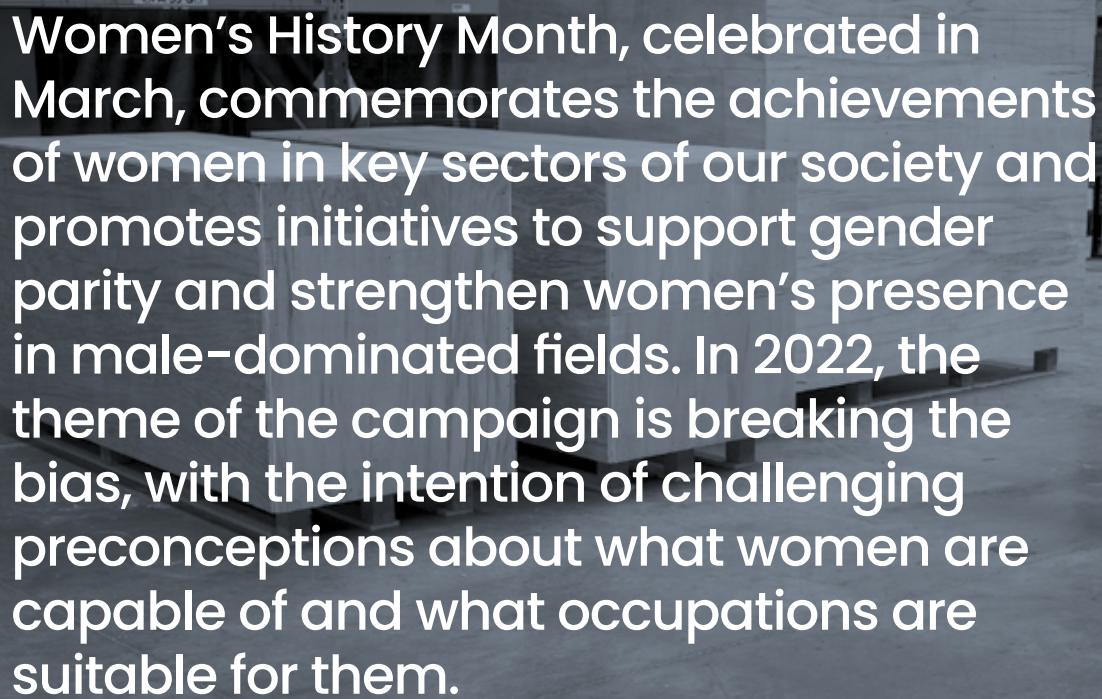


The added value of diversity

How gender diversity benefits everyone



A black and white photograph of a woman wearing a hard hat and a safety vest, walking through a warehouse. She is carrying a small box. In the background, there are large stacks of materials on pallets.

Women's History Month, celebrated in March, commemorates the achievements of women in key sectors of our society and promotes initiatives to support gender parity and strengthen women's presence in male-dominated fields. In 2022, the theme of the campaign is breaking the bias, with the intention of challenging preconceptions about what women are capable of and what occupations are suitable for them.

The topic ties in well with the challenges of women in engineering, who have participated in advancing the sectors for over a century, but are still dramatically underrepresented, especially at management level.

Supporting gender equality and furthering the participation of women at all career levels is a moral imperative. Moreover, the business case for diversity in the workplace is now overwhelming, with plenty of evidence to demonstrate the correlation between a more diverse workforce and improved business performance.

The following guide delves deeper into the added value of gender diversity in manufacturing, presenting data from a wide variety of sources to showcase why empowering women benefits everyone, and what can be done to close the gender gap that is still plaguing engineering.



Women in engineering – it's a long story

The mid-1800s:

Some universities start to admit women to engineering programmes, but manufacturing and engineering are still largely for men.

1914:

With the start of WWI, women enter the workforce in mass to replace men who joined the army. Women are only employed in manual jobs and paid significantly less than men.

