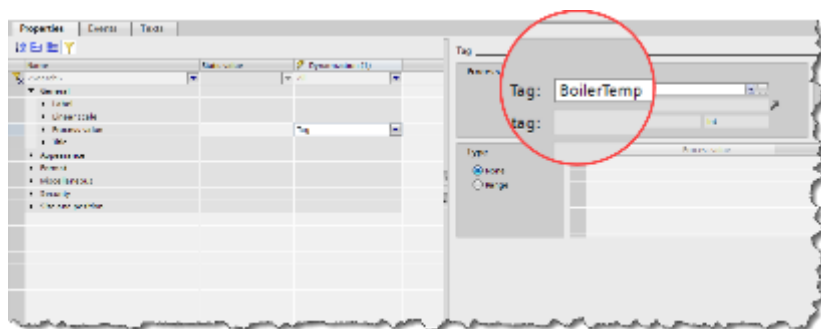
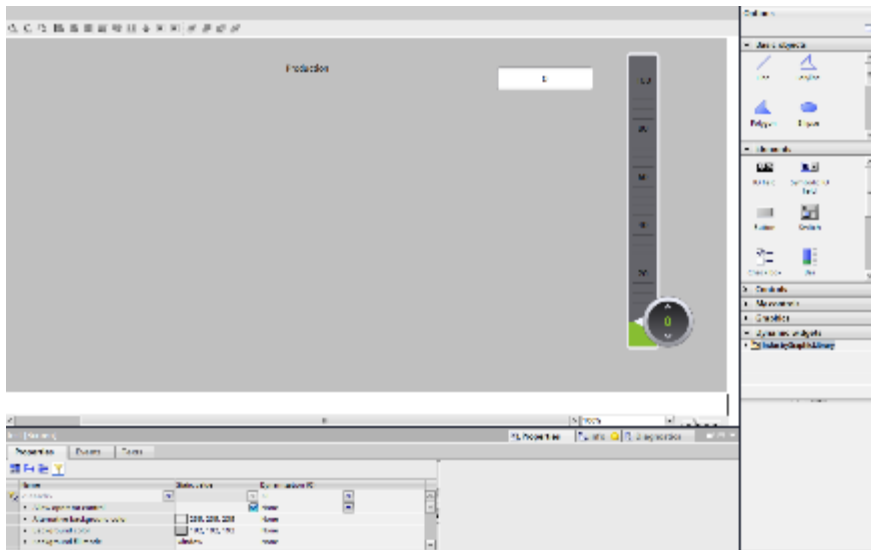
The image features a laptop in the foreground displaying the WinCC Unified software interface. The interface includes a project tree on the left, a central workspace with a graphical design, and a right-hand pane with a list of objects. In the background, a semi-transparent 3D visualization of a factory production line is shown, with various components and data points. A large teal banner is overlaid on the bottom half of the image, containing the title text. The overall aesthetic is clean and modern, with a light blue and teal color palette.

# WinCC Unified Screen Engineering

# SIMATIC WinCC Unified Hands On: Properties

## HANDS ON



1. Modify Production Screen
2. On Production Screen insert
  1. Slider
  2. I/O field
3. Set lower and upper limits of slider to 0, 100
4. Create Tag and attach to both Slider and IO field
5. Save and test

# SIMATIC WinCC Unified Hands On: Properties

1. Drag Slider onto screen "Production"
2. Change to "Tag"
3. Click "..."/> to browse
4. Create, Rename and Confirm
5. Modify properties as shown

The image shows the SIMATIC WinCC Unified interface with several windows and panels. The main window displays a 'Production' screen with a vertical slider widget. A properties dialog is open, showing the 'General' tab with 'Name: BoilerTemp', 'Data type: Int', and 'HMI data type: Int'. A 'Tag' dialog is also open, showing a list of tags with 'MyTag' selected. A table of properties is visible at the bottom, with 'Process value' set to 'Tag' and 'Scale value' set to '100'. A 'Dynamic widgets' panel is also visible on the right.

Name	Static value	Dynamization (1)
Label		
Process value	Tag	
Scale		
Alignment	Vertical	None
Division count	5	None
Graduation	64, 64, 68	None
Label - color	0, 0, 0	None
Label - font		
Output format	{}	None
Scale mode	Numbers, Graduation	None
Scale value	100	None
Scale value	0	None
Scale value		None

# SIMATIC WinCC Unified Hands On: Properties

1. Drag IO Field onto screen "Production"
2. Highlight "Default tag table"
3. Drag "BoilerTemp" from Details View on drop on IO Field

The screenshot displays the SIMATIC WinCC Unified interface. The main workspace shows a screen titled "Production" with a grid background. A white rectangular IO field is placed on the grid, and a vertical scale with a circular gauge is also visible. A green arrow labeled "1" points from the IO field to the "Default tag table" entry in the HMI tags list on the left. Another green arrow labeled "2" points from the "Default tag table" entry to the "BoilerTemp" tag in the Details view at the bottom. A third green arrow labeled "3" points from the "BoilerTemp" tag to the IO field. The Details view shows the "Properties" tab for the IO field, with the "Process value" option selected under the "General" section. The "Tag" section shows the "BoilerTemp" tag selected, with the "PLC tag" field set to "BoilerTemp".

