VENTEX, BOLTON, ONTARIO

Bolton-based louvre and damper manufacturer opens up to new opportunities with laser cutting equipment

BY NESTOR GULA

Many successful companies start off with a simple idea. Ventex Inc. started because one man had an idea of how to improve a product most of us don't even think about—industrial back-draft dampers.

Bill Haley was working for Leader Fan when he had an idea for an improved extruded aluminum back-draft damper, and in 1984 he went out on his own.

"He started this because he had an idea how to make back-draft dampers better," says his son, Jason Haley, president of Ventex Inc. "It was just him for the first couple of years, and then he hired a couple of guys. I joined the business in 1992 right out of university. I went to school at Seneca College studying sales and marketing, and I actually wanted to get into advertising. I said I would never work for my dad. But…it was the middle of the recession and he needed help. So I started to work for him. And I have not found a better job yet."

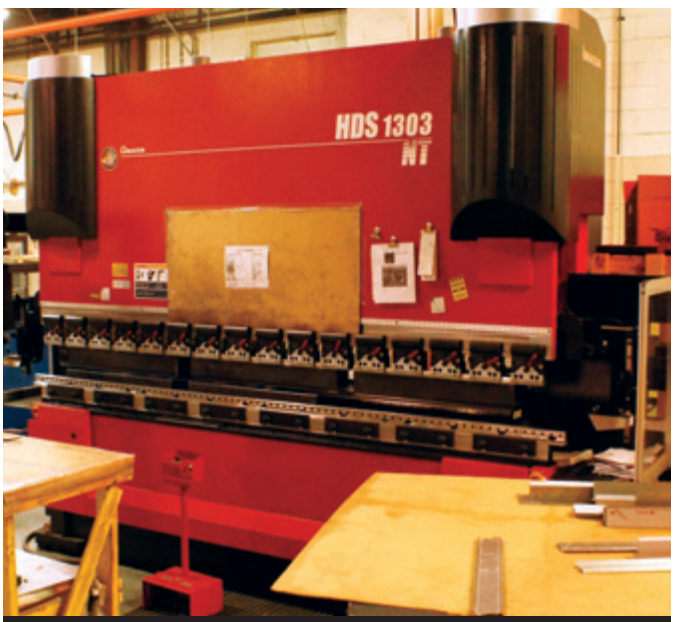
The company started very modestly. Manufacturing was done in the Finch Avenue and Weston Road area of Toronto. Bookkeeping, accounting and general business were conducted in the family home.

"When he first started up, it was in a room no bigger than this," he says, pointing to his very modest-sized office. "When they cut the first extrusion they had to open the door to make the cut because it stuck out into the hallway."

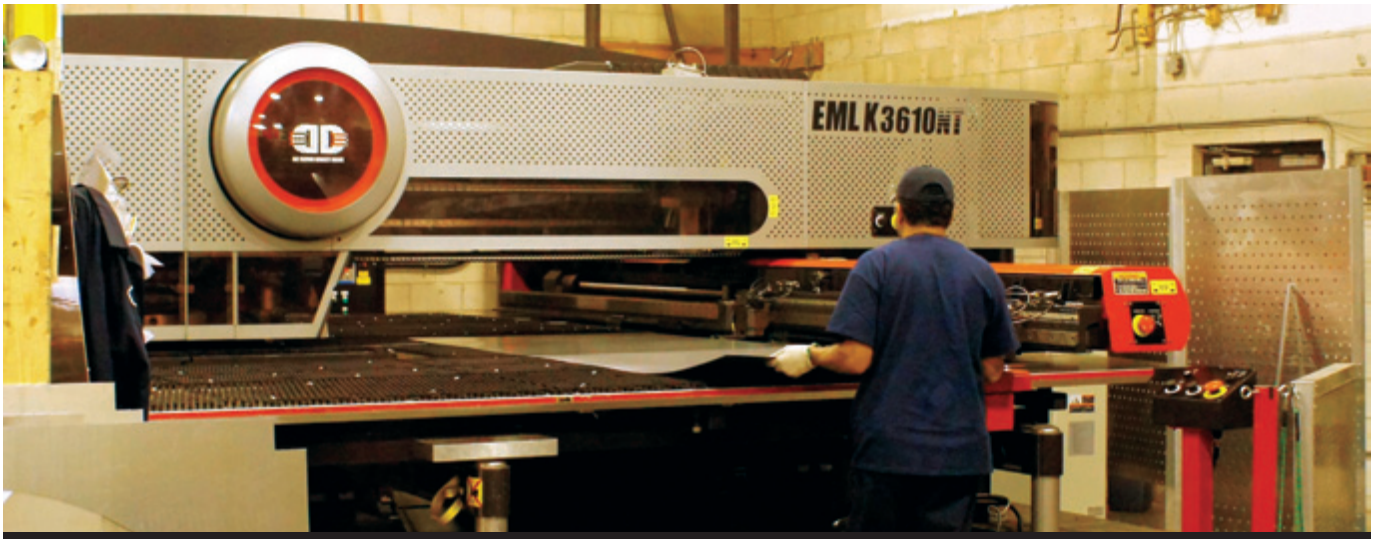
The company moved a few times—they were just north of Toronto in Concord, around Jane Street and Highway 7, and in 2001, they bought a 46,000 square-foot facility in Bolton, northwest of Toronto.

