PD5740 – AutoCAD® P&ID and AutoCAD® Plant 3D: Hidden Treasures in Your Databases

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Class summary

You will learn:

- how AutoCAD® P&ID/Plant 3D uses databases
- what the difference between Table and View is
- what are relationship tables for
- how you create your own views
- how you get the result of a view into your drawing

Key learning objectives

At the end of this class, you will be able to:

- Understand how AutoCAD P&ID software and AutoCAD Plant 3D software handle databases
- Learn where and how the data is stored in the database
- Learn how to create database views
- Discover ways to use the view's result for your work

How AutoCAD® P&ID/Plant 3D uses databases

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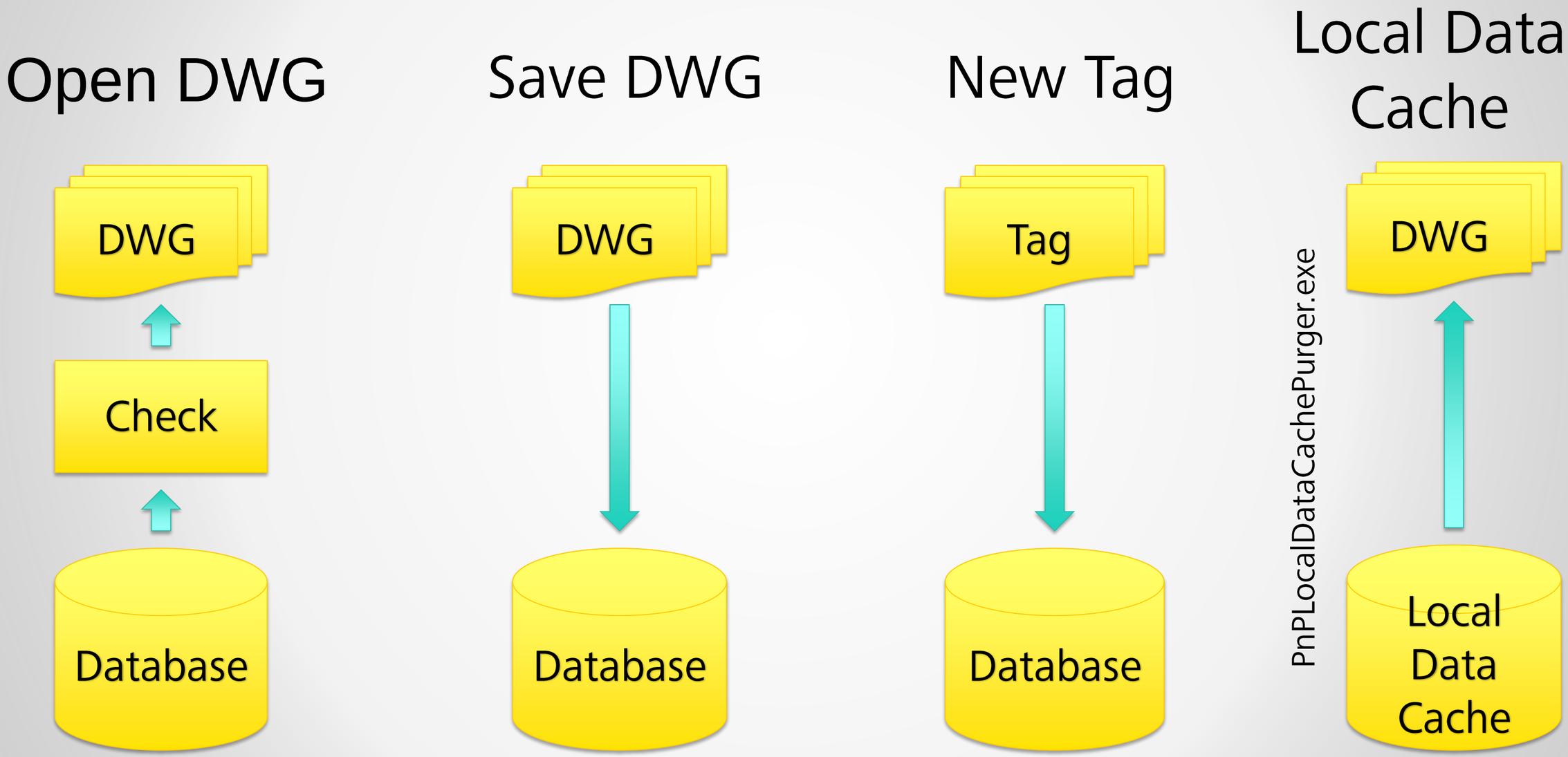

