New Era of Interoperability for Industrial Plants and Offshore
Ensure fluent information sharing by combining the structural steel model with the plant design model. This is easy via the native IFC interface between CADMATIC and Tekla Structures software.

You’ll achieve cost-efficiency, improved safety, and better schedule control of the whole industrial project by visual model-based design, communication, fabrication planning, and coordination. The virtual model then enables you to monitor and access the risk analysis when operating the plant.

**Superior technology**

- Distributed workflow support: access up-to-date information anywhere, anytime, on any device.
- Clash detection: automate clash checking and expose conflicts within the model before it’s too late.
- Model sharing: work on the design and detailing efficiently with all internal and external project parties.
- Constant innovation: promote industry and software development.
- Versatility: choose a solution that applies to both Offshore & Onshore plants.

Effective 3D model-based industrial plant and offshore design allows simultaneous collaboration and data share with all parties involved in the project and effective project management. This translates into efficiency and accuracy during fabrication and in the field. 3D models can be further utilized to track and manage the performance of facilities and structures during operation.
DESIGN

The 3D model-based plant design process encompasses structural analysis and design and the detailing of steel and concrete, process engineering, and detail design.

Through IFC-enabled data exchange from one software to another the interfacing between disciplines is native, two-way and dynamic.

A virtual project model is an ideal communications hub that allows all project parties to participate throughout the project.

The model supports distributed workflow and enables effective change management. Possible clashes are seen already on the design phase, not on the site.

BUILD
(FABRICATION AND CONSTRUCTION)

Detailed model provides direct support of automated steel processing and fabrication, including pipe and HVAC prefabrication, automation and installation. Open system approach makes it easy to interface with ERP and MIS software in fabrication, and the visual 3D approach makes the information flow with site and production staff more transparent. This way distributed workflow is supported for the site, shop, transportation, and engineering office and allows better understanding of possible change implications. Moreover, detailed 3D modeling enables full material traceability according to the EN1090 standard.

OPERATE

Detailed 3D modeling ensures that you always have access to an up-to-date “virtual plant”. The 3D plant model functions as a two-way window to information that has been created in different software systems, including plant maintenance, virtual preventative risk management, process control, risk analysis, inspections, and structural models. Once the plant exists in 3D, you’ll find it easy to plan structural additions and revisions to existing facilities.

What is IFC?
Industry Foundation Classes (IFC) facilitate information sharing between project team members and across the software applications that they commonly use for design, construction, procurement, maintenance, and operations.

What is buildingSMART?
The worldwide authority driving the transformation of built-asset economy through creation and adoption of open, international standards, such as IFC.
Trimble is transforming the way the world works by delivering products and services that connect the physical and digital worlds. Core technologies in positioning, modeling, connectivity and data analytics enable customers to improve productivity, quality, safety and sustainability. From purpose built products to enterprise lifecycle solutions, Trimble software, hardware and services are transforming a broad range of industries, such as agriculture, construction, geospatial and transportation and logistics.

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 industrial plants 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.

CADMATIC is an international developer and supplier of cutting edge engineering software for the marine and process plant industries. CADMATIC software is used in many leading shipyards, ship design, engineering, EPC, and Owner/Operator organizations worldwide. Our software has gained a good reputation of having one of the world’s best money/performance ratios. The software solution for your engineering work is a carefully chosen combination of our software products and modules introduced below. Contact us and let us show you the CADMATIC way to boost your performance.

www.cadmatic.com

www.tekla.com