Solid Edge XpresRoute streamlined tubing, wiring and cable design

For machinery and electro-mechanical assemblies

fact sheet

Summary

Solid Edge XpresRoute boosts design productivity for machinery and electro-mechanical assemblies. Fully integrated with Solid Edge, XpresRoute helps designers quickly and easily model rigid or flexible tube parts, wiring, and cabling by utilizing process-specific workflows that match industry best practices.

Features

Fully associative tubes, wires and cables that automatically update when related parts change

Automated workflow for routing tubes and cable paths

Create rigid or flexible tubes, single wires or multiple wire cables

Automatically produce tube bend tables and wiring reports

Benefits

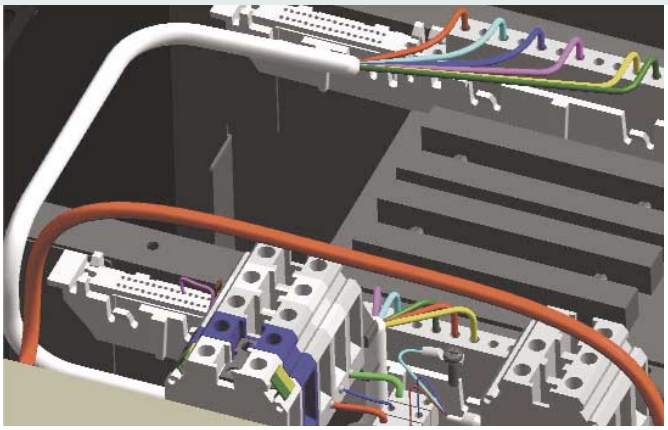
Increase productivity through automated, structured workflows

Improve accuracy and manufacturability

Automatically build best practices into new designs

Reduce costs from detailed purchasing and manufacturing reports

Quickly investigate alternate routing options



Easily create intelligent, associative tubing and wiring designs

Creating a tube, wire, or cable with Solid Edge XpresRoute is as easy as drawing a path and specifying the properties. Designers can model these components in the context of a Solid Edge assembly, using existing part model geometry to ensure accurate fit and function. Tubes and wires are fully associative and update with the parts to which they are connected. When the assembly model is modified, tube and wire parts automatically adapt to design changes.

Streamlined tools for modeling tubing and wiring

Solid Edge XpresRoute helps designers specify component paths with specialized modeling aids.

- Solid Edge PathXpres enables designers to rapidly define a 3D tube, wire, or cable without drawing the individual lines of the path. Solid Edge PathXpres automatically generates an optimum path between two points.
- Solid Edge OrientXpres is an interactive design aid that assists in drawing 3D lines defining the tube or wire path. As designers draw line or arc segments, Solid Edge OrientXpres locks the orientation of the line parallel to an axis or plane. 3D curves can also be used for both tube and wire creation, allowing designers to easily represent flexible tubes.

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System requirements

Solid Edge XpresRoute is delivered with Solid Edge, and shares Solid Edge system requirements:

Minimum system configuration

Intel Pentium or AMD Athlon processor-based PC
Windows XP, Windows NT 4.0 Service Pack 6 or later, Windows 2000, Windows ME, or Windows 98, second edition
128 MB RAM
420 MB of disk space for installation
Minimum resolution: 1,024 x 768, 65K colors
CD-ROM (local or network) for installation

Recommended system configuration

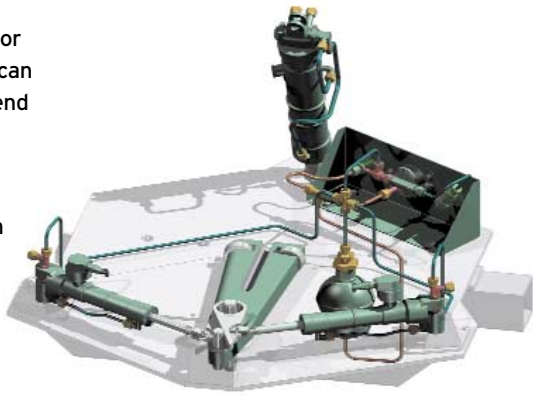
Windows 2000, Pentium III or Pentium 4 or AMD Athlon, 256 MB or more RAM, OpenGL accelerator with 65K colors.
Language support for Solid Edge XpresRoute:
Chinese
English
French
German
Italian
Japanese
Spanish

Once the path is defined, a solid model of the tube or wire is created along the path segment. Designers can specify attributes such as size, color, extents, and end treatments via simple dialog boxes.

For wiring

The designer can select different connect points on the path segments to define single wire, cable, and trunk wire paths:

- Single wire paths are used to create an individual wire, disjoint from the rest of the wires in the assembly.
- Cable wire paths are used where multiple wires make up a single cable, such as with coaxial.
- Trunk wire paths are made up of independent wires that merge into common segments (follow a common path) but are not connected together.



Engineers at AERO Bodochody a.s. increased productivity using Solid Edge XpresRoute when designing test equipment for the L159 nose landing gear.

Solid Edge XpresRoute allows designers to quickly produce wiring data reports in standard formats that can be used for procurement and production needs.

Wiring reports include wire lengths, attributes, physical properties, and other information as defined by the user. Reports can be generated based on all wires in the assembly or by selections defined by the user.

For Tubing

To complement Solid Edge XpresRoute, Solid Edge provides a library of commonly used tube fittings. Designers can add standard tubing components, from adapters to tees, with the click of a button. The fittings library manager can also be used to replace existing components while maintaining their assembly relationships.

Tube parts modeled with Solid Edge XpresRoute are fully supported by Solid Edge drafting functions including dimensioning for tube lengths and radii, and angular dimensioning between tube path segments. In addition, Solid Edge XpresRoute automatically produces bend tables that can be used directly by tube bending machines.

For more information, contact your Solid Edge Reseller:

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