Manufacturing Resource Group

Founded in 1988, Manufacturing Resource Group (MRG) is a leading manufacturer of electromechanical and cable assemblies, including custom cable and wire harnesses that involve anything from fans and pumps to straight wiring connections. Headquartered in Norwood, Massachusetts, with a second plant in Mexico, the family-owned business serves a wide range of industries, including industrial, military, medical, telecommunications, automotive, lighting and more.

An MRG employee hand-building custom cables.

A worker machine crimping at MRG.

MRG's cable assembly products range from battery and wire harness assemblies to coaxial, fiber optic, and IDC ribbon, while its electromechanical assembly products include wire, battery, fan trays, power supply and more. The company also offers a variety of engineering, program management and material, logistic and inventory management services. Committed to quality, MRG is ISO 9000 certified, and has a pending 13485 Medical ISO.

Like many manufacturers, MRG used a variety of manual processes and software products to manage production, accounting, and other activities required to operate a busy shop floor. When they sought an integrated ERP solution to cut costs and simplify production and administrative processes, they chose Global Shop Solutions.

"There are many good ERP systems out there," says Jay McGarry, IT Manager for MRG. "But when you buy them, you get their out-of-the-box functionality and that's it; everything else costs extra. We liked the flexibility and easy customization that Global Shop Solutions offered, especially the ability to write our own custom reports and Global Application Builder (GAB) scripts without paying an arm and leg to do it."

Better On-Time Delivery

On a busy shop floor, efficiency starts with simplifying processes and eliminating duplicate efforts. Lacking an integrated production management system, one of the biggest time wasters for MRG involved chasing down information about the status of job orders. The poor visibility of information also contributed to low on-time delivery rates. Global Shop Solutions ERP software eliminated the need to chase down information by making it instantly available with just a few clicks of the mouse.

"Before Global Shop Solutions, it wasn't unusual to have someone running across the shop floor with a piece of paper in his hand saying, 'This needs to go out today! Where is it?'," recalls McGarry. "Then everyone had to stop what they were doing to track down the order. With Global Shop Solutions, we can see everything about a job: where it is, what material has been issued, what's been done, and who's got it. It's all there in one central location, and is easy to read and understand. As a result, we work more efficiently and our on-time delivery rate has gone up significantly."

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Change Orders Made Easy

Global Shop Solutions ERP software also helped MRG overcome another common shop floor headache – fitting in customer changes or rush orders without disrupting the entire schedule. When a customer needs a job pushed up, MRG turns to the Advanced Planning & Scheduling (APS) module for assistance – in particular its "what-if" scheduling functionality.

What-if scheduling allows planners to test different scenarios by seeing what happens to other jobs when one gets moved around. APS also provides a variety of graphs that identify at a glance whether MRG has the capacity to load more work into the schedule. This is especially helpful when managing change orders to work in progress.

"Suppose we're halfway through a job and the customer needs one small change," says McGarry. "In the past, we probably would have sent out half the parts with the old rev, and have the customer send them back to redo with the new rev. With Global Shop Solutions, we can find out where the parts are on the floor, pull them off, run a change order through the system, and get the change done effectively. We can literally interrupt jobs in progress and finish them the way the customer needs them."

Increasing Profit Margins

As the company's IT expert, McGarry appreciates the easy customization of the software using the GAB functionality and Crystal reports. He regularly writes custom GAB Dashboards to help people perform their jobs more efficiently. He also creates Crystal reports that format financial data the way senior management likes.

"I use GAB for a lot of little things," says McGarry. "For example, I'll add a text box that won't let people tab to the next field until they enter the right data for a customer. These small changes save time by making sure we enter the data correctly the first time."

The timesavings from Global Shop Solutions ERP software don't stop there. Instead of poring through many different spreadsheets containing BOM and pricing information, salespeople can now pull the information they need to quote jobs from a few simple screens. When faulty products are returned, QC personnel can quickly track them back to the employee, find out why they weren't done properly, and take corrective action. Instead of requiring several people and many different processes, job costing is now accomplished in far less time.

An employee testing cables at the MRG testing center.

"We used to struggle to determine the costs associated with each job," says McGarry. "Now with just a few clicks of the mouse, we know exactly what a job cost us. We also know how much time we're putting into each job, so we no longer have to 'ballpark' labor costs."

"The auto purchasing module has made a huge difference for us as well," adds McGarry. "Using our old system, it took a day and a half to put together one day's worth of purchasing requirements. Global Shop Solutions can do it in one-third the time. That alone helped increase our profit margins by 3.5%."

Creating Happy Customers

According to McGarry, the secret to MRG's success – or any business – is creating happy customers.

"Making cables is what we do," he explains, "but ultimately we're in the business of making our customers happy. From purchasing to estimating and routing to being able to track orders on the floor, Global Shop Solutions helped us become more efficient internally so we can provide faster, better service to our customers."

"For example, when a customer needs a quick turnaround on a job, the superb visibility of data in the software allows us to quickly determine whether we can meet the deadline, which makes us more responsive," says McGarry. "We also have better control over inventory through the cycle count system. And since we no longer waste time chasing down data, our on-time delivery rate has gone up. All of which contributes to making our customers happy."

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When asked what Global Shop Solutions does to make MRG happy, McGarry responds with a long list of things you don't find with many ERP companies, starting with excellent customer service and support.

"If I have an issue, I can call Global Shop Solutions and usually get an answer within 20 minutes," he says. "If not, I send an email and someone gets back to me right away."

McGarry also likes the way Global Shop Solutions keeps upgrading the system and adding new features – often taking enhancements designed for one customer and making them available to all customers as part of the next software version.

"Last year, we asked Global Shop Solutions to design a way to break out material and labor on finished good items we have in inventory," he says. "They could have turned it around in a week for us. Instead, they thought it was such a good idea they're including it in the next version. To find a company that really listens to the customer and responds like that is rare indeed."

"I have nothing but positive things to say about the software and the company as a whole," concludes McGarry. "When we have a problem, Global Shop Solutions always responds to give us an answer. They listen to their customers and use the feedback to make their product better. That's how we operate as a company, and that's one of the reasons we use Global Shop Solutions."

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