Name	Data type	Address
@ServerMachineName	WString	
@SystemActivationStat	UDInt	
@SystemHealthInde	ULInt	
@UserName	WString	
BoilerTemp	Int	
MyTag	Int	

Properties	Events	Texts	Expressions
<b>General</b>			
Font			
Mode	Input/output	None	
Output format		None	
Process value		Tag	
Appearance			
Format			
Miscellaneous			
Security			
Size and position			

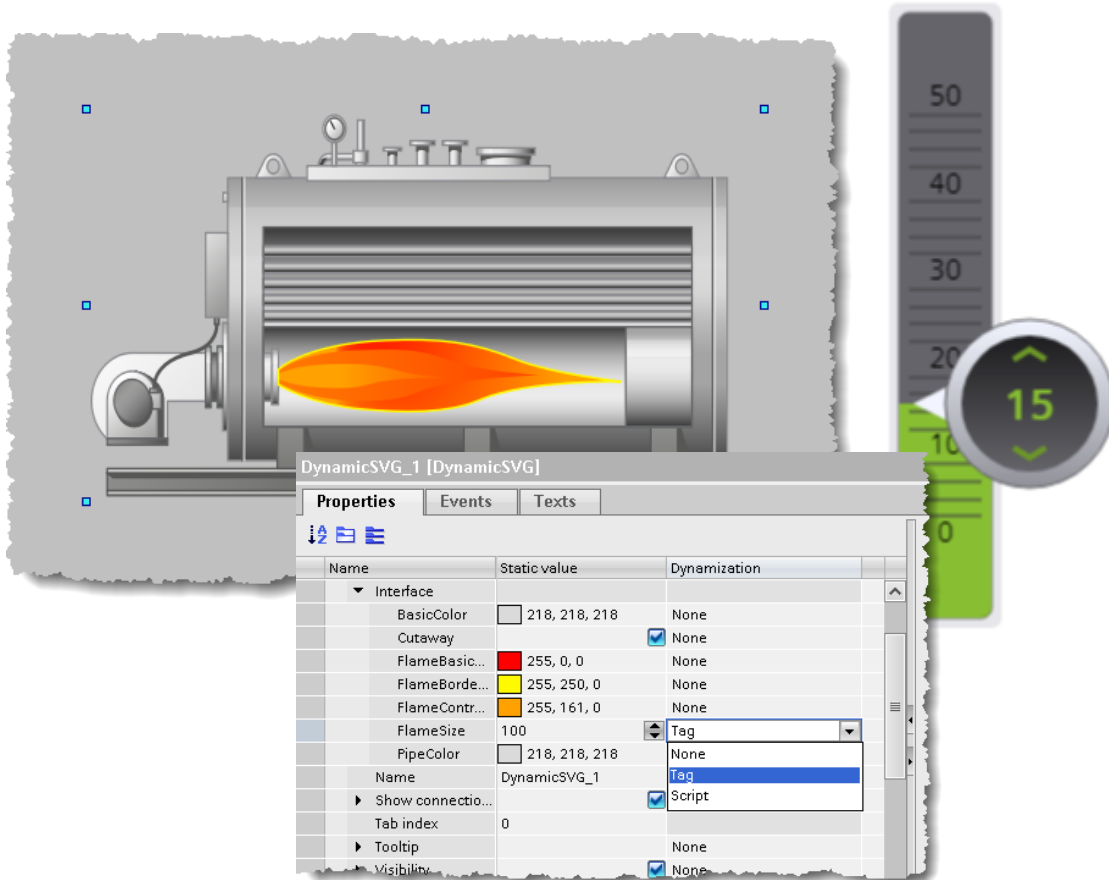
Tag	Condition	Process value
BoilerTemp		

# SIMATIC WinCC Unified Hands On: Properties

The screenshot displays the SIMATIC WinCC Unified software interface. On the left, the Project Tree is visible, with the 'HMI\_1 [MTP700 Unified Basic]' device highlighted. The main window shows a simulation of a 'Production' screen with buttons for 'Overview', 'Production', 'Alarm', and 'Trend'. A numerical display shows '50' and a vertical scale shows '100', '80', and '60'. A green callout box contains a five-step list of instructions.

