

Line List Report

Features

An automatic line list will help you maintain valid information on your P&IDs and with your process, mechanical and electrical groups. The custom line list from Applied Software provides the following advantages:

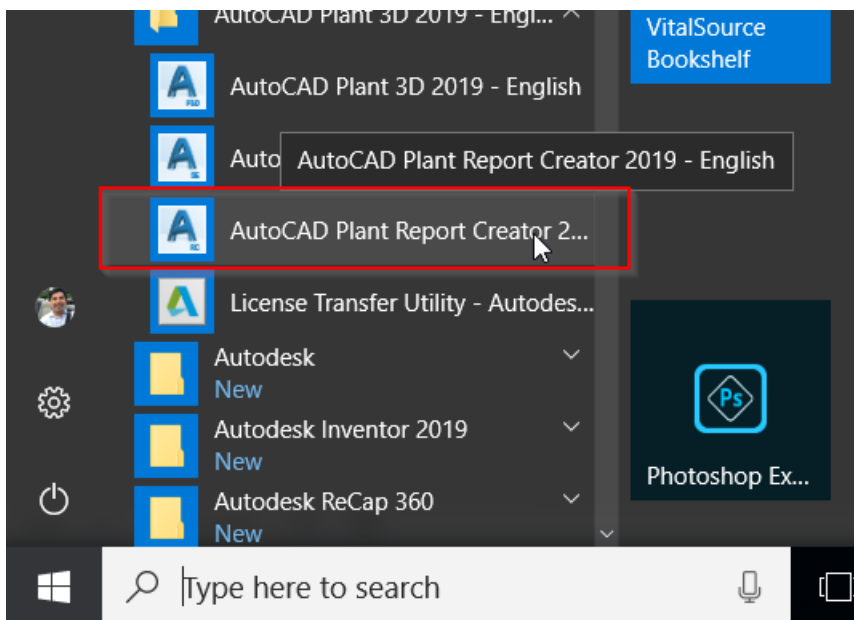
- Consistent Line List Output
- Line List Control
- Non-Plant 3d Users access fresh data
- Project Data can receive the latest changes

To use the automatic line list successfully, the following workflows will have to be adopted in your project practice.

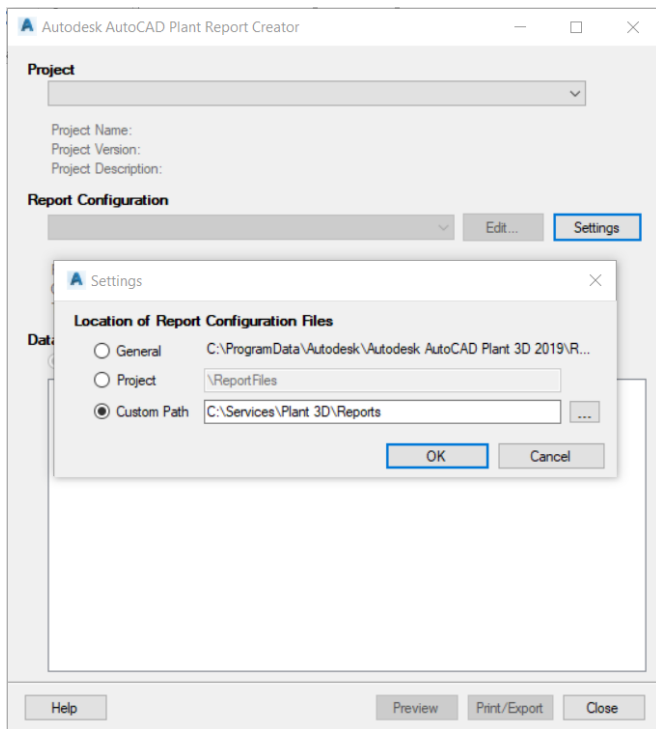
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Launch the Report Creator

The Report Creator application generates reports for AutoCAD P&ID/Plant 3d. To launch the report creator app, click the Windows (start) button, in the programs list scroll down to and expand the folder AutoCAD Plant 3D 20XX - English, and click AutoCAD Plant Report Creator 20XX.

