

CoCreate® Cabling

Create electromechanical products and optimize designs for manufacturability

CoCreate Cabling combines electrical and mechanical design data, so you can fully simulate electromechanical products and shorten lead times.

Design and validate physical harness routing, generate accurate bill-of-materials, specify connector types and lengths, and support engineering analysis.

Make the most of your processes for wire harness development

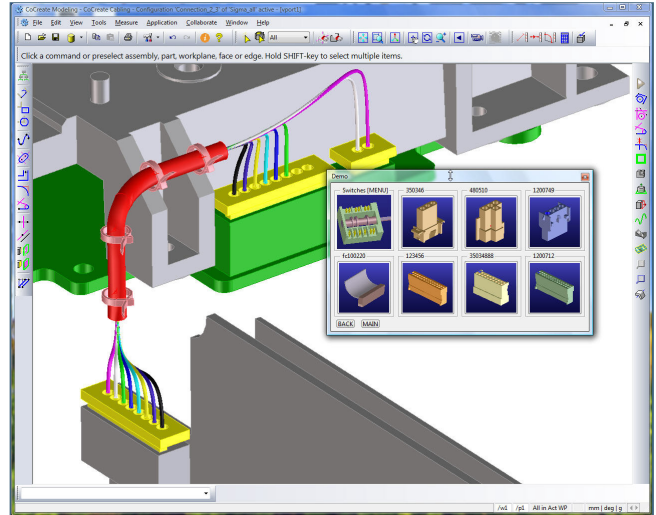
Save money and time by switching to software-based development instead of manually defining your harness. Re-use information already in your MCAD and ECAD system to speed development and combine both into a common product model. Never wait for a mechanical prototype to measure and estimate your wire harnesses again.

Accommodate late changes in the process

Design your wire harness with CoCreate Cabling in 3D using the same tool you use for mechanical design. That way, teams can support late requirement changes without threatening schedules or forcing complete rework.

Key Benefits

- Speed design – Access specialized flexible and rigid cable design capabilities that boost productivity and speed the design of electromechanical products
- Build perfect prototypes – Eliminate errors in connector positioning, cable lengths, and housing considerations by using 3D CAD to fully design and validate complex wire harness assemblies before you produce any physical prototype
- Create manufacturing-ready drawings – Easily create manufacturing-ready drawings of cable harness designs, completely annotated with all necessary manufacturing information
- Promote standard manufacturing materials – Use wire and connector libraries to make sure cabling designs use standard manufacturing materials, and cut unneeded custom cable costs



Use CoCreate Cabling to simulate electromechanical products and optimize designs for manufacturability.

Features and Specifications

Design and Route Cables

- Design 3D cable harnesses within CoCreate Modeling
- Interactively or automatically route cables between pins of physical components
- Easily connect multi-conductor cables
- Define virtual and physical cable channels
- Use extensive features for dynamic ribbon cable routing

Run Reports and Calculations

- Check electrical, physical, and manufacturing information
- Ensure manufacturability with checks for minimal cable bend radii, multiple wires on same pin, open wire ends, etc.
- Define and customize additional design rules
- Calculate cable diameter, maximum bend radii, maximum wire length, and other values
- Generate reports like bill-of-materials, connection or wire "from-to" lists, and others
- Define company-specific reports

Create Cable Harness Drawings for Manufacturing

- Automatically generate accurate, associative 2D formboard (nail board) drawings for harness manufacturing
- Automatically create required dimensions
- Move, rotate, and scale cable segments or connectors to improve position or annotation
- Add annotations like dimensions, tables, wire run-lists, and bills-of-materials directly on the harness drawing
- Add standard or embedded dimensions of the actual harness length
- Add annotations like pin, wire, and connector properties

Access an Entire Electrical Library

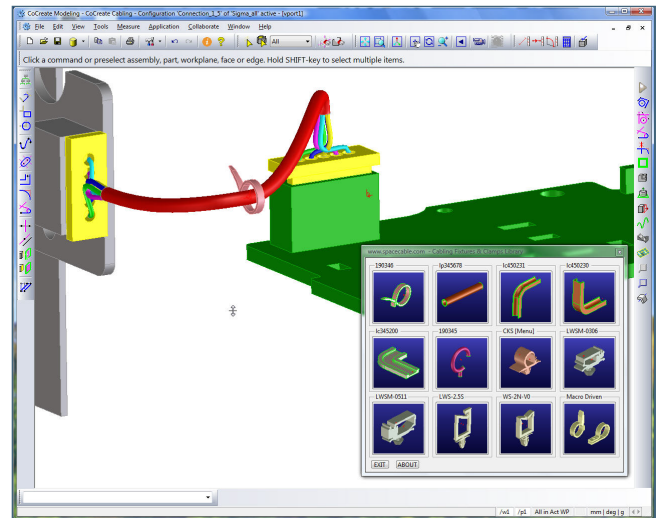
- Choose from wires, cables, fixtures, connectors, and other components in native CoCreate Modeling format
- View electrical properties, location points, and assembly directions in all library parts
- Snap in components automatically with predefined mating points
- Extend the library with your own company-specific components

Verify Designs

- Share electrical and mechanical data and accurate 3D prototypes for design reviews

Import and Export

- Import wire lists from any ECAD system
- Automatically create all required wires based on the imported wire list
- See missing components, unplaced components, connection differences, etc. when importing with intelligent update checks
- Automatically create connections with cable air nets
- Auto-route air nets via pre-defined channels and virtual paths for optimized harness results
- Export cable information back into ECAD systems



CoCreate Cabling is a flexible add-on module for CoCreate Modeling™, the world's #1 explicit 3D CAD system.

Prerequisites

- CoCreate Modeling

Platform Requirements

Runs on the same Windows® platforms as CoCreate Modeling:

- Windows 7 32-bit and 64-bit Editions of Ultimate, Enterprise, and Professional
- Windows Vista® 32-bit and 64-bit Editions of Ultimate, Enterprise, and Business
- Windows XP Professional 32-bit and 64-bit Editions

For the most up-to-date platform support information, visit: www.ptc.com/partners/hardware/current/support.htm

For more information, visit www.ptc.com/products/cocreate

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