Test Project

Industrial Control

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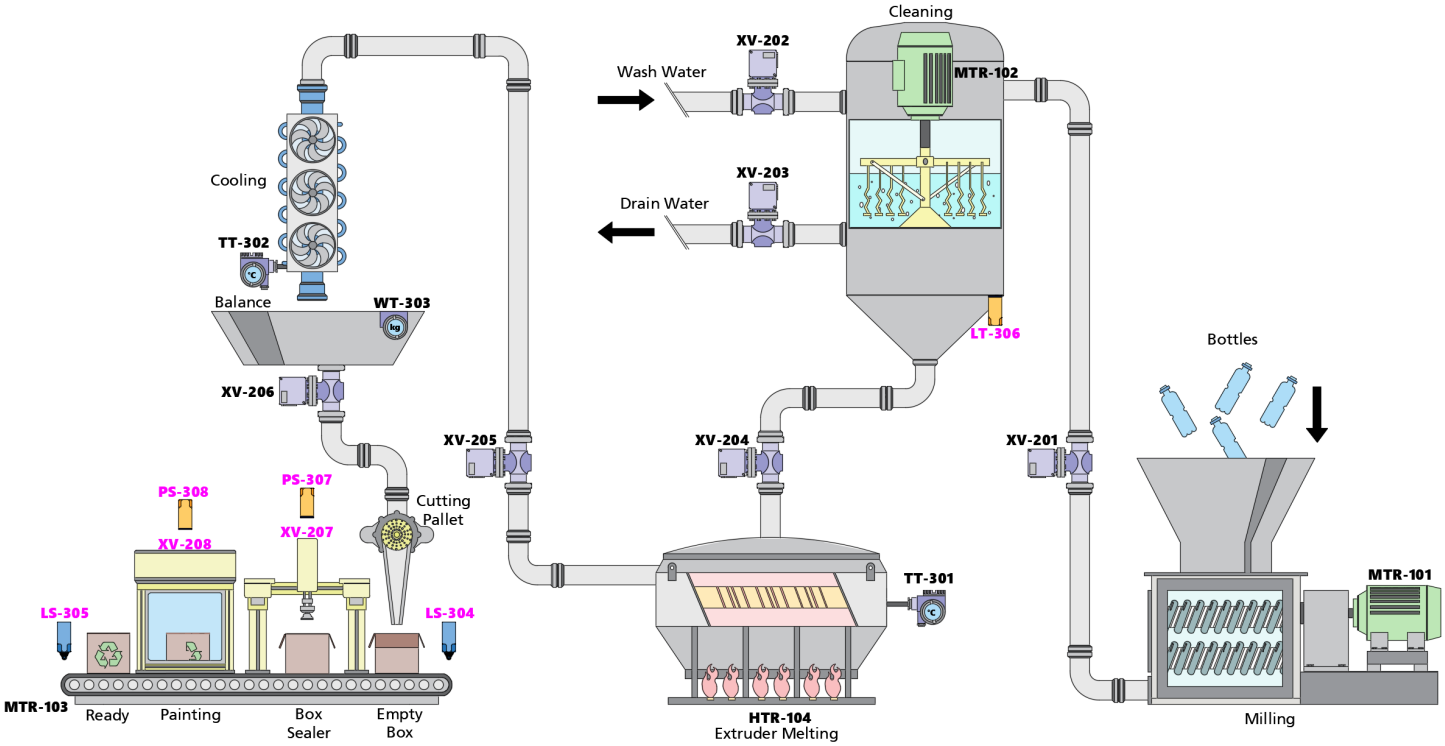
Introduction

The Competitor must program the equipment to simulate an **Industrial PET bottle recycling process**.

Using **TIA Portal**, develop the PLC program and HMI application in accordance with:

- **The operating flowchart;**
- **The HMI screen and Hardware requirements;**
- **The specified machine operating conditions and functions.**

