Import Your HVAC Solution Designs into Autodesk Revit MEP 2013 and 2014

Joe Simmons - HVAC Solution, Inc.

Going From Concept to Completion

WHY?

It’s all about getting across the finish line on time, on budget, and feeling good!

Learning objectives:

- Import files from loads programs (Trane, Elite CHVAC, gbXML, Taco Load Tool) into HVAC Solution.
- Build your air handlers, airflow, hydronic, steam, and control schematics and then optimize and run simulations on systems.
- Automatically select equipment from HVAC manufacturers that meet system design capacities. Create equipment and control schedules, BOMs, DXF™ files and more!
- Use the new Revit add-in to import your schedules and schematics into Revit! Or you can map your equipment to a Revit family instance, then transfer HVAC Solution equipment design data to shared parameters of the mapped Revit family instance. We then automatically create schedules using the Revit API.

How HVAC Solution and Revit are used to take a project from Concept to Completion

Concept: HVAC Solution

The concept staff:

- Develops the design ideas and comes up with systems.
- Sells the design/systems to the client.
- Communicates the design for completion to the detail staff.

Completion: Revit

The completion/detail staff:

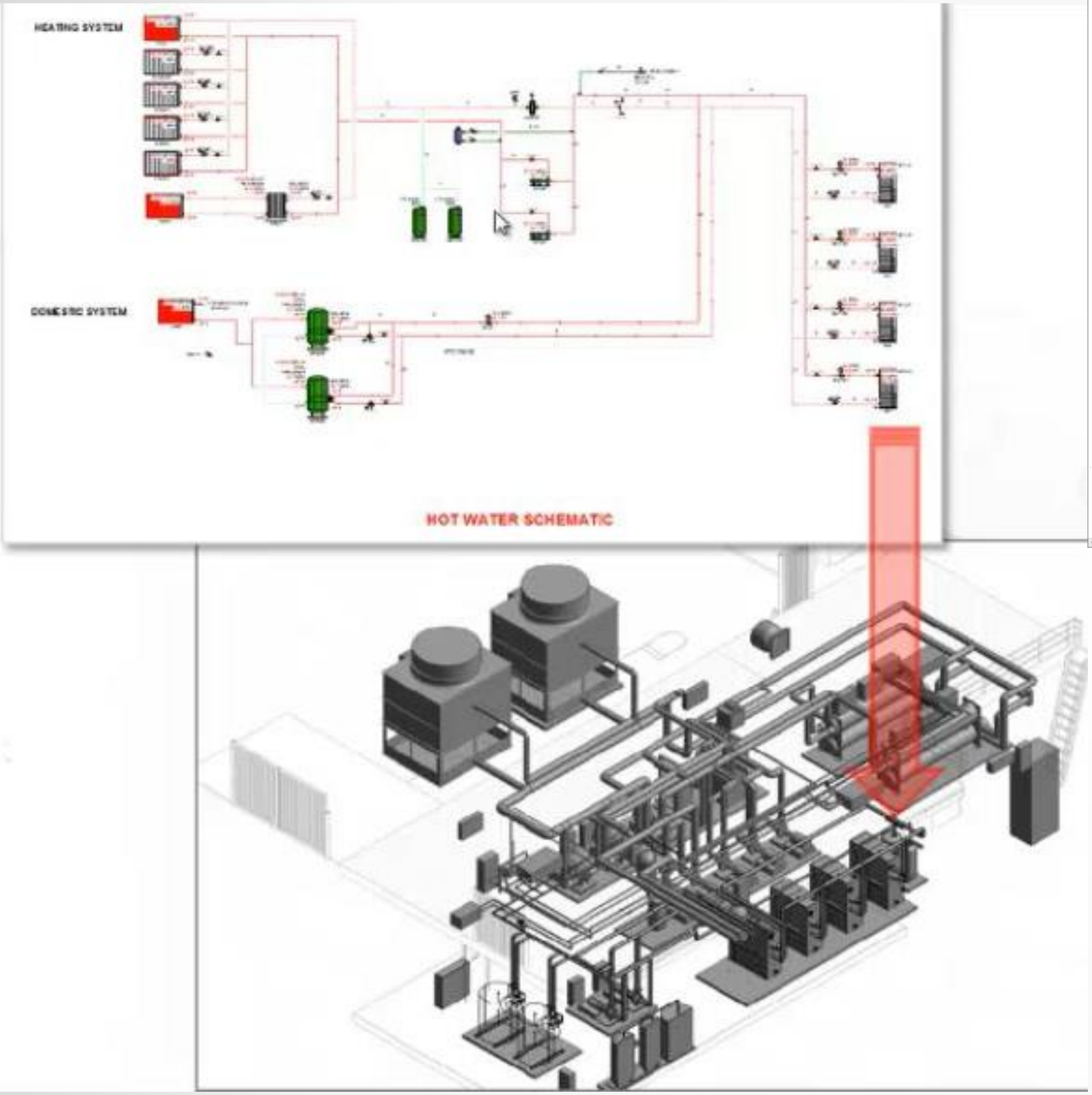
- Details out the design given to them by the concept staff.
- Completes the design under the supervision of the concept staff.

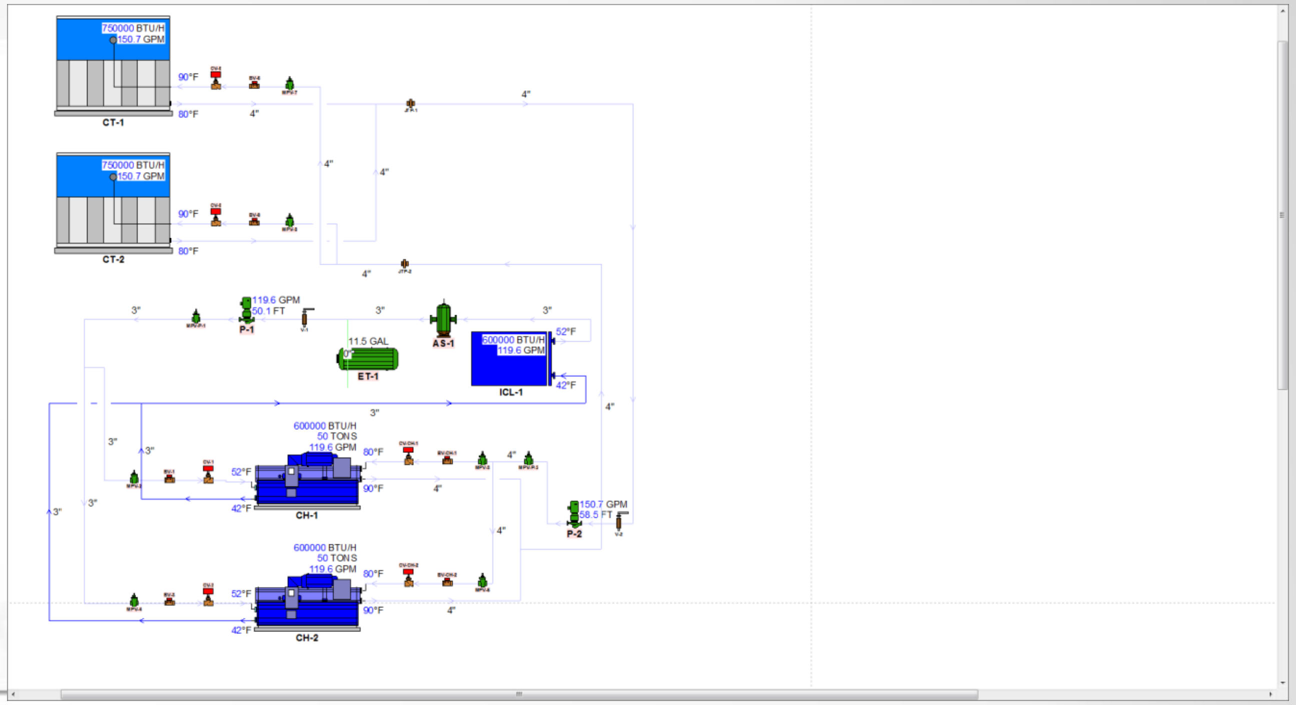
The Concept Staff and Completion/Detail Staff can be the same or a different person

Depending on the following:

- Knowledge and experience of systems and software.
- Size and type of projects.
- Size of firm.
- Who is most cost effective and/or who will be most profitable?

An HVAC Solution Schematic Concept


HEATING SYSTEM
DOMESTIC SYSTEM
HOT WATER SCHEMATIC


750000 BTU/H
150.7 GPM
90°F
80°F
CT-1
750000 BTU/H
150.7 GPM
90°F
80°F
CT-2
4"
3"
119.6 GPM
50.1 FT
P-1
11.5 GAL
ET-1
AS-1
600000 BTU/H
119.6 GPM
52°F
42°F
ICL-1
600000 BTU/H
50 TONS
119.6 GPM
80°F
90°F
52°F
42°F
CH-1
150.7 GPM
58.5 FT
P-2
600000 BTU/H
50 TONS
119.6 GPM
80°F
90°F
52°F
42°F
CH-2

And the Revit Completion

Current tools employed in going from Concept to Completion

- 1) Loads program - Trane Trace, Elite CHVAC, gbXML, Taco Load Tool.
- 2) HVAC Solution – Professional software.
- 3) Integrated manufacturers selection software! We have over 40 manufacturer partners.
- 4) Autodesk products - AutoCAD, Revit MEP.

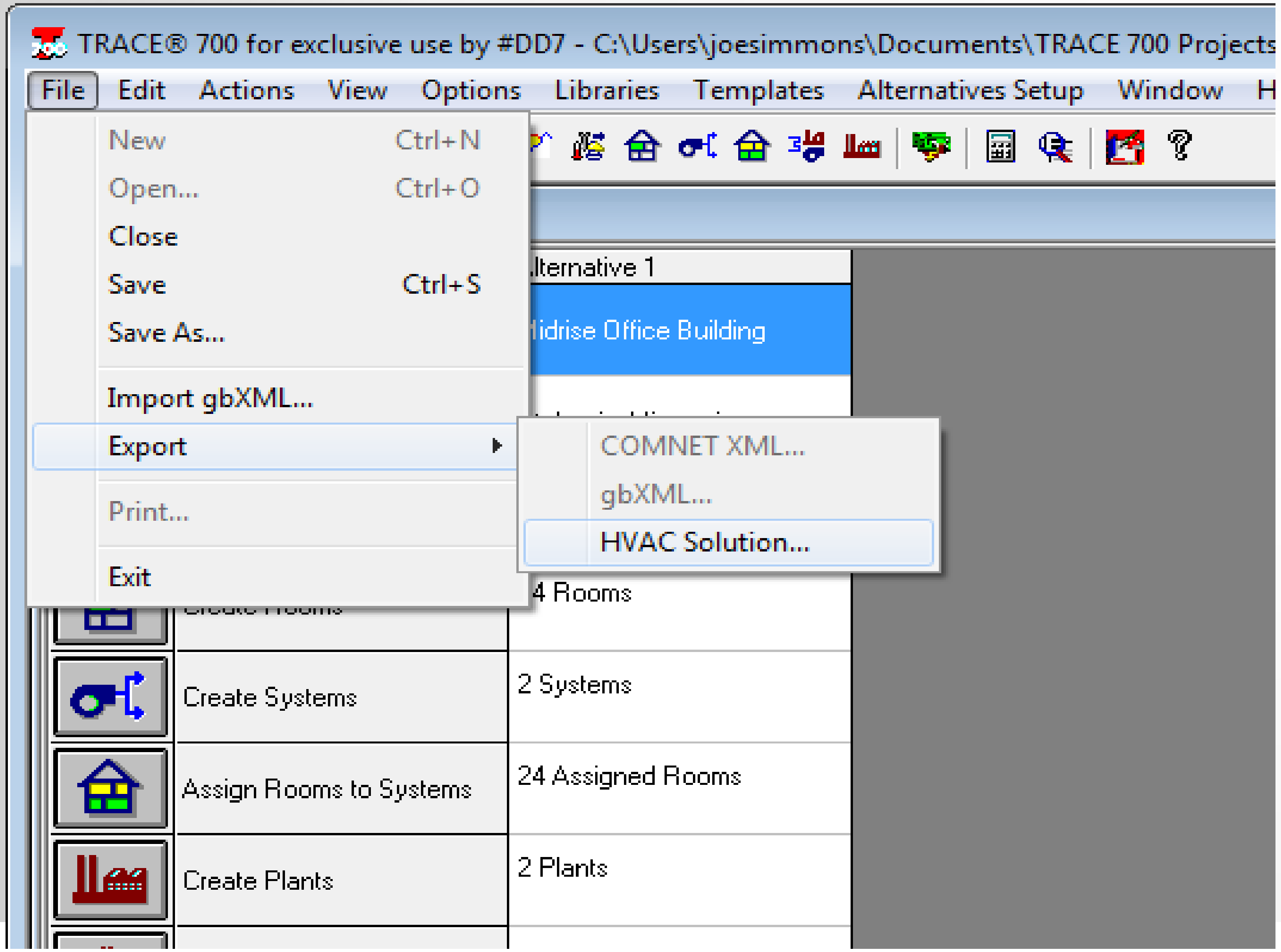
Information required from a loads program for HVAC Solution

- Altitude, location
- Outside air conditions
- Space air temperature
- Space heating and cooling airflows
- Number of people
- Space sensible heating loss
- Exhaust airflow.

