

THE MANUFACTURING EXPERIENCE

Closing the Gender Gap

Recruiting and Retaining Women in Manufacturing

NOVEMBER 2022

KEY FINDINGS AND INSIGHTS FROM MANUFACTURERS

WITH SUPPORT FROM

Colonial Life®

Center for Manufacturing Research

THE MANUFACTURING EXPERIENCE:
Closing the Gender Gap: Recruiting and Retaining Women in Manufacturing

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By Chad Moutray[1]

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1 Dr. Moutray is the Director of the Center for Manufacturing Research at The Manufacturing Institute. Special thanks to AJ Jorgenson, Sarah Shields and Mary Frances Holland for their contributions to this paper and to the manufacturing executives who gave their time to be interviewed.



This paper explores what manufacturers are doing to help close the gender gap, incorporating survey responses and interviews with various company executives to identify best practices and provide insights for other manufacturers. We received 190 responses to the survey, which was in the field from June 21 to July 22, 2022, and conducted interviews with executives at seven companies from varying industries and of diverse sizes.

› Key findings include:

- **Prioritizing a diverse workplace is key to attracting workers, improving productivity and employee retention and growing a company's bottom line.** This is particularly important against the backdrop of a tight labor market and the challenges of identifying and retaining the "next generation of workers."
- **Women represent a sizable talent pool that manufacturers cannot ignore.** As it stands, women make up more than 29% of the manufacturing workforce. By raising the percentage of women in the manufacturing sector to 35% of total employment in the sector, there could be 800,000 more female manufacturing employees. This would be enough to fill almost every open job in the manufacturing sector today.
- **Companies that have increased worker flexibility have seen a correlation with the ability to attract new employees and retain current staff.** New policies have included part-time options, adjusted shift schedules and opportunities for remote work.
- **Both men and women cite lack of child care options/support to be an issue, though a consensus suggests this is a larger issue for women.** Workplace flexibility can aid in addressing this challenge, though some companies are exploring subsidized or onsite solutions.
- **Providing job training/continuing education opportunities, developing Employee Resource Groups and establishing mentorship programs also help with retention and recruitment.** Implementing policies that can help advance and train a diversity of leaders shows a commitment to employee growth, making the company a more attractive place to stay—or join.

Introduction: The Current Environment

The manufacturing sector—much like other industries—faces unprecedented challenges in recruiting and retaining workers, a problem that the very tight labor market has exacerbated. On the one hand, employment has been a bright spot in an economy that has faced a multitude of headwinds, including supply chain bottlenecks, soaring costs and geopolitical and economic uncertainties that have clouded the outlook. The unemployment rate increased from 3.5% in July to 3.7% in August, but even with the increase, the labor market remains at "full employment." Through the first eight months of 2022, the manufacturing sector has added 297,000 workers, building on the 365,000 additional employees added in 2021, which was the most since 1994. Most importantly, manufacturing employment now exceeds pre-pandemic levels—an amazing accomplishment given the 1.3 million workers lost in the first couple of months of the pandemic.

Yet, the strength of the national labor market has also made it more difficult to find and keep workers. More than 76% of respondents to the third quarter 2022 NAM Manufacturers' Outlook Survey said that workforce challenges were a primary concern for their company,[2] and a previous survey found that roughly 45% of manufacturing companies have had to turn away work because they did not have enough employees to take on such an opportunity.[3] There were 834,000 manufacturing job openings in July, continuing to be highly elevated, averaging 860,600 over the past 12 months. In the larger economy, there were 11,239,000 job openings nationally. More notably, there are essentially two job openings for every one unemployed worker in the economy—an unprecedented ratio that speaks to the historic nature of the current labor market. There also continues to be significant churn in the labor market, with quits in the nonfarm business and manufacturing sectors remaining not far from recent record highs.

The competition for talent has become intense, with many firms increasing their base pay and offering new incentives over the past couple of years to remain competitive with other local and national competitors. Indeed, July's report showed that the average hourly earnings of production and nonsupervisory workers in manufacturing rose 5.0% over the past 12 months. This figure continued to be highly elevated despite moderating from 5.7% year-over-year in March and April, the fastest pace since August 1982. Firms also anticipate increasing compensation strongly this year. In The Manufacturing Institute study on compensation released in May with Colonial Life, respondents predicted a 4.8% growth in wages and salaries in 2022.[4]

While the labor market is expected to cool over the coming months, workforce challenges are not likely to abate over the coming years. A recent study by Deloitte and the MI found that manufacturers will need to hire 4 million workers through 2030, primarily to replace those individuals who are retiring and to account for growth in the sector. Still, because of worker skills mismatches, firms will struggle to fill 2.1 million of those jobs if the skills gap is not adequately addressed.[5] This speaks to the fact that workforce challenges are more of a structural hurdle for manufacturers—not a cyclical one—despite firms working proactively to identify the next generation of employees for their companies.

2 See https://www.nam.org/2022-3rd-quarter-manufacturers-outlook-survey/.
3 See https://www.nam.org/wp-content/uploads/2021/12/Manufacturers_Outlook_Survey_December_2021.pdf.
4 See https://www.themanufacturinginstitute.org/wp-content/uploads/2022/05/Compensation-5-9-22.pdf.
5 See https://www.themanufacturinginstitute.org/wp-content/uploads/2021/05/DI_ER-I-Beyond-reskilling-in-manufacturing-1.pdf.



Diversification Widens the Talent Pool

Against the backdrop of a tight labor market and the challenges of identifying and retaining the "next generation of workers," manufacturers have looked to expand their talent pools, bringing in more diverse and underrepresented candidates.

Attracting and recruiting more diverse talent offer many advantages. For one, demographic trends show that the United States is becoming increasingly more diverse, and these trends will necessitate change. The U.S. Census Bureau estimates that the non-Hispanic white population will decline from 61.3% in 2016 to 55.8% in 2030 to 44.3% in 2060, with the Hispanic population jumping from 17.8% to 27.5%, the Asian population rising from 5.7% to 9.1% and the Black or African American population increasing from 13.3% to 15.0%.[6] Manufacturing recruitment needs to meet those trends, with the workforce in the sector better matching the overall population and the communities those companies serve.

At the same time, a wider talent pool is necessary to help close the skills gap. This means bringing in more women and more diverse candidates. Even with progress in recent years, in 2021, 79.5% of employees in manufacturing nationally were white and just 29.2% were female.[7] Comparatively, for all industries, 47.0% of employees were female.

This more inclusive approach to hiring both allows workers to bring their whole selves to the workplace and speaks to the progress that many companies have made in their approaches to diversity, equity and inclusion and their culture. A diverse workplace can also help to improve the bottom line, attracting workers who might have looked elsewhere otherwise and improving productivity and employee retention.

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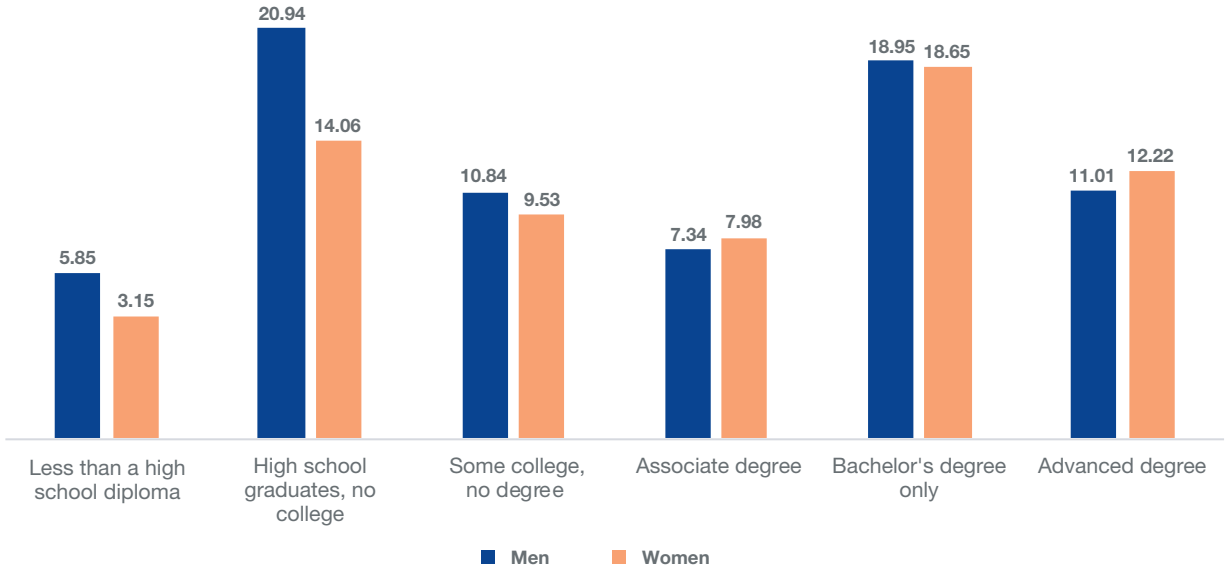
6 See https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf.
7 See https://www.bls.gov/cps/cpsaat18.htm.

The Power of Women

Women continue to pursue college degrees at a higher rate than men, which should increase gender diversity, especially for more-skilled roles in manufacturing. In 2021, 47.8% of all women employed in the total labor force had a bachelor's degree or higher, versus 40.7% for men (Figure 1).[8] Moreover, employed women accounted for 50.7% of all bachelor's degrees or higher in 2021 relative to all employees, or 52.6% of all advanced degrees. Overall, the percentages of male and female employees in 2021 having at least some college or higher (including those who did not obtain a degree) were 64.9% and 74.4%, respectively. Women represent a sizable talent pool that manufacturers cannot ignore, especially as the sector becomes more advanced.

