

GLOBAL SHOP SOLUTIONS CASE STUDY

Becker Electronics, Inc.

Becker Electronics is an electronics contract manufacturer, specializing in custom cable assemblies, harnesses and mechanical assembly services. Headquartered in Ronkonkoma, New York, the company serves a variety of industries that require precision electrical assemblies to build their products. These include aerospace, audio, computer equipment, home automation, machine tooling, medical equipment, military applications and more.



Their assemblers have the experience and dexterity to complete intricate and delicate soldering items.



Becker Electronics excels at quickly producing large quantities of box builds.

Founded in 1996, Becker Electronics provides a wide range of electronic assembly services, from mass-produced wire crimping items to complex harness assemblies. Other services include soldering, custom labeling, wire cutting and stripping and box builds. Committed to quality products at competitive prices, Becker Electronics is ISO 9001:2008 registered and UL and CSA certified.

Becker Electronics managed production with an outdated ERP system that did not allow the company to maintain an organized and coherent production schedule. After a lengthy research process that involved close scrutiny of several different ERP vendors, senior management decided to upgrade to [Global Shop Solutions ERP software](#).

"We selected Global Shop Solutions for several reasons," says President David Sosnow. "The price fit our budget, and we liked the fact that we got a complete system rather than having to buy different modules and cobble them together. Equally important, the folks at Global Shop Solutions took the time to learn about and understand our company. We felt they would make a good long-term partner as we continued growing our business."

Simplifying Scheduling

Sosnow's first priority with Global Shop Solutions involved revamping the production scheduling process – no surprise considering the company typically has hundreds of jobs on the shop floor at any given time. Becker Electronics also has nearly 300 different workcenters, which adds to the complexity of the scheduling process.

To improve scheduling, Becker Electronics uses the powerful [Advanced Planning and Scheduling](#) (APS) application. Planners use the reports available in APS to drive the scheduling process.

The reports identify how much time is available for each workcenter and when jobs are due by the day, week and month. Instead of using an "up next" approach, schedulers use the data to determine when and where to schedule jobs. They also use APS to assign priority codes to each job, and create location and material flow codes that make it easier to track workflow through the shop floor.

"It took us a while to properly define our workcenters within APS," says Sosnow. "We use many different tools and do a lot of crimping that involves automated procedures. Rather than the machine itself, the workcenter is really the tooling for the machine and the applicator. Once we got that squared away, APS made a huge difference."

"Prior to implementing Global Shop Solutions, we used to run behind schedule on almost every job. Now we almost never fall behind. And if we do, we can look in APS and it will tell us why."

Revamping the Routers to Improve Workflow

Becker Electronics also used Global Shop Solutions ERP software to more closely align the functionality of the router flow with the production process. As a result, the company has completely restructured and evolved its internal manufacturing process to be more efficient, productive and under control.

With so many tools and workcenters, changing tooling takes the most time. Sosnow and his team went through a process of identifying and timing each individual function at each workcenter. Now, instead of saying a job takes 20 hours to complete, they say it takes 15 minutes for crimping, one hour for wire prep, 30 minutes for labeling, and so forth. Knowing how long each step takes at each workcenter allowed them to create more accurate routers in Global Shop Solutions ERP software.

"Now, instead of changing tooling 10 different times, we leave the tooling, run the jobs, and run deeper into the schedule into the future," says Sosnow. "As result, our production times and efficiency of workflow are extraordinary."

50% Increase in On-Time Delivery

Thanks to Global Shop Solutions, Becker Electronics' on-time delivery rate has nearly doubled – from an average of 50% to a consistent 99%. Sosnow attributes the remarkable increase to two key factors – the improvement in [scheduling and production processes](#) and the [visibility of data](#) throughout the system.



Becker Electronics has extensive wire stock to meet all their customers' cable assembly needs.

"The software does so many things to help us work more efficiently and deliver on time," says Sosnow. "First, the production reports tell us how much time we need to produce the orders we have committed to. Then we drill down into every work order to see how much work we have in a particular week, and balance that with labor and machine availability. And we can do it all from one screen in Supply & Demand."

When he's not managing production, Sosnow uses the software to keep tabs on the financial side of the business. Using the general ledger in the [Financial](#) application, he easily monitors cash flow, accounts payable and receivable, loan balances, and other key financial indicators.

"Global Shop Solutions includes a complete accounting system that provides accurate data in real time," he says. "Having all the information at my fingertips makes closing the books at the end of the month a snap. I hit a couple of buttons and it's done!"

Driving Down Labor Costs

Like so many of today's manufacturers, winning the business in the electronics assembly sector often comes down to price. Global Shop Solutions helps Becker Electronics offer competitive pricing by keeping material and labor costs under control.

The company's purchasing personnel are just starting to get familiar with the Auto Purchasing application, but it's already helping them become more efficient in their material purchasing. The usage screen makes it easy to track purchases and material usage. The reorder points automatically let them know when its time to order. As they become more proficient with all the different features, purchasing will become even more efficient and automated. Meanwhile, tracking labor time in Global Shop Solutions ERP software has significantly lowered labor costs.

"Global Shop Solutions provides a very thorough and efficient foundation for evaluating individual and workstation performance in real time," says Sosnow. "The ability to track time on each job, the instant collating capability of the software, and next-day exception reports are driving our labor costs down as we more accurately monitor performance."



Becker Electronics provides support for large projects by using Kanban stocking to meet their customers' needs.



Becker Electronics is determined to succeed and committed to excellence in every aspect of thier business.

Hitting A Homerun with Production Control

Global Shop Solutions is even helping Becker Electronics reduce excess paper. The company recently added 28 [Shop Floor Data Cllection](#) stations on the shop floor. As a result, production workers can now electronically access drawings, work instructions and other job-related documents right at their workstations – saving time and eliminating the need for paper in many processes.

Ultimately, however, the "homerun" for Becker Electronics has been the massive improvement in production control. At any time, people can log into the system to find out where a job is in the production process, where it's going next and when it will be complete. Very rarely does the company fall behind on a job schedule. And rarer still do they miss a promised delivery date.

To Sosnow, the company behind the software is as important as the product itself.

"With ERP, you're not just buying software; you're buying a relationship," he says, "and we believe we got the right partner with Global Shop Solutions. They provide excellent service and support, and we feel like we matter to them as a customer."

"The software has turned out to be everything we hoped it would be and more, but we've only scratched the surface of all it can do. We know we can gain a lot more efficiencies by using more of the system. And we know the product and the company is large enough to grow with us. I predict it will be a long time before we hit any limits within the software."