



**SolidPlant**

CERTIFIED  
Gold  
Product

 **SOLIDWORKS**

# SolidPlant

Comprehensive Plant Design for SOLIDWORKS

**All new, all you need**

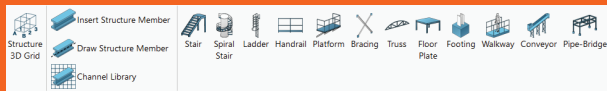


[www.SolidPlant3d.com](http://www.SolidPlant3d.com)

The only true specification driven Plant Design System for SOLIDWORKS, SolidPlant 3D combines the intuitive parametric SOLIDWORKS System with a sophisticated database to generate all components on the fly. Unlike SolidWorks Routing, there is no parts library. This concept allows unlimited freedom and flexibility in piping design.

## User interface

The most important aspect of the user interface is the requirement to help the user work faster while making less errors. The SolidPlant interface was designed with that principle in mind. To optimize user-friendliness and recognizability, we have styled our user interface in such a way that it is fully in line with that of SOLIDWORKS. SOLIDWORKS users will feel even more familiar with SolidPlant, as the interface is so similar to the platform they know best.



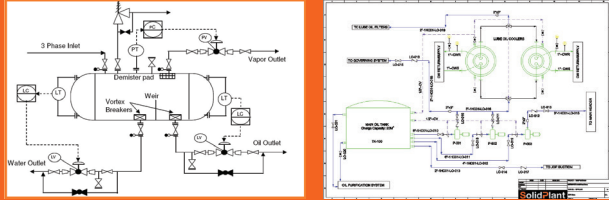
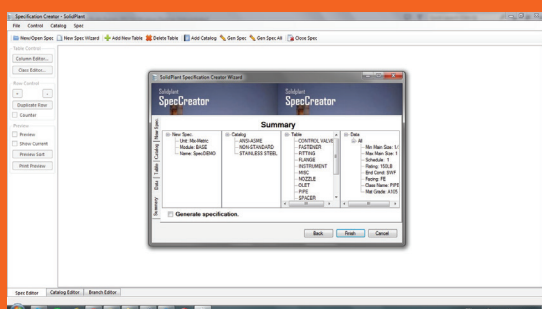
## SpecCreator

The most important element of a plant design system is how the graphics work with the database. We understand that the piping engineer does not want to spend a lot of time on creating and managing the database. Preparing a database with an enormous amount of data will traditionally take a lot of effort and discipline in order to make sure it is done right from the start with the highest level of accuracy.

SolidPlant's SpecCreator provides a great tool for the engineer to prepare piping data as easily as possible without having to compromise on accuracy. SolidPlant is a strong advocate of the concept, "Do It Right the First Time!"

## Catalog Import/Export

Creating a new catalog normally is a time consuming task. Our SpecCreator module can export any of the existing catalogs already available in the system to an Excel format. You can then edit or modify the data and import it back into the system. Our Import Catalog feature will help you import the new catalog after it has been prepared in an Excel format. It doesn't matter what format the columns and names are. The feature will allow the user to map the columns of the new catalog to the correct format. Then you will have your new catalog in a few clicks.



## Project Based with P&ID data import

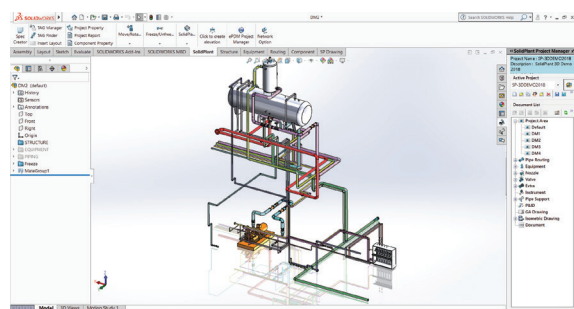
SolidPlant is a project based system that works perfectly with piping specifications. We use tag names as a link towards the whole project design. If you have designed your P&ID on SolidPlant P&ID, SolidPlant will synchronize the data automatically. If you use another intelligent P&ID, or your existing 2D diagram program, we can import all tags and data from the pipe list, equipment list, valve list and instrument list from the exported files using the SolidPlant Tag Manager. Now you can find any equipment, valve, instrument or pipe based on its tag name quickly. You can create the 3D equipment and pipes without having to re-enter data. This will significantly decrease the human error of data entry. For even more flexibility you can also create new tags in SolidPlant for those ever so common design changes.

