



# EMBRACING MILLENNIALS:

Closing the Manufacturing  
Skills Gap and Gaining a  
Competitive Advantage

“MILLENNIALS REPRESENT THE GREATEST OPPORTUNITY – AND THE GREATEST CHALLENGE – TO OUR WORKFORCE NEEDS.

**GIVE ME SOMEONE WITH CURIOSITY, AND I’LL GIVE YOU A SOLID, GROWTH-ORIENTED EMPLOYEE. GIVE ME SOMEONE WITH A SENSE OF ENTITLEMENT, AND I’LL SHOW HIM/HER THE DOOR.”**

*Manufacturer Feedback,  
Tooling U-SME’s Millennial Survey*

The solution to one of the industry’s most critical challenges – a severe talent shortage – is right in front of us. The country’s approximately 75 million millennials,<sup>1</sup> those roughly between 18 and 34 years old, are coming of age and searching for satisfying careers. Match up even a fraction of this group with manufacturers needing to fill open positions, and the skills gap is solved.

If only it were that simple. A disconnect between manufacturers and millennials when it comes to expectations in the workforce can hamper a company’s growth and competitiveness.

There’s no doubt companies are anxious to fill positions. A recent Tooling U-SME Millennial Survey<sup>2</sup> shows 80 percent, or eight out of 10 manufacturers, are concerned about meeting their workforce needs within the next five years.

Yet, while most manufacturers (78 percent) agree millennials are important to their future operations, less than half (40 percent) say they have a good understanding of this group of employees.

It is true that millennials offer unique differences in the workplace than their predecessors. After all, they are shaped by their own life experiences – think recessions, debt, ubiquitous technology. They are also not afraid to question and push boundaries.

Challenges by millennials to traditional approaches in the workplace, while often uncomfortable, can actually be a benefit to manufacturers. Companies that take a fresh look at their training and development approaches can ultimately elevate the performance of everyone in an organization – not just millennials – leading to loyal employees and stronger business results.

In this report, Tooling U-SME, an industry leader in manufacturing training and development, explores perceptions of the Millennial Generation, provides insights on how manufacturers can best appeal to these workers, demonstrates the importance of building targeted training and development programs to attract and retain this generation, and outlines industry best practices.

<sup>1</sup> “This Year, Millennials will overtake Baby Boomers,” Pew Research Center, FactTank, January 16, 2015

<sup>2</sup> Tooling U-SME Millennial Survey, April 2015

# WHO ARE THE MILLENNIALS?

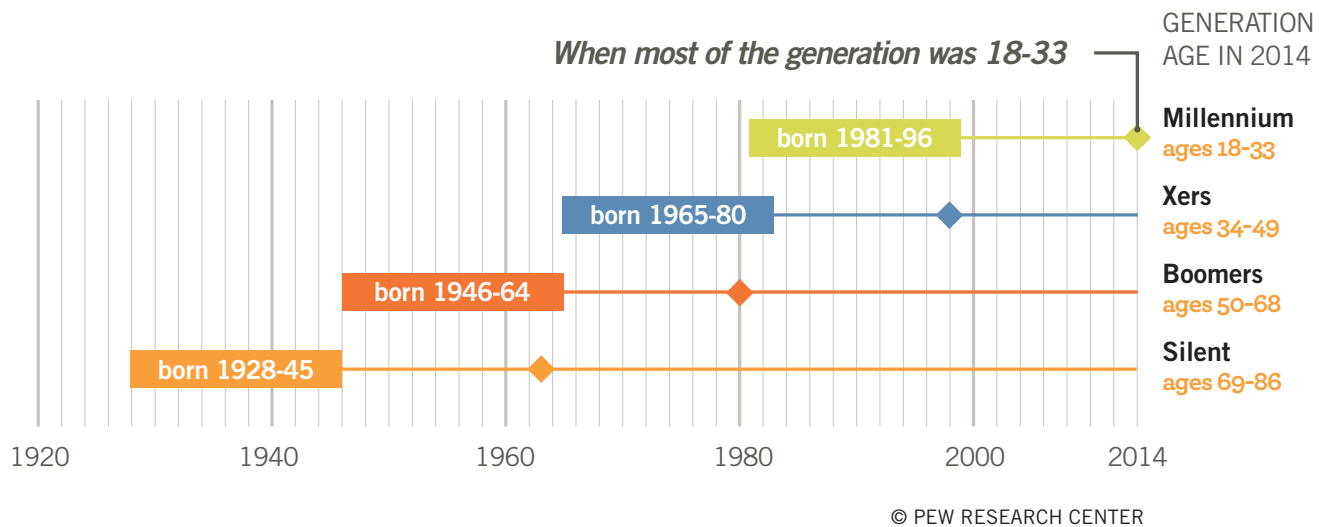
Known interchangeably as millennials, the Millennial Generation or Generation Y, this demographic group follows Generation X (35-50 years old in 2015), which followed the Boomer Generation (ages 51-69).

