

GLOBAL SHOP SOLUTIONS CASE STUDY

Richard Manufacturing Company

Specializing in wiring and interconnect technology, *Richard Manufacturing Company (RMC)* turns out a variety of products and services for companies in the defense industry, including Boeing, Lockheed Martin, Northrup Grummon, and the U.S. government from their headquarters in Ogden, Utah.



RMC team members pose for a group photo.



A wire harness used in military aircraft and missile systems.

Founded in 1979 by Quinn Call, the company's products include wiring harnesses, electronic, panel, and cable assemblies, test sets, coax cables, and other electromechanical components. Their technical services range from design and engineering to laser engraving, wire stamping and braiding, painting, and tooling.

Acknowledged experts in aircraft wiring, RMC parts go into a variety of aircraft, including two of the most important fighter planes in the U.S. military – the F15 and F16. In addition, the company makes parts for ICBM missiles and various types of ground equipment. A six-time winner of the U.S. SBA Administrator's Award for Excellence, RMC has also earned numerous vendor awards – including the Boeing Supplier Gold Excellence Award from 2008 to 2010 – and is ISO9001:2008 and AS9100: C registered.

A Global Shop Solutions customer since 1999, RMC chose the software because it seemed like the best fit for the company. Management also liked the high level of customer service, as well as the flexibility and adaptability of the software.

"Before Global Shop Solutions, we did just about everything manually," recalls Teresa Stakebake, a second-generation owner of the business. "We had an accounting package and a purchasing/inventory software, but they didn't share the data, and both programs had very limited capabilities."

"Bringing everything together under one umbrella with Global Shop Solutions has saved a lot of time and hassle," she says. "It has also eliminated the multiple data entry mistakes you often get with manual processes. With Global Shop Solutions, you enter the data once and it gets populated throughout the entire system."

Handling Customer Changes

Shortly after implementing Global Shop Solutions ERP software, RMC began to experience significant improvements in shop floor efficiencies and productivity. One of the first areas to yield noticeable returns was **job costing**.

"With our previous system, we used a lot of different spreadsheets to track costs," says Stakebake. "Every time we paid for something we had to log it manually – a slow, cumbersome and inefficient process. Now, Global Shop Solutions automatically tracks the costs for each work order. Not only do we have better visibility of the data, we also get it in real time. This enables us to make decisions while jobs are in progress rather than after the fact."

As a **custom job shop**, RMC starts almost every job from scratch. In some cases, they partner with the customer to design and engineer the part. Other times they work directly from customer-provided blueprints, drawings, and spec sheets. Either way, the requirements of producing custom parts and assemblies present numerous challenges on the shop floor, especially in terms of estimating, quoting and responding to customer changes.

“We get a lot of customer changes,” acknowledges Stakebake, “the toughest of which come during the design or engineering phases. A customer may determine that a part is too big or too small, or they might decide to change the part all together. Global Shop Solutions makes it much easier to track these changes and to verify that we have the stock we need to make the new part.”

As any manufacturer knows, customer changes can easily throw the proverbial monkey wrench into the job schedule, especially when new parts need to be ordered. Here’s where the **Advanced Planning & Scheduling (APS)** application lends a hand.

“Since we make virtually every part from scratch, it’s hard to get a good feel for what our schedule looks like until we get all the materials in,” explains Stakebake. “APS allows our scheduler to go in and adjust schedules based on whether we have to buy a different material or make other adjustments. He can also see the impact of any scheduling changes on other jobs. For example, if we need to push a job out, Global Shop Solutions immediately shows how other jobs, including work loads at individual workstations, will be affected.”

Managing Minimum Purchases

Considering that RMC has thousands of custom parts and stock **parts in inventory** at any given time, it’s not surprising that Global Shop Solutions ERP software made a real impact in this area as well.

With just a few clicks of the mouse, anyone in the company can determine which parts are in inventory, how many of each, and where to find them. In addition, RMC often has to make minimum buys when purchasing parts, even when they don’t need that many parts. For example, they may only need five of a certain part, but the vendor requires them to buy 10. This results in a sizeable “residual” inventory of parts not used in different jobs.