Figure 1: Employment Status by Educational Attainment and Gender, 2021

(in Millions of Workers, 25 Years and Older)



Source: Bureau of Labor Statistics

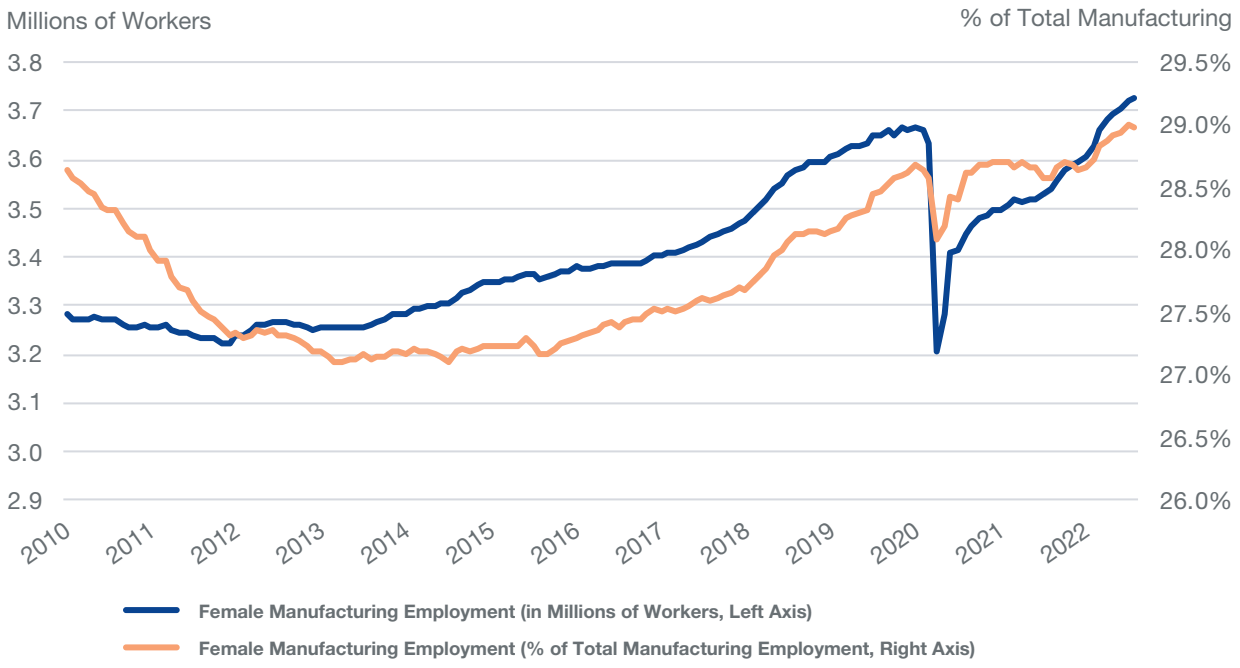
In August, there were 3,725,000 female employees in the manufacturing sector, the most since November 2008, accounting for 29.0% of total manufacturing employment (Figure 2). Interestingly, the number of female manufacturing employees exceeds the pre-pandemic level, up by 62,000 (or 1.7%) since February 2020; in contrast, male employment in the sector has edged up by 5,000 (or 0.1%) since the pandemic began (Figure 3). Meanwhile, male and female labor force participation rates in August were 67.8% and 57.1%, respectively (Figure 4).[9] Each remained below the participation rates in February 2020, which were 69.3% and 57.9%.

One issue that has dominated the conversation about female participation—and for parents and caregivers in general—since the start of the COVID-19 pandemic has been child care. The shortage of child care workers and more-restricted supply of options has forced many parents to stay on the sidelines (and out of the labor market) or ask for flexibility at work. As Figure 5 shows, the percentage of employees citing child care as the reason for being absent from work peaked in late 2020, but it remains higher than before the pandemic. For instance, there were 56,000 Americans who missed work because of child care in August, according to the Bureau of Labor Statistics, down from 93,000 in October 2020 but up from 24,000 in February 2020.

8 See https://www.bls.gov/cps/cpsaat07.htm.

9 Total labor force participation in July was 62.1%.

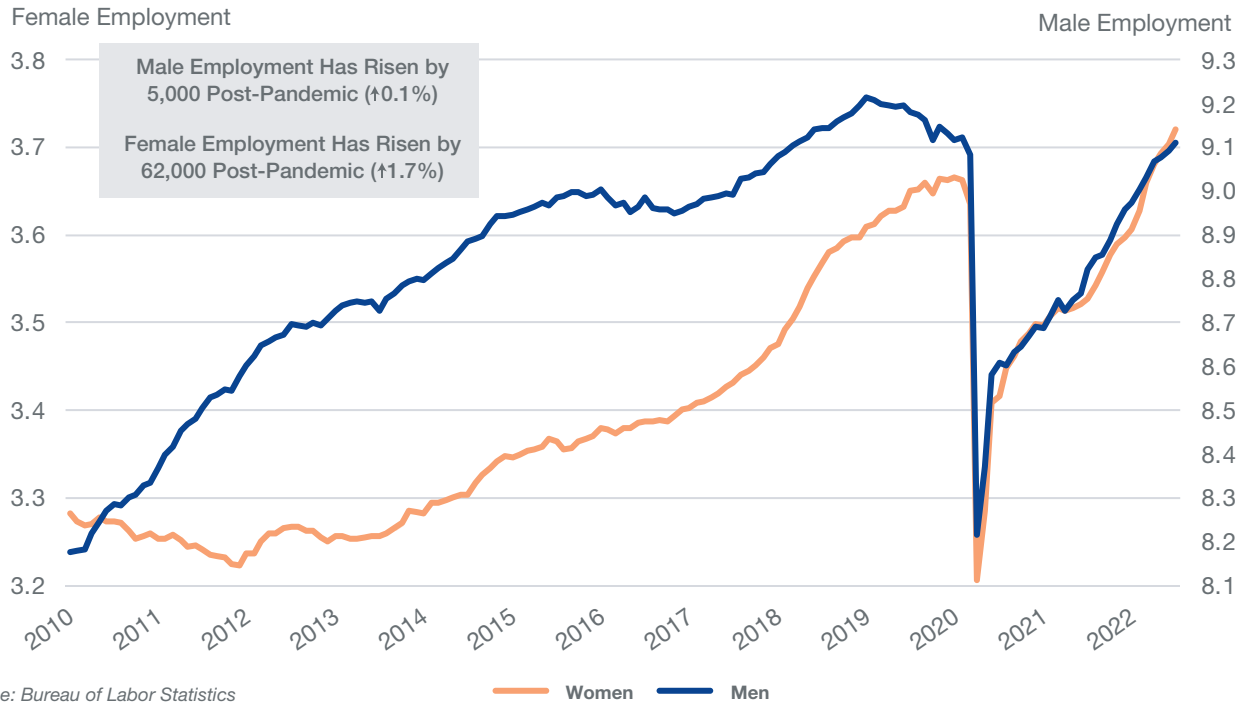
Figure 2: Female Manufacturing Employment, 2010–2022



Source: Bureau of Labor Statistics

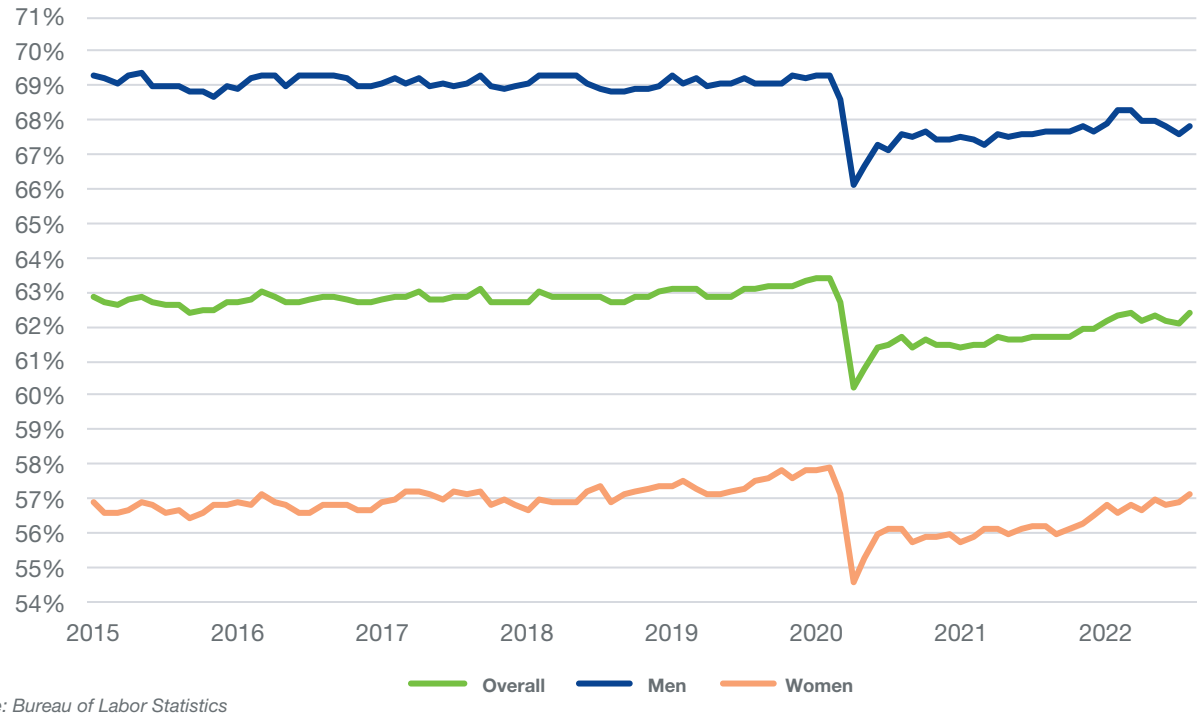
Figure 3: Manufacturing Employment by Gender, 2010–2022