While there are no exact dates for when the Millennial Generation starts and ends, for this report we'll use the parameters defined by Pew Research<sup>3</sup>: those between ages 18 to 34 in 2015 (born early 80s to late 90s).

Understanding more about these workers can help employers build training programs to fit their learning styles as well as tap into their talents and passions related to technology, desire to make the world a better place and eagerness to be part of something bigger than themselves.

The companies that embrace millennials' unique differences are the ones that will break new ground in the workplace and the marketplace.

## The Generations Defined



<sup>3</sup> "This Year, Millennials Will Overtake Baby Boomers," Pew Research Center, FactTank, January 16, 2015

# MILLENNIAL PROFILE: STRONG WORK ETHIC



**Nyki Robinette**

*Age: 29*

*Phoenix, Arizona*

*Welder, entrepreneur and mother of two*

*Studied at Mesa (AZ)*

*Community College*

“ I will always try to top myself. I am not content until what I do is perfect. And I believe there is ALWAYS room for improvement. What is important to me career-wise is that I feel challenged. I love welding and I want to continue to feel that way. And without that challenge it's easy to feel stagnant. For me, the pride of building something with your own to hands will always win over working at a desk. ”

## MILLENNIAL SNAPSHOT

Millennials grew up in a world of uncertainty – full of layoffs, student debt, environmental issues and terrorist threats. The eldest portion of the group landed in the job market during the recession of 2007-2009 when jobs were tough to come by. By default, almost one third of millennials (30 percent)<sup>4</sup> are still living at home.

Due to this uncertainty, connections and experiences are extremely important to them and should be considered

when building onboarding and training programs.

Yet, despite this backdrop, millennials are remarkably positive about the future, with 49 percent saying the country's best years are ahead. More than eight out of 10 say they either currently have enough money to lead the lives they want (32 percent) or expect to in the future (53 percent).<sup>5</sup>

They also have high expectations for their employer.

<sup>4</sup> “Young Adults Then and Now,” United States Census

<sup>5</sup> “Millennials in Adulthood,” Pew Research Center, March 7, 2014

# IMMERSED IN TECHNOLOGY AND UNCERTAINTY

**1981-1996 (approx.)**  
Millennial Generation born

**1992**  
First text message sent

**1999**  
First rudimentary Blackberry device introduced

**2000**  
PayPal reaches 1 million users

**2001**  
9/11

**2004**  
Facebook founded

**2006**  
First tweet sent

**2007**  
iPhone introduced

**2007-2009**  
Recession<sup>7</sup>

**2010**  
In two months, Instagram hits 1 million users

**2014**  
Debt burden of college graduates rises faster than inflation<sup>8</sup>

**2015**  
Apple Watch available

Deloitte's fourth global Millennial survey<sup>6</sup> indicates that 75 percent of millennials believe businesses are too fixated on their own agendas and not focused enough on helping to improve society.

Millennials may be on to something: Having a higher purpose seems to pay off for companies.

The Deloitte study shows a direct link between companies where millennials say there is a strong sense of purpose and those with higher reporting of financial success,

employee satisfaction and recruitment. For instance, 69 percent of companies said to have a strong sense of purpose had performed well financially versus only 41 percent of companies millennials said lacked a strong sense of purpose.

Manufacturers should evaluate and effectively communicate their vision – having a strong purpose can help attract this important pool of workers and drive business results.

<sup>6</sup> The Deloitte Millennial Survey 2015

<sup>7</sup> "The Recession of 2007-2009," U.S. Bureau of Labor Statistics

<sup>8</sup> "Congratulations to Class of 2014, Most Indebted Ever," The Wall Street Journal, May 16, 2014

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# EXPERIENCE IS EVERYTHING

According to Mark C. Perna, the founder of Tools for Schools, a Cleveland-based consultancy that specializes in career and technical education, one key phrase sums up what millennials want and expect: “Experience is everything.”

