

# Line List Report

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## 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.

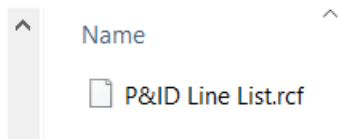
- [Storing Report Creator Templates](#)
- [Configure Project Settings](#)
- [Launch the Report Creator](#)
- [Create a Line List Report](#)
- [Modify P&ID Line List Data](#)
- [Import Line List Report](#)

## Storing Report Creator Templates

Report creator templates may be delivered in a \*.zip file and will end in an \*.rcf file extension. Choose a folder on a network or a shared location that all users who need the report templates will have access to.

Copy the received \*.rcf file to your shared reports folder location.

Local Disk (C:) > Services > Plant 3D > Reports



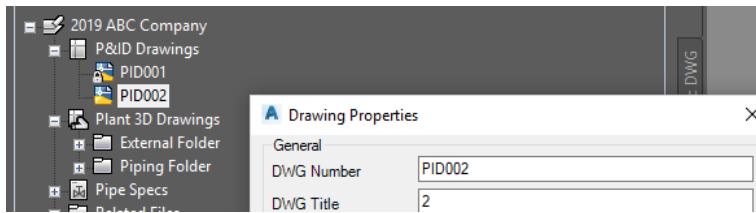
## Configure Project Settings

The Applied Software Line List uses custom project settings. Perform the following changes to your project setup to use the line list.

- [Set Drawing Number](#)
- [Add Pipe Line Group Properties](#)
- [Add Pipe Line Segment Properties](#)

## Set Drawing Number

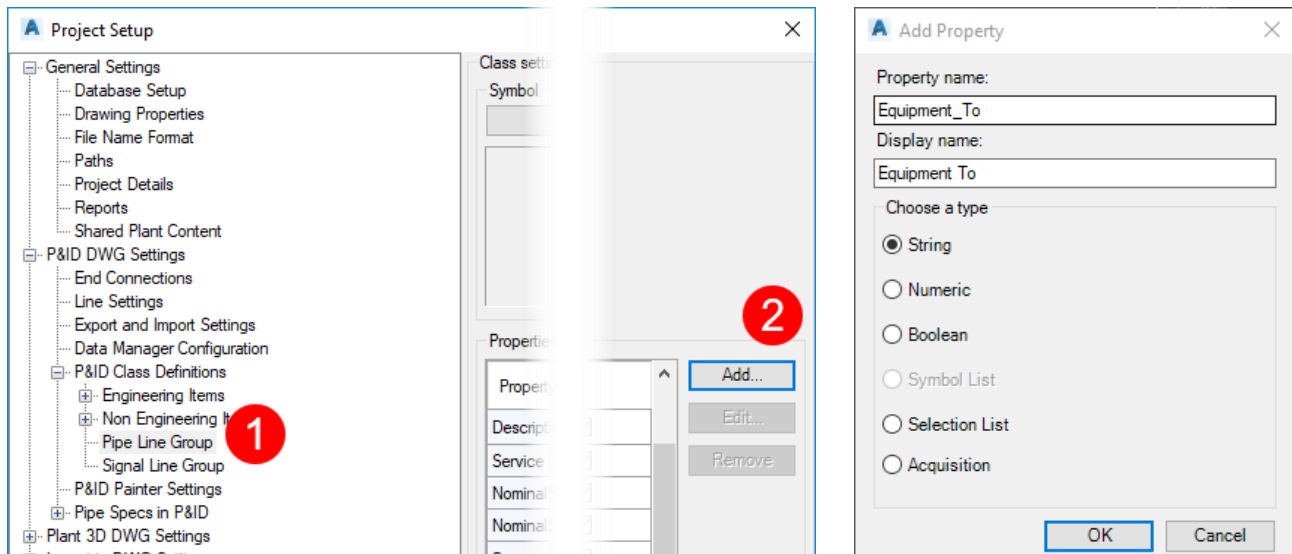
The Line List uses the drawing number property. Make sure each drawing has the drawing number assigned by right-click on the file in Project Manager, selecting properties and filling out Drawing Number.