1918–1940:

Returning soldiers and less demand mean that many women workers are laid off. The remaining ones initiate a series of successful initiatives for equal pay.

1908:

C.J. Walker founds the Madame C.J. Walker Manufacturing Company, becoming the first female self-made millionaire in America. Walker employed thousands of women and built one of the most financially successful companies of the early 20th century.

1914–1918:

Several associations are created, such as the Women's War Workers, Women in Industry Services, and more.



1940–1945:

Demand for women in manufacturing skyrockets again during WWII. The number of women in the workforce increases by more than 50 per cent.

The 1970s:

Technology requirements lead to more women in office occupations in the manufacturing industry.

2011:

Allison Grealis founds Women in Manufacturing (WiM), a global organisation with more than 10,000 members.

2019:

Due to the COVID-19 pandemic, female participation in the workforce is at its lowest rate since 1988 (source: IBM)

2022:

Women represent 47 per cent of the global workforce, but only about 30 per cent are in manufacturing. According to IBM, there are also fewer women in executive roles than in 2019.

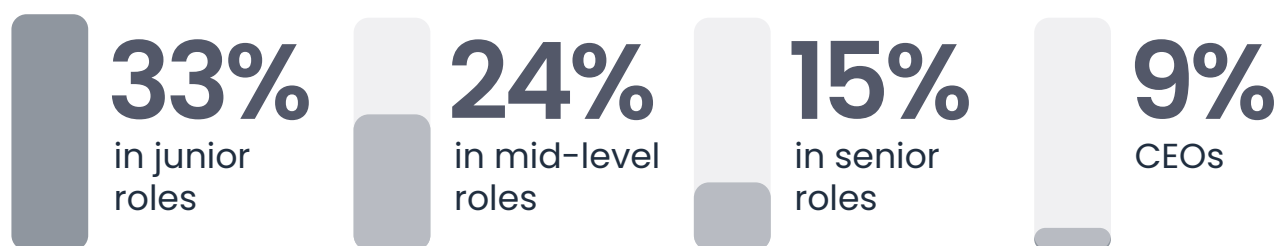
What will the future look like for women in manufacturing?



Climbing the ladder

According to the Higher Education Policy Institute (HEPI), women gain more university degrees than men — 56.6 per cent vs 44.1 per cent. However, only about 25 per cent of students in science, technology, engineering and mathematics (STEM) are women.

According to the World Economic Forum, about 30 per cent of industry workers are women, of whom:



This data presents a clear picture. Women are, on average, more educated than men, but face bigger obstacles when climbing the corporate ladder.

Another clear outcome is that girls seem less inclined to choose STEM subjects, despite their potential to lead to higher incomes — the UK Government has recently pointed out that STEM education can boost girls' future salaries by as much as 33 per cent.







At the root of the problem

Why are women not accessing the industry? And when they do, why are they not moving upwards as fast as their male colleagues? Though it is difficult to generalise, the following data can provide some answers.

According to recent research by the Manufacturing Institute and Deloitte, a general perception of manufacturing jobs as unrewarding is one of the sector's core challenges. Their survey reports that this misperception is created at an early age and in all genders. However, only 12 per cent of respondents believe that the school system actively tries to change it when it comes to girls, encouraging female students to consider a career in manufacturing.



According to the same report, women who do enter the industry plan to make a career out of it. Women in manufacturing also report having no regrets, with 70 per cent of the survey respondents stating that they would choose to remain in the same industry in which they operate. Given this data, it is appalling that the manufacturing sector should have a retention problem.

Interestingly, when asked what motivates them to stay, the surveyed women reported that working on stimulating challenges is their top priority, followed by an attractive pay and good work-life balance.

In light of these considerations, it is easier to understand what pushes women to leave a career in manufacturing. Gender bias, conscious or unconscious, might prevent employers from assigning some of the most challenging but rewarding tasks to women. On the other hand, there is evidence that some companies still have a glaring gender pay gap problem. For example, in the UK the trade body Make UK reported that the mean gender pay gap in manufacturing is currently 13.3 per cent.

