

## GLOBAL SHOP SOLUTIONS CASE STUDY

# American Block Manufacturing Company

*American Block Manufacturing Company designs and manufactures oilfield and marine equipment for land and offshore rigs. Headquartered in Houston, Texas, the family-owned business also repairs drilling equipment.*



*Using long distance scanners, American Block employees can easily and safely scan barcodes on these 30-ft racks on the shop floor.*



*An American Block employee picks materials for a job by scanning corresponding barcodes with a handscanner.*

Founded in 1979, American Block started out as a single-product company making sheaves – a pulley-like component used on oilrigs. After two decades of success, the company began expanding its product lines to reach a more diverse customer base. Today the firm manufactures a variety of products related to the exploration and refining of oil, including traveling blocks, mud pumps, fairleads, rotary tables, hammer unions, pressure gauges, swivel joints, relief valves and more.

The majority of American Block's products are made to industry standards. However, when customers require different product specifications, American Block's skilled engineers can design it for them. These customized products have included riser tensioners, winches, personnel transfer bridges, and chain jacks. American Block is an ISO:9001-certified company.

Through most of its lifetime, American Block managed the business with different software packages, spreadsheets and manual processes. With the advent of the Internet and other technological advances, company ownership recognized the need for an integrated business management system that would enable American Block to keep pace with the rapidly evolving manufacturing environment.

With this goal in mind, American Block researched several different ERP systems, and even considered developing its own ERP program. Eventually they selected [Global Shop Solutions ERP software](#) based on the recommendation of their repairs manager, who had extensive experience with the system at another company, as well as their own appraisal of the software.

### **Fast Results in Inventory and Job Costing**

According to Materials Manager Rechal Shah, one of the second-generation family members in the business, American Block initially focused on using Global Shop Solutions ERP software in the [accounting](#) and engineering areas.

"We started out using Global Shop Solutions mainly as an accounting software and engineering tool," she recalls. "One of our early improvements involved making a composite list for all our part numbers, which run in the thousands."

“Shortly thereafter we began using the [inventory](#) application, and that’s when we really began to see results. Being able to track all our parts in an integrated ERP software program versus an Excel spreadsheet was like night and day.”

Over time, Global Shop Solutions ERP software has continued to improve American Block’s control over their [shop floor](#). Previously, managers struggled to accurately determine [job costing](#), labor time and expenses, and other critical shop floor metrics. Now the daily use of work orders and routers has greatly simplified the production process and provided new insights into the performance of people and equipment.

“Global Shop Solutions ERP software gives us a very good idea of all our job costs, and makes it easy to break them down by labor, materials and other categories,” adds Shah. “It has also significantly improved our inventory accuracy. We monitor all inventory transactions daily, so we know exactly what we have coming in and going out.”

### **Simplifying the Multi-Level BOM Process**

Meanwhile, Global Shop Solutions ERP software continues to pay dividends in other areas of the business. Finance and accounting use it to manage accounts payable and receivable, as well as generate timely and accurate financial reports to inform management decisions.

In the [sales](#) department, Global Shop Solutions ERP software has taken customer service to a new level with its instant accessibility to customer data. With just a few mouse clicks, sales reps can tell customers anything they need to know about their jobs – past, present or pending.

One of the biggest timesavers has come from American Block’s newfound ability to create and manage very large, multi-level [bill of materials](#) (BOMs). Some of American Block’s products, such as the mud pump product line, require creating 20-page BOMs with hundreds of part numbers. According to Shah, Global Shop Solutions ERP software greatly simplifies this highly complex and time-consuming process.

The engineers enter all the part numbers into the BOMs, ensure they get assigned to the right product, and Global Shop Solutions ERP software does the rest. When completed, the BOMs get released to the planning department, where managers determine whether they need to make or buy the parts for the job. If they need to buy something, Global Shop Solutions ERP software creates the purchase orders. If they need to make a part, Global Shop Solutions ERP software creates the work orders.

