

GLOBAL SHOP SOLUTIONS CASE STUDY

Davico Mfg.

A special exhaust manufacturer specializing in hard-to-find, direct fit catalytic converters, [Davico Mfg.](#) started in the service bay of a muffler shop operated by Owner Ray Surprenant's great uncle. Founded to meet a growing need in New England for replacement Subaru converters, Davico Mfg. has since grown into a leading producer of diverse exhaust products, including universal converters, pre-bent flex pipes, gaskets, oxygen sensors and flex couplings.



Prototype Manager Robert Hamel and Ray Surprenant review a new part.



Employees reviewing Davico Mfg.'s new robotic welding system.

Located in New Bedford, Massachusetts, Davico Mfg. operates out of 62,000 square feet of production space for its aftermarket catalytic converters and mufflers. Its skilled team of 75 employees is organized into three different "cells," one for high-volume runs of stock parts, one for medium-size runs, and one that produces runs as short as a single piece. The short-run team, which specializes in rare and hard-to-find catalytic converters, can build and ship a single piece in the same day they receive the order.

Prior to purchasing [Global Shop Solutions ERP software](#), Davico Mfg. used a first-generation production software program to run the business. While functional, it had no labor tracking capabilities or payroll integration. It also lacked "actual vs. estimate" tracking capabilities, which prevented management from measuring the efficiency of the short-run team against any kind of standards.

"Short runs are a small but important part of our business," says Surprenant, "because it makes a real impression on our warehouse distributors when we tell them we can build and ship a rare part the same day we receive the order. We also needed a better way of tracking job costs. Global Shop Solutions not only offers all these capabilities, it also has superb data integration for every area of the business."

98% On-Time Delivery

Upon implementing Global Shop Solutions ERP, Surprenant immediately set about using the software's robust data tracking capabilities to track open orders. The "Open Order" screen is particularly useful for this task, as it regularly refreshes the data as operators update each work order when they complete their portion of the production process.

At the same time, the "Current Work in Progress (WIP)" screen enables managers to identify any employees that significantly exceed standard so they can check for bottlenecks and quickly resolve them. Recently, Davico Mfg. took advantage of Global Shop Solutions ERP software's unique [customization capabilities](#) by having one of the Global Shop Solutions' [Consultants](#) create a custom display screen that delivers WIP data right into the welding booth.

“All these features allow our operators to track their own performance in real time,” says Surprenant, “which is especially helpful on the same-day delivery jobs.”

“If we don’t visually give operators the data,” continues Surprenant, “they have no way of evaluating their performance. Whether through the [Shop Floor Control](#) on the shop floor or the custom screens in the welding booth, Global Shop Solutions ERP software displays the data in a clear, easy-to-understand format so operators know at all times where they stand.”

Thanks to the open orders tracking and the visibility of real-time production data, Davico Mfg.’s on-time delivery rates, which they track daily, average 98% – including the same-day shipping orders.

“We get a lot of special and single-piece orders,” adds Surprenant, “and on-time delivery is paramount for these customers. They appreciate how we don’t drop the ball on the special orders we promise to ship at a certain time.”

Improving Labor Efficiency

Davico Mfg. also uses the ERP software to create individualized weekly scorecards for each operator. Managers pull data from the Shop floor Data Collection “Estimated vs. Actual” report and export it to an Excel spreadsheet. From there they create personalized scorecards that measure how each operator performed against standard, including any rework.

The process of tracking the data and creating the scorecard helps managers identify inaccurate standards, allowing them to adjust or refine processes to improve the standard. It also provides hard data when managers need to have conversations with operators about how to improve performance.

“Our operators like receiving the scorecards, because it allows them to have some input on what the standards should be,” notes Surprenant. “Before, they all had a general idea of how were doing. Now they can see it in black and white for each work order they worked on.”

Tracking Costs with Precision

As with any manufacturer, accurately identifying the [true costs of a job](#) is critical for quoting, pricing, and achieving the desired margins. With its superb labor tracking, inventory management and purchasing capabilities, Global Shop Solutions ERP software gives Davico Mfg. a precise picture of total costs as soon as a job is finished.

“When we build a new prototype, we may create a fixture for a part that we’ll make for 10 years,” explains Surprenant. “Having been in the business for so long, we have an expectation of how much time it will take and what steps will be required, but we need to know for sure. Without Global Shop Solutions tracking, we wouldn’t have the clarity around how long it takes to make a new part, which would make it impossible to correct a problem.”

Quadrupling the Business

Since implementing Global Shop Solutions ERP software, Surprenant and his team have grown the business four-fold in a little more than a decade. He attributes much of that growth to the ERP software’s ability to generate efficiencies throughout the business.



Welding a direct-fit catalytic converter.

For example, shippers regularly use the FedEx® and UPS® plug-in capabilities to eliminate time-consuming data entry. When an order is ready to ship, they simply type in the sales order number and the plug-in feature automatically populates the shipping address and other pertinent order info into the FedEx or UPS systems.

On the [payroll side](#), the accounting team uses Global Shop Solutions ERP software to automatically export all the data to Paychex®, which uploads the data, cuts the checks, and sends back reports that Davico Mfg. uses to auto-populate their general ledger.”



Automotive flanges cutting on a waterjet machine.

“Exporting payroll data is a huge time saver,” says Surprenant, “and was a big part our decision to do our financial statements in-house. It used to take months to get the numbers right, and now we can do it in a few days. As a result, we can follow the key numbers and react instantly any time we see any major discrepancies.”

“The ability to electronically upload customer orders also saves time and eliminates data entry errors,” adds Surprenant. “Our bigger warehouse customers will often order a few pallet loads of varying catalytic converters, all of which have different product numbers and production specs. We no longer have to manually enter the data because we import it directly into Global Shop Solutions, which makes it easier to deliver on our same-day products.”

Using Business Intelligence for Competitive Advantage

While managers and operators use the software to track and manage the production process, Surprenant focuses more on the [Business Intelligence](#) application. Here he gets the high-level data he needs to make more informed business decisions regarding customers, product lines, low-margin products and other metrics that directly affect cash flow and the bottom line.

“I’m constantly using the module to monitor open orders, labor dollars, estimated versus actual, and inventory levels,” says Surprenant. “Every day I pull stats from the software regarding our customer mix, dollars shipped, and parts from inventory versus parts not from inventory, which helps me understand where our inventory levels need to be. Business Intelligence provides easy access to a good mix of production and financial data that gives me a big picture look at what’s going on throughout the business.”

Individual features and capabilities aside, Surprenant considers Global Shop Solutions ERP software’s superb data integration as its primary benefit. Having access to so much real-time and historical data in one centralized system enables everyone in the company to work together from the same page.

“With Global Shop Solutions, designing and building a prototype and making it available to all our customers averages slightly less than a week,” states Surprenant. “We think it takes many of our competitors three to four months, which gives us a real competitive advantage.”