When it comes to work-life balance, it is undeniable that women still do most of the care work at home, something that has become even more evident during the COVID-19 pandemic.

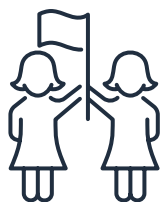
While some countries, such as Spain, Germany and the Scandinavian countries, have equal policies for maternal and paternal leaves, others have extremely unbalanced policies. These inequalities penalise women in the job market, especially in male-dominated fields like manufacturing, while depriving fathers of the possibility to be equally involved in the first months of their children's lives.



Why gender diversity pays off

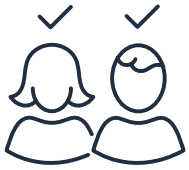
The manufacturing sector has a social and ethical responsibility to tackle this problem, promoting access to the industry for women and non-binary people, and supporting those who decide to pursue this career.

However, social good is not the only reason to encourage gender diversity. Plenty of data proves that a diverse workforce also benefits companies financially. Here's why:

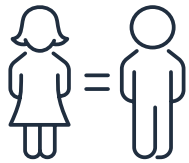


Women represent one of industry's largest pools of untapped talent. The manufacturing industry needs the potential of women to close the skills gap that is plaguing the sector and overcome ongoing challenges, such as accelerating the digital transition and supporting a green economy. Recruiting, retaining and advancing educated and experienced women is crucial in providing the talent the sector urgently needs.





A more diverse workforce and leadership benefit businesses. According to McKinsey, in the UK every 10 per cent increase in gender diversity among organisations will increase the operating profit by 3.5 per cent. Greater gender diversity might not automatically translate into more profits, but data indicates that diverse companies are better equipped to win top talent and improve customer retention.



Gender diversity contributes to employee retention and increased job satisfaction. Research shows that having a gender diversity policy in place can increase job satisfaction, because employees may feel more confident in communicating their ambitions and career goals, regardless of gender.



Finally, diversity contributes to better customer relations. A diverse workforce will be better equipped to respond to the needs of a diverse customer base in terms of product development, market strategy, customer support and public relations. Case in point: in 2012, Bic released the first pen for ladies. Needless to say, a more diverse and gender-aware management board could have prevented the launch of a product that has been mocked for years and failed to gain any consumer base.

// Diversity benefits every industry. STEM careers develop things for everyone to use, so having the biggest variety of inputs results in better end products. //

Amy McGill, mechanical engineer at Katrick Technologies.



Challenges for the future

// It's an uncomfortable truth that there are inequality issues within the engineering industry. Rather than sweeping these issues under the rug, companies should ask their employees about the challenges they face and encourage open conversations. **//**

Victoria Phillips, lead engineer at Katrick Technologies

While breaking the bias is not easy, Women's History Month can be an occasion for the manufacturing industry to reflect on how to advance its agenda for gender diversity.

Inspiring future generations of girls and women to join the industry is the first step for a more diverse tomorrow. Representation matters, so it's important to provide girls with empowering examples of women who have built a successful and rewarding career in manufacturing.



Retention is another priority. Flexible working and more balanced policies for maternity and paternity leaves can provide women with the flexibility they need to achieve a more satisfying work-life balance.

Finally, a more transparent recruitment policy could provide women with more opportunities to negotiate fair salaries. Concrete initiatives, such as the UK's new pay transparency pilot scheme, are needed. The initiative aims at closing the gender pay gap by having employers list salary details on the job adverts and stop asking about salary history during interviews.

// The numbers of women working in STEM roles are growing year on year. Qualified female candidates are out there, so if a business is getting no female applicants, they have to do better to seek them out. **//**

Amy McGill, mechanical engineer at Katrick Technologies.

While these steps alone might not be enough to erase gender disparities in manufacturing, they offer some food for thoughts for manufacturers who are willing to commit to achieving a more diverse workforce and to do their part for a more equitable society.



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