- Systems should be modeled in HVAC Solution as closely as possible to the way they were modeled in your loads program to insure similar results.

1) Import a file from a Trane Trace 700 loads program!

Go to “File”, “Export”, and select “HVAC Solution”. This will create the following file to import into HVAC Solution.


TRACE® 700 for exclusive use by #DD7 - C:\Users\joesimmons\Documents\TRACE 700 Projects
File
Edit
Actions
View
Options
Libraries
Templates
Alternatives Setup
Window
New Ctrl+N
Open... Ctrl+O
Close
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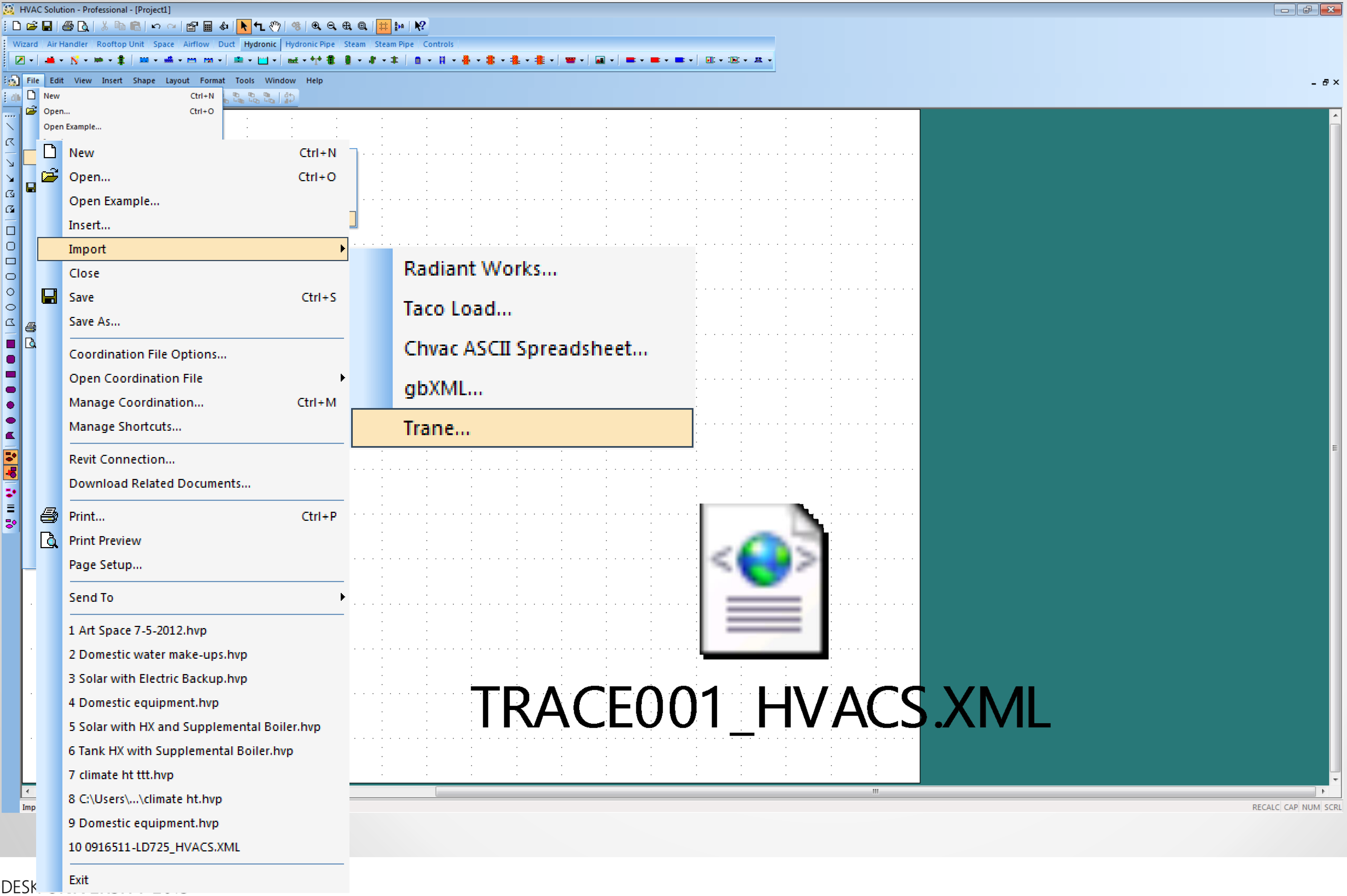
Save As...
Import gbXML...
Export
Print...
Exit
COMNET XML...
gbXML...
HVAC Solution...
lternative 1
idrise Office Building
4 Rooms
Create Systems
2 Systems
Assign Rooms to Systems
24 Assigned Rooms
Create Plants
2 Plants

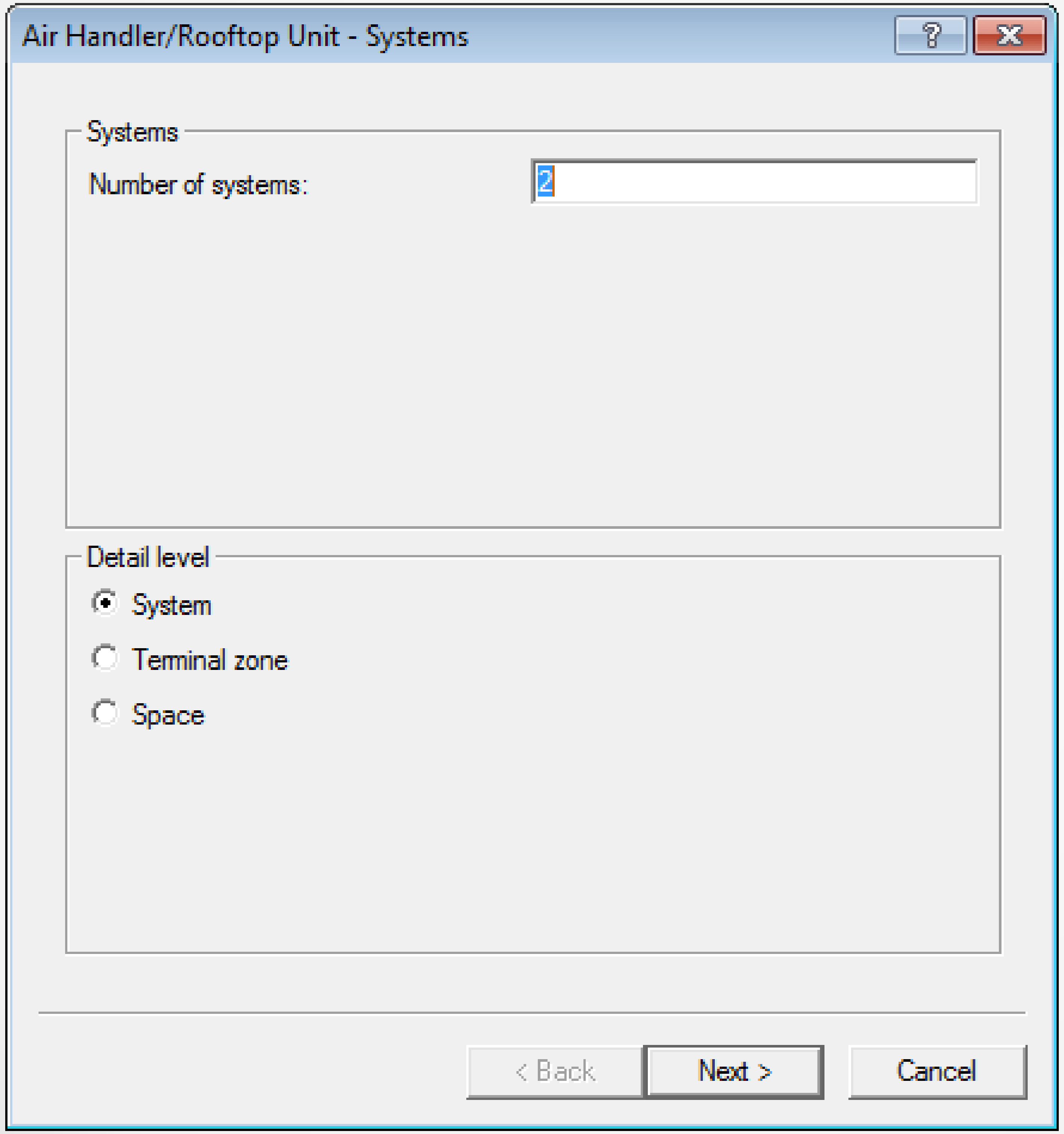
TRACE001_HVACS.XML

1) Open up HVAC Solution. Select File, Import, Trane from the menu.


HVAC Solution - Professional - [Project1]
Wizard
Air Handler
Rooftop Unit
Space
Airflow
Duct
Hydronic
Hydronic Pipe
Steam
Steam Pipe
Controls
File
Edit
View
Insert
Shape
Layout
Format
Tools
Window
Help
New Ctrl+N
Open... Ctrl+O
Open Example...
Insert...
Import
Close
Save Ctrl+S
Save As...
Coordination File Options...
Open Coordination File
Manage Coordination... Ctrl+M
Manage Shortcuts...
Revit Connection...
Download Related Documents...
Print... Ctrl+P
Print Preview
Page Setup...
Send To
1 Art Space 7-5-2012.hvp
2 Domestic water make-ups.hvp
3 Solar with Electric Backup.hvp
4 Domestic equipment.hvp
5 Solar with HX and Supplemental Boiler.hvp
6 Tank HX with Supplemental Boiler.hvp
7 climate ht ttt.hvp
8 C:\Users\...\climate ht.hvp
9 Domestic equipment.hvp
10 0916511-LD725_HVACS.XML
Exit
Radiant Works...
Taco Load...
Chvac ASCII Spreadsheet...
gbXML...
Trane...
RECALC CAP NUM SCRL

TRACE001_HVACS.XML

2) Answer **questions** asked by our **Import Wizard** and it will build the schematics for you.



Air Handler/Rooftop Unit - Systems

Systems

Number of systems: 2

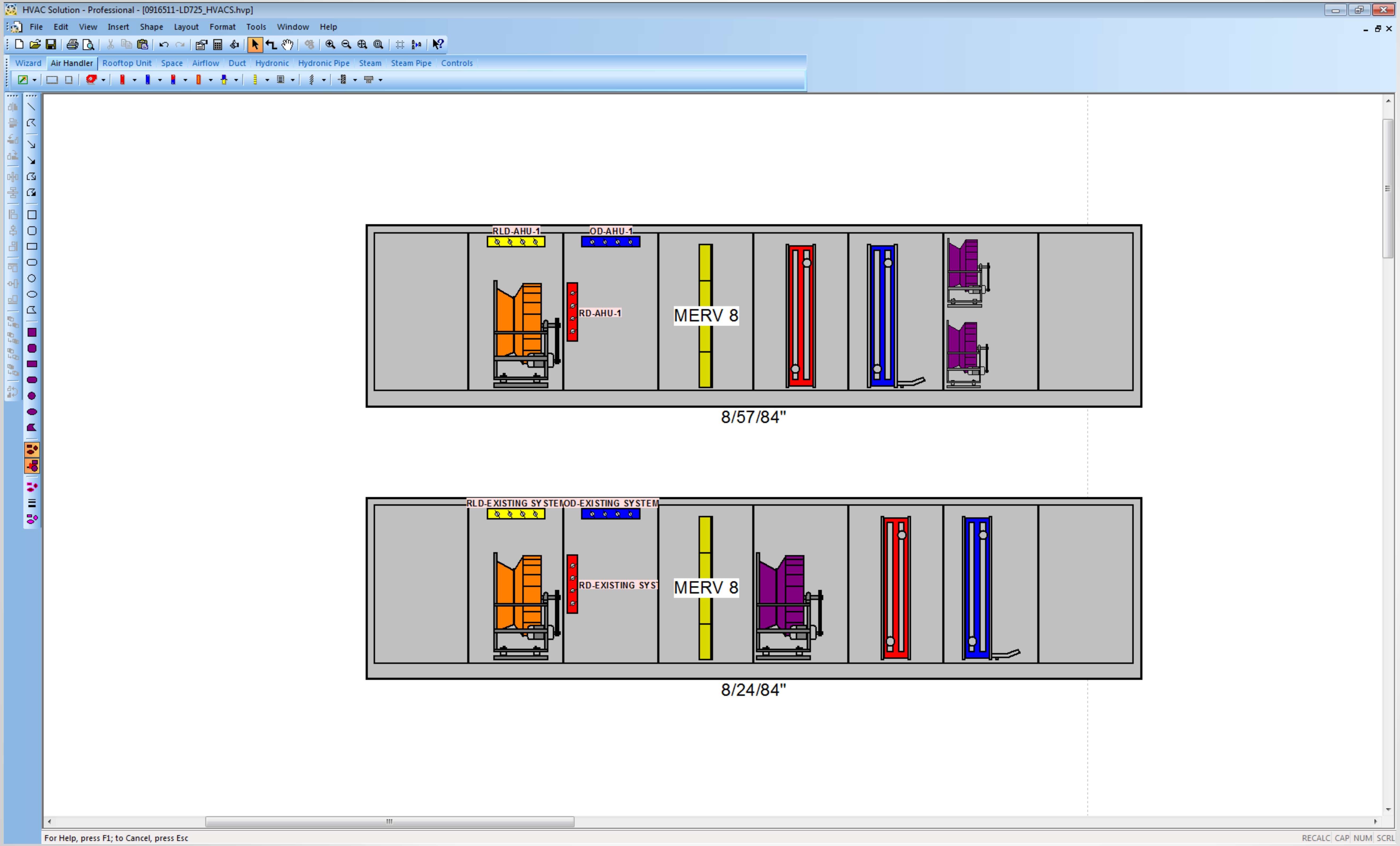
Detail level

● System

○ Terminal zone

○ Space

2a) Air handler schematic!