"We bought this building. We did not need the entire building at first, so we rented out half of the building, and we actually rented out the office spaces as well," he says. "As the years went by, we added more products and grew the business. Now we occupy the whole building and we are looking to expand in the next year or so."

Haley acknowledges that they got a good price for it, and that he was very comfortable in the area as he actually grew up 15 minutes from Ventex's current location. There are actually two businesses under the roof—Ventex, which manufactures louvres, penthouse louvres, acoustic louvres and back-draft dampers mainly; and Alumavent, which manufactures extruded aluminum control dampers, insulated control dampers, galvanized steel control dampers and fire dampers. [Incidentally, penthouse louvres are four sided louvres that sit on top of a roof and have the ductwork come up from the bottom.]



The Amada HDS 1303 NT press brake.



Although feeding the turret laser is still performed manually, automating the process is being considered.

Alumavent was created when the company bought a competitor in 2006. "They were a louvre manufacturer, and we moved that company up to Bolton. We changed the product line around, and we introduced our insulated control damper and the fire safety products through Alumavent."

What is interesting about Ventex is that neither the founder, Bill, nor the current president, Jason, are engineers or have a technical background. "My dad is a financial controller by profession and I'm a sales and marketing guy," says Jason. "We just learned by doing."

Having a good product and establishing an impeccable reputation was important to growing the company.

"It was very challenging. We were always looking for customers," he recalls. "It was a very gradual process. There is no major distributor for our products that handles them across the country. It is not like we are selling to a large retailer. We have to go into these markets and research, either with agents or wholesalers, to sell our products. There is a lot of time spent building relationships. And there was a lot of travel. Not so much anymore but I still do travel, especially to Montreal; it is really busy there these days. We have a salesman in Montreal and I am out there when we are doing the big projects."

The company has been around for 30 years and maintaining a good reputation is important. In these three decades, the company has grown to over 50 employees. There is even a sign in front of their building stating that they are hiring. "Finding and keeping staff is not difficult," according to Haley. "We do a large amount of in-house training. We have two employees that have been with the company for over 25 years. They actually predate me."

Haley notes that one recurring aspect of the company is to invest in technology to produce better products. "We have invested a lot of time and money in using technology wherever we can in the manufacturing process. It started with our internal computer system," he says, explaining, "What it does is take an order directly from the order entry system in accounting, translates the line items and descriptions and turns it into something that goes right to the shop where it is barcoded and the cutter gets his cut list just by scanning the bar code. The assemblers have their production sheets all summarized, and they scan the bar codes through production so that we know where every order is in the shop at any time—we can just look it up when a customer calls."

Another recent big investment was the acquisition of an Amada EMLK 3610NT Laser Turret system and an Amada HDS 1303 HD press brake. "Basically, we were looking for a laser to replace a plasma cutter," says Haley. He was looking for something to make cleaner cuts, faster. "The plasma is like taking a torch and just cutting a piece of metal out. A laser is much more refined and it leaves a much nicer finish on the product. There are no burns, there are no marks, there are no secondary processes needed that sometimes the plasma cutter requires."

The decision to go with the turret system came after consultation with Amada salespeople and others as well. "Amada sold me on them. Their customer service was amazing—is amazing," he enthuses. The Amada salesperson took the time to listen to Haley's concerns and needs, taking an interest in his current production process. "[The salesperson] tried to show me how he could improve [our process]. Going into this, I was initially going to just get a laser. However, he showed me this other machine that had the combination of a turret punch as well as a laser, and showed me how it could be effective in my business and what it could let me do."

The turret machine allows Ventex to do some forming and actual bending of the product on the machine, which was generally a secondary process for the company. "You can actually cut out production steps."