1. Save the project
2. Highlight the HMI device in the Project Tree
3. Press the simulation button
4. Test your screen
5. Close simulator when complete

## ADDITIONAL HANDS ON



1. Add the SVG Boiler with flame to a screen  
"BoilerHorizontalCutawaywithFire"
2. Open the interface in the properties of the SVG
3. Connect the Slider Tag to the flame size of the boiler
4. Download the Runtime
5. Change the size of the flame during the Runtime

Additional: Try also some other SVG's to see the differences in the interface!

# SIMATIC WinCC Unified Hands On: SVG's

1. Drag Boiler from Dynamic widgets
2. Change FlameSize to Tag
3. Assign BoilerTemp tag

The screenshot displays the SIMATIC WinCC Unified interface. At the top, a 'Production' environment is shown with a boiler widget and a vertical scale. A green arrow labeled '1' points from the boiler widget in the 'Dynamic widgets' library to the 'FlameSize' property in the 'Interface' section of the 'Properties' window. The 'FlameSize' property is set to 'Tag'. The 'Process' section of the 'Properties' window shows the 'Tag' field set to 'BoilerTemp'. The 'Type' section of the 'Properties' window shows 'None' selected.

Name	Static value	Dynamization (1)
Appearance		
Miscellaneous		
Connection quality - show		<input checked="" type="checkbox"/> None
Connection status	None	
Contained type - name	BoilerHorizontalCutaw...	
Interface		
BasicColor	<input type="checkbox"/> 218, 218, 218	None
Cutaway		<input checked="" type="checkbox"/> None
FlameBasicColor	<input type="checkbox"/> 255, 0, 0	None
FlameBorderColor	<input type="checkbox"/> 255, 250, 0	None
FlameContrastColor	<input type="checkbox"/> 255, 161, 0	None
FlameSize	100	Tag
PipeColor	<input type="checkbox"/> 218, 218, 218	None
Layer	Layer_0	

Process	Tag
	BoilerTemp

Type	Condition	FlameSize
<input checked="" type="radio"/> None		
<input type="radio"/> Range		
<input type="radio"/> Multiple bits		
<input type="radio"/> Single bit	0	