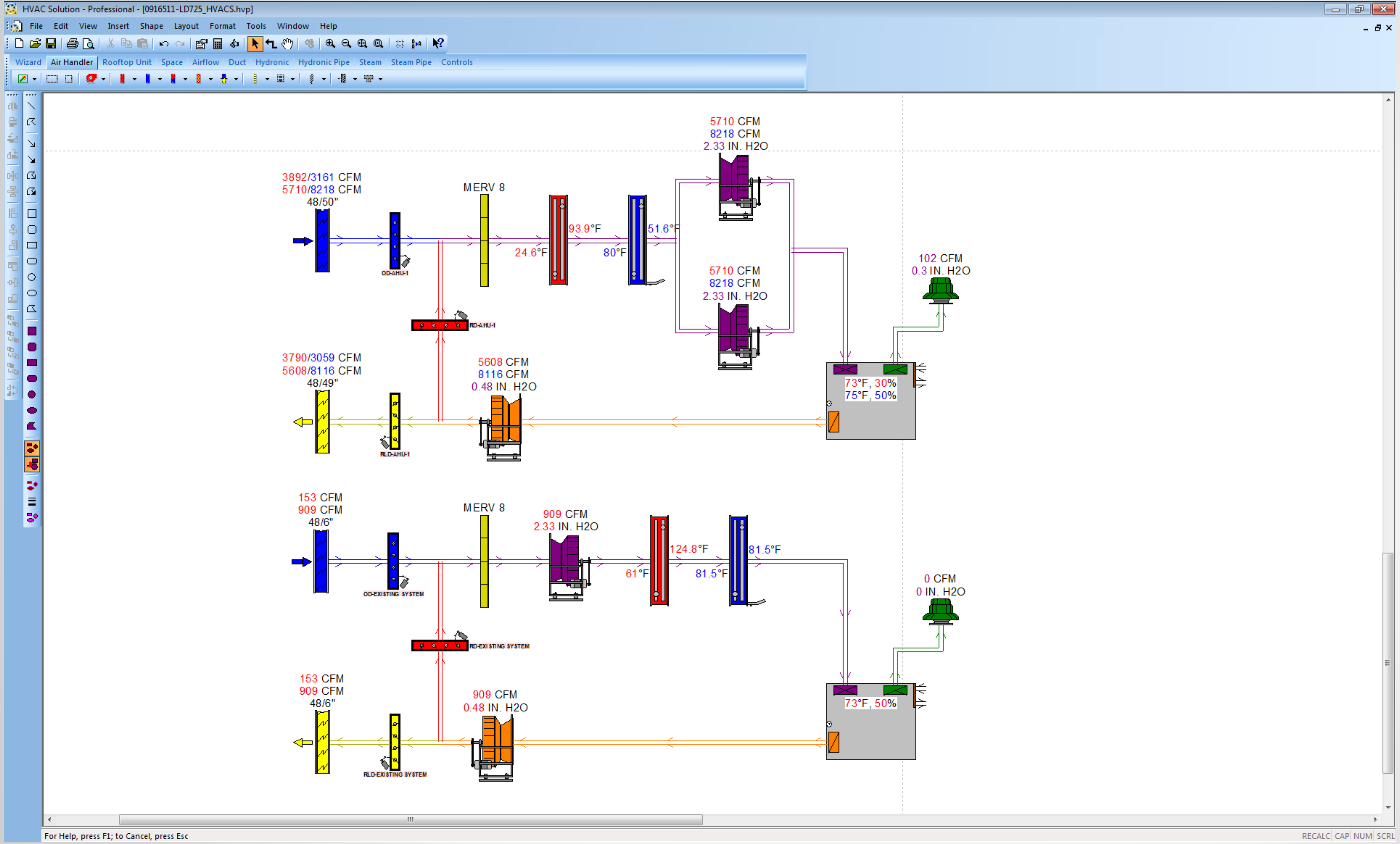


HVAC Solution - Professional - [0916511-LD725_HVACS.hvp]

File
Edit
View
Insert
Shape
Layout
Format
Tools
Window
Help
Wizard
Air Handler
Rooftop Unit
Space
Airflow
Duct
Hydronic
Hydronic Pipe
Steam
Steam Pipe
Controls
RLD-AHU-1
OD-AHU-1
RD-AHU-1
MERV 8
8/57/84"
RLD-EXISTING SYSTEM
OD-EXISTING SYSTEM
RD-EXISTING SYST
MERV 8
8/24/84"
RECALC
CAP
NUM
SCRL

For Help, press F1; to Cancel, press Esc

2b) Airflow schematic!


HVAC Solution - Professional - [0916511-LD725_HVACS.hvp]
File
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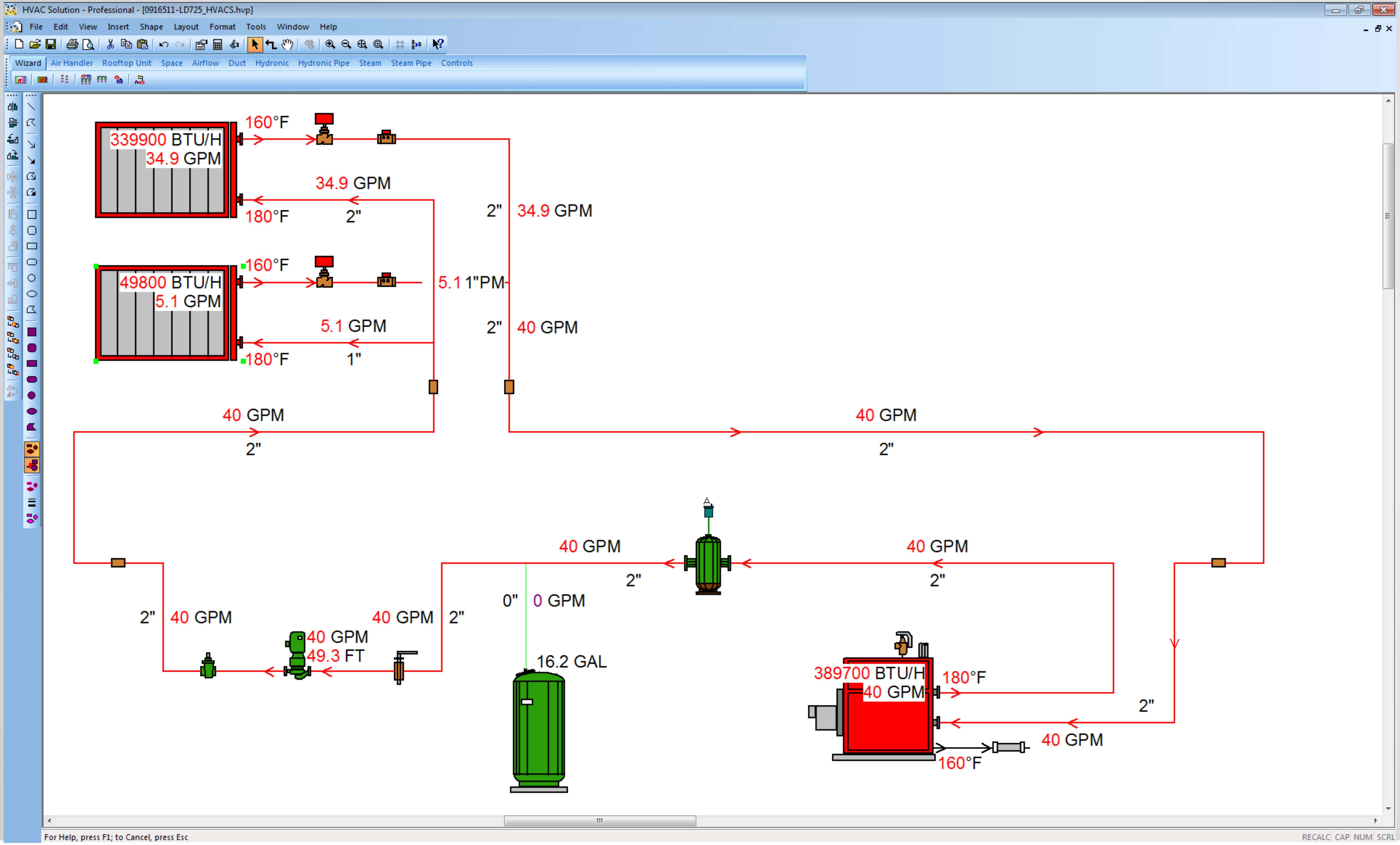
Shape
Layout
Format
Tools
Window
Help
Wizard
Air Handler
Rooftop Unit
Space
Airflow
Duct
Hydronic
Hydronic Pipe
Steam
Steam Pipe
Controls
5710 CFM
8218 CFM
2.33 IN. H2O
3892/3161 CFM
5710/8218 CFM
48/50"
MERV 8
93.9°F
51.6°F
24.6°F
80°F
OD-AHU-1
5710 CFM
8218 CFM
2.33 IN. H2O
102 CFM
0.3 IN. H2O
RD-AHU-1
3790/3059 CFM
5608/8116 CFM
48/49"
5608 CFM
8116 CFM
0.48 IN. H2O
73°F, 30%
75°F, 50%
RLD-AHU-1
153 CFM
909 CFM
48/6"
MERV 8
909 CFM
2.33 IN. H2O
124.8°F
81.5°F
61°F
81.5°F
OD-EXISTING SYSTEM
0 CFM
0 IN. H2O
RD-EXISTING SYSTEM
153 CFM
909 CFM
48/6"
909 CFM
0.48 IN. H2O
73°F, 50%
RLD-EXISTING SYSTEM
For Help, press F1; to Cancel, press Esc
RECALC
CAP
NUM
SCRL

2c) Hot water schematic!


