

GLOBAL SHOP SOLUTIONS CASE STUDY

BHI Solutions

Long recognized as one of the best metal forming companies on the West Coast, [BHI Solutions](#) manufactures a wide variety of metal parts for industries ranging from auto and aerospace to defense, electronics, medical hardware, and telecomm. Their custom products include springs, stampings, wire forms, and slide products, and the company also offers assembly services and tooling. BHI Solutions is ISO 9001:2008 registered, and is currently pursuing AS9100 quality management system certification.



BHI Solutions' production facility in Tijuana, Mexico.



An overhead view of the coiling workstation.

50 Years and Going Strong

The year was 1961. Two experienced metal stampers, Jack Bazz and Chet Houston, decided to combine their skills and financial resources to create their own metal forming business. Starting out in a small garage with a single stamping machine, the two quickly developed a reputation for producing quality metal-formed products. From this humble beginning, BHI Solutions has grown into a versatile metal forming company with more than 100 employees working out of two manufacturing plants in Garden Grove, California, and Tijuana, Mexico.

Fifty years is a long time for any company to be in business. But when you walk through the doors at BHI Solutions, you get a sense that the best is yet to come, in large part because of people like Pete Madrid. As production manager for both plants, Madrid is a devoted student of [Global Shop Solutions](#) ERP software, constantly soaking up everything he can learn about the software, even in areas that have nothing to do with production. His enthusiasm and passion for getting the most out of Global Shop Solutions ERP software has rubbed off on people at all levels of the organization. As a result, the entire company has embarked on a journey to grow from basic to advanced users of the system.

Two Plants, One ERP System

Operating two plants in two different countries presents unique challenges for any manufacturer, especially in the areas of information tracking and management.

Global Shop Solutions makes it easy to operate both plants from the same system by setting up different company codes for each plant. That way, Madrid can keep the data from each plant separate, but can also access information from either plant simply by opening different screens from his computer terminal. More important, it allows him to manage both plants from one location.

"We basically run the business out of our U.S. plant," says Madrid. "Our engineering support team, salespeople, and administrative staff all work out of the U.S. plant. We do all the purchasing for both plants here in the U.S. And when a customer calls to place an order, the phone rings here in Garden Grove, regardless of whether they're calling from Mexico or the U.S."

"[Purchasing](#) is just one example of how Global Shop Solutions makes it easy. By having the versatility of two companies in the system, our buyer can log in and create purchase orders for either company with just a few clicks of the mouse. This greatly simplifies the process of tracking our purchases and making sure they get assigned to the right jobs in each plant."

With many of its customers located throughout all regions of Mexico, BHI Solutions opened the Tijuana plant in order to move most of the labor-added steps for those parts closer to the customer. With a Maquiladora permit, they can also move parts manufactured in the U.S. and warehouse them in Tijuana so that their Mexican customers can pull parts as needed.

Either way, it requires a system that can accurately track which parts are made where, when they move from one plant to the other, how much labor time is required at each location—all the things companies normally track at one plant but are now split between two. According to Madrid, Global Shop Solutions coordinates the flow of information between both locations with ease. It also facilitates the process of working with outside vendors for parts that need secondary processing.

"Many of the parts we make in Tijuana get sent out for capping or additional plating," notes Madrid. "Because the labor rate for those operations is much cheaper in Mexico, that's where our real cost savings come in. Global Shop Solutions helps us manage those outside operations by putting all the information I need right at my fingertips."

Supply and Demand

As a dedicated student of Global Shop Solutions, Madrid strives to learn as much as he can about every application in the system. But when it comes to his job responsibilities, he tends to focus on a few applications that help him track and manage all the activities on the shop floor.

Which applications does Madrid use the most?

"I live in the supply & demand application," he says. "It's the first screen I open in the morning, and I typically keep it open throughout the day. I have a separate supply & demand screen for each plant, so I can easily navigate to anywhere I want to go in the system. For example, one way we sort our part numbers is through customer codes. When I want to link all the part numbers for a particular customer, supply & demand lets me use those codes to quickly find all the different parts we make for that customer."

