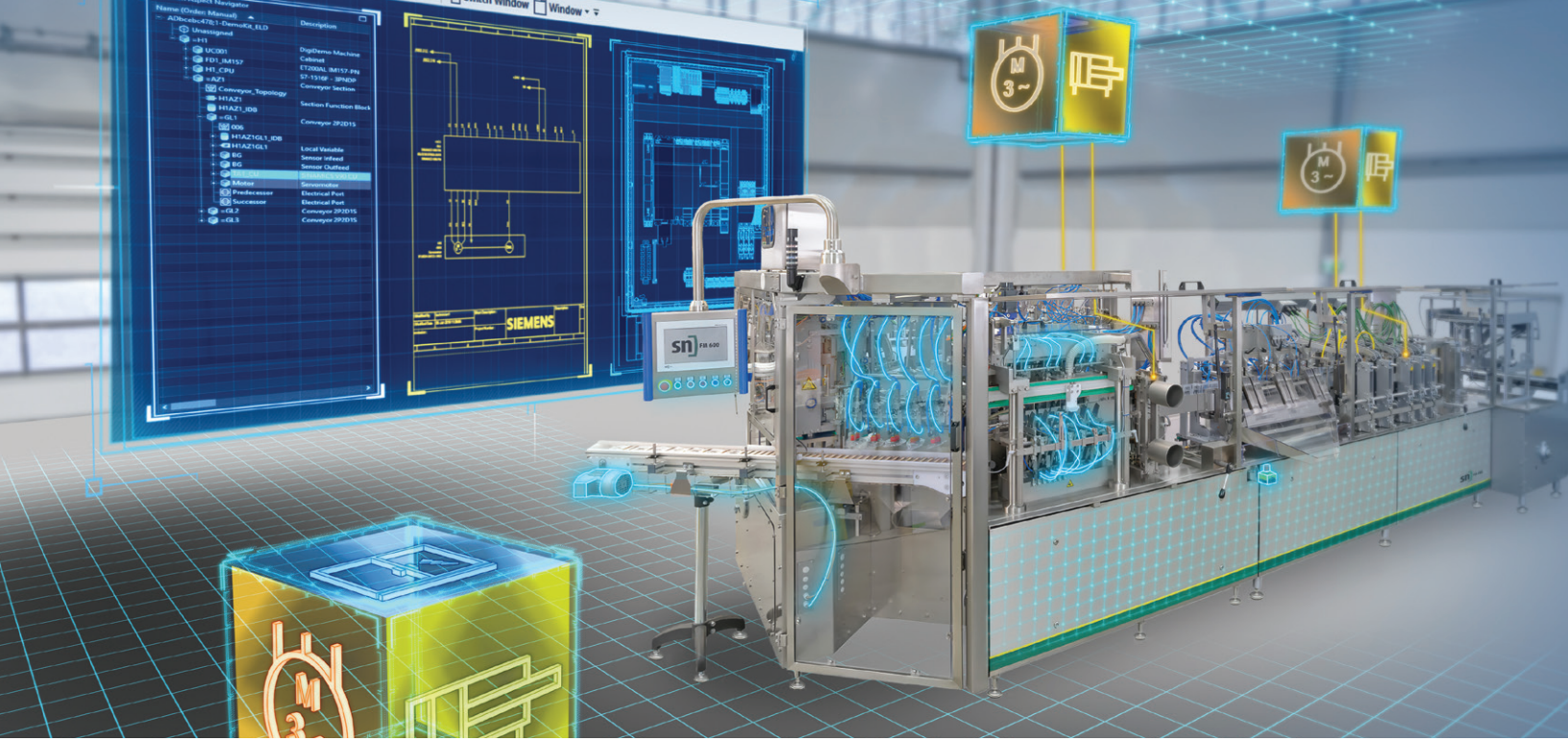


DIGITAL INDUSTRIES SOFTWARE

NX Industrial Electrical Design

Enhancing efficiency with a full ECAD suite

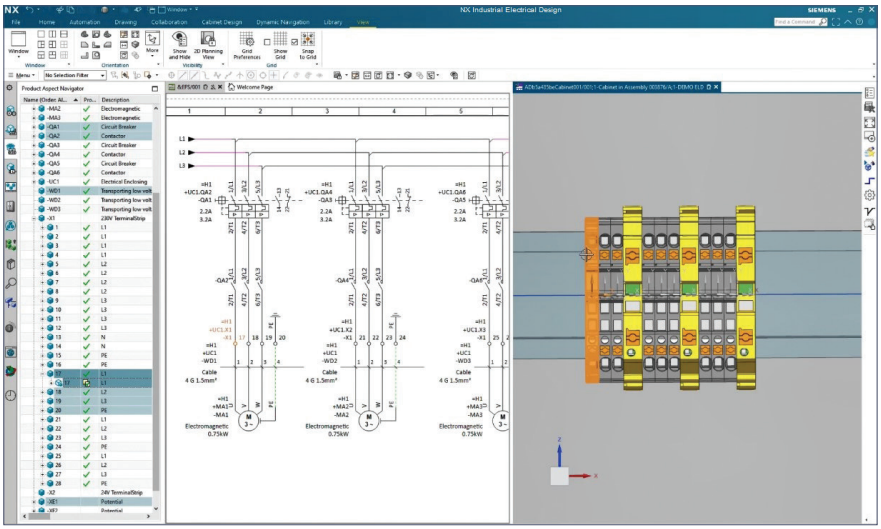
Benefits

- Enhance efficiency with full ECAD suite
- Increase consistency by using a single electrical data model
- Support modularization and standards with functional design
- Reduce efforts by re-using smart electrical engineering
- Synchronize disciplines to increase quality

Summary

Industrial engineering companies that support production facilities or other installations are facing increasing challenges to their business. Their equipment is becoming more electrified and automated, leading to increased complexity, equipment variants and changes to machine design, all while being faced with pressure to deliver their engineering solutions faster. The tools they are working with were not built to address these new challenges effectively and rely on classic design methodologies centered around symbolic diagramming, which do not consider the complete process.

