Speed to market is Carded Graphics' key to success. New equipment and processes ensure that this U.S. company is meeting customer needs. By Julia Griffin & Nick Griffin

VALUE-ADDED PRODUCTS PRODUCED QUICKLY

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Using state-of-the-art technology and a streamlined workflow, U.S. based Carded Graphics routinely shaves days and weeks off the time it takes to make value-added packaging. Murry Pitts, President and CEO, has in-sourced structural design, production of tooling and even the education of future machine operators, resulting in a remarkable expansion of his facility and business. The company pursues primarily complex, short-run jobs from a diverse customer base, a market niche in which Carded Graphics has excelled. While some companies still opt to use old equipment on the theory that it saves money, Carded Graphics utilizes the newest machines and only the best techniques to focus on making money by doing difficult work quickly and effectively. The result has been consistent growth, recently achieving double-digit annual expansion.

According to Pitts, "We're focused on category busting, brand enhancing, special effects printing for food and beverage and, for the most part, that doesn't really exist elsewhere right now. Our special effects include spot and full gloss, coatings for an unusual touch, raised UV, foils and special inks."

Since acquiring the U.S. based company in 2006, Pitts has committed to providing customers with high quality folding cartons as quickly as possible. "We define speed as the whole process, not just turnaround," Pitts says. "Speed to me is, for example, when a customer asks for a quote, they get it in 24 hours, they ask for a sample, they get it in 48 hours, if they ask for a digital sample, they get it in 36 hours." Carded

Graphics works to consistently reduce the time to market throughout all aspects of the company. As Pitts put it, "That starts with how we deal with our customers and from there it just blossoms out through the whole process."

In-house Efficiencies

Based in Staunton, Virginia, the company does in-house what others may choose to outsource. With three full-time graphic designers and three full-time structural designers, the company is able to cut time to market by employing people who understand the plant's capabilities and can match customers' work to the right machinery. If there's an issue, the designers can fix it so that "instead of holding a job or putting it off because, say there's a problem with a plate, we can create a new plate in an hour or two," says Vice President for Business Development Christine Kelley. "Our designers go in and check the customers' work for accuracies. They are a talented pre-press department and this helps ensure efficiency and quality during production." Pitts adds, "Design is a big part of our speed, our proofing process and the ability to take files and get them out in 24 or 36 hours gives us and our customers a tremendous advantage."

Carded Graphics also believes in self-sufficiency. "We make our own blanking tools, counters, stripping units, we sheet from our own roll stock and we convert our own corrugated shippers. We can run all the substrates, kraft, clay coated, news, SUS, SBS, some N-flute, pretty much anything in the paperboard industry. We do as much as we can internally. The only thing we don't make is paper," Pitts says. "Our goal is to not wait for an outside vendor for anything. Part of our strategy is to control all the variables."

Christine Kelley, Vice President for Business Development.

Pitts attributes much of his company's growth to his commitment to using the best available technology to attain speed and precision. "We typically try to identify what we're going to do in the future, buy equipment for that, and then sell into that," he says. "It's a 'build it and they will come' type strategy and it has worked out pretty well for us."

Bill Guthrie, Finishing Manager, adds, "Every day we do something different as far as innovation. Just today we were talking about how we want to improve the back end with automation, robotics and such."

The company expanded from a 60,000 to a 120,000-sq-foot facility in 2008, driven at the time by the installation of a Heidelberg 105 XL and Bobst 106 Expertcut with blanker. In 2013, it installed a new Heidelberg 106 XL eight-color double coater and two new Bobst Expertfolds. "We run every type of product there is on our two Expertfolds; we've got all the bells and whistles on those," Pitts says. "We have complete glue detection, we can run six

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The new Bobst 106 Expertcut with blanker.

corner, four corner auto bottoms, straight line boxes, inner cell work and we cover the full spectrum of all of them. When Carded Graphics brought in the new folder-gluers, "Bobst re-configured our plant for greater efficiency and, in the process, moved all of our old machinery to improve the job flow for us," he continues. "During the change they even scheduled it so we never lost a shift of gluing. We never went down."

Market Niche

A large portion of Carded Graphics' work is four and six carrier packs for craft beers. This market segment in particular demands a highly decorative carton, often foiled or enhanced with special effects, and with exceptional structural integrity, driving the recent purchase of a Bobst GNB Masterfold. GNB stands for the Gyrobox rotating and nick-breaking features which, along with the Bobst Speedwave hook-free back folding section, allow Carded Graphics to significantly improve run speeds and rapidly perform makereadies with no compromises in quality and performance. "Bobst holds the patent for this particular nick-breaker," Pitts says, "which is key to the whole process of making a six pack carrier. It's a really bulletproof system. There are folder-gluer manufacturers that try to duplicate some aspects of their nick-breaker, but they can't copy it."

