

THE MANUFACTURER

PROMOTING BEST PRACTICES IN MANUFACTURING



Going the *extra mile*

*Since its founding in 1979, **BTD Manufacturing** has grown from a simple job shop to a company offering its customers value-added services like engineering, assembly, and special packaging.*

Linda Seid Frembes finds out how

Avanade

The Avanade ERP solutions, built on the Microsoft Dynamics AX platform, leverage our core competencies in demand-driven manufacturing, supply network, lean production, global sourcing, and operations management to maximize your investments. Our cost-effective, adaptable, integrated industry-focused enterprise solutions have the breadth of functionality to increase your productivity, boost operational efficiency, and connect subsidiaries, customers, and business partners worldwide.

Bismarck Tool and Die Company (BTD) began in Bismarck, ND, on May 15, 1979. Its founders, Erling Rasmussen and Paul White Jr., created BTD as a job shop to design and manufacture dies, fixtures, and special machines. The company soon moved to its current location in Detroit Lakes, MN, due to expansion and growth. Today, BTD Manufacturing is an operating company of Otter Tail Corporation that provides OEMs with engineering, design, in-house die and fixture building, prototyping, metal stamping and fabrication, robotic and hand welding, machining, tube lasering and bending, riveting, assembly, plating, heat treating, and special packaging.

According to its parent company, BTD serves a niche in metal fabrication with the ability to manufacture large quantities of different mid-sized parts in small to medium volumes. BTD's major customer market is the recreational industry, serving brands like Polaris Industries, Arctic Cat, and Kawasaki. BTD has also done well in the lawn and garden, agricultural, and construction markets, servicing brands like Toro, CNH, and

Kubota. Jared Lotzer, sales engineer for the company, says, "Our differentiator from pure job shops is being multifaceted. We're willing to go the extra mile for our customers. For example, we'll provide the entire roll cage for a recreational vehicle, while others are not always capable of doing the value-added work. We can provide better service, thanks to our investment in new technology and our good financial backing from Otter Tail Corporation."

BTD's willingness to service its customers with value-added work has garnered a steady rate of growth year over year. BTD's capabilities now include engineering and prototyping, which translates into manufacturing improvements and cost savings for customers. The company's customers manufacture a wide range of products, from snowmobiles and ATVs to farm equipment and tractors, lawn and garden equipment, gas fireplaces, exercise equipment, and generators. "Ninety percent of our customers are located in the Midwest, with some in the South and East and continued emphasis on growth locally and

nationally,” says Lotzer. “We have over 300 active customers, but the top 10 represent 65 percent of our business volume.”

“Some customers provide us with a 52-week forecast in advance and are input into the ERP system,” says Marty Kiebke, vice president of materials and systems for BTM. “We work with several different steel suppliers to ensure that materials are received and processed in a timely manner.” In June 2006 the company went live with RF-SMART’s Distribution Suite to enhance its Microsoft Dynamics AX enterprise software. RF-SMART provides wireless, mobile, and RFID software solutions specifically for Microsoft Dynamics AX environments. According to a press release, BTM implemented RF-SMART to add value to its Dynamics AX-driven logistics operations, which handle more than 2,500 logistics-related transactions per day.

In addition, the company focuses on continuous improvement. BTM has worked with David Meier, coauthor of *The Toyota Way Fieldbook*, to train managers in lean manufacturing principles. “We apply and use lean tools like flow and cellular manufacturing,” says James Vogt, vice president of continuous improvement and planning for BTM. “We are just now getting the first kanban system in place so we can intentionally create the need for improvements. Overall, we have been using the tools that control inventory flow, labor, and save space.”

BTM had dabbled in lean manufacturing over the past five or six years but recently took a more systematic approach to deploying it. “We concentrated on 5S and a lot of kaizen blitzing. Our systematic approach to lean says, ‘If it’s not broke, then break it, because you constantly reinvent yourself.’ That’s the mentality you need to stay ahead of the competition,” says Vogt.

Currently, BTM’s 410 employees are spending a lot of time learning about the principles of lean manufacturing with the hope that it will become an ingrained practice. The focus on improvement has meant that the company maintains some of the best stamping lead times in the industry. Its fabrication shop can often do a same-day turnaround on customer orders. Vogt adds, “We try to build to standard lead times, but we have projects that have their own lead times too.”

Rob Oelfke, customer service manager for BTM, also notes that some customers build to stock while others are build to order. To meet the growing need of its customer base, the company established a satellite production operation in Lakeville, MN, in April 2006. Located 200 miles from its headquarters in Detroit Lakes, the new production operation is housed in the same building as the BTM Lakeville distribution center. This production location improves the company’s reach by serving customers in southern Minnesota and eastern Wisconsin. Customers in the area have enjoyed the reduced shipping cost of just-in-time deliveries.

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BTM Lakeville production operation is housed in a 52,000-square-foot precast building with ample room for future growth. The adjacent finished goods warehouse is identical in size to the 44,000-square-foot warehouse in Detroit Lakes. Moving forward, the company looks to grow both organically and via future acquisitions like Performance Tool in the Lakeville area. The addition of Performance Tool added to BTM’s already expanding expertise in tool and die.

As the company grows into more of a major player, market forces like global competition become more of a threat. “We have to control the labor content in products, and that’s where lean benefits us,” says Vogt. “Controlling costs like steel prices is done via quarterly contracts. We also try to build the relationship down the supply chain,” says Kiebke.

BTM Manufacturing is ISO 9001:2000 certified and is often recognized with customer awards for its quality, delivery, and cost-reduction efforts. BTM is affiliated with several industry organizations, including the National Association of Manufacturers, the Precision Metalforming Association, the Manufacturers Alliance, the Minnesota Safety Council, the Association of Women in Metal Industries, and the Society of Manufacturing Engineers. ■



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