HVAC Solution - Professional - [0916511-LD725_HVACS.hvp]
File
Edit
View
Insert
Shape
Layout
Format
Tools
Window
Help
Wizard
Air Handler
Rooftop Unit
Space
Airflow
Duct
Hydronic
Hydronic Pipe
Steam
Steam Pipe
Controls
339900 BTU/H
34.9 GPM
160°F
34.9 GPM
180°F
2"
2"
34.9 GPM
49800 BTU/H
5.1 GPM
160°F
5.1 1"PM
5.1 GPM
180°F
1"
2"
40 GPM
40 GPM
2"
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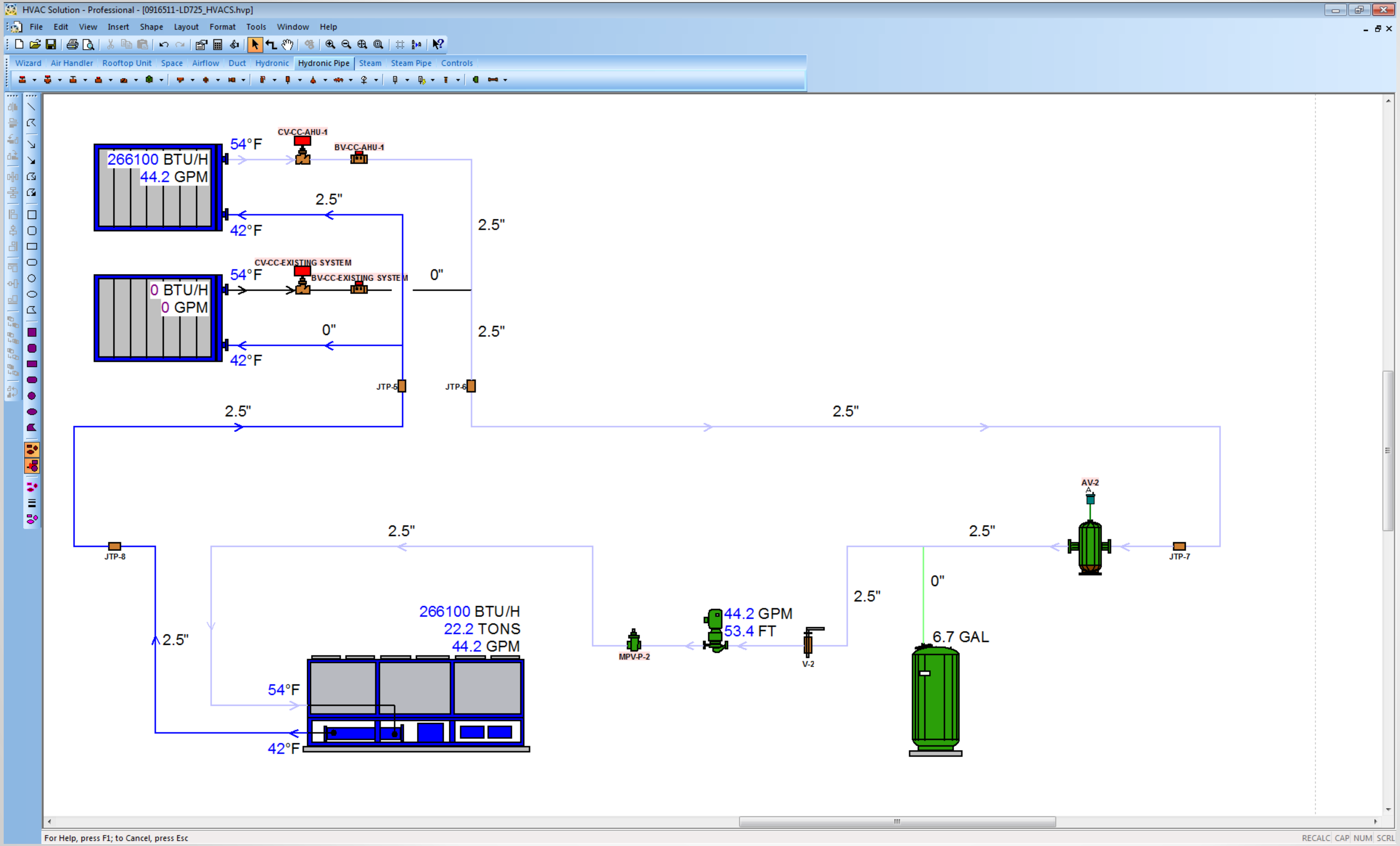
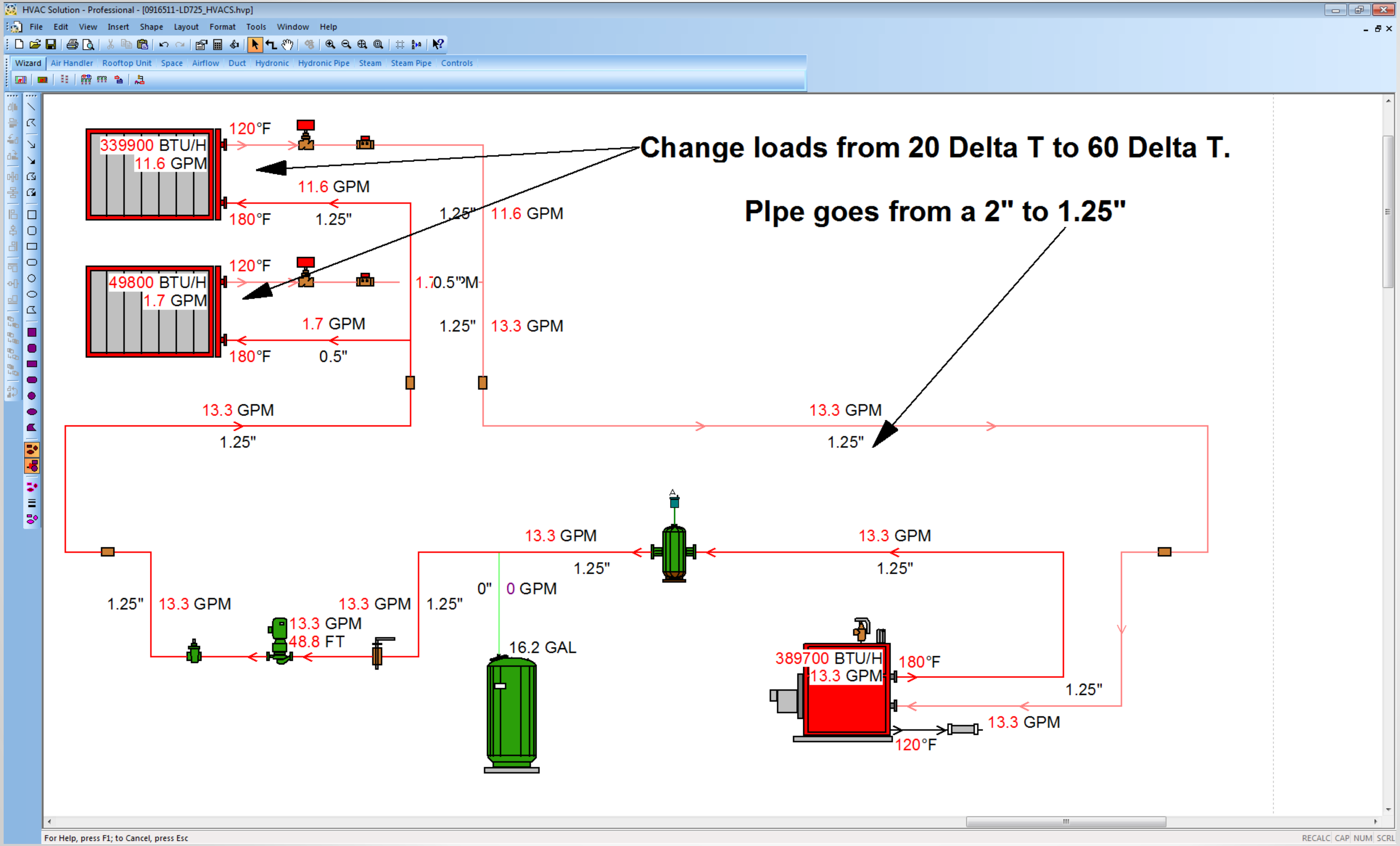
2"
40 GPM
2"
40 GPM
2"
0"
0 GPM
2"
40 GPM
40 GPM
2"
40 GPM
49.3 FT
16.2 GAL
389700 BTU/H
40 GPM
180°F
2"
40 GPM
160°F
RECALC
CAP
NUM
SCRL

For Help, press F1; to Cancel, press Esc

2d) Chilled water schematic!


HVAC Solution - Professional - [0916511-LD725_HVACS.hvp]
File Edit View Insert Shape Layout Format Tools Window Help
Wizard Air Handler Rooftop Unit Space Airflow Duct Hydronic Hydronic Pipe Steam Steam Pipe Controls
266100 BTU/H
44.2 GPM
54°F
42°F
CV-CC-AHU-1
BV-CC-AHU-1
2.5"
2.5"
0 BTU/H
0 GPM
54°F
42°F
CV-CC-EXISTING SYSTEM
BV-CC-EXISTING SYSTEM
0"
0"
2.5"
JTP-5
JTP-6
2.5"
2.5"
AV-2
2.5"
2.5"
JTP-8
JTP-7
0"
2.5"
2.5"
266100 BTU/H
22.2 TONS
44.2 GPM
44.2 GPM
53.4 FT
6.7 GAL
54°F
42°F
MPV-P-2
V-2
For Help, press F1; to Cancel, press Esc
RECALC CAP NUM SCRL

2e) Optimize and run simulations on systems!



Change loads from 20 Delta T to 60 Delta T.

PIpe goes from a 2" to 1.25"

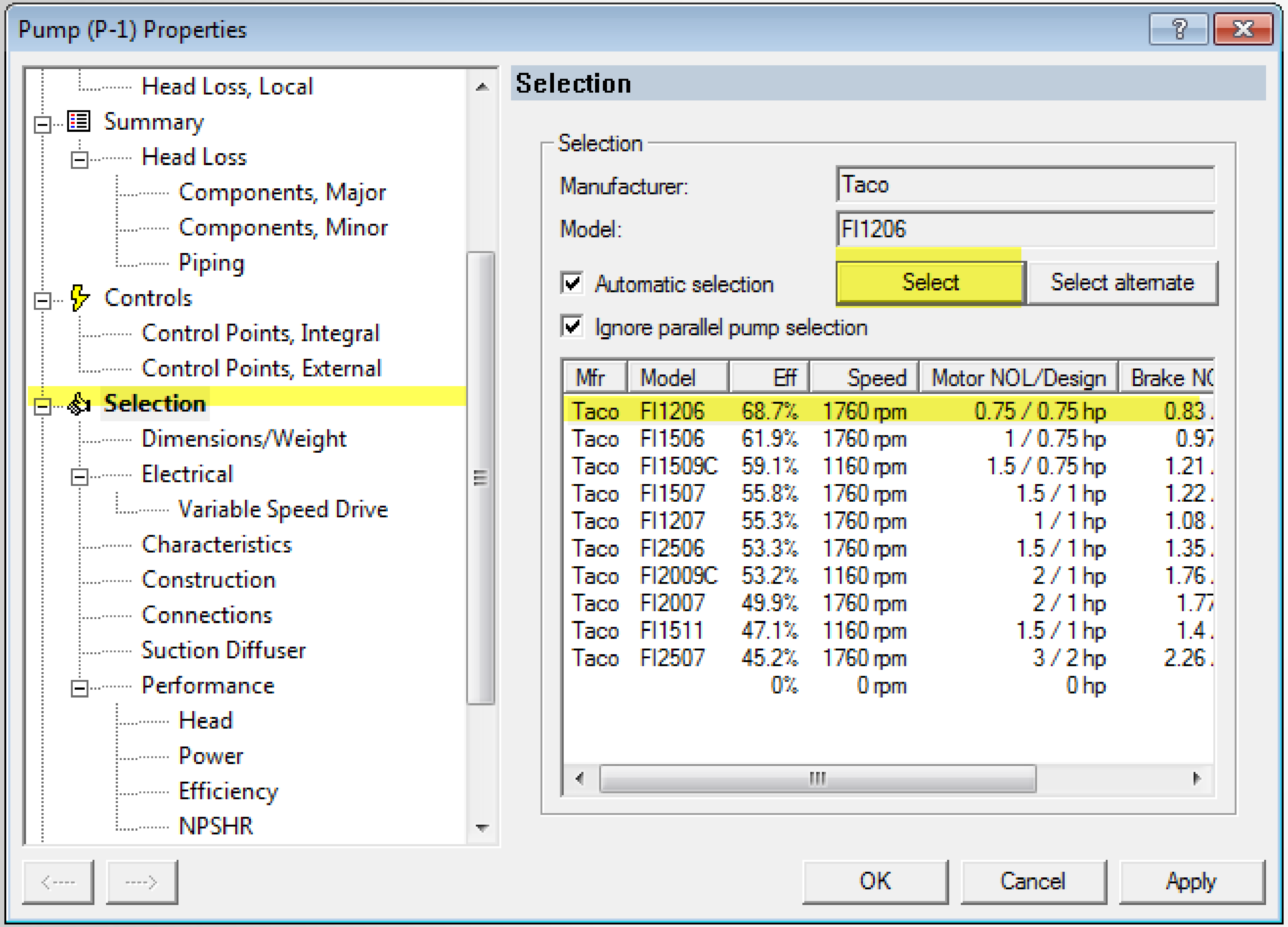
For Help, press F1; to Cancel, press Esc

HVAC Solution - Professional - [0916511-LD725_HVACS.hvp]
File Edit View Insert Shape Layout Format Tools Window Help
Wizard Air Handler Rooftop Unit Space Airflow Duct Hydronic Hydronic Pipe Steam Steam Pipe Controls
339900 BTU/H
11.6 GPM
120°F
180°F
11.6 GPM
1.25"
1.25"
11.6 GPM
49800 BTU/H
1.7 GPM
120°F
180°F
1.70.5"PM
1.7 GPM
0.5"
1.25"
13.3 GPM
13.3 GPM
1.25"
13.3 GPM
1.25"
13.3 GPM
1.25"
13.3 GPM
1.25"
1.25"
13.3 GPM
13.3 GPM
1.25"
0"
0 GPM
13.3 GPM
48.8 FT
16.2 GAL
389700 BTU/H
13.3 GPM
180°F
1.25"
13.3 GPM
120°F
RECALC CAP NUM SCRL

2f) Optimize and run simulations on systems!

