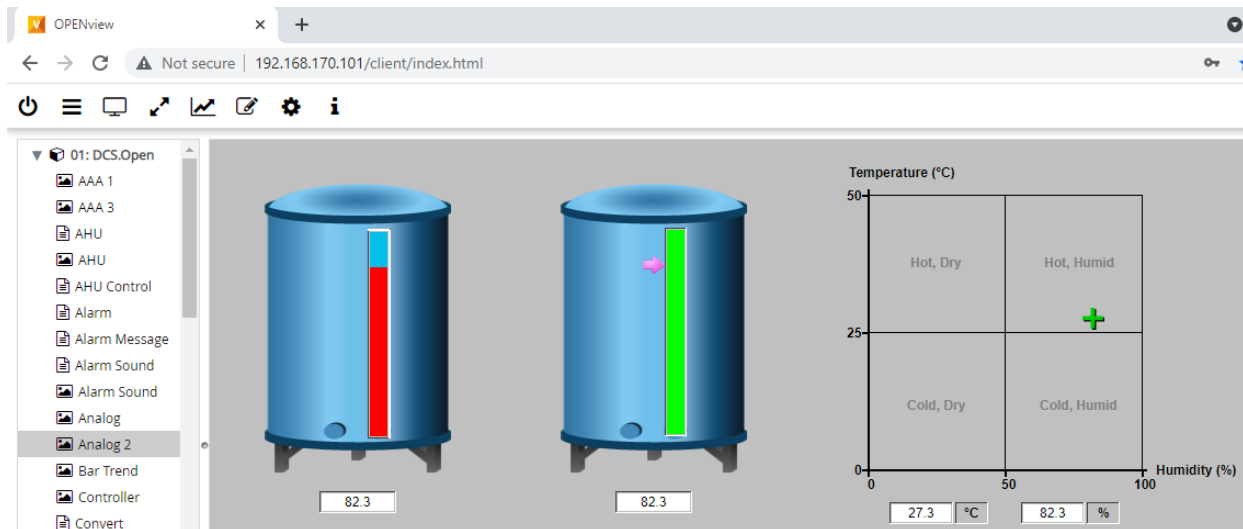
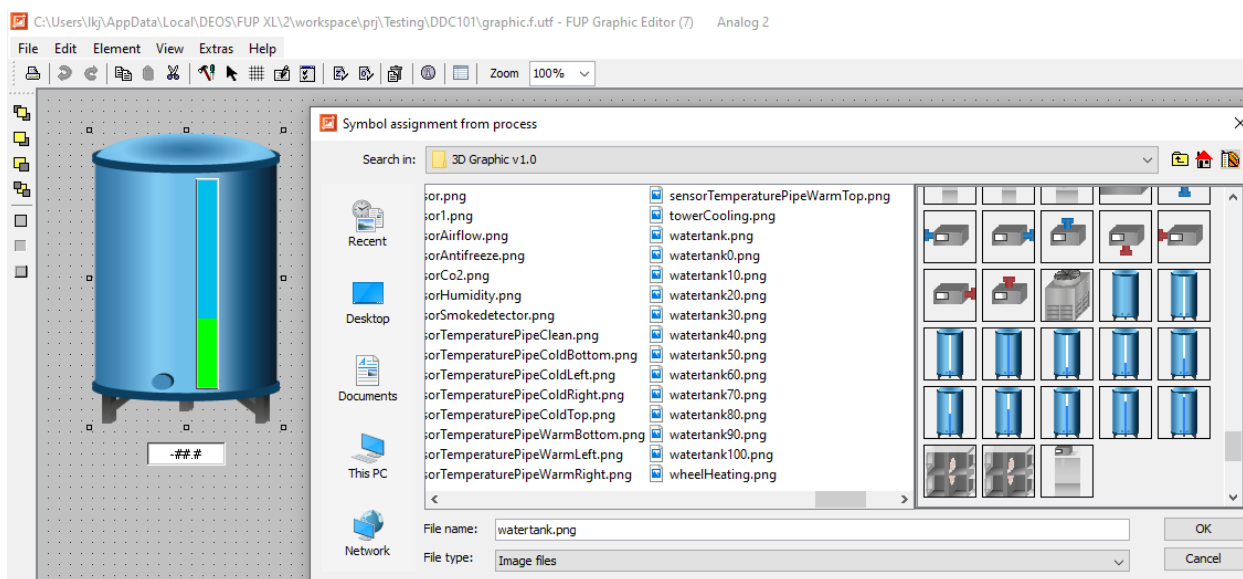