He says this generation looks for ways to connect with the people around them and for interesting experiences: “They want to have experiences online and with their friends. They want to travel the world, are environmentally conscious and want to give back.”

In the workplace, millennials want experiences too, whether the opportunity to work on new projects, participate on a sustainability task force or have interactions with senior executives.

It’s also important to note that millennials approach life differently than previous generations. Perna’s research shows this group elevates friends to family status. They also find social interaction more interesting and engaging in a group, something employers should consider when creating and nurturing teams.

Another point to consider is that millennials, unlike previous generations, were raised on technology – always knowing the existence of the Internet, computers and cell phones. Millennials came of age with the advent of social media platforms such as Facebook and Twitter. Most millennials rarely check email, opting to post, direct message or text.

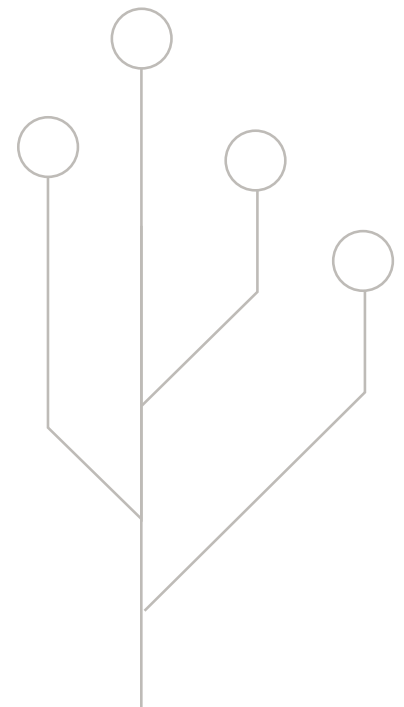
This can be a benefit for manufacturers who tap into their ease with technology, whether through integrating approaches like online training or enlisting millennials to help coach older colleagues on technical aspects of the job, which frequently change due to the accelerated pace of technological advancements in automation and digital manufacturing.

Additionally, millennials are eager to bring their talents and skills to help solve a company’s problems and want to know how their work fits into the big picture.

“Let them see the vision and become part of the organization,” advises Perna. “Shut them off and they will turn away.”

According to Perna, by helping millennials feel connected, companies will build respect and loyalty among millennials for their boss (who they think of as a coach/mentor), their peers and their organization.

A company must help millennials understand how their piece of the manufacturing process fits into the bigger puzzle. Also essential is having a formal structure in place so that millennials connect to a very specific – and bright – future both at the company and in life.



Millennials are at a stage in their lives when getting ahead is important and employers who help map out a plan will benefit. When describing their ideal job, 72 percent say they are more likely to value opportunities for career advancement (compared to 52 percent and 64 percent of Boomers and Gen Xers, respectively). They also value the chance to learn new skills (72 percent), whereas only 48 percent of Boomers and 62 percent of Gen Xers prioritize that quality.<sup>9</sup>

“Don't tell them what they can't do; tell them what they can do to thrive and be successful,” says Perna. “Like most employees, millennials succeed when they are motivated from within – when they're the right workers, in the right jobs, for the right reasons. When they feel the branch creak beneath them and catch the urgency of their own dreams, they will create their own success.”



**Mark C. Perna**

*Founder  
Tools for Schools  
Cleveland, Ohio*

## Millennial Generation

- ◆ Experience is Everything
- ◆ Friends – Family
- ◆ Prefer Groups to One-on-One Interaction
- ◆ Nurtured
- ◆ Unique – Special – Important
- ◆ Entitled
- ◆ Celebrate Diversity
- ◆ High Expectations
- ◆ Rewrite the Rules

Courtesy of Tools for Schools

<sup>9</sup> PayScale's Gen Y on the Job Report

# MANUFACTURER PROFILE



## Jennifer Stogran

*Human Resources  
Weiler Corporation  
Cresco, Pennsylvania*

Nestled in the Pocono Mountains of Pennsylvania, Weiler Corporation, a global manufacturer of surface conditioning solutions, is known as a progressive, innovative and high-growth company.