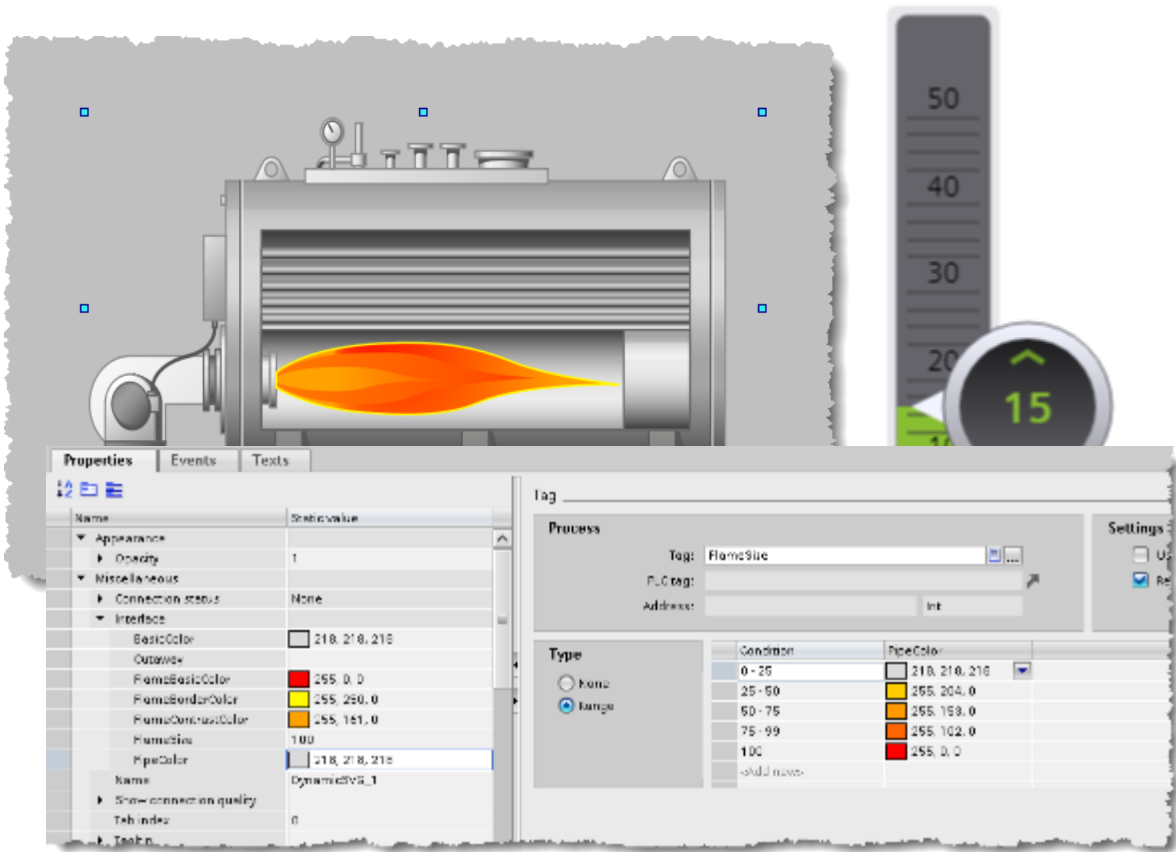
# SIMATIC WinCC Unified Hands On: SVG's

The screenshot shows the SIMATIC WinCC Unified interface. On the left, the Project Tree is visible, with 'HMI\_1 [MTP700 Unified Basic]' selected. The main window displays a simulation of a 'Production' screen. The screen features a navigation menu with buttons for 'Overview', 'Production', 'Alarm', and 'Trend'. A temperature gauge is shown with a value of 71. The simulation window is titled 'Production' and contains a graphic of a furnace with a flame inside. The temperature gauge is a vertical scale from 0 to 100, with a green needle pointing to 71. A circular callout around the gauge also displays the value 71.

1. Save the project
2. Highlight the HMI device in the Project Tree
3. Press the simulation button
4. Test your screen
5. Close simulator when complete



## ADDITIONAL HANDS ON



1. Add the same tag you added to the flame size also to pipe color
2. Activate dynamization type "Range"
3. Create different colors depending on the value
4. Do this with ranges or static values
5. Download the Runtime and test
6. Change pipe color during the Runtime

# SIMATIC WinCC Unified Hands On: SVG's

1. Change PipeColor Dynamization property to "Tag"
2. Assign BoilerTar
3. Change Type to "Range" and set conditions as shown.

The screenshot shows the SIMATIC WinCC interface. At the top, a boiler SVG is displayed with a flame and a gauge. Below the SVG, the 'DynamicSVG\_2 [DynamicSVG]' window is open, showing the 'Properties' tab. The 'PipeColor' property is highlighted in blue, and its value is '218, 218, 218' with a dropdown menu set to 'Tag' (1). The 'Tag' field is set to 'BoilerTemp' (2). The 'Type' is set to 'Range' (3). The 'Settings' section shows 'Use indirect addressing' unchecked and 'Read-only' checked. The 'Type' section shows a table of conditions and colors.

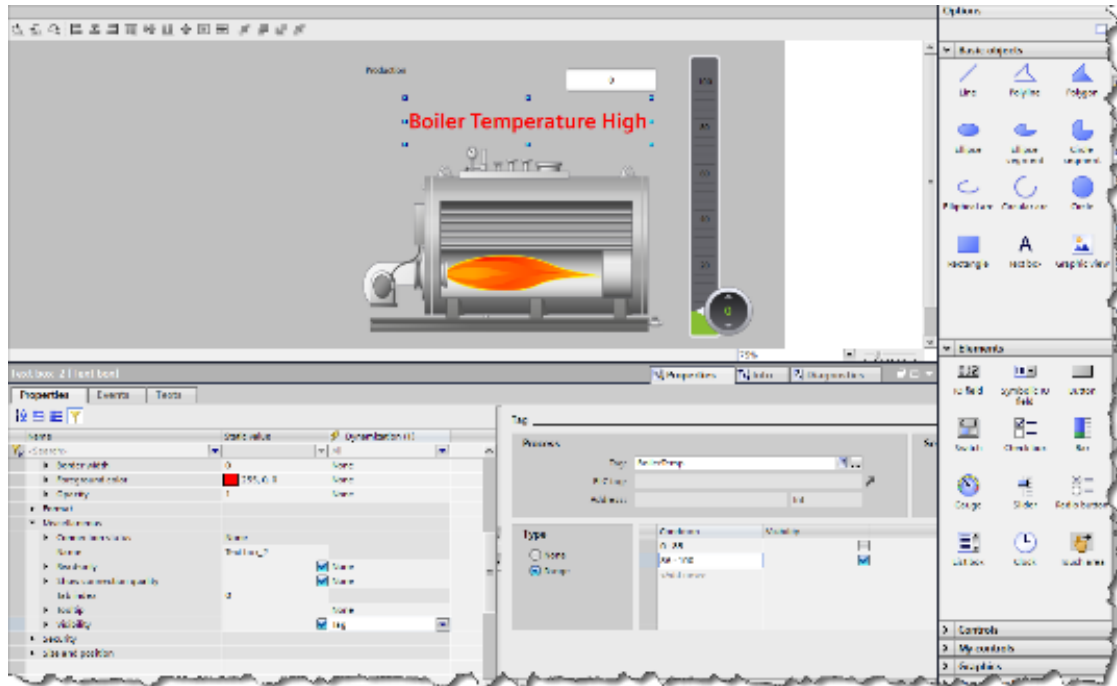
Condition	PipeColor	Flashing	Alternative value	Frequency
0 - 25	51, 102, 255	No	255, 0, 0	Medium
26 - 50	255, 255, 0	No	255, 0, 0	Medium
51 - 75	255, 102, 0	No	255, 0, 0	Medium
76 - 100	255, 0, 0	No	255, 0, 0	Medium
<Add new>				

