

# Tekla Structures for Precast Concrete Industry



TRANSFORMING THE WAY THE WORLD WORKS



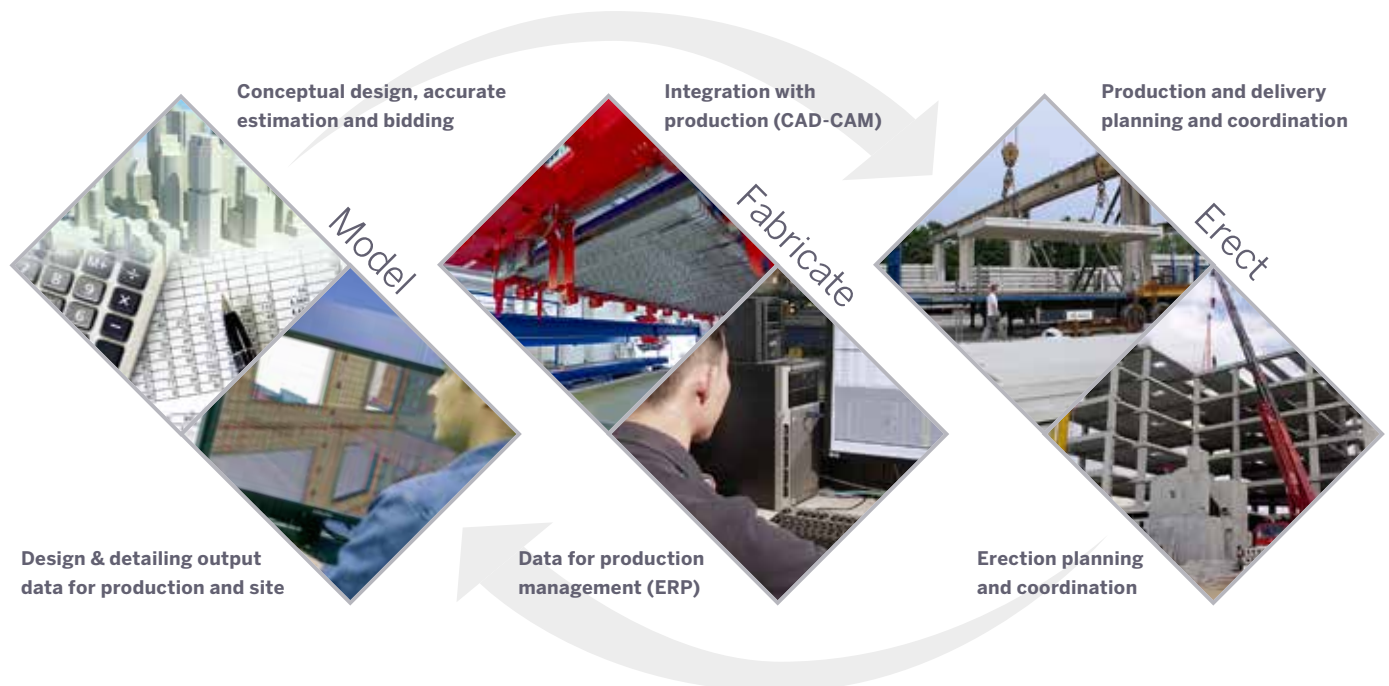
# Model, Fabricate and Erect all Precast Structures – Faster and with Better Quality

Working with the constructible Tekla models minimizes costly surprises and rework in precast concrete fabrication. Streamlined processes lead to more profitable projects. Tekla Structures is a powerful BIM software solution for precast concrete industry.

Tekla Building Information Modeling software brings advantage to design, factory and construction site. The models and easy access to element quantities add value to bidding. With the intuitive tools you can model any structure on the highest level of detail, and use the data in the intelligent model to plan and control production. Coordinate design, fabrication and site operations and enhance information transfer to achieve a smoother, error-free workflow that produces less waste.

