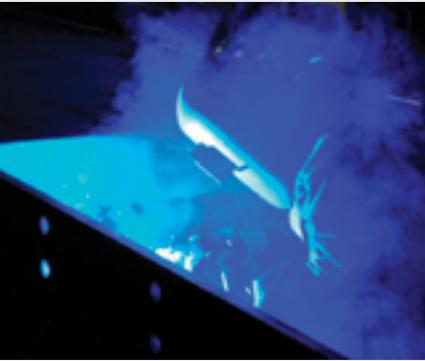




- Overhead crane for moving raw materials and work-in-progress.



- Welder fabricates structural beam.

Hypertherm®

Building for the future with plasma technology

Industry: Steel Service Center

Equipment: ProNest®, HyPerformance® Plasma, HPR260XD®, EDGE® Pro

The company and products

Behlen Industries of Brandon, Canada was founded in 1969 and is Canada's largest producer of steel building systems, in terms of units produced annually. Behlen serves industrial, institutional, commercial, and agricultural markets with systems sold and installed throughout North America and parts of Europe by a network of authorized builder-distributors. The builder-distributors are supported by regional Behlen sales and technical customer service employees. Behlen is ISO 9001 certified and is consistently listed as one of Canada's 50 best managed private companies. As a result of its success, it is also the largest user of steel in Western Canada with consumption typically exceeding nine million pounds annually.

Putting the structure in place

Behlen recently invested in a new Koike Versagraph plasma cutting machine which replaced a 10 year old unit that had been operating 24/7. The replaced machine was no longer serviced or supported by its manufacturer and had reached the end of its reliable service life. After some research, Behlen purchased the new cutting machine from Linde Canada; their existing supplier of industrial equipment and gas. Linde Canada also provides service for the new machine, which was a major factor in the final purchase decision.

The newly installed Koike cutting machine is equipped with SureCut™ technology from Hypertherm: a HyPerformance HPR260XD plasma cutting system with Autogas, an EDGE Pro CNC, Sensor THC, and ProNest nesting software.

The Behlen production team developed some specific purchase-related criteria for the new machine technology. Behlen's production manager, Doug Riddoch, commented, "The plasma system is considered a vital component of the work flow at the company.

If it is not working then it really affects the operation of the shop. It (the plasma) conducts the work flow, with 40 welders waiting for cut parts."

Continuing his thoughts on the recent machine acquisition Riddoch went on to say, "Quality and reliability were our big drivers for the purchase. The Versagraph was selected because we felt that it was more heavy duty than the other models we saw. Trouble-free operation is what we are looking for and we'd rather spend a little more to get this, if needed. We purchased the machine with growth in mind. Knowing we had our last machine for ten years certainly made capacity planning a little less difficult."

Mike Trupp, a Technical Sales/Automation Specialist for Linde Canada, was primarily involved in the pre and post sales process, including system installation and training. Mike takes his customer satisfaction responsibility very seriously. "The buck stops with me, as far as ensuring my customers' machines are operational," says Mike. "I have to be a one-stop shop to our customers, as much as possible. The relationship I have with Hypertherm makes that easier for me. Whether it's a ProNest True Hole® technology setup question or something related to the HPRXD plasma, I only need to make one call directly to Hypertherm, or via the machine manufacturer (OEM), and I can get the answers I need ... instead of one component-supplier blaming the other's component(s). I plan to start using the Hypertherm online Remote Help™ capability soon. It's a win-win solution for the customer and for us, the equipment distributor. Even though the new technology, like True Hole®, is automated and simple for inexperienced programmers and operators to use, it also means that when there is a technical question those same operators may not be able to help diagnose the issue. Remote Help™ will allow me to resolve, or be a part of resolving, technical and applications questions right from my office."



- Welded structural beam

A higher level of success

The new Hypertherm-equipped cutting machine has delivered impressive results and changed the way Behlen operates. Riddoch commented, "Since the plasma was installed three months ago, we've seen some major improvements in the way we process jobs and the results we achieve. Firstly, we have more flexibility with the new machine. We transferred work from our plate machine and were able to bring some work back in-house from outsource vendors. We also consolidated some projects from our other company locations. All in all, the new machine capability has given us the flexibility to alleviate production bottlenecks, reduced our work in progress, and our material handling. Another major impact (from the new machine) is the improved I-beam weld fit-up based on optimized part quality from reduced edge taper. I-beams are now consistently fabricated to tighter tolerances, which helps our installers by reducing costly in-field rework. Other major process improvements include use of the new Hypertherm True Hole® technology available with this machine. While we've not yet used it to its full thickness potential, because right now we mostly very thin sheet work, based on the bolt-ready hole quality we've seen so far, we will definitely gain a lot of benefit from the technology in the future."

Behlen uses ProNest® each day to program its cutting jobs. Programming at Behlen includes the use of ProNest's Automatic

Nesting to achieve high levels of material utilization without programmer intervention. Collision Avoidance is also applied automatically to each nest, yielding optimized tool paths, lead styles and positioning. The resulting tool path translates to productivity improvements in cut-to-cut cycle time. This is one of the ways ProNest contributes to Rapid Part™ technology. Chad, one of Behlen's two full-time programmers, remarked "we also like the Common Line Cutting feature (provides for cutting of two common straight-edges with a single cut) a lot because it is so easy to use and improves the nest utilization."

Summarizing results from the machine investment, Riddoch says "From the time we receive the paperwork on a job, we can now be ready to ship it (complete building, etc.) in just two days. Just by bringing some of the hopper-bin work in-house, we've seen a 40 percent cost savings on that product alone, as well as a significant savings in production lead time. All of these changes to the way we process jobs using the new machine have helped us improve our profitability."

The team at Behlen Industries clearly understands the importance of using the right tool for the job. Through successful implementation of new ground-breaking plasma cutting technology and partnering with a dedicated equipment supplier, Behlen is saving money and improving profitability in a competitive market.

For a location near you, visit:
www.hypertherm.com/CAM

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One of Hypertherm's long-standing core values is a focus on minimizing our impact on the environment. Doing so is critical to our, and our customers' success. We are always striving to become better environmental stewards; it is a process we care deeply about.

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