# SIMATIC WinCC Unified Hands On: SVG's

The screenshot displays the SIMATIC WinCC Unified interface. On the left, the Project Tree shows the 'HMI\_1 [MTP700 Unified Basic]' device selected. In the center, a navigation pane contains buttons for 'Overview', 'Production', 'Alarm', and 'Trend'. On the right, the 'Production' screen is visible, featuring a temperature gauge with a value of 55 and a corresponding digital display. The interface is annotated with numbered callouts: 1 points to the 'Save project' button, 2 points to the selected HMI device, 3 points to the simulation button, 4 points to the production screen, and 5 points to the top right corner of the window.

1. Save the project
2. Highlight the HMI device in the Project Tree
3. Press the simulation button
4. Test your screen
5. Close simulator when complete

# ADDITIONAL HANDS ON



1. Add a Text Field
2. Adjust font and color
3. Set text field only to show based on tag value
4. Download the Runtime
5. Test

# SIMATIC WinCC Unified Hands On: SVG's

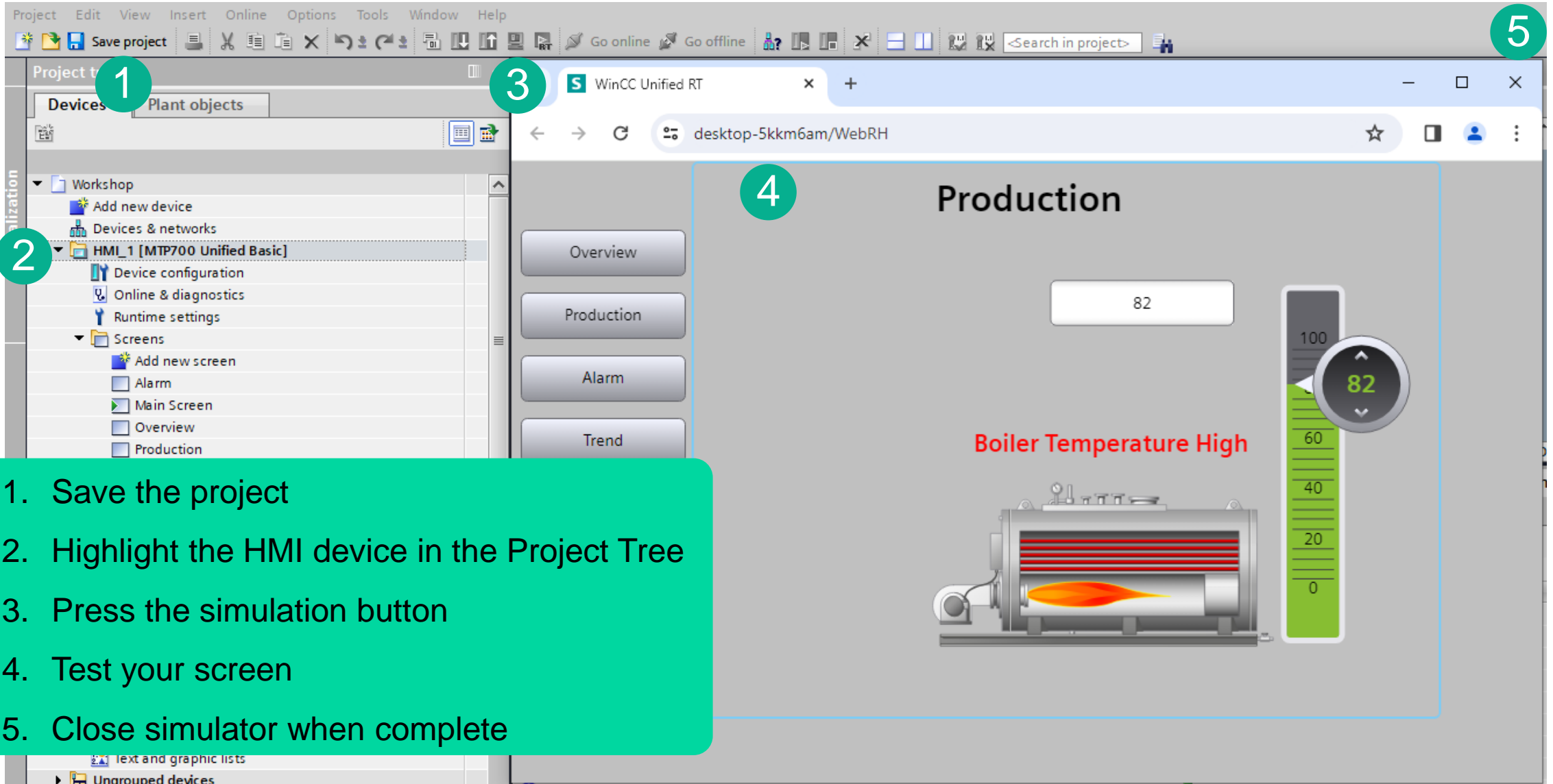
1. Drag a Text object from the Basic Objects
2. Change properties as shown