One of its newest challenges? Appealing to millennial workers as its existing workforce ages.

“We have to dazzle them,” says Jennifer Stogran, the company’s human resources coordinator. “We are learning that to attract millennials, we have to create an experience and provide a development path they can see.”

Working with Tooling U-SME, Weiler is creating a formal program to help identify high-potential entry-level machine operators, with the goal of building a career path to future mechanics, toolmakers, technicians, trainers and team leaders. From there, the company will outline each step for them to reach the next career level, whether that is a path to a toolmaker or an engineer.

Part of the program includes looking at their onboarding processes. Stogran says it is essential to capture millennials’ attention right away on that first day and create a feeling of teamwork versus the traditional approach of focusing them on completing paperwork.

“It’s important to show how a millennial employee fits into the organization and why his or her job is important to the success of the company,” says Stogran. “We are transforming into a learning organization by necessity – the skills we will need for the future are not easy to find, so we must develop them and millennials are an important part of that process.”



# WORKING WITH MILLENNIALS

It is important to sift through fact and fiction when dealing with the Millennial Generation. Understanding what motivates millennials, tapping into their strengths, and helping them with career advancement can lead to loyal, high-performing workers with immense benefits for manufacturers.

Although some employers may gripe about the differences between this generation and those that came before, Gen Y workers are not going away or going to change. Like each generation before them, the behaviors and unique aspects of millennials will continue to shape manufacturing and the world.

Ready to embrace this significant pool of workers, some companies, notably those that already have experience working with millennials, are increasing their focus on recruiting, training and retaining.

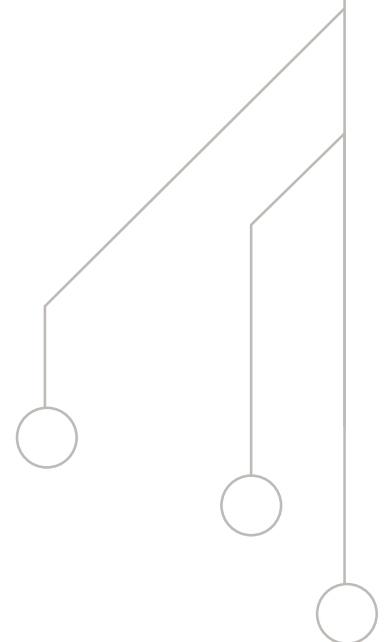
According to the Tooling U-SME Millennial Survey, nearly half (46 percent) of companies that employ millennials approach their recruitment differently than previous generations. That compares with only six percent of those that do not have millennials on staff and are missing an opportunity to build up this important group of workers.

Clearly, manufacturers already working with millennials have a more favorable impression of this group than those that are not currently employing millennials. For instance, companies that employ millennials are:

- ◆ Three-and-a-half times more likely to say millennials have a strong work ethic.
- ◆ Three times more likely to agree with the statement “Millennials have strong attention to detail.”
- ◆ More likely to say that millennials are open to training.

While millennial loyalty remains a concern for two-thirds (66 percent) of manufacturers overall, it is clear that experience working directly with Gen Y helps to debunk some of the misperceptions.

Most (nearly 70 percent) agreed that millennials require a new/different management style and that is the opportunity for manufacturers.



# MILLENNIAL PROFILE: LOYALTY AND LEARNING OPPORTUNITIES



## **Nathan Engstrom**

*Age: 30*

*Maple Grove, Minnesota*

*Applications Engineer  
(machine shop)*

*Studied at Anoka Technical  
College*

“ I have always loved mechanical things. I picture myself staying here as long as possible. I started working on Okuma equipment and recently moved to our company's Swiss line doing programming, set ups and customer training. By teaching others, I can learn with them. We can figure it out together. One week out of the month I meet the equipment sales applications guy. It is worth everything to talk with guys with 30 years experience who can provide tips and tricks on programming. When I make a part, I am so proud of it. As you grow in a career it's important to never give up. It takes time to learn things and you have to stick with it. ”

# TRAINING BEST PRACTICES

Keeping these insights in mind, companies can build high performers and future leaders by focusing on industry best practices like these that help millennials – and all employees – feel valued from the moment they walk in the door.