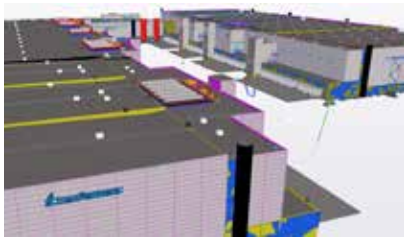
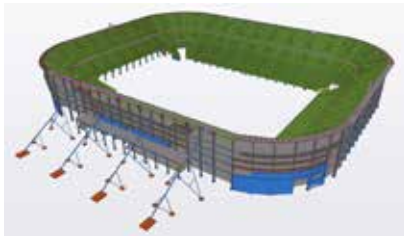
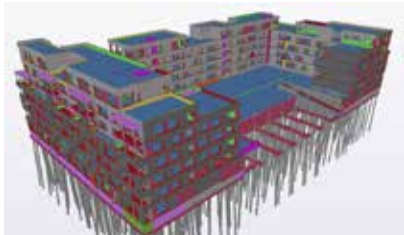
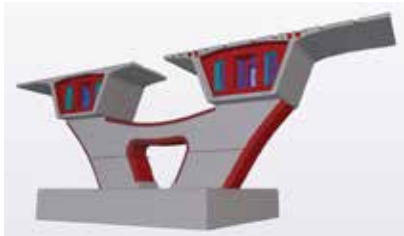
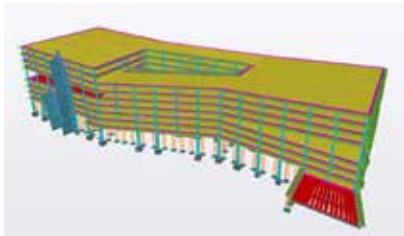
## WITH TEKLA YOU CAN

- Work with any structure regardless of size or complexity
- Estimate accurately and manage risk when bidding
- Avoid detailing and fabrication errors, minimize the need for rework
- Manage project changes easily
- Integrate with production machinery and transfer fabrication data efficiently
- Plan and coordinate projects
- Communicate clearly with model

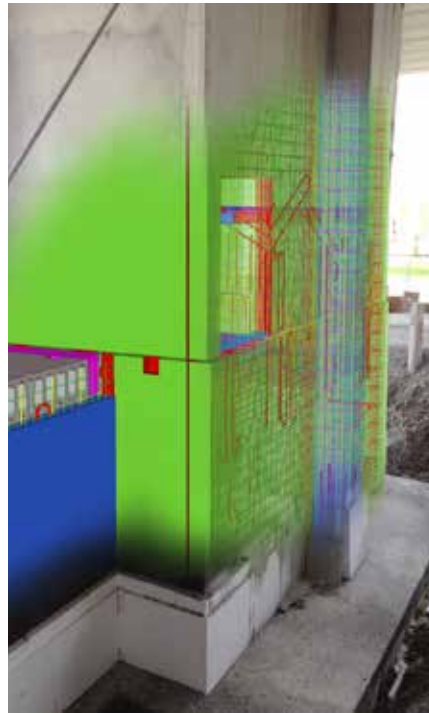


# All project types and sizes

With Tekla Structures precast detailers and fabricators can create a detailed, constructible 3D model of any structure: industrial, commercial and residential buildings, car parks, stadiums or bridges. Working with Tekla is the most accurate, integrated way to manage detailing, production and erection.



Flexible and advanced, Tekla works for modeling, fabricating and erecting all types of elements from everyday wall and floor panels and structural frames to stairs and complex prefabricated concrete products.



**Tekla**  
Warehouse

## TEKLA WAREHOUSE

Tekla Warehouse is a free online BIM storage for applications, custom components, parts, profiles, materials like steel and concrete grades, rebars, meshes, shapes and templates for Tekla Structures. Because the 3D model parts, provided by the manufacturers, include all the relevant, up-to-date information for construction, the service offers a convenient way to produce constructible high-quality models efficiently.



