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

# Tilo Industries

Tilo Industries is a family-owned manufacturing business that creates natural hardwood architectural millwork, mouldings, furniture and cabinet components for home builders, contractors, and other manufacturers. Located in Lewisburg, Pennsylvania, Tilo uses select hardwood species to manufacture a wide variety of made-to-order wood products. These range from door jambs and baseboards to table legs, furniture components, panels for table tops, countertops, chair seats, and much more.





Employee scans a move tickets into the system.

Two high precision, HSK spindle, Weinig moulders to produce moldings.

Founded in 1998, Tilo can handcraft their wood components to a tolerance standard of .005 inch for consistency in profile reproduction. They also offer refinishing, priming and sanding, and lumber surfacing services.

During its early years, Tilo used separate accounting and database software programs to manage the business. However, as the company grew, it quickly outstripped the capabilities of its patchwork system. Upon the recommendation of a customer, company ownership arranged for a demo of Global Shop Solutions ERP software, and quickly decided it offered the ideal system to lead Tilo's future growth.

"First and foremost, we wanted better shop floor control and purchasing," says company Owner Tim Yoder. "We also wanted to improve quality control and customer relationship management. Global Shop Solutions had everything we wanted in these and other areas of the business."

## 32% Increase in Shop Floor Efficiency

The ability to group raw materials using op codes in Global Shop Solutions ERP software had an immediate and significant impact on Tilo's shop floor efficiencies.

Tilo uses many different species of wood of varying thicknesses and lengths to make their parts. Rather than cutting the wood individually for each job, saw operators use the op codes to group jobs that use woods of the same species, thickness and length. They bring in a pack of lumber, cut all the orders that require that raw material, and then use move tickets to assign them to the appropriate jobs. They use the same process when milling like-profile pieces through the molder.

"Yield is critical in our business," says Tim Yoder. "Using the op codes helps us work faster and more efficiently to increase our yield at every workcenter."



Add in the increased predictability of scheduling available through Global Shop Solutions ERP software, along with other process improvements, and Yoder estimates a 32% improvement in shop floor efficiency.

"Prior to implementing the software, scheduling was all done on paper," he says, "requiring us to manually sort through all the jobs and due dates and try to pull it all together. Now that we do flex scheduling with everything driven by due dates in the system, our workflow has dramatically improved."

## **Precision Job Costing - On Every Job**

With Tilo's old system, costing tended to be a hit-or-miss process, with workers usually clocking in just for the day rather than logging on or off jobs. As a result, supervisors struggled to calculate overhead and labor costs for each job. Using Global Shop Solutions ERP software to accurately capture operational time and material usage on jobs and sequences has significantly improved costing accuracy.

"Workers now log in and out of each job sequence using the Shop Floor Data Collection barcode scanners at every workstation," says Plant Operations Manager Linus Yoder. "This gives us fast, accurate tracking of all time and labor costs."

"We also use the scanners to issue the material to the job," he continues. "As parts go through each step of the production process, we use move tickets to track them from one operation to the other. The difference between costing accuracy then and now is night and day."

#### **Near Perfect On-Time Delivery**

The ability to track every job step by step – in real time – has enabled Tilo to improve on-time delivery from a pedestrian 75% to the current high of 98%.

As long as the job information is properly entered into the system, Global Shop Solutions ERP software provides the visibility of data needed to keep jobs on track.

"Every job has time and materials estimates," explains Linus Yoder. "As we enter new jobs into the system, we can see ahead of time if we will encounter any constraints, overbook any workcenters, or do anything else that might cause a job to be late."

"For example, if material constraints presents a problem, we'll know early because the purchasing module will tell us," he adds. "That way, we can go back to the



President Tim Yoder standing in his busy shop.

customer and adjust the due date if needed. That rarely happens because the system gives us much better predictability of what's going to happen and when. With Global Shop Solutions, nothing gets lost in the shuffle."

#### **Buying Smarter Cuts Inventory Almost In Half**

Meanwhile, Tilo has also reduced inventory carrying costs a whopping 46% - without even trying.

"We used to track material issued to each job on spreadsheets," recalls Linus Yoder. "That wasn't very accurate, so to be safe we always ordered more than we thought we needed. Now we order only what's needed directly to the job, using the minimum quantity reorder points to ensure we always have enough materials on hand."

Issuing material directly to the job also improves physical inventory counts. Within six months of implementing Global Shop Solutions ERP software, the next inventory reconciliation required an adjustment of only a few hundred dollars – a remarkable level of accuracy for a manufacturer with so many types and sizes of materials.

"We're buying smarter now because we only buy what we need instead of what we think we need," adds Linus Yoder. "This reflects directly on our cash flow because we no longer carry all that excess inventory."



## **Getting the Pricing Right Every Time**

By facilitating accurate inventory and job costing, Global Shop Solutions ERP software helps to improve pricing as well.

Tracking costs down to each sequence builds up a comprehensive costing history that can be analyzed by the part, job, product line or customer. After several years of collecting the data, Tilo had enough history to correct pricing inconsistencies that had been negatively impacting the company's profitability.

"We were profitable before," says Tim Yoder, "but we couldn't tell you where the profits were coming. Now we know exactly how much we made or didn't make on each job as soon as it's finished – and we know why. This allows us to identify where we need a price increase and justify the reason for it. Customers are a lot more understanding when you can show that you know your costs."

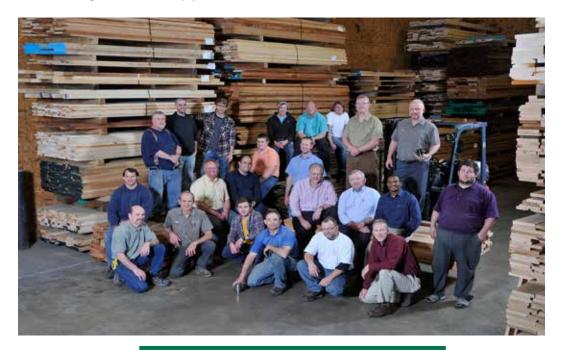
#### **Poised for Robust Growth**

Growing a business requires accurate, trustworthy data that leads to intelligent business decisions. Here again, Global Shop Solutions ERP software excels.

Using the system's ability to seamlessly integrate with Crystal reports, Linus Yoder has created a number of custom reports that format the data in a way that leads to more actionable information. These include daily sales reports that provide summary data on sales orders, invoicing and quotes, as well as the profitability for every job that went out that day.

In addition to these reports, Tim Yoder gathers data from the Business Intelligence application to make decisions that impact the long-term growth of the business. Armed with this data, management can now discern what type of customers and market segments are driving Tilo's growth, allowing them to position the company to focus on value-added rather than commodity markets.

"As we look into the future, we see unlimited growth potential for Tilo," says Tim Yoder. "With Global Shop Solution's ability to manage multiple locations, the flexibility to adjust the system to the way we do things, the ease of use, and the outstanding customer support, we know we won't outgrow the software. We see it as the driving force behind our growth for many years to come."



Tilo's successful team.

