



# Micron

## The Tenure Gap: Is the Precision Machining "Skill Gap" Exclusively a Hiring Problem?

### Building A Resilient Work Force

#### The Hole in the Bucket

If you asked most shop owners to diagnose their staffing woes, they'd describe a broken pipeline — the "skill gap" in which skilled workers nearing retirement outnumber the incoming pool of talent.

Refilling the bucket of talent within a shop is more than just a question of the speed of water coming from the faucet. There's a hole in the bucket — machinist departures — which, depending on its size, may make the difference between having talent to the brim or running dry.

The winners who emerge from this succession crunch won't necessarily be the most aggressive hirers. Shops that retain solid employees long enough to train them into experts — patching the hole in the bucket — address the skill gap succession risk while also reducing the inefficiencies that stem from constant re-hiring.

This paper explores the economics of tenure, the costs of churn, and the specific strategies shops can use to build a stable, skilled production team.

#### The Demographic Reality of Machining

Narratives of an impending "silver tsunami" have become ingrained in machining industry discourse. These narratives are not unfounded, but deserve perspective.

Recent data from the U.S. Bureau of Labor Statistics (BLS) shows that for the two detailed occupation descriptions that embody machining work — machinists and CNC operators — 30.7% of the workforce is age 55 or older.<sup>1</sup>

This represents a credible perception of succession risk. For purposes of illustration, it means a machining shop with 30 production employees could realistically expect to face 9 retirements over the next 10-15 years.

The exit will occur gradually, creating a window for replacement and skill transfer, but still begs careful management on the part of employers. Onboarding and skill development require time and resources and, critically, the presence of experienced tradesmen to hand off the torch.

<sup>1</sup> U.S. Bureau of Labor Statistics, "Employed Persons By Detailed Occupation and Age", Jan 29, 2025, <https://www.bls.gov/cps/cpsaat11b.htm>

While skill gap narratives primarily present this problem as an impending hiring crunch, the reality may prove that the key to addressing succession risk lies in retention strategies.

## The Shop Floor's Next Generation

While machinists age 55 and older represent the plurality of shop-floor employees, the pipeline behind them is not empty. Workers age 25-34, 35-44, and 45-54 represent 21%, 21%, and 19% of this labor pool, respectively. While the 16-24 cohort's thin representation at 8% may indicate a larger shift in skillsets in this generation, it may be partly due to this cohort working in feeder roles not yet classified under machining-specific job codes.<sup>1</sup>

However, while the available pool of workers is present in the numbers, a different statistic — employment tenure — sheds light on why maintaining adequate staffing to man the machines can feel difficult.

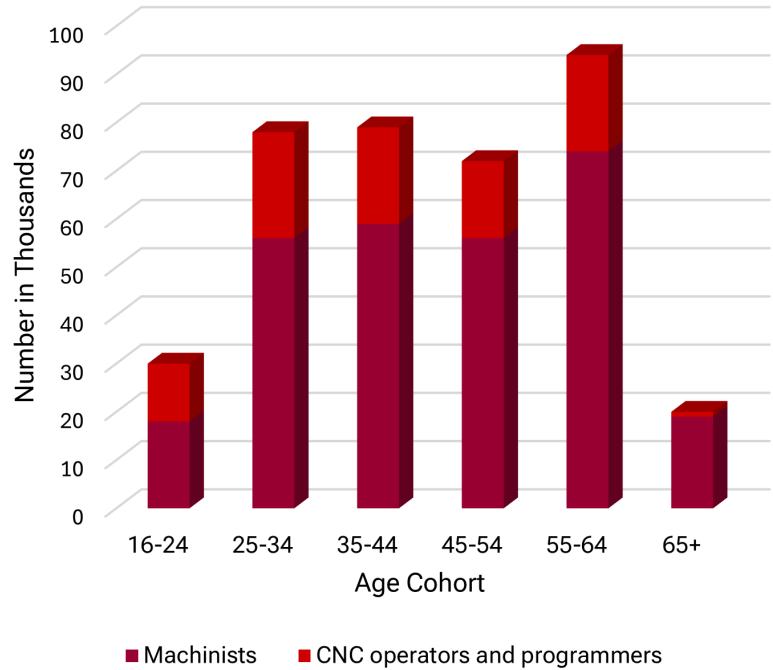
While the BLS does not publish tenure data specifically for machinists, the trends for the broader industry category of machinery manufacturing — a category which includes machinists — are revealing. In 2024, the median tenure for machinery manufacturing fell to 5.0 years. This figure diverges only slightly from the all-industry median, which itself dropped to a 20-year low of 3.9 years.<sup>2</sup>

When tenure is broken down by age, a specific challenge emerges: younger workers — particularly the 25-to-34 cohort — have a median tenure of just 2.7 years.<sup>2</sup> This is partly structural — a 34-year-old worker simply cannot have a 20-year tenure with their current employer — but likely also due to life circumstances associated with younger age and workforce culture.

These cohorts are inherently more geographically and professionally mobile. Less likely to be tethered to a specific location by common anchors such as a below-market mortgage, a spouse with an established local career, or caregiving responsibilities for parents — they are free to pursue new work opportunities wherever they may be found. This understandably makes them more inclined to prioritize immediate wages and overtime opportunities over the less tangible benefits of long-term stability with a single employer.

<sup>2</sup> U.S. Bureau of Labor Statistics, "Employee Tenure News Release", September 26, 2024, <https://www.bls.gov/news.release/pdf/tenure.pdf>

Machinists and CNC Operators by Age Cohort<sup>1</sup>



## The Cost of Churn

Excessive workforce churn creates compounding inefficiencies that go beyond the inconvenience of a temporary man-hour shortage on the schedule board.