The screenshot displays the SIMATIC WinCC Unified interface. The top window shows a design workspace with a boiler icon and a temperature scale. A red text object "Boiler Temperature High" is placed on the scale, with a green circle '1' and an arrow pointing to it. The right sidebar shows the "Basic objects" section with a text object icon selected.

The bottom window shows the "Text\_2 [Text]" properties dialog. A green circle '2' and an arrow point to the "Properties" tab. The "General" section shows the font set to "Siemens Sans, 21pt, style=Bold". The "Text" section shows the text "Boiler Temperature High". The "Appearance" section shows the foreground color set to red (255, 0, 0). The "Miscellaneous" section shows the "Visibility" property set to "Tag". The "Process" section shows the tag "BoilerTemp" and the "Type" set to "Range". The "Condition" table shows two conditions: "0 - 75" and "76 - 100", both with "Visibility" checked.

Condition	Visibility
0 - 75	<input checked="" type="checkbox"/>
76 - 100	<input checked="" type="checkbox"/>
<Add new>	

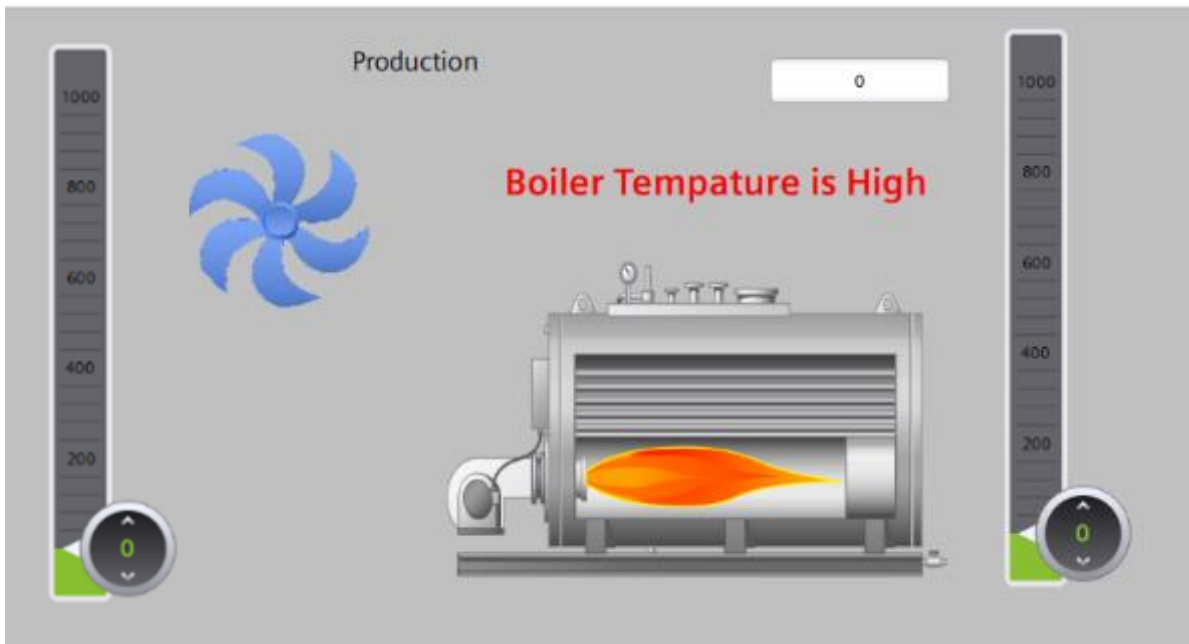
# SIMATIC WinCC Unified Hands On: SVG's



The screenshot displays the SIMATIC WinCC Unified interface. The Project Tree on the left shows the 'HMI\_1 [MTP700 Unified Basic]' device highlighted. The main window shows the 'Production' screen with a boiler temperature gauge and a 'Boiler Temperature High' alarm. The simulation button is visible in the navigation pane.