(in Millions of Workers, Seasonally Adjusted)



Source: Bureau of Labor Statistics

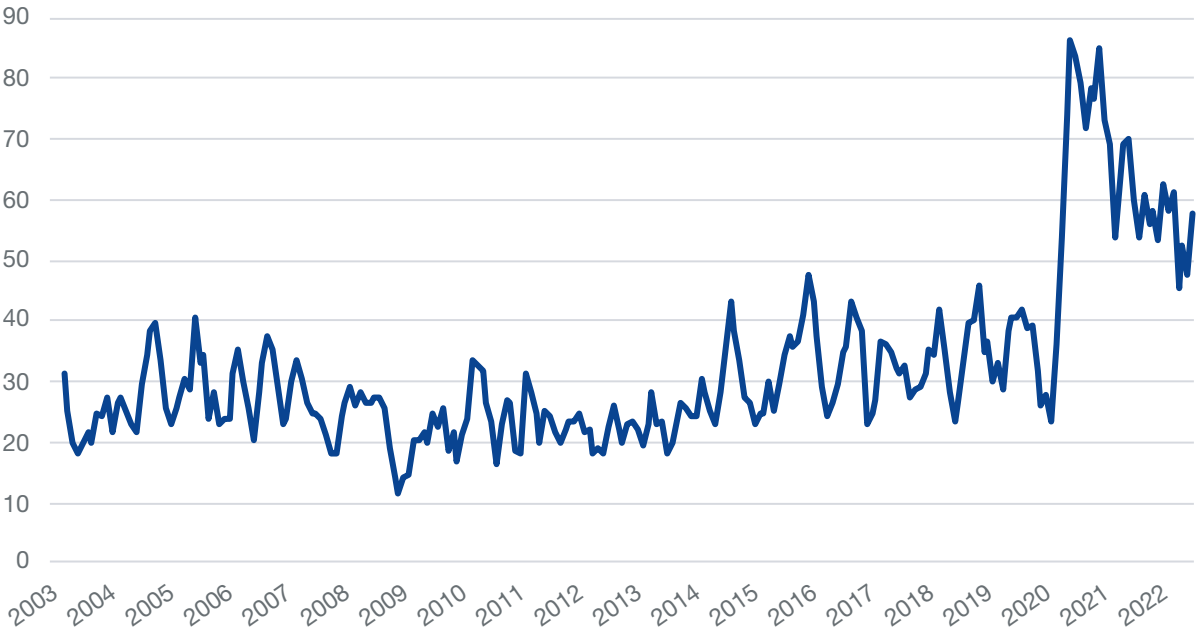
Figure 4: Civilian Labor Force Participation Rate, Seasonally Adjusted, 2015–2022



Source: Bureau of Labor Statistics

Figure 5: Absences from Work Due to Child Care, 2003–2022

(in Thousands of Workers, 16 Years and Older, Three-Month Moving Average, Not Seasonally Adjusted)



Source: Bureau of Labor Statistics

With an eye on increasing female participation in the sector, the MI has initiated the 35x30 campaign, which seeks to raise the percentage of women among manufacturers to 35% by 2030.[10] This initiative aims to help change perceptions among women and girls about manufacturing as a career, to attract and retain more female employees into the sector and to highlight more women as role models. In addition, raising the percentage of women in the manufacturing sector to 35% would bring total female employment to nearly 4.5 million at current levels, or nearly 800,000 more than today. That would go a long way toward closing the skills gap in the manufacturing sector. This would be enough to fill almost every open job in the manufacturing sector today.

› Challenges and Motivating Factors for Increasing Female Participation in Manufacturing

Overall, manufacturers who were interviewed noted the tight labor market and the difficulties of finding and keeping workers in the current economic environment. Some manufacturers suggested that hiring had improved, and turnover had lessened in recent months—perhaps a sign of some cooling in the market. Manufacturers have had to substantially increase compensation to remain competitive, with at least one interviewee suggesting that they had to start new employees at the top of their company's pay range. For many, referral bonuses have often been their best recruitment tool.

Beyond these factors, "ghosting" has been an ever-increasing phenomenon. Susan Foley, the chief executive officer at Diamond Envelope, said that while the labor market is "very tough," one of the biggest challenges is to "just get people to show up." This is consistent with a recent NAM Manufacturers' Outlook Survey and the Institute's Retention Workshop in summer 2022, which found that retention was a significant problem in the early months of an employee's career, and that companies struggled to retain new hires due to candidate expectations, compensation and benefits and workplace culture. Indeed, 24.4% of manufacturers suggested that the highest separations occurred within two months of the start date, and nearly 53% noted retention challenges for those workers who have been at the company for less than one year.

Location can play a role. One of the interviewees noted that many of their facilities were in rural areas with very low unemployment, providing a smaller labor pool from which to draw talent. She also said that reduced immigration presents a challenge. Yet, for roles at manufacturing companies that can be remote, the national scope of the recruitment process has "opened up a lot of talent that we would not have had before," according to Nicole Butler, the director of talent acquisition at Cornerstone Building Brands. She also noted that having women in senior roles at the company has helped to attract more talent into the organization.

Labor force churn was also cited as a problem, especially given the challenge and cost of refilling those roles—an issue that has become more severe in a tight labor market. Tracey Hustad, the vice president for human resources at Arconic, spoke about increased turnover at her company and the impact that this has had on wages and their attempts to hire new workers and to encourage others to return to the fold ("boomerang" employees). This is consistent with national trends, with quit rates remaining near record levels. However, she noted that Arconic is experiencing lower turnover among female than male employees.

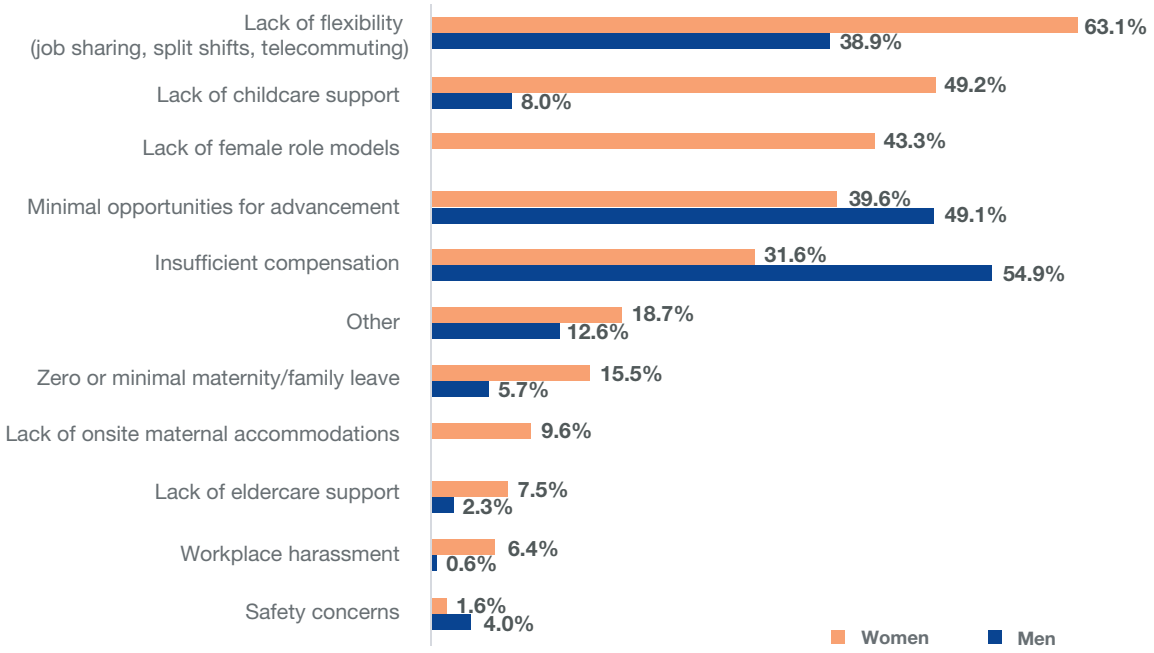
In the survey for this study, roughly 6 in 10 said that labor force challenges had caused both male and female employees to leave their company in the past year. Similarly, 20.9% said they had experienced an increased number of female employees quitting their jobs over the past year, with another 25.1% suggesting that their company had seen more women leave but at the same rate as men.