- Change pipe sizes and look at actual head loss.
- Change pipe material to see how roughness changes the head loss.
- Look at different pump types for greater efficiencies and lower BHP.
- Compare pipe fitting factors to actual number and type of fittings.
- See the effect of glycol and the percentage in your systems.
- Compare different piping distribution types – direct return, reverse return, and single pipe system.
- Compare different pump configurations – manifold, primary, primary secondary.

3) Automatically select equipment from HVAC manufacturers that meet system capacities


Pump (P-1) Properties
?
X

- Head Loss, Local
- Summary
  - Head Loss
    - Components, Major
    - Components, Minor
    - Piping
- Controls
  - Control Points, Integral
  - Control Points, External
- Selection
  - Dimensions/Weight
  - Electrical
    - Variable Speed Drive
  - Characteristics
  - Construction
  - Connections
  - Suction Diffuser
  - Performance
    - Head
    - Power
    - Efficiency
    - NPSHR

Selection

Selection

Manufacturer: Taco

Model: FI1206

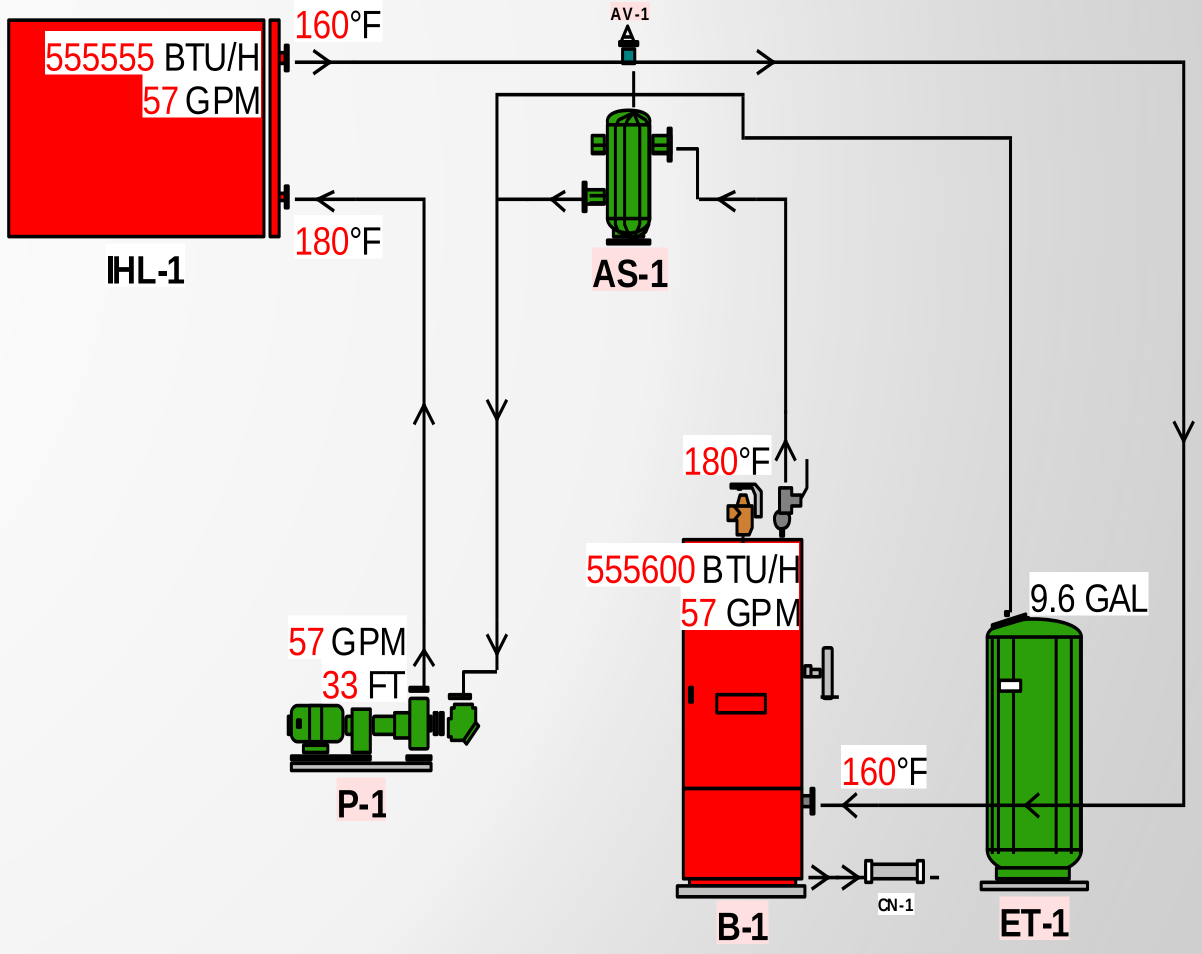
☑ Automatic selection

☑ Ignore parallel pump selection

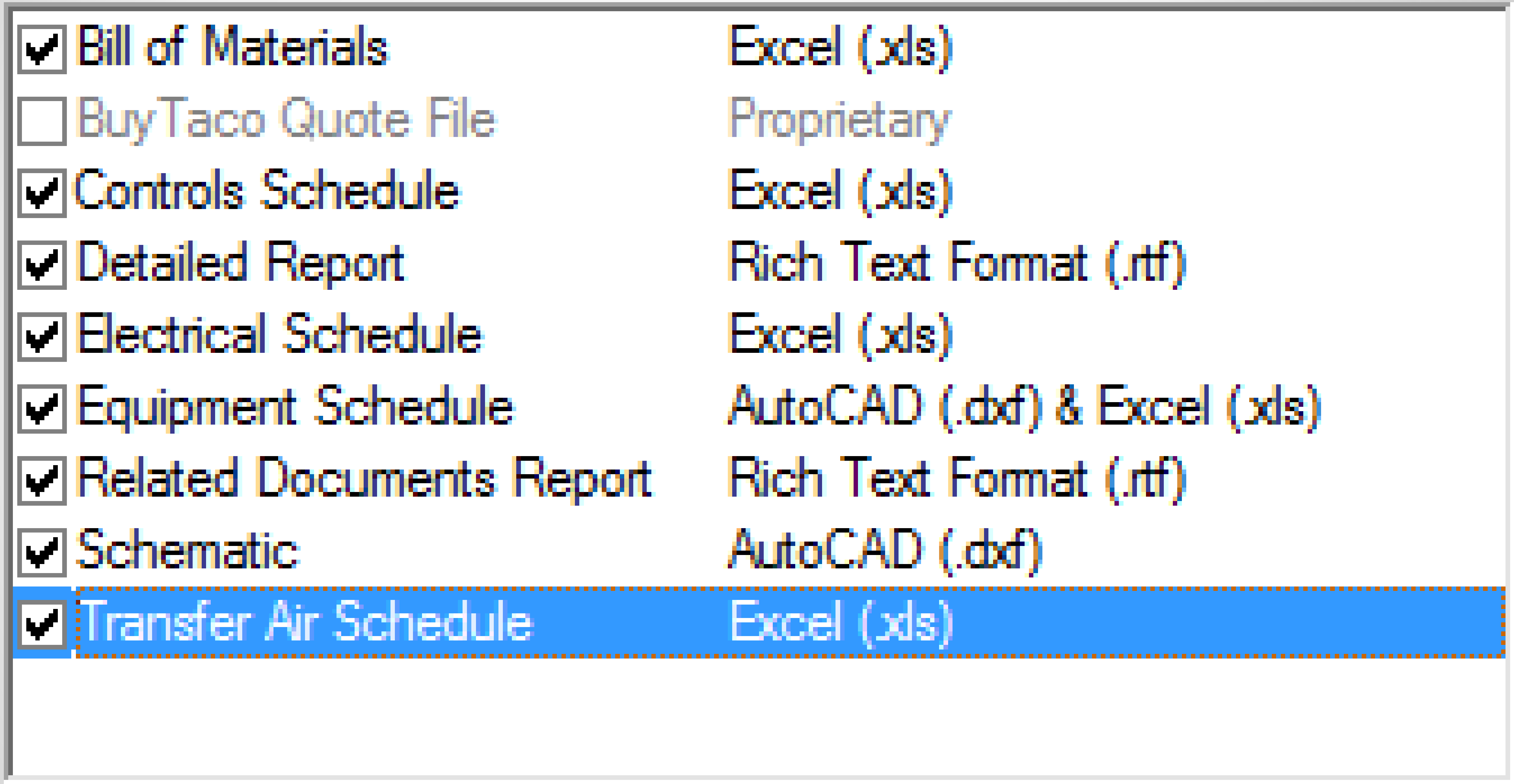
Select
Select alternate

Mfr	Model	Eff	Speed	Motor NOL/Design	Brake NC
Taco	FI1206	68.7%	1760 rpm	0.75 / 0.75 hp	0.83
Taco	FI1506	61.9%	1760 rpm	1 / 0.75 hp	0.97
Taco	FI1509C	59.1%	1160 rpm	1.5 / 0.75 hp	1.21
Taco	FI1507	55.8%	1760 rpm	1.5 / 1 hp	1.22
Taco	FI1207	55.3%	1760 rpm	1 / 1 hp	1.08
Taco	FI2506	53.3%	1760 rpm	1.5 / 1 hp	1.35
Taco	FI2009C	53.2%	1160 rpm	2 / 1 hp	1.76
Taco	FI2007	49.9%	1760 rpm	2 / 1 hp	1.77
Taco	FI1511	47.1%	1160 rpm	1.5 / 1 hp	1.4
Taco	FI2507	45.2%	1760 rpm	3 / 2 hp	2.26
		0%	0 rpm	0 hp	

<---
--->
OK
Cancel
Apply

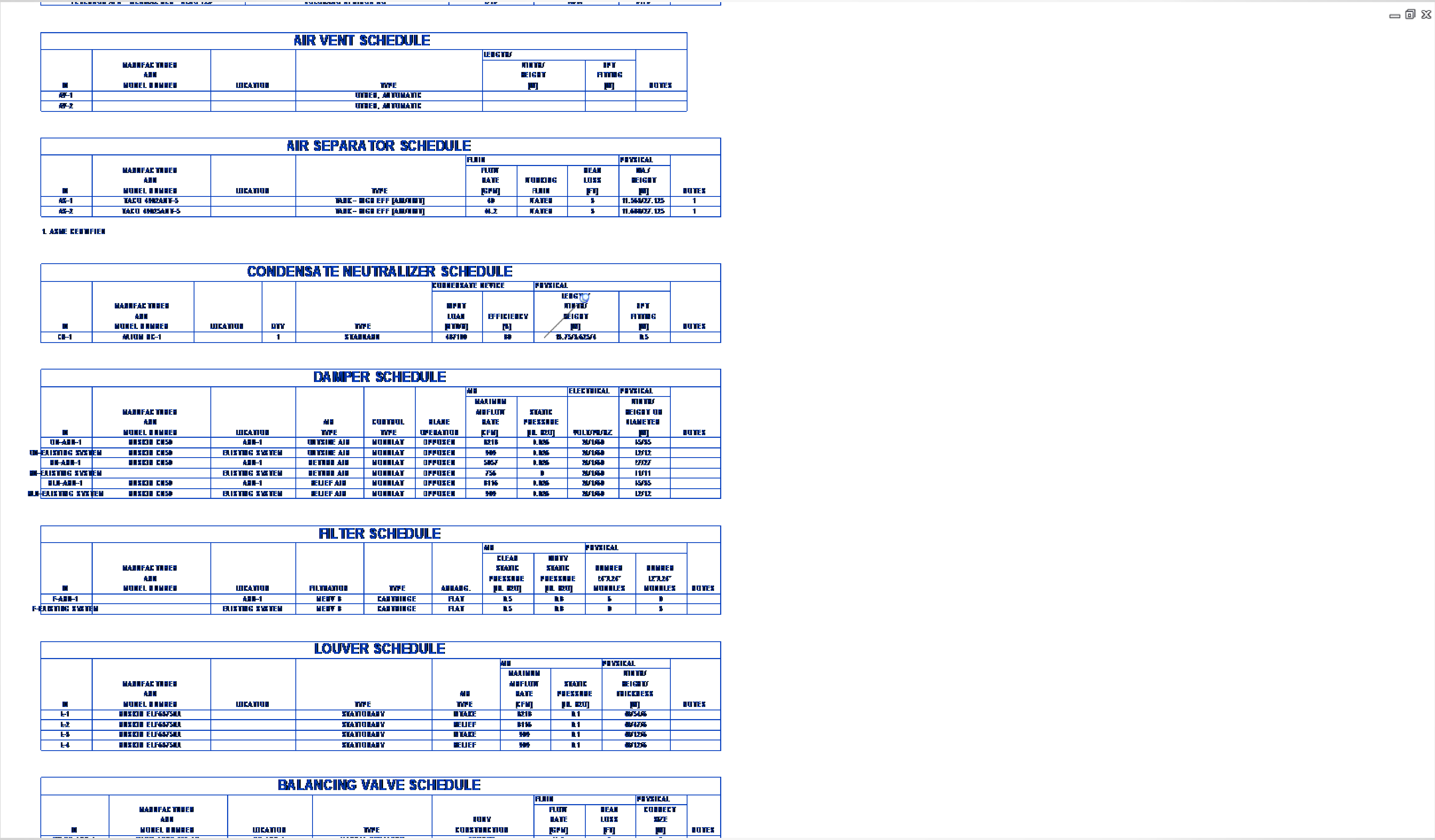

555555 BTU/H
57 GPM
IHL-1
160°F
180°F
AV-1
AS-1
180°F
555600 BTU/H
57 GPM
B-1
CN-1
160°F
9.6 GAL
ET-1
57 GPM
33 FT
P-1

3a) **Automatically** create BOM, controls, electric equipment and transfer air schedules, reports, schematics!



