

Solid Edge Piping Design

Enabling the automatic generation of complete pipe systems

Benefits

- Automatically generates complete pipe systems
- Automatically generates construction of bill-of-materials
- Provides comprehensive 3D standard parts library, includes a report generator
- Provides system-generated design checks
- Facilitates simple usage and fast user acceptance
- Software can generate isometric drawings powered by Isogen

Summary

Accurate 3D pipe system planning is required for successful modular plant design. The Piping Design module in Solid Edge® software provides engineers with the tools to automate the construction and alteration of 3D pipe systems in 3D assembly groups. By automating the process with pipe specifications, users can reduce the number of work stages, which increases efficiency. Users are able to create specification tables with project-specific characteristics and parameters (for example, maximum and minimum pipe lengths) to pass internal software plausibility checks. Once the 3D isometric diagrams are created and approved, they can be used for manufacturing.

Features

Solid Edge Piping Design offers many features and capabilities that support industry standards and streamline the workflow process. During the design process, Solid Edge Piping Design makes it easy to create, alter, extend and reproduce all necessary components for 3D pipe system construction. Users have the option of creating pipeline paths by drawing system routes with 3D lines or automatically generating a complete pipe system with specifications. The 3D pipe system also includes many options for automatically placing fittings. Users can automatically place bends, tees, collars/weldolets, flanges, gaskets and various pipes between fittings. Solid Edge Piping Design also offers many functions for non-round pipes. Cable ducts, routes, air ventilation ducts, etc., can be quickly and efficiently built in the 3D assembly. During the design process, users can automatically place bends, tees, flanges and washers for non-round pipes. After a pipe system has been created, Solid Edge Piping Design also lets the user alter system routes and the composition of pipelines, and seamlessly reduce or extend pipelines.

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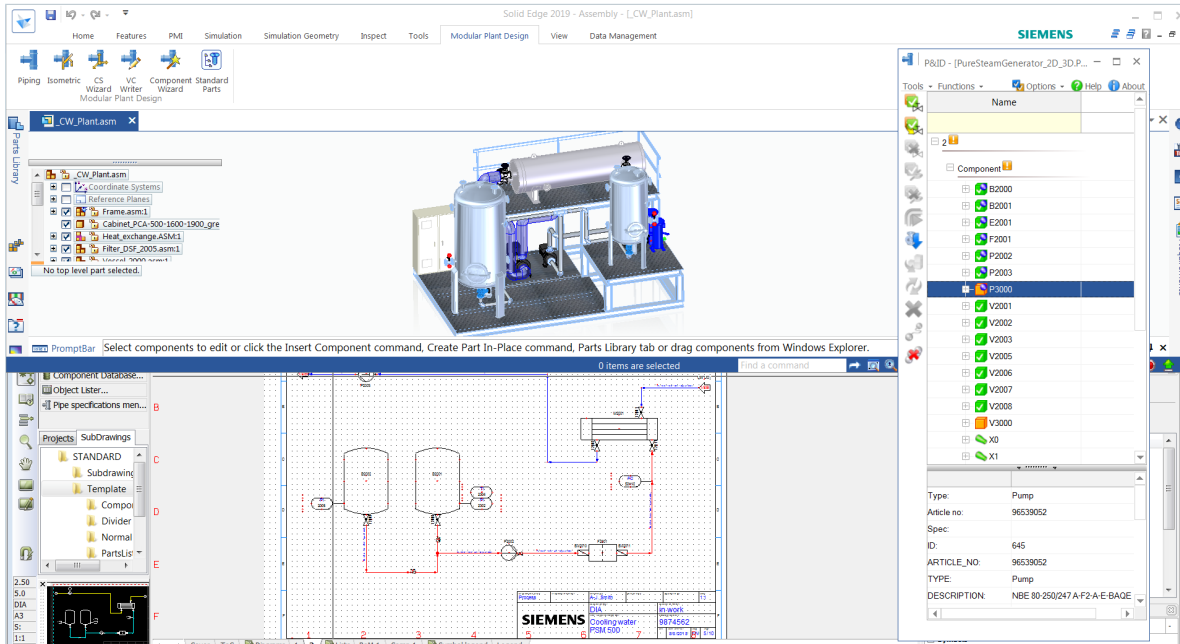


Figure 1: Solid Edge Piping Design integrates well with Solid Edge P&ID Design, allowing cross highlighting between modules.

Included functionality

Solid Edge Piping Design offers automated 3D piping design capabilities in a standalone solution. However, Solid Edge Piping Design can be integrated with Solid Edge P&ID Design. It can be added to a Solid Edge 2019 MPI license or newer. Solid Edge P&ID can be connected to the Solid Edge Piping Design application, and features such as fittings and equipment that are defined in the P&ID can easily be placed in the 3D model. There is also a to-do list function that provides the user with an online or integrated connection between the P&ID diagram and a 3D assembly.

Extending value

Solid Edge is a portfolio of affordable, easy-to-deploy, maintain and use software tools that advance all aspects of the product development process – mechanical and electrical design, simulation, manufacturing, technical documentation, data management and cloud-based collaboration.

Recommended system requirements

- 64-bit Windows 7 or Windows 10 operating system
- Eight gigabyte (GB) random access memory (RAM) or more
- True color (32 bit) or 16 million colors (24 bit)
- Screen resolution: 1,280 by 1,024 or higher, widescreen format

Minimum system configuration

- Any of the above 64-bit operating systems
- Four GB RAM or more
- 65,000 colors
- Screen resolution: 1,280 by 1,024 or higher
- Six GB of disk space is required to install Solid Edge