Global Shop Solutions ERP software tracks these residual items separately from the main inventory, while providing the same level of data visibility regarding what kind of parts, how many, and where they reside in the warehouse. This instant access to inventory data also prevents buyers from over-ordering when newly scheduled jobs can use residual parts.



An inside look at a panel assembly.

According to Travis Smith, IT Administrator for RMC, having minimum purchases with residual leftover has actually helped in the firm’s bidding and sales department.

“Because this residual stock is already paid for, in some cases we can undercut a competitor’s price,” he explains. “We can offer a part at discount or even at cost rather than trying to get our usual margin. As a result, we can lower our competitive bid and win more jobs that way.”

“Additionally, we need to have complete traceability of every part for our ISO certification,” he adds. “With Global Shop Solutions’ lot-to-lot and bin-to-bin tracking features, we get the level of traceability we need without breaking a sweat. Any time we receive parts from a vendor, we assign a lot number to those parts. Using that lot number, we can trace the part throughout the system and maintain our certifications because the data is so easily found.”

Seeking New Efficiencies

Like any owner, Stakebake needs a high-level view of what’s happening on the shop floor and in backroom departments in order to manage the business. However, her primary duties involve overseeing the **accounting** and **human resources** functions.

Accordingly, she spends much of her time in Global Shop Solutions ERP software, monitoring what employees are working on, how many hours, and other workforce metrics.

She also spends a lot of time in the [Accounting application](#), keeping an eye on the general ledger, accounts payable and receivable, and making sure the books balance properly.

Although Smith focuses mainly on the administrative aspects of Global Shop Solutions ERP software, he dabbles in just about every part of the software. Recently, Stakebake tasked him with learning the deep details of each application in order to find new efficiencies for every department in the company.

“Most of our people are so busy with the production aspects of their jobs that they don’t have time to get engrossed in the fine details of the software,” he explains. “My primary responsibility is to explore the software and come up with new ways Global Shop Solutions can improve everyone’s jobs.”

“I started off in the sales department, moved to the [estimating and routing features](#), and now I’m starting to dive into the [customer relationship management application](#),” says Smith. “Along the way, I’ve discovered a few areas where Global Shop Solutions doesn’t quite fit what we want to do. So I’ve put in some service requests, asking Global Shop Solutions to tweak a few areas so they better align our needs.”



One of many electronic assemblies produced by the RMC team.

Even for someone with an IT background, getting to know Global Shop Solutions in its entirety can be a daunting task. Smith gets assistance from Global Shop Solutions ERP software’s voluminous help files. He makes extensive use of the online training videos. And he regularly visits the virtual forums to see what projects other Global Shop Solutions customers are working on.

Along the way, Smith has learned to write [custom Crystal reports](#) to format data the way people prefer to see it. He also uses Access to extract data from the ERP system and help format the custom reports. His next venture involves testing out the powerful [Global Application Builder \(GAB\)](#) that customers can use to create custom enhancements to the software.

“Global Shop Solutions has so many features that you want in an ERP software,” says Smith. “It’s logically developed, yet intuitive and easy to use. It makes sense in terms of where things are and why they’re there. It gives you the ability to adapt the software, manipulate the data, and write reports to format the data exactly as you want.”

“I also love the formulas written into the software,” he adds. “The developers created the tables and field names so logically that even if you don’t know a lot about the system, you can dig in and find the data you need relatively quickly.”

Superb Visibility of Data

Ultimately, says Stakebake, Global Shop Solutions ERP software is all about integration and visibility of data – essential ingredients for competing in today’s global markets.

“Global Shop Solutions puts the entire history of every job at our fingertips,” she says. “We can go back and look at similar jobs to improve our quoting and estimating. We can look back at what we paid for different parts. Having all that data in front of us when making key business decisions is invaluable.”

“Global Shop Solutions is remarkably adaptable,” she concludes. “Now that we have someone in-house who can write reports in Crystal, we can pull the data out of the system in formats that work for us and for our customers. Having all the data tied together in one system is a huge benefit. And to top it off, Global Shop Solutions has great service as well. When we need help, I know that we can contact Global Shop Solutions and quickly get the answers to any questions or issues we may have.”