Manufacturing leaders were asked about the most significant labor force challenges facing male and female employees at their company (Figure 6). The top choices heard from women included the lack of flexibility (e.g., job sharing, split shifts, telecommuting) (63.1%), the lack of child care support (49.2%), the lack of female role models (43.3%), minimal

10 See https://www.themanufacturinginstitute.org/women/wma/35-x-30-the-next-step/.

opportunities for advancement (39.6%) and insufficient compensation (31.6%). In contrast, the chief workplace issues heard from male employees were ranked somewhat differently, with insufficient compensation (54.9%), minimal opportunities for advancement (49.1%) and the lack of flexibility (38.9%) ranking highest for men.

Figure 6: Biggest Labor Force Challenges Heard from Male and Female Employees

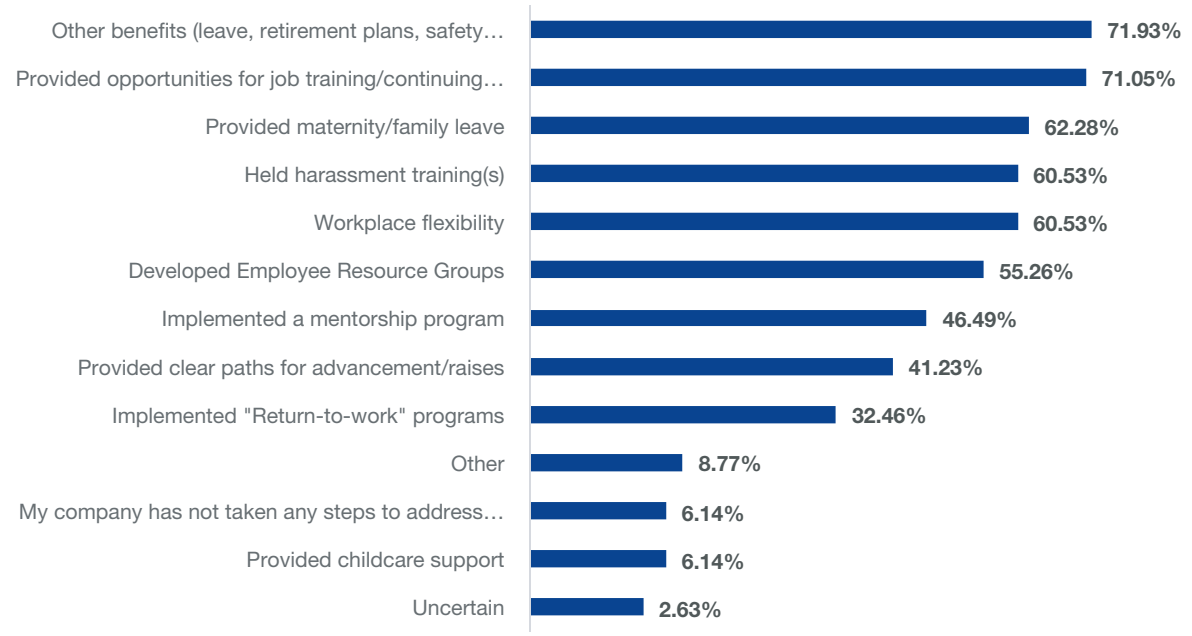


Respondents were asked about the steps they might have taken to address various workplace challenges (Figure 7). More than 71% noted providing opportunities for job training and continuing education. The following steps were the other leading choices: other benefits (such as leave, retirement plans or safety protections), maternity or family leave, harassment training, workplace flexibility, ERGs, mentorship programs, clear paths for advancement and raises and "return-to-work" programs. More importantly, they were asked which of these programs had the most impact on workplace challenges at their company. Most cited workplace flexibility, but there were comments centering on career development opportunities, training and upskilling, ensuring that "employees feel that they have a voice," mentorships, ERGs and various forms of leave.

Those completing the survey were also asked to rank the factors that prospective employees value the most when applying for or considering a job at their company based on their experiences when interviewing or communicating with candidates for open positions. The top choices for women, in order of preference, were: location, compensation, the job description, benefits and clear paths for advancement, raises and bonuses (Figure 8). Those same five choices were also noted for men, but in a slightly different order: compensation, the job description, location, clear paths for advancement and benefits (Figure 9). As such, pay and the jobs that they do were the top choices for men, according to the survey takers. In contrast, location is the most important factor for women, likely reflecting the complexities of work-life balance that many female employees need to juggle and the need to be close to home, school or other commitments;[11] it could also reflect the need for work to be in a location that they feel comfortable commuting to. Beyond these points, it is also perhaps notable that women are more motivated by structured mentorship programs and ERGs than men—at least based on the results of those survey questions.

11 See https://www.nber.org/system/files/working_papers/w21913/w21913.pdf. Authors find that many women's labor participation patterns are related to their male partner's need to either relocate ("tied-mover") to or remain in ("tied-stayer") a location for their careers rather than the woman's career.

Figure 7: “If your company has taken steps to address workplace challenges, in what way have you done so?”



Note: Respondents were able to check more than one response; therefore, responses exceed 100%.

Figure 8: “In your experience when interviewing or communicating with female candidates for an open position, what are the motivating factors they value most when applying for or considering a job at your company?”

(Ranked from most valued to least valued.)

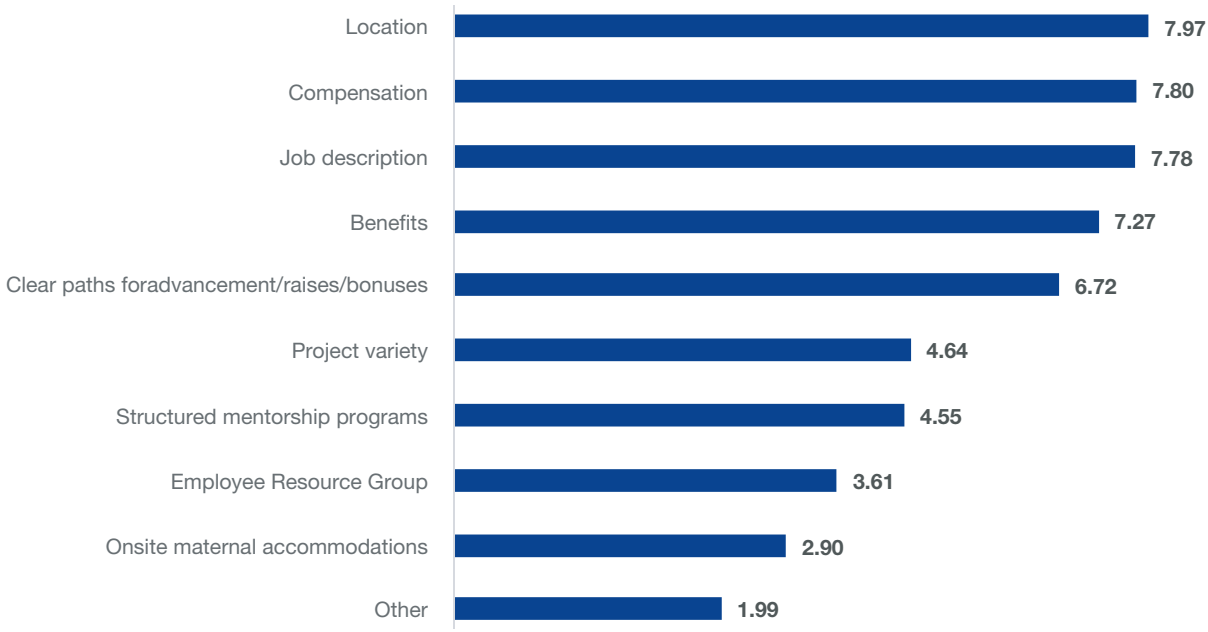
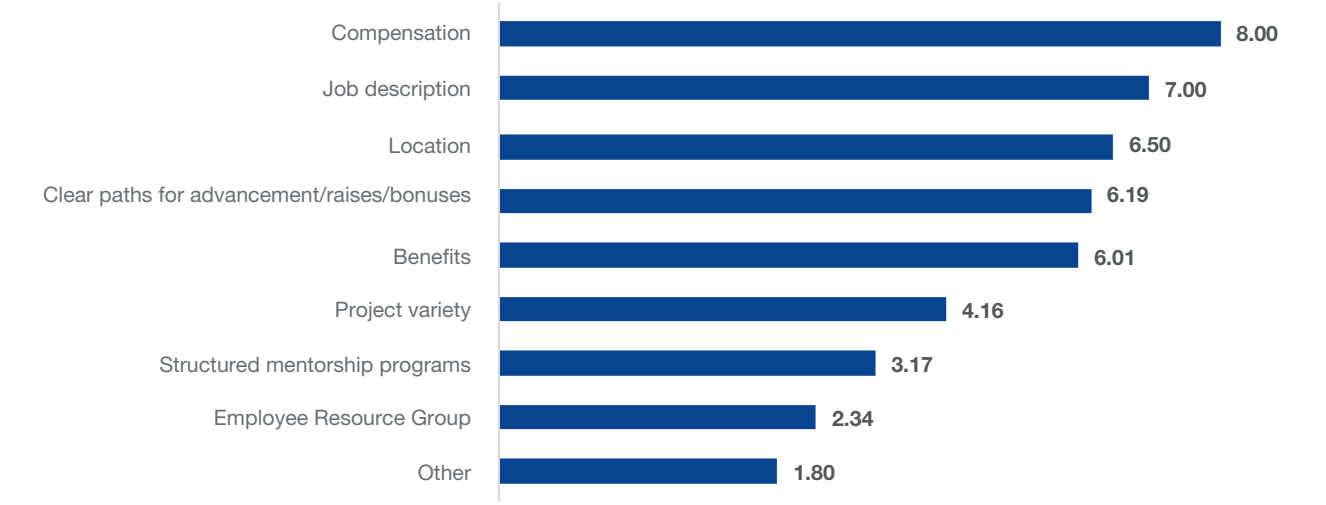


Figure 9: "In your experience when interviewing or communicating with male candidates for an open position, what are the motivating factors they value most when applying for or considering a job at your company?"

