

Midland Steel - Reinventing Off-Site Reinforcement

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Midland Steel, a leading supplier of reinforcing steel, is revolutionizing the construction industry with its innovative offsite rebar solutions and Building Information Modelling (BIM) processes.



With a strong culture of innovation, Midland Steel is pushing the bar for steel reinforcement through speed, quality, and safety.

A Journey of Innovation

Founded in 1998 by Mr. Tony Woods (finalist, EY Entrepreneur of the Year 2006) as a concrete frames company, Midland Steel has grown into a global leader in the reinforcement industry.

With headquarters in Mountmellick, County Laois, Ireland, and three locations in the United Kingdom, Midland Steel has been at the forefront of introducing modern and sustainable methods for supplying reinforcing steel to the construction sectors.

Embracing Technology

Midland Steel is the first reinforcing steel company in the world to attain a BIM Level 2 (ISO 19650 Tier 2) status. By leveraging a cloud-based BIM process with full 3D modelling, Midland Steel delivers agile and collaborative project processes that enhance the speed of building concrete structures.



“In 2011, I embarked on the BIM journey, and identified what it could bring to us as a company. It became very clear to me it was the future of construction and the future of solving problems before they happen, and it became clear to us that this is a major added advantage. To date, it has been extremely beneficial to us and has brought substantial business to us.” - Tony Woods, Founder, Midland Steel

Sustainability and Safety

Midland Steel is committed to reducing CO2 emissions during construction activities¹. Their processes aim to reduce the 8 Wastes of Lean Manufacturing through their BIM process, Factory Production Control environment, and efficient installation methods. Midland Steel’s commitment to Health and Safety is demonstrated through their OHSAS 18001 Certified management systems.

In a recent collaboration with Nightingale HQ, a data and AI scale-up, Midland Steel has taken a significant step towards making reinforcement steel manufacturing greener. The project aims to reduce carbon emissions in steel manufacturing through standardisation, modular prefabrication with advanced Building Information Modelling (BIM), and optimisation services. Nightingale HQ’s role is to optimise the planning production process to drive a reduction in rebar waste and associated carbon emissions

Collaborating with ReaDI-Watch

Midland Steel has embarked on a strategic partnership with ReaDI-Watch, an Innovation Management System (IMS) designed to unlock companies’ innovation and R&D potential. This collaboration is aimed at streamlining Midland Steel’s R&D and innovation processes, making them more efficient and effective¹.

ReaDI-Watch’s digital platform allows Midland Steel to build, track, protect, and manage their innovation and R&D strategy, including their projects, team, and intellectual property. This has resulted in significant time savings on claims, increased valuations and funding, and improved focus and collaboration across the team.

The partnership with ReaDI-Watch has enabled Midland Steel to tap into their untapped potential, turning

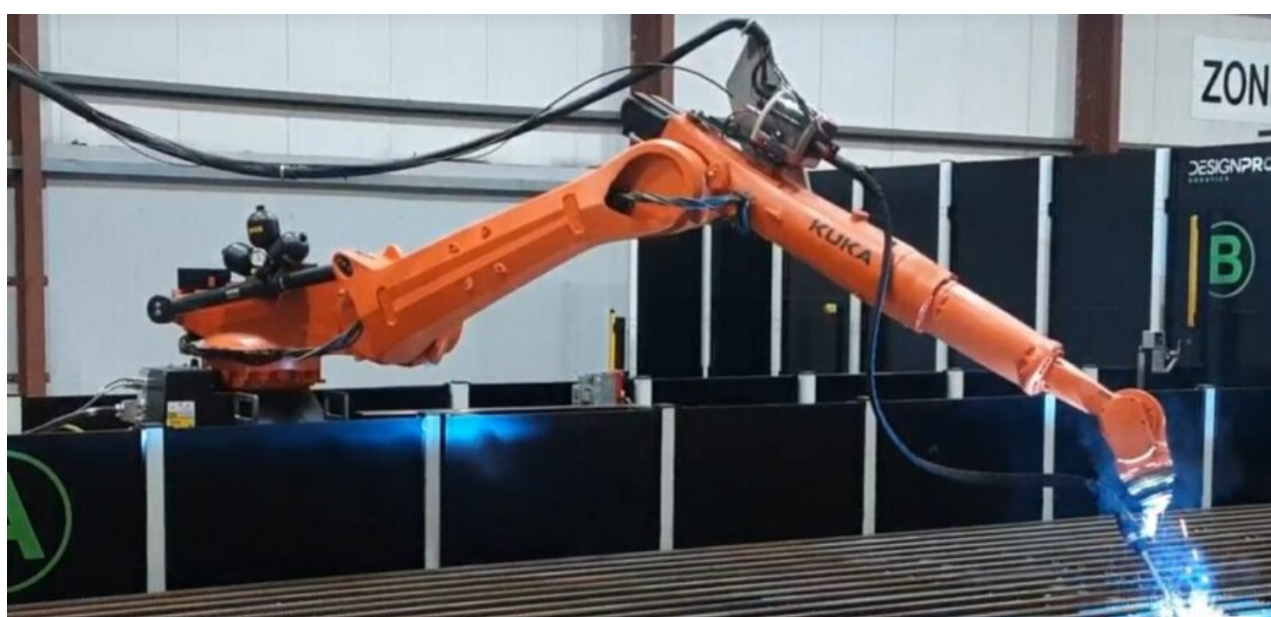
retrospective approaches to navigating R&D and Innovation (RD&I) into a streamlined, real-time RD&I management.

This has not only led to increased productivity but also fostered a culture of continuous learning and innovation within the company.

The Future of Reinforcement

Midland Steel's Fasterfix Modular Rebar, a patented solution, is an example of their commitment to innovation. This offsite solution enables customers to have a safer construction site, faster modular installation time, less waste, reduction in labour, delivering projects on time and on budget.

Midland Steel has recently introduced the world's first Robotic Welding Cell for Rebar². This state-of-the-art cell combines the precision and power of the Kuka Robotic Arm with the efficiency of the Fronius Welder, revolutionising the way rebar welding is accomplished in the industry².



This breakthrough not only enhances the well-being of the workforce but also elevates the overall standard of safety on construction sites. With the robotic rebar welding cell from Midland Steel, you can expect superior precision, accelerated production, and an unwavering commitment to environmental consciousness and worker safety.

Conclusion

Midland Steel is not just a supplier of reinforcing steel; it is a pioneer in the industry, constantly pushing the boundaries of what is possible with steel reinforcement. Through their commitment to innovation, sustainability, and safety, Midland Steel is shaping the future of the construction industry.
