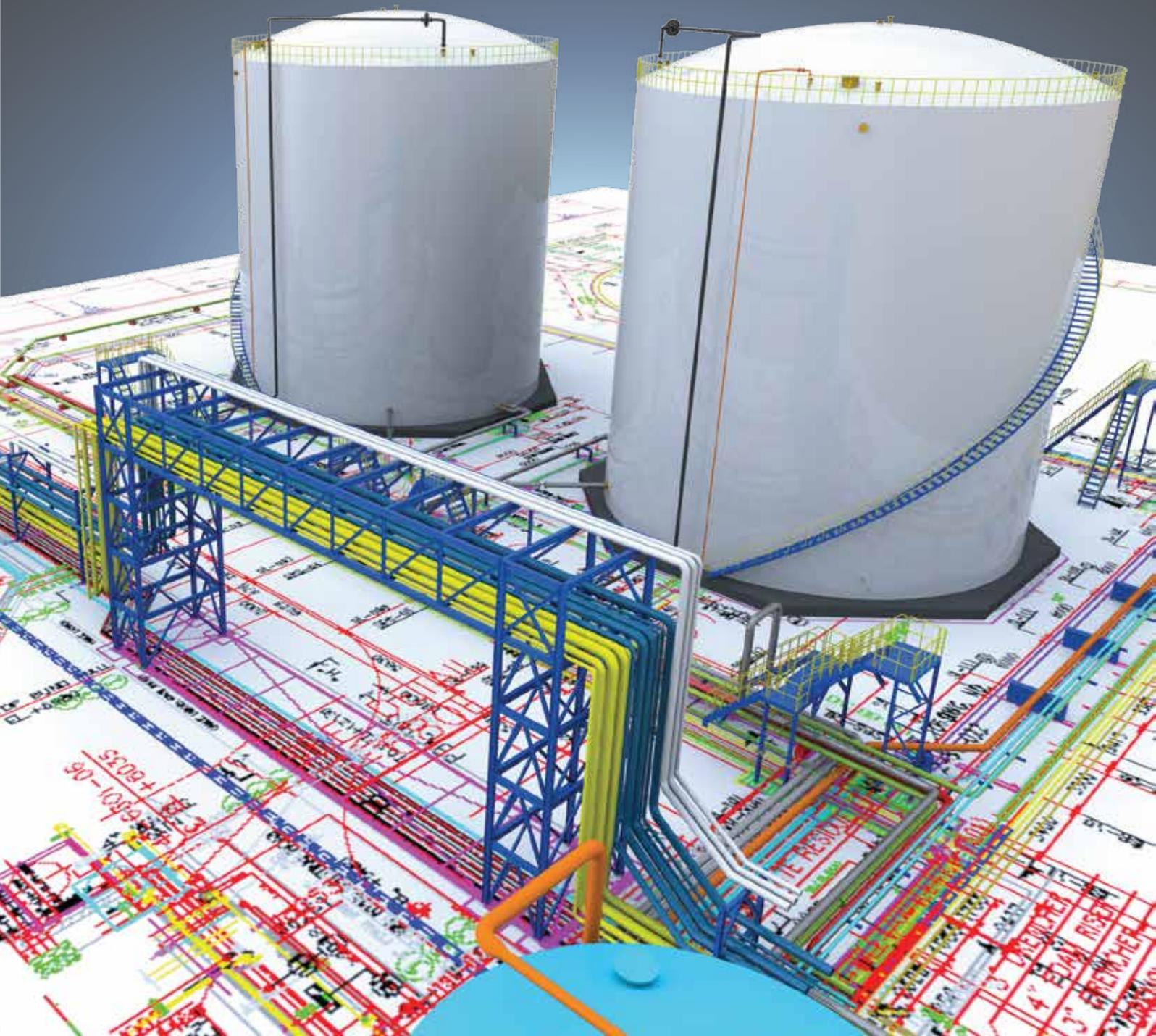


# SolidPlant

Comprehensive Plant Design for SolidWorks

**Route it your way,**



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.

