

# RESHAPING THE FUTURE

ARTIFICIAL INTELLIGENCE (AI) AND AUTOMATION ARE RESHAPING THE FUTURE OF CONSTRUCTION. AS NATIONAL PRECAST WRITES, KEEPING THINGS SIMPLE IS ESSENTIAL WHILE DIGITISING PRODUCTION.

For the precast sector in particular, the message is clear: keep it simple, make it practical, and let automation work for the people doing the job.

Precast manufacturing has long embraced innovation, often ahead of other construction methods. But even in this forward-looking sector, a digital disconnect sometimes persists between the planning that happens in the office, the activity on the factory floor, and the reporting delivered at project handover. That gap can mean lost efficiency, reduced traceability and unnecessary rework.

One of the most effective ways to bridge that gap is through the digitisation of Quality Assurance and Control (QA/QC). As compliance demands grow, particularly in government and infrastructure projects, digitised QA offers a straightforward path to improvement. It creates a live, traceable record during production, streamlining both internal processes and client reporting.

"We're not digitising for the sake of it. In precast, every tool must help people on the ground, making work safer, faster, or more consistent. If it doesn't achieve that, it's not worth the investment," says Sarah Bachmann, Chief Executive Officer of National Precast.

"Digital tools like CONQA are already making this a reality for many of our members."

Used by a growing number of Australian precasters, the software helps capture and manage quality data throughout production. This reduces paperwork, simplifies compliance, and produces accurate Manufacturers' Certificates of Compliance – otherwise referred to as birth certificates – for each element. This is a particularly valuable asset in large

infrastructure projects where detailed traceability is now expected.

Bachmann says that what sets it apart is its development model. The platform has evolved through a long-standing partnership with National Precast and its members, ensuring it remains grounded and delivers on what's required by industry.

"Having our members involved in shaping tools like this ensures the solutions are practical. They're built by the industry, for the industry, and aligned with real factory workflows and project pressures," Bachmann says.

"As an example, this collaborative approach led to the development of 'Progress Tracking', a feature designed to simplify project setup and final reporting. It improves communication between the office and the yard and closes the loop between pre-construction planning and delivery. It's the kind of feature that sounds simple but helps to solve a host

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of day-to-day challenges for busy precast manufacturers."

This type of digitisation has benefits that go beyond quality for everyone in the supply chain. They include better time management, stronger risk controls, and greater consistency across teams. For management, it provides real-time visibility across operations. For clients, it means more accurate, timely handovers.

"It's a practical way to deliver on quality while lifting efficiency. For many

precasters, this kind of digitisation is a quick win," Bachmann says.

As ESG (environmental, social, and governance) and compliance reporting become more complex, digital systems will only grow in importance. But they don't need to be complicated.

The right technology respects the realities of factory life, supports workers, and delivers measurable value across the business.

For precast manufacturers, keeping it simple may be the smartest strategy. ■



Digitising quality management assists in the process of delivering high quality precast outcomes, maximising strength, durability and aesthetic results.



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