

Focus key to value-priced custom business



You don't beat your competitors on price without a definite game plan.

by Bruce Plantz
bplantz@fdmonline.com

Devon Martin believes that Signature Custom Cabinetry's focus on one segment of the market — and designing the company and its processes to meet the needs of that segment — have led to the company's growth and success.

Ask anyone at Signature Custom Cabinetry what the company's market is, and you get a quick answer. "We are for the value-conscious, upper-end designer," explains Devon Martin, co-founder vice president of product development/engineering, for the Ephrata, Pa., company.

Value-conscious, upper-end designer may sound like an oxymoron, but it's a market niche that Signature has successfully mined to carve its place in the competitive upper-end custom market.

"Most of our competitors have been around a long time," says Martin. "We've been here 15 years." Signature is the classic success story in the cabinet market. Started by a couple of brothers, Devon and Kent, who is CEO of the company, in a two-car garage, the company has grown to fill a 35,000-square-foot facility with plans on

adding another 52,000 square feet, including additional administration space.

They have done that by being the value producer. But that takes careful management. "If you are going to be a value producer, you can't succeed by doing it with low margins," says Martin. "Our biggest competitive advantage is information."

Not rocket science

That may sound like an odd statement for a manufacturer, but Martin can back that up with details. He says there is a running joke around the company, "This isn't rocket science, it's harder. Taking an order from a consumer's dream through a designer's mind and delivering it to the home to meet their expectation is a tall order."

The Martins believe the way to meet that expectation is through getting the information from the dealer as seamlessly as possible, then moving it quickly to the plant floor without re-entering data or much manipulation.

Martin says another goal from the brand promise is to be the most easily transacted supplier. "Dealers don't want to spend time transacting an order; they want to be designing and selling."



If a part is wider than a certain width, the program for the Maxym tenoner automatically makes multiple tenons.



The Maxym tenoner is programmed ahead of time. The operator enters a part number and the machine pulls up the correct program and machines the part. The addition of the machine has nearly eliminated errors in that department.

plant facts

Signature Custom Cabinetry, Inc.
Ephrata, Pa.

- Product: Custom cabinetry
- Employees: 125
- Plant size: 35,000 square feet

Easy transaction

So Signature started the information process with the dealer. Today, nearly 100 percent of the company's orders come from dealers via the Internet. "We receive orders electronically. Of course we have to scrub them, tech service them and edit them, but it removes a huge possibility for error when you aren't entering written orders into the system."

In 1994 Signature hired its first full-time order-entry person, at about the time it started the electronic order-entry process. After 10 years of double-digit growth, Signature still only has one order-entry person.

"The dealer pushes a button and the order is sent in. They receive an order confirmation and a week of delivery. At that point we have a live order in the system that's ready to process for downloading to the plant," says Martin.

The company's information system is built on a custom FoxPro database. Orders go into the database, which acts as a prod-

uct configurator and outputs data to the shop floor for production of cabinets. That isn't a simple task. "We started off with one self-taught programmer who was a visionary," says Martin.

People are key

Signature operates with more than 125 employees in its 35,000-square-foot facility. The company currently runs about 80 people in production on day shift and 15 on the night shift. The product is primarily face frame kitchens, with a new frameless line being added to the mix. The plant has some automated equipment and a sophisticated finishing area, but Martin says most of the credit for efficient manufacturing goes to the employees, or stakeholders, as the company refers to them.

"In the plant our biggest asset is highly skilled, highly deployable people," says Martin. He says the two pieces of highly automated equipment in the plant are a Holzma panel saw and a Maxym tenoner. "Those are both great pieces of equipment, but that's it for CNC for us," says Martin.

The bills of material are created by the FoxPro database. Cutlists for the Holzma saw are run through Holzma CutRite for optimization and downloaded directly to the saw. A week's orders are batched prior to optimization. Panels are 75 percent plywood and 25 percent particleboard with a birch print interior. As cut parts come off the saw, a label is printed with further machining instructions.

Solid wood parts for face frames and assorted parts come in as either S2S or S3S

being faxed to Conestoga. "However, we're working on EDI solutions with many of our vendors," says Martin.

That tight relationship works both ways. The vendors know they are getting accurate, timely information. In return, they are expected to deliver orders as needed. In the case of Conestoga, Signature buys hundreds of doors a week, with daily delivery. As doors are delivered, they are matched to assembled face frames and fit and sizing is checked. "If there is a problem, we know it before assembly," says Martin.



