

# BCI's Open Door

**With a new tool shop, value-added service and growing machining capabilities, Bremen Castings is working to shed its “foundry” label.**

**Shannon Wetzel, Managing Editor**

**J**B Brown is wired. He's not necessarily wired in the hyper sense of the word, although the cup of coffee constantly in his hands indicates otherwise. Brown is wired as in connected to as many methods of communication and information gathering that are feasible. Three computer monitors sit on his desk. A flat screen TV hangs on his wall, constantly broad-

casting cable news programming. With an iPhone at his hip at all times, Brown admits that when he feels its vibration every time a new email or text comes through, it kills him not to check and respond immediately.

Of Brown's three computer monitors, one shows streaming video from the 26 cameras he has installed at Bremen Castings Inc. (BCI), Bremen, Ind.

He can—and does—access the same feed when he's at home in the evenings and on the weekends.

“I always love to know what's going on because it opens up doors,” Brown said. “You only have so much time to walk through that door.”

In his third year as president of BCI, Brown has proven that in some cases, it doesn't take just a step but a flying



# Policy

leap to go through an open door. In the fall of 2008, he learned of a tooling expert who was in the market for a job. Two and a half months later, he had invested half a million dollars into creating BCI's own tooling shop with a new CNC machine, software and someone to run it.

"It was not planned, it just happened," Brown said. "But a door of opportunity opened up, and I went in."

## Ready and Willing

BCI is located 28 miles southwest of Elkhart, Ind., the "RV Capital of the World," which has been hard hit by the

current recession—even warranting a visit from President Obama in February and early August to address economic concerns. The crippling of an industry so close to home has not been ignored by BCI. The gray and ductile iron metalcasting and machining company experienced 32% growth in FY2008 and 30% growth in FY2009, which ended in March, but FY2010 has Brown worried. The industries that BCI supplies, including heavy truck, hydraulics and industrial pump, are all experiencing reductions. According to Brown, orders from every customer except for one are lower than last year. But because the

company had experienced such strong growth the previous years, the current reductions (provided they do not worsen) will only return the company to its volume of sales a year ago. If things do worsen, Brown, as always, will be looking for open doors of opportunity.

"If things get bad, maybe we don't machine castings, maybe we machine knives or plastic. I don't know," he said. "We're already doing things here I thought we'd never do, like having our own tooling shop. I'm looking at all prospects. I'm willing to do just about anything."

BCI's tooling shop has made an immediate improvement in the company's lead times, and eventually Brown hopes it can help the business acquire prototyping work. So far, two customers have put in prototyping orders.

"I'm getting rid of waiting on other suppliers," Brown said. "I want to be



**“We are a machine shop that can supply castings.”**

The machine shop at Bremen Castings Inc. features 15 CNC machines. Company President JB Brown (inset) said plans are in the works to move the machine shop to a recently-acquired building on a neighboring lot.



**Barry Bundesman, tool shop manager, explains the final adjustments to a new CNC machine, which will be used to make tooling and patterns, to Mike Menke.**

the one accountable for how soon we can ship our castings.”

### Spin Doctor

BCI is a metalcasting company. It started as one 70 years ago, and most of its resources go toward the casting of gray and ductile iron parts. But Brown envisions his company as more than that, and he wants desperately for his customers to view it the same way—as a “precision CNC machine shop with its own green sand [casting facility] under one roof,” as described on the BCI website.

“Our customers are more familiar and comfortable with machine shops,” Brown said. “Now we are trying to change the mentality of casting buyers, showing them we are a machine shop that can supply castings, complete with assembly and packaging.”

BCI began bringing services in-house in 1996, when the casting facility started its machine shop to cut out the middle man for new jobs and work directly with the end customer. Within that first year, the company installed four CNC machines. Now the shop features 15 machines, and the majority of new work coming into BCI is for machine-complete parts. In November 2008, BCI acquired a 55,000-sq.-ft. manufacturing facility on neighboring property that Brown hopes will house

more machining capabilities.

According to Mike Menke, director of sales and marketing, 65-70% of new jobs at BCI are machine-complete work. Such value-added work helps BCI earn a 7% profit margin, which Brown says would be much slimmer if the company produced only raw castings.

When a sales person receives a request for quote on a part, he or she will call the potential customer and ask to quote the complete machined casting. Since BCI machines in-house, lead times and transportation costs are reduced. BCI also performs in-house assembly for 10% of its orders and contracts with a company to paint between 40 and 50% of its castings.