☑	Bill of Materials	Excel (.xls)
☐	BuyTaco Quote File	Proprietary
☑	Controls Schedule	Excel (.xls)
☑	Detailed Report	Rich Text Format (.rtf)
☑	Electrical Schedule	Excel (.xls)
☑	Equipment Schedule	AutoCAD (.dxf) & Excel (.xls)
☑	Related Documents Report	Rich Text Format (.rtf)
☑	Schematic	AutoCAD (.dxf)
☑	Transfer Air Schedule	Excel (.xls)

3b) Equipment schedules!



AIR VENT SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	LENGTH/ WIDTH/ HEIGHT [IN]	IPT FITTING [IN]	NOTES
AV-1			OTHER, AUTOMATIC			
AV-2			OTHER, AUTOMATIC			

AIR SEPARATOR SCHEDULE

				FLUID			PHYSICAL	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLOW RATE [GPM]	WORKING FLUID	HEAD LOSS [FT]	DIA./ HEIGHT [IN]	NOTES
AS-1	TACO 4902AHT-5		TANK - HIGH EFF [ADJ/INT]	40	WATER	5	11.563/27.125	1
AS-2	TACO 4902SAHT-5		TANK - HIGH EFF [ADJ/INT]	44.2	WATER	5	11.688/27.125	1

1. ASME CERTIFIED

CONDENSATE NEUTRALIZER SCHEDULE

					CONDENSATE DEVICE		PHYSICAL		
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QTY	TYPE	INPUT LOAD [BTUH]	EFFICIENCY [%]	LENGTH/ WIDTH/ HEIGHT [IN]	IPT FITTING [IN]	NOTES
CN-1	AXIOM NC-1		1	STANDARD	48/100	80	13.75/3.625/4	0.5	

DAMPER SCHEDULE

						AIR		ELECTRICAL	PHYSICAL	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	AIR TYPE	CONTROL TYPE	BLADE OPERATION	MAXIMUM AIRFLOW RATE [CFM]	STATIC PRESSURE [IN. H2O]	VOLT/PH/HZ	WIDTH/ HEIGHT OR DIAMETER [IN]	NOTES
OA-AHU-1	RUSKIN CD50	AHU-1	OUTSIDE AIR	MODULAT	OPPOSED	8218	0.026	24/1/60	15/35	
OA-EXISTING SYSTEM	RUSKIN CD50	EXISTING SYSTEM	OUTSIDE AIR	MODULAT	OPPOSED	909	0.026	24/1/60	12/12	
RA-AHU-1	RUSKIN CD50	AHU-1	RETURN AIR	MODULAT	OPPOSED	5057	0.026	24/1/60	27/27	
RA-EXISTING SYSTEM		EXISTING SYSTEM	RETURN AIR	MODULAT	OPPOSED	756	0	24/1/60	11/11	
RLA-AHU-1	RUSKIN CD50	AHU-1	RELIEF AIR	MODULAT	OPPOSED	8116	0.026	24/1/60	15/35	
RLA-EXISTING SYSTEM	RUSKIN CD50	EXISTING SYSTEM	RELIEF AIR	MODULAT	OPPOSED	909	0.026	24/1/60	12/12	

FILTER SCHEDULE

						AIR		PHYSICAL		
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	FILTRATION	TYPE	ARRANG.	CLEAN STATIC PRESSURE [IN. H2O]	DIRTY STATIC PRESSURE [IN. H2O]	NUMBER 24"X24" MODULES	NUMBER 12"X24" MODULES	NOTES
F-AHU-1		AHU-1	MERV 8	CARTRIDGE	FLAT	0.5	0.8	6	0	
F-EXISTING SYSTEM		EXISTING SYSTEM	MERV 8	CARTRIDGE	FLAT	0.5	0.8	0	3	

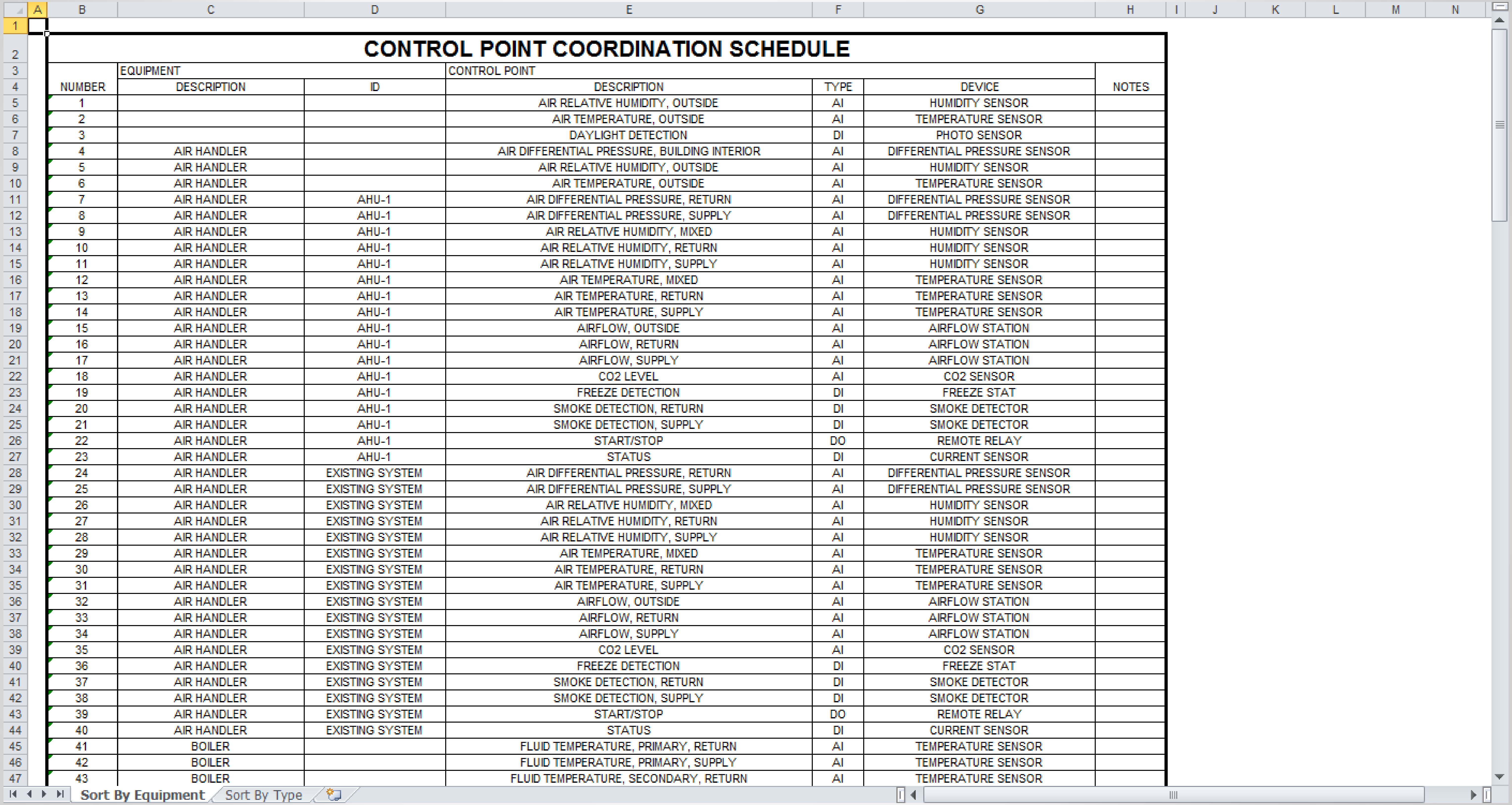
LOUVER SCHEDULE

					AIR		PHYSICAL	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	MAXIMUM AIRFLOW RATE [CFM]	STATIC PRESSURE [IN. H2O]	WIDTH/ HEIGHT/ THICKNESS [IN]	NOTES
L-1	RUSKIN ELF6375DX		STATIONARY	INTAKE	8218	0.1	48/54/6	
L-2	RUSKIN ELF6375DX		STATIONARY	RELIEF	8116	0.1	48/47/6	
L-3	RUSKIN ELF6375DX		STATIONARY	INTAKE	909	0.1	48/12/6	
L-4	RUSKIN ELF6375DX		STATIONARY	RELIEF	909	0.1	48/12/6	

BALANCING VALVE SCHEDULE

					FLUID		PHYSICAL	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	BODY CONSTRUCTION	FLOW RATE [GPM]	HEAD LOSS [FT]	CONNECT SIZE [IN]	NOTES

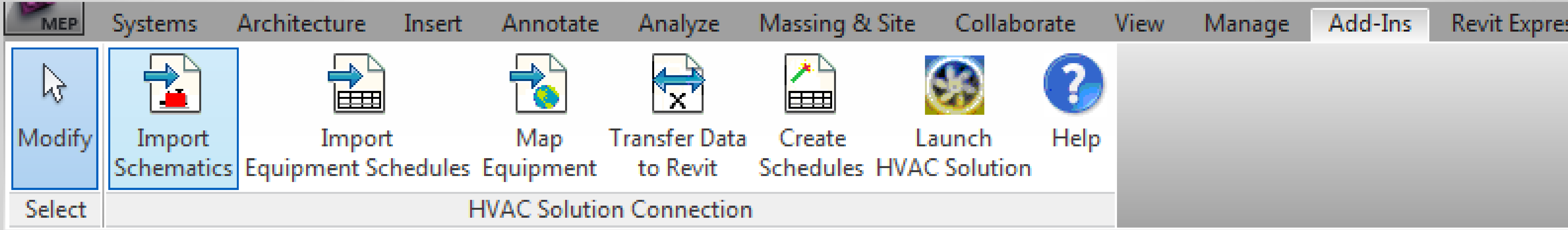
3c) Control schedules!