As outsourced doors arrive daily from Conestoga Wood Specialties, they are unpacked and sizes checked against the assembled face frames. Note the computer terminal where every face frame and door is recorded.

and 13/16 thicknesses. Lumber gets final calibration through a double-head SCM widebelt sander that brings it down to 3/4 inch.

Parts are cut to length on chop saws equipped with computerized Tiger Stop fences. Tenons are cut on face-frame parts with the Maxym tenoner.

"That tenoner dramatically improved the efficiency of our face-frame area," says Martin. He says the improvements came two ways. First is accuracy. "There's no rework because tenons are cut right the first time. As long as you have the piece against the stop, it's right."

A second advantage of the tenoner is its programmability. Martin explains that the company builds a wide range of face frames, some as wide as six inches. Parameters are set in the programming so that when the face frame exceeds a certain width, it automatically goes from one to two or more tenons.

"If the operator calls up the program for a six-inch-wide board, it automatically makes three tenons," says Martin. "The operator doesn't have to be a programmer."

Martin says that with the panel saw, the tenoner and the programmable stops on the chop saws, most room for machining error is eliminated.

Checking things twice

After machining, parts are kitted for each cabinet. All parts for cabinet assembly are skidded and double-checked before being moved to the assembly area. This is where information management comes back into play.

"You see computers throughout the

continued

FDM

focus

plant," says Martin. He says parts are tracked at certain stations. As cabinets are assembled, a bar code label is generated that goes with that cabinet. From that label, all information about what is still needed and who did what work up to now on the cabinet can be pulled.

"If there is a problem, we can tell you who made the frame, who assembled the cabinet, who added the hardware and so on. Everything is linked back to the database. I can go to the database and tell how many units we assembled today, how many were sanded and how many passed through final assembly."

He said at first workers worried about the accountability, but today the workers see the system as the information tool it is. Workers on the floor can pull up reports and check how their department is doing on any day. "You see people looking at reports during their breaks," says Martin. "This gives the people in the plant the tools to measure their own productivity."

Compensation is based on performance, but that includes more than production, says Martin. Other performance criteria include things like attendance and skills building.

To institute that type of system isn't easy. Every department has full documenta-

tion of standard operating procedures and the skills that can be mastered in that department. As an employee masters skills, he or she is tested and a record is kept.

"Employees know exactly what is expected of them, and they know exactly what it takes to succeed in the company," says Martin. The goal is to have a flexible work force.

Match nearly anything

An example of that flexibility is the finishing department. The company's policy is that it will do about any color in finishing. "We have a custom-color mixing lab," says Martin. "Customers will send in a tie, a sweater or a table leaf and we will match it."

One week the company can be running mostly hand-rubbed glazes, the next traditional wood finishes. The line and the employees have to be flexible to meet those changing demands. "We don't have topcoat people or glazers; we have finishers," says Martin.

The finishing line is a mix of manual and automated, with assembled cases moving through on conveyors and doors and drawer fronts going through on racks. All spraying is done with manual guns in booths, and parts move into halogen ovens for drying. Parts move through the first sealing and priming areas, go through ovens and then into an accumulation area. Jobs can be manually sorted. "If it's a multicoat finish, it goes to the return line; if it's a stain job, it goes to the topcoat booth; and some go out the bottom of the room to where glazing is applied. This



The Holzma Optimat HPP 72 panel saw is used to cut as many panel parts as possible. Jobs for a week are batched and run through Cut-Rite software for optimization.

is a blend between pushing the cabinets through automatically, and having people make the decisions."

That blend is at the core of Signature's production philosophy. The company has a sophisticated information management system that drives production and it relies on small, flexible workstations to achieve most of the machining. The third leg of the stool is the flexible, well-trained workforce. The result is efficient production of a highly custom product — for the value-conscious, high-end market. ▲

Reprinted from **FDM** magazine, March, 2004. ©2004 Watt Publishing, Co.



Parts move out of the halogen oven in the finishing room into the accumulation area. Here parts can be sent in any of several directions, depending on the finish.

Innovative vendors vital to success

Devon Martin credits four groups for Signature Custom Cabinetry's success — the consumer, the dealers, the employees and the vendors who supply the company. It calls all four groups stakeholders, and defines that as all individuals and organizations who have a genuine interest in the continued success of Signature Custom Cabinetry.

An example of that cooperation with vendors is with Conestoga Wood Specialties, the company's primary door vendor. The company's internal database automatically sizes doors and prepares orders. Those orders are now



Holzma U.S., a division of Stiles Machinery Inc.
1200 Tulip Dr.
Gastonia, NC 28052
Phone: 704-861-8239, ask for Bill Pitt.
Fax: 704-867-4140
Web: www.stilesmachinery.com