### **GLOBAL SHOP SOLUTIONS CASE STUDY**

# KRYTON Engineered Metals Inc.

KRYTON Engineered Metals Inc. ramped up their use of Global Shop Solutions ERP software that has enabled them to increase throughput, on-time deliveries and revenues while reducing inventory carrying costs.





KRYTON headquarters in Cedar Fall, Iowa.

KRYTON's Rob Smith clocking into the Shop Floor Data Collection station at the robotic arm station.

One of the premier metal spinning companies in the Midwest, KRYTON is a leading producer of spun metal component and fabrication parts for domestic and international customers. Founded in 1981, the company uses advanced laser cutting, metal spinning and metal fabrication technologies to produce high-tolerance parts made from a variety of metals, including copper, aluminum, brass and steel. These include parts for agricultural fans and blowers, architectural lighting, furniture, filtration equipment, civil defense sirens, and more.

Located in Cedar Falls, Iowa, KRYTON manufactures a mixture of make-to-order and make-to-stock items, with most of its business comprised of custom metal spun products. The company also offers a variety of fabrication services, including shearing, bending, rolling, and all types of seaming and welding, and is ISO 9001:2008 certified. When companies need a custom metal product that involves cutting, spinning or fabrication, KRYTON's skilled engineers and machinists can handle it.

## Manufacturing Scheduling the Way It Should Be

Like most custom job shops, where no two projects are exactly the same, efficient scheduling of work flow has always presented a challenge for KRYTON. Since implementing Global Shop Solutions' Advanced Planning & Scheduling (APS) software, that challenge has become significantly easier to manage.

"With our old method of scheduling, which involved a lot of manual planning, we struggled to come up with reliable ship dates," says Mike Zehentner, Vice President of Business Development for KRYTON. "We would give customers ship dates based on what we thought we could do, but they weren't always accurate. With APS, we can provide accurate dates while also giving ourselves an internal cushion to hit those dates and make sure our machines are being fully utilized."

APS also helps manage the high number of last-minute orders more efficiently. Using the finite scheduling feature, planners can plug drop-in jobs into the system to see how they will affect work flow, and then adjust the schedule accordingly. The new-found ability to accurately identify labor and machine capacity also helps make smart scheduling decisions.



"We don't run a full second shift," says Zehentner. "With APS, we can see where we can allocate more man-hours to certain machines or workcenters to handle the additional work. As a result, our throughput had increased and on-time delivery has dramatically improved. We've also reduced the amount of overtime due to scheduling conflicts."

## **Precise Job Costing**

Until recently, KRYTON also struggled with another key component in today's highly competitive manufacturing markets – accurate job costing. Using Global Shop Solutions Job Costing Accounting software (referred to as FLOOOM), management can now determine individual costing components with remarkable precision.

An acronym for freight, labor, overhead, outside, other and material, FLOOOM takes the uncertainty out of job costing by enabling manufacturers to understand precisely how much labor and materials went into a part. It also allows them to compare current data with historical job costs by providing visibility into every part that has passed through the shop floor. In addition to reviewing current transactions and costs, KRYTON managers can dive into a complete history of finished goods costs, allowing them to make better management decisions.

In addition to accurately identifying the cost makeup of each manufactured part, FLOOOM gives KRYTON the opportunity to take out overhead costs and analyze each part based on gross margin. As a result, management can now tell how much labor and material went into a specific part, and how the cost breakdown compares with past production of that part. It can also see how a change in production costs (such as materials) will affect the financial statement, as well as which processes can be improved to lower costs.

"We installed FLOOOM because we wanted more visibility and transparency of data throughout the business," says KRYTON IT Manager Jason Mathern. "Whether working on the shop floor or in the accounting office, FLOOOM makes it easier for everyone to see the data. We now have more accurate quoting in the sales department, and also use the FLOOOM data to communicate more effectively with customers."

# "So far we've made real improvement, including reducing inventory carrying costs by 20%."

# 20% Reduction in Inventory Carrying Costs

These days, even custom job shops are being asked to hold a certain amount of inventory for their customers. One of KRYTON's major goals was to improve their ability to manage this inventory on an individual basis with each customer. In particular, they wanted to reduce end-of-the-year scrap due to overproduction for some customers.

"Like many job shops, we struggled with inventory because we don't make our own products and we don't get a lot of forecasting from our customers," says Zehentner. "As a result, we often overproduced some parts and had to scrap inventory at the end of the year that customers didn't take."

"Now we use the historical data in Global Shop Solutions to create our own forecasts," continues Zehentner. "By

comparing current usage with last usage we can do a better job of keeping the right quantities on hand for our customers without overproducing. So far, we've made real improvement in the first three months of this year, including reducing inventory carrying costs by 20%."

### **Achieving Record Revenue Levels**

Perhaps the biggest benefit from ramping up their use of Global Shop Solutions ERP software has been a significant growth in new business that has driven revenue to record levels over the past eight months. Zehentner attributes much of the growth to increased visibility of data throughout the business.

"The data is no longer on paper or Excel spreadsheets, so we now have more transparency between departments," he explains.



"Instead of always having to verbally communicate, people in all departments can see what everyone else is doing," he continues. "For example, at any time I can look in the system to see what the shipping department is doing today. At the same time, shipping can see what sales is doing to get a look ahead at what might be coming their way."

"In fact, now that our front-end sales personnel can see the production schedule as easily as anyone else, we have them inputting all the sales orders and work orders," adds Zehentner. "They create the ship dates instead of the scheduling department, and production follows through on those dates. Moreover, with just a few clicks of a button, they can give customers accurate real-time data on anything related to past, current or pending jobs."

According to Mathern, the big hurdle KRYTON needed to clear was "garbage in, garbage out". In other words, the data



KRYTON's Nick Brooks is shipping finished goods with an iPad.

going into the system wasn't always reliable. It took a year to make the data as accurate as they needed it to be, but management feels the company has definitely turned the corner.

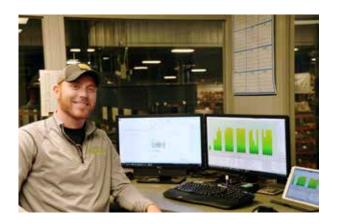
"At first, Global Shop Solutions was a tool for improving processes here and there," says Mathern. "Now that we can trust the data, we're using the software to manage the entire business, and it's making a huge difference."

"As a company, we now rely on the data rather than verbal communication, which makes everyone more efficient because we're not always running around trying to get answers," continues Mathern. "This has produced a tremendous improvement in throughput on the shop floor, an increase in on-time deliveries – and a big jump in revenues."



Pictured are Brad Nichols & Ryan Kelly of KRYTON's Quality

Department.



KRYTON's Master Scheduler Nick Podhaski.

