Progress Group, 39042 Brixen, Italy

# Automation and software for precast concrete and rebar industries

Progress Group is a true digital transformation and automation innovator, pushing the boundaries of what's possible in the precast concrete and rebar industries. The company seamlessly blends advanced machine automation solutions and modern software, ensuring every step of the journey – from the drawing board to the final brick – is enhanced by the latest technology, IoT, digital twins, robotics, cloud computing and AI.

The transformative impact of its solutions can be seen in Taracon Precast's successful operations. Using Progress Group's plug-in for Autodesk Revit, BIMpro, they were able to maximise the efficiency of the end-to-end planning process involving architects, structural engineers and production teams. By significantly cutting down data import times, BIMpro also streamlined the collaboration process, trimming planning durations to just two hours from the previous eight hours. This real-time data transfer extended to production beds and machinery, enabling Taracon Precast to swiftly adapt to project changes.

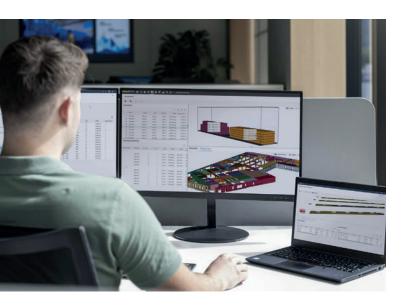
The integration of the aheadAPS system facilitated seamless planning of project phases, erection sequences, deliveries and bed layouts, with extended benefits to the detailed plan-

TARACTA

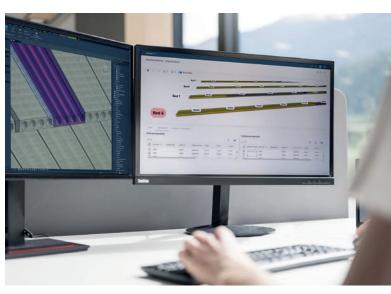
Alan Cartwright, Taracon Precast's TQM Director says: "One of the main benefits we see is that Progress Group created one central data silo that feeds real-time information to everyone involved."

ning of kitting, bed labour and finishing operations. This hub platform bridges CAD, ERP and MES systems.

Taracon Precast has been modernizing its plant not only with software from Progress Software Development, but also with a plotter from Echo Precast Engineering, both Progress Group companies. With the automatic plotter SmartJet it is possible to draw and print data such as cutting lines and



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Using Progress Group's plug-in for Autodesk Revit, BIMpro, Taracon Precast is able to maximise the efficiency of the end-to-end planning process.

## PROGRESS GROUP



### **Mesh Welding Plants**







Highly automated reinforcement technology:

- flexible
- energy efficient
- made-to-measure

Customized mesh welding plants for the cost-effective production and bending of bespoke reinforcement mesh for a variety of applications.

#### PRECAST CONCRETE ELEMENTS



With the Automatic Plotter SmartJet it is possible to draw and print data on the precast concrete elements.



Taracon Precast modernized its plant with machinery and software from Progress Group.

angles, project identifications and areas to be cut-out on the hollow core slabs. Prints can be made on top of the element as well as on both sides to prepare the slabs for the next operating processes.

Highlighting the software's benefits, Paul Nelson, Vice President of Taracon Precast, notes: "The efficiency and economy brought to our precast layout by the Progress Group software not only saved considerable costs over the project's lifespan but enabled us to keep projects on track and be able to adapt to changes effectively."

Progress Group's mix of in-house capabilities makes this possible. With its own rebar shop and precast concrete division, augmented by a cutting-edge software development team, Progress Group brings a holistic vision to life. Its software solutions are built on three critical pillars: CAD for unparalleled design accuracy, ERP for seamless resource planning and MES for flawless manufacturing execution. Capturing its essence in its rich product portfolio, BIMpro, e<sup>rp</sup>bos, aheadAPS, ebos, profit and stabos, Progress Group ensures every aspect of business and production processes interlocks perfectly from a single, trusted source.

The proof is in its tangible benefits. The use of its software solutions can reduce the time spent in design and planning by up to 75 percent, thanks to features that allow for the transformation of architectural models into producible precast models with a couple of clicks. This streamlines reinforcement processes and facilitates the generation of producible data as PXML files for direct machine use.

"All in all, I think Progress Group is the only company we could have partnered with due to their shared vision of the future and how they can incorporate work instructions into machine data files to eliminate human error along the way." – Alan Cartwright, Taracon Precast's TQM Director.



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#### **FURTHER INFORMATION**



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