## Large Design Review

In SolidPlant 2018 the user has the possibility to review the project quickly and easily without having to worry about loading time. In this mode, the focus will lie on the graphics of the project, disabling the underlying database, making for a smooth and quick way to review and present a project.

## Area Mode

The user can specify a certain area within the project in which the design tasks take place. Outside this area, certain features will be turned off, putting less strain on the operating system and, thus improving performance.

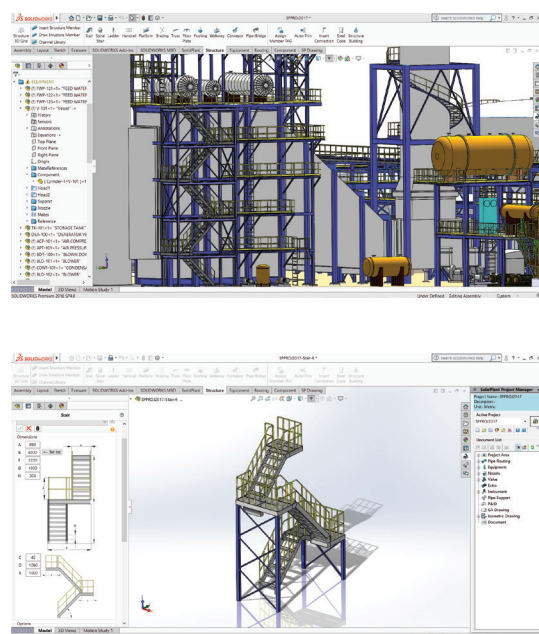




## Structure Modeler Templates

SOLIDWORKS itself has good steel structure design features. However, SolidPlant gives you more tools on top of that. To model a structural element would consume a lot of time and effort. SolidPlant has prepared templates of Stairs, Spiral Stairs, Ladders, Handrails, Trusses, Walkways, Platforms, Conveyor and Pipe Bridge. The graphic user interface is simple and intuitive. The user only has to enter a value for a dimension in the graphic input field then SolidPlant will generate the model quickly.

That's not all, since the model is a SOLIDWORKS model, the user will be able to change all the dimensions as a parametric model, or pop up the template window and edit the desired dimension. The model then rebuilds automatically. These templates will save a lot of time, especially for the piping designer that has to model these kinds of structures just for referencing.

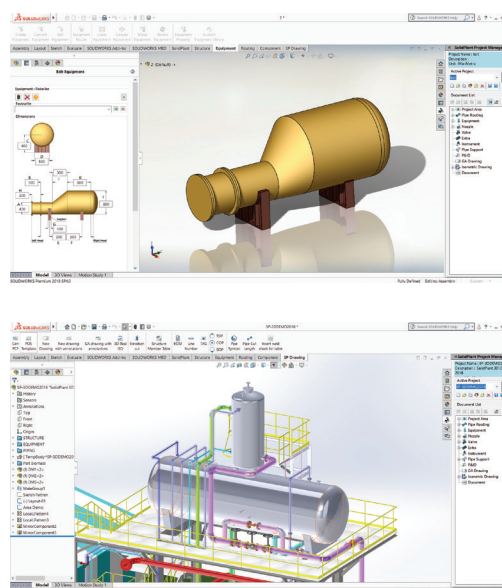


## Equipment Creation Templates

SOLIDWORKS is a great tool to create equipment models. On top of this SolidPlant provides templates to create several types of typical equipment such as Tanks, Horizontal and Vertical Vessels, Heat Exchangers, Pumps and Towers. With an engineering friendly user interface it will help you place or add any type of nozzle to any part or area of the equipment.