Many customers have tried to become more efficient but are trapped by the shortcomings of their existing tooling and they typically have an error-prone and costly copy-and-paste style of engineering. What they need is a new, efficient, functional electrical design capability where they can work with objects, not symbols, allowing them to not only design their equipment, but to continuously speed up engineering and increase their quality while supporting efficient engineer-to-order (ETO) and configure-to-order (CTO) processes.



If companies want to remain competitive, they are going to have to move to a functional electrical design approach, increase re-use of their designs and increase modularization. They need a system that provides:

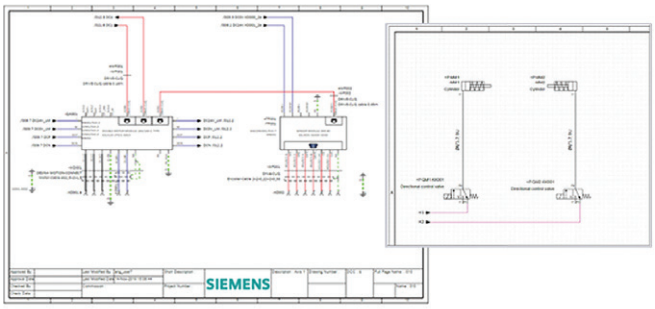
- Fast and effective re-use of electrical designs
- Design automation using rule-based engineering
- Design management on an object and functional level
- Efficient integration with up and downstream processes and data

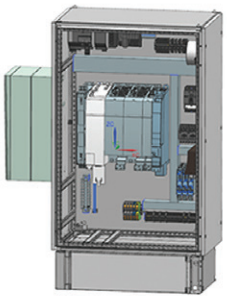
Using NX™ Industrial Electrical Design software enables them to achieve this by facilitating a more holistic approach to electrical design.

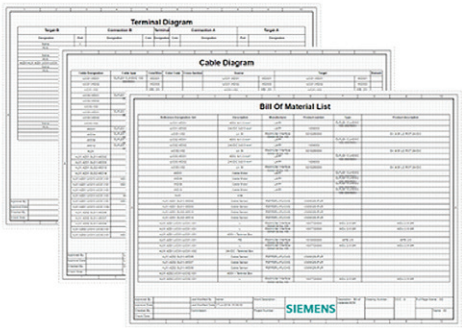
What is NX Industrial Electrical Design?

