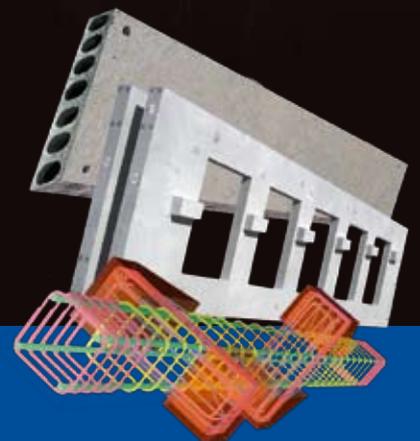
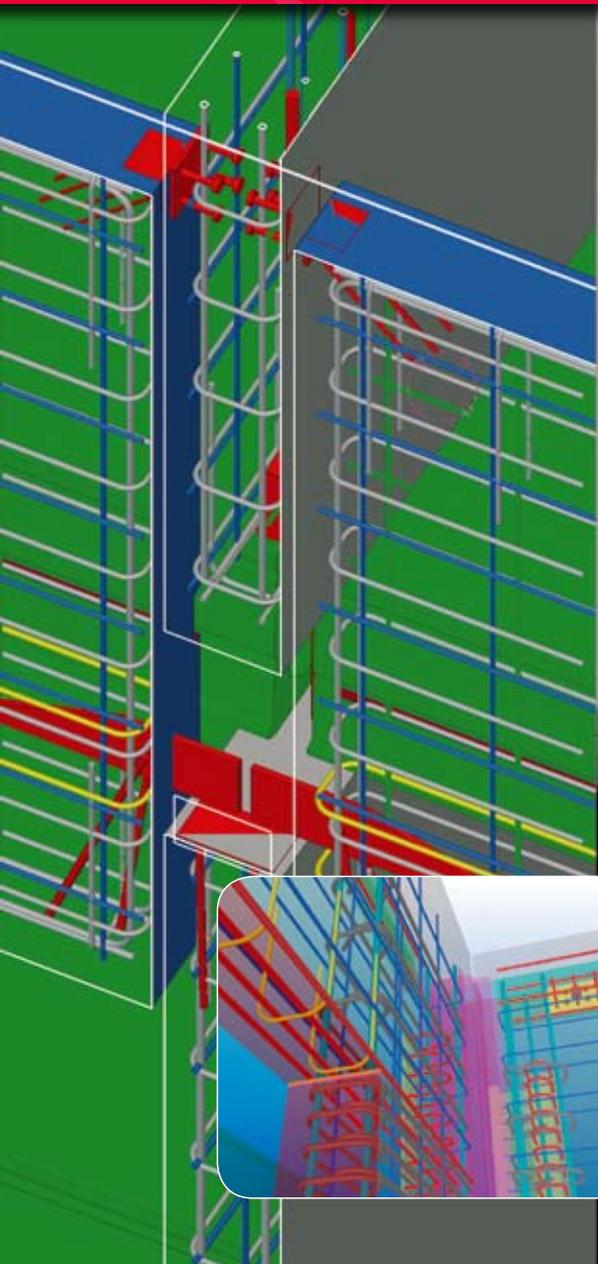




**TEKLA**® Structures

## PRECAST CONCRETE



*Tekla Structures – More than a detailing tool*



# MUCH MORE THAN A DETAILING TOOL

➤ Tekla Structures is much more than design and detailing software: it is the most accurate and comprehensive 3D building information modeling (BIM) tool in the market that streamlines the workflow from sales, bidding, cost estimation and conceptual design to detailing, manufacture and erection.

Top-down modeling and easy change management enable handling of the model and the project as a whole, instead of trying to fit together individual pieces that may or may not match. Tekla Structures open interface allows integration with other systems needed in manufacturing, such as production or resource planning and machine automation systems as well as company-specific solutions.

Tekla is the market leader in steel detailing. This is why Tekla Structures easily integrates concrete with steel frames and any other building material to promote efficient collaboration throughout the building workflow.