“With Global Shop Solutions, we can easily trace all our BOMs back to our drawings and manage our inventory through the Supply & Demand screen,” says Shah. “That way, we can make sure we have the right inventory to build the jobs and create the work orders for them. I can’t imagine what this process would be like without Global Shop Solutions.”

### **Going Mobile with Global Shop Solutions ERP software**

To further improve inventory management, American Block implemented Global Shop Solutions’ [wireless system](#). Now, every piece of material that comes in the door or gets issued to a job is handled wirelessly. In addition, all bin-to-bin transactions and inventory counts are wireless. Moreover, the company just moved its entire inventory into a new warehouse – all done wirelessly.

Workers scanned one barcode to identify the material, moved the material to its new home, and then scanned another barcode on the new bins so they know where everything is. The result? Nearly \$15 million worth of inventory transferred without missing a beat!

“Initially, we had a few problems setting up the wireless due to some validation issues,” notes Shah. “Global Shop Solutions worked with us to create an alternative solution, which ended up being a report we can check. Not only did it resolve the problem on our end, Global Shop Solutions also plans to include the report in their new rollout.”



*Each part that comes in and goes out of American Block is marked with a durable adhesive label that makes inventory management nearly effortless.*

“Our new warehouse has a lot of tall shelving, which would normally make it difficult to scan barcodes. Working with System ID, a company recommended by Global Shop Solutions, we were able to create a flat bin design that has the barcodes face downward. That way we can use the wireless scanners standing at the bottom and going all the way to the top of the shelves.”

One feature the new wireless system didn’t offer was the ability to see who makes each barcode transaction. Here, Global Shop Solutions’ ability to create [custom reports](#) came to the rescue.

As materials manager, Shah likes to keep tabs on all inventory transactions, including knowing which person received or issued a particular material. A manual tracking system provides a printed audit trail, but not so with a wireless system. Using custom reports, American Block’s IT manager created a custom “Transaction Code with User” report. Now, Shah can enter a transaction code and instantly find out which job was associated with the transaction, what bin it affected, and who did the transaction.

“I can manage the whole warehouse looking at this and other custom reports every morning,” she says. “At a glance I can tell how much work gets done each day, how many work orders got closed, how much product got shipped, and who shipped it. I can sit in my office or somewhere offsite and know exactly what is going on in the warehouse at all times. To me, that’s one of the biggest advantages of Global Shop Solutions.”

### Supporting Sustained Growth

Where has Global Shop Solutions ERP software made the biggest difference for American Block? That depends on who you ask.



*An American Block employee scans parts into Global Shop Solutions ERP software so that they can be automatically tracked, assigned to jobs, and reordered as needed.*

The company’s engineers rave about the ease of creating and using the multi-level BOMs. Accounting points to the improved financial tracking and reporting. For Shah, it comes down to precision inventory control, including the wireless tracking and the ability to know exactly what is in inventory at any given time.

She also credits Global Shop Solutions ERP software with helping American Block compete more effectively by providing customers with just-in-time information about their jobs.

“In addition to our oil rig products, we also run a spare parts business,” she says. “When customers call in and needs a random part for a rig, we can give them an answer right away. We simply look in the Supply & Demand screen to see if it’s in inventory and whether it’s been allocated to a job. If we have the part available, we can get it out to the customer right away. They love the fast turnaround, especially in down-rig situations.”

“We also compete by keeping our turnaround times on all manufactured products as short as possible. If you ask our bigger competitors to build you a mud pump, it could take two or three years. We can usually produce one in three to four months. Part of that is due to the fact that we’re a small family business, and part is due to the flexibility and control that Global Shop Solutions gives us on the shop floor.”

Shah also appreciates how the ERP system has kept up with the growth of American Block without missing a beat.

“Global Shop Solutions has played a key role in sustaining our growth over the past five years,” she says. “Global Shop Solutions does everything that other ERP software products from bigger companies do, and it is much more affordable. The software is easy to learn. It’s user-friendly. And if it doesn’t do something you need it to do, the folks at Global Shop Solutions will do it for you. Global Shop Solutions ERP software is such an integral part of our day-to-day business that I can’t imagine operating without it.”