## 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.

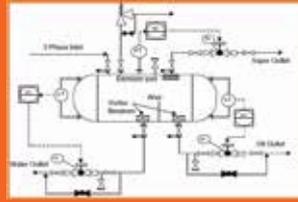
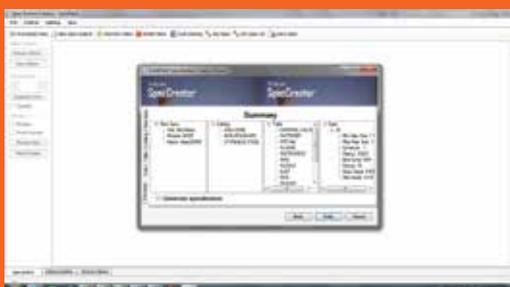
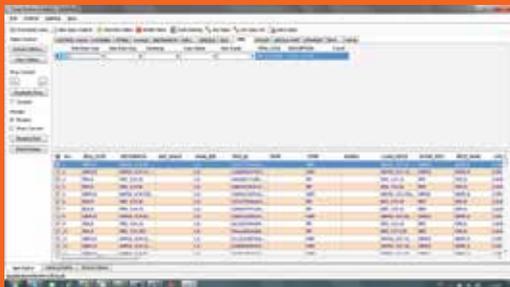
SolidPlant's SpecCreator provides a great tool for the engineer to prepare piping data as easily as possible without having to compromise on accuracy. SolidPlant is a strong advocate of the concept, "Do It Right the First Time!"

## 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.

## Spec. Wizard

A step by step Wizard style interface helps the user create piping specifications for his projects very easily without making mistakes. The specification can then be used or edited further to suit the needs of the designer.



## 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.

## 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, Conveyer 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.



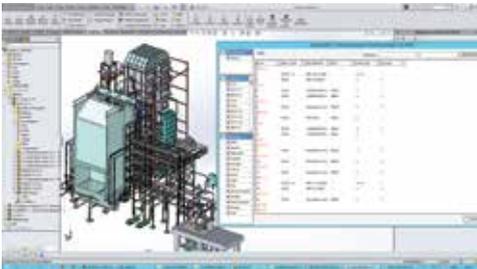
## Intelligent Pipe Supports

Based on the flexibility of SolidWorks mating features in an assembly, SolidPlant gives you the easiest way to place pipe supports. Our pipe support templates will allow you to place supports and edit them with just a few clicks. This will give you pipe supports that are required for your design quickly, in the way that they should be, automatically. Sloped supports and custom sized U-bolts are some of the features in SolidPlant Pipe supports feature.



## 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 will be accurate and reliable. The bill of materials can take off from Structures, Equipments and Piping in flexible format. We also can export this data to an Excel format if required.



