

GLOBAL SHOP SOLUTIONS CASE STUDY

RK Mechanical, Inc.

RK Mechanical, Inc. started out as a full-service plumbing, mechanical and process piping contractor and fabricator 50 years ago. Since then, the company has developed several different business units, expanding its products and services to include HVAC sheet metal ducting, fabricating and installing structural steel products, energy industry services, and the production of water treatment systems.



RK's headquarters in Denver, Colorado.



Finished products waiting to be shipped from the yard at RK.

Headquartered in Denver, Colorado, with a second production facility in nearby Henderson, RK still looks to its contracting unit as the primary source of business, performing plumbing work in new building construction and renovations while offering a complete start-to-finish process that includes design, factory fabrication and installation. Among its many accreditations, RK is ISO 9001:2008 registered and AISC certified.

Unlike most Global Shop Solutions customers, RK implemented the ERP software to augment rather than replace existing business management software systems. Despite having multiple software systems in place, accurately tracking labor and production costs across two locations, four business units, and seven different shops that collectively handle hundreds of work orders at any given time proved to be an extremely difficult task. After researching Global Shop Solutions' robust [shop floor](#) and data integration features, RK management decided to add it their suite of software systems.

Also unlike most Global Shop Solutions customers, RK only uses a few of the software's many applications.

"We use Global Shop Solutions primarily to generate work orders and track labor hours in all the shops," says Randy Renwand, Production Engineer and Global Shop Solutions administrator for RK. "We have 11 [Shop Floor Data Collection stations](#) at our two locations, and workers use them to scan their badges and the work orders to log into a job. We then export the labor hours data out of Global Shop Solutions into our primary system, and it performs [payroll](#) for all the shops."

Renwand appreciates Global Shop Solutions ERP software's ease of work order generation and ability to capture time and labor hours with precision. But he sees its real value as bringing standardization, data visibility and [customization](#) to the company to help cut costs on the shop floor.

"One of our biggest challenges is the fact that each of our business units has its own management structure, which makes it difficult to integrate production information," says Renwand.

“Even though we’re only utilizing Global Shop Solutions in a few areas, it gives us the ability to integrate data from dozens of different sources into one system and process that data in a standardized manner,” he says. “Given all the software can do, we’re probably underutilizing Global Shop Solutions. But with 50 people in management all tugging in different directions, doing the work orders and labor tracking in Global Shop Solutions gives us some much-needed standardization. If we didn’t have an integrated work order system in Global Shop Solutions, we would probably have seven different work order generation methods.”

This standardization especially helps with the company’s inter-shop transactions. For example, the pipe shop is part of the contracting unit, but it also supplies assemblies to the energy business unit, which requires a lot of data sharing back and forth. According to Renwand, tracking labor and generating works orders would be several orders of magnitude more difficult if they were on different systems.

“We have separate production planners in each shop/business unit,” he says, “and they all know that if they need a work order, they have to produce it in Global Shop Solutions.”

Data Visibility Yields Impressive Results

Even with minimal use, Global Shop Solutions ERP software has generated some very impressive numbers for RK. For example:

- 30% reduction in **inventory carrying costs**
- 50% improvement in on-time delivery
- Data retrieval is up to 400% faster
- **Scheduling time** reduced by 50%



RK employees working on a diverse array of sheet metal products designed and engineered at the facility.

Renwand attributes most of these gains to the superb visibility of data within Global Shop Solutions ERP software.

For example, the switch from paper time cards – where several hundred employees manually entered their hours line by line on a weekly basis – to Shop Floor Data Collection stations has cut payroll processing time by 90%.

“Workers scan their time and Global Shop Solutions exports into the payroll system at the touch of a button,” says Renwand. “It’s that simple.”

An important productivity report for the structural steel division used to take four hours each week to produce. With the data now coming directly from Global Shop Solutions ERP software, it takes less than an hour.

With so much information residing in other systems, RK has to import data into Global Shop Solutions ERP software to create their work orders. Even so, the ERP software has still reduced scheduling time by half with its backwards scheduling function. All of which contributes to faster, better management decisions.

“Now that we get real-time data from the Shop Floor Data Collection stations, we can analyze it directly in the system as opposed to having to export it to a spreadsheet or some other external system,” says Renwand. “We can also track estimated versus actual hours, employee performance, shop performance, and identify what’s going on in the work orders. We can tie our labor codes into our work orders so we can track performance for each job, allowing us to improve labor efficiency. We can now see interactions between shops. We can do a lot of things we couldn’t do before simply because the data wasn’t available.”

Customization Features Stand Out

An experienced Global Shop Solutions ERP software user at multiple companies, Renwand really likes the software’s ease of customization.

“I’ve worked with six or seven different ERP systems, and Global Shop Solutions allows more customization than any of them,” he says. “It’s a terrific feature you don’t see in most other ERP systems.”

For example, RK uses a custom GAB (Global Application Builder) script to track employee injuries. And Renwand often downloads popular customizations from ARC (Application and Reporting Center), Global Shop Solutions' online store where customers have access to more than a thousand free custom applications.



The RK pipe shop where pipes are produced, cooled, and stored before being shipped to customers.

"I recently downloaded the color coding by workcenter dispatch in the Shop Floor Data Collection station," says Renwand. "This highlights information in red, green and yellow, depending on the characteristics of each work order or workcenter, allowing us to **reduce paperwork on the shop floor**. Shop floor personnel can refer directly to the Shop Floor Data Collection screen to get their work instructions and see how things are going. They don't have to waste time hunting down paper or talking to someone. This one simple app greatly simplifies the process and cuts down on paper."

Renwand also has extensive experience **writing Crystal reports**, which he puts to good use with Global Shop Solutions ERP software. He has created some labor performance charts and reports that the energy business unit uses to make decisions at weekly management

meetings. Custom reporting helped reduce the time it takes to produce the steel unit productivity report from four hours a week to less than one. And the business units manage their shop schedules based on custom Crystal reports with data that comes directly out of Global Shop Solutions ERP software.

Cutting Costs, Supporting Growth

Renwand also credits the newfound ability to integrate data across multiple business units with helping to reduce costs and support RK's growth – 20% overall since implementing Global Shop Solutions ERP software.

"The cost reductions we've generated with Global Shop Solutions allow us to bid more competitively, and the efficiency of operations allows us to meet schedule demands," he explains. "For example, we've increased productivity in our sheet metal shop by about 20% in the past year. I attribute that to our lean manufacturing initiatives, which Global Shop Solutions supports very well."



RK's second production facility in Henderson, Colorado.

Although RK Mechanical uses only a small portion of all that Global Shop Solutions ERP software has to offer, that portion is growing daily as the company is able to integrate it into their continuous growth plan. Renwand highly recommends the software for manufacturers looking for a complete business management system.

"Global Shop Solutions offers a broad scope of shop floor and business functions that cover all the bases," he says. "When people ask me if the software can do something, 99% of the time I say yes. And if it can't, the folks at Global Shop Solutions will work with you to find a way to do it."

"Global Shop Solutions offers great technical support," he concludes. "The customization features can't be beat. And the company constantly upgrades the software. By staying on the cutting edge of software development, they make it easier for us to stay current in our own industry and better serve our customers."