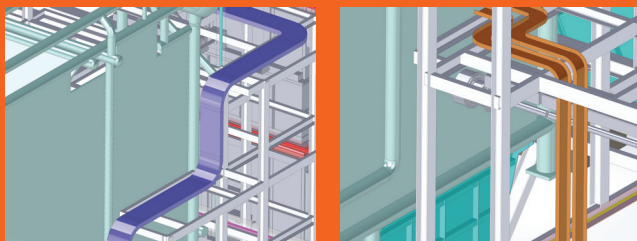
If you have other departments involved in designing equipment for you but they happen to be unfamiliar with SOLIDWORKS, there is no need to be concerned as SolidPlant also allows you to import 3D equipment models from other CAD software using standard formats such as IGES, ACIS, Parasolid or any other format that SOLIDWORKS is able to read and import.

SolidPlant provides a comprehensive tool to assign accurate nozzle coordinates. This is the most important requirement in order to be able to do automated and accurate pipe routing.



## Duct and Cable tray

Our Duct feature provides two methods to model your Ducting, Cable Trays or other Non-round piping. Using the manual method you can place components one-by-one. This is a very easy and straight forward method and is appropriate for mining and cement plant designs. Or you may also model your duct systems using a 3D sketch method and the system will generate all of the components automatically. These two methods will allow you to save time when you are creating your 3D models.



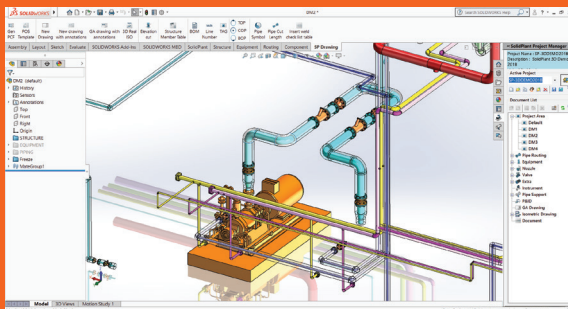
## PIPING

### Pipe Routing

SolidPlant offers a variety of ways to do the pipe routing. From manual routing to fully automated multi-line routing. The tools we provide will help you design a complex piping system easier and more efficiently. We understand what engineers want: a system that is as easy and as flexible as possible, but fully accurate at the sametime.

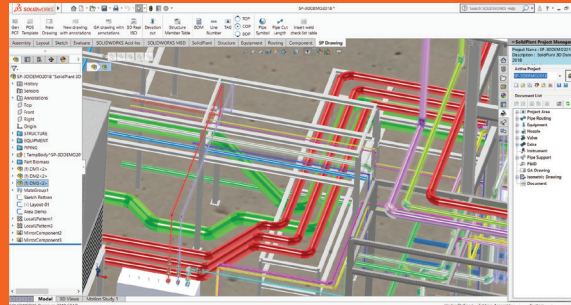
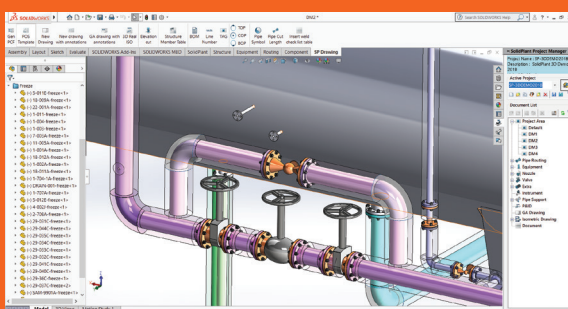
### Auto Route

This method will help the designer create the best path or pipe route faster than ever. With just two clicks, the 'from nozzle' and 'to nozzle', the system will automatically generate the pipe route for you based on the piping specification database in the system.