## 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.

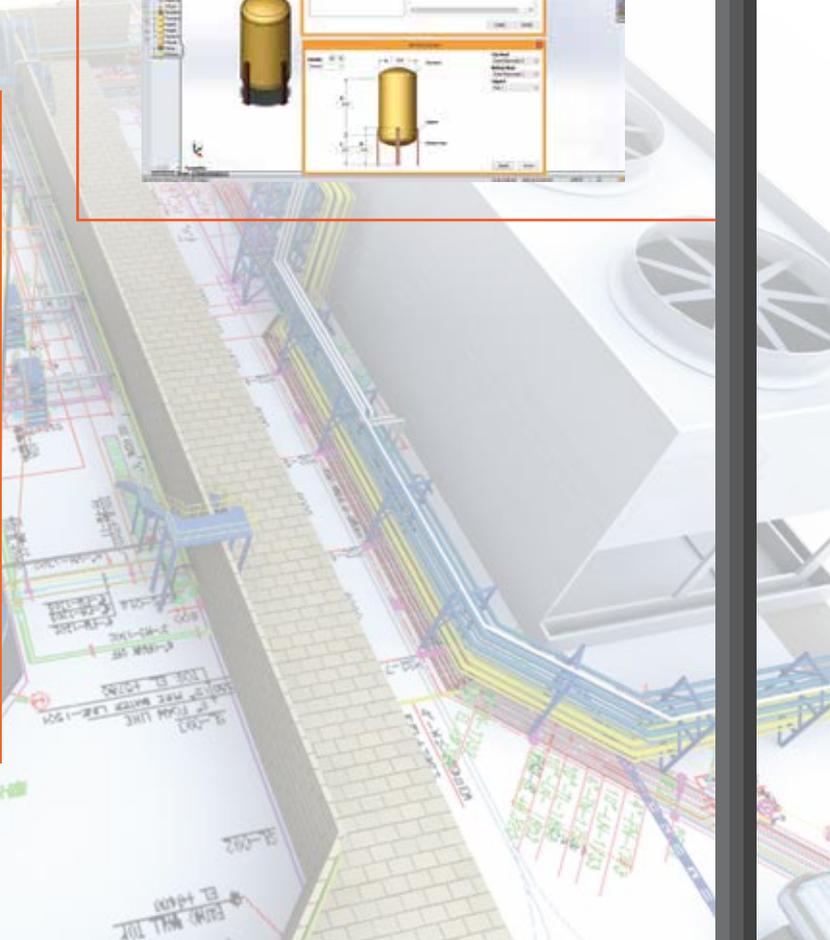
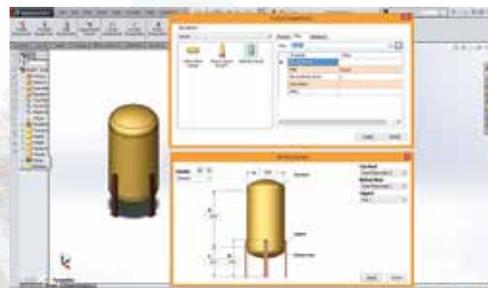


## Equipment Creation Templates

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 or worried 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.



## Piping

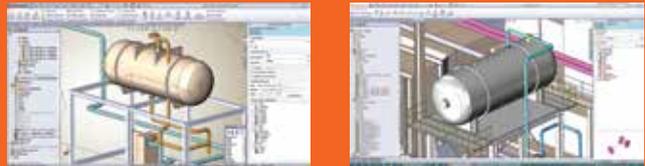
### Traditional Pipe Routing

This method is a combination between the manual method and the fully automatic techniques. 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 same time.



### Auto Routing

This method will help the designer create the best path or pipe route faster than ever. With just 2 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.



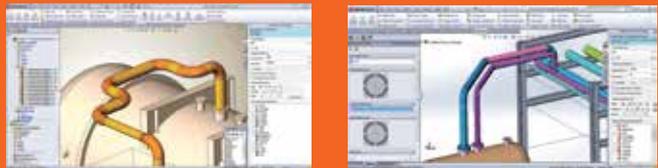
### Smart Routing

A unique feature called "Smart Routing" 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 pop up the valve list for the route based on that data. You can then easily drag and drop the valves onto the pipeline in the correct location.



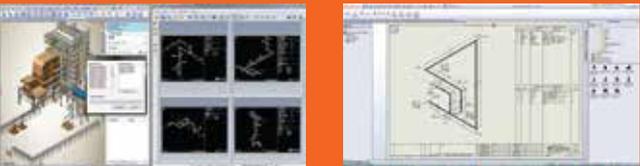
### Smart Fitting

SolidPlant has a cool feature called "Smart Fitting" that allows you to extend or add pipe branches by dragging toward any point you prefer. This feature will automatically put the fitting in the pipe. If it's an extending pipe, the fitting will change.



### Alias' ISOGEN® included

SolidPlant has embedded the de facto standard for generating isometric drawings, Alias' Isogen. 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.



### 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:

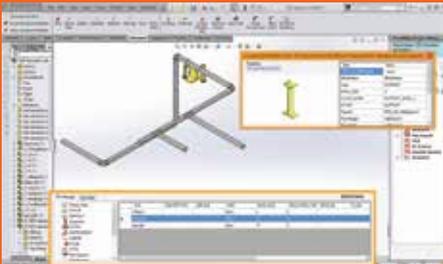
- Sloped pipe
- Pipe jogging
- Stub in
- Pipe with Insulation
- Pipe adjustment
- Tag finder



## Utilities

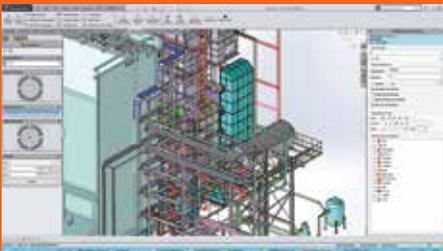
### User interface

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. Our interface and workflow were designed by experienced piping designers with the purpose of giving you a great experience when using SolidPlant 3D.



