Tekla Structures for Steel Industry
Model, Fabricate and Erect All Steel Structures Faster and with Better Quality

Working with the detailed, constructible Tekla model minimizes costly surprises and rework and allows more profitable projects with total process optimization. Tekla Building Information Modeling software brings advantage to the site and the office: Coordinate design, fabrication and site operations for an enhanced, more automated workflow.

KEY BENEFITS
• Utilize one model from design to construction site
• Avoid errors in detailing
• Manage changes and save time
• Avoid human errors: Integrate design to fabrication and automate information transfer
• Optimize the fabrication process and minimize the need for rework
• Plan production and erection with the model
• Coordinate and communicate with other project parties
All project types and sizes

Tekla Structures is powerful and flexible software for structural steel detailers and fabricators. You can create a detailed, constructible 3D model of any steel structure from everyday industrial and commercial buildings to stadiums and high rise buildings. Working with Tekla is the most accurate, integrated way to manage detailing, production planning and erection.

Transmission towers
Detailed transmission tower models include everything from foundation layout to tower components and connections.

Offshore
Tekla handles even the largest offshore structures. Benefit from the accurate model throughout the structure lifecycle.

PEB
Save time in design with special PEB tools and achieve a smooth workflow.

Bridges
Utilize an accurate, up-to-date 3D modeling environment for steel, concrete, wood and composite bridges.

Miscellaneous
Create as-built models of miscellaneous metal work such as stairs, ladders, handrails and sheet metal work.
Detailed as-built models

With Tekla you can create, combine and distribute accurate, detailed, as-built structural models. The model is the source of building information, and when you need information, the drawings you extract are up to date because they are connected to the model.

Your construction projects do involve materials other than steel. Tekla handles all materials including concrete. You can just utilize the information other project parties create by interfacing with their solutions.

RELIABLE SOFTWARE

Tekla Structures can handle projects regardless of size or complexity; from simple stairs to the largest oil rigs and world class stadiums. This is possible because of the unique technology for managing the model and related data.

WORK FASTER

Tekla offers an extensive range of standard and custom parts and connections – you do not have to model everything from scratch. As changes are managed within the model, all drawings, reports and other output are automatically updated accordingly. Tekla Model Sharing makes collaboration convenient regardless of the location of project parties.

ESTIMATION AND BIDDING

Using a preliminary model you can get a bill of materials to make cost estimations and find alternative solutions early in the process. 3D visualizations help communication with everyone, and provides you a powerful sales tool for winning more projects.
WITH TEKLA YOU CAN

- Model all details of the building including welds, bolts and all other structural items.
- Automate clash check and expose conflicts before it is too late
- Manage changes and implications
- Generate up-to-date drawings and reports automatically from the 3D model
- Utilize the global libraries of steel profiles, materials and components
- Automatic identification of parts and assemblies
- Interface with plant design and analyses solutions

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

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.

LEARNING & SUPPORT

Getting started with Tekla software is easy. Thanks to extensive training opportunities, 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.
Information for fabrication

Model-based workflows increase productivity through a higher level of automation of fabrication and also improved project management: The information-rich models provide a tool for controlling fabrication as they provide open, readable data for manufacturing and link to CNC and robotic welding machinery.

INTERFACE AND INTEGRATE

Tekla integrates with industry leading software and CNC equipment. This is possible with standards and proprietary formats including IFC, DXF, DWG and DGN. Because of Tekla’s open system approach it’s possible to interface with all the leading software for MIS and CNC equipment, as well as analysis & design and plant design, including STAAD, Robot, SAP2000, ETABS, Dlubal, PDMS, E3D, and Smart 3D.

CUSTOMIZE IF YOU WISH

Tekla Structures is ready to use but you can customize it if needed. Create your own special connections without any programming needed. Your plug-in applications integrate and communicate within the modeling environment using the Tekla Open API™ application programming interface.

WITH TEKLA YOU CAN

- Interface with the industry leading technologies like CNC, MIS and ERP
- Use the model to plan and follow up production status
- Stay on top of changes in estimating, scheduling, procurement and production management
- Share project information using Trimble’s mobile solutions and streamline the process

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

PLAN YOUR WORK

Staying in the schedule and delivering on time is easier with a tool that supports delivery and material use planning. Status information in the model allows realistic production planning.
Smaller erection phase

Solve the clashes already at the office, not on site. When you find clashes already in the design phase, solving them is easier, cheaper and faster than on site.

Tekla BIM software allows you to manage changes and avoid errors. You can plan better, minimize rework, and use and waste less material and other resources. Welcome better quality.

THE MATERIAL YOU NEED, WHEN YOU NEED

Model-based fabrication and logistics management mean that the construction site has the correct materials and prefabricated parts in the right place at the right time. This modern way let you achieve punctuality in deliveries which is crucial on busy sites.

COMMUNICATE UPSTREAM AND DOWNSTREAM

Thanks to an open approach to BIM, Tekla software boosts model-based communication both upstream and downstream in the workflow. Fluent communication between architects, structural engineers, production and installation teams is possible with Trimble’s mobile applications regardless of location. This modern way of working reduces errors and saves time.

WITH TEKLA YOU CAN
- Plan and manage transportation and logistics
- Plan and coordinate production schedules based on the site requirements
- Stay on top of changes and always work with the same information as others
- Utilize the model information on site
- Enhance communication with the site and production with Trimble’s mobile solutions
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.