### Smart Route

A brilliant feature called "Smart Route" allows you to create a pipeline with amazing ease. Simply right-click the pipe tag in the SolidPlant project manager and select "SmartRoute". SolidPlant will then generate the route, connecting the correct nozzles as defined in the data imported from your P&ID design. It will also let the valve list pop up for the route based on that data. You can then easily drag and drop the valves onto the pipeline in the correct location.



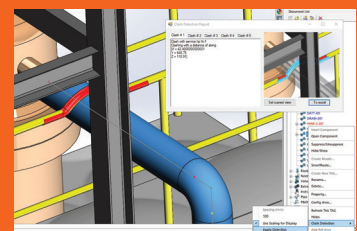
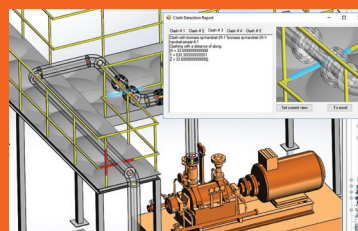
### Multi-Route Navigator

One of the most extraordinary routing features not only in SolidPlant, but in the entire industry, is Multi-Route Navigator. This feature allows you to generate preview lines from the line list of as many route lines as you want: 5, 10, 50, all in one go. You can then modify the lines and convert them to 3D models. You can imagine the time savings when using Multi Route Navigator.

### Advanced Piping Features

In sophisticated pipe routing designs, we need more advanced features to finish a 3D model. SolidPlant has developed more advanced tools that will help the designer solve the complex piping easier and with better accuracy. Some of these features that will help the designer are:

- Pipe supports
- Sloped pipe
- Pipe jogging
- Copy pipe
- Stub-in
- Pipe with Insulation
- Realistic valve templates
- Jacketed pipe



### Clash Detection

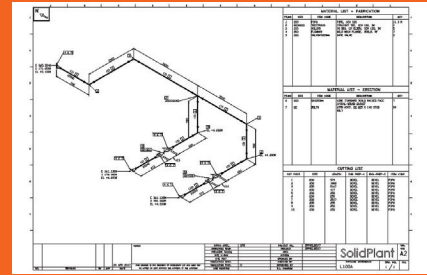
SolidPlant offers a feature that will further reduce the number of mistakes in any project. The user can apply clash detection to an entire pipe line in two different modes: soft clash detection and hard clash detection. Users can apply soft clash detection to determine the working space around a specific pipe line to make sure that there is enough room for service and maintenance. Hard clash detection can be used to check if a specific pipe line collides with others objects in the plant.



## OUTPUT DOCUMENTS

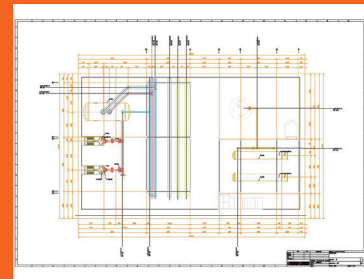
### ISOGEN included

SolidPlant has embedded the de facto standard for generating isometric drawings, Isogen by Alias. Now you can generate Isometric drawings anytime. Engineers, pipe designers, and contractors worldwide recognize this format and this allows you to share your pipe designs with confidence knowing they will be understood. The drawing can also be generated in 3D and will contain vital information such as material lists for fabrication and erection, and a cutting list. A Pipe Component File is exported simultaneously with the generation of the iso drawings, and can be imported into external pipe stress analysis packages such as AutoPipe, Caesar II and ROHR2.