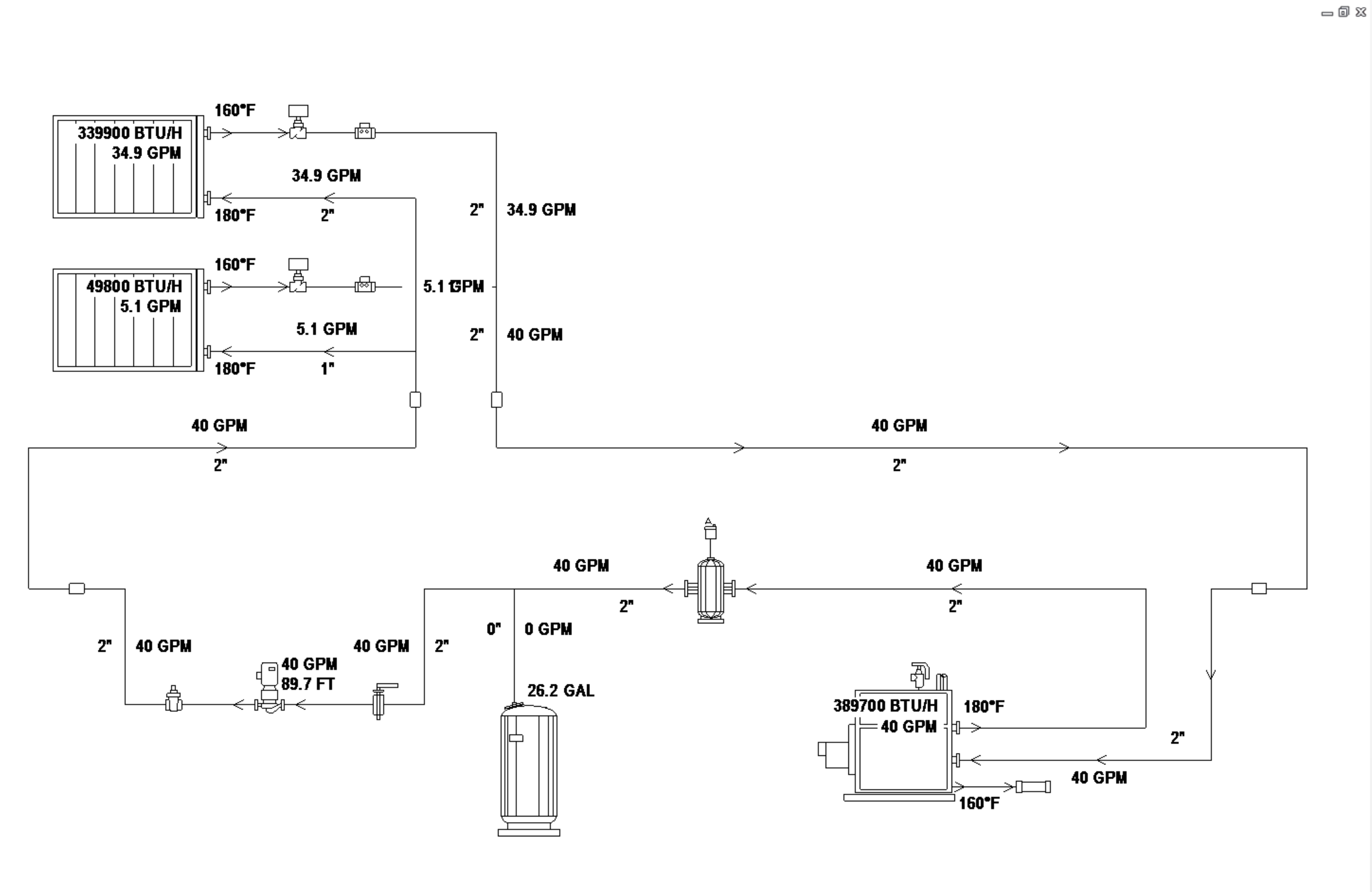


CONTROL POINT COORDINATION SCHEDULE

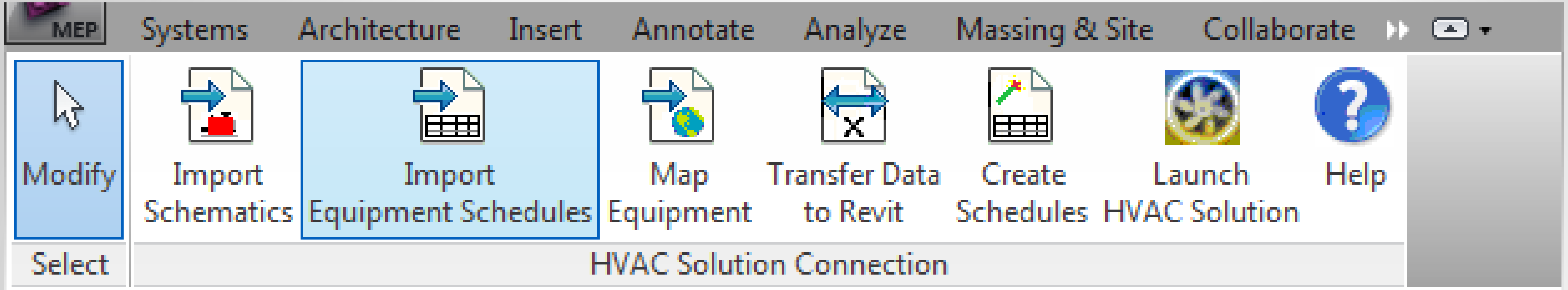
	EQUIPMENT		CONTROL POINT			
NUMBER	DESCRIPTION	ID	DESCRIPTION	TYPE	DEVICE	NOTES
1			AIR RELATIVE HUMIDITY, OUTSIDE	AI	HUMIDITY SENSOR	
2			AIR TEMPERATURE, OUTSIDE	AI	TEMPERATURE SENSOR	
3			DAYLIGHT DETECTION	DI	PHOTO SENSOR	
4	AIR HANDLER		AIR DIFFERENTIAL PRESSURE, BUILDING INTERIOR	AI	DIFFERENTIAL PRESSURE SENSOR	
5	AIR HANDLER		AIR RELATIVE HUMIDITY, OUTSIDE	AI	HUMIDITY SENSOR	
6	AIR HANDLER		AIR TEMPERATURE, OUTSIDE	AI	TEMPERATURE SENSOR	
7	AIR HANDLER	AHU-1	AIR DIFFERENTIAL PRESSURE, RETURN	AI	DIFFERENTIAL PRESSURE SENSOR	
8	AIR HANDLER	AHU-1	AIR DIFFERENTIAL PRESSURE, SUPPLY	AI	DIFFERENTIAL PRESSURE SENSOR	
9	AIR HANDLER	AHU-1	AIR RELATIVE HUMIDITY, MIXED	AI	HUMIDITY SENSOR	
10	AIR HANDLER	AHU-1	AIR RELATIVE HUMIDITY, RETURN	AI	HUMIDITY SENSOR	
11	AIR HANDLER	AHU-1	AIR RELATIVE HUMIDITY, SUPPLY	AI	HUMIDITY SENSOR	
12	AIR HANDLER	AHU-1	AIR TEMPERATURE, MIXED	AI	TEMPERATURE SENSOR	
13	AIR HANDLER	AHU-1	AIR TEMPERATURE, RETURN	AI	TEMPERATURE SENSOR	
14	AIR HANDLER	AHU-1	AIR TEMPERATURE, SUPPLY	AI	TEMPERATURE SENSOR	
15	AIR HANDLER	AHU-1	AIRFLOW, OUTSIDE	AI	AIRFLOW STATION	
16	AIR HANDLER	AHU-1	AIRFLOW, RETURN	AI	AIRFLOW STATION	
17	AIR HANDLER	AHU-1	AIRFLOW, SUPPLY	AI	AIRFLOW STATION	
18	AIR HANDLER	AHU-1	CO2 LEVEL	AI	CO2 SENSOR	
19	AIR HANDLER	AHU-1	FREEZE DETECTION	DI	FREEZE STAT	
20	AIR HANDLER	AHU-1	SMOKE DETECTION, RETURN	DI	SMOKE DETECTOR	
21	AIR HANDLER	AHU-1	SMOKE DETECTION, SUPPLY	DI	SMOKE DETECTOR	
22	AIR HANDLER	AHU-1	START/STOP	DO	REMOTE RELAY	
23	AIR HANDLER	AHU-1	STATUS	DI	CURRENT SENSOR	
24	AIR HANDLER	EXISTING SYSTEM	AIR DIFFERENTIAL PRESSURE, RETURN	AI	DIFFERENTIAL PRESSURE SENSOR	
25	AIR HANDLER	EXISTING SYSTEM	AIR DIFFERENTIAL PRESSURE, SUPPLY	AI	DIFFERENTIAL PRESSURE SENSOR	
26	AIR HANDLER	EXISTING SYSTEM	AIR RELATIVE HUMIDITY, MIXED	AI	HUMIDITY SENSOR	
27	AIR HANDLER	EXISTING SYSTEM	AIR RELATIVE HUMIDITY, RETURN	AI	HUMIDITY SENSOR	
28	AIR HANDLER	EXISTING SYSTEM	AIR RELATIVE HUMIDITY, SUPPLY	AI	HUMIDITY SENSOR	
29	AIR HANDLER	EXISTING SYSTEM	AIR TEMPERATURE, MIXED	AI	TEMPERATURE SENSOR	
30	AIR HANDLER	EXISTING SYSTEM	AIR TEMPERATURE, RETURN	AI	TEMPERATURE SENSOR	
31	AIR HANDLER	EXISTING SYSTEM	AIR TEMPERATURE, SUPPLY	AI	TEMPERATURE SENSOR	
32	AIR HANDLER	EXISTING SYSTEM	AIRFLOW, OUTSIDE	AI	AIRFLOW STATION	
33	AIR HANDLER	EXISTING SYSTEM	AIRFLOW, RETURN	AI	AIRFLOW STATION	
34	AIR HANDLER	EXISTING SYSTEM	AIRFLOW, SUPPLY	AI	AIRFLOW STATION	
35	AIR HANDLER	EXISTING SYSTEM	CO2 LEVEL	AI	CO2 SENSOR	
36	AIR HANDLER	EXISTING SYSTEM	FREEZE DETECTION	DI	FREEZE STAT	
37	AIR HANDLER	EXISTING SYSTEM	SMOKE DETECTION, RETURN	DI	SMOKE DETECTOR	
38	AIR HANDLER	EXISTING SYSTEM	SMOKE DETECTION, SUPPLY	DI	SMOKE DETECTOR	
39	AIR HANDLER	EXISTING SYSTEM	START/STOP	DO	REMOTE RELAY	
40	AIR HANDLER	EXISTING SYSTEM	STATUS	DI	CURRENT SENSOR	
41	BOILER		FLUID TEMPERATURE, PRIMARY, RETURN	AI	TEMPERATURE SENSOR	
42	BOILER		FLUID TEMPERATURE, PRIMARY, SUPPLY	AI	TEMPERATURE SENSOR	
43	BOILER		FLUID TEMPERATURE, SECONDARY, RETURN	AI	TEMPERATURE SENSOR	

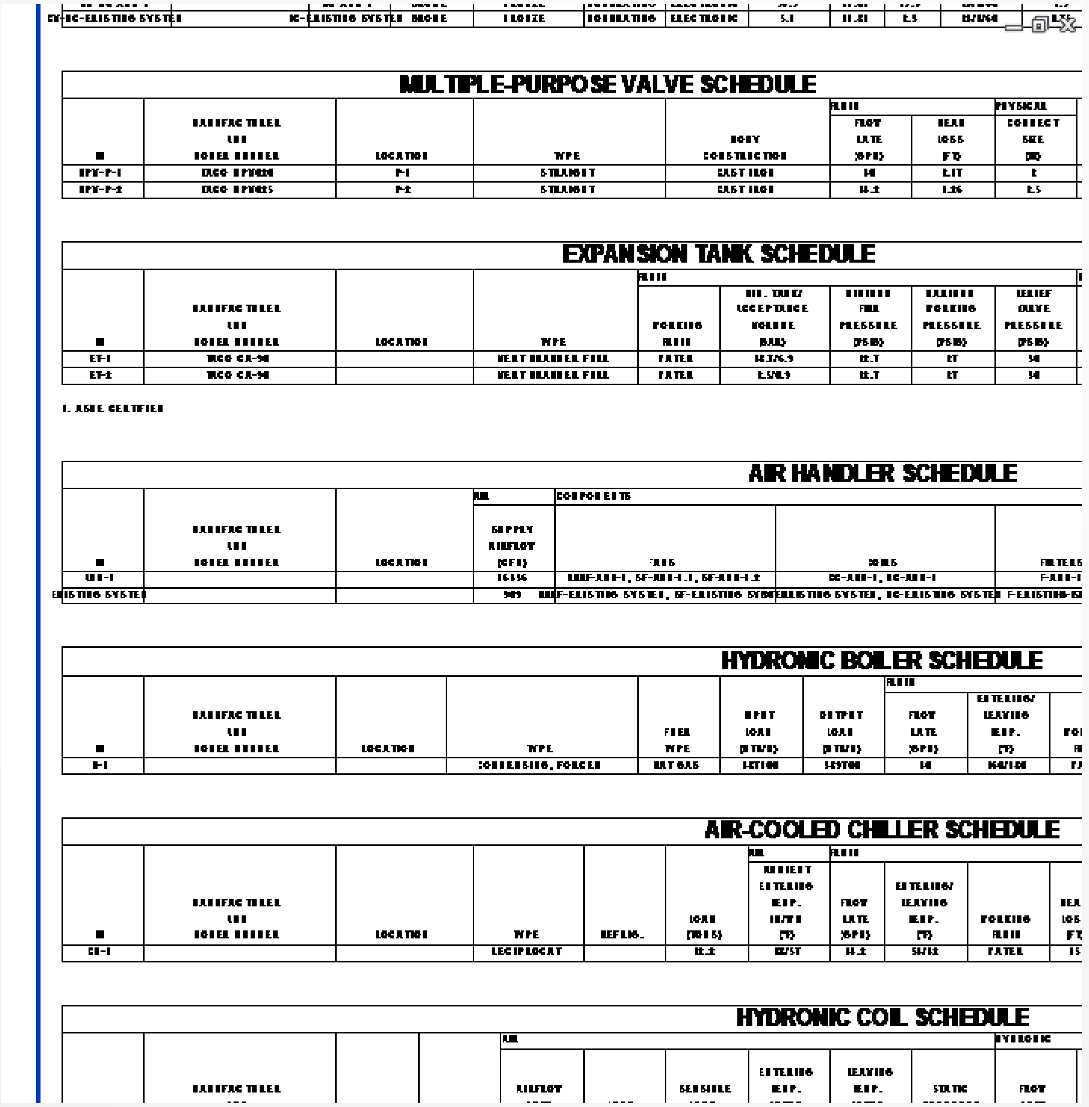
4a) Use the **Revit add-in** to import your **schematics** into Revit MEP!