Carded Graphics also credits the Masterfold with helping the company cut time from their processes. "The Masterfold is all about speed to market — fast makereadies and complete quality control," Kelley says. "It inspects 100 percent of the cartons using cameras for glue and barcode detection." Pitts explains, "Six packs are not a typical folding carton because there are panels that fold inside and panels that fold inside other panels — and glue can't leak out of any of those areas. With the nature of our work we needed more glue heads, so there are 26 different glue guns on our gluer. If one of those glue areas isn't accurate or an applicator misfires, the whole integrity of the carrier is jeopardized. The Masterfold gluer helps avoid that situation by having 100 percent in-line inspection and automatic ejection of questionable pieces.

"The technology that Bobst brings to the table eliminates the need for hand-inspection so it's our first line of defense," he adds. "A lot of machinery in the past has been operated on the premise that visual inspection by an operator is the first line of defense, but we need detection and automatic rejection at high speeds in order to give a comfort level to both us and our customers. It's just so important."

Carded Graphics chose the Masterfold for its quick and efficient work. "The technology that this thing has is unbelievable," Pitts says. "It is designed for speed and for faster makereadies. We supplement this by internally making all of our own tooling. Our machine is a traditional Masterfold, but the addition of far more than

Murry Pitts, Carded Graphics President and CEO.

normal glue guns, the Gyro rotator, the nick-breaker and the Speedwave function, makes it specifically configured for running four pack and six pack production."

Loyal Customer

Pitts says the decision to buy the Masterfold was influenced heavily by his previous experience with Bobst as a company. "They're really the only ones in the world that have so many important and proprietary patents in the marketplace. I've always been a Bobst guy. I've had Bobst equipment for over 20 years because they know how to do it best. Bobst has experience in every type of folding carton there is, so they can partner with us and help us fulfill our customers' needs. When we bought the Masterfold, the Bobst guys were here for three weeks after installation to help us get up and running," he says.

Kelley adds, "They helped us design and develop our nicking patterns, establish the way we run our six pack carriers, and set up most of what we run on their technology. Really, they've been instrumental in helping us actually design some of our products."

Bobst has not only worked with Carded Graphics on design and installation, but the company has also helped support the establishment of the Paperboard Packaging Technology Program at Blue Ridge Community College. This college level program will teach diecutting and gluing, using the equipment at Carded Graphics. "The hands-on classes are going to be here," Pitts says. "The instructor training sessions will be here, and we're even going to have an actual classroom here. We've needed a program like this for a while. One of the biggest problems in our industry is finding talented machine operators, and we're working to solve that." The program will graduate six students next year, and Pitts plans to keep expanding it after that.

Pitts describes the relationship between Carded Graphics and Bobst as a partnership. "The bottom line is that if you're down for maintenance and you've got a customer who needs the product now, you can count on Bobst." ■

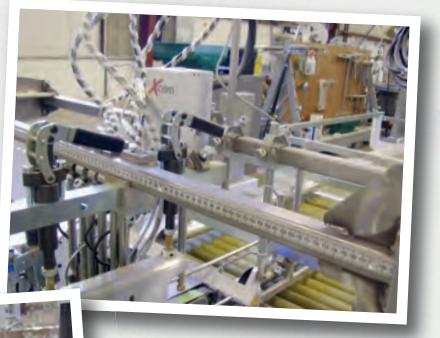
hhs Glue Systems Enhance Operation

Over the past eight years, Carded Graphics President and CEO Murry Pitts and his team have spent more than $35 million on innovative equipment, technology, human resources and physical plant improvements. "It is one, if not the most modern folding carton facility in North America," Pitts says. "We have a very advanced subset of equipment, from the very beginning of the process to the back end of the operation and we have accomplished that goal in the last three to four years. Our growth has been phenomenal. We went from 34 employees in 2006 to 175 employees today."

In 2013, the company installed two Bobst Expertfold 110s with Baumer hhs 8 level glue systems that includes XTS 2, code reading and glue detection. The systems added about 300 percent capacity to the department. "Up until that point we had never had hhs," Pitts says. "We were not happy with our previous equipment and its technology. With the Expertfolds we wanted glue detection and barcode detection and we wanted it right and we wanted it automated. We didn't want to have to sort. hhs' partnership with Bobst is a huge strength. Our operators love it, our gluing department supervisor has been a huge supporter, and between the training program and the system being so bulletproof, it has been a seamless transition."

Pitts says automating the glue detection with the ejection system has changed his business. "Our whole business is built on speed, quick makereadies, estimates and samples. We are all about speed and we wanted to bring that speed into the beverage marketplace. The speeds we run are pretty substantial, and we don't want a jam or a failed box. The hhs glue detection system removes that worry.

"Our technology sets us apart, with our new hhs glue detection and camera system installed in 2014 on our new GNB gluer, it's a game changer," he continues. "The glue detection technology does exist on old equipment. It might stop it, but it won't solve it. With the hhs glue detection system we have the ability to know where the glue is and where it isn't supposed to go. If anything is off or skewed, it will reject it automatically so we are not picking through them.



It's amazing the time this saves. If any one of the glue locations are skewed the whole carrier can fail. That's why a glue detection system is so important. We are able to inspect and control it, leaving the work being done very consistent throughout the whole project."