*"Tekla Structures is changing the way we do business."*

*– Wayne Kassian, Kassian Dyck & Associates*

# BECOME MORE COMPETITIVE WITH TEKLA STRUCTURES

## Create dynamic sales models and win more tenders

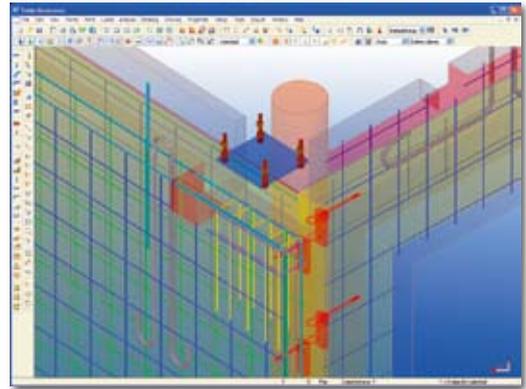
- > Fast, intelligent modeling lets you create several tender alternatives with accurate cost estimates, pricing and optimized structural solutions according to your own or industry standards and your manufacturing capacity
- > Visualization capabilities let you create powerful sales presentations
- > Visualization, cost estimates and Bill of Materials reduce risk when responding to tender offers

## Detail faster and more accurately

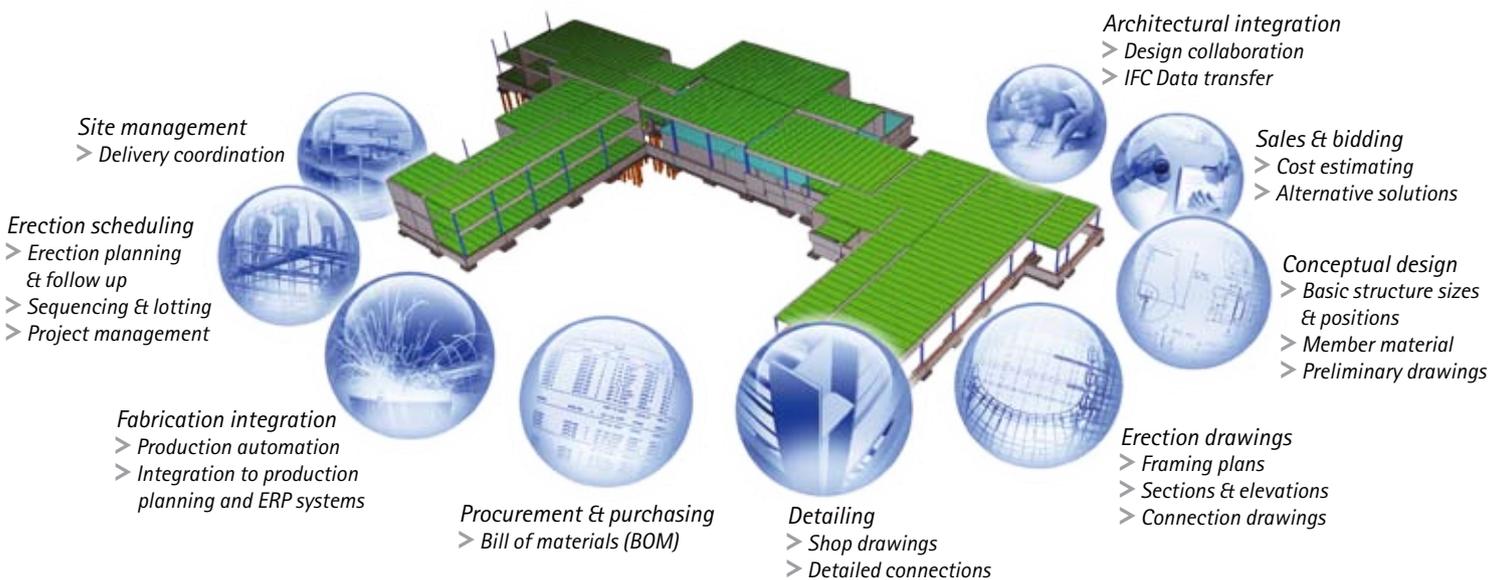
- > Automated features take care of routine work like drawing production so that you can focus on the essential design
- > Flexible libraries of connections, reinforcements and cast-in embedments allow the instant application of accurate details to any design
- > Better geometrical accuracy
- > You can model and store company-specific connections, details and drawing templates and reuse them on all projects

## Manage changes with ease

- > Costly errors are minimized through superior change management
- > All related components react to a change and drawings, reports and other documents are updated automatically and are always consistent because the model contains all of the structural information
- > Drawing objects are associated with model objects, which means less editing and more time saved
- > Automated clash checking exposes conflicts



Easier than 2D drafting – start modeling quickly  
Get immediate results while generating sound return on your investment. Over time, your efficiency and productivity will exponentially augment the benefits of modeling in Tekla Structures.