MEP
Systems
Architecture
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Revit Expres
Modify
Import Schematics
Import Equipment Schedules
Map Equipment
Transfer Data to Revit
Create Schedules
Launch HVAC Solution
Help
Select
HVAC Solution Connection

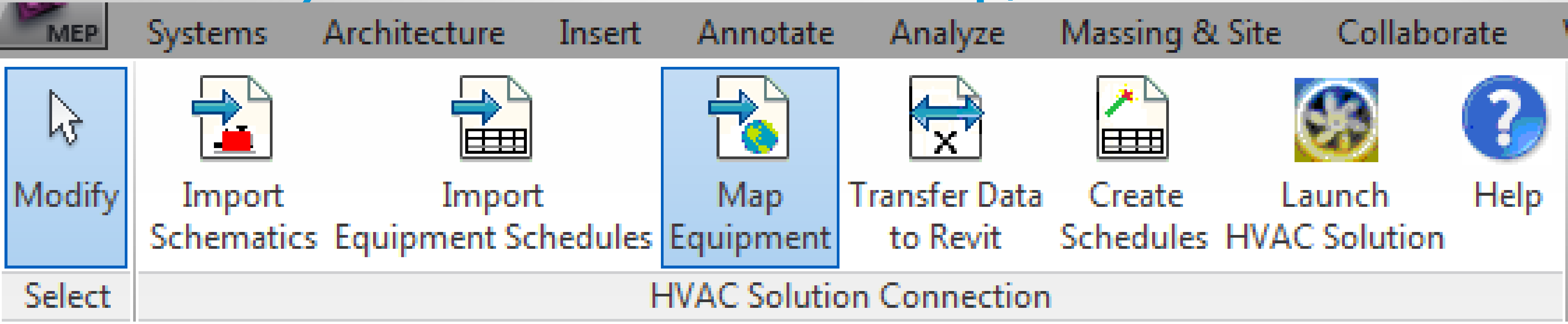

339900 BTU/H
34.9 GPM
160°F
180°F
34.9 GPM
2"
2"
34.9 GPM
49800 BTU/H
5.1 GPM
160°F
180°F
5.1 GPM
1"
5.1 GPM
2"
40 GPM
40 GPM
2"
40 GPM
2"
40 GPM
2"
40 GPM
2"
2"
40 GPM
40 GPM
89.7 FT
40 GPM
2"
0"
0 GPM
26.2 GAL
389700 BTU/H
40 GPM
180°F
160°F
2"
40 GPM

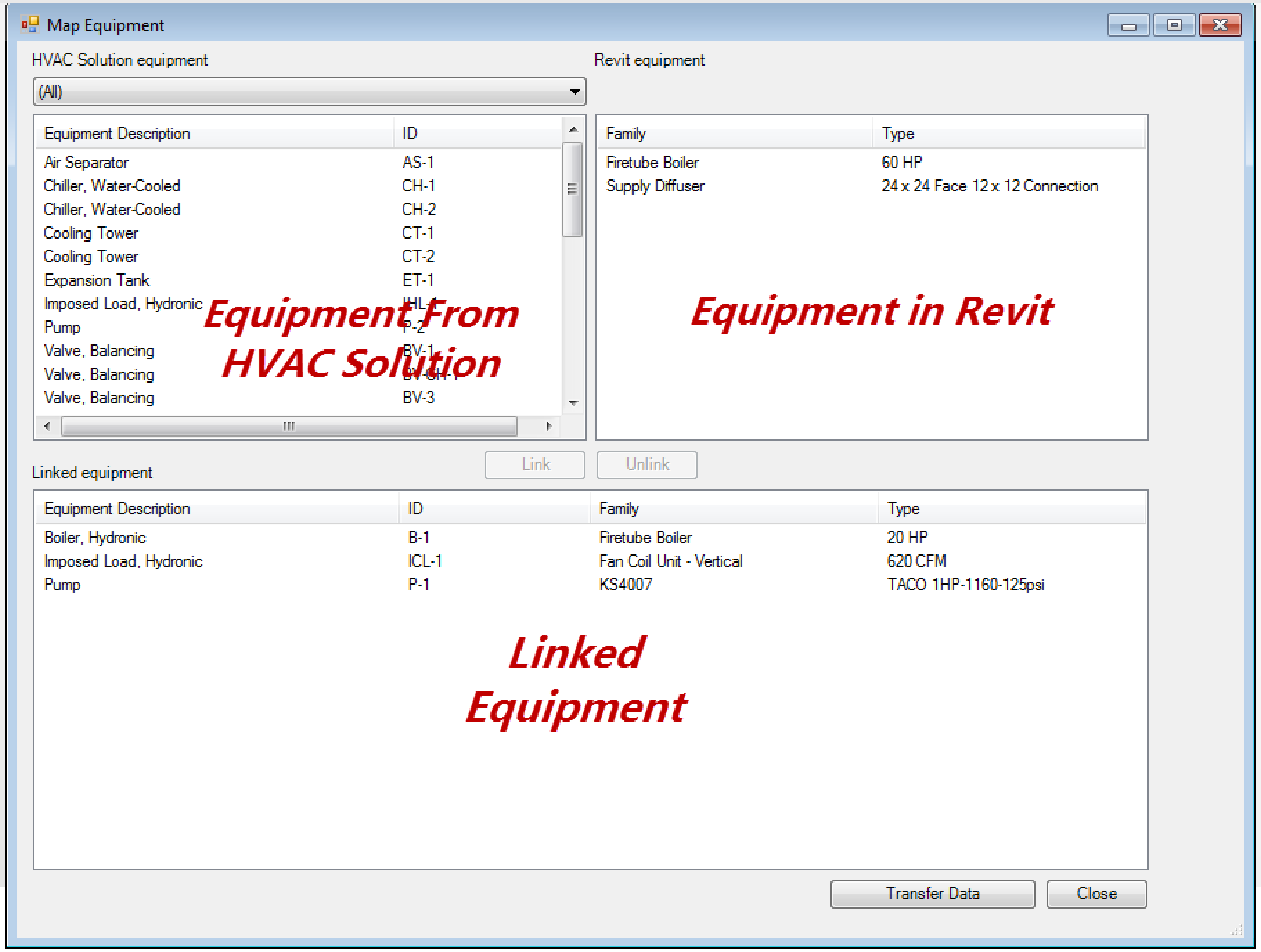
4b) Use the Revit add-in to import your schedules into Revit MEP!


MEP
Systems
Architecture
Insert
Annotate
Analyze
Massing & Site
Collaborate
Modify
Import Schematics
Import Equipment Schedules
Map Equipment
Transfer Data to Revit
Create Schedules
Launch HVAC Solution
Help
Select
HVAC Solution Connection


MULTIPLE-PURPOSE VALVE SCHEDULE
EXPANSION TANK SCHEDULE
AIR HANDLER SCHEDULE
HYDRONIC BOILER SCHEDULE
AIR-COOLED CHILLER SCHEDULE
HYDRONIC COIL SCHEDULE

4c) Use the Revit add-in to map, link and transfer data into Revit MEP!


MEP
Systems
Architecture
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Modify
Import Schematics
Import Equipment Schedules
Map Equipment
Transfer Data to Revit
Create Schedules
Launch HVAC Solution
Help
Select
HVAC Solution Connection


Map Equipment
HVAC Solution equipment
(All)
Revit equipment
Link
Unlink
Linked equipment
Transfer Data
Close

HVAC Solution equipment

Equipment Description	ID
Air Separator	AS-1
Chiller, Water-Cooled	CH-1
Chiller, Water-Cooled	CH-2
Cooling Tower	CT-1
Cooling Tower	CT-2
Expansion Tank	ET-1
Imposed Load, Hydronic	IHL-1
Pump	P-2
Valve, Balancing	BV-1
Valve, Balancing	BV-CH-1
Valve, Balancing	BV-3

Equipment From HVAC Solution

Revit equipment

Family	Type
Firetube Boiler	60 HP
Supply Diffuser	24 x 24 Face 12 x 12 Connection

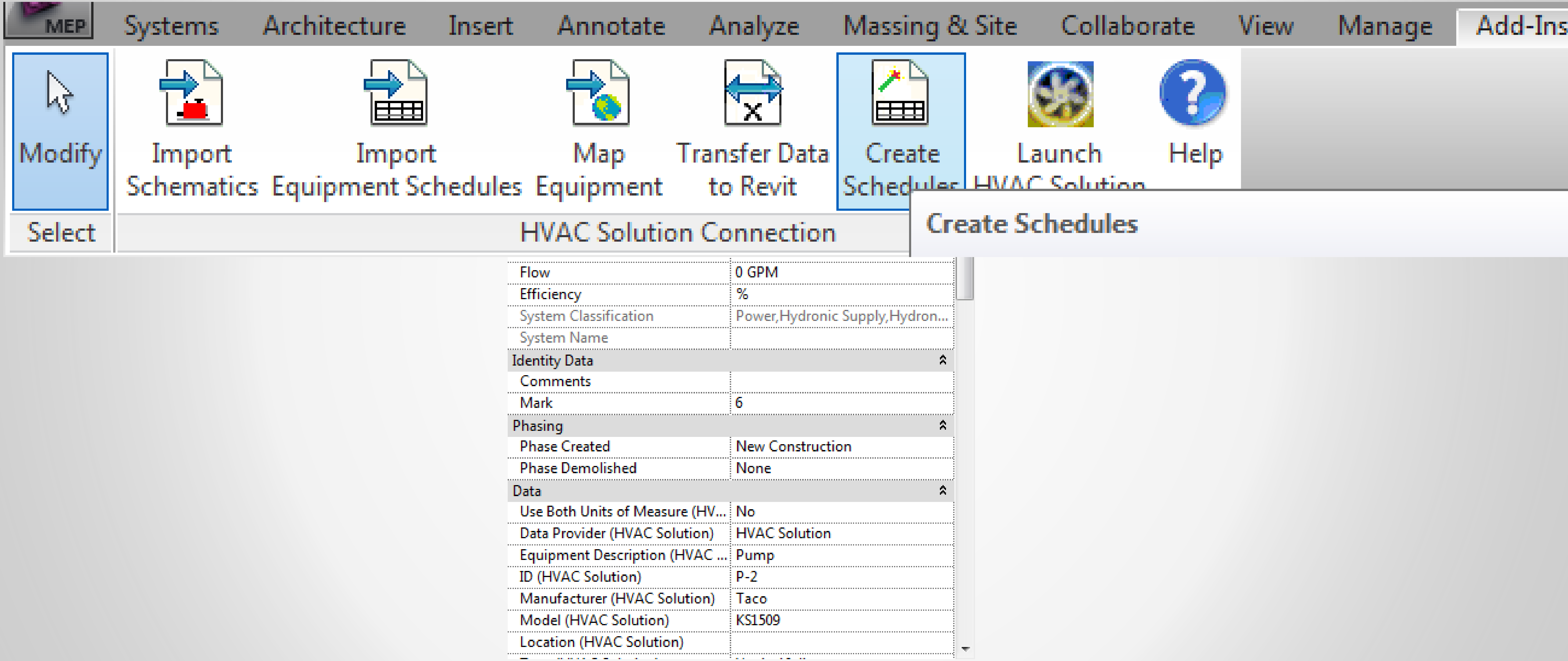
Equipment in Revit

Linked equipment

Equipment Description	ID	Family	Type
Boiler, Hydronic	B-1	Firetube Boiler	20 HP
Imposed Load, Hydronic	ICL-1	Fan Coil Unit - Vertical	620 CFM
Pump	P-1	KS4007	TACO 1HP-1160-125psi

Linked Equipment

4d) HVAC Solution equipment design data is placed in the mapped Revit family instance for schedule creation.


MEP
Systems
Architecture
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Modify
Select
Import Schematics
Import Equipment Schedules
Map Equipment
Transfer Data to Revit
Create Schedules
Launch HVAC Solution
Help
HVAC Solution Connection
Create Schedules

Flow	0 GPM
Efficiency	%
System Classification	Power,Hydronic Supply,Hydron...
System Name	
Identity Data	
Comments	
Mark	6
Phasing	
Phase Created	New Construction
Phase Demolished	None
Data	
Use Both Units of Measure (HV...	No
Data Provider (HVAC Solution)	HVAC Solution
Equipment Description (HVAC ...	Pump
ID (HVAC Solution)	P-2
Manufacturer (HVAC Solution)	Taco
Model (HVAC Solution)	KS1509
Location (HVAC Solution)	

The remainder of this presentation will demonstrate HVAC Solution and Revit, from Concept to Completion.

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