-term perspective, Global Shop Solutions helps us understand what our business environment looks like down the road,” adds Bartelli. “Do we need to adjust staffing because work is starting to slow down or get busier? Are some product lines growing while others are shrinking? The system gives us the data we need to make better decisions for the business.”



*An automated gear grinder at Gear Motions' plant*

### Leaning Operations with Supply & Demand

Moving work in progress (WIP) to finished goods and closing work orders can be a time-consuming task. Global Shop Solutions ERP software simplifies this process by providing quick access to all the necessary data through one single screen – [Supply & Demand](#).

“Supply & Demand lets you do so much from one screen,” says Waters. “You can look at work order history for costing purposes, sales history for pricing trends, and purchase order history for anything related to purchasing. You can look at all inventory transactions. You can even add comments to the work order. It gives us a very efficient quality check process to make sure we did things right and correct things when we didn’t.”

“If you need to know anything related to a part from beginning to end, Supply & Demand quickly supplies the information,” adds Bartelli. “No matter what you’re looking for, the screen will have a tab that takes you right to the data you want.”

### Custom Reporting Drives Accountability

Waters frequently uses the software’s flexibility to [create custom Crystal reports](#) that format data in a way that fits Gear Motions’ unique operating environment. One of these reports tracks output for machine operators on a daily basis, providing a powerful feedback tool for improving performance and accountability.

“We print a copy and give it to all machine operators every day,” says Waters. “The report shows which jobs they worked on the day before, when they started and ended, how many parts they completed or scrapped, and so on. It also identifies setup time, indirect time, and whether they forgot to log in or out of a particular sequence.”

“Employees like receiving the report because we don’t use it in a punitive way,” continues Waters. “Instead, it’s a tool they can use to review their work and make corrections. As an ESOP company, our employees have a real stake in holding down costs and working productively. They see the report as a way to do both.”

Bartelli agrees.

“The report gives operators the ability to validate their input from the day before and make adjustments when needed,” he says. “They also like seeing how their performance compares to engineering standard. Global Shop Solutions supports our culture of feedback and open communication by providing reliable performance data we can all use to continually get better.”

### **A Complete Business Management Tool**

As the Global Shop Solutions administrator for Gear Motions, Waters values the ease of navigation throughout the system as well as the timely technical support.

“Global Shop Solutions has everything I need to effectively perform my job while helping others learn the software and do their jobs more efficiently,” she says. “When people come to me with questions, I can usually resolve the issue or suggest resolutions, and if we can’t resolve it internally then I place a call to Global Shop Solutions’ technical support.”

“The best part of the software is the ability for companies to adapt it to their specific operating environments,” continues Waters. “It’s a very robust product, but you can use as little or as much of it as you want and still get great results.”

Bartelli considers the software’s greatest asset to be the superb visibility of data in all areas of the business.

“Global Shop Solutions enables us to run our business the way we need to run it. APS has a huge impact on our scheduling, staffing and decision-making. And the real-time data allows us to make adjustments in the moment to keep our commitments to customers. The system provides everything we need to work efficiently, supply our customers’ needs, and operate a profitable business.”



*Gear Motions’ Syracuse plant*