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Ahead by a **CENTURY**

*Even after 100 years
in business, Quebec's
S. Huot continues to
seek out new markets*

By Mark Cardwell

High-quality metalworking to make high-precision parts, assemblies, and large-scale structures has been the hallmark of S. Huot for the past 100 years. But it's the skill and experience of the people behind the tools, machines, and processes that have always been the heart and soul of the Quebec City metal shop.

"Our true strength is our personnel," said Thien Tien Huynh, the company's CEO who co-owns the company along with two of the founder's grandsons.

Housed in a 100,000-sq.-ft. plant in the Saint-Malo industrial park in Quebec City's Limoilou neighbourhood and only a short drive from where the company began as a machine shop in 1920, S. Huot designs, builds, and installs equipment and products for customers in Quebec and elsewhere in a variety of markets, including forestry, mining, aerospace, aluminum, hydropower, and ports.

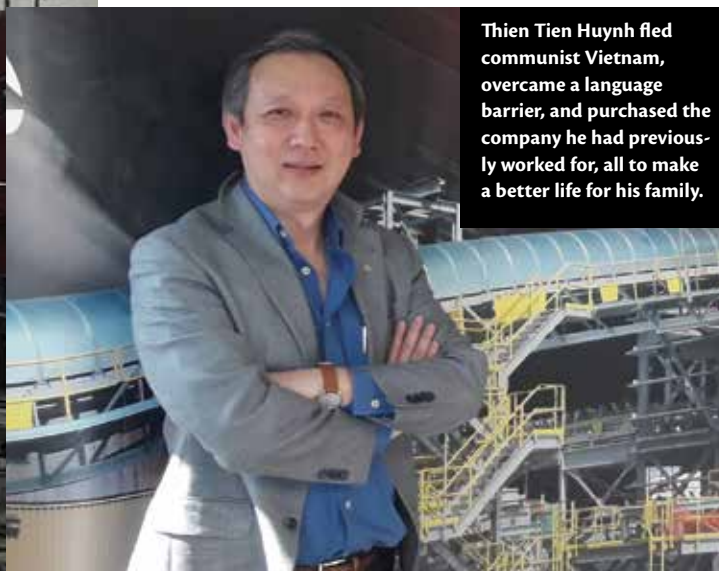
Roughly 100 employees, including a dozen who have been with the company for 35-plus years and dozens more with 10-plus years, operate 23 machining centres that can handle parts up to 7 m long.



The company's 100,000-sq.-ft. plant in the Saint-Malo industrial park in Quebec City's Limoilou neighbourhood is only a short drive from where it began as a machine shop in 1920.

"It's very simple," said Huynh. "We build conveyors that bring materials from point A to point B," he said.

Conveyors for both industries are made of steel frames and rubber belts. The similarities end there, however. Conveyors for sawmills are from 24 to 48 in. wide, with small motors of 30 to 50 HP. They are used to either carry cut boards inside sawmills or entire logs in lumberyards.



Thien Tien Huynh fled communist Vietnam, overcame a language barrier, and purchased the company he had previously worked for, all to make a better life for his family.

New Equipment Added

Last year the company added two new machines worth nearly \$1.6 million: a Correa Norma 45 4-position milling machine with a turning table for maximum versatility and a Nakamura AS-200LMYS multitool lathe equipped with an automatic bar feeder used to manufacture small aluminum parts in large volumes.

The company also has a 35-ton crane lifting capacity and offers welding, steel blasting, and painting services, as well as design, engineering, and project management.

According to Huynh, the lion's share of the company's business comes from just a few industry sectors, including forestry and mining.

By contrast, conveyors for mining are from 72 to 84 in. wide and are driven by motors up to 1,250 HP.

In February the company signed a deal to supply 13 such large conveyors for the new Côté gold mining project in northeastern Ontario (located between Sudbury and Timmins). The equipment will be used to carry up to 36,000 tons of ore cuttings a day from the face of the \$1.3 billion open-pit mine to concentrators and other production infrastructure.

S. Huot began building the equipment in May, with the first deliveries planned for August.

For Huynh, the Côté contract, which his company first bid on in May 2019 and began contract negotiations for last summer, will allow the company to recall workers that were laid off last year because of the pandemic.

"We have had no cases of infection in the company, but it did impact business," said Huynh. "Now we're ready to recall 10 or more people and hire 15 to 20 more to finish the gold contract by November 2022."