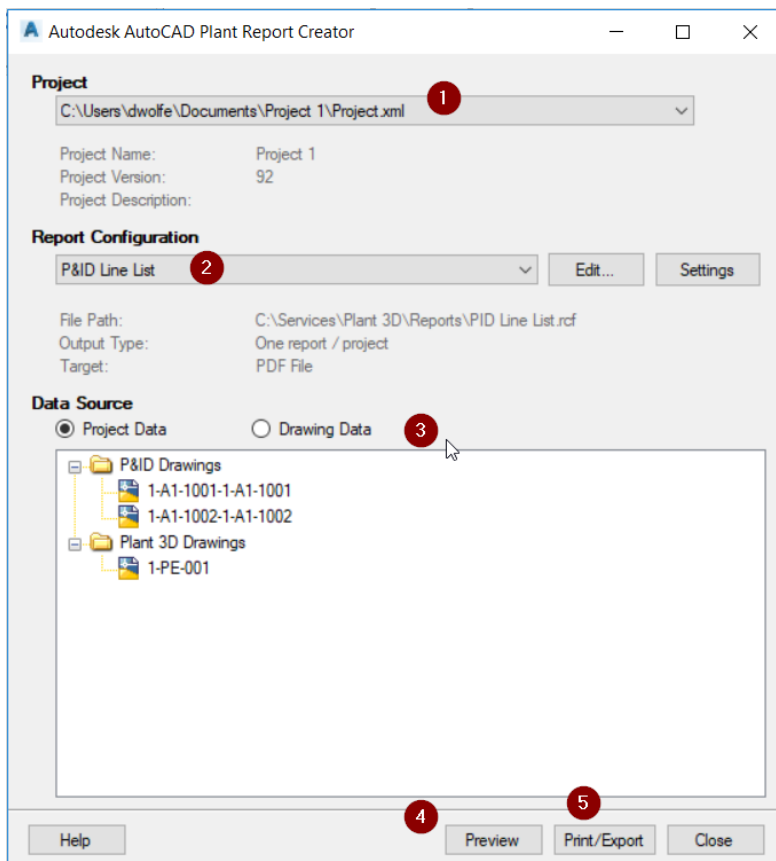


The first time the report creator is launch, the Settings dialog is shown. Select the Custom Path option and browse to the share report location. You may change the path at any time by clicking the Settings button in the main report creator window.



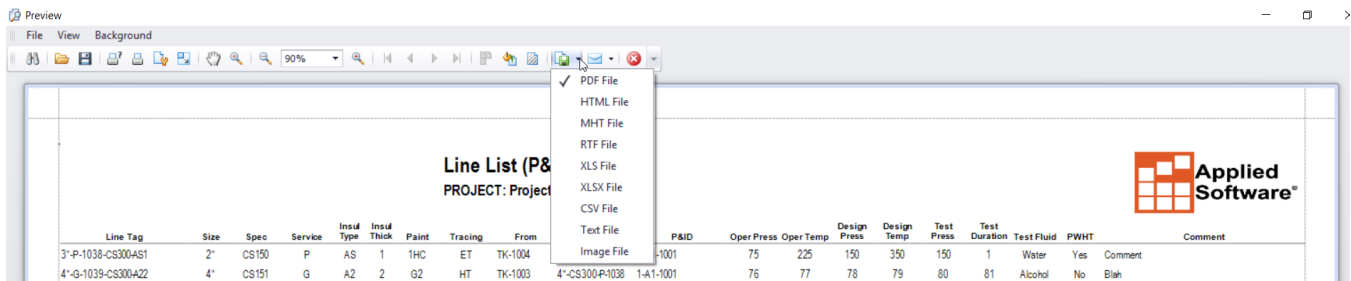
Create a Line List Report

In the report creator, the following steps will allow you to preview and create a report.