(Ranked from most valued to least valued. Higher readings would suggest greater importance for male candidates.)



Similarly, manufacturing leaders were asked about benefits that were the most valued when candidates were considering employment at their company. Health care and paid time off were ranked highest, both for female (Figure 10) and male (Figure 11) employees. Women candidates were also likely to be attracted by flexible and remote offerings, training and professional development opportunities, paid maternity leave, paid family leave and retirement benefits. Flexibility ranked higher for women than men. Paid maternity leave for female prospects was more enticing than paid paternity leave was for male candidates

Figure 10: "In your experience when interviewing or communicating with female candidates for an open position, what are the specific benefits they value most when applying for or considering a job at your company?"

(Ranked from most valued to least valued. Higher readings would suggest greater importance for male candidates.)

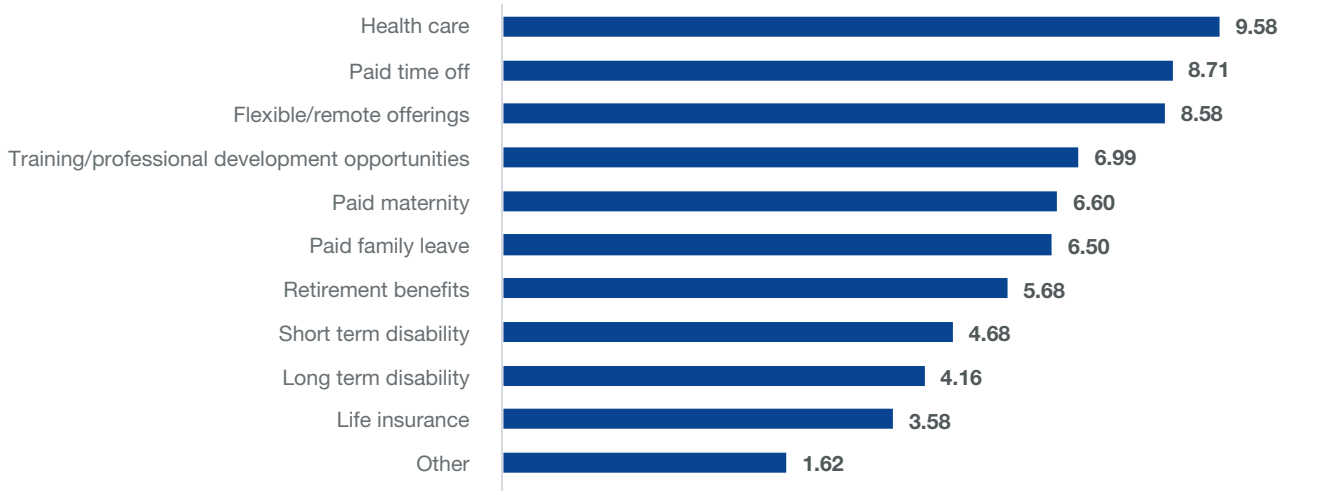
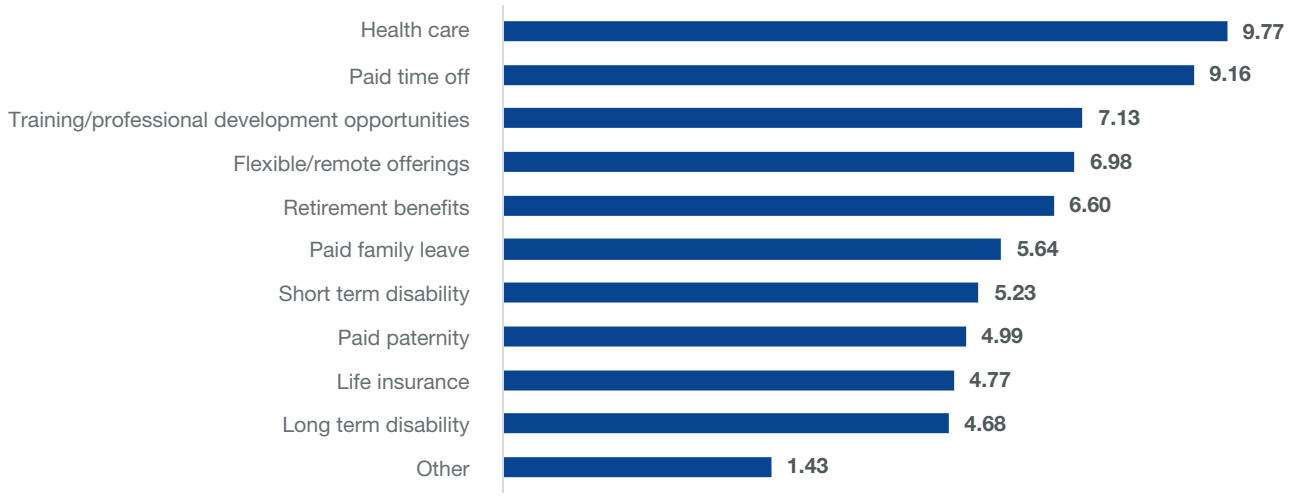


Figure 11: “In your experience when interviewing or communicating with male candidates for an open position, what are the specific benefits they value most when applying for or considering a job at your company?”

(Ranked from most valued to least valued. Higher readings would suggest greater importance for male candidates.)



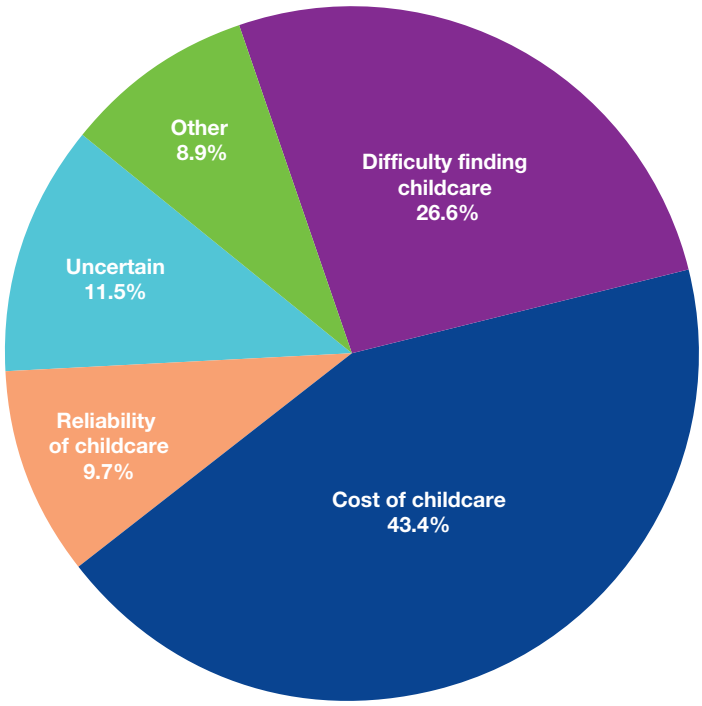
Male candidates were somewhat more likely to rate training and professional development opportunities, retirement benefits, life insurance and short-term and long-term disability insurance higher, in the experiences of the human resources executives completing the survey. The data also suggest that companies could do more to provide benefits education and decision-support tools. Nearly 62% of respondents said that their company did not offer such tools customized uniquely for female employees in such a way as to guide them to the best annual benefit election to meet their personal needs. Along those lines, 41.7% said that offering benefits education and decision-support tools customized uniquely for female employees would help retain and recruit female employees, with 35.7% uncertain.

Workforce Flexibility and Childcare

The difference in perceived male and female challenges regarding access to child care is striking, with 49.2% of women talking about child care support issues versus 8% of men. While men still face these challenges, both the interviews and survey results show the responsibilities of child care, schooling and managing the home more often fall to women. A leader at one manufacturer put it this way, "Women have more demands outside of work than men do in general." This necessitates or has encouraged experiments for manufacturers to increase flexibility where possible.

When caring for children, manufacturing employees who are parents have to weigh many factors. Survey respondents were asked to cite the top child care challenges they hear from employees (Figure 12). Seven out of 10 responses were either the cost of child care (43.4%) or the difficulties in finding child care (26.6%). The reliability of child care (9.7%) was also mentioned, with uncertain (11.5%) and other (8.9%) rounding out the options. Of those who stated "other," the comments centered largely on the hours of operation not meeting their needs, the quality of the service and those who would have preferred an "all of the above" option.

Figure 12: "For workers citing child care concerns, what is the main challenge?"



Note: Total exceeds 100% due to rounding.

Kim Dolder, the human resources partner and safety lead at Diamond Envelope, said that the lack of child care options has been their biggest hurdle for many women at their company, with some employees needing to stay home to take care of children, even with offers to change schedules when possible. The challenge of balancing work and child care, especially coming out of COVID-19, has increased stress levels for many employees, according to Denise DeLaune, the global director of excellence at Dow. The company has long valued mental well-being, encouraging workers to prioritize what is important in their lives as they seek an appropriate work-life balance.