Initially, Haley was skeptical. He had another salesperson come to his shop, telling him that a turret type machine was unnecessary for what Ventex needed. However, after going through the specifications, the Amada salesperson invited Haley to their solution centre in Schaumburg, Illinois.

"I was blown away by their facility, the people, their knowledge of products and everything. They had a complete package. They do what I do. They stand behind their machine. Their customer service has been top notch as far as answering questions. The machine has never broken down because of something mechanical in the year that I have had it. It only broke down once because my operator did something wrong—a sheet of metal crumpled up so we had to replace one part. It has been reliable. It is the backbone, really, of my production now."

Amada came in to train the employees on the machine says Haley. "I was extensively involved in learning the software side of the program. Because I needed to know what the capabilities of the machines are…I wanted to get as much out of the machines as possible. I am very hands-on that way. I know how to operate most of the machines in the shop."

He actually helped design some of the machines in the shop. "The machines on the aluminum side of the shop do custom cutting and punching. And a custom pinning machine that we designed basically took what were the slow spots in production and turned them into areas which drive the production."

While some may suggest automation and high-speed machinery will eliminate jobs in manufacturing, Haley says he sees the opposite. The use of the laser has increased throughput and actually caused more hiring in his company.

Jason Haley poses in front of one of the company's louvres.

"I used to be able to process about 50 to 70 sheets of steel or aluminum in a week with one guy. Now with the laser turret and the new brake we are processing the same amount in one shift. So we have increased our productivity five times," he says.

"It has also allowed us to have new products. We have more products now than we could have had with the old machines. We are now doing heavy-duty industrial control dampers for mines. I have done jobs in stainless steel for Potash in Saskatchewan, something that I could not have done before.

"It has just changed the nature of our approach to manufacturing and what we can manufacture. It has changed our mindset to think of ways to be creative to solve problems—something we could not have done before."

The complete set up of the laser took about two weeks according to Haley. "The thing that was extremely impressive about it was that as soon as they finished setting the machine up, we were producing. The next day, as part of our training seminar we were producing parts on the floor that we were using in production," he says.

The press brake has also helped streamline the operation. "That came out of necessity because I bought the new laser," says Haley. "I had the [laser turret system] for a couple of months, and I was getting pristine parts out of the laser, and I was going to bend them in my old brake but the accuracy was just not there. It is amazing to see the capability and the accuracy of the Amada brake. It is repeatable within a few thousandths of an inch every single time.

"When I looked at our production before—bending sheet metal, bending aluminum, bending steel—it was

always something that we did as a secondary function," he says. "It was always something the guys wanted to put off until the last moment. Now we are able to engineer products and have the sheets cut out before we need them. This is now driving my production. What used to be a bottleneck is something that is making the rest of my production go faster."

Ventex does not have robotic handling yet. "We don't do a lot of the same thing over and over again. I'm not doing process runs. I am still doing custom fabrication in a way. We very rarely sell the same sized unit twice," he said. "What I really like about the Amada system is that I can design something in Solid Works, send it to the Amada bending software and then the bending software can then say this is where you need to have a procedure done on the laser. The system is very integrated and very graphical. The guy who is running the press brake can see what he is going to do and what he is to do next. It is all laid out to him very visually."

Haley says that the company does run into bottlenecks on occasion, and he is very proactive to come up with solutions. "It is as simple as being in the shop and knowing what is going through the shop, what processes are taking the most amount of time," he says. Ventex is a busy place. If you include data entry, there is anywhere between 75 and 100 orders in various stages of production in the shop, he says. Ventex can do around 30 to 40 shipments a day.

Although the machines are only running about eight hours a day right now, Haley expects they will be running them longer in the near future. He is looking to the automation of the tools so the machine can run 24/7, feeding the sheets and picking the parts up. "We haven't done this because of space. We are jam packed for space," he said.

The flexibility and ease of his recently bought machines has allowed Haley to expand his business. "Another thing Amada has allowed me to do is innovate and come up with new products," he says. "I can actually do all the prototyping and build the product first. Have a specific set of plans and then send them out to the engineers. It has saved me a ton of money in development, and has allowed me to be limited only by my imagination. I'm always asking my guys here at the shop to think of new ways to do things. And the Amada products are really helping me be innovative. We do more because we can.

"Did I have a plan set out for every single thing that these machines would do when I bought them? No. But I knew that we could utilize them, and the capabilities of the new tools would help our business grow." CM

The busy and well-lit assembly area of Ventex.