What is the difference between Table and View

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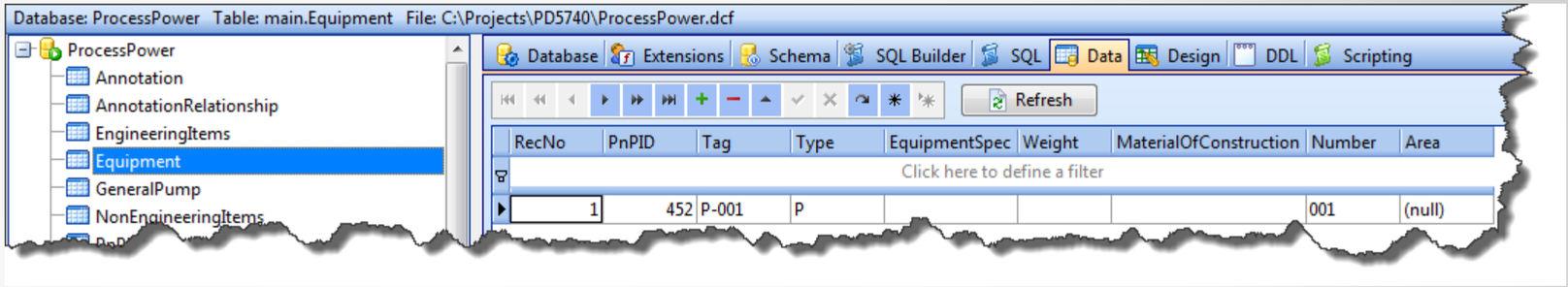
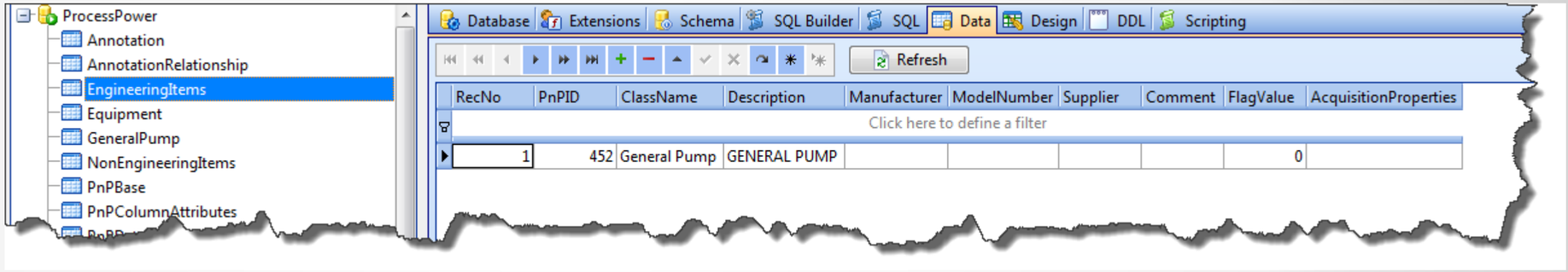
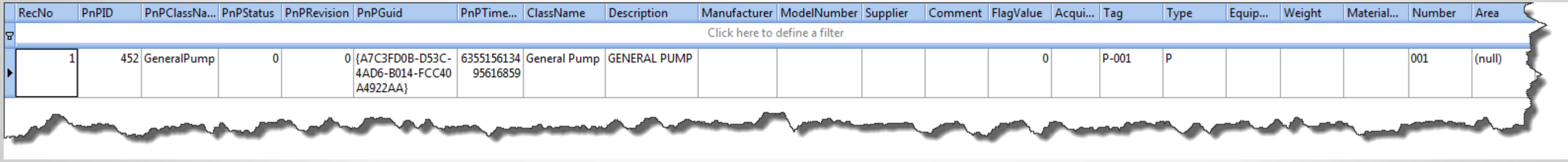
Equipment Table



