MANUFACTURING



Trending upward

Versatility, bold bets, and trend awareness have paid off for Stillwater-based VistaTek BY DAN EMERSON

n any industry, staying current with changing technology is a prerequisite for sustaining a successful business. But it's also important to be selective. And the time-honored concept of "doing what you do best" still applies. The recent history of VistaTek, a Stillwater-based manufacturer, is a case in point.

In the manufacturing industry, 3D printing — the process of making a three-dimensional object from a digital model — has been a transformative and disruptive technology. Founded in 1996, VistaTek had initially been focused on 3D printing. It enjoyed great success in the rapid-prototyping sector, something 3D printing is well suited for, and it became one of the largest players in the U.S.

But then, as the cost of 3D printers dropped, "it became more mainstream and we saw more of our customers bringing the technology in-house," says managing director Dan Mishek.

That posed a potential problem for VistaTek's continuing revenue stream; fortunately, the company had other things to fall back on. In the early 2000s, it entered the mold-making business — machining the aluminum molds used to make plastic parts

and components. The move involved a major investment in time, R&D, and capital costs, as the company had to introduce the high-tech hardware and software needed to meet precision specs. But it paid off. In 2011, the company made more than 500 molds.

Setting the stage

In 2012, VistaTek's management made another bold decision: to sell the 3D printing business altogether and concentrate its efforts in its two other divisions: mold-building and the production of plastic components. The move was intended to set the stage for the company's continuing growth.

Now VistaTek, with its 33 employees, manufactures parts, products, and tooling for more than 2,000 companies in industries ranging from electronics and medical devices to agricultural equipment.

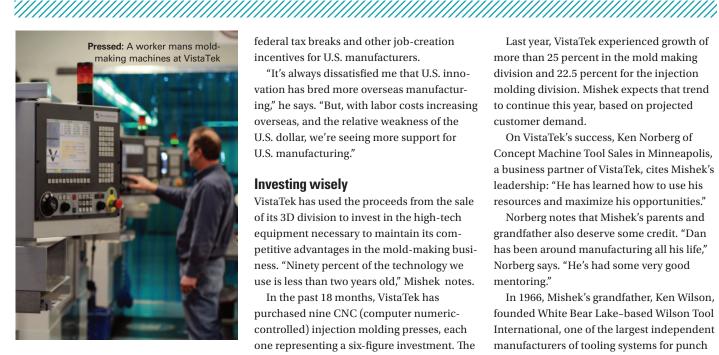
Versatility has been a key asset for VistaTek, including its ability to manufacture a diverse array of products. When one customer's industry is slowing down, another one may be gaining momentum. For example, at one point VistaTek was simultaneously making children's toys, an assault rifle, a hearing aid, and a horse manure pitchfork.

Among the company's largest customers are 3M, Medtronic, and Hewlett-Packard. Making accessories for digital consumer devices such as Apple's iPad and mobile phones is another focus.

The company specializes in parts 16 inches and smaller. Mishek says VistaTek has developed a unique niche in its ability to manufacture components in volumes many of its competitors "can't or don't want to. We don't mind doing lower volumes, and we can also do high volumes. Our 'sweet spot' is 500 to 1 million parts."

Unlike most companies in the field, VistaTek both makes the metal molds and does the plastic-injection molding in-house. It also performs second operations in-house, such as decorating, assembly, sonic welding, and so on; for example, it might add a client's logo to the parts or products, and then package them as well.

VistaTek's biggest value-add, says Mishek, is that "we can do it all in-house," saving customers time and money on multiple manufacturing steps. "If something isn't right, I'm not able to point the finger at another supplier," he notes. "We have to fix it. So, the customer knows he's in good hands and that we will honor our commitments."



Like many U.S. manufacturers, VistaTek has benefited from the "reshoring" trend more manufacturing being brought back to the U.S. Mishek reports that several programs have come back from Asia due to quality, regional wage increases, and the cost of shipping.

