

## Dynamic Structural Steel

By Holly Dolezalek



(Photo by Marshall Franklin Long)

Proctor, Minn., is a town of 2,800 people about 8 miles southwest of Duluth, in the northeastern tip of the state just before it stabs into Lake Superior. According to the 2000 U.S. census, the median income for a household in Proctor is \$38,322, and about 5 percent of the population lives below the poverty line.

Any new business would have an impact on Proctor's economic landscape, but Dynamic Structural Steel isn't just any new business. In just three years, the company went from \$2 million in sales to \$15 million, from 23 employees to 56. And it's bringing business back to northern Minnesota.

"We've been able to job [get work in] Chicago, South Dakota, Iowa, Canada, Wisconsin and other places, which means we're getting more work back to this area that might have gone instead to the

Twin Cities," says owner Jason Erickson.

Dynamic Structural Steel (DSS) fabricates steel beams for commercial construction, and while it's very much the new kid on the block, Jason Erickson isn't. He's all of 28, but he's been in and out of fabrication shops since he was 4 years old. And in just three years, he's built a respected company that lands business as close as Bemidji and as far away as Iowa. His company employs 56 people in the Duluth and Proctor area, half of whom have been hired in a period when the rest of the economy was shedding jobs at a rapid clip.

Erickson started the company in 2006 in Duluth, thanks to investment from believers and a Small Business Administration loan. It moved to Proctor in 2007 and took over a couple of old Canadian National Railway buildings that had stood empty for years. That year, output was about 3,500 tons, and Erickson set a goal of 8,000 for 2008. It seemed like a reasonable goal, but it wasn't; output was over 14,000 tons in 2008, and this year, Erickson thinks they might hit 25 to 30,000 tons.

Each of the buildings is 40,000 square feet, but in just two years, DSS has already outgrown that space. They added 4,000 square feet for office space to one building, and they just secured financing to build another 50,000-square-foot building between the first two.

"We focus on customer service, because it's the best thing we can give even in a bad economy," Erickson says.

"We're working overtime to get jobs done, and we're always working on new ventures and more automation so we can get projects done faster."

How much faster? "We deal with a lot of erectors who know they'll make more money with us, because our steel goes up 20 to 30 percent faster," Erickson says.

### EXPERIENCE BECOMES OPPORTUNITY

Erickson comes from a family of welders and fabricators. His father and uncle are both in the business, and he was visiting welding supply shops with his father before he started school. "I think I've been to every fab shop from Forest Lake to Canada," he says. He trained to be an architect, but discovered that Minneapolis traffic wasn't for him, and so he moved back north to start his own architectural firm. But then his father and uncle approached him to get involved in their company, which connected him to Duluth Steel Fabricators, where he worked for six years.

In 2006, he decided he wanted to do this business his way. "I finally realized that somebody needed to change customer service in this industry, and how construction companies view fabricators," Erickson says. "That meant manufacturing faster and more effectively."

He briefly considered buying in to Duluth Steel Fabricators, but after a scan of market and financial data, he decided to find investors and start his own company. "I've learned a lot in the last three years," he says. "When I was working on my business plan, I envisioned maybe a 20,000-square-foot shop with 15 to 20 employees and maybe \$5 million in sales."

#### INNOVATING FOR PROFIT

Part of the explanation for the company's meteoric rise can be found in the technology that Erickson embraces. From the beginning, his shop has used building image modeling (BIM) software to simulate how the steel beams they manufacture will fit in the building. That has helped DSS to avoid the expense of re-fabricating beams that might only be off specifications by an eighth of an inch. "If you're an ironworker sitting 130 feet up in the air and it's 20 below and you're flying up a 40,000-pound section to bolt up, the last thing you want to worry about is your holes not matching up," Erickson says in a video on the company's Website.

The BIM software allows Dynamic Structure Steel to make sure those holes line up. It simulates the beams' placement in a 3-D model of the building as it will be built according to the architect's specifications. By using a 3-D model rather than the two-dimensional paper drawings that are still used widely in the construction industry, Erickson says, it's possible to see problems before they come up—say, if a beam is going to be too long to accommodate the HVAC or other piping that will be in the same area.

"If you produce a dozen beams for a CVS store and they're all six inches too long, you have to either melt those down or get a welder on site to modify them, and either option takes a lot of time and money," says Christian Erickson [no relation], marketing manager for Tekla Software, which makes the BIM software that DSS uses. "The accuracy of the model has improved his operations and allowed them to see mistakes before anything physical is created."

DSS has racked up a lot of experience in its relatively short existence, which has helped to build its reputation as well as line its pockets. Mike Dosan is the senior project manager for the Duluth office of Kraus-Anderson, and has worked on several projects with DSS. "We've had nothing but good results from them," Dosan says. "For such a young company and such a young owner, they provide service and quality that add value to their product, and they do a great job on shop drawings, in fitting everything together."

In an industry that is occasionally plagued by delays due to subcontractors or suppliers, Dosan says that DSS is both reliable and flexible. "They're very proactive if you need something quickly, and they'll adjust the schedule and work overtime if they have to to get it to you," he says.