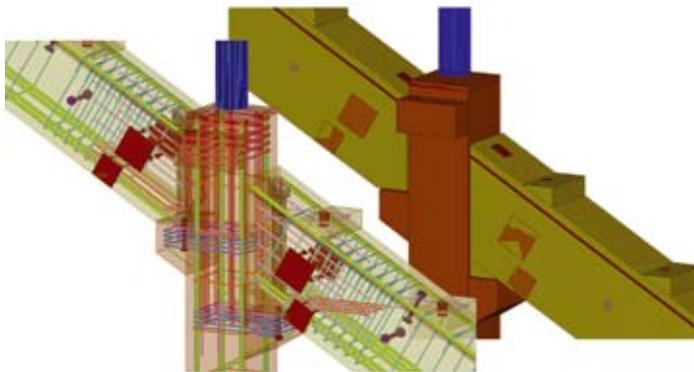
# BECOME MORE COMPETITIVE WITH TEKLA STRUCTURES

## Improve the workflow from sales to erection

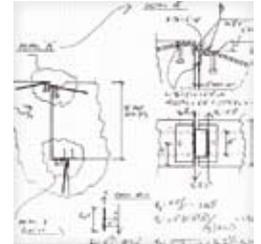
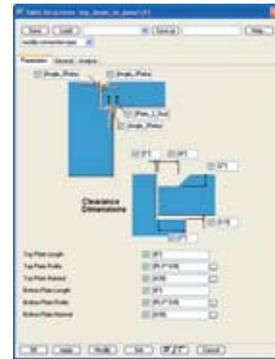
- > Consistent utilization of information –input only once
- > Information is accumulative and accessible by everyone
- > All changes are reflected in the output eliminating the duplication of data, mistakes and human errors
- > Multi-user capabilities enable fluent collaboration with other parties involved in the project, which translates into faster project delivery
- > Production management and manufacturing data (NC) directly from the model
- > Fully integrated drawing production ensures that everything fits together on the construction site
- > Open and customizable solution supports production needs: coordination with other systems needed in manufacturing, such as production or resource planning (e.g. ELIPLAN ERP) and machine automation systems (e.g. Unitechnik) as well as company-specific solutions.

## Improve quality and maximize productivity

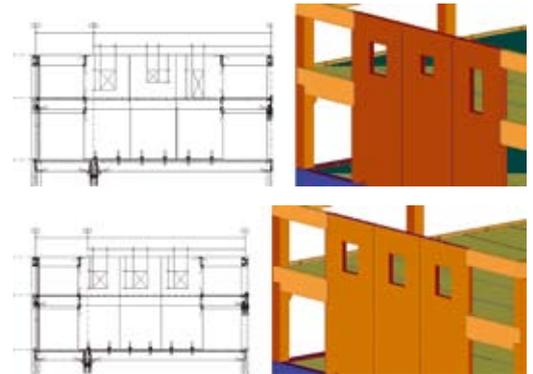
- > All structural design work is mastered within one model
- > Reduced costs due to avoidance of detailing errors – intelligent object-based parametric modeling ensures model consistency in a true 3D environment
- > Unlimited options for viewing the design in real-time, regardless of the size or complexity of the project
- > More efficient overall process reduces project lead time and improves the cycle time
- > Capitalize on your increased efficiency to cultivate new business opportunities



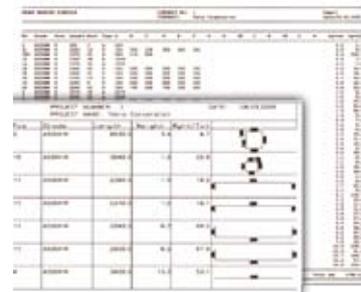
Adaptive reinforcement and connections: Attach reinforcement to parts automatically and follow all changes made to the part.



Define your own connections  
If the library components aren't enough, create your own details by simply modeling them and adding whatever intelligence you require.



Make late changes with ease:  
When changes occur, Tekla Structures' intelligence automatically keeps the model and drawings consistent. This software is capable of handling any size model – from small to very large.



Automate routine tasks, focus on design:  
Fully associative drawings and documents (e.g. bill of materials and bending schedules) are extracted from the model whenever needed.

## WE COULDN'T HAVE SAID IT ANY BETTER...

"Bison puts approximately 1 million square meters of hollow core concrete floor onto steel frames, the majority of which have been modeled with Tekla Structures software. The requirement to interface with another structural component is crucial to us and the benefits are considerable. The flexible libraries of connections, 3D reinforcements and cast-in embedments allow fast and accurate production of details. Working in a visual, virtual BIM environment allows us to compare alternative structural solutions and make changes accordingly. The automatic clash-detection function exposes any conflicts, which significantly reduces our risk. The Tekla Structures platform allows better communication with other stakeholders, affording us a competitive edge over the competition. Most major jobs within the next 5 years will be done in 3D."