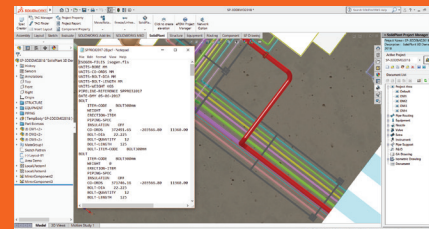
### Auto GA

SolidPlant 3D makes your GA drawing fast and easy. With just a single click you can start the automated process. You will be given the possibility to give your drawing a name, choose a sheet size, and select the view and scale. You can also select which annotations you want your drawing to include. For example: dimension, line number, grid label, as well as center, top and bottom of pipe. Within moments, the drawing is generated, reflecting all the selected data. Drawings are automatically updated when changes in the 3D model are made, without the need to generate the drawing again.



### Bill of material

As SolidPlant is a real specification driven system, all components are created from the database. The bill of materials that will be generated from SolidPlant is accurate and reliable. The bill of materials can take off from Structures, Equipments and Piping in a flexible format. We also can export this data to an Excel format if required.

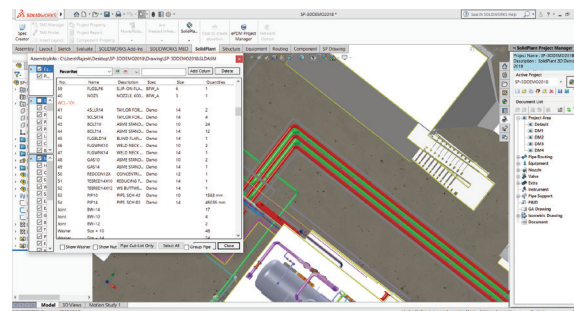


### PCF, IFC Imports/Exports

With SOLIDWORKS ability to import an IFC file you have the benefit of being able to import a structure from a 3D Architect CAD system such as ArchiCAD, Bentley or Revit to be used in your plant design, without having to model it again in SolidWorks. With these structures placed into your plant assembly your pipe designs can then accurately reference these.

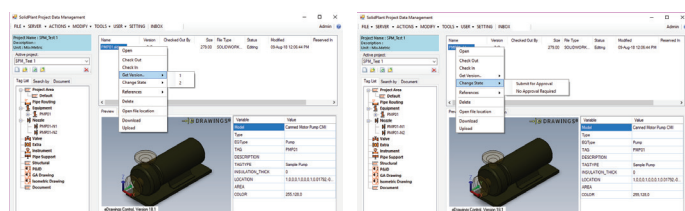
The benefit of SolidPlant's PCF Import is the ability to use existing pipe designs that were created in a system that has the ability to export PCF files. This feature will help the contractor so that they can accept 3D files from any system and then use these files to smoothly work within SolidPlant and SOLIDWORKS.