He notes that many of the companies reshoring today "have lost their network connections in the U.S., as local manufacturing has been ignored or avoided for one or two generations."

VistaTek has been subject to another major trend impacting U.S. manufacturers: a relative shortage of workers with the skills required for high-tech manufacturing. Today's manufacturing processes require fewer people than in previous eras, but they demand more highly skilled workers well trained in managing automated systems, barcoding systems, software tracking, and other tech-driven functions.

Accordingly, Mishek has made workforce development one of his top priorities, "everything from working with local community colleges to develop training programs to helping educate high school students about manufacturing careers."

During the days of peak unemployment in the recent recession, Mishek joined a lobbying group of the American Manufacturers Association, speaking before Congressional committee members to encourage more

federal tax breaks and other job-creation incentives for U.S. manufacturers.

"It's always dissatisfied me that U.S. innovation has bred more overseas manufacturing," he says. "But, with labor costs increasing overseas, and the relative weakness of the U.S. dollar, we're seeing more support for U.S. manufacturing."

Investing wisely

VistaTek has used the proceeds from the sale of its 3D division to invest in the high-tech equipment necessary to maintain its competitive advantages in the mold-making business. "Ninety percent of the technology we use is less than two years old," Mishek notes.

In the past 18 months, VistaTek has purchased nine CNC (computer numericcontrolled) injection molding presses, each one representing a six-figure investment. The mold-making machines are equipped with carbon diamond-tipped cutters, constantly under laser inspection to ensure that cutting surfaces maintain their precision edges. "You have to continue to invest and evolve or you'll be quickly left behind," Mishek says.

On the positive side, the high capital costs represent a barrier to entry that limits the entrance into the industry of new competitors.

Early last year, VistaTek made a literal move: relocating from its 15,000-square-foot plant in Vadnais Heights to a 56,000-squarefoot manufacturing facility it purchased in Stillwater. Nearly four times the size of its original home, the new location provides plenty of room to accommodate what the company anticipates will be continuing growth.

The move reflects some "ambitious growth goals, based on projections from our customers," Mishek says. About 95 percent of the firm's customers are in North America. In an era of just-in-time inventory management and quick manufacturing turnarounds, "customers like to be within one or two hours time-zone difference."

VistaTek estimates that of the roughly 3,000 moldmakers in the U.S., only about 1 percent focus on quick-turn tooling — the ability to produce molds within one to four weeks — and also do in-house injection molding for large numbers of molds. VistaTek is one of those roughly 30 firms nationwide, Mishek says.

Last year, VistaTek experienced growth of more than 25 percent in the mold making division and 22.5 percent for the injection molding division. Mishek expects that trend to continue this year, based on projected customer demand.

On VistaTek's success, Ken Norberg of Concept Machine Tool Sales in Minneapolis, a business partner of VistaTek, cites Mishek's leadership: "He has learned how to use his resources and maximize his opportunities."

Norberg notes that Mishek's parents and grandfather also deserve some credit. "Dan has been around manufacturing all his life," Norberg says. "He's had some very good mentoring."

In 1966, Mishek's grandfather, Ken Wilson, founded White Bear Lake-based Wilson Tool International, one of the largest independent manufacturers of tooling systems for punch presses, press brakes, and punch and die components for the stamping industry. His father, Jim Mishek, worked there before he and his wife co-founded VistaTek with four employees and one 3D printing machine.

Previously his father had worked in the sheet metal industry before retiring early, and the industry connections he retained from that career helped VistaTek get off to a rapid start.

Mishek joined VistaTek in 1998 as a 24-year-old salesman; he was promoted to managing director about four years ago. It's still a family business. His younger sister, Jennifer Sutherland, is the firm's finance director. His brother, Allen Mishek, is an account manager who also does the marketing.

On the topic of running a family business along with two siblings, Mishek says the benefits outweigh any drawbacks: "One of the advantages is we really know and understand each other, and know when to 'push' and when to back off."