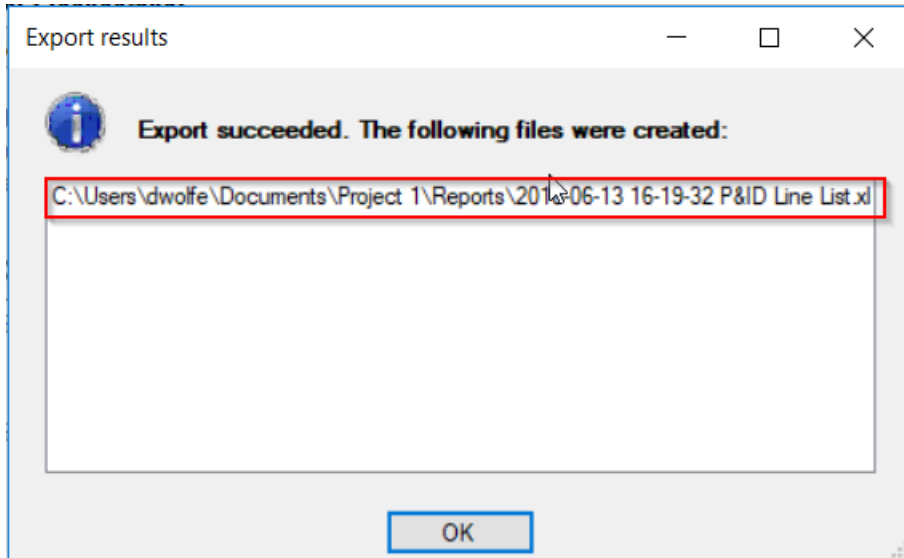


1. Select a project
2. Select the line list report
3. Select project data. Drawing data will allow you to create report from a selection of drawings instead of the whole project.
4. Click preview.
5. After closing the preview, you may click Print/Export to generate the report at the pre-defined report location with the default report type.

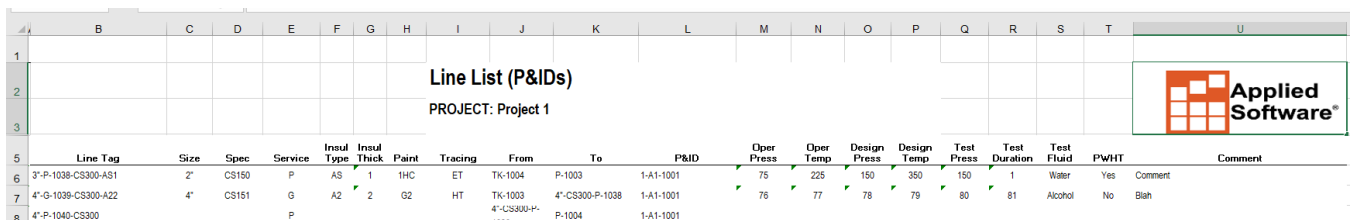
The report preview allows creating the report at a custom location with a custom file type, ideal for creating a pdf for client review.



After closing the preview and clicking Print/Export, the export results dialog shows with a clickable hyperlink to open the report directly.



Reports generated in Excel will have consistent column widths and row heights.



Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From	To	P&ID	Oper Press	Oper Temp	Design Press	Design Temp	Test Press	Test Duration	Test Fluid	PWHT	Comment
3"-P-1038-CS300-AS1	2"	CS150	P	AS	1	1HC	ET	TK-1004	P-1003	1-A1-1001	75	225	150	350	150	1	Water	Yes	Comment
4"-G-1039-CS300-A22	4"	CS151	G	A2	2	G2	HT	TK-1003	4"-CS300-P-1038	1-A1-1001	76	77	78	79	80	81	Alcohol	No	Blah

The first row of the Excel export will contain column headers read by Plant 3d for import. These columns must match the columns in the main report body. The first column contains the PnPID (unique database id) for the line groups being reported on. The PnPID column must remain in order to successfully import the data back into the project.

Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From	To	P&ID
634 3*-P-1038-CS300-AS1	2"	CS150	P	AS	1	1HC	ET	TK-1004	P-1003	1-A1-1001
706 4*-G-1039-CS300-A22	4"	CS151	G	A2	2	G2	HT	TK-1003	4*-CS300-P-1038	1-A1-1001

Modifying P&ID Line List Data

Even though the report pulls automatically from the data, at times more control is required on the specific line group properties that should be shown. While the report creator allow extensive options to customize how manual data is loaded, the default report allows for the following techniques to control the reporting line information.

Unmodifiable Columns

The columns highlighted will not be imported back into the project, therefore, any changes you make are not permanent.

Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From	To	P&ID	Oper Press
4*-CS300-P-1038	4"	CS300	P	AS	1	1HC	ET	TK-1004	P-1003	1-A1-1001	75
4*-G-1039-CS300-A22	4"	CS300	G	A2	2	G2	HT	TK-1003	4*-CS300-P-1038	1-A1-1001	76
4*-P-1040-CS300	4"	CS300	P					4*-CS300-P-1038	P-1004	1-A1-1001	
3*-P-1042-CS300	4"	CS300	P					P-1004	E-1002	1-A1-1001	

Selecting the Main Size and Spec

When the IsMainLineSegment property is set to true for a line segment, the report will pull the size and spec from that line to fill in the report data.

In this example, the size and spec can be switched from 4" to 3" by toggling the main line segment.

Line List (P&IDs)

PROJECT: Project 1

Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From	To
4"-CS300-P-1038	4"	CS300	P	AS	1	1HC	ET	TK-1004	P-1003
4"-G-1039-CS300-A22	4"	CS300	G	A2	2	G2	HT	TK-1003	4"-CS300-P-1038

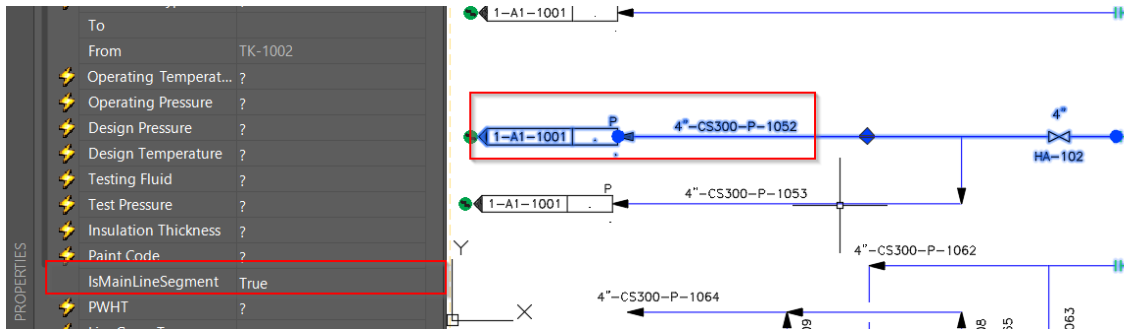
Line List (P&I)

PROJECT: Project 1

Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From
3"-CS150-P-1038	3"	CS150	P	AS	1	1HC	ET	TK-1004
4"-G-1039-CS300-A22	3"	CS150	G	A2	2	G2	HT	TK-1003
4"-P-1040-CS300	3"	CS150	P					4"-CS300-P-1038

Setting the P&ID Drawing

The IsMainLineSegment also defines with drawing should be reported in the Drawings property.