**Tekla**  
Model Sharing

## TEKLA MODEL SHARING

With Tekla Model Sharing, Tekla Structures project teams can work efficiently together regardless of their location or time zone, in parallel and at different times. The model data is stored safely and transferred encrypted. The service works for all sizes of projects, both online and offline.



**Tekla**  
Local Helpdesk

## LEARNING & SUPPORT

Thanks to extensive training opportunities, new Tekla users can soon create high quality models. In addition to online support services, the local support works to solve any possible technical problem. With Tekla Maintenance, you always have the latest software available.



# Accurate bids and optimal solutions

Using Tekla helps you win more projects and increase profits. You can create conceptual models quickly, generate accurate quantities for estimation and present your solutions clearly to the client.

Reliable quantity take off reduces risk when bidding and model-based workflows ensure that the project can be built efficiently in terms of time, cost and safety.

## EASY TOOLS FOR FAST MODELING

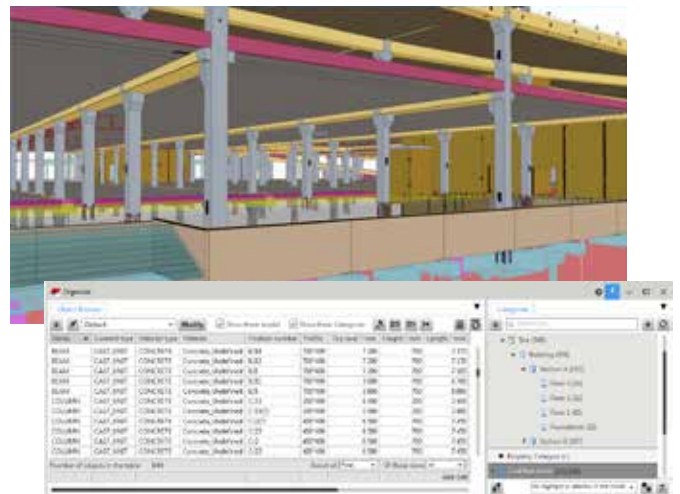
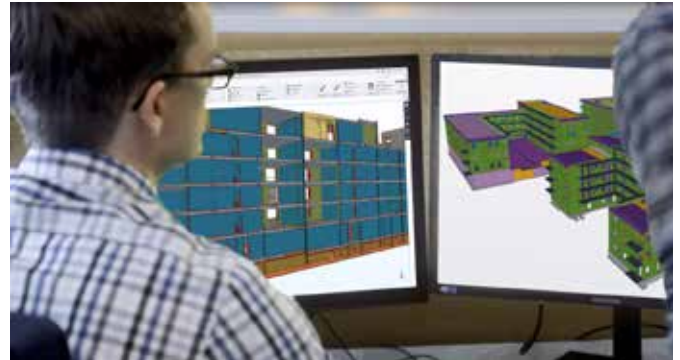
You can create conceptual models fast with Tekla Structures' intuitive modeling tools. Plan your concept efficiently, study alternative solutions and identify potential problems early.

## ACCURATE QUANTITIES QUICKLY FROM THE MODEL

For accurate and fast estimation, you can generate quantity, geometry and material information from your model. Utilize ready-made reports, create your own easily or export data to other software solutions for creating bids.

## CLEAR AND POWERFUL PRESENTATIONS

Working with Tekla enables you to extract associative drawings directly from model. You can build powerful sales presentations with 3D visualizations and 4D animations, and present the advantages of your precast solutions to your clients.



## WITH TEKLA YOU CAN

- Manage risk when bidding
- Model fast with easy tools
- Ensure constructibility and find potential problems early
- Compare different structural solutions
- Get quantities fast for accurate estimation of project cost and time
- Present your bid clearly



# Detailed accurate models

With Tekla you can create, combine and distribute accurate structural models. The constructible model is the source of all building information: extract up-to-date data, drawings and other documents directly from the model.

