WireWorks

The E3.series edition for the SolidWorks community.

Electrical design for control schematics, harnesses, cable assemblies and control panels

DATA SHEET

Introduction

E3.WireWorks is an advanced design tool used by electrical and fluid engineers for planning, designing and documenting their designs. With wire harness and control panel design all built in, it comprehensively supports all aspects of the design and manufacturing process.

Ease of use

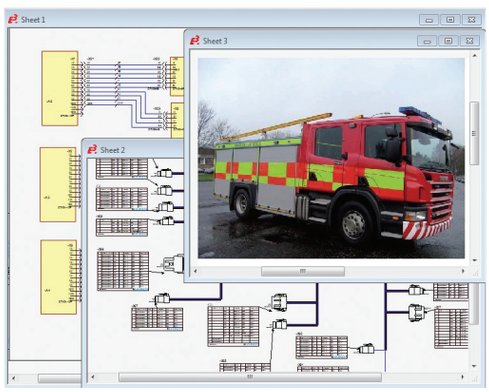
E3.WireWorks makes use of standard Windows® functionality including right-click context-sensitive menus and in-context help files. Industry-standard support for ANSI, IEC, GOST, etc. With simple drag and drop cut and paste utilities, new and infrequent users can easily get up to speed or pick up where they left off.

Flexibility

With more than 25,000 licenses in use today covering an array of differing industry sectors, E3.series is proven technology. Whether you design complex machinery, special vehicles or appliances, E3.series will improve your design and development processes.

Design reuse and automation

Get to market quicker with predefined sub-circuits. Configure your designs with our advanced Variant and Option functionality or completely automate with the extensive API.



"E3.series' ability to generate top-quality, detailed schematics has been exceptionally beneficial for us."
Graeme Shields, Design Manager, Emergency One

Top Features and Benefits

E3.WireWorks puts the focus on design, not tool usage

- **Multi-view project file**
  Projects contain all aspects of your design (schematics, cable plans, control panels, formboards and fluid detail). All dynamically linked; a change in one is automatically reflected in all.
- **Electrically-aware part library**
  Intelligent part libraries help drive the design with automatic part selection and real-time checks to prevent errors.
- **Real-time design rule checks (DRC)**
  ECAD engine designed by EEs for EEs with built in real-time DRCs. Prevent errors rather than find them later.
- **SolidWorks® integration**
  Collaborative design for harness and fluid engineering with SolidWorks® Routing and P&ID functionality.
- **SolidWorks® Enterprise PDM Integration**
  Data and bill of material management with Enterprise PDM.
- **Part of Zuken's E3.series software suite**
  Stable and proven technology, used by thousands globally.

SOLIDWORKS Solution Partner

ZUKEN

Links to Manufacturing

Bridge the gap between design and manufacturing and help eradicate those costly errors. E³.WireWorks' object-oriented structure ensures that bills of materials, control panels and harness production drawings will always reflect your latest design.

E³.WireWorks Schematic

Provides electrical engineers with an easy-to-use solution for designing and documenting electrical wiring designs from circuit diagrams to terminal plans and bills of material. Its integrated core database and online DRC provide a consistent design approach to help eliminate errors, improve quality and reduce design time.

E³.WireWorks Panel

Enables engineers to design cabinets and panels with all associated parts and wiring within the same working environment. It automatically calculates wire details and connection routes, enabling pre-assembly of wires and cables. All necessary data is generated for production, labeling, manufacturing cables, drilling, milling and producing reports.

E³.WireWorks Cable

Includes all functionality of E³.WireWorks Schematic plus advanced design methods such as hierarchical circuit design and cable assembly generation. It provides engineers with the ability to design, develop and document electrical cable and harness systems to be used in any manufacturing segment – especially special vehicles, machinery, heavy equipment, and transportation.

E³.WireWorks Autoroute

Autoroute is an optional add-on that enables automatic wire routing in the cabinet or panel.

E³.WireWorks Formboard

Provides engineers with the ability to design harnesses in two dimensions and create true working 1:1 scale nail board drawings (layups) ready for manufacturing. The Formboard drawing is a view of the cables and harnesses defined in the circuit diagram including connector placement, wire segments, coverings, cable protection, clips, pin and wire charts, etc.

SolidWorks® Premium Routing Integration

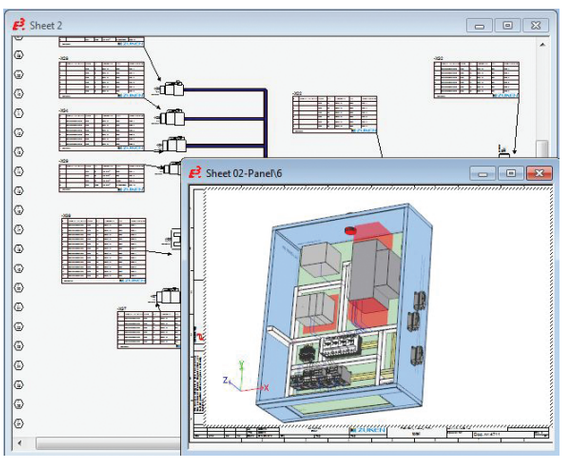
E³.WireWorks integrates with SolidWorks® Premium Routing by transferring the necessary data to route wires, harnesses and cables within the 3D model. Once routed, this information, along with segments and wire lengths, is passed back into E³.WireWorks for use in Formboard. The integration improves collaboration between electrical and mechanical engineers by sharing part and harness information, allowing them to see multiple views of cables, verify mating connectors and connector pin terminals, determine bend radius, clash detection, etc.

E³.WireWorks Fluid and SolidWorks® P&ID Integration

End equipment, inline parts and pipe connections created in E³.WireWorks are transferred to SolidWorks® Piping. Users can pick and place or locate end equipment. Guidelines show piping routes and highlighted segments for the inline parts such as valves and tees.

SolidWorks® Enterprise PDM Integration

E³.WireWorks integrates with SolidWorks® Enterprise PDM allowing you to manage your entire project within the SolidWorks data vault. E³.WireWorks projects can be checked-in and checked-out of the SolidWorks project area, permitting work-in-progress (WIP) data management. Users can update attributes from either a checked-out E³.WireWorks document or from the Enterprise PDM data card. Bills of materials can be transferred from E³.WireWorks projects directly into Enterprise PDM. The BOM module also allows for sub-project management where sections of designs can be individually monitored. Additionally, it also manages and displays change deltas from previous versions of the BOM.



"As our needs have evolved, so has E³.series. With each new version, Zuken gives us the functionality we need for higher productivity and quality."

Sami Kivioja, Engineering Manager, ABB

www.zuken.com/e3WireWorks