NX Industrial Electrical Design, which is part of the Xcelerator™ portfolio, the comprehensive and integrated portfolio of software and services from Siemens Digital Industries Software, provides a complete electrical design package for industrial applications. It enables the creation of electrical, pneumatic and hydraulic schematics and complete cabinet designs. Integrated reporting capabilities allow the user to quickly create all necessary documentation for manufacturing and fabrication of their designs.

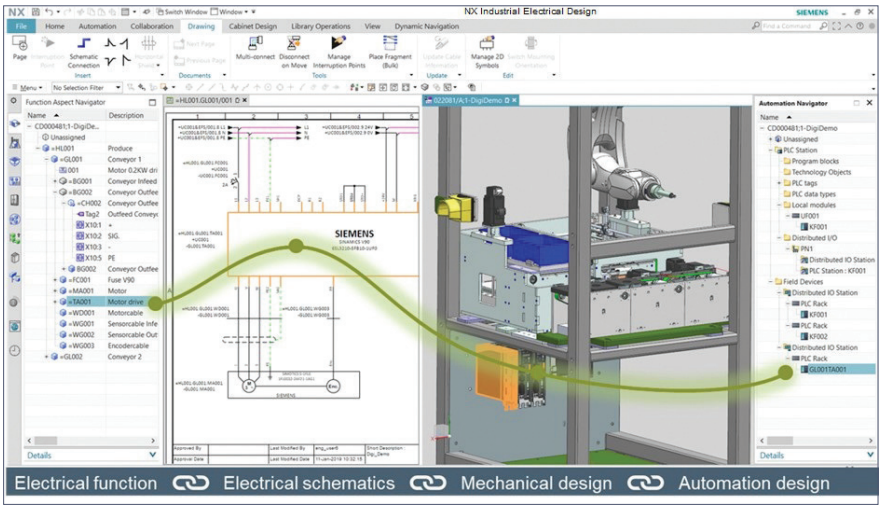
In addition to classic electrical computer-aided design (ECAD) functionality, NX Industrial Electrical Design also provides a complete suite of functionality to improve the overall design process and to speed up ETO and CTO development.







NX Industrial Electrical Design is focused on industrial equipment suppliers. The primary industry focus is on industrial machinery. The solution is scalable from small-medium sized businesses (SMB) to enterprise-level customers.



Features

Full ECAD suite of functionality for highest efficiency

Using NX Industrial Electrical Design enables you to create electrical, pneumatic, hydraulic schematics and complete 2D/3D cabinet designs. For fast documentation, out-of-the-box report documents are provided.

It increases the consistency of engineering data with object oriented electrical engineering (objects not symbols) and a single electrical data model for all kind of schematics and 2D/3D cabinet design.

Maximize design re-use and configuration for faster engineering

Using NX Industrial Electrical Design provides the ability to create functional templates from standard ECAD designs, providing both functional structures to maintain the design as well as all the schematic representations of the components. This enables users to look at an entire function, like a motor control circuit, and save it to a library for later re-use.

In addition, we provide value sets to speed up changes. You can use value sets to quickly adapt properties and product selections at once. This allows you to increase the re-use of existing design and speed up changes while simplifying management.

Synchronizing disciplines to increase quality

Electrical engineers typically start their design with input from upstream processes. They need access to this data to do their work efficiently. NX Industrial Electrical Design incorporates this data in modeled form through import of:

- Mechanical assembly data
- Plant layouts
- Excel spreadsheet software lists

After completing their design, electrical engineers need to communicate this work to their peers in automation so the software can be written for the machine. NX Industrial Electrical Design can be extended to directly integrate programmable logic controller (PLC) software and hardware in the data model and deliver program-less export of this data directly to Siemens Totally Integrated Automation (TIA) Portal.

For third-party systems, creating signal lists and hardware information is possible by using custom reports and Excel export of data from the system.

This environment where mechanical, electrical and software come together significantly reduces collaboration complexity.

Siemens Digital Industries Software

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