## Add Pipe Line Group Properties

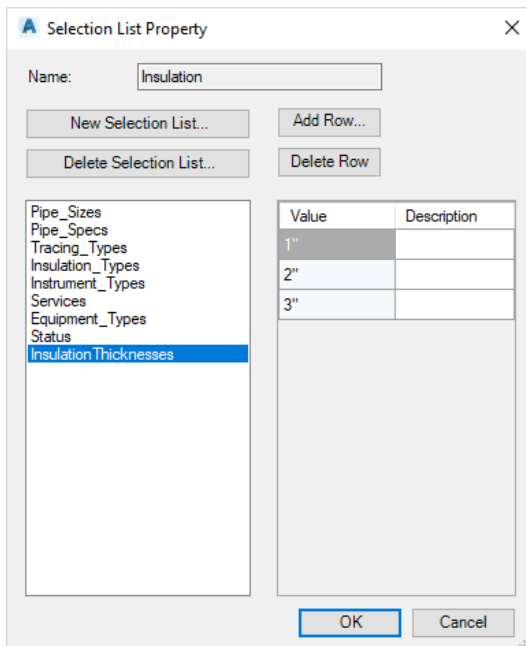
The Line List uses several custom pipe line group properties to track and fill in information. Add the following properties to the Pipe Line Group class if they are not present already

- OperatingPressure
- OperatingTemperature
- DesignPressure
- DesignTemperature
- Test\_Pressure
- Test\_Duration
- Test\_Fluid
- PWHT
- Equipment\_To
- Equipment\_From
- Related\_Drawings



Next add the following selection list properties to the Pipe Line Group class. Insulation and Paint will need to be created as new selection lists. Add your own list values as required.

- InsulationType
- Insulation
- Tracing
- Paint

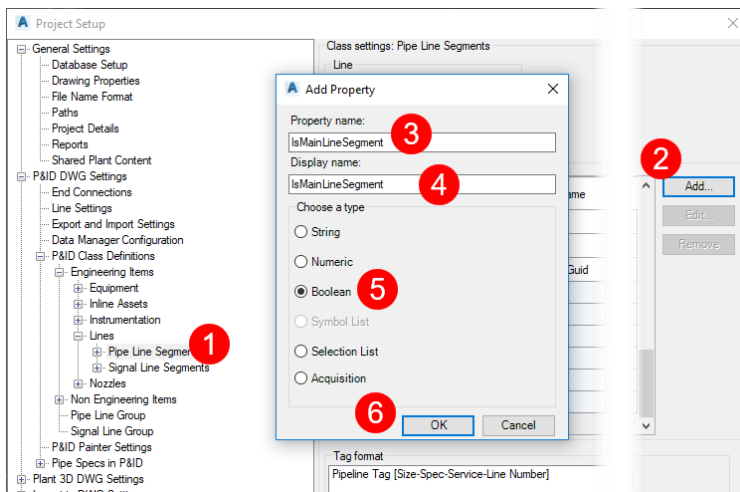


## Add Pipe Line Segment Properties

The Line List uses custom properties on the Line Segment class to allow users to customize the display of the lines in the report.

Add the following properties to the Pipe Line Segments class:

- IsMainLineSegment – Add as Boolean
- LineGroupTag – Acquire from Pipe Line Group.Tag property



If the following properties have no data, they can be safely removed from the project setup. They add no value on the line segment class, and are not the correct type to acquire from the Pipe Line Group class.

- Insulation
- Paint Code
- OperatingTemperature
- OperatingPressure
- DesignPressure
- DesignTemperature
- TestingFluid
- TestPressure

- PostWeldHeatTreatment

equipment  
 Line Assets  
 Instrumentation  
 Lines  
 ↳ Pipe Line Segments  
 ↳ Signal Line Segments  
 Nozzles  
 Engineering Items  
 Line Group  
 Line Group  
 Header Settings  
 Settings in P&ID  
 ↳ Settings  
 ↳ Settings  
 Settings

Insulation Type	System property whi...	Insulation Type	▼	List	None
Insulation		Insulation Thickness		Number	None
PaintCode		Paint Code		String	None
To	System property whi...	To		String	None
From	System property whi...	From		String	None
Operating Temperat...		Operating Temperat...		Number	None
OperatingPressure		Operating Pressure		Number	None
DesignPressure		Design Pressure		Number	None
DesignTemperature		Design Temperature		Number	None
TestingFluid		Testing Fluid		String	None
TestPressure		Test Pressure		Number	None
PostWeldHeat Treat...		PWHT		String	None
Spec Part	System property whi...	Spec Part		String	None

Once the properties have been removed, create an Insulation acquisition from the Pipe Line Group Insulation.

Tracing and Insulation Type already have the selection list type and can be made to acquire by clicking the acquisition button in the Acquisition property. Acquire the corresponding property from the Pipe Line Group.