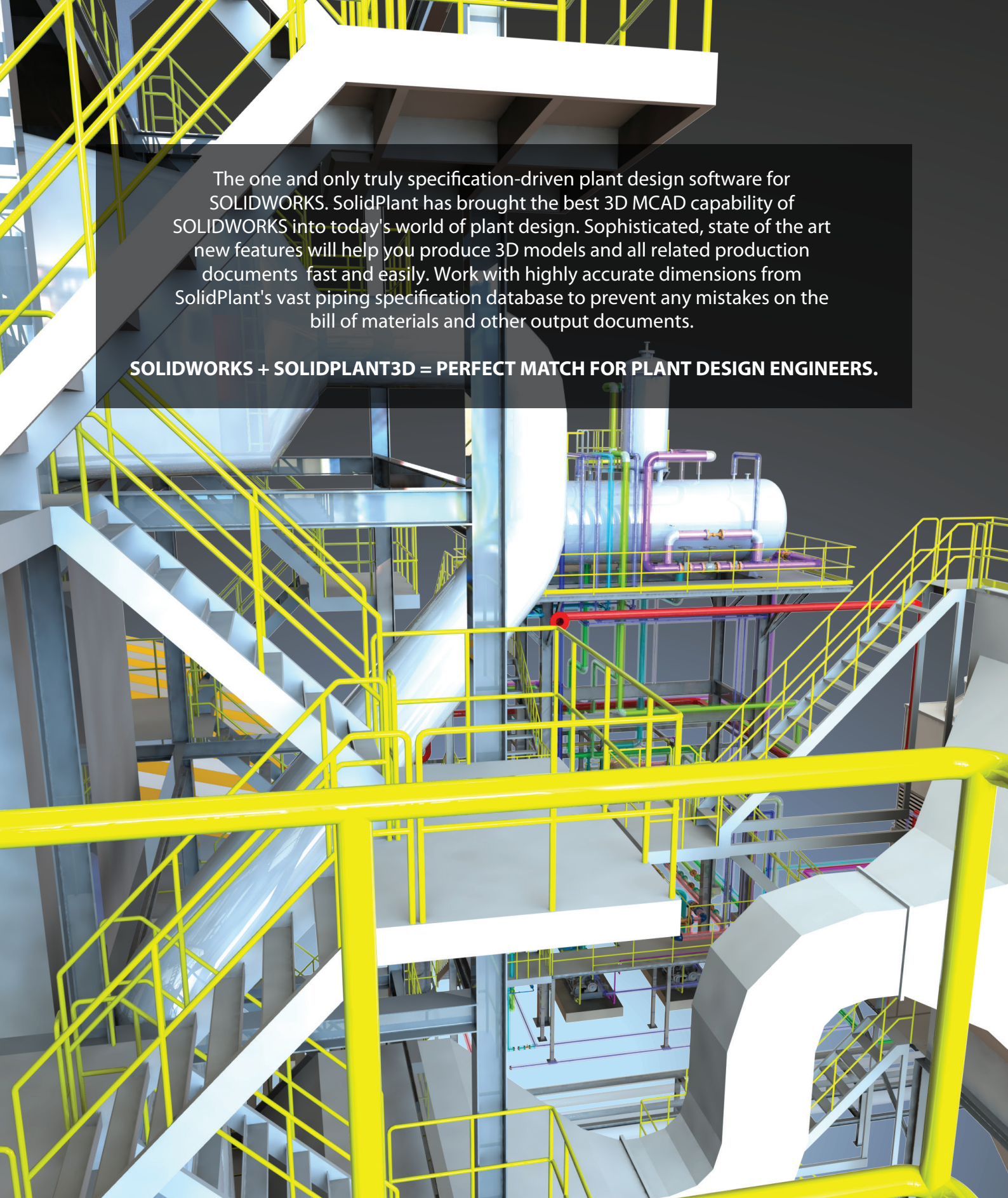
The PCF Export feature of SolidPlant 3D allows you to send out the 3D model to your favourite pipe stress analysis application.



### PDM Lite

SolidPlant 2018 gives the user more flexibility with PDM Lite as a stand-alone application, without the need of SOLIDWORKS PDM. PDM Lite offers new features to increase overall user friendliness. It is now possible to store the 'Vault' either inside or outside the database, allowing for more flexibility when choosing a project's location.





The one and only truly specification-driven plant design software for SOLIDWORKS. SolidPlant has brought the best 3D MCAD capability of SOLIDWORKS into today's world of plant design. Sophisticated, state of the art new features will help you produce 3D models and all related production documents fast and easily. Work with highly accurate dimensions from SolidPlant's vast piping specification database to prevent any mistakes on the bill of materials and other output documents.

**SOLIDWORKS + SOLIDPLANT3D = PERFECT MATCH FOR PLANT DESIGN ENGINEERS.**

## **SolidPlant B.V.**

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### **System requirements :**

OS : Microsoft Windows 7 (64 bit) or greater  
Processor : Intel® Core™ i5 process or Intel® Core™ i7 processor or Intel® Xeon® Processor E3 Family  
Memory : 16 GB minimum  
Disk Space : 50 GB minimum free hard disk space  
Video Card : 2 GB Microsoft OpenGL or Direct3D capable  
(\*SolidWorks Certified cards and drivers recommended)  
Software : SOLIDWORKS 2017-2018 Sp 2.0 or higher (64 bit)

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