

THERE IS A SERIOUS LABOUR SHORTAGE IN THE MACHINING INDUSTRY

# WHERE ARE THE WORKERS?

**M**achining plays a vital role in Canada's manufacturing sector, with machinery manufacturing making up [10.9% of Manitoba's total exports](#). This \$7 billion industry consists of businesses that shape, form, and finish metal parts using various machine tools from lathes to grinders. Canadian machining companies produce high-precision components for key industries like aerospace, automation, defense, and oil & gas exploration.

Like other manufacturing sectors, the Canadian machining industry is facing an acute shortage of skilled labour. According to a [2022 survey by Canadian Manufacturers & Exporters](#), over 80% of manufacturing companies reported difficulty recruiting and retaining workers amid mass retirements, lack of training opportunities, and misconceptions about careers in the trades.

The situation is particularly severe in Manitoba, where job vacancies in manufacturing reached [2,130 in the third quarter of 2022](#)—more than double the 2015-2019 average of 900





positions. Despite these challenges, the sector continues to grow, with [Canadian Manufacturers and Exporters](#) projecting 13,000 new manufacturing jobs in Manitoba alone over the next four years.

This indicates that the labour shortage has more than doubled within the span of less than a decade, with the percentage of manufacturers reporting understaffing sharply increasing from 39% in 2016. The shortage of machinists, CNC programmers, machine operators, and other roles is taking a major toll on productivity and profitability throughout this vital industry. Addressing this labour crisis is crucial for the future health and competitiveness of Canadian machining companies in the global marketplace.

## Why is There a Labour Shortage in the Machining Industry?

There are several pivotal factors exacerbating the growing shortage of skilled labour across Canada's machining sector:

### Impending mass retirements

[Statistics Canada population projections](#) indicate that by 2051, almost one-quarter of the population could be aged 65 and older, adding up to almost 12 million people. As these veteran workers with decades of technical expertise and knowledge retire in masse in the coming years, there are insufficient younger skilled workers to replace them.







## Declining Enrolment in Vocational Training Programs

Negative perceptions of careers in the skilled trades have led to plummeting enrollment numbers for machining courses and apprenticeships. This tightening pipeline of new entrants has severely constricted labour supply.

## Barriers to Talent Acquisition

The precision machining trades confront a significant perception challenge in today's competitive labor market. Despite offering careers at the intersection of advanced technology and skilled craftsmanship, the sector struggles to attract emerging talent due to persistent misconceptions about the nature of modern machining work.

## Market Perception Challenges

Legacy impressions of machining as a traditional manufacturing role have failed to evolve alongside the industry's technological advancement. Contemporary machining positions demand sophisticated technical expertise, offering competitive compensation packages that reflect the high-value nature of precision manufacturing work. However, these opportunities remain underappreciated by potential candidates who may not recognize the sector's transformation.

## Impact of the Labour Shortage in the Industry

*The growing skills crisis has had severe repercussions across the Canadian machining sector:*

### Plummeting productivity and on-time delivery rates

Staffing shortages have forced existing machinists to work excessive overtime to fulfill production quotas. This strain on human resources compromises overall operational efficiency and production reliability.

### Downstream effects across supply chains

With longer lead times and reduced reliability, machining bottlenecks have disrupted downstream manufacturing sectors including aerospace, agriculture, construction, and oil & gas. This has raised costs and project timelines economy-wide.

## Automation as an Imperative Solution

Implementing robotic and automated systems has become an imperative strategy for Canadian machining companies to remain globally competitive amid acute labour shortages:

### Surging quality and productivity through precision automation

Advanced CNC machines, 3D printers, robotic arms, and other systems can operate continuously at ultra-high precision levels surpassing human capabilities. This results in gains in productivity and improved quality rates.

### Alleviating the Labour Crisis through Complementing a Lean Workforce

By handling repetitive and hazardous tasks, smart automation systems allow the existing workforce to focus on higher-value responsibilities requiring human discernment and expertise. This maximizes output while needing fewer highly skilled staff.

### Significant Savings from Reduced Labour Expenses

With automated equipment helping to fill the gaps for manually intensive processes, shops have decreased payroll costs related to headcount, overtime wages, training, and employee benefits, delivering a compelling ROI.

### Developing a Technology-Driven Competitive Edge

Early adopters of machining automation can pull ahead domestically and globally through efficiency gains. This also positions companies to win business from multinational manufacturers seeking advanced technological capabilities from suppliers.

# SOURCE ATLANTIC'S TURNKEY AUTOMATION SOLUTION

Source Atlantic offers [Turnkey Automation Solutions](#) aimed at helping machining businesses efficiently adopt automation:

## Customized Automation Systems

Our cutting-edge robotic systems optimize manufacturing, boost safety and efficiency, and reduce manual labour. Our automation delivers major productivity gains while operating nearly continuously. Step into manufacturing's future with Source Atlantic's robotic cells.

## Parts Manufacturing Solutions

Our parts manufacturing solutions empower machine shops to produce complex components with unmatched precision. We guide shops in choosing specialty tools and offer custom programming even for highly detailed parts. With our support, your shop will surpass modern manufacturing demands, making each part a true mark of excellence.

## Comprehensive Support and Training

A Source Atlantic Turnkey Solution includes full support services to integrate the new automated systems into existing workflows. Shop staff also undergo extensive training in operating and maintaining the new automation equipment.



## Preventative Maintenance

Maximize machinery lifespan and precision with routine inspections by our technicians. Prevent issues and ensure ongoing efficiency. Your company will benefit from our lubrication, calibration, software updates, and training for seamless operation.

Invest in your company's future competitiveness by leveraging Source Atlantic's Turnkey Automation Solution for your shop. [Let's talk about](#) how we can streamline your manufacturing with improved productivity, quality and profitability.



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