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# MMP & P

## Metalworking Production & Purchasing

The Canadian publication for production, purchasing and management in metalworking

[www.metalworkingcanada.com](http://www.metalworkingcanada.com)

### Milling grade stays sharp in stainless steels



Sandvik Coromant launches its GC1040 milling grade on October 1st. In the extremely tough machining of austenitic stainless and duplex materials, this grade performs securely with consistently sharp cutting edges, low forces and slow wear. This is the company's first-choice recommendation for shoulder milling

with small diameters in fine to medium roughing. The company states that this grade is ultimately secure in unstable conditions and safe for unmanned production, time after time. Grade GC1040 is available for a broad range of CoroMill cutters. Visit Sandvik at CMTS Booth 2538.

[www.sandvik.coromant.com/ca](http://www.sandvik.coromant.com/ca)

### Solid carbide high-performance drills



The X-treme solid carbide high-performance drills of the Walter Titex specialty brand are now available in the diameter range 3 to 25 mm including external cooling. Apart from the different cooling method, they offer users the same advantages as the internal cooling version. The most striking feature of these tools is the four lands, which improve the guidance. This enables the drills to maintain their direction at the drill entrance or exit, even when machining inclined surfaces. This makes them suitable for use in numerous sectors, such as general mechanical engineering, tool and mould construction and the automotive and energy industries. In many cases, the processing time for components is reduced, as the user is able to forgo preparatory operations such as milling a plane surface or drilling pilot holes. Visit Walter at CMTS Booth 2038.

[www.walter-tools.com/us](http://www.walter-tools.com/us)

### High-powered FOL-Fiber Laser

Amada announces the FOL-Fiber laser, which boasts a 4000 W production fiber laser specifically designed for cutting. Featuring linear drives in the X, Y & Z axes, it is engineered to provide users with 5G acceleration for the entire work envelope and more than 13,000 ipm traverse speeds. The system is best suited to take advantage of the higher cutting speeds in thin material typically associated with fiber lasers. The fiber



laser source is comprised of seven 600-watt power stacks. By combining these stacks, the company has developed a fiber laser that provides maximum power for laser processing with maximum efficiency. To further enhance green light-on-time, the FOL-F can be equipped with an automatic nozzle changer. The optional 8-station changer automatically changes, cleans and calibrates the nozzle and head based on the requirements of the material to be processed.

[www.amada.com](http://www.amada.com)

Volume 38, Number 5



## Cutting a clean line at W. Côté & Fils

By Rob Colman

It was back in 1929 that Eugène Côté, a blacksmith, designed his first snowplow. It was fabricated in wood and covered in sheet metal. His nephew, Wilrose, would go on to found W. Côté & Fils in 1964, a company that still builds and repairs snowplows and snow removal equipment. The fourth generation of the Côté family currently runs the business, and they remain the go-to business in the snow and ice control industry in Canada ([www.w-cote.com](http://www.w-cote.com)).

The company brings in 80 percent of its business from Quebec and 20 percent from the rest of Canada and elsewhere. The demand keeps the company's 35 employees constantly busy at their 35,000-square-foot facility in Mercier, Quebec, on the south shore of Montreal.

To keep such an institution at the top of its game requires sound management and dependable machines. When current vice-president Laurent Côté needed to replace a plasma cutter two years ago, he was looking for reliability and ease of use.

For the company's needs – cutting everything from 14 gauge to 1 in. steel – ESAB's Sabre DX and m3 G2 Plasma fit the bill on all fronts ([www.esab.ca](http://www.esab.ca)).

The W Côté & Fils shop floor is busy, with seven ESAB dual feeder welding stations, four ESAB MigMaster 250s, one dual robot work cell, one single robot work cell, a 400-ton 23-foot press brake, a 165-ton punch, a 100-ton ironworker, and an automated bandsaw.

The plasma cutter formerly on the shop floor had a gantry built by one company, a torch built by another, and a CNC control system designed by a third. This wasn't always ideal when looking for someone to maintain the company's investment. Mr. Côté wanted a better solution, and ESAB provided it.

"ESAB is the only manufacturer that builds and supplies the gantry, the torch and the CNC controls, so when something happens, we deal with one person and there is no 'passing the buck,'" says Mr. Côté. "ESAB provides a complete solution and local service."

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## feature COVER STORY

Continued from the cover

**On the cover:** An operator runs the ESAB Sabre DX and m3 G2 Plasma at W. Côté & Fils. All photos courtesy of W. Côté & Fils.

“We work hard to keep the **highest quality** and service on the market. The secret to success is to have **the best machines** on the shop floor for your production, give the **highest product and service** to your customers, keep your employees happy and, finally, love your work!”



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Performance, of course, was also important. W. Côté & Fils prides itself on having an inventory of equipment and parts that allows them to turn around customer orders the same day, or within a few days of an order being received. This means production has to remain smooth and efficient.

“The Sabre DX provides the wide speed range we need, the accuracy and smoothness of motion we want to cut parts, along with a very high quality cut face,” Côté explains.

The Sabre DX is a heavy-duty, high-speed, low profile gantry that carries up to two plasma or eight oxy-fuel stations over cutting widths of up to 14 feet. With digital AC drive amplifiers and AC brushless motors, it is built for speed, accuracy, and maintenance-free operation.

The system was installed back in 2009 at W. Côté & Fils on an existing water table, and the company has had no major challenges with it since. “W. Côté & Fils has been one of our showpieces for people looking for that size and scope of machine,” says J.P. Dillon, ESAB representative in Quebec.

The Sabre DX is equipped for a maximum machine speed of 1,400 inches per minute and handles up to six-inch thick material. Available processes include plasma, oxy-fuel, three torch edge prep, plasma marking, air-scribe, punch marking, routing and drilling.