## FLAWLESS DETAILING

Tekla Structures comes with a comprehensive set of intuitive tools and components for creating accurate models complete with connections and reinforcement. Everything fits together.

Because changes in the model can automatically update to all documents, the information stays consistent and human errors can be avoided.

## STANDARDIZE AND STREAMLINE YOUR WORK

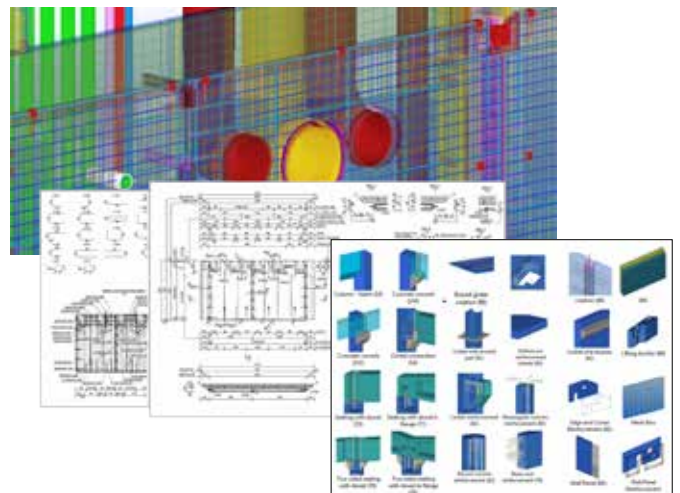
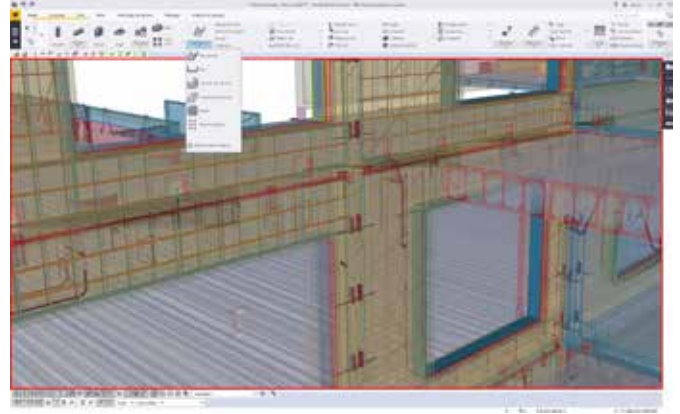
You can define your own connections and components that meet your company's needs by simply modeling them and adding the required information.

Standardizing settings for automatic drawings and reports can improve your document production even more.

## OPEN APPROACH TO BIM

Tekla Structures handles all materials, and you can work effectively regardless of the size or complexity of a project thanks to the unique technology for managing model and related data.

You can exchange data for example with architectural, MEP and analysis & design software solutions. Tekla supports industry standard file formats such as IFC, DXF, DWG and DGN.



### WITH TEKLA YOU CAN

- Detail any structure regardless of material, size or complexity
- Find clashes and avoid errors in documents and fabrication data
- Extract perfectly associative drawings and reports from the model
- Manage changes easily
- Customize the solution to meet your needs.
- Work on the same model regardless of team members' location



IFC is the open and neutral data format for Open BIM.

# Accurate data for fabrication

Model-based workflows increase productivity, enhance information transfer, prevent human errors and help you deliver on time. Tekla models offer an easy access to accurate data for planning and controlling fabrication.

Accessible 3D information allows everybody understand design intent and improves collaboration between design, factory and site.

## INTERFACE AND INTEGRATE

Tekla Integrates with the leading production automation systems and industry standards such as Unitechnik and BVBS. Because of the open system approach you can interface with ERP systems.

Your own applications can communicate within the modeling environment using Tekla Open API™ application programming interface.