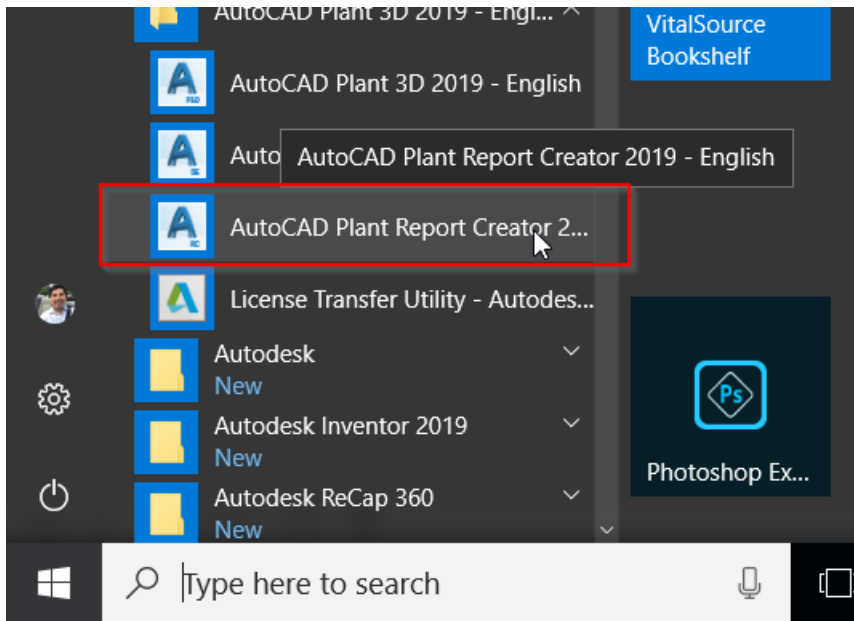
*Status	System property whi...	Status	New	▼	List	None
*ParamOnLine		ParamOnLine			String	None
Tag	System property whi...	Tag			String	None
Size	System property whi...	Size		▼	List	None
Spec	System property whi...	Spec		▼	List	None
Tracing		Tracing		▼	List	None
InsulationType		Insulation Type		▼	List	None

Make sure the default values for the properties added are set correctly.

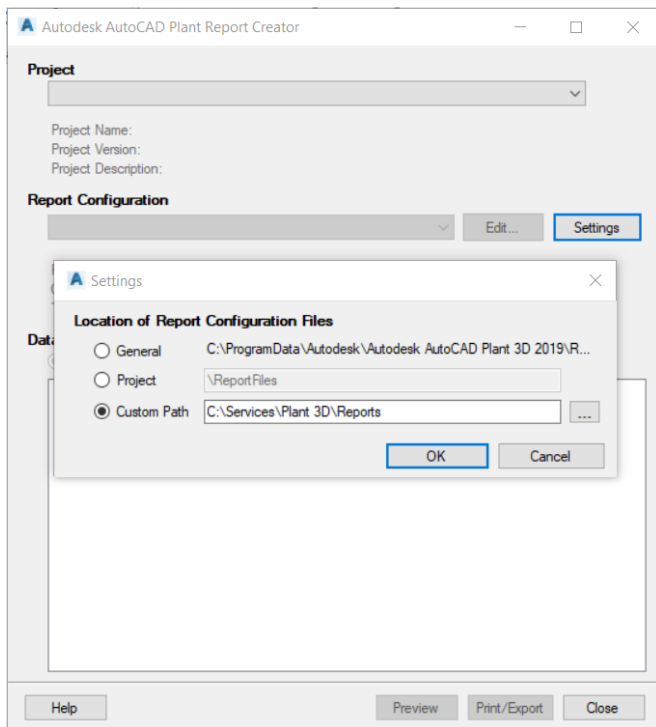
If you are setting up an existing project and you create new acquisition properties, you need to run PLANTREFRESHACQPROPERTY to update the acquisition property values.

## 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.



## Configuring Your Line List

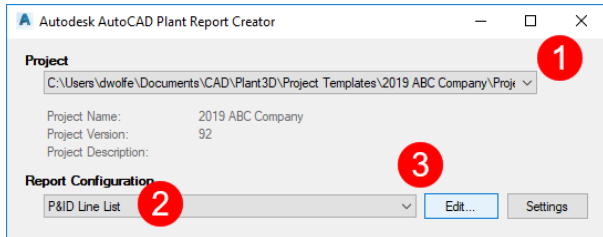
To customize the Line List for various clients, you may want to change the report logo, or add/remove columns.

