

GLOBAL SHOP SOLUTIONS CASE STUDY

Solar Spring & Wire Forms

Solar Spring & Wire Forms began in 1979 out of founder David Diaz' garage with one small machine making one spring at a time. After a few years, through diligent efforts and quality products, Solar Spring landed General Motors, Honda, Kodak, John Deere, and other major businesses as clients and moved into the 80,000 sq. ft. Elk Grove Village, Illinois, plant where they are located today.



Solar Spring workers operate a rapid wire coiling machine.



A high-speed horizontal metal forming machine in the plant.

“Global Shop Solutions is always a step ahead of us,” says Emilio Ortega, the Quality Director of Solar Spring. “We’re always trying to catch up with all of their innovations and updates.”

Ortega also serves as the ERP Implementation Director for Solar Spring, and it is in this capacity where he sees the return on investment provided by the many features of their Global Shop Solutions ERP software. In fact, simplified ERP was their original criteria in searching for fully integrated, robust manufacturing software. And in Global Shop Solutions, they found not only the product they were looking for, but they also found another family-owned business that has grown into industry significance from modest beginnings.

“We started using Global Shop Solutions in 2004,” Ortega remembers. “We had looked at several other ERP software, but they were very difficult to communicate with – one company seemed to be going through a series of several acquisitions. We took the position that we were a small company, and to get our voices heard by our ERP software provider, we needed to feel that we were linked in a partnership with them. This is something we consistently experienced with the people at Global Shop Solutions, and as they are a family-owned and operated company, there was commonality with them along these lines.”

Since making the move to Global Shop Solutions ERP software, Solar Spring has realized that it is one of the best decisions they made in terms of gaining productivity through efficiency. For Solar Spring, the ERP software is a flexible manufacturing tool into which they can continuously grow.

“I still look around at Global Shop Solutions’ competitors in terms of features, and Global Shop Solutions is by far the best, the most competitive, and still the best value around in ERP software,” says Ortega. “Global Shop Solutions is a valuable tool for us, and that’s why we’ve been with them for many years and will continue to grow with them in the future.”

The Right ERP Solution

When you’re making millions of springs, stampings, and wire forms each year, keeping track of data moving through the shop is perhaps the most demanding task of management.

The key to success in such a manufacturing scenario is to keep the data flowing in real time. However, in the absence of an integrated ERP system, this is virtually impossible. The ongoing management of labor, time and attendance, production scheduling, inventory, raw materials, and so forth, requires an ERP materials and management solution that is powerful, accurate, and fast. In Global Shop Solutions ERP software, Solar Spring fulfills their needs in a one-system approach that employs real-time data from every aspect of the manufacturing operation.

“The **Inventory application** and the Supply & Demand screen are probably what we use the most,” observes Ortega. “This is because they link into so many other modules, and with them we’re quickly able to answer any internal or customer-originated questions. Also, because we are constantly handling various engineering plans and schemata, we make great use of the **Document Control module**. This means that we’re able to attach documents onto each work order through the system, and this provides another great advantage for our bottom-line efficiencies.”

With most of their 170+ machines in use at any given moment, the management of material that moves about the shop floor has always been a major consideration, and one that Global Shop Solutions ERP software facilitates with unsurpassed ease. Incorporating automated purchasing, inventory monitoring, shipping, and tracking, the ERP software provides a quick and easy assessment of materials status at the touch of a button.

“On the shop floor, we use the **Shop Floor Data Collection stations** and **barcoding setup** all of the time,” says Ortega. “We use them mostly to track material and this is a big thing for us. We also use the stations so our operators can log-in, log-out of their work orders and for their payroll.”

“Sometimes our customers want a copy of the materials certification,” he adds. “When the shipping people used to manually get this information from our purchasing person, this created a lot of delays. Now our shipping person can print the certification directly from the screen and pack it up right away and send it with the part.”

ERP Software Means Performance

As a producer for the **automotive industry**, Solar Spring knows the performance demands required by their customers: quality, pricing, and on-time delivery are paramount. Though all of these areas are operationally intertwined, each is functionally independent and requires varying degrees and types of data to maintain continuity of high performance and lean results.

For example, in terms of quality, shop floor operators must be apprised of engineering changes as soon as possible to avoid machine downtime and scrapped production. As Ortega points out, Global Shop Solutions is a complete ERP software with features designed especially for the maintenance of quality machine shop output.

“With the many types and volume of products we make, and the constant orders and changes that are coming from our customers, the various modules provide the best way we’ve found in keeping up with our production schedule, our operators, and the quality of our products in the quickest and most efficient possible way,” he says.

In today’s hyper-competitive manufacturing environment, it is the notion of on-time delivery that may make or break the ability of a vendor to maintain an automotive industry client. Since the implementation of Global Shop Solutions ERP software, Solar Spring has seen a significant increase in their ability to meet delivery due dates – testimony to the overall increase in performance realized in all areas of their operation.

“Global Shop Solutions has really helped us in terms of on-time delivery,” explains Ortega. “We’re now at about 96% compared to only the high 80s before Global Shop Solutions. It used to be that we would have to run through spreadsheets and wait until someone entered the final day, calculate it, make graphs, and so on.”



A series of multi-slide metal strip processors produce high quality mounting plates for automobiles and ATVs.

"Sometimes, this type of report would take a week or two, or even longer," he continues. "The lengthy time delay made it more difficult to respond to a particular incident. Now, at the touch of a button we can see our performance. We can also produce a graphic picture of what our on-time deliveries look like and make any adjustments in scheduling based upon that outlook as provided by Global Shop Solutions."



One of the horizontal machines at Solar Spring

A Valued Partnership

As a manufacturer grows from a garage-shop to a major, minority-owned business in the United States, their success is the culmination of hard work, quality products, and savvy business decisions. For Solar Spring, the decision to make the move to Global Shop Solutions ERP software was one that enhanced their already well-regarded abilities to produce quality metal-form parts for the automotive industry.

Their powerful ERP software has proven itself time and again to be able to bring together real-time data that Solar Spring management is able to easily assess.

The continuous innovations that Global Shop Solutions brings to the software, through extensive research and development, are made with emerging and future manufacturing needs in mind. It is, perhaps, this latter quality of the software that Ortega concludes is the most appealing aspect of the relationship they have with Global Shop Solutions.

"Global Shop Solutions has helped Solar Spring become successful because they understand that the industry we are in is a constantly changing industry," he concludes. "Global Shop Solutions research and development has kept one step ahead of these changes in the market, and this is important to us on many levels. Mostly, what Global Shop Solutions has done is provide innovations in manufacturing software that we at Solar Spring can use to keep us ahead of our competition in the industry."