EngineeringItems Table



Equipment_PNP View

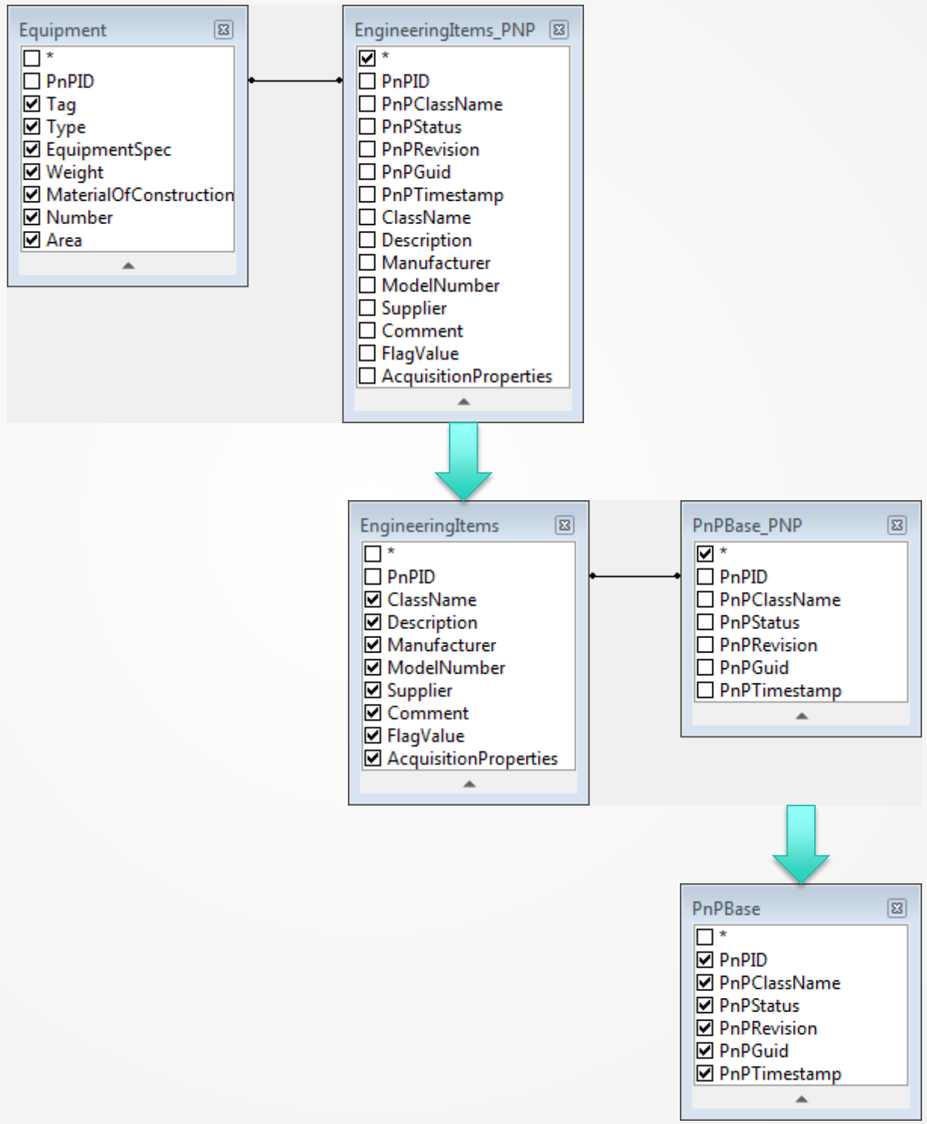


What is the difference between Table and View

Equipment_PNP
View

EngineeringItems_PnP
View

PnPBase_PNP
View



What are relationship tables for

What are relationship tables for

Off-Page Connector

PipeLineGroup & PipeLineSegements

LineStartAsset & LeinEndAsset

ConnectorsRelationship

RecNo	PnPID	PnPGuid	PnPTimestamp	Connector1	Connector2
Click here to define a filter					
1	29	{6E3813A2-7A42-4A7B-8780-E01A1752D295}	635515626089217496	488	508

Connectors

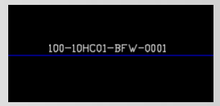
RecNo	PnPID	ConnectorNumber
Click here to define a filter		
1	488	
2	508	

PipeLineGroupRelationship

RecNo	PnPID	PnPGuid	PnPTimestamp	PipeLineGroup	PipeLine
Click here to define a filter					
1	5	{836F240F-54FD-450A-851D-0C16E55BA7A7}	635515624691559254	468	462
2	23	{54839448-D5CF-435A-87D4-38C2EA19B914}	635515625763453034	504	497
3	28				

PipeLines

RecNo	PnPID	Tag	Size	Spec	Tracing	InsulationType	Insulation	PaintCode	To	From	Op
Click here to define a fil											
1	462	100-10HC01-BFW-0001	100	10HC01					W-001	P-001	
2	478	100-10HC01-BFW-0002	100	10HC01						W-001	
3	497	100-									



PipeLineGroup

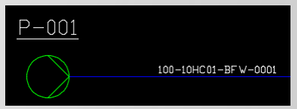
RecNo	PnPID	Tag	LineNumber	Description	Service	NominalSize	NominalSpec	Comment	AcquisitionProperties
Click here to define a filter									
1	468	0001	0001	PIPE LINE GROUP	BFW	(null)	(null)	(null)	(null)
2	484	?		PIPE LINE GROUP		(null)	(null)	(null)	(null)
3	504	0002	0002	PIPE LINE GROUP	BFW	(null)	(null)	(null)	(null)

LineStartAsset

RecNo	PnPID	PnPGuid	PnPTimestamp	Line	Asset
Click here to define a filter					
1	6	{D40051A9-3533-49A1-9E9B-93282E2EB5A3}	635515624691862000	462	452
2	16	{406194BD-CDB9-48AE-BD			

Equipment

RecNo	PnPID	Tag	Type	EquipmentSpec	Weight	MaterialOfConstruction	Number	Area
Click here to define a filter								
1	452	P-001	P				001	(null)
2	457	W-001	W				001	(null)
3	492	K-001	K				001	(null)