S. Huot provides its customers with machining, fabricating, welding, steel blasting, and painting services, as well as design, engineering, and project management.

Machining Services

In addition to serving the forestry and mining sectors, the company also performs machining and parts manufacturing for many other industries, which represents about 40 per cent of its business. One of the company's most notable and longstanding customers is Canadian transportation icon Bombardier.

Forty years ago S. Huot was contracted to perform the machining of the under frames of train and subway cars for Bombardier's transportation division, which had landed several multibillion-dollar contracts with rail and subway providers in Montreal, New York City, Long Island, and in Europe for the Channel Tunnel.

"Their plant is in La Pocatière (about an hour's drive east of Quebec City), so we could do the work before the cars were shipped out by sea or rail," said Huynh.

Those contracts helped to both diversify the company's activities and raise its renown in the industry as a top-tier metalworking shop.

The Beginning

Founded by Stanislas Huot, a mechanic whose grandson Michel describes as hard-working, highly principled, and ingenious, the company built a solid

reputation for the machining services it supplied to local printers, shipbuilders, and pulp and paper mills during its first few decades in existence.

Stanislas eventually sold the business to two of his sons, Félix and André, who in turn sold it to two of



Machinist Yves Cantin, who has been with the company for 27 years, works on the newly acquired Correa Norma 45 CNC milling machine.



Jonathan Côté, a machinist for S. Huot for 19 years, measures a component.

their sons, Michel, a mechanical engineer who ran operations, and Jean-Marc, the company's administrator.

While the two cousins still co-own the business, they no longer are involved in day-to-day operations.

It was under theirs and their fathers' watch in the 1960s and '70s that S. Huot began to focus on the manufacture of massive machinery like slashers and

sorters for the forestry industry.

"Our equipment is all over Quebec, Ontario, and New England," said Huynh. "We had marketing reps and manufacturing agents throughout the region. The cutoff point was Western Canada. Our equipment was so big and heavy that the shipping costs were prohibitive the farther away you got from our plant and we weren't as competitive."

Interestingly, it was during those same years that a deadly war half a world away propelled Huynh on a compelling personal journey that would ultimately lead him to Canada and S. Huot.

Dealing With War

Born and raised in the former South Vietnamese capital of Saigon, where his father owned and operated a business that made and supplied machinery to the sugar industry, Huynh's world was turned upside down in 1975 when the communist North Vietnamese finally defeated the U.S.-backed South after a bloody, decades-long civil war.

"We grew up with Western values," Huynh said about life in the former French colony. "But everything



S. Huot designs, builds, and installs equipment and products for customers in Quebec and elsewhere in a variety of markets, including forestry, mining, aerospace, aluminum, hydropower, and ports.

Tiago Lucas is a 34-year-old machinist from Sao Paulo, Brazil who emigrated to Quebec in 2019 with his wife and two small kids to take a job in the S. Huot plant.



changed overnight.”

After three years of living under communist rule, 16-year-old Huynh and his three siblings followed their mother from the family home early one morning.

Unbeknownst to their father, they headed to the coast through a clandestine network and, together with nearly 100 other people, boarded a 10-m, shallow-draft wooden river boat powered by a 5-HP motor and headed out to sea.

“It was very dangerous, very scary, with lots of risks,” Huynh recalled about his family’s illegal escape bid, which would have earned them long jail sentences if they were caught, or worse if they fell into the hands of roving bands of pirates.

After seven days at sea, they landed in Malaysia. And after spending six months in a refugee camp there with thousands of other so-called Boat People, Huynh and his family flew to Quebec City, where an uncle who sponsored them was already living.

“I was the only one in my family who didn’t speak French,” recalled Huynh with a laugh. “I was the only one who studied English in school.”

He quickly mastered the French language, however, as a college student in business administration and at night courses in supply chain management. After working for a few companies in procurement, he landed a job as a purchasing agent at S. Huot in 1992.

Huynh left in 1999 to take a job as purchasing manager for a telecom company that, among other things, did subcontracting work for Nortel.

When the tech bubble burst in the early 2000s, and Nortel in particular suffered a spectacular stock market crash, Huynh returned to S. Huot, only this time as general manager in charge of procurement and production.

Highs and Lows

Although the company registered a record year with \$31 million in sales in 2001, it was then hit hard by two existential challenges.