## Strong Onboarding Process

In his book, *Y-Size Your Business*, Jason Ryan Dorsey writes that millennials make a decision about whether to stay with a company long-term by the end of the first day. That's a lot of pressure on a company and a big reason to create a strong onboarding process that starts from day one.

First, it is important to distinguish from orientation and onboarding. Orientation can be completed in one day, while onboarding is accomplished typically in a 90-day period, teaching knowledge and skills before new employees are on their own.

Onboarding is about developing the behaviors that will be the foundation of employee performance for their tenure with the organization. By creating opportunities

for millennials to immediately immerse themselves in an engaging task, meet their co-workers, begin building relationships and address lingering anxiety, companies start to create the foundation that can lead to long-term employment.

Remember millennials want to fully understand their role and why it is important to the organization. They also want to impact the bigger world and expect their companies to do so too. Teach about your company's mission and share initiatives, for instance, related to community or environmental programs, where new team members can be involved.

## Formal Training Program

Based on feedback that millennials want/need to see clear career pathways, it is important to create and administer a formal training program tied to competency development and career growth – and communicate that it exists. Tribal knowledge, informal passing along of company policy and procedures by more senior employees, is not an effective method of training millennials or anyone for that matter. This group desires documented expectations and plans to help them reach those expectations and beyond.

A number of current best practices can help manufacturers create or adapt their current programs. For instance, competency models – a structured system to develop the needed knowledge, skills and abilities for specific jobs – are increasingly used to build high-performance teams comprised of all age groups. To integrate competency models, the first step is for human resources to work with production and operations managers to develop job descriptions that accurately define the qualifications needed by workers and include both knowledge and skills. This creates a sustainable program from hiring through advancement, with a specificity that can appeal to millennials. This common “language” allows productive conversations related to performance management and individual development plans. Tied to the bottom line, a standardized learning and development program that is methodical and visible can eliminate some of the struggles faced by manufacturers training Gen Y. Frequent rewards and recognition should also be built in.

## Experiential Learning

Millennials thrive on constant learning. A proper learning and development program goes beyond one-off training. Just make sure the program is based around new experiences.

Blended learning, another industry best practice, can provide this experience by allowing students to learn in different ways (online, classroom, on the job, etc.) and break up the monotony of one method.

It is also important that learning is continuous and integrated into daily work through performance support strategies. Millennials want and expect resources.

An early pioneer of performance support strategies, Gloria Gerry<sup>10</sup> pointed out the importance of having all the information workers needed for optimal performance within easy reach rather than in various places.

Performance support is defined as “an orchestrated set of technology-enabled services that provide on-demand access to integrated information, guidance, advice, assistance, training, and tools to enable high-level job performance with a minimum of support from other people.”

Proper performance support should be:

- ◆ Aligned: To the business need.
- ◆ Embedded: In the workflow.
- ◆ Contextual: Access by process, roles and circumstances.
- ◆ Just Enough: Support to get the job done.
- ◆ Uniform: Across business processes and applications.
- ◆ Integrated: With formal learning.
- ◆ Trusted: To be correct and current.

Examples can include just-in-time troubleshooting or digital work instructions.

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<sup>10</sup> Gottfredson, Conrad, “Now’s the Time for Performance Support,” TrainingIndustry.com, April 26, 2013

## Continual Education

Millennials want to continue learning and developing at all stages of their career and expect manufacturers to offer resources to do so. It is in a manufacturer's best interest to do this to build the future leaders the company needs and wants.

To streamline the process, some manufacturers are partnering with educators to keep the pipeline flowing and help retain and develop workers. Apprenticeship programs are one example of how companies are educating their high potential millennials toward higher skills roles.

For instance, a successful apprenticeship program at Lake Michigan College in Benton Harbor, Michigan, brings together on-the-job (OTJ) training, instructor-led classes and online courses. Apprenticeships take four years to complete, including 8,000 hours of OTJ and 576 hours of classroom and online training. Programs are designed by working closely with manufacturers.

"The reason our program is successful is that we now do things differently by helping students sign up, finalize their schedules and advise them on the process six weeks before classes start," said Kenneth Flowers, dean of Career and Workforce Education, Lake Michigan College, explaining how programs have changed over time to meet worker needs. "This hands-on approach ensures there are no worries for either the company or the apprentice."

Many community colleges and technical schools offer programs to help employers continue to develop their millennial, and other, workers. Most schools are used to working with employers and often customize programs to fit their specific needs.