- **Hiring and Training Costs:** New hires represent a significant investment of resources. Beyond the direct expenses of recruitment and training, there's an opportunity cost of time diverted from process improvement, production oversight, and core competencies. Turnover research estimates that while direct replacement costs can reach 50-60% of an employee's annual salary, the total organizational cost — including productivity loss and cultural disruption — can range from 90% to 200%.<sup>3</sup>
- **Cultural Erosion:** High turnover disrupts the relationships and trust that develop among coworkers and between management and the shop floor. Excessive departures reshape the social fabric of the workplace.

Without a strategy to minimize exits, these costs recur and compound.

Improving tenure requires addressing both sides of the equation: reducing voluntary quits and minimizing the need for terminations. The strategies that follow address both.

<sup>3</sup> Society for Human Resource Management, "Retaining Talent: A Guide to Analyzing and Managing Employee Turnover", 2008, <https://www.shrm.org/content/dam/en/shrm/topics-tools/news/Retaining-Talent.pdf>

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## Strategies for Improving Tenure

Once tenure is identified as a priority, improving it requires a carefully managed approach. A checklist of Human Resources to-dos falls short of what's required to make meaningful progress — a holistic focus on creating a work environment employees don't want to give up. This focus, of course, centers on employees who are engaged and meet performance standards.

### 1. Hiring for Tenure

Beyond assessing whether a candidate possesses the skills required to do the job, the hiring process is an opportunity to screen for the candidates with the most potential to become long-term team members.

- **Screen for Stability Signals:** Review employment history not for gaps, but for the reason behind them. A resume with five jobs in five years warrants a conversation. However, look for candidates who have demonstrated the ability to stay somewhere for 2-3 years.
- **Use Behavioral Assessments:** Technical skills can be taught, but work style, communication preferences, and motivational drivers are deeply ingrained. Use pre-employment assessments to gain objective insight into how a candidate communicates, handles challenging decisions, and fits with existing team dynamics and the role they are being considered for. This removes guesswork from hiring by providing a roadmap for how to best communicate with and manage a new hire from day one.

### 2. Clarify Total Compensation

When an employee chases a \$1/hour raise to another shop, they may fail to calculate what they lose in benefits. Teaching them the value of their benefits package at your company is a powerful retention tool.

- **Quantify the Package:** Conduct regular benefits reviews with employees that highlight not just what benefits exist, but how to use them effectively. Turn abstract "benefits" into tangible value employees can calculate.
- **Teach Financial Literacy:** Don't assume employees understand the value of a 401k match. Hold annual meetings explaining compound interest. When employees realize that your 4% match could be worth six figures at retirement, the \$1/hour raise at a shop with no match looks far less attractive.



### 3. Make Skill Development a Career Roadmap

The fear of "training someone and losing them" is valid. However, skill development, particularly when it's tied to a career growth path, gives employees a compelling reason to stay.

- **Recognize Skill Growth:** Map out the entire skillset production workers in your shop can achieve. Quantify proficiency levels in each of these skills from entry level to mastery.
- **Discuss Achievements and Goals:** Conduct regular one-on-one meetings between employees and the managers they report to review their skill development and ask about their career goals.
- **Review Wages Proactively:** Pair skill development with a clear path to higher pay. Scheduled, formal wage reviews preempt the perception that employees need to leave the shop to earn what they're worth.

#### 4. Invest Strategically in Shop-Floor Equipment

Equipment investment sends a powerful signal to employees about their future. As US Manufacturing moves towards complexity, precision, and agility, workforce training increasingly emphasizes modern equipment and methods. When capital investment aligns with industry direction, employees know the future is here — not somewhere else.

- **Modernize Strategically:** When making capital investment decisions, consider each new machine's impact on talent. Modern CNC equipment and standardized controls (where possible) offer employees clear value: marketable skills development opportunities and cleaner working conditions.
- **Standardize to Accelerate Competence:** A varied fleet of machines offers production versatility, but it can also fragment your workforce's skills. By contrast, a higher degree of platform standardization speeds onboarding and smooths cross-training. More importantly, it allows employees a quicker path to mastery — a powerful driver of job satisfaction and tenure.

#### 5. Foster a Culture People Don't Want To Leave

The day-to-day experience of working on the shop floor is one of the most tangible drivers of job satisfaction — and one of the biggest unknowns an employee may face when considering a move. A strong culture, therefore, transforms staying into a quality-of-life decision.

- **Leadership Accessibility:** Employees must know they can bring ideas and feedback to anyone in the organization, from their direct supervisor to the company president. Owners and managers achieve this by being visible on the floor during regular production, not just during crises. Knowing names, asking about families, and listening to process ideas send an unmistakable signal that leadership is accessible.
- **Hire for Cultural Contribution:** Skills can be trained, but character and collaboration style cannot. Before adding a new hire, understand what makes your current team work well together and look for those same qualities in candidates. Each new person reshapes the shop floor dynamic. Hire people who elevate everyone around them.

#### Conclusion: Micron by Example

These are not theoretical recommendations. We've implemented them at Micron, and the numbers bear that out. At the close of 2025, our average employee tenure stood at 13.6 years.

This figure deserves some context: In 2025, we hired six new team members, each starting their tenure clock at zero. Our average tenure remains high because a tenured core provides

stability even as retirements and growth create the opportunity to bring in new talent. In other words, we've focused less on the speed of the faucet and more on patching the hole in the bucket.

The labor market will remain tight. Demographics will continue to shift. But the shops that thrive will be those that focus on the levers they can control: how they hire, how they compensate, how they train, how they invest, and how they lead. The workforce is out there. The challenge — and the opportunity — is building a place worth staying.