How to create your own Views

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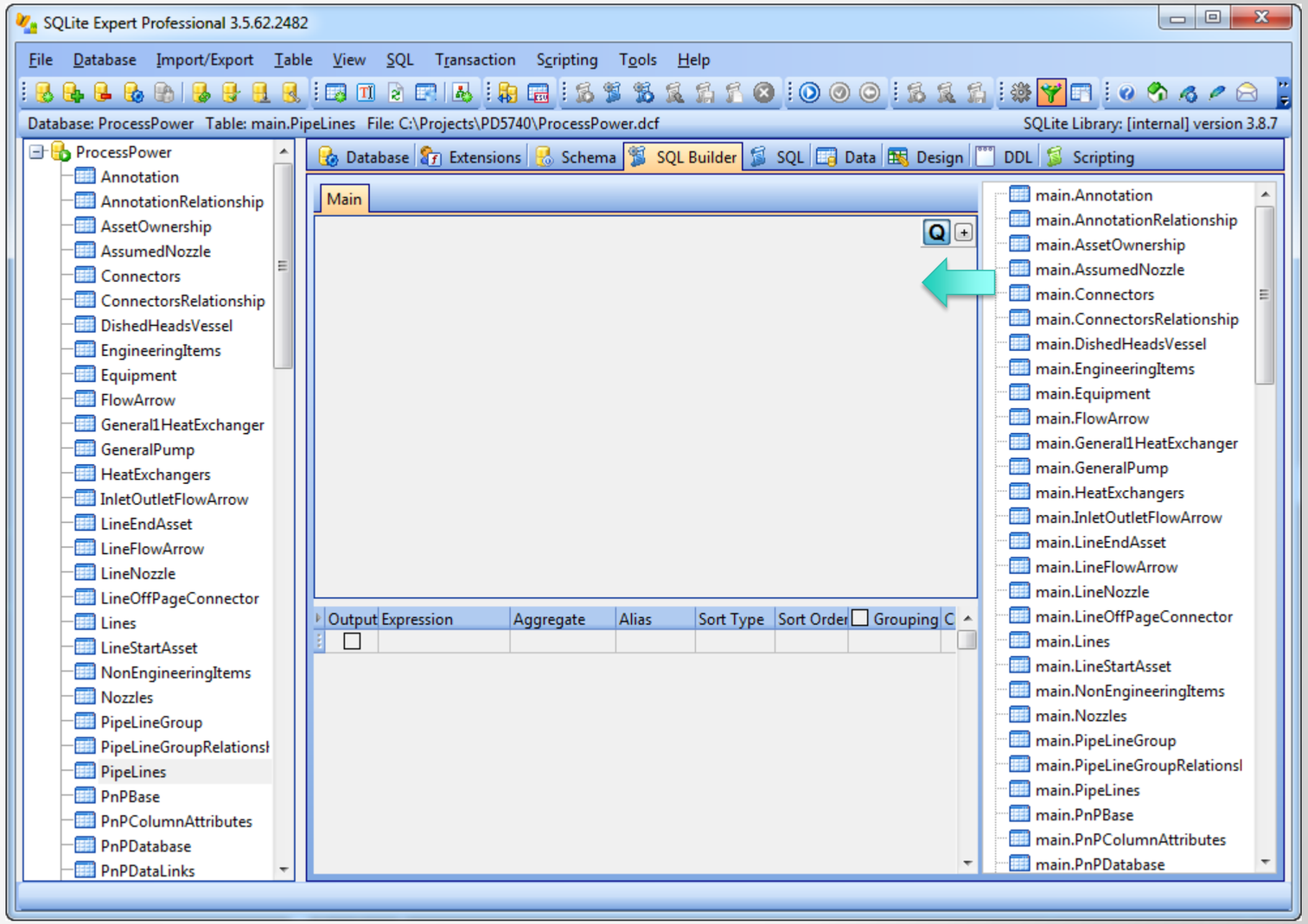
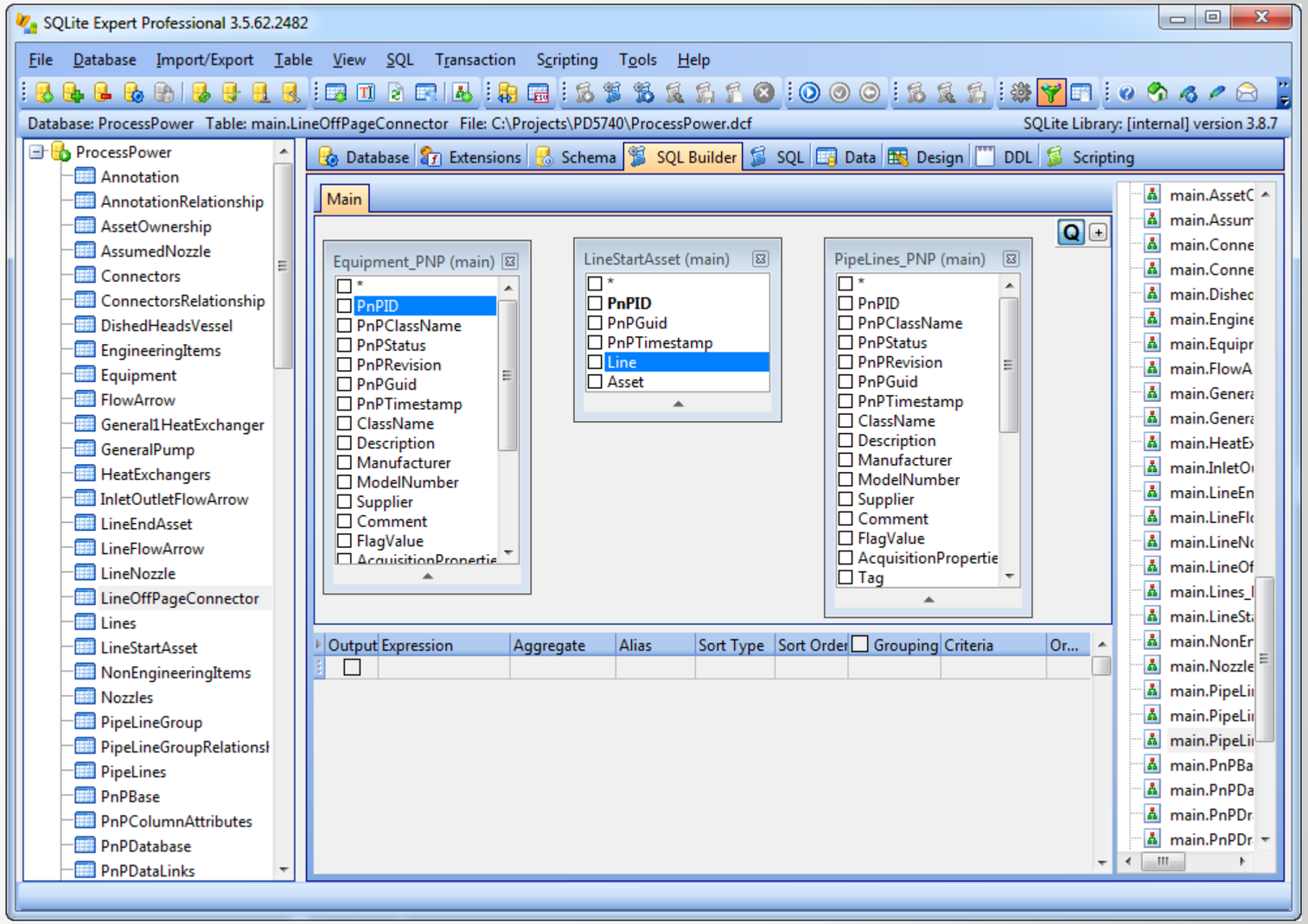
SQL Builder