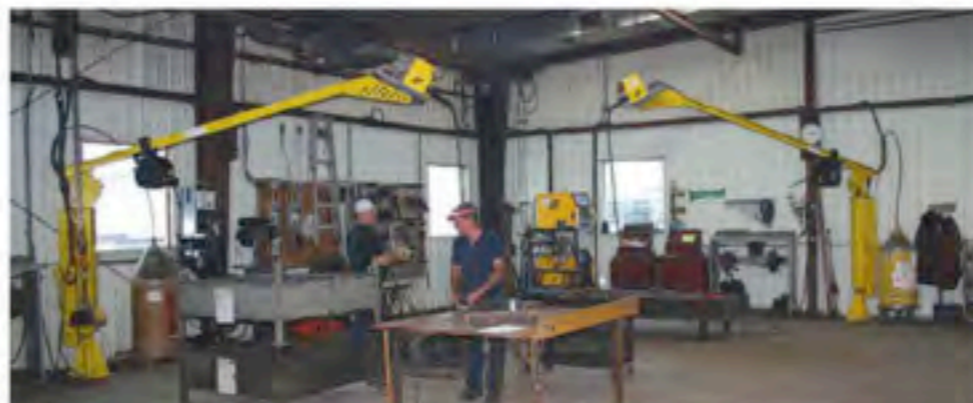
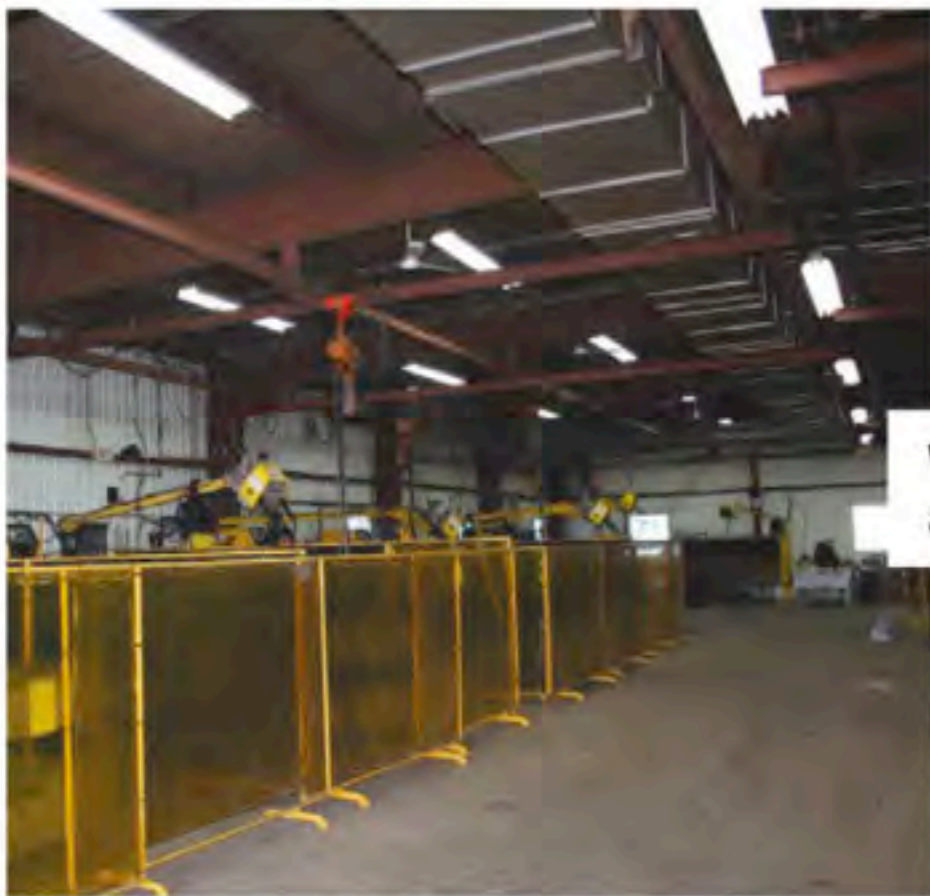
As J.P. Dillon describes it, the Sabre DX with the m3 Flow Control is the only all-digital plasma system, a closed-loop system. “The way it is designed allows all of the components to speak to each other at a high speed in digital formats,” he says. “A plasma cutter is, in the end, a gas control system. It controls the gas jet. That means you need



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W. Côté & Fils has a busy shop floor, including the Sabre DX, a dual robot work cell, and seven dual feeder welding stations



to know what the pressure and flow is to make it work optimally. In the past, and still among our competitors, the controls only control the pressure. The problem is, you can have pressure and not have any flow. You can illustrate this by putting your finger over the end of a garden hose. The pressure is still there, but the flow is blocked.

"With this system, the machine knows the status of every component, all of the time. It has built-in diagnostics that tell us what is going on all the time. It even prevents operator error. For instance, if an operator puts the wrong nozzle in the torch, the machine will tell him that the nozzle is either too small or too large."

Mr. Dillon notes that Côté is a great partner and a company that is always interested in innovating when it makes sense for their business. "Whenever we have a new product, they are interested in evaluating it and seeing how they might be able to use it," he explains. "Their machines are not a static investment, they are an organic part of their shop, and as new options are available, if it makes sense for their business, they will invest in it."

As a representative of the fourth generation of Côtés in the company (alongside his brother Jocelyn), Laurent Côté understands the importance of every element in his business.

"We work hard to keep the highest quality and service on the market," says Mr. Côté. "The secret to success is to have the best machines on the shop floor for your production, give the highest grade of product and service to your customers, keep your employees happy and, finally, love your work!"

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