Equipment & Systems Engineering

CATIA - Electrical Cableway Routing 2 (ECR)

CATIA V5R19

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CATIA - Electrical Cableway Routing

Create 3D implementation of electrical cabling systems based (optionally) on the 2D diagram of the electrical system.

Product overview

CATIA - Electrical Cableway Routing 2 (ECR), add-on of CATIA - Systems Space Reservation 2 (SSR), allows user to define 3D implementation for all existing electrical components defined in the electrical diagrams.//ECR automatically manages creation of reservation items and placement according to electrical connectivity information (diagrams) and compartment definition. Users can solve complex cable routing problems within the context of the digital mock-up.//Using CATIA - Electrical Cableway Routing 2 (ECR), designers can integrate both electrical and mechanical behaviors, capitalizing on CATIA V5 knowledge-based applications.

Product Highlights

- Provides tool to route easily in 3D rectangular round and oval cableways.
- 2D driven placement of 3D equipments.
- Automatic cable routing in cableways.
- Network analysis tool.

Product Key Customers Benefits

Equipment or space reservation according to specifications from electrical diagrams... Users can easily and intuitively place elements from the electrical schematic representation utilizing simple drag-and-drop functionality. Choices from the 3D Parts Electrical Catalog are facilitated by an automatic filter that displays relevant elements (based on electrical diagram specifications). Users can benefit from map integrity checking that warns if pieces of equipment are placed twice, for instance. Therefore, users are able to perform reliable and relevant placement of elements within a 2D/3D unique map.

Create space reservation to place cables... Users can take advantage of previously defined electrical diagrams; in fact, cableways can be generated automatically using electrical diagram specifications. Oval, circular and rectangular cableway forms can be used. The transition between two cableways is automatically handled by the application. Finishing tools are provided to help users clarify and refine cableway routing, allowing improvements in 3D electrical design productivity and reliability.

Automatic cable routing in cableways... Users can optimize the cable route according to company design rules criteria, such as shortest cable route. Users also can route multiple cables simultaneously, in compliance with priority order. In addition, users can manage areas in the cableway and utilize knowledgeware rules and criteria to check cable routing reliability, according to user-defined standards and best practices.

Network analysis tool... Several tools are provided to give users relevant information about the network they have created. These advanced functionalities help the user check the consistency of the network, or easily visualize different options for connecting

equipment. For instance, the user is able to obtain a complete list of elements connected to previously selected equipment. Or by selecting two pieces of equipment, it is possible to assess if a path through cableway (at least one) exists to connect them.

ABOUT CATIA V5R19

CATIA is Dassault Systemes' PLM solution for digital product definition and simulation.

www.3ds.com/products/catia