Line List (P&IDs)

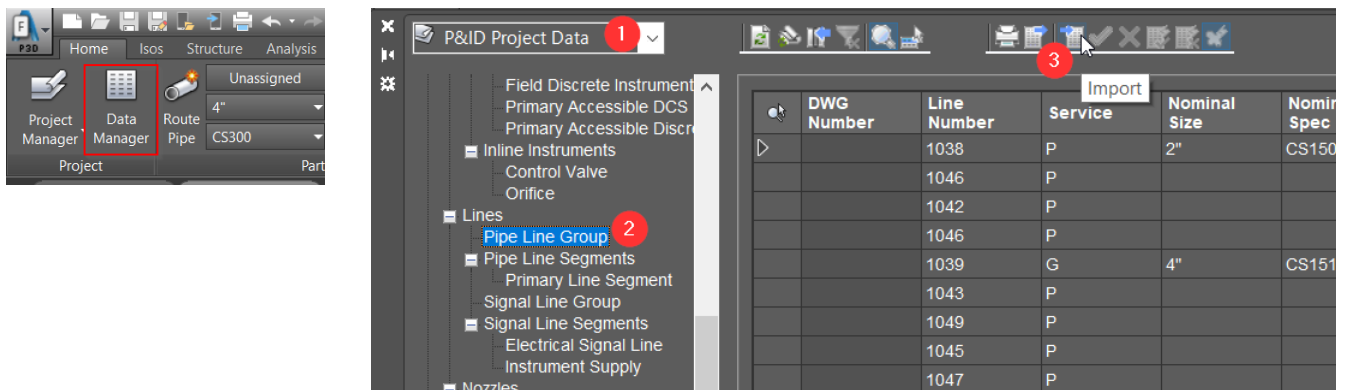
PROJECT: Project 1

Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From	To	P&ID	O
3"-P-1038-CS150-AS1	3"	CS150	P	AS	1	1HC	ET	TK-1004	P-1003	1-A1-1001	
4"-G-1039-CS300-A22	4"	CS151	G	A2	2	G2	HT	TK-1003	4"-CS300-P-1038	1-A1-1001	
4"-P-1040-CS300	4"	CS300	P					4"-CS300-P-1039	P-1004	1-A1-1001	
3"-P-1042-CS300	3"	CS300	P					P-1004	E-1002	1-A1-1001	
3"-P-1043-CS300	3"	CS300	P					P-1003	3"-CS300-P-1042	1-A1-1001	
3"-P-1044-CS300	3"	CS300	P					3"-CS300-P-1043	E-1001	1-A1-1001	
3"-P-1045-CS300	3"	CS300	P					E-1002, 1-A1-1001	3"-CS300-P-1046	1-A1-1001	
3"-P-1046-CS300	3"	CS300	P					TK-1003		1-A1-1001	
4"-P-1046-CS300	3"	CS300	P					E-1002, 4"-CS300-P-1046, TK-1003	4"-CS300-P-1046, TK-1003	1-A1-1001	
3"-P-1047-CS300	3"	CS300	P					3"-CS300-P-1046	TK-1004	1-A1-1001	
4"-P-1049-CS300	4"	CS300	P					E-1001, TK-1003		1-A1-1001	
4"-P-1052-CS300	4"	CS300	P					TK-1002	E-1002	1-A1-1002	
4"-P-1053-CS300	4"	CS300	P					4"-CS300-P-1052	E-1001	1-A1-1002	
4"-P-1054-CS300	4"	CS300	P					E-1007	TK-1003	1-A1-1002	

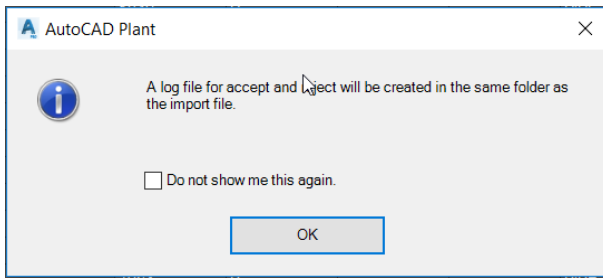
Import the Line List Report

To import the P&ID Line list back into the project, open the data manager.