## Train the Trainer

Engagement studies often declare a reason for leaving is tied to unhappiness with direct supervisors. Making sure those responsible for training millennials have the knowledge and skills to develop and nurture them is critical to building and maintaining a manufacturing workforce.

Companies can start by sharing with those in supervisory roles, insights and approaches tailored to the way millennials like to learn and work. For instance, managers should understand that millennials like to feel they have a strong purpose so frequently reinforcing how each individual job fits into the overall company mission is important. Or, supervisors can learn to create a nurturing environment by scheduling regular feedback sessions. (See "Seven Tips For Working With Millennials" on page 14).

These managers should be held responsible/accountable for building, developing and retaining millennials. Metrics can be built into annual performance reviews with financial incentives, for instance.

Ultimately, this will lead to greater job satisfaction with millennials and others throughout the organization. In addition to financial incentives, managers will feel better equipped to deal with the next generation, as well as have the added reward of being appreciated and respected by their teams.

Manufacturers need to plan for tomorrow by investing in a strong workforce today. Following these best practices can help move in the right direction by cultivating the enormous pool of millennial employees – our future leaders – who are just waiting to find the right opportunity.

# SEVEN TIPS FOR WORKING WITH MILLENNIALS

## 1 Don't generalize.

Like all generations from Boomers to the newest Generation K<sup>11</sup> (as in *The Hunger Game's* Katniss Everdeen), this broad swathe of workers is made up of individuals with different life experiences that color their approach to work and careers.

## 2 Communicate your corporate mission.

Millennials expect companies to demonstrate a strong sense of purpose and want to be part of that. Be sure to communicate your mission and show how each individual job ties to it. Allow them to see how their talents and skills fit into the big picture.

## 3 Show them their future.

Millennials want to see their (near) future. Provide room for growth within your company so they do not feel they need to grow somewhere else. Ask about their career aspirations. Institute clear steps that young employees can take to develop skills they might need for future positions within your organization. Ensure there are clear milestones along the way with rewards in the not-too-distant future. Provide recognition with each success.

## 4 Provide continual learning opportunities.

Millennials have a strong desire to learn and acknowledge they have things to learn. For instance, despite their confidence in the workplace, millennials feel they were stronger on “softer” (i.e. hard work, discipline, teamwork) rather than “technical” skills at graduation.<sup>12</sup> Help them gain that missing knowledge, especially by appealing to their desire for the experiential. Host a lunch session exclusively between management and millennials to encourage conversation. Pair millennial employees with your own organizational mentors or those outside the company. All of this should fit into a formal continuing education program.

## 5 Go digital.

This generation grew up with technology. Move away from paper. Much hiring and training can now be done digitally through tablets and smartphones. For instance, online courses allow workers the flexibility to complete training at any time of day or night. Different learning styles are easily accommodated through the use of video or ability to have text read to the student. Online training offers the added benefit of providing instant feedback – automated grading and tracking, saving considerable administrative time for employers. Allow millennials to share their technical talents with older workers, which can create new peer connections.

## 6 Allow them to share their ideas.

Only 28 percent of millennials feel that their current organization is making full use of their skills<sup>13</sup> so provide them the opportunity to show what they can do. Arrange dynamic brainstorming sessions allowing all employees to contribute ideas. Their fresh perspective can complement that of more senior employees. These sessions also help them see the big picture so they know where they, and the organization, are headed. From there, assign them meaningful missions. You – and they – may be surprised at what they can accomplish.

## 7 Provide regular and immediate feedback.

Millennials grew up with constant feedback from their parents, teachers and coaches. They expect it from you, their leader. It doesn't have to be a long session. Just five minutes of clear, direct feedback, on a regular basis, will keep them motivated and engaged. Consider quarterly merit increases versus one annual raise to demonstrate career movement in response to feedback.

<sup>11</sup> “Generation K: Who are they, and what do we know about them?” Women in the World in Association with The New York Times, April 21, 2015

<sup>12</sup> The Deloitte Millennial Survey 2015

<sup>13</sup> The Deloitte Millennial Survey 2015

# MANUFACTURER PROFILE



## Michael Munday

*Chief Executive Office and Owner  
Arwood Machine Corporation  
Newburyport, Massachusetts*

Arwood Machine Corporation, a Newburyport, Massachusetts contract manufacturer of ultra-precision, machined metal components for the aerospace, communications, medical military and other commercial markets, faces familiar challenges when it comes to hiring and retaining a high-performance workforce.

