

Hit from Both Sides

Machine shop realizes big benefits from double column machining centre

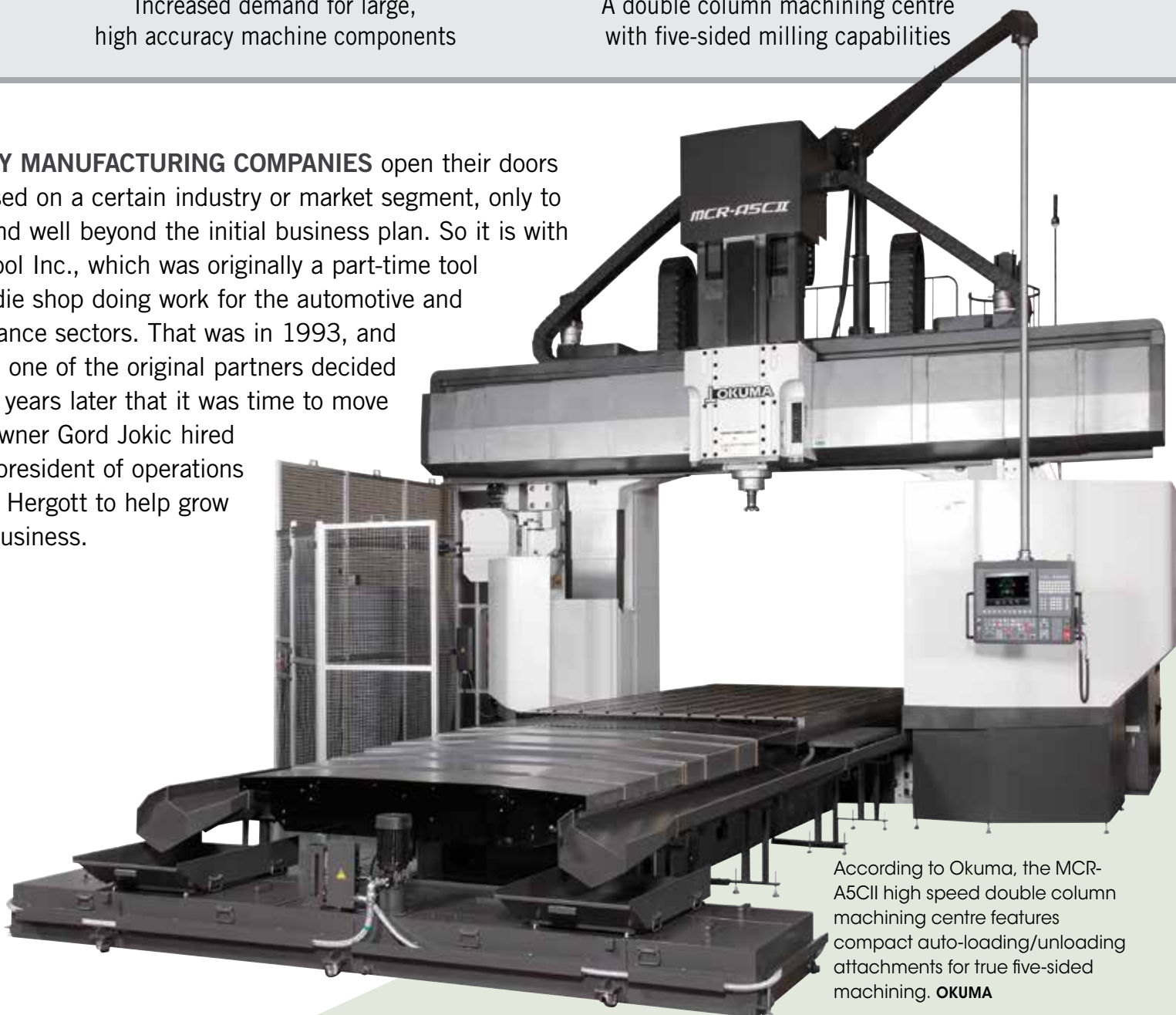
THE CHALLENGE

Increased demand for large, high accuracy machine components

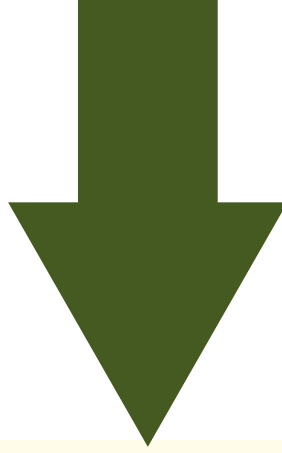
THE SOLUTION

A double column machining centre with five-sided milling capabilities

MANY MANUFACTURING COMPANIES open their doors focused on a certain industry or market segment, only to expand well beyond the initial business plan. So it is with XL Tool Inc., which was originally a part-time tool and die shop doing work for the automotive and appliance sectors. That was in 1993, and when one of the original partners decided eight years later that it was time to move on, owner Gord Jokic hired vice president of operations Chris Hergott to help grow the business.