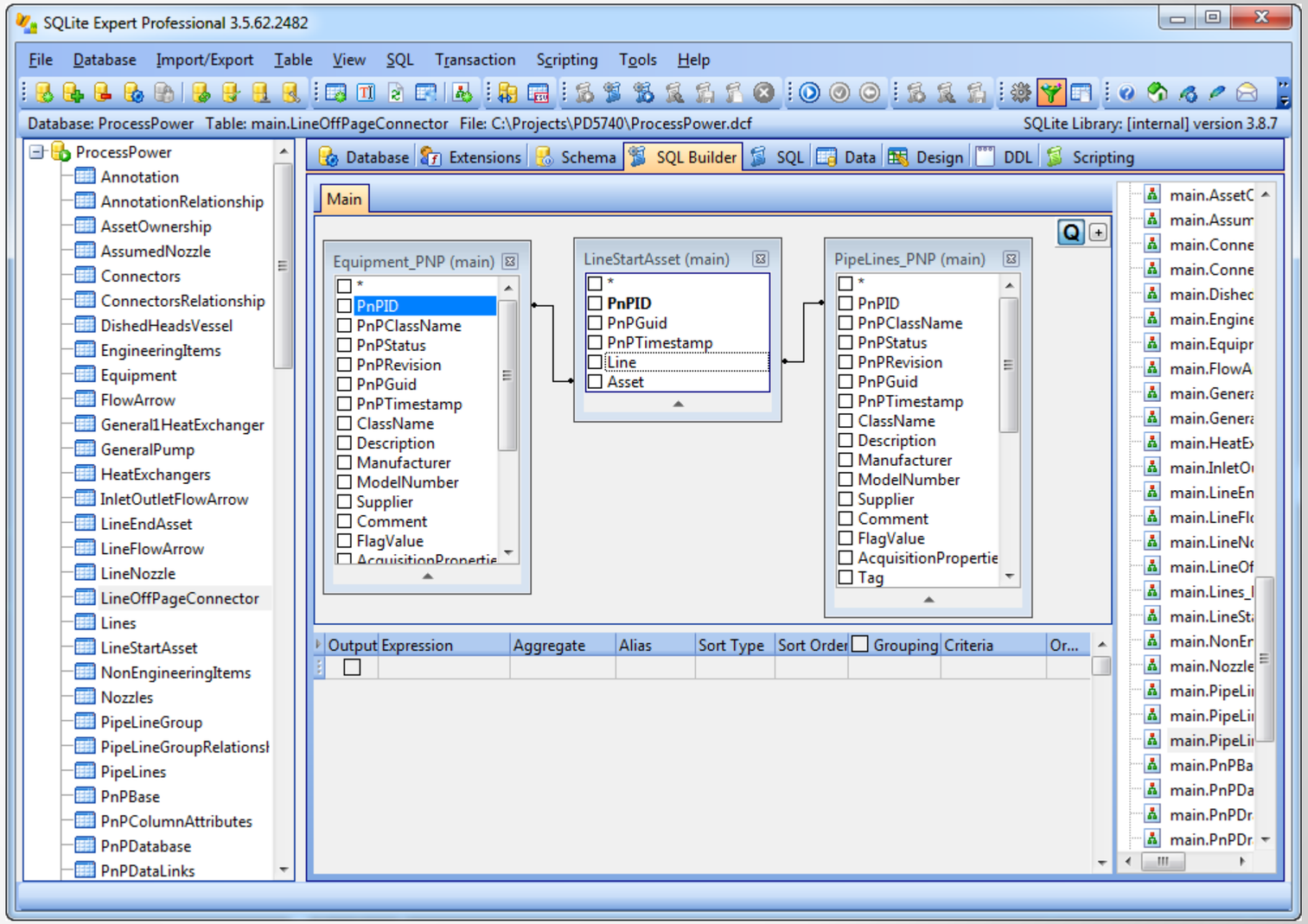
How to create your own Views

Select Tables
or Views



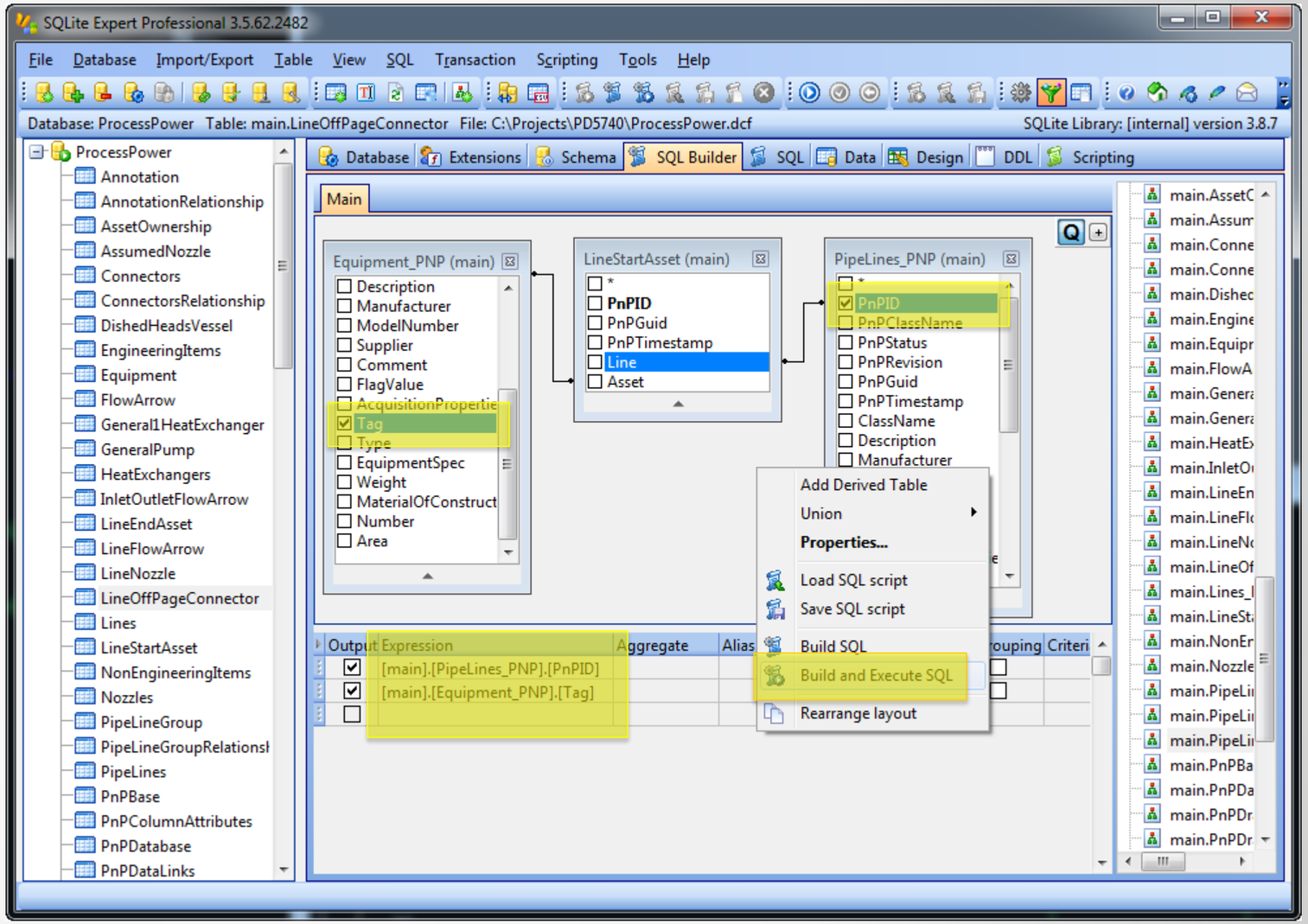
How to create your own Views

Set relationships



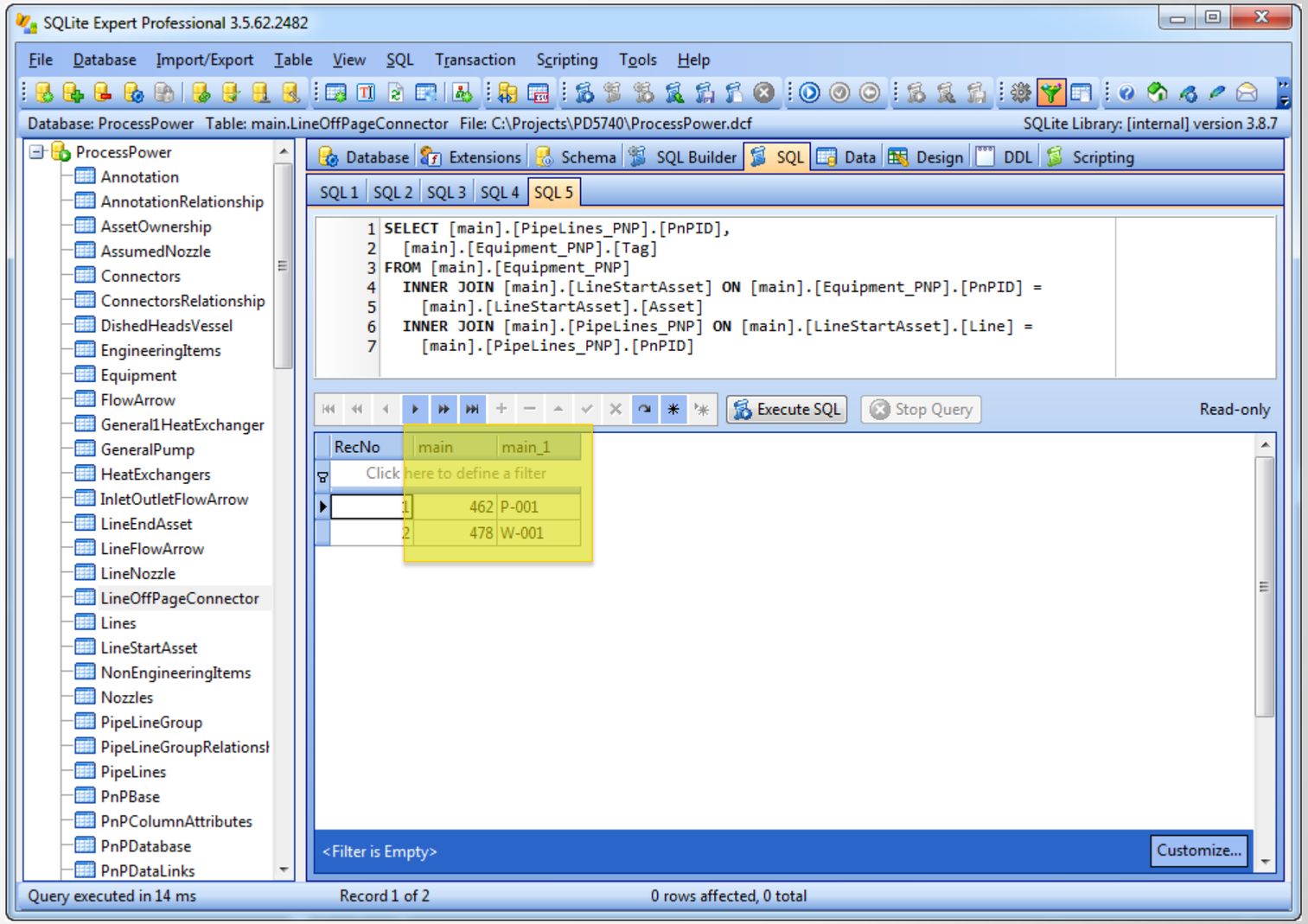
How to create your own Views