**Tekla**  
Open API

## PLAN YOUR WORK

Tekla models offer accurate data for procurement, and product and status information in the model helps production planning.

Easy-to-use mobile solutions allow fabrication personnel to quickly understand the design intent, which improves both the efficiency and quality of production.



## WITH TEKLA YOU CAN

- Link BIM data to production automation systems (CAD-CAM)
- Extract quantities for scheduling and procurement fast
- Exchange data with production management solutions
- Understand the design intent and find relevant information from your model easily
- Use model data to plan and coordinate production and delivery
- Monitor progress and communicate clearly with other project parties



# Smoother erection phase

Solve clashes already at the office instead of doing it on site. BIM-based workflows and the information in Tekla models allow you to ensure that correct elements are delivered error free in the right place at the right time.

## FAULTLESS DELIVERY

Working with Tekla helps you plan your project, follow up progress and keep all parties in the supply chain well informed throughout the project. Utilizing the status information in the model is an effective way to improve project coordination and ensure error-free delivery according to the schedule.

## ENHANCE COMMUNICATION

Information-rich models bring better project understanding, make possible problems easier to identify and improve safety as everybody stays informed. Adapting to project changes becomes flexible when the project parties share the same view of the project situation. Reporting to the client is straightforward with 3D visualizations.

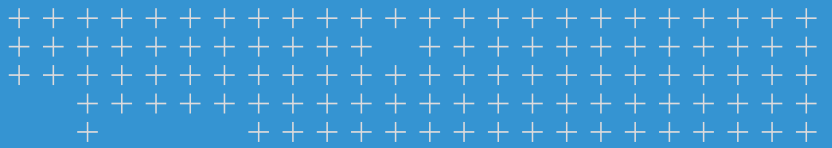
With easy-to-use mobile solutions, model information brings benefits to everybody regardless of location or computer skills.



## WITH TEKLA YOU CAN

- Plan erection sequence and achieve a safe execution
- Add sequence, schedule and status information to model objects and visualize
- Follow up the whole process and ensure progress according to the schedule
- Enhance the flow of up-to-date information between all project parties
- Increase efficiency in project meetings
- Solve issues early and ensure smooth erection phase





# Together we are shaping a smarter future for construction

## TEKLA SOFTWARE BY TRIMBLE

Trimble is a technology company with a vision of transforming the way the world works. Trimble's construction offering ranges from total stations to advanced software, giving the industry tools to transform planning, design, construction and operation of buildings. The company also has products for trades like logistics and agriculture.

## TRIMBLE BUILDINGS

In addition to Tekla, Trimble Buildings brands include names like SketchUp and Manhattan Software, targeting architects, engineers, fabricators, MEP contractors, general contractors and construction managers, and building owners. The software solutions promote constructible models and collaboration. Trimble Buildings offering blend groundbreaking innovations and practical features, helping the industry achieve transformative results.

## TEKLA SOLUTIONS

Tekla software is at the heart of the design and construction workflow, building on the free flow of information, constructible models and collaboration. It is the people who make the difference, while Tekla gives tools for realizing projects around the world from housing and bridges to factories and skyscrapers. Good communication and elimination of waste make the industry more sustainable and cost effective, improve your projects and in the end your customers' happiness.

- **Tekla Structures** is the most developed Building Information Modeling software on the market. It makes accurate, constructible modeling of any structure possible.
- **Tekla Structural Designer** gives engineers the power to analyze and design buildings efficiently and profitably.
- **Tekla Tedds** automates repetitive structural calculations.
- **Tekla BIMsight** is a free professional tool for construction project collaboration allowing anyone combine models, check for clashes and share information.
- **Tekla Field3D** is an easy-to-use 3D tool for utilizing Building Information Models on mobile devices.
- **Tekla Civil** is a comprehensive, model-based solution for heavy civil engineering design needs.



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