Progress Group, 39042 Brixen, Italy

FP McCann as a driver of innovation in precast concrete production

At the forefront of the UK's precast concrete sector, FP McCann harnesses cutting-edge machinery and software from Progress Group to revolutionise production. One of the UK's largest manufacturers of precast concrete elements is leveraging automation and digitalisation to enhance production efficiency and quality.

Setting new standards

FP McCann operates 13 precast plants all over Great Britain and Northern Ireland and provides an extensive range of concrete solutions for the industrial, commercial, structural, and infrastructure markets. Six of their plants now feature state-of-the-art reinforcement machinery and software from Progress Group, enhancing their production capabilities and setting new industry standards.

State-of-the-art reinforcement machinery

The manufacturing facility at the Byley site showcases the benefits of the integrated M-System Evolution. This mesh welding plant stands out for its dual bending system and integrated handling mechanism. The bending system exemplifies FP McCann's commitment to cutting-edge technology enabling the production of huge reinforcement cages for heavy precast elements. "Having the ability to bend both entire sheets of mesh as well as individual bars allows us to decrease the time required to fabricate cages," shared David Norry, Production Manager at the precast plant in Byley. This capability significantly reduces the amount of reinforcement required, resulting in cost savings and reduced material waste.

"One of the biggest benefits of the machinery is the integration. It saves a significant amount of time to have continuity across the design processes by using the same machines. But of course, also the quality of the product is a key benefit." Andrew Slaven, Design Support Manager for FP McCann, explained that with Byley and Littleport as two of the main sites for structural and architectural work, having the automation provided by Progress machinery has been invaluable. "It's been an amazing tool to have as part of our design portfolio and how we design products – it is all based around the machinery and the machinery's output."

Enhancing operational efficiency with software solutions

The profit^{YC} software from Progress Group has been a game-changer for FP McCann's reinforcement production. profit allows both machine operators and production teams to see

The M-System Evolution mesh welding plant in Byley boosts operational efficiency.

Two separate bending systems enable the production of huge reinforcement cages for heavy precast elements.

The EBA stirrup bender enables the staff to work more efficiently, faster and, above all, more safely.

Construction of the new production hall in Littleport – combining structural expertise and advanced reinforcement technology.

the status of reinforcement production at any time. This real-time visibility enables the team to optimise the planning, manage resources effectively, and maintain continuous production flow. It is also used to predict the duration of production jobs using machine learning, enabling the team to manage their workload effectively. "The software is the key part that holds everything together. We will be using profit^{YC} in the new plant in Littleport and will then roll it out in the rest of the business. That will be a key move for us because we have a lot of people who deal with PXMLs and software programming. If we can automate and take away a lot of the manual work in the background by using the software, it makes it a lot more efficient for us", explains Slaven. With which FP McCann hereby strengthens its position at the forefront of digital innovation in the construction sector.

Precast concrete box culverts are ideal for a wide variety of civil engineering and construction applications.

A strong partnership with Progress Group

The successful collaboration between FP McCann and Progress Group has been instrumental in advancing their production technology. "Working with Progress has been a positive experience over the last years. Their machinery and software have significantly enhanced our reinforcement production capacity, adapting to the growing demands of our customers," remarked David Norry.

Adam McCann, Engineer at FP McCann and part of the family that has built the successful company, adds, "We like to build relationships with the companies we buy machinery and software from – we like to work with them for a long time. That would have been the biggest selling point for me, and of course, Progress Group is a well-known name. We bought the machine first and now have seen that the software elevates it."

Automation and digitalisation

With automation and digitalisation, FP McCann can stay at the forefront of precast production in the UK. Andrew Slaven states that the experience with Progress Group has been consistently positive since the start. He emphasised that the support and integration within the company work very well. "The biggest benefit of automation and digitalisation is time saving, more than anything – being efficient as a business is the priority." ■

PROGRESS GROUP sponsored the free download possibility of the pdf of this article for all readers of CPI. Please check the website *www.cpi-worldwide.com/channels/progress-group* or scan the QR code with your smartphone to get direct access to this website.

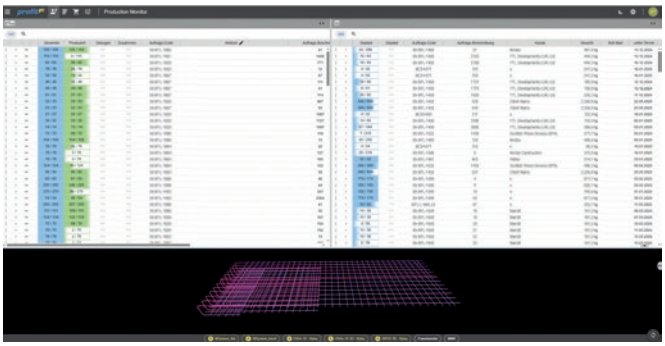
FURTHER INFORMATION

FP McCann Ltd
3 Drumard Road
Knockloughrim
Magherafelt BT45 8QA, Northern Ireland
www.fpmccann.co.uk

Progress Maschinen & Automation AG
Julius-Durst-Straße 100
39042 Brixen, Italy
info@progress-m.com
www.progress-m.com

Progress Software Development GmbH
Julius-Durst-Straße 100
39042 Brixen, Italy
info@progress-psd.com
www.progress-psd.com

The WorkloadProfiler in profit^{YC} provides an overview of the current utilisation of machines. Through machine learning, the duration of production jobs can be predicted.



In the profit^{YC} software, cages and meshes can be designed easily and quickly with predefined templates in 2D and 3D, and then scheduled for production.