TT220103 – FUP - Graphic Elements for Analog Point 2

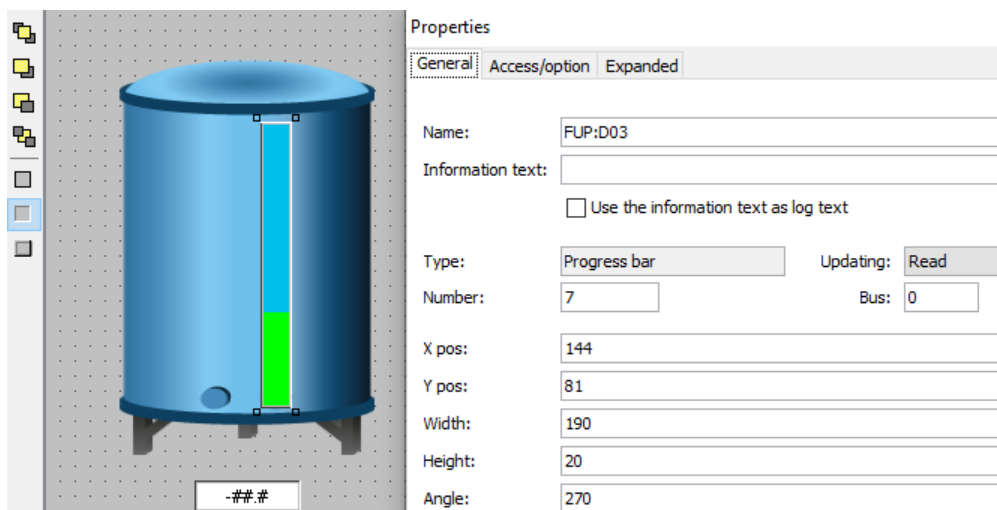
1. In TT190702, we show you some graphic elements for analog point value in FUP. In this document, we will show you some other ways to show analog point value in your graphic page.



2. First, we add the tank picture to the graphic page. Use “Status” graphic element and select the tank picture from the 3D graphic library (or any other picture you like).



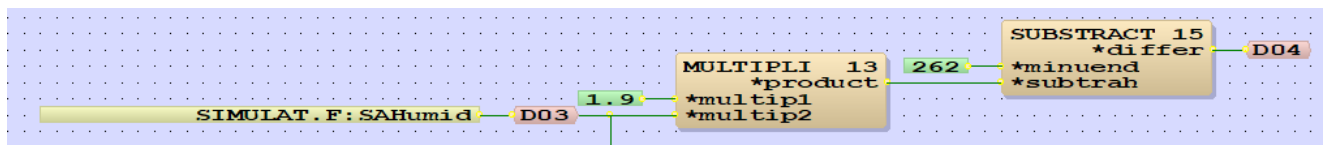
3. Add a “Progress bar” element for the tank level, link it to a “Display” and set the “Angle” to 270.



- Go to “Expanded” tab, and set the start and end values, min/max values, and set different colors for different states (normal, below min. and above max.)

Properties	Value	Preview
Foreground color	-16711936	[Green bar]
Background color	-16728085	[Blue bar]
Minimum limit value	20	20
Foreground color when value fell below Min	-65536	[Red bar]
Background color if the value falls below the min value	-16728085	[Blue bar]
Maximum limit value	80	80
Foreground color if the max value was exceeded	-65536	[Red bar]
Background color if the max value was exceeded	-16728085	[Blue bar]
Start value of progress bar	0	0
Progress bar final value	100	100

- You can also use a “pointer” picture to show the tank level. First, we need to calculate the vertical position of the pointer in your graphic, based on the analog point value.



