

## GLOBAL SHOP SOLUTIONS CASE STUDY

# IVD Research Inc.

*IVD Research Inc. is not your typical manufacturing company. Founded in 1996, the Carlsbad, California-based company manufactures in-vitro diagnostics test kits that detect the presence or absence of antigen or antibodies, which aid in the diagnosis of infectious diseases. Used around the world by hospitals, laboratories, clinics and other research and medical institutions, these kits provide accurate, cost-effective tools for identifying common worldwide pathogens.*



*IVD Research is located in Carlsbad, California.*



*One of IVD Research's diagnostic test kits.*

A family-owned business, IVD Research makes about 50 different diagnostic kits and also manufactures and distributes a full line of external controls for use with different laboratory platforms. All their products follow current good manufacturing practices (cGMP) as outlined by the FDA, and all assays are CE marked – a mandatory conformity marking for products sold within the European Economic Area. IVD Research's facility is registered for manufacturing by the federal FDA, licensed by the State of California FDA, and also holds a USDA Biologics Manufacturing License. IVD Research is currently in the process of obtaining ISO 13485:2003 certification.

What does a manufacturing firm that has only one piece of equipment and makes its products primarily from liquids and biological reagents need with a sophisticated ERP system? Try lack of **shop floor controls**, poor inventory management, difficulty in **measuring costs** – the same issues that manufacturers everywhere struggle with on a daily basis.

"Before, we managed the business by hand with paper logs and Excel spreadsheets," says Chief Operations Officer Kathy Hildebrand. "If a raw material got recalled, it took days to find every place we used it. If a customer called to order a certain diagnostic kit, we had to manually track it down to see if we had any in stock. We knew that in order to keep growing, we needed a more efficient system. We looked at all the big ERP products, but they were way out of our price range. Then we came across Global Shop Solutions ERP software and discovered it could do everything those bigger products could do – and more – at a price that fit our budget."

### **25% Reduction in Inventory**

All of IVD Research's raw materials have expiration dates, which means the company can't just hold them in inventory until they run out. And because they're made with biological reagents, the diagnostic kits in finished goods inventory have expiration dates as well. According to Director of Operations Christopher Lambillotte, this presents several inventory management challenges.

“Before Global Shop Solutions, having raw materials go out of date was a big issue for us,” he recalls. “We constantly had to expedite the ordering of raw materials because we had no real system in place, which inflated our inventory costs. And we often didn’t know how much usable inventory we had on hand.

“With Global Shop Solutions, we know exactly what we have in inventory and how long we can keep it there,” continues Lambillotte. “And having visibility of the dollar amount enables us to manage inventory levels up or down as needed. We’ve reduced our raw materials inventory by 25% and our purchasing costs – in large part because we no longer order materials the day before we need them.”

### **Faster, More Efficient Purchasing**

In addition to lowering inventory costs, Global Shop Solutions ERP software also saves money by simplifying the purchasing process. Previously, all raw materials were manually ordered, which often led to duplicate ordering of materials already in inventory. Using the **Auto Purchasing** feature, IVD Research can now see the history of every raw material, when it was ordered and how much it cost. Combined with the ability to see the entire production schedule for three months out, IVD Research can also make larger, more economic purchases of raw materials. Meanwhile, the use of automatic reorder points further simplifies the purchasing process.

“We’re striving to lean our raw material inventory as much as possible,” explains Lambillotte, “so I use the reorder points to purchase all materials used in the manufacturing process. Auto purchasing monitors what we have on hand and compares it to the work orders in the system. This ensures that we have what we need when we need it, without ordering it too soon.”

### **Complex Traceability with ERP Software**

As a biotech company, IVD Research must have complete traceability of all raw materials and finished goods, which requires precise lot-to-lot tracking capabilities. This includes following numerous written documents when making their diagnostic kits, as required by the FDA and USDA.

IVD Research also builds finished goods stock up to an unlabeled level, so their customers can choose their own labeling. This requires assigning and tracking two different levels to the same lot number as it moves through the production process. Further complicating matters, finished products can have multiple configurations based on who ordered them.

All of which leads to a complex and highly detailed traceability process that combines manual paperwork with in-system tracking.

“It would be nice to automate the entire traceability process in Global Shop Solutions,” says Lambillotte. “However, we’re required to keep paper documents as well, so we find it easier to do the paperwork first and then go back and do the lot tracking and issuing of materials in the system later. That’s not the way Global Shop Solutions is designed, and probably not the way most companies use it, but it works for us. The software is so flexible that it still manages to simplify the process, even with our combination of manual tracking, pre-assigned lot numbers and different levels.”

### **40% More Efficient on the Shop Floor**

According to Lambillotte, Global Shop Solutions ERP software has produced a steady stream of improvements throughout the shop floor.

He can now issue work orders with due dates. Instead of standing around waiting for instructions, shop floor personnel look at the work orders to see what to do next. He can look in the system to see the status of every job, including where each job is in the production process and who’s working on it. He can also compare work in progress to finished goods, as well as open versus closed work orders.



*Another diagnostic test kit produced at IVD Research.*

“As a result, manufacturing at IVD is now continuous,” notes Lambillotte, “and we’ve improved shop floor efficiencies by more than 40%.”

Hildebrand, who works at home more than half the time, points to Global Shop Solutions ERP software’s remote capabilities as an important benefit.

“I can see everything that’s going on in the business from my home office,” she says. “I can track which bills have been paid, which customers are behind, and make sure we’re paying the right vendors at the right time. I can do the production scheduling and generate the master schedule. I can see what’s happening on the shop floor in real time. Global Shop Solutions gives me a complete picture of the business at any point in time.”

However, it’s the flexibility and adaptability of Global Shop Solutions that impresses Hildebrand and Lambillotte the most.

“One of the unique aspects about our business is that we work in liquids rather than metals,” says Lambillotte, “which means we had to leverage the software’s flexibility in capturing labor time. When setting up the routers in Global Shop Solutions, we use ‘setup’ and ‘frequency’ on the labor step. As long as we work in frequencies that make sense, it works fairly well. And that’s the great thing about Global Shop Solutions – if you need it do something a little bit different than it was designed to do, you can usually find a way to make it work.”

### **Personalized Service and Support**

As a provider of generic brand diagnostic kits, IVD Research must offer low pricing to maintain a competitive edge. With Global Shop Solutions ERP software helping to control inventory and keep costs down, Hildebrand knows the company is pricing its products correctly. And by making the data visible throughout the company, the ERP software helps everyone work together more effectively.

“Global Shop Solutions provides great visibility of the production process,” says Hildebrand, “and the flow of data makes sense from start-to-finish, with everything flowing into the next piece. This enables all employees to see the bigger picture of how their individual jobs fit in with everything else.”

Finally, Hildebrand appreciates the personalized service and support.

“We’re a small company, but Global Shop Solutions doesn’t treat us that way,” she concludes. “With many software companies, you get feeling that once you buy the product, you’re on your own. Not so with Global Shop Solutions. They provide great service and support, and they’re always there to help resolve problems. If you need Global Shop Solutions to do something a little bit different for you, they’ll find a way to make it work.”