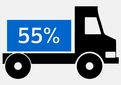
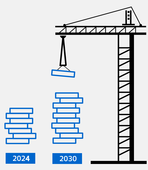
ALLPLAN
A NEMETSCHEK COMPANY

Growth opportunity for prefabrication

The global precast concrete market is set to grow by **40%** from USD$111,21 billion to **USD$156,13 billion** between 2024 and 2030*.

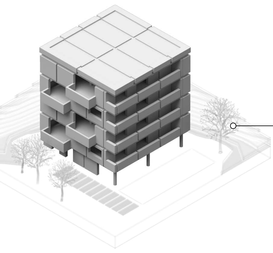
*Source: Grand View Research





Factors for a shift towards prefabrication

The numerous advantages of prefabrication – such as cost-effectiveness, reliable scheduling, and high production quality – are accelerating the rapid growth of the precast industry. In addition, the general market conditions in the construction industry are favoring the shift towards industrialized construction.



- Demanding **quality requirements** for products
- Rising **costs** and tighter **time constraints**
- Continuing **shortage of skilled workers**
- Stricter **safety** and **welfare standards**
- Increasing **sustainability** and **environmental protection requirements**

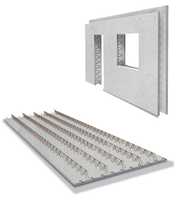
Challenges of the precast industry and suitable solutions

Digital tools are a decisive success factor for increasing efficiency in precast projects. This is because only specialist software solutions for precast design and detailing take into account the specific requirements of industrial prefabrication.

Challenges	ALLPLAN's Software Solutions
Growing demand, maintaining competitiveness	Automated workflows for more efficiency and precision
Provision of 3D models	Create a 3D model using 2D or 3D workflows with 100% consistency between the two views
Fulfilling BIM requirements	BIM-compliant solution that satisfies requirements for all levels of BIM
Precise production data	IFC interface for loss-free export of all precast elements, with attributes, fixtures, reinforcement, & formwork
Increasing complexity of projects and products	Automatic functions – such as collision checks – remove manual tasks for higher quality in less time
Increasing number of project participants	Seamless collaboration through Bimplus and Allplan Share, enabling real-time access to current project data from anywhere
Lack of skilled staff for both planning and production phases	Attract and retain talent with up-to-date working methods, and lower learning curve for new staff
Managing last-minute changes	Efficient change management through smart features that reduce the impact of changes

Automated workflows

Through automated workflows, ALLPLAN's solutions enable significant efficiency gains in your precast projects.



WALLS AND SLABS

› Automated panel distribution
› Automated generation of basic reinforcement
› Automated generation of shop drawings
› Automated sleeves and transport anchors
› Automated further processing of imported IFC data
› Automated quality assurance mechanisms
› Efficient implementation of changes (e.g. automated adjustment of drawings, reinforcement, etc.)

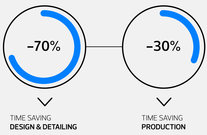
STRUCTURAL PRECAST PARTS

› Automated generation of shop drawings
› Efficient handling of identical components
› Automated labeling with the correct position numbers
› 100% consistency between the model and all plans at any second (making changes more efficient)
› Efficient further processing of any 3D bodies
› Parametric design options with Pythonparts, for efficient, simplified, and automatic model creation based on parameters – no manual modeling required

Customer testimonial Leier Polska JSCo

„We roughly estimate that ALLPLAN Precast saves us about **70% of the design time** and reduces the **production time by 30%**."

Krzysztof Jaskólski, precast part designer, Leier Polska



FOR SOFTWARE SOLUTIONS SPECIFICALLY DEVELOPED FOR PREFABRICATION, VISIT?

› COMPETENCE CENTER ALLPLAN PRECAST

allplan.com/precast

PRECAST