Process Overview



MTR-101: Milling Motor

MTR-102: Mixing/Cleaning Motor

MTR-103: Belt Motor

HTR-104: Heater

XV-201: Discharge Valve

XV-202: Wash Water Inlet Valve

XV-203: Drain Outlet Valve

XV-204: Discharge Valve

XV-205: Discharge Valve

XV-206: Discharge Valve

TT-301: Temperature Sensor Heating

TT-302: Temperature Sensor Cooling

WT-303: Balance Sensor

XV-207: Box Closing Valve

XV-208: Painting Valve

LS-304: Empty Box Position

LS-305: Ready Position

LT-306: Level Sensor

PS-307: Box Sealer Sensor Position

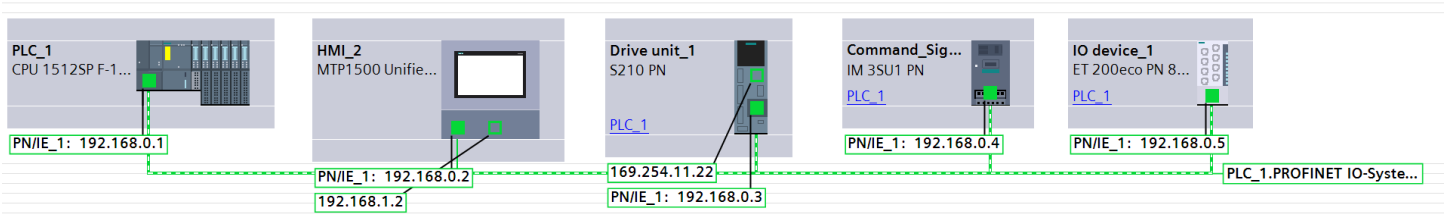
PS-308: Painting Sensor Position

} Part B

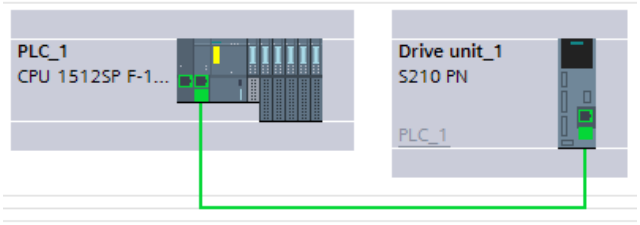
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PROFINET Network

The Competitor shall configure the **PROFINET network** according to the configuration shown in the figure below.

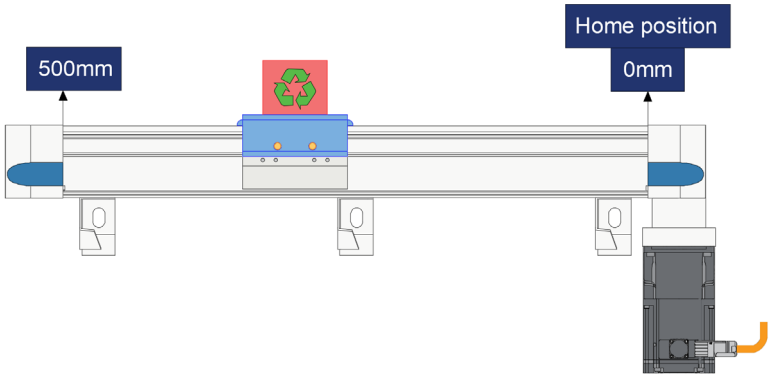


Mandatory topology for the use of **Telegram 750 (Send Torque / Receive Torque)**.

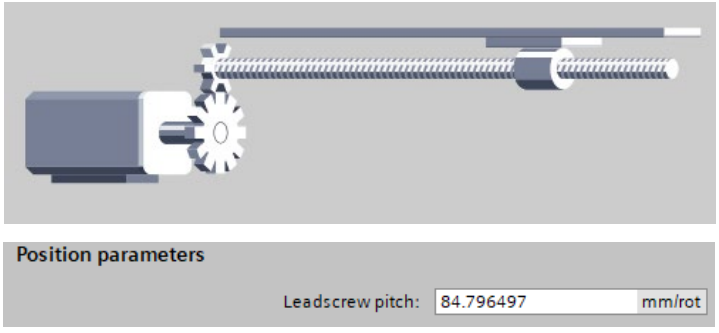


Servo Driver Configuration

Festo Axis Setup – Position:



Position Parameters for the Servo Driver



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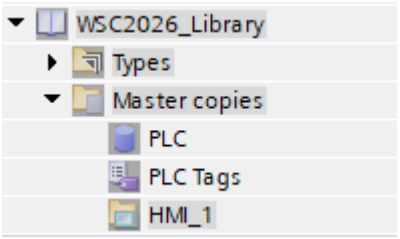
PLC and HMI Configuration

Each Competitor will receive an **HMI package**, **PLC variable table**, and required **HMI images/library** as importable files for TIA Portal.

The HMI itself will **not be assessed**, but it will be used for operation, monitoring, and validation of PLC functions. Competitors are responsible for keeping the HMI and PLC variable structure functional and consistent.