One was the collapse of the forestry industry, caused by the expiry of the Canada-U.S. softwood lumber agreement. With it went the demand for S. Huot’s heavy forestry equipment. The second was the rapid decline in demand for newsprint in an increasingly paperless, internet-driven world.

“Sixty per cent of our business was in sawmills and it fell to zero,” recalled Huynh. “We had to come up with new ways to diversify our business.”

Another challenge at the time was what Huynh calls a “very tense” relationship between ownership and the plant’s unionized workers (the Centrale des syndicats démocratiques), the smallest of Quebec’s four big trade unions.

“We had frequent strikes and work stoppages,” said Huynh. “The big problem was that labour agreements were only three to five years in length. They took a year to negotiate and by then we were already nearing the end. They were too short.”

To solve the problem, Huynh orchestrated a switch to seven-year contracts.

“That changed everything,” he said. “Now we have very good relations with the union.”

Finding new sources of revenue proved a bigger challenge.

The steep decline in revenues notably forced the company to stop acquiring new machinery, ending a decades-old tradition of investing \$1 million every year into the plant’s CNC machining capacity.

“We needed to develop new growth using existing resources and find a way to show our strengths and hide our weaknesses,” said Huynh, who became a part-

owner of S. Huot in 2010. "We needed to promote the company without new machines, but with lots of older machines being run by very experienced people."

Led by Huynh, the company's team of engineers, technicians, and designers began conducting experimental trials in which they generated ideas, drawings, and even the construction of novel products in an effort to drum up new business from existing and potential customers in other areas of industrial activity.

"A lot of [ideas and products] didn't work," said Huynh.

One of these was a press designed to build trusses for the housing market.

"Making trusses is more of a winter business, when things are slower, and our idea was to find business that would compensate for the cyclical nature of the industry. But it wasn't a market worth pursuing," he explained.

The company has enjoyed much more success with its industrial products in other sectors, though. For example, S. Huot makes moulds for aluminum ingots. It also manufactures steel dollies that are used to move structural parts like wings and fuselage parts for Bombardier and Airbus.

S. Huot was notably selected as one of only four vendors (two in Quebec, one in the U.S., and one in France) to machine jigs for Bombardier's CRJ1000, the last and largest of the four regional jets in Bombardier's Canadair series, which was sold to Mitsubishi last year.

"For the last 10 years or so we've been focusing more on tooling instead of machined parts," said Huynh. "To machine [aerospace] parts takes a lot of certifications, and since they can be shipped easily from anywhere with a very low cost, the competition is worldwide."

The change in strategic planning and sales mindset also has helped to market the concept of S. Huot as a one-stop shop for high-precision machining, welding, inspection, and painting as part of an assembly process.

"Engineering is the difference between the tooling and the mining and sawmill equipment we manufacture," said Huynh. "We provide a turnkey solution for mining and sawmills with our own design and engineering, but that's not the case for the tooling division

where ideas and design are provided by customers, with us doing the work."

100th Anniversary

That work is carried out in S. Huot's production area, which is divided into four bays: one for CNC work and three for fabrication.

To help commemorate its 100th anniversary, the company's cafeteria, locker room, and second-floor offices are currently in the midst of a major makeover.

"We want to create a better work environment," said Huynh. Plans are also in the works, he added, to buy a new CMM and possibly a new ERP system. "For next year, we're thinking about a small to medium-size 5-axis CNC to increase our capacity for the aeronautic and aluminum industries."


Though the company's official 100th birthday was in 2020, Huynh said the pandemic derailed its plans to celebrate.

"We decided to put things off until this year," he said. "At some point, when it's safe, we'll have a big party."

Going forward, Huynh said finding qualified workers will be one of the company's greatest challenges.

"The workforce here is very tight, with only 4.1 per cent unemployment," he said. "And there are few machinists available with the right qualifications and experience."

The shortage has led S. Huot to recruit a half-dozen immigrant workers from Europe and South America. Four others are delayed due to the pandemic. Once these immigrants arrive, the company actively helps them to find apartments close to the factory (eliminating the need for cars) and get their families settled.

"We find them furniture through employee donations, help them get their kids in school, do the shopping and banking—all that stuff," said Huynh. "As an immigrant, I know how hard it is in a strange place with a new language and culture. We take care of them and they appreciate it. It works very well for everyone. Our strength is really our personnel." 

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S. Huot, www.shuot.com