Lori Johnson, the operations technician staffing leader at Dow, noted that there are “child care deserts” in many locations, making it harder for parents and caregivers to be able to work or juggle life priorities. She added that the “industry has an opportunity to make strides in this space by helping to make child care more affordable and available” for existing and prospective employees. Dow is currently exploring various partnerships to help add child care offerings to workers at its facilities. Another interviewee made similar comments, stating that they are setting up a pilot program with Bright Horizons at their headquarters and have put in a child care facility at one of their locations. Each of these programs is subsidized by the company.

Indeed, employees are demanding more flexibility in their schedules than ever, both as a reaction to the tight post-pandemic labor market and to the conflicting demands of the workplace and home. As noted above, this flexibility is crucial for attracting and retaining more female employees. Indeed, 68.1% of survey respondents said that their company has had to increase worker flexibility in the past couple of years, particularly as it relates to scheduling, to remain competitive in the labor market. More than 58% felt that increased worker flexibility had helped them attract new employees and retain current staff, with roughly one-third uncertain. Moreover, 51.9% noted that, for their company, workplace flexibility included part-time options, which might be attractive to female employees or parents and caregivers. Nearly 42% said they did not offer part-time options, with 6.3% uncertain.

With that said, each worker has unique needs to balance the priorities in their life. Figures 13 and 14 highlight the responses to the survey on what specific policies related to workplace flexibility their male and female employees cite most as priorities when applying for or considering a job at their company. Not surprisingly, telecommuting and hybrid work topped the list for both genders. With more occupations in other sectors offering increased hybrid options, there is an ongoing debate among many manufacturers about what roles at their companies might be ripe for such opportunities. Where hybrid or remote opportunities exist in manufacturing, they are more likely to be in non-production and administrative roles, as most shop-floor roles must be performed onsite, working closely with other colleagues as part of an ongoing process. At the same time, many manufacturers, especially small and medium-sized companies, feel that, for fairness, if one employee needs to be on the plant floor every day, everyone needs to come in every day. Yet, even among those companies, the conversation about the post-pandemic work life continues to evolve.

Figure 13: “Rank the specific policies related to workplace flexibility that female employees cite as priorities when applying for or considering a job at your company.”

(Ranked from most valued to least valued. Higher readings would suggest greater importance for female candidates.)

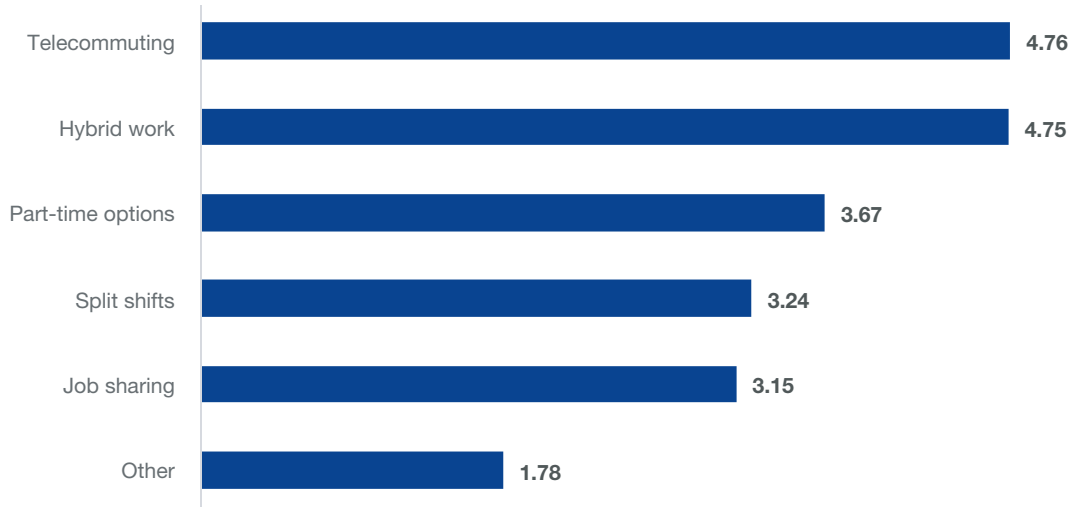
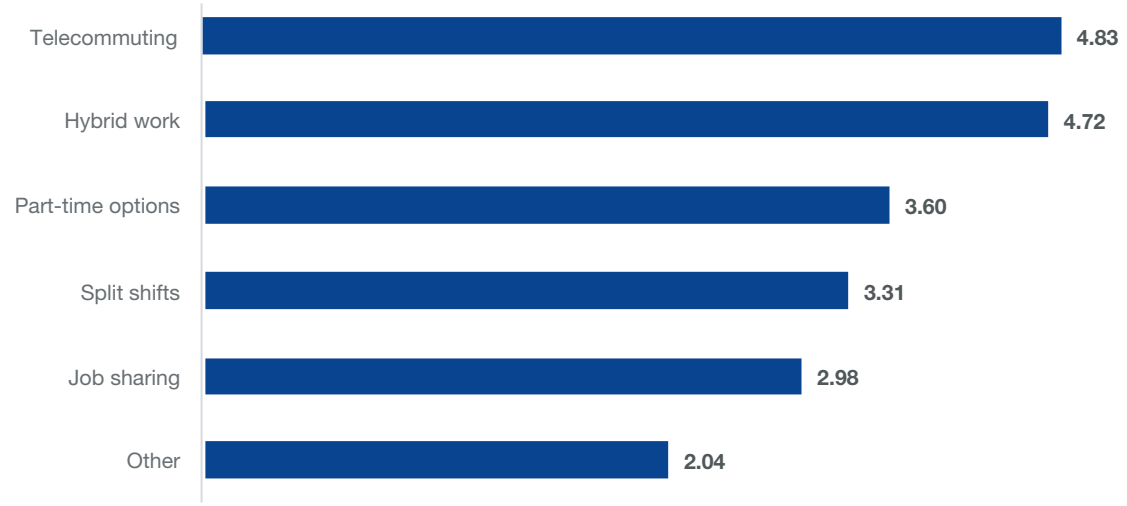


Figure 14: "Rank the specific policies related to workplace flexibility that male employees cite as priorities when applying for or considering a job at your company."

(Ranked from most valued to least valued. Higher readings would suggest greater importance for female candidates.)



In the survey, part-time options, split shifts and job-sharing ranked highly among women after telecommuting and hybrid work. Men were less likely than their female colleagues to cite this option. From the interviews, manufacturers discussed many of the experiments and steps that they have taken recently to increase flexibility options for their workers. First and foremost, each noted that employees dealing with COVID-19 were provided the time away they needed to care for themselves or their families. There were also discussions of hybrid and part-time options. Lizeth Medina, the senior manager for advanced data science at the Neenah Foundry, said that some corporate personnel were allowed to work up to two days from home. In addition, during the summer, several employees worked nine-hour days Monday through Thursday, allowing them to work just a half day on Friday. Meanwhile, the Neenah Foundry was exploring part-time options for factory workers and was planning to roll out a similar pilot for maintenance employees.

There were similar comments from other interviewees. Nicole Butler at Cornerstone Building Brands added that it has become more difficult to attract workers to second, third and weekend shifts. Most employees and candidates want to work first shift to accommodate their family schedules. Operations and human resources leaders are exploring possibilities to increase flexibility for their factory-floor employees, including potentially offering early, shorter, or flexible shifts to better accommodate schooling or childcare schedules. She added that they "need to help female employees balance time as working mothers" and that having more women in senior roles at the company helps focus the need for such flexibility (and also helps attract more talent who see female leaders in key roles).

Susan Foley and Kim Dolder from Diamond Envelope both noted their company's "open-door policy" on scheduling. Foley said, "Let us know what you need, and we will try to work with everyone." This has resulted in some employees switching shifts to accommodate their families' schedules better and offering part-time options for some high school students. They added that, for their business, a "blanket policy on flexibility will not work for everyone" since each worker has different needs. Denise DeLaune at Dow made a similar point, with each employee making a "design your day" agreement with their supervisor. This puts the onus of how workers complete their daily tasks on them, affording some flexibility where feasible while also increasing buy-in on the scheduling arrangement. At the same time, she added that Dow was piloting different organizational models to see how they could increase flexibility company-wide. This could provide the "potential to normalize shift-swapping and job sharing, neither of which is currently widespread."

› Increasing and Spotlighting Diversity, Mentorship and

Networking Opportunities

Manufacturers continue to recognize that they need to attract more women, both to increase the size of the talent pool and to complement their existing workforce. Lizeth Medina at Neenah Foundry spoke about how metal casting has traditionally been a very male-dominated industry. As the company actively looks for more women to hire, there have had to be adjustments to workplace cultures in order to reflect this commitment, which meant shifting from what has typically been considered "status quo." She added that the female employees at Neenah Foundry are very dedicated and can be good role models for other prospective women.

Similarly, Lori Johnson, the operations staffing leader at Dow, said that "people need to see themselves in the role," and the company actively promotes its female and minority employees through "day in the life testimonials" and highlighting their successes. They are also major supporters of the Creators Wanted campaign and the 35x30 campaign, both initiatives of the MI, where manufacturing careers are spotlighted to dispel misperceptions and to attract young women and underrepresented populations that might pursue manufacturing as a career. Aneesa Muthana, the CEO and co-president at Pioneer Service, spoke about the importance of having female leaders at the company. In seeing other women in key roles, she offered this mantra: "when you see it, you can be it." She added, "Women at the company are not seen as trophy employees. They know that they belong and are treated well, and we are always promoting their successes." Pioneer Service often highlights the industry to a diverse population as a quality career option, and the stories of the women and minorities at the company are excellent marketing tools for recruiting others.