Set fields and execute



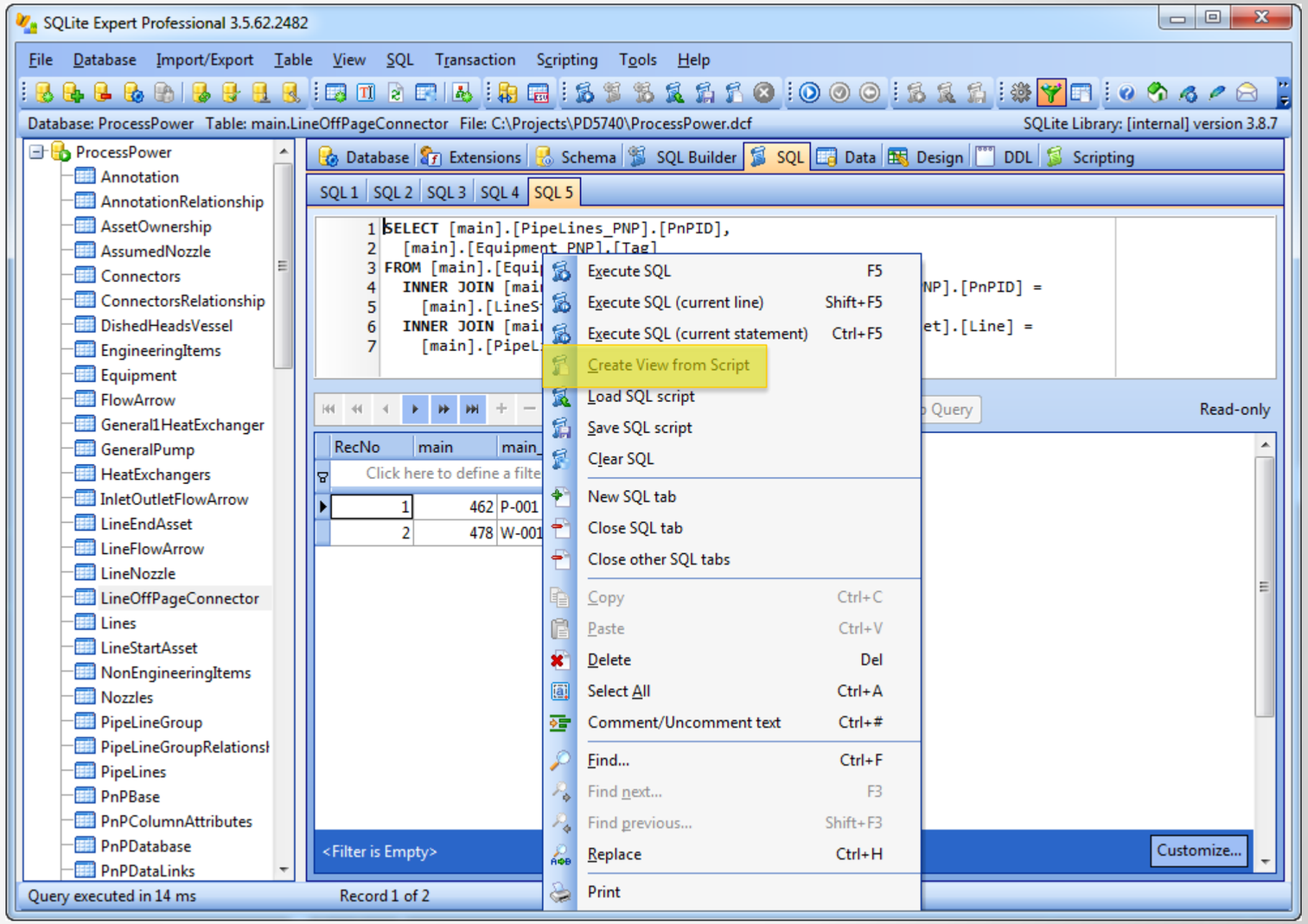
How to create your own Views

Check result



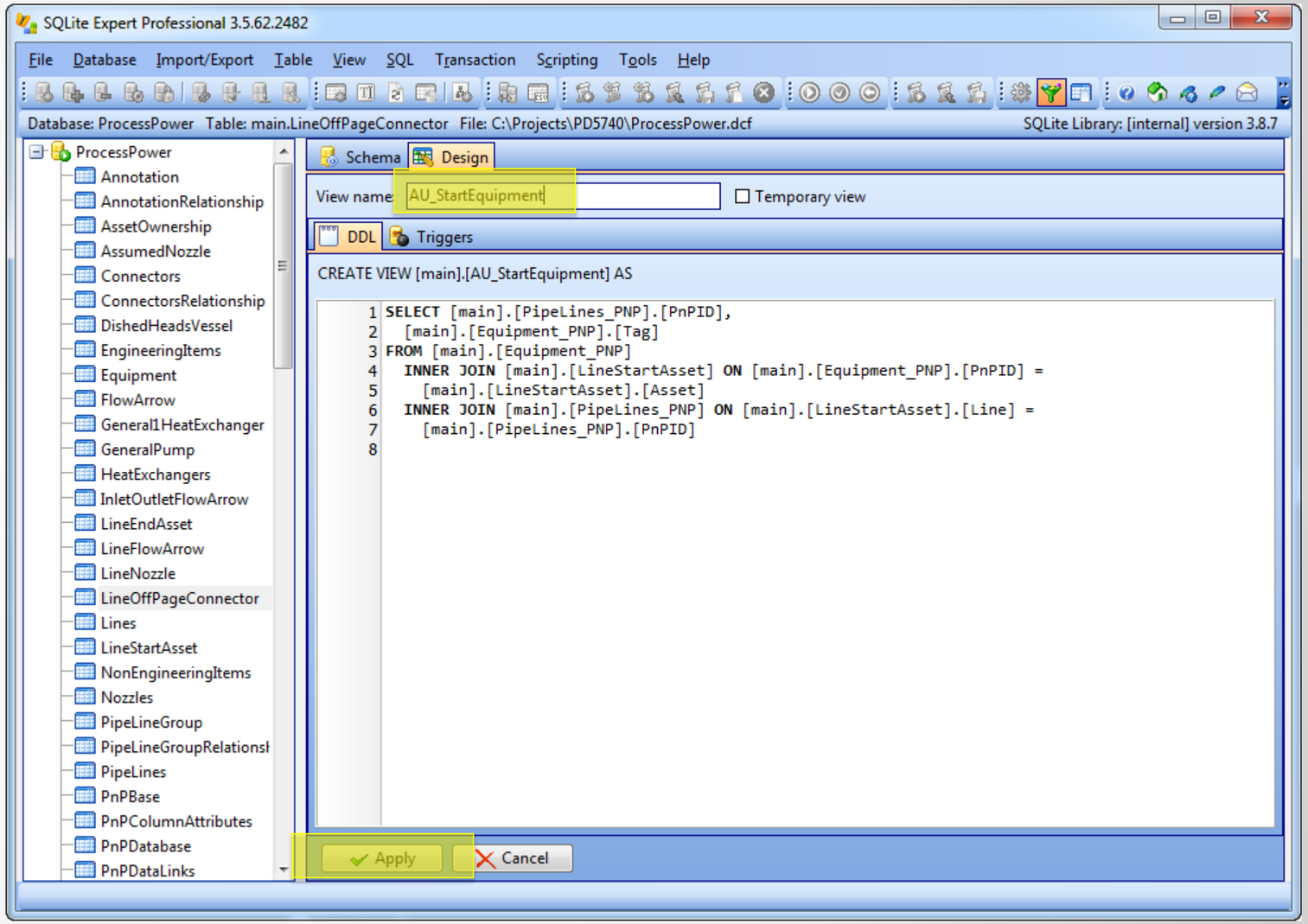
How to create your own Views

Check result



How to create your own Views

Save View