"I also keep the work in progress and [Advanced Planning and Scheduling](#) (APS) screens open throughout the day so I can see what's happening on the shop floor at any given time. I don't do any scheduling, but I'm constantly looking at the APS screen to make sure we have the right loads on the machines and that people are doing the right things based on what we have scheduled."

Operational Efficiencies

One of the main reasons companies purchase Global Shop Solutions is to simplify operations and improve shop floor efficiencies. BHI Solutions is no different.

"The ease of navigation throughout the system, the ability to go into different areas and get information quickly—that's where Global Shop Solutions has really simplified things for us," says Madrid. "And not just on the shop floor, but in every department. When someone needs information about a particular job, work order, purchase order



BHI Solutions' punch presses turn out a wide variety of metal stampings.

or customer, they don't have to call somebody on the phone, root through file cabinets, or try to track somebody down on the shop floor. They just go into the system and get it. With Global Shop Solutions, you can't help but get more efficient!"

While Madrid points enthusiastically to the operational efficiencies already generated by Global Shop Solutions, he gets even more excited about the new ones he and others in the company are currently implementing.

For example, BHI Solutions recently installed several [Shop Floor Data Collection](#) screens in their Tijuana plant. These allow workers to electronically log on and off jobs without having to write out timecards or fill in manual job logs. They also enable workers to access information about individual jobs without leaving their workstations. At the U.S. plant, workers are currently preparing the areas where the flat-screen monitors will go. Once in place, these will allow U.S. workers to clock in and out electronically like their Tijuana counterparts. They will also allow the plant to migrate to a system where all routers and work orders are delivered electronically—a huge time saver on busy shop floors.

"We've also implemented the [Document Control](#)™ feature, which has proved to be another real time saver," says Madrid. "We used to make copies of all our material certifications as the materials came in. Recently, we scanned all those certifications and created a directory for them so that all the information is in Global Shop Solutions. Now when materials come in, we use Document Control to automatically link them to the right certifications."

"Also, sales is looking into forecasting, a tip we picked up from a recent [Friday Feature](#). Once we get up to speed with forecasting, purchasing can begin looking at raw materials requirements three to four months out and begin negotiating with buyers for a whole quarter's worth of materials."

Upgrading Their Global Shop Solutions Skills

Another feature that Madrid loves about Global Shop Solutions is the many different ways users can learn more about the software. In particular, he likes the Friday Features and online video training classes.

"I'm always learning new things about the software," he states. "Every time someone shows their desktop on a Friday Feature, I see buttons and features I've never seen before. So I quickly try to figure out how they got that button and how we can use that feature in our business."

The best part is that Madrid's passion for learning has caught on with his co-workers. Everyone in the company now participates in the online classes on a regular basis. Most do it on an individual basis during lunch. But often a group of employees will get together to tackle a certain task or take a refresher course in one area of the software.

Madrid also loves to participate in the [Global Application Builder](#) (GAB) Forum, an online forum where Global Shop Solutions customers exchange ideas about how they use the software to simplify processes. Here he continually picks up good ideas for the shop floor and other areas of the company.

"We're working on a good one I picked up a few weeks ago," says Madrid. "Normally you have to select all the different workcenters each time you create a router. Global Shop Solutions wrote a GAB application, called the Router Wizard, that lets you identify those workcenters in advance in a spreadsheet. Once it's finalized, you can dump the spreadsheet into Global Shop Solutions and it automatically creates routers for you. Talk about a time saver!"

With these and other improvements taking place on a regular basis, Madrid believes that BHI Solutions is rapidly moving toward the point where most employees can use the software at an advanced level.



BHI Solutions employees using precision tooling to produce wire forms and fourslides.

“We still have a lot to learn about the software,” concludes Madrid, “but whenever there’s an update I read everything about it, regardless of whether or not it pertains to production. When I see something that could help someone, I go to that department and suggest they check it out. And with everyone joining in on all the Friday Features, people are starting to see all the new bells and whistles that Global Shop Solutions has added to each application.”

“I like the fact that Global Shop Solutions continues to work hard at staying ahead of us by constantly adding new features to the system. For example, since I started with the software they’ve added many new buttons to the supply & demand application that make it more versatile than ever. These new features keep me on my toes, but that’s a good thing. As long as Global Shop Solutions stays ahead of the game, we’re the ones who benefit.”