In speaking about their diversity, equity and inclusion efforts, Carol Enneking at Cornerstone Building Brands also noted the importance of having women and minorities in senior roles and how they helped to attract more talent. For instance, they just hired two female business unit presidents at the company. These female executive roles inspire other females both within and from outside the company to consider their own potential career possibilities at Cornerstone Building Brands. In addition, Cornerstone Building Brands has a DE&I Council, which provides all employees opportunities to increase their own awareness and help drive a culture of inclusiveness companywide. Launching four employee resource groups has provided employees tangible ways to actively promote greater inclusion by sharing their experiences, increasing visibility on critical issues and encouraging allyship.

Dow has a long history with ERGs; these groups serve as an essential tool for supporting informal and formal mentoring, making connections and helping individuals with similar traits feel more comfortable and able to bring their full self to work. Jim Fitterling, the chairman and CEO at Dow (and the current chair of the board of directors at the National Association of Manufacturers), has been a strong leader in this space, and he has encouraged these groups to take an even stronger stance in recent years, according to Denise DeLaune. She has been a member of the Women Innovation Network at Dow for 15 years. As part of a focused program, "WIN +5", when female employees join WIN, they are immediately connected to five sponsors, offering them a chance to network with other women at the company. This engagement has led to many promotions at the company. It has been important for women to engage with other women, who can often understand and empathize with the work and life struggles each might face. Beyond WIN, Dow has additional opportunities for mentoring, including its Sponsor for Success and Advocacy in Action programs and its support of the MI's 35x30 Initiative's Mentoring Program.

Tracey Hustad at Arconic touted the success of their Employee Resource Group for women, which is called Thrive. It is one of six ERGs at the company. These groups are well-funded, with tremendous support from executives throughout the company. Beyond internal funding, the Arconic Foundation has helped to provide support for Thrive and other groups. She noted that Thrive has offered webinars (some in collaboration with other ERGs), helped to put a spotlight on women at Arconic and their success stories and supported initiatives that helped to raise awareness (including a "wear purple day"). Many of these events are in March, which is Women's History Month, but there are also activities throughout the year. In addition to providing networking and mentoring possibilities, these groups help to change perceptions.

Kim Dolder at Diamond Envelope also spoke about sharing women's stories as a recruitment vehicle for attracting others into key roles. Like the culture Lizeth Medina describes at Neenah Foundry, men have more traditionally been



adjustors at Diamond Envelope, and it has only been recently that two female employees have assumed the adjustor's role. Dolder and Medina have utilized these women's stories to highlight successful female employees taking on new roles, making a great wage and building a successful career. One of these women, for example, was a STEP Ahead Award (now known as the Women MAKE Awards) winner, and Diamond Envelope was able to showcase this accomplishment with all her male and female colleagues cheering her on. More importantly, these women persevered through some challenges, including balancing work while raising children, and those stories also resonate with other mothers or women who want to have children.

On mentoring, 40.9% of manufacturers responding to the survey said they had a formal mentoring program. Of those that said that they did, 78.1% felt that their structured mentoring program had been beneficial to advancing women's careers in manufacturing, with 49.1% strongly agreeing and 16.7% neutral. More than 54% said that they thought it was important for female employees to have a female mentor, with 26.7% neutral and 19.0% disagreeing.

While acknowledging the importance of female mentors, Katy Theroux, the executive vice president and chief human resources officer at Cornerstone Building Brands, said that it was important for people not to forget that diversity should have a goal of being inclusive in every way, including for men. Diversity efforts should serve to bring people together as much as possible. Along those lines, she added that men can be valuable members of the women's ERGs, speaking about their own experiences and the ideal work environment they would like to see for their daughters or other women in their lives. Likewise, Lori Johnson at Dow said that mentoring programs should not be limited to women—even as they have vibrant programs encouraging this—with male mentors also being beneficial for professional growth. Aneesa Muthana at Pioneer Service agreed, saying that companies need to be strategic in their moves and not forced. She added, "You cannot do it just to serve an agenda." She recommended that manufacturers create avenues for women and men to work together as much as possible.

› Other Strategies Cited for Increasing Female Participation in Manufacturing

While increasing workplace flexibility, providing child care solutions and finding ways to elevate and connect women are at the forefront of how companies can start increasing female participation in the manufacturing industry, several other tactics could be considered as a company develops its strategic approach to recruitment and retention, including:

1. **Competitive compensation:** As seen earlier, candidates—both male and female—look at wages, salaries and benefits when deciding where they might want to work, and this challenge of attracting and retaining workers has become even more intense given the tight labor market. Survey respondents were asked about their compensation for female employees at their company relative to their peers and/or the local market for talent. Nearly 61% said their overall compensation was competitive with other manufacturers or local businesses, with 11.3% suggesting that they paid more than their peers or others locally. While some said they were not competitive with their current compensation ranges, they planned to do something about it. Along those lines, 12.2% said that they were actively working to close the gap with their peers or local competitors, and 8.7% noted this was a priority for the future.

2. **Leadership Development:** Carol Enneking at Cornerstone Building Brands spoke about the company's Leadership Essentials Program, which provides a consistent experience for leaders at the company. This is virtual program spanning 12 weeks, with two hours per week, offering lessons on situational leadership and the "big picture" of company performance. This program includes a diverse team of leaders, helping those individuals feel valued and supporting the growth of women and people of color. At the same time, it helps ensure that diversity efforts are uniform and valued throughout the company.

3. **Creating Inclusive Cultures:** This issue was most frequently cited as a critical selling point for attracting and retaining female workers in the open-ended question on the survey. The company's culture and "being cared for" are important differentiators for manufacturers in the competition for talent. This includes frequent and effective communication (including "being heard"). Still, training and upskilling, the emphasis on health and safety and drives for more inclusivity can also help make employees "sticky," helping with retention.

4. **Widening Talent Pools in Recruitment:** Cornerstone leaders also spoke about how manufacturers need to be inclusive to reach out to new communities. This goes beyond the regular talent pools if they are going to attract more women and people of color. Recruiters need to be trained in unconscious bias, as well, if they have not already.

5. **Employee Handbook and Onboarding:** Susan Foley at Diamond Envelope stressed the importance of their employee handbook. This handbook highlights the processes that have been put in place, including expectations. She added that it "helps everyone know their lane and for all employees to know that there is open communication. Diamond Envelope updates its handbook every two years with department heads providing input on changes. She feels that a solid employee handbook can be effective for onboarding new employees. Aneesa Muthana at Pioneer Service agreed, speaking about the importance of the employee handbook in laying out fair and impartial policies and highlighting the company's overall culture. These can help all employees feel more comfortable, including in the onboarding process.

6. **Demonstrating Zero Tolerance for Harassment:** It is essential for women to feel safe in the company. This includes making it clear that harassment and intimidation are not tolerated. One interviewee spoke about how they let a long-tenured male employee go because a female employee was being harassed. By letting this individual go, it spoke volumes about how much management cared for its employees and the overall culture of the company.

Conclusion

To address the workforce shortage, manufacturers need to expand their talent pools, bringing in more diverse and underrepresented candidates. Women represent a sizable talent pool that manufacturers cannot ignore, especially as the sector becomes more advanced. By embracing the diversity of its employee base, companies can positively shape their company's culture, which can be attractive for identifying and retaining workers. In addition, by highlighting successful women at their companies, their female employees have become important role models for other existing and prospective workers, and these efforts go a long way toward conveying the importance of diversity and differing perspectives to the company's overall culture and to the bottom line.

At the same time, it is also vital to address some of the challenges that hinder more women from entering the manufacturing sector. The lack of flexibility, child care support and company-supported development and networking opportunities are the top barriers women are facing, and successful manufacturers have worked to address those challenges. Child care and work-life balance are top-of-mind for many employees, both male and female, and in the aftermath of the COVID-19 pandemic, there are increasing conversations about what the "new normal" in the workplace looks like. Meanwhile, manufacturers have explored job training and continuing education opportunities, ERGs and mentorship programs to help their retention and recruitment efforts. These initiatives also help to ensure that employees feel valued and that there are sufficient resources dedicated to their success and development.

WOMEN MAKE AMERICA

The Manufacturing Institute can also be a resource for leaders in the sector. As the nation's marquee program devoted to closing the gender gap in manufacturing, the MI's Women MAKE America initiative (formerly the STEP Women's Initiative) is a powerful tool for manufacturing companies to spotlight current female talent, strengthen advancement pipelines, tap into new recruitment channels and implement policies that create more inclusive workplaces that allow women to thrive.

Over the past decade, the MI developed two flagship programs to elevate, empower and connect women. The Women MAKE Awards recognize 130 women annually who exemplify excellence, leadership and a commitment to developing the next generation of women in manufacturing. The MI's Women Connect events provide a platform for women to connect, hear from each other and learn ways to grow professionally.

In March 2022, the MI launched the 35x30 campaign to increase the percentage of women in the manufacturing workforce to 35% by 2030. This industry-wide, action-oriented campaign features a best-in-class female-to-female mentoring program, increased company engagement and expanded access to professional development and training.

Learn more about The MI's Women MAKE America initiative here.