“One of our greatest challenges is how to put people in the shop,” says CEO and Owner Michael Munday, noting that many workers are heading into retirement, what he dubs the Silver Tsunami. “We can buy machines but we can’t find people to run them.”

He believes millennials are going to be our future and that it is important to keep them engaged and create the fun environment they expect so that they stay.

“We want to make sure millennials are connected to what they are doing,” says Munday who is active on several area workforce and education boards. “We do this by making sure they understand how what they are doing fits into the big picture. Our parts are used in missiles and planes and need to be right. We want our millennial workers to feel they are part of an important mission.”

Millennials want to know that they are part of a winning team and so Munday makes sure to share successes company-wide. This motivates millennials to recruit friends and when you have a group of friends working together, they are less likely to leave, according to Munday.

Millennials are looking for experiences and so tend to move around a lot, which is something Arwood wants to avoid. “Through training – each employee has a mandatory hour of training per week – we hope to reinforce that they are moving forward in their career,” said Munday. “To show this movement, instead of giving an annual raise, we often given smaller quarterly increases.”

Munday says that the constant churn will wear you out so if manufacturers are willing to modify and adapt their hiring and training approach, they will find a valuable source of employees in millennials. “Manufacturers need to get with it now or be dragged along painfully later.”

## MILLENNIALS AT A GLANCE<sup>14</sup>

23%

Percent of population

22%

Bachelor's degree or higher

2%

Veterans

65%

Employed

66%

Never married

30%

Living with a parent

81%

On Facebook<sup>15</sup>

<sup>14</sup> “Young Adults Then and Now,” United States Census

<sup>15</sup> “Millennials in Adulthood,” Pew Research Center, March 7, 2014

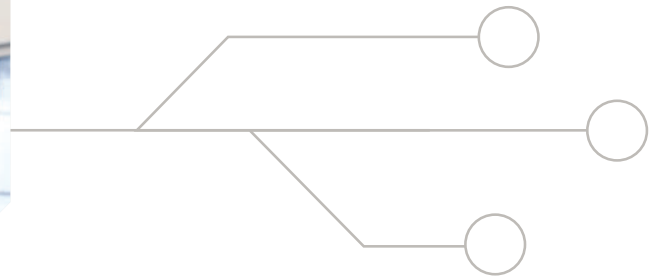
# EMBRACING THE MILLENNIAL GENERATION FOR SUCCESS

Throughout time, employers – and parents – have insisted that this next generation is dramatically different from theirs. Of course, it's true. Changing technology, economic conditions, education, communications – all of this shapes outlooks in different ways, which can bring many opportunities.

Millennials, also known as Gen Y, are no different. By understanding what motivates this up-and-coming generation of manufacturing workers, companies can work around current perceptions about this group and better build targeted training and development programs that appeal to their desire for experiences and connections.

Integrating best practices and approaches – from creating a strong onboarding process to demonstrating how each job supports a company's mission and purpose – can help manufacturers attract and retain this significant pool of employees. This is especially important as baby boomers – a significant portion of manufacturing workers – start retiring.

Embracing the strengths of Gen Y, manufacturers can build high performers, providing exciting career opportunities and boosting productivity throughout the entire organization. With their fresh eyes and thinking, millennials can be an asset to companies looking for a competitive advantage in the years to come.



## Contact

For more information on the importance of human capital and how it can impact your business goals, please call Tooling U-SME at 866.706.8665 or email [info@toolingu.com](mailto:info@toolingu.com).

## About Tooling U-SME

Tooling U-SME delivers versatile, competency-based learning and development solutions to the manufacturing community, working with more than half of all Fortune 500® manufacturing companies, as well as educational institutions across the country. Tooling U-SME partners with customers to build high performers who help their companies drive quality, productivity, innovation and employee satisfaction. A division of SME, an organization that connects people to manufacturing solutions, Tooling U-SME can be found at [toolingu.com](http://toolingu.com), [facebook.com/toolingu](https://facebook.com/toolingu) or follow [@ToolingU](https://twitter.com/ToolingU) on Twitter.