### Floor/Elevation arrangement

Our elevation management feature will help the plant designer who is not familiar with the mate features in SolidWorks to work with what they are familiar with, like the elevation on the Z axis and defined floor levels.



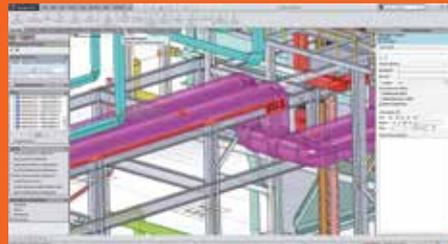
### GA Drawing generation and detailing

SolidPlant provides many tools and standard symbols of Plant design that do not exist in SolidWorks regular drawing features. The user can make a GA drawing faster and more accurately.



### Walkthrough/Collision detection

With the walkthrough feature of SolidWorks the user will be able to do a video animation or real-time walkthrough within the SolidWorks window. You don't need to export to any other software just to do a walkthrough.

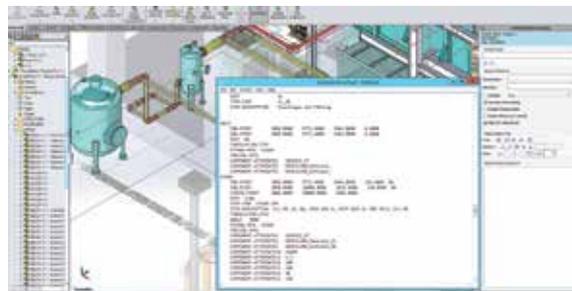


### PCF, IFC Imports/Exports

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.

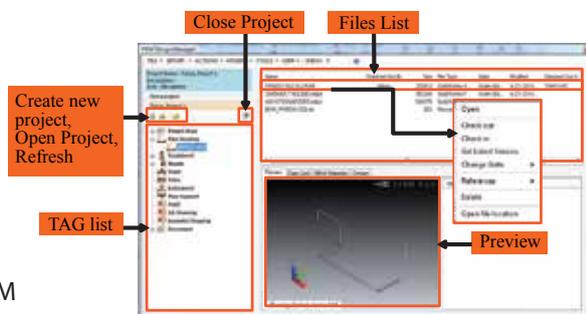
The benefit of SolidPlant's PCF Import is the ability to use existing pipe designs that were created in a system that has the ability to export PCF files. This feature will help the contractor so that they can accept 3D files from any system and then use these files to smoothly work within SolidPlant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

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



### Workgroup

SolidPlant provides the ability and tools to work as a workgroup. SolidPlant has written a plug-in for SolidWorks EPDM to embed the tag and model data. We have added functionality to the interface based on Tag number and definition. So you can use all the benefits of Solidworks EPDM such as Multiuser, Check-in/Check-out, Search/Preview, and authorised work flow design. If you don't have EPDM, We also provide a multiuser working environment feature without EPDM capability.



With SolidWorks platform, plant design engineers around the world will enjoy creating 3D models of everything from a small bolt to a large tower in a precise way. SolidPlant 3D allows you to finish your plant design and generate all necessary documents, such as general arrangement detail drawings and Isometrics, and of course Bill of Materials in a single platform.

Combining Solidworks and SolidPlant 3D is definitely a dream Plant design system that the engineers always desired for!



**System requirements :**

- OS : Microsoft Windows 7 (64 bit) or greater
- Processor : Intel Core i3 or AMD with SSE2 support
- Memory : 8 GB minimum
- Disk Space : 50 GB minimum free hard disk space
- Video Card : 1 GB Microsoft OpenGL or Direct3D capable  
(\*SolidWorks Certified cards and drivers recommended)
- Software : SolidWorks 2015 Sp 2.0 or higher (64 bit)

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