- [Changing the Report Logo](#)

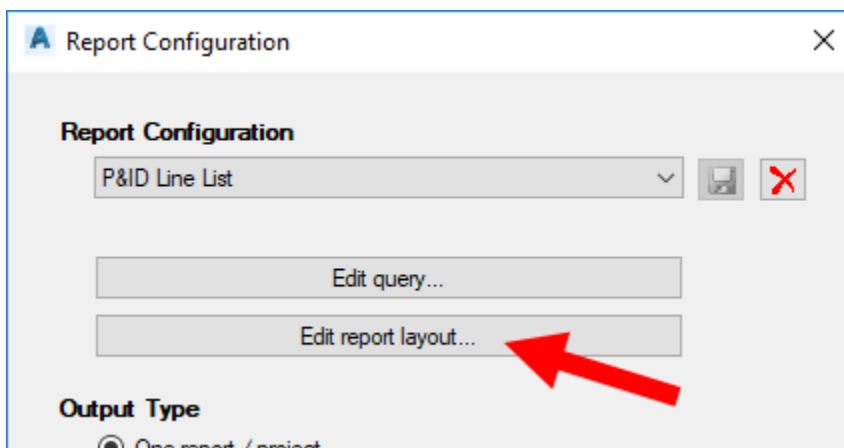
- [Column Add/Removing](#)
- [Reserved Columns](#)
- [Customizing the Line Tag](#)

## Changing the Report Logo

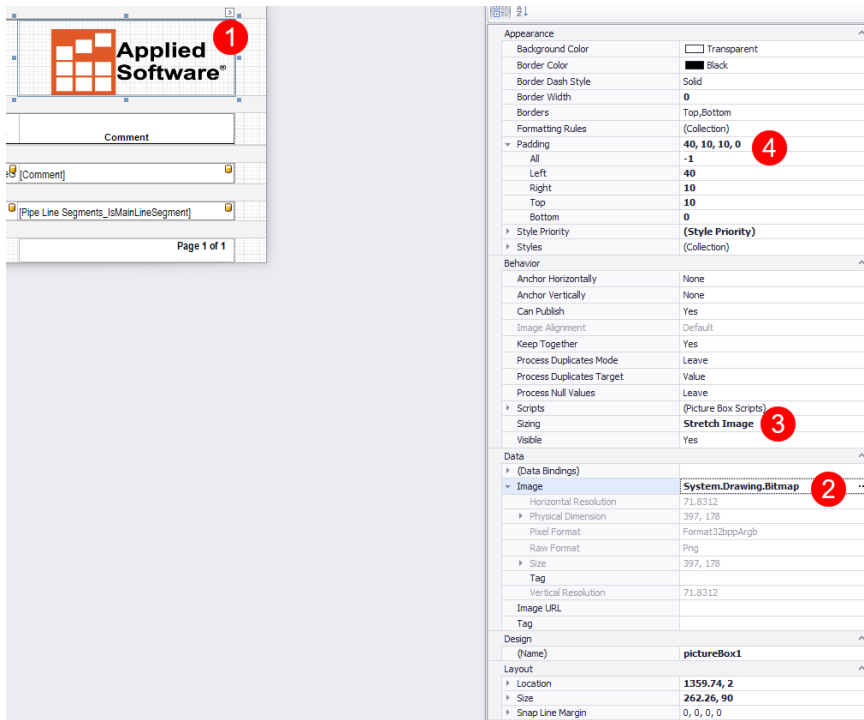
Launch the report creator app, select a project, and the report template and click edit.



Click Edit Report Layout

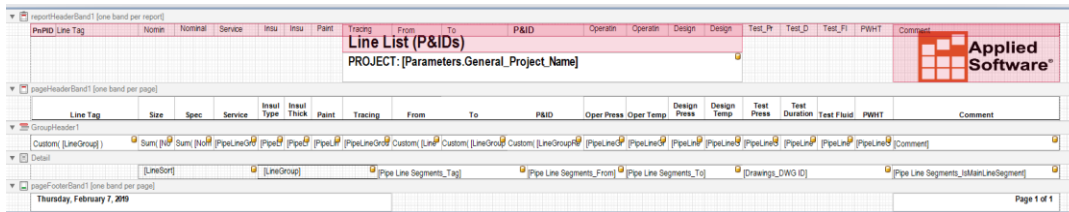


Select the image (1), click browse in the Property Grid (2) and select a file. You can alter the Sizing model (3) and adjust padding (4) to change the spacing around the image.