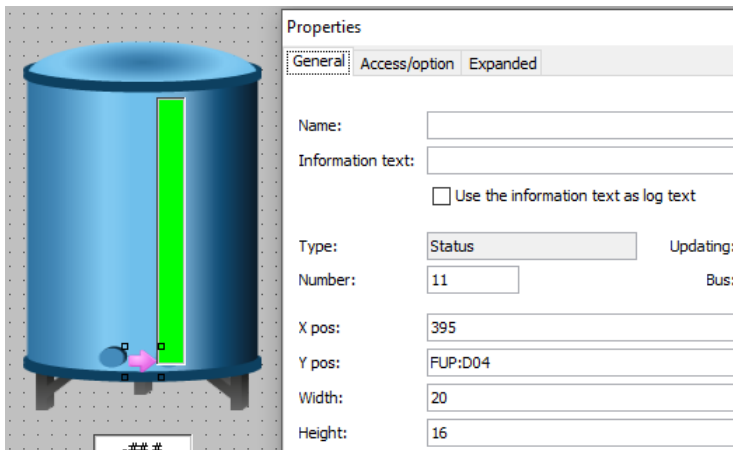
- Now add the “Pointer” picture to your tank, and set the “Y-Pos” to link to the “Display” D04.

Properties	
General Access/option Expanded	
Name:	
Information text:	
<input type="checkbox"/> Use the information text as log text	
Type:	Status
Number:	11
X pos:	395
Y pos:	FUP:D04
Width:	20

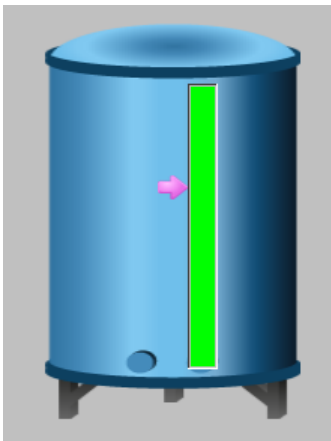
- You will need to change the constant “1.9” and “262” based on your actual size and position of your tank level. In our example, the tank level graphic has a height of “190”, and the tank level is 0-100%, so first we multiple it by “1.9” to convert 100 to 190.

Properties	
General Access/option Expanded	
Name:	
Information text:	
<input type="checkbox"/> Use the information text as log text	
Type:	Color
Number:	10
Updating:	Read
Bus:	0
X pos:	415
Y pos:	80
Width:	20
Height:	190

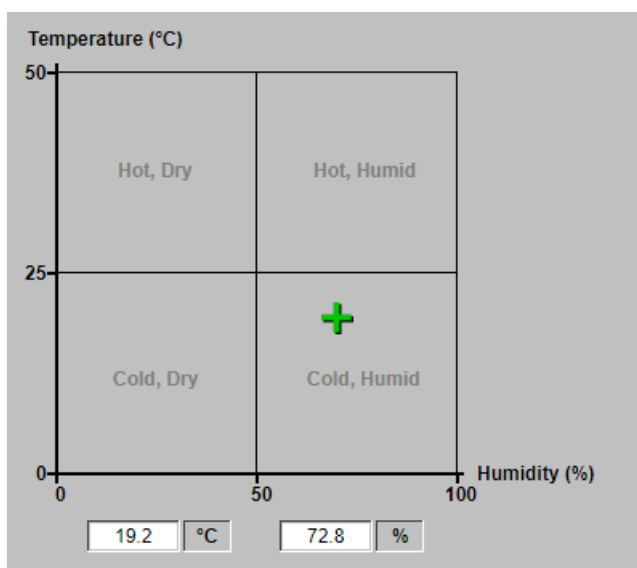
8. The lowest point of the tank level is “Y pos” + “Height”, so it's $80+190=270$. Since the “Height” of the “Pointer” picture is “16”, so final “Y Pos” for the pointer picture is $270-16/2=262$.