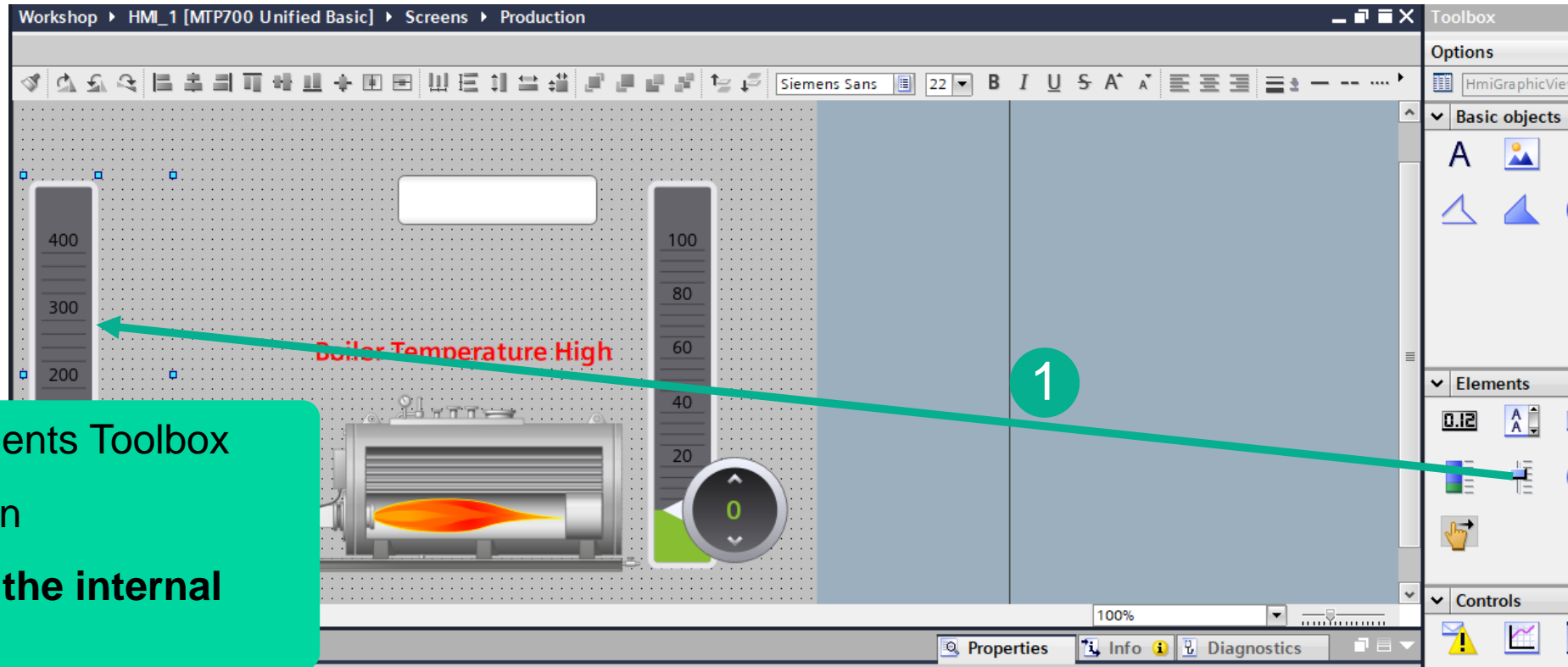
1. Save the project
2. Highlight the HMI device in the Project Tree
3. Press the simulation button
4. Test your screen
5. Close simulator when complete