“We’re after being a machine shop,

and then a [metalcaster],” Meinke said. “We are not happy with staying the same, sticking to the status quo. That’s how we’ve stayed in business, and that’s how we’re going to stay in business—constant change and constant progress.”

### Cursing the Status Quo

Two years ago, Brown made another leap, purchasing Magma solidification software for his 250-employee job shop.

“For our size metalcasting facility, it’s not common to have solidification software because it is expensive, but I think it’s the way to go,” Brown said. “We just bit the bullet, and it’s been a cost-savings for us.”

Brown hopes incorporating solidification software will strengthen the company’s ability and position in the prototyping market. But prototyping wasn’t the main reason for purchasing solidification software. BCI uses it daily on difficult jobs. A full-time associate is dedicated to running the simulations, which are set up during the day and then run at night

“We rank our jobs from 1 to 10, 10 being the most difficult,” Brown said. “On jobs 7 and above, we try to run a simulation before producing samples. If you don’t put a full time person on it, it will not pay for itself.”

Solidification simulation played a role in a scrap reduction initiative that Brown tackled when he became president in 2006. (His father James E. Brown is the company’s CEO, and his mother Maryln Brown is corporate secretary.)

JB Brown had been director of operations prior to taking the helm and hired Dan Hirsch as his replacement with the express purpose of lowering scrap and keeping it lowered. Scrap rates, which consistently ranged between 8 and 13% before Hirsch was hired, were reduced to below 6% in 2008. For the first quarter of 2009, BCI’s scrap rate was 4.9%.

“That’s because of teamwork, [simulation software], being disciplined and being extreme in doing analysis,” Brown said. “To have scrap under 5%? I’m thrilled with it. I never thought we’d get there. But it’s because of extrem-



**Bremen Castings Inc. installed a second automatic molding line in 2003, which increased capacity and mold cooling time.**

ism—that's the only way it gets done."

### Idea Thieves

The reduction of scrap is one of three main focuses at BCI, according to Brown, along with safety and customer service. Last year, BCI added a customer service department that reports directly to sales. The department, which helps answer customer questions regarding purchase orders and shipping, was partly inspired by Brown's experience with the customer service "genius bar" at Apple computer stores. He purposefully hired staff with customer service experience in an outside industry to bring new perspective on how to deal with customers.

"It's important to look for ideas, opportunities and solutions from places outside of the metalcasting industry," Brown said. "The best ideas are always stolen."

BCI sends its employees to visit its customers to build face-to-face relationships but also to give them a glimpse of end-use manufacturing facilities in various industries. The goal is to bring the glossy look of a manufacturer to the green sand metalcasting facility in Bremen.

"When you're walking through the plant, you should not step in sand, you should not get leaked on," Brown said.

BCI is in the process of painting its interior walls white to give it a more manufacturing facility feel, but Brown admits it is a work in progress. The metalcasting facility still has some dirt on the machinery and floors, and certain areas, like the grinding department, would benefit from reorganization and ergonomic improvements.

To tackle the remaining facility and operations improvements, BCI created a lean manufacturing team, affectionately called SQS for "status quo sucks." The team regularly creates a list of top 10 priorities for the company, based on the plant's current condition. The priorities change periodically as conditions change. SQS issues can range from business philosophy to operations of the loading and unloading dock to



Along with complete finish machining, Bremen Castings Inc. performs some in-house assembly for its customers.

how employees speak to customers.

"We ask, 'what do we want to be doing today' and 'why are we not doing it?'" Brown said.

### Hoops and Doors

With the distressed economy, BCI, like other manufacturers, is fighting to keep its customers, but Brown said that fight will not be at the expense of the company's profitability. He refuses to agree to price decreases on a per pound basis and is not interested in turning in the lowest quote.

"Our niche is intricate castings that other people don't like to do, and we're doing it with less than 5% scrap," Brown said. "If a customer is coming to BCI

the next day.

"Whether we like it or not, if we don't get them castings, we get a black eye," Brown said. "We don't break procedure, but we do jump through hoops for our customers."

Whether jumping through hoops or leaping through open doors, BCI takes an active approach to growing its business. Halfway through its fiscal year 2010, the company is maintaining its position in the market with the help of its value-added capabilities.

"We map out a path and stick to it," Menke said. "We're feeling the economy, but I don't think we are feeling it as bad because we do stick to our path."

MC



Bremen Castings Inc.'s lean management team has targeted the facility's finishing department as an area for future improvement.



Visit [www.moderncasting.com](http://www.moderncasting.com) for an audiocast with JB Brown.