How to get the result of your view into your drawing

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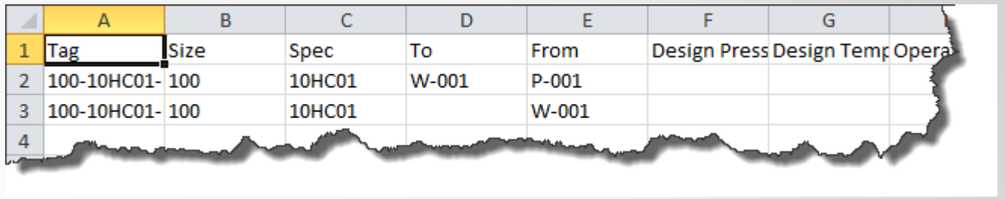
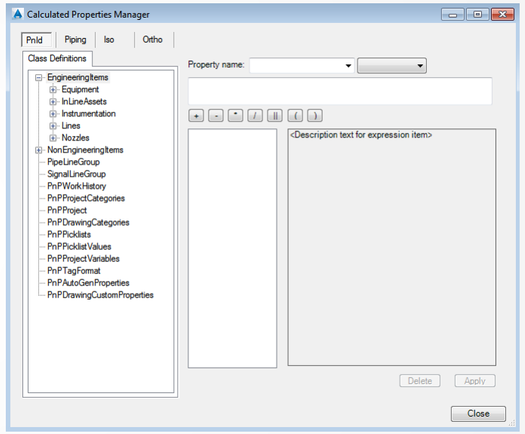
- Excel Ex-/Import + Copy & Paste

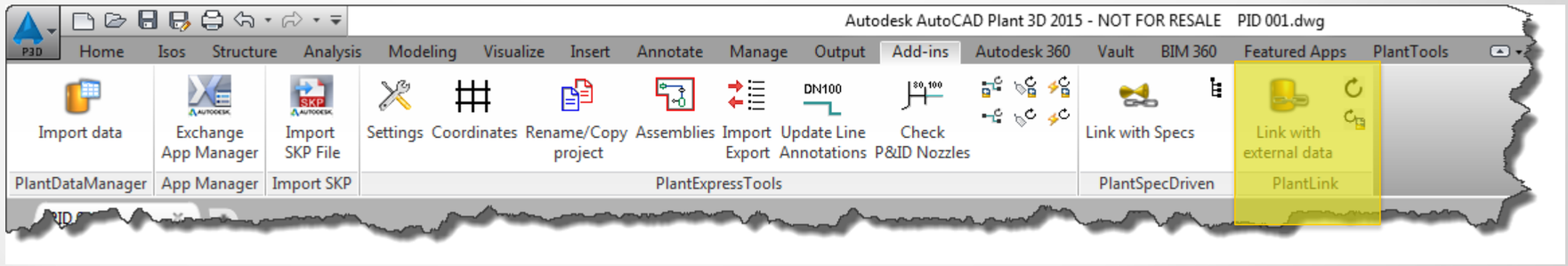


	A	B	C	D	E	F	G
1	Tag	Size	Spec	To	From	Design Press	Design Temp
2	100-10HC01-	100	10HC01	W-001	P-001		
3	100-10HC01-	100	10HC01		W-001		
4							

- PLANTXDBMANAGER



- PlantLink



How to get the result of your view into your drawing