According to Okuma, the MCR-A5CII high speed double column machining centre features compact auto-loading/unloading attachments for true five-sided machining. **OKUMA**



OKUMA MCR-A5CII DOUBLE COLUMN MACHINING CENTRE

- Width Between Columns: 2,150 mm (84.65 in.) to 3,650 mm (143.70 in.)
- Table Travel (X-Axis): 3,050 mm (120.08 in.) to 12,050 mm (474.41 in.)
- Max. Spindle Speed: 4,000 rpm (6,000 and 10,000 rpm optional)
- Rapid Traverse (X and Y axes): 30 m/min (98.4 fpm)
- Magazine Capacity: 50 tools (up to 180 optional)



The MCR-A5CII from Okuma plays a key role in XL Tool's large part machining operations.
XL TOOL

Slow but steady growth

A machinist and toolmaker by trade, he was quite successful. Today, this ISO 9001:2015 shop has 50 employees, a 3400 sq m (37,000 sq. ft.) plant in Kitchener, ON, a stamping facility in Querétaro, Mexico, and has recently earned its N299.4-16 nuclear certification. It also made a substantial investment earlier this year in an equally substantial machine tool, an Okuma MCR-A5CII double column CNC high speed machining centre from EMEC Machine Tools Inc. in Mississauga, ON.

It's not XL Tool's first Okuma. Far from it. There's also an MU-5000V five axis vertical machining centre (VMC), an MB-46VAE three axis VMC, a Y axis LB4000 EX II and Genos L300MW CNC lathes, both with live tooling, and an M560-V vertical with a five axis table. XL Tool's well-equipped production floor boasts numerous other manual and CNC lathes and mills, surface grinders, and wire EDM machines, among them a 4-metre (157 in.) X axis horizontal machining centre from Awea, an 800-ton Bliss tryout press, and the latest addition, a 1600-ton Blow straight-side stamping press.

It's the Okumas that have perhaps had the biggest impact on growth over the past decade, however. "We started buying Okumas around ten years ago and quickly found that you just can't beat them," says Hergott. "They're reliable, extremely accurate, and there are rarely any difficulties. Yes, there's less expensive equipment out there, but there's a reason they're called mother machines."

The MCR-A5CII came on the heels of a 1400 sq m (15,000 sq. ft.) expansion late last year. Hergott

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explains that they brought in the five-axis mill to accommodate ever-larger part requirements. Some of this can be attributed to XL Tool's fairly recent nuclear certification, its ongoing work in oil and gas, and as the company name indicates, a continued commitment to tool and die. "It's primarily because of all these larger, increasingly difficult parts that the Okuma's five axis capability is so important to us," Hergott says.

Expanding markets

XL Tool's core business remains the designing and building of metal stamping dies for a wide range of industries, with automotive high on the list. These include progressive, transfer, and draw dies, many boasting in-die tapping and in-die nutting capabilities. Many of the tools not shipped to the OEM or Tier supplier make their way down to the plant in

Mexico, where automaking remains a strategic and important market sector.

When not making high-end stamping dies, XL Tool does custom machining for the nuclear industry, as well as its customers in the automation field. Here again, the MCR-A5CII has opened doors to new opportunities, in large part due to its accuracy and robust metal removal capability. Still, there's one problem that Hergott continues to struggle with: skilled labour.

"Nobody wants to work," he says. "We can't even find a shipping and receiving person, let alone a good machinist or tool and die maker. I know that most shops have the same problem these days, which is why automation is growing at such a rapid pace. But you can't automate a one-off part for the nuclear industry that takes a week to machine and has flatness tolerances in the microns. There's just no way."

To help improve this situation,

Hergott gives significant amounts of time back to the industry as the president of the CTMA (Canadian Tooling & Machining Association). He says the group is aggressively promoting the trades in Canada, working with high schools to get involved with manufacturing and garnering industry support from local governments.

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Though extremely proficient at making precision machined parts for the nuclear and other industries, XL Tool also spends much of its time making high end stamping dies. XL TOOL

Unexpected obstacles

To this last point, another challenge is government regulation, as well as the US trade war with China. Hergott notes that he purchased the Okuma two years ago, but due to COVID-related supply chain disruptions and overly stringent building codes that brought the expansion to a crawl, XL Tool couldn't take delivery until one year later. Fortunately, Okuma was willing to work with him on storing the machine until the plant was ready.

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As for the trade war, the Trump and then Biden administrations' tariff policy has created an unexpected and unfair situation—some American companies are buying tools from Chinese manufacturers, having them shipped to Canada (which does not impose tariffs), and then importing them to the States. Add to that rising material costs and shipping rates, hugely increased lead times on most everything, and an overall shortage of containers, and the supply chain outlook appears grim, at least in the short term.

Despite all this, Hergott has no regrets over the new machine. “Like all of our Okumas, it’s an amazing piece of equipment,” he says. “It’s probably the busiest machine in the shop right now. And regardless of all the current trade issues and government interference, we’re on solid footing. Canada’s nuclear industry is strong. Its automotive business is strong. GM and Ford have stayed, Toyota’s here big time, and we see a lot of electric vehicle activity in Canada. Best of all for us, these companies see value in our tooling. That’s because we’ve built great facilities with cutting-edge equipment. Now, if we as a country can just learn to utilize our manufacturing capabilities and lock our doors a little bit more, we’re all going to be in great shape.” SMT

www.okuma.com
www.xltool.com



Gord Jokic and Chris Hergott are the sole owners of XL Tool Inc. Canada (shown here, above) and XL Tech de Mexico (right). XL TOOL



A bird's eye view of the shop floor at XL Tool's facility in Kitchener, Ontario. XL TOOL