E^3.3D Routing Bridge - Integrate electrical and mechanical design

SPECIAL FUNCTIONALITY IN E^3.3D Routing Bridge

- Electromechanical collaboration
- Virtual prototyping
- Clash avoidance
- Bend radius
- Space optimization
- Connector transfer
- Cable transfer
- Cable length transfer

Harness flattening

Introduction

Zuken's E^3.series is used for documenting and detailing electrical and fluid design projects. Its flexibility supports the entire process from definition and design, through manufacturing and maintenance. Its unique object-oriented architecture ensures all stages of the design are fully synchronized.

E^3.3D Routing Bridge enables companies to integrate their electrical harness design with all major MCAD vendors. Electrical harness details such as connectors, terminals, splices and netlist information are transferred to the MCAD system, where harness engineers route the cables in the mechanical space. The length and structure data for the harness is then fed into E^3.series, where the final details are added for manufacturing.

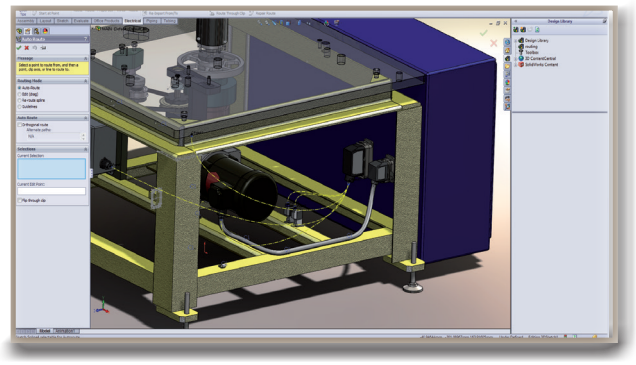
E^3.3D Routing Bridge works in conjunction with E^3.cable.

Supported industries

E^3.3D Routing Bridge is ideally suited for harness manufacturers and automotive, aerospace, rail, off-highway, special purpose vehicle and machinery companies.

Designed for purpose

E3.3D Routing Bridge enables electrical and mechanical collaboration allowing electrical and mechanical engineers to work in their own dedicated environment but and then integrate design data in a controlled manner.



Machinery harness integration

Virtual prototype

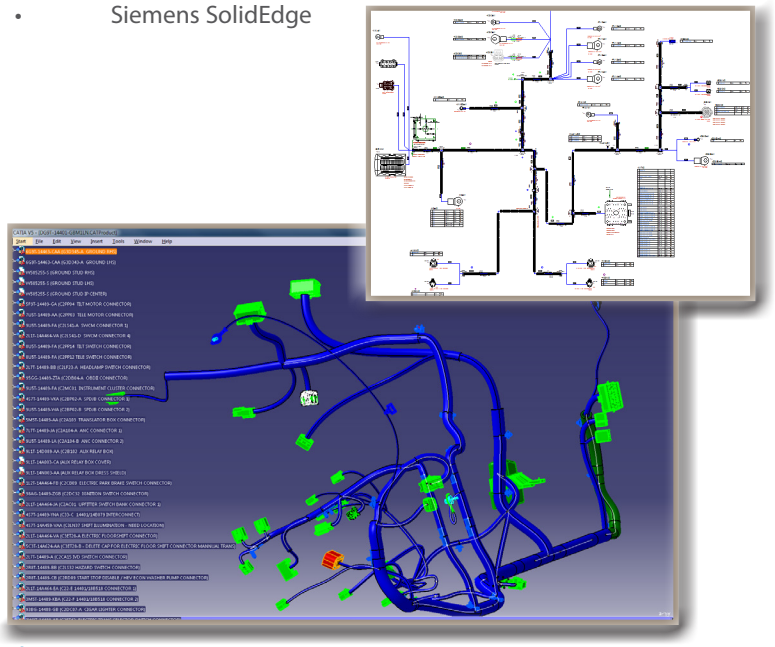
Digital prototyping is transforming the way companies work. Costly mockups and expensive workshops and laboratories are no longer required.

Harness flattening

For certain MCAD systems, you can extract 3D geometric harness data, import this into E3.Harness Flattening and and automate the creation of the 1:1 scale harness description for manufacturing in E3.formboard.

Supported MCAD systems

- Autodesk Inventor
- Dassault Systèmes CATIA V5
- Dassault Systèmes SolidWorks 3D CAD
- PTC Creo Elements
- PTC Creo Direct
- Siemens NX
- Siemens SolidEdge



E3.formboard design

Additional E3.series options

E3.schematic
The core module of the E3.series suite enables the creation of schematic diagrams for electrical control systems.

E3.cable
Enhanced functionality for designing cables and cable harnesses. Different views of the design enable specific documents to be created for production, start-up and service.

E3.fluid
Integrated design solution for hydraulics, pneumatics, cooling and lubrication systems. Supports integrated electrical and fluid design.

E3.formboard
Creates build-to-print detailed 1:1 harness designs; linked dynamically to E3.cable drawings.

E3.panel
For general arrangement drawings of cabinet enclosures. Work in either 2D or 3D, place devices, cable ducts and mounting rails and prepare panels for manufacture.

E3.redliner
Mark up documents in a protected read-only copy of the design. Playback and jump to all recommended changes in the master design.

E3.Revision Management
Document all physical and graphical changes between design iterations. Automatically produce engineering change order documentation

E3.topology
Evaluate system harnesses early in the design flow for factors such as length, weight and cost. Enables tradeoff analysis of harnesses and sub-harnesses to optimize manufacturing performance and cost.

E3.view
Free-of-charge viewer for all E3.series projects and special viewer files.

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