**Peter Kelly, BSc CEng MStructE, Technical Director**  
**Bison Concrete Products Ltd, UK**  
[www.bison.co.uk](http://www.bison.co.uk)

"The concrete industry is rapidly moving towards 3D modeling. Through modeling the industry will be able to catch up with competing building materials. Tekla Structures is a central tool for us. Our competitiveness will increase with the use of the software, as design becomes faster and more efficient. The use of 3D modeling decreases the number of detailing errors, and alternative plans can easily be printed from the model at any time. The model created with Tekla Structures also makes it easier to sketch out the most complicated objects, and it is even possible to predict errors at the site."

**Olli Korander, Managing Director**  
**Consolis Technology, Finland**  
[www.consolis.com](http://www.consolis.com)

"Tekla Structures is our future. We use the software from the moment we sign a contract all the way through to construction site delivery. Since we contract in concrete and steel structures, Tekla Structures allows easy coordination between both materials. I particularly find real-time visualization significant. I can present data during meetings to emphasize particular details or highlight specific problems. We collaborate with others in the supply chain and the platform supports this process. The Tekla Structures multi-material and multi-user properties are applicable to our everyday work process. Communication is integral to the success of any project. All information is collected and any changes are reflected in the output, eliminating duplication and mistakes."

**Sverre Steen, Construction&Development**  
**Kynningsrud Prefab**  
[www.kynningsrud.com](http://www.kynningsrud.com)

"3D modeling has numerous benefits for detailing precast. The overall speed of detailing is increased at least 30% with reduced manpower. We have been able to reduce cross coordination and checking of drawings. There are no fit, geometry or hardware misplacement errors reported from the construction site. We've been using Tekla Structures to create structural contract drawings as a natural advance from 2D drafting into 3D structural modeling. The software can be used for both simple and complex structures and provides excellent visualization to all members of the team during the development of the structure. Using Tekla Structures we can provide our clients with accurate contract drawings that are easily updated if design changes occur. We clearly see the benefits of creating contract drawings using 3D modeling versus 2D CAD drafting. Tekla Structures and 3D modeling is changing the way we do business."

**Wayne Kassian, Principal, Consulting Engineer**  
**Kassian Dyck & Associates**  
[www.kdassociates.com](http://www.kdassociates.com)



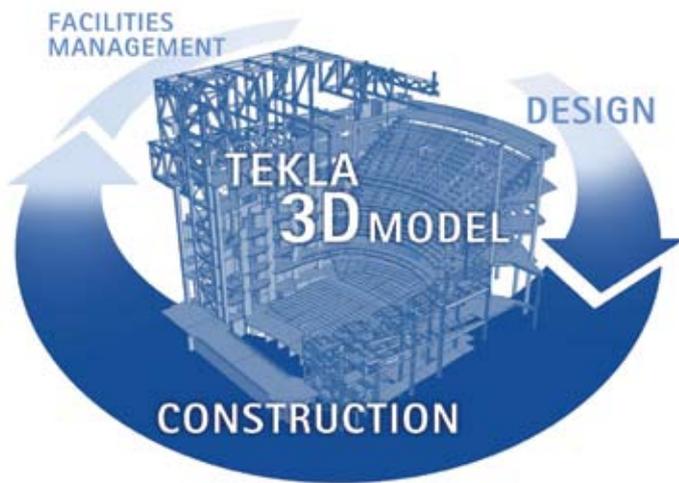
## WANT TO KNOW MORE?

Tekla Structures encompasses specialized configurations for structural engineers, steel detailers and fabricators, precast concrete detailers and manufacturers, as well as contractors. Thousands of Tekla Structures software users in more than 80 countries have successfully delivered BIM-based projects across the world. Every year Tekla invests up to 20% of revenue in R&D to provide you with the leading and most advanced solutions on the market. The Tekla team of skilled professionals provides all the technical support you need.

Order a free Tekla Structures Demo CD now! Visit [www.tekla.com/democd](http://www.tekla.com/democd) or contact your local Tekla office.

## TEKLA CORPORATION

Tekla is a leading international software company whose innovative software solutions make customers' core businesses more effective. Tekla's software products and related services are used mostly in building and construction, but also in energy distribution and by municipalities. Tekla Corporation has area offices and partner organizations worldwide. International operations account for 80% of net sales. Founded in 1966, Tekla is one of the oldest software companies in Finland.



With Tekla, BIM means wider usage of the structural model: accurate and error-free coordination of every material in every stage of design and construction

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