# ADDITIONAL HANDS ON



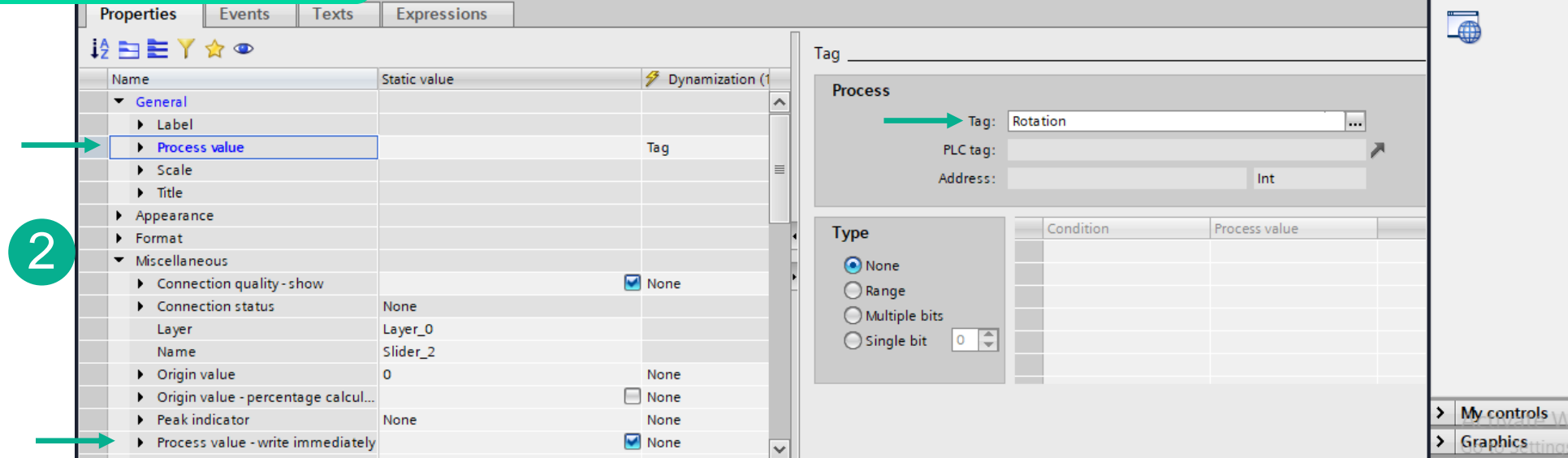
1. Add some basic objects on a screen
2. Create a tag for the rotation and connect it to a slider control
3. Use the tag to configure the rotation of objects
4. Download the runtime
5. Rotate the object

# SIMATIC WinCC Unified Hands On: Rotation



1. Drag a Slider from the Elements Toolbox
2. Change Properties as shown

**Note: You will need to create the internal Rotation tag as before.**





# SIMATIC WinCC Unified Hands On: Rotation

- 1. Drag the Fan graphic from the Graphics Toolbox
- 2. Change the Rotation – angle as shown

The screenshot shows the SIMATIC WinCC Unified interface. The main window displays a production screen with a fan graphic and a boiler. The fan graphic is highlighted with a green circle labeled '1'. The Graphics Toolbox on the right shows the fan graphic being dragged from the 'Blowers' folder. The Properties window at the bottom shows the 'Rotation - angle' property set to 0, highlighted with a green circle labeled '2'.

Name	Static value	Dynamization (1)
General		
Appearance		
Format		
Miscellaneous		
Security		
Size and position		
Position - left	153	None
Position - top	90	None
Rotation - angle	0	Tag
Rotation - pivot point	Absolute to center	None
Rotation - pivot point X	0	None
Rotation - pivot point Y	0	None
Size - height	120	None
Size - width	116	None

Type	Condition	Rotation - angle
<input checked="" type="radio"/> None		
<input type="radio"/> Range		
<input type="radio"/> Multiple bits		
<input type="radio"/> Single bit	0	

# SIMATIC WinCC Unified Hands On: Rotation

The screenshot displays the SIMATIC WinCC Unified environment. On the left, the Project Tree shows the 'HML\_1 [MTP700 Unified Basic]' device selected. The main window shows the 'Production' screen simulation, which includes a fan icon, a digital display showing '83', a boiler icon with a 'Boiler Temperature High' warning, and two vertical gauges. The gauges show values of 193 and 83. A green callout box contains the following steps:

1. Save the project
2. Highlight the HMI device in the Project Tree
3. Press the simulation button
4. Test your screen
5. Close simulator when complete

# Get started smoothly with the WinCC Unified System

## Supporting Materials

### Tutorial Center

Video series for an easy start with the WinCC Unified System. Learn all the things you need to get started smoothly.

### Template Suite

Ready-to-use screen templates for PC Systems and the Unified Comfort Panels in a free TIA Portal library incl. Wizard.

### Get started or modernize

Everything you need know when you want to switch from an existing visualization to the WinCC Unified System



Find all the supporting materials for the WinCC Unified System at a glance  
<https://support.industry.siemens.com/cs/ww/en/view/109777887>

Modernize **NOW**:  
[www.siemens.com/modernize-now](http://www.siemens.com/modernize-now)

# WinCC Unified Workshop



## Siemens Industries Inc Digital Industries Factory Automation Visualization

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