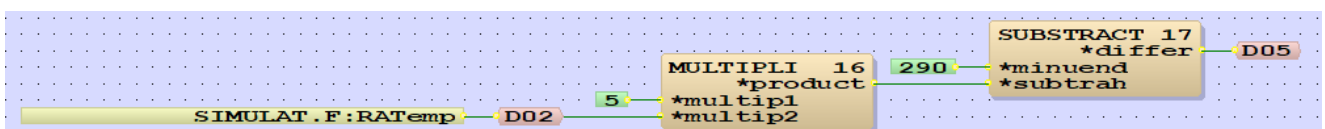
9. Combining the above 2 ways, you can use “Progress bar” for the actual tank level, and the “Pointer” picture to show the setpoint.



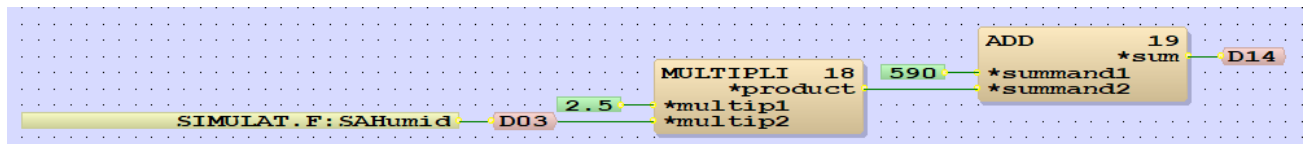
10. Finally, we will show you how to create a graph like below to show the temperature and humidity graphically.



11. Now, calculate the “Y Pos” of the pointer based on the temperature value.



12. Calculate the “X Pos” of the pointer based on the humidity value.



13. Again, you need to change the value of the constants based on your actual graphic size and position, and also the picture size of your pointer picture.

Properties

General Access/option Expanded

Name:

Information text:

☐ Use the information text as log text

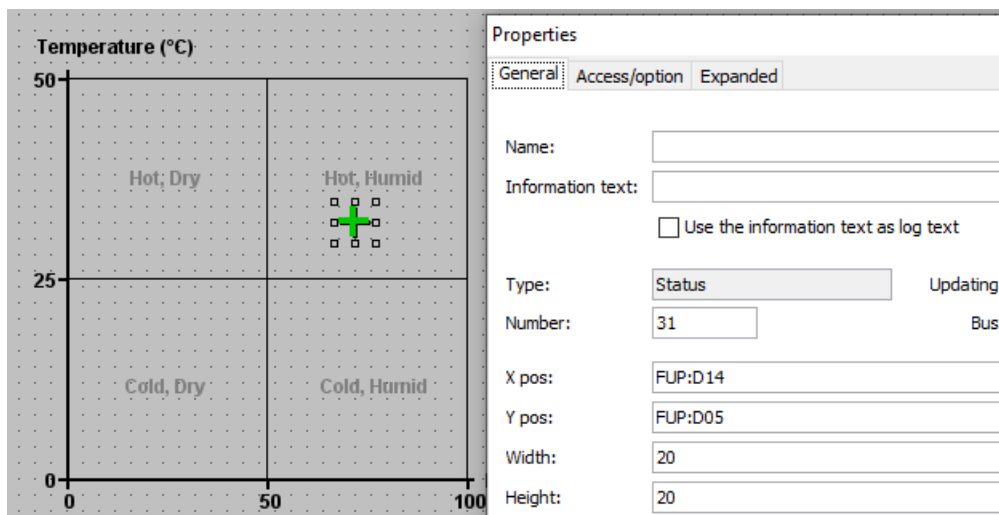
Type: Color Updatir

Number: 15 Bi

X pos: 600

Y pos: 300

14. Lastly, set the “X Pos” and “Y Pos” of your pointer to the “Display” of your calculation accordingly. It’s done!



15. With the above techniques, you can also build something like below as well.