Appendix: Survey Responses

1. **Do you have unfilled positions within your company for which you are struggling to find qualified applicants?**
    a. Yes – 88.83%
    b. No – 5.32%
    c. Uncertain – 5.85%

2. **What are the biggest labor force challenges that you hear from female employees at your company? (Select all that apply.)**
    a. Lack of childcare support – 49.20%
    b. Lack of eldercare support – 7.49%
    c. Lack of flexibility (job sharing, split shifts, telecommuting) – 63.10%
    d. Lack of female role models – 43.32%
    e. Insufficient compensation – 31.55%
    f. Minimal opportunities for advancement – 39.57%
    g. Zero or minimal maternity/family leave – 15.51%
    h. Lack of onsite maternal accommodations (e.g., nursing room, schedules that allow for nursing, fridge for storage, etc.) – 9.63%
    i. Workplace harassment – 6.42%
    j. Safety concerns – 1.60%
    k. Other – 18.72%

3. **What are the biggest labor force challenges that you hear from male employees at your company? (Select all that apply.)**
    a. Lack of childcare support – 8.00%
    b. Lack of eldercare support – 2.29%
    c. Lack of flexibility (job sharing, split shifts, telecommuting) – 38.86%
    d. Lack of male role models – *none*
    e. Insufficient compensation – 54.86%
    f. Minimal opportunities for advancement – 49.14%
    g. Zero or minimal paternity/family leave – 5.71%
    h. Workplace harassment – 0.57%
    i. Safety concerns – 4.00%
    j. Other – 12.57%

4. **Have you experienced an increased number of female employees quitting their jobs across the past year at your company?**
    a. Yes – 20.86%
    b. Yes, but the same rate as males – 25.13%
    c. No – 25.13%
    d. Uncertain – 19.25%

5. **Have the labor force challenges listed above caused female employees to consider leaving your company within the past year?**
    a. Yes – 62.77%
    b. No – 18.82%
    c. Uncertain – 18.62%

6. **Have the labor force challenges listed above caused male employees to consider leaving your company within the past year?**
    d. Yes – 56.91%
    e. No – 22.87%
    f. Uncertain – 20.21%

7. **In your experience when interviewing or communicating with female candidates for an open position, what are the motivating factors they value most when applying for or considering a job at your company? (Rank from most valued to least valued.)**
    a. Job description – 7.78
    b. Location – 7.97
    c. Benefits – 7.27
    d. Structured mentorship programs – 4.55
    e. Employee Resource Group – 3.61
    f. Compensation – 7.80
    g. Clear paths for advancement/raises/bonuses – 6.72
    h. Project variety – 4.64
    i. Onsite maternal accommodations (nursing room, schedule flexibility to accommodate nursing, fridge for breastmilk storage, etc.) – 2.90
    j. Other – 1.99

8. **In your experience when interviewing or communicating with male candidates for an open position, what are the motivating factors they value most when applying for or considering a job at your company? (Rank from most valued to least valued.)**

    a. Job description – 7.00

    b. Location – 6.50

    c. Benefits – 6.01

    d. Structured mentorship programs – 3.17

    e. Employee Resource Group – 2.34

    f. Compensation – 8.00

    g. Clear paths for advancement/raises/bonuses – 6.19

    h. Project variety – 4.16

    i. Other – 1.80

9. **In your experience when interviewing or communicating with female candidates for an open position, what are the specific benefits they value most when applying for or considering a job at your company. (Rank from most valued to least valued.)**

    a. Health care – 9.58

    b. Paid maternity – 6.60

    c. Paid family leave – 6.50

    d. Paid time off – 8.71

    e. Long term disability – 4.16

    f. Short term disability – 4.68

    g. Life insurance – 3.58

    h. Flexible/remote offerings – 8.58

    i. Retirement benefits – 5.68

    j. Training/professional development opportunities – 6.99

    k. Other – 1.62

10. In your experience when interviewing or communicating with male candidates for an open position, what are the specific benefits they value most when applying for or considering a job at your company. (Rank from most valued to least valued.)

a. Health care – 9.77

b. Paid paternity – 4.99

c. Paid family leave – 5.64

d. Paid time off – 9.16

e. Long term disability – 4.68

f. Short term disability – 5.23

g. Life insurance – 4.77

h. Flexible/remote offerings – 6.98

i. Retirement benefits – 6.60

j. Training/professional development opportunities – 7.13

k. Other – 1.43

11. Rank the specific policies related to workplace flexibility that female employees cite as priorities when applying for or considering a job at your company. (Ranked from most important to least important.)

a. Job sharing – 3.15

b. Split shifts – 3.24

c. Part-time options – 3.67

d. Telecommuting – 4.76

e. Hybrid work – 4.75

f. Other – 1.78

12. Rank the specific policies related to workplace flexibility that male employees cite as priorities when applying for or considering a job at your company. (Ranked from most important to least important.)

a. Job sharing – 3.31

b. Split shifts – 3.60

c. Part-time options – 2.98

d. Telecommuting – 4.83

e. Hybrid work – 4.72

f. Other – 2.04

13. Has your company taken any steps to address workplace challenges specific to women?

a. Yes – 83.76%

b. No – 11.11%

c. Uncertain – 5.13%

14. If your company has taken steps to address workplace challenges, in what way have you done so? (Select all that apply.)

a. Provided childcare support – 6.14%

b. Provided maternity/family leave – 62.28%

c. Workplace flexibility (job splitting, split shifts, telecommuting) – 60.53%

d. Developed Employee Resource Groups – 55.26%

e. Provided clear paths for advancement/raises – 41.23%

f. Provided opportunities for job training/continuing education – 71.05%

g. Implemented a mentorship program – 46.49%

h. Held harassment training(s) – 60.53%

i. Other benefits (bereavement leave, retirement plans, safety protections, vacation time, sick leave) – 71.93%

j. Implemented "Return-to-work" programs (a clear path for those who are returning to work after an extended absence) – 32.46%

k. Uncertain – 2.63%

l. My company has not taken any steps to address workplace challenges – 6.14%

m. Other – 8.77%

15. If yes, which one has had the most impact on the workplace challenges in your company? (Open-ended question.)

16. For workers citing childcare concerns, what is the main challenge?

a. Difficulty finding childcare – 26.55%

b. Cost of childcare – 43.36%

c. Reliability of childcare – 9.73%

d. Other – 11.50%

e. Uncertain – 8.85%

17. Has your company had to increase worker flexibility, particularly as it relates to scheduling, to remain competitive in the labor market?

a. Yes – 68.07%

b. No – 22.69%

c. Uncertain – 9.24%

18. What are some examples at your company of increased worker flexibility? (Open-ended question.)

19. Does this workplace flexibility include part-time options, some of which might be attractive to female employees or parents?

a. Yes – 51.90%

b. No – 41.77%

c. Uncertain – 6.33%

20. Has increased worker flexibility helped to attract new employees to your company and retain current staff?

a. Yes – 58.23%

b. No – 8.86%

c. Uncertain – 32.91%

21. Does your company have a formal mentoring program?

a. Yes – 40.87%

b. No – 55.65%

c. Uncertain – 3.48%

22. A structured mentoring program is beneficial to advancing the careers of women in manufacturing.

a. Strongly agree – 49.12%

b. Agree – 28.95%

c. Neutral – 16.67%

d. Somewhat disagree – 4.39%

e. Strongly disagree – 0.88%

23. For structured mentoring programs, it important for women employees to have a mentor that is also female.

a. Strongly agree – 12.07%

b. Agree – 42.24%

c. Neutral – 26.72%

d. Somewhat disagree – 15.52%

e. Strongly disagree – 3.45%

24. How would you characterize labor market compensation—including wages, salaries and benefits—for female employees at your company relative to your peers and/or the local market for talent?

d. We tend to pay more than our peers and/or the local market – 11.30%

e. We are competitive with our peers and/or the local market – 60.87%

f. We are not competitive but have been actively working to close the gap with our peers and/or the local market – 12.17%

g. We are not competitive with our peers and/or the local market, but this will likely be a priority in the future – 8.70%

h. Other – 2.61%

i. None of the above – 4.35%

25. Are there other aspects at your company (e.g., company culture, other perks, career potential, family-like atmosphere) that you feel are critical selling points in attracting and retaining female workers, and if so, what are those? (Open-ended question.)

26. Does your company currently offer employee benefits education and decision support tools customized uniquely for female employees to help guide them to the best annual benefit elections to meet their personal needs?

a. Yes – 23.48%

b. No – 61.74%

c. Uncertain – 14.78%

27. Do you think offering benefits education and decision support tools customized uniquely for female employees would help retain and recruit female employees?

a. Yes – 41.74%

b. No – 22.61%

c. Uncertain – 35.65%

28. What is your company's primary industrial classification?

a. Chemicals – 13.79%

b. Computer and electronic products – 2.59%

c. Electrical equipment and appliances – 4.31%

d. Fabricated metal products – 13.79%

e. Food manufacturing – 6.90%

f. Furniture and related products – 1.72%

g. Machinery – 12.93%

h. Nonmetallic mineral products - none

i. Paper and paper products – 4.31%

j. Petroleum and coal products - none

k. Plastics and rubber products – 6.03%

l. Primary metals – 1.72%

m. Transportation equipment – 1.72%

n. Wood products – 1.72%

o. Other – 28.45%

29. What is your firm size (e.g., the parent company, not your establishment)?

a. Fewer than 50 employees – 6.84%

b. 50 to 499 employees – 23.08%

c. 500 or more employees – 70.09%

d. Uncertain – *none*


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