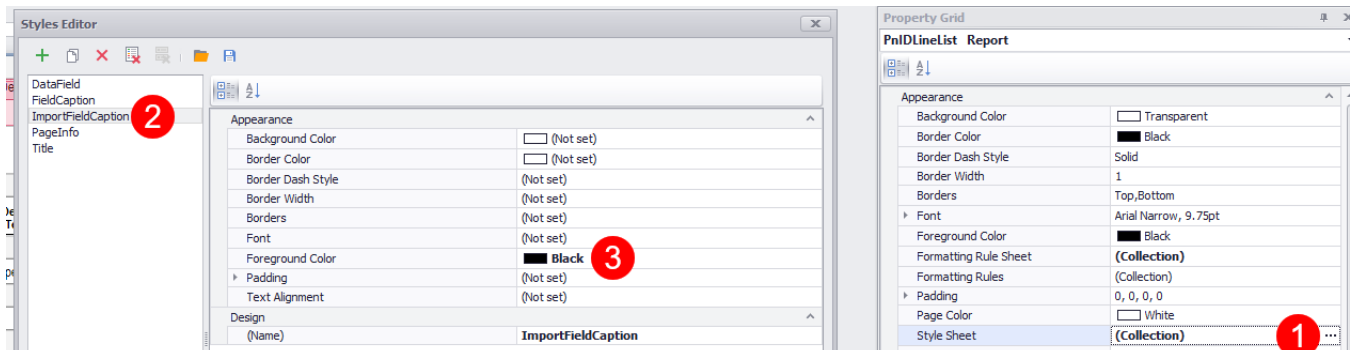


## Column Add/Removing

Columns stored in the Pipe Line Group class may be added or removed. If you are replacing a column, drag and drop it from the field list to the desired column location. Any column added must have its import description added to the table at the top of the report that is minimized by default.



To view the table, select it, and set its Height to 20. Go to Style Sheet and set the ImportFieldCaption style Foreground color to Black.



Set the ImportFieldCaption back to transparent when finished editing the column names.

## Reserved Columns

There are several special columns that are reserved and should not be modified or the report may not

function. The reserved columns are:

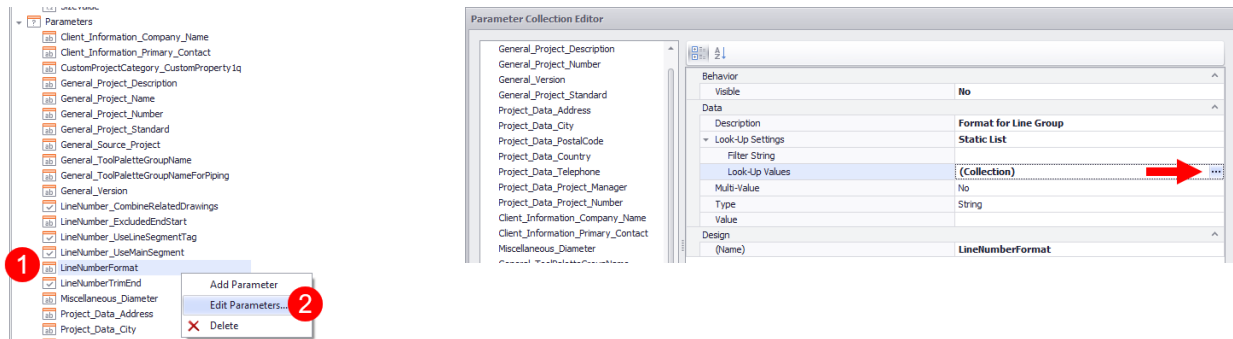
- Line Tag
- Size
- Spec
- From
- To
- P&ID

pageHeaderBand1 [one band per page]											
Line Tag	Size	Spec	Service	Insul Type	Insul Thick	Paint	Tracing	From	To	P&ID	Oper Press O
GroupHeader1											
Custom( [LineGroup] )	Sum( [No] )	Sum( [No] )	[PipeLineGro	[PipeL	[PipeL	[PipeLin	[PipeLineGro	Custom( [Line	Custom( [LineGroup	Custom( [LineGroupRe	[PipeLineGr [P
Detail											
	[LineSort]		[LineGroup]				[Pipe Line Segments_ Tag]			[Pipe Line Segments_From]	[Pi
pageFooterBand1 [one band per page]											
Thursday, February 7, 2019											

Columns may be added in front of or behind the columns to change position, but the columns themselves should not be modified.

## Customizing the Line Tag

This report includes the ability to customize the Line Tag property. In the Field List panel, scroll down and find LineNumberFormat under the Parameters section. Click Collection in the Parameter Collection Editor.



In the Lookup values dialog, Add/remove items to match your client's line number format. Dashes and ? are automatically trimmed off in the display of the line number.



Look-Up Values X

Value	Description
▶ PipeLines_Size	
-	
PipeLineGroup_Service	
-	
PipeLineGroup_LineNumber	
-	
PipeLines_Spec	
-	
PipeLineGroup_InsulationType	
PipeLineGroup_InsulationThickness	

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OK Cancel