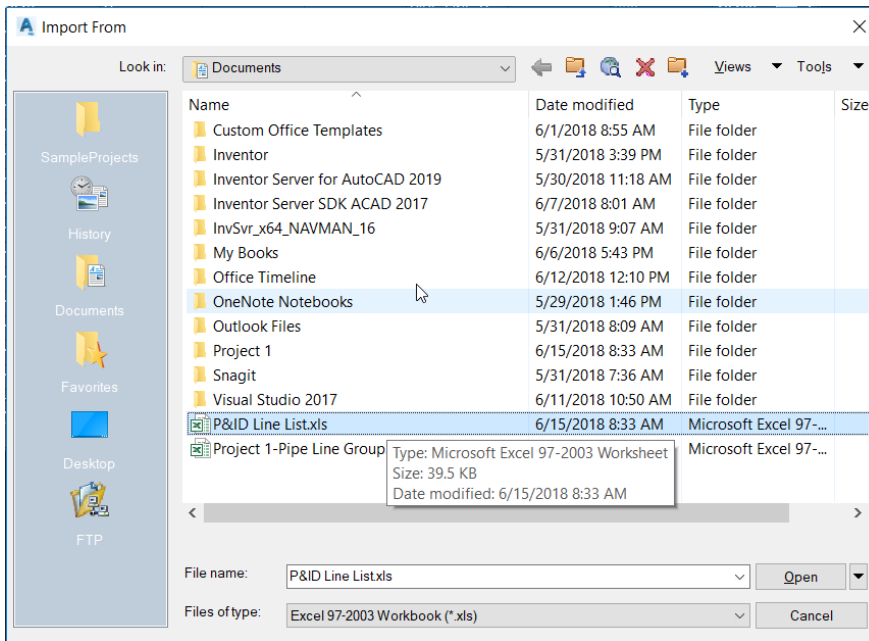
Next select P&ID Project data from the drop down (1), select Pipe Line Group from the class tree (2), and then click Import (3).



You may get a warning dialog about a log file, you may check the box to not show the warning and click ok.



Next a dialog will show asking you to select the Excel file to import.



Files generated from the report preview go wherever the user saved them. Files created from the Export/Print button go to the location defined in the report settings. Typically the project folder\Reports location is used.



Choice

Result

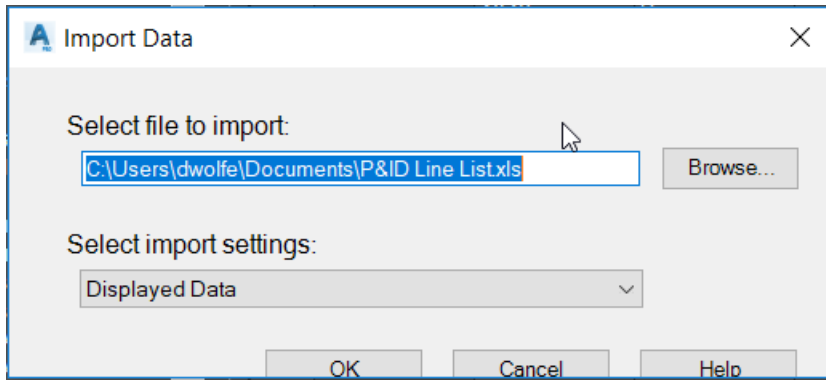
Export Reports to the same file

Import is always from the same file. CAD User must import immediately after changes to lessen chance of losing edits.

Export Reports to different files by date

Editor must inform CAD user of which file needs to be imported.

Accept the default settings for the import.



Changes are highlighted in yellow, and the old value can be previewed by hovering over a cell (1). A single change may be accepted or rejected (2), or all changes can be accepted or rejected (3).

