

## GLOBAL SHOP SOLUTIONS CASE STUDY

# Frederick's Machine & Tool Shop, Inc.

A second-generation, family-owned business, [Frederick's Machine & Tool Shop, Inc.](#) manufactures and repairs a wide array of parts for the oil and gas industry. Founded in 1965, the company operates four separate divisions – job shop, sub-sea machining and fabrication, waterjet cutting & wireline tools – that provide specialized components for industry leaders like Halliburton, Oceaneering, Schlumberger, and more.



*Subsea structure that sits on the ocean floor made by Frederick's Machine.*



*James Frederick, Roy Frederick & Daniel Dore*

Headquartered in New Iberia, Louisiana, Frederick's Machine makes everything from packer parts and downhole tools to hydraulic cylinders and shafts. The subsea division specializes in pipe clamps, mud mat assemblies, tanks, baskets and other below-water drilling parts. ISO 9001:2008 certified, the company also maintains API Spec Q1 Registration.

When Controller Ovide Mercure joined Frederick's Machine several years ago, the company was already using Global Shop Solutions ERP software, but only to create work orders and process inventory. Recognizing the system's unutilized potential, he brought in a Global Shop Solutions [Consultant](#) for several weeks of on-site training. Since then, Frederick's Machine has evolved into a lean, efficient manufacturer with complete visibility of data throughout the business.

"To say that Global Shop Solutions transformed our company would be an understatement," says Co-Owner Daniel Dore. "Going from a clunky DOS-based program to a fully integrated system with accurate [accounting](#), time management, [job costing](#), [quoting](#), [scheduling](#), [inventory](#) management and all the rest changed the way we do just about everything on and off the shop floor."

### **Getting the True Cost of Every Job**

After the on-site training, Mercure installed barcode stations and scanners on the shop floor to capture labor time more accurately. This enabled the company to eliminate their manual time cards by having operators [electronically log into workcenters](#). For the first time, managers could see exactly how much time people had on each job and whether the quote aligned with actual performance.

"Now, we can determine our true costs as soon as a job is finished," says Mercure. "Supervisors simply print their work order detail reports and the costs are right there for all to see. Having this data allows us to analyze our quoting and pricing to make sure we're charging what we should for every job."

## “WIPing” Inventory into Shape

Previously, Frederick’s Machine managed all inventories by hand using various spreadsheets. When people took material out of inventory, they relayed the information by word of mouth, and the material was removed from the appropriate spreadsheet. At the end of the month, Mercure reviewed the spreadsheets to come up with an estimate of inventory on hand.

“The spreadsheets were always tough to keep up to date,” he recalls. “People would forget to mark down what they took out of the yard, so we were always chasing down shortages. Now we issue material directly to the work order, which automatically keeps us up to date.”

“We also use Global Shop Solutions to assign work in progress (WIP) numbers, which makes it easy to manage finished goods inventory,” says Mercure. “Between the WIP report and issuing material directly to the job, I know we have accurate inventory counts.”

## Turning a Profit Even in A Slowdown

With the slowdown in the oil and gas industry, sales have declined for Frederick’s Machine and others who supply the industry. Using Global Shop Solutions ERP software helps protect margins even as the market becomes more competitive and prices come down.

“Currently, everyone in our market is quoting low in order to get work,” says Dore, “but we have a commitment never to quote to lose money. With Global Shop Solutions, we know exactly what a job costs and where we can trim costs to quote more effectively. The system helps us determine how low we can go with a quote and still make a profit on a job, and we trust the data.”

## Never Saying “We Don’t Know”

As competition for jobs heats up, it becomes even more critical to deliver them on time. With Global Shop Solutions ERP software, supervisors can see at a glance which jobs are on schedule and which are running late. This allows them to give customers a heads-up about impending late deliveries – a move they greatly appreciate.

“Every company will be late some of the time,” says Mercure. “As long as we call the customer in advance to let them know, they can adjust their schedule accordingly. The worst thing is for customers to call us, ask where their part is, and we have to say ‘we don’t know.’ With Global Shop Solutions, we never have to say ‘we don’t know.’”

## From Darkness Into Light

Ask Mercure to identify where Global Shop Solutions ERP software has made the biggest difference and he ticks off a long list of improvements.

Knowing the exact cost for every part as soon as it’s finished. Accurately computing WIP to ensure inventory accuracy. The ability to track jobs in real time from anywhere in the plant. Electronic processing of engineering change requests for improved quality. The list goes on and on.

“The software makes us so much more efficient,” says Mercure. “When operators arrive in the morning and log into the Shop Floor Data Collection stations, they already know what they’re going to do that day. When they finish at end of day, we know how many parts they have left to make and by when. We literally know everything about the job.”

“I like to say that we used to be in the dark ages, and Global Shop Solutions brought us into the light,” concludes Mercure. “In my estimation, it offers the best value in ERP systems on the market.”



*Subsea containment cap.*