

GLOBAL SHOP SOLUTIONS CASE STUDY

Berlin Gardens

Founded in 1988, [Berlin Gardens](#) manufactures outdoor living products that combine comfort with visual appeal. Headquartered in Berlin, Ohio, the company's business lines include outdoor structures (gazebos, pavilions and pergolas), a variety of poly furniture, and a wide assortment of outdoor fabrics to complement the furniture pieces.



An employee operating an automatic screw machine on a furniture assembly line.



A furniture assembly workcenter.

An environmentally-responsible company, Berlin Gardens makes all its outdoor furniture products from recycled, high-density polyethylene. These poly products – which include chairs, tables, A-frames, outdoor bars, picnic tables, benches, arbors, and more – are all made by highly skilled Amish craftsmen. Combining old-world artistry with modern technology, Berlin Gardens provides outdoor furniture that is attractive, durable and environmentally friendly.

Berlin Gardens implemented six sigma lean manufacturing procedures to improve operations and make better use of its limited production space. But an outdated business management system led to scheduling, inventory management, and other shop floor problems. To address these challenges, management turned to [Global Shop Solutions ERP software](#).

“Our biggest challenge was the way we scheduled work orders,” recalls Owen Yoder, IT/Systems Manager for Berlin Gardens. “We also did a lot duplicate data entry for tracking materials and scheduling. We wanted a one-stop shop with [inventory control](#), [accounting](#), scheduling and everything else, and Global Shop Solutions offered an all in one integrated system.”

Short Lead Times with APS

As part of its lean manufacturing philosophy, Berlin Gardens offers a two-week lead time for its furniture orders and three to four weeks for its outdoor structure orders, building their products only two days before shipping them. Global Shop Solutions' [Advanced Planning and Scheduling](#) (APS) plays a critical role in helping the company meet its ambitious lead times while producing a smooth flow of work through the shop floor.

For example, in the past, production schedules were based on sales order due dates. Now, planners use the auto work order generation feature in APS to schedule the start of all new jobs.

“One of the reasons we chose Global Shop Solutions is the ability to create work orders aside from the sales orders,” says Yoder. “With the work orders driving production, we can build to stock, but only what we need to ship.”

“APS also lets us run the auto work order generation with cutoff dates, and it provides excellent visibility of capacity by workcenter. If we exceed capacity on any given day, we can shuffle the work orders and move up production for certain jobs based on which workcenters are overloaded.”

20% Reduction in Raw Materials Inventory

Most of Berlin Gardens’ vendors can’t match their two-week lead times, forcing the company to order raw materials ahead of time. This presents a number of purchasing and inventory management challenges.

Berlin Gardens uses Global Shop Solutions ERP software to solve them, including the auto reorder point feature to automatically order raw materials. This ensures the company always has enough raw materials on hand while still allowing it to buy to customer demands. It has also significantly lowered raw material inventory and the associated carrying costs.

“We set our raw materials reorder points high enough so that we have a week’s supply on hand at all times,” says Yoder. “We run auto purchasing every day, based on order-entry cutoff dates. Auto purchasing looks at the orders entered yesterday and let’s us know if any materials have fallen below the reorder point. If so, we purchase based on that data. With Global Shop Solutions, we’ve reduced raw materials inventory by 20% without disrupting our two-week lead time.”

Saving Time with Product Configurator

Berlin Gardens offers a wide variety of customizable options with its outdoor structure products. Previously, this required making a lot of different parts and keeping them in inventory to cover all the possible options for each item. With Global Shop Solutions, it’s a different story. Instead of having to maintain a large inventory of component parts and manually create the BOMs for each new order, Berlin Gardens now creates each BOM in minutes by the using the Global Shop Solutions Product Configurator to select the desired options.

“This has been huge for us,” says Yoder. “When entering an order, we simply select the options and Global Shop Solutions creates the material list, generates the work order, and schedules everything – saving about 20 minutes per work order. Considering we average 25 structure work orders per day during peak season, the time savings are significant.”

Yoder also appreciates the ease of customization within Global Shop Solutions. In addition to creating a number of custom reports using Crystal Reports, he also has downloaded a number of [custom applications](#) from Global Shop Solutions’ online ARC store where customers have access to more than a thousand free custom applications.



A vinyl gazebo with poly furniture.

One custom report tracks the number of pieces of furniture scheduled at each workcenter each day. Another shows the shipment schedule for structure products in a calendar format, displaying what orders are scheduled to ship on what day, color coded by shipment. Both play an important role in ensuring that Berlin Gardens maintains it’s two-week production lead times.

Global Shop Solutions also supports Berlin Gardens’ lean six sigma efforts, which has had a big impact on improving on-time delivery rates.

“With Global Shop Solutions, we have complete visibility of all job requirements,” says Yoder. “This allows us to produce exactly the amount of pieces on order, which helps get the product out the door on time.”

Real-Time Costing

Global Shop Solutions has significantly improved Berlin Gardens’ ability to track [job costs](#) and adjust pricing by automatically averaging inventory part costs when raw materials prices change.

“Before, we managed all pricing on spreadsheets,” recalls Yoder. “To review pricing we had to analyze the spreadsheets to figure out exactly we were paying for our materials and then manually update it. This gave us a cost, but one that was based on what we were purchasing at the time. Global Shop Solutions gives us a more accurate cost in real time, and we don’t have to do anything to update it.”

“When we receive materials, the system automatically re-averages the existing inventory cost. When that material gets issued to a job, the newly averaged cost automatically goes with it. When the job is done, we can see exactly what it costs to make the job. We update all our routers once a month, which keeps us current with price changes and avoids a lengthy end-of-year pricing update.”

Leaner, More Efficient Operations

Using Global Shop Solutions, Berlin Gardens has achieved productivity and efficiency gains in virtually every area of the business. This includes reducing the amount of raw material in stock, simplifying the purchasing and scheduling departments with automated purchasing, and simplifying the structure (furniture and outdoor structures) department from order entry all the way through the manufacturing process.

Put these and many other improvements all together and you get a leaner, more efficient company better able to compete in today’s markets.

“One of our big competitive differences is the ability to maintain a short lead time that customers can depend on,” says Yoder. “Having accurate costs at our fingertips enables us to offer competitive prices. Global Shop Solutions even helps manage our off-season workload, when we make a lot of small inventory parts for use during our busy season. Tracking inventory usage helps us control those costs by knowing how much to make and when.”

Global Shop Solutions also helps Berlin Gardens maintain a lean staff. Although headcount hasn’t been reduced, the company gets more done with the same amount of people. Since implementing the software, the company now performs scheduling and purchasing with only one person for each function.

What impresses Yoder most about Global Shop Solutions is the flexibility of the software.

“I love all the different ways the software lets you build systems and get things done faster and more efficiently,” he says. “The folks at Global Shop Solutions are knowledgeable and responsive. And if the system doesn’t do something you want it to, they’ll work with you to find a way to get it done.”

“Managing Berlin Gardens with one integrated system has improved how we work together as a company. Global Shop Solutions has us working together, communicating better, and all moving in the same direction to deliver quality products that our customers can use to enjoy the great outdoors.”



A cedar pergola and outdoor curtains with poly furniture and outdoor cushions.