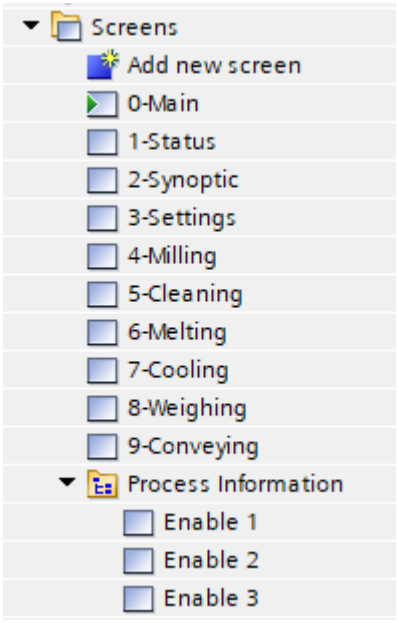
Instructions:

1. Open the library file "**WSC2026_Library.al21**" on your computer and export to your project:

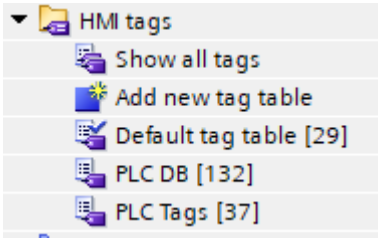


2. Move → **PLC Data block** to Program blocks for your PLC
3. Move → **PLC Tags** to the PLC Tags in your PLC
4. Move → **HMI_1** to your Project tree
5. **HMI_1** Contents:

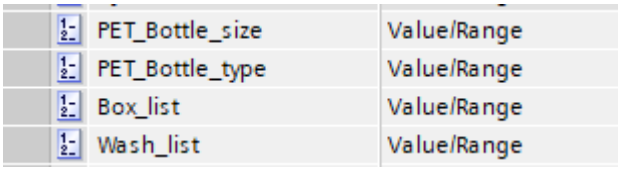
Screens:



HMI tags:



Text lists:



6. The **HMI Runtime** must start automatically with no waiting time:
   HMI Screen → Home → Runtime Properties → Automatic Runtime Start → **Waiting Time (s) = 0**

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Main Screen



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Details Main Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	display	Screen Window	Start screen: 1-Status Position - left: 144 Position - top: 119 Size - height: 624 Size - width: 1202
2	status_button	Button Events	Change Screen: 1-Status Screen Window: display
3	synoptic_button	Button Events	Change Screen: 2-Synoptic Screen Window: display
	PLC_Automatic	Operator control - allow	State “0” = op. control = Not Allow State “1” = op. control = Allow
4	settings_button	Button Events	Change Screen: 3-Settings Screen Window: display
	PLC_Automatic	Operator control - allow	State “0” = op. control = Not Allow State “1” = op. control = Allow

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		ACTION	COMMENT
5	milling_button	Button Events	Change Screen: 4-Milling Screen Window: display
	PLC_Manual	Operator control - allow	State "0 " = op. control = Not Allow State "1 " = op. control = Allow
6	cleaning_button	Button Events	Change Screen: 5-Cleaning Screen Window: display
	PLC_Manual	Operator control - allow	State "0" = op. control = Not Allow State "1" = op. control = Allow
7	melting_button	Button Events	Change Screen: 6-Melting Screen Window: display
	PLC_Manual	Operator control - allow	State "0" = op. control = Not Allow State "1" = op. control = Allow
8	cooling_button	Button Events	Change Screen: 7-Cooling Screen Window: display
	PLC_Manual	Operator control - allow	State "0" = op. control = Not Allow State "1" = op. control = Allow
9	weighing_button	Button Events	Change Screen: 8-Weighing Screen Window: display
	PLC_Manual	Operator control - allow	State "0" = op. control = Not Allow State "1" = op. control = Allow
10	conveying_button	Button Events	Change Screen: 9-Conveying Screen Window: display
	PLC_Manual	Operator control - allow	State "0" = op. control = Not Allow State "1" = op. control = Allow
11	PLC_Automatic	Background - color Border - color Line - color Foreground - color	State "0" = color = State "1" = color = 
12	PLC_Manual	Background - color Border - color Line - color Foreground - color	State "0" = color = State "1" = color = 
13	PLC_Fault_1 **OR** PLC_Fault_2 **OR** PLC_Fault_3 **OR** PLC_Fault_4	Background - color Border - color Line - color Foreground - color	State "0" = color = State "1" = color = 
14	PLC_Actual_data_time	Time - source	Time-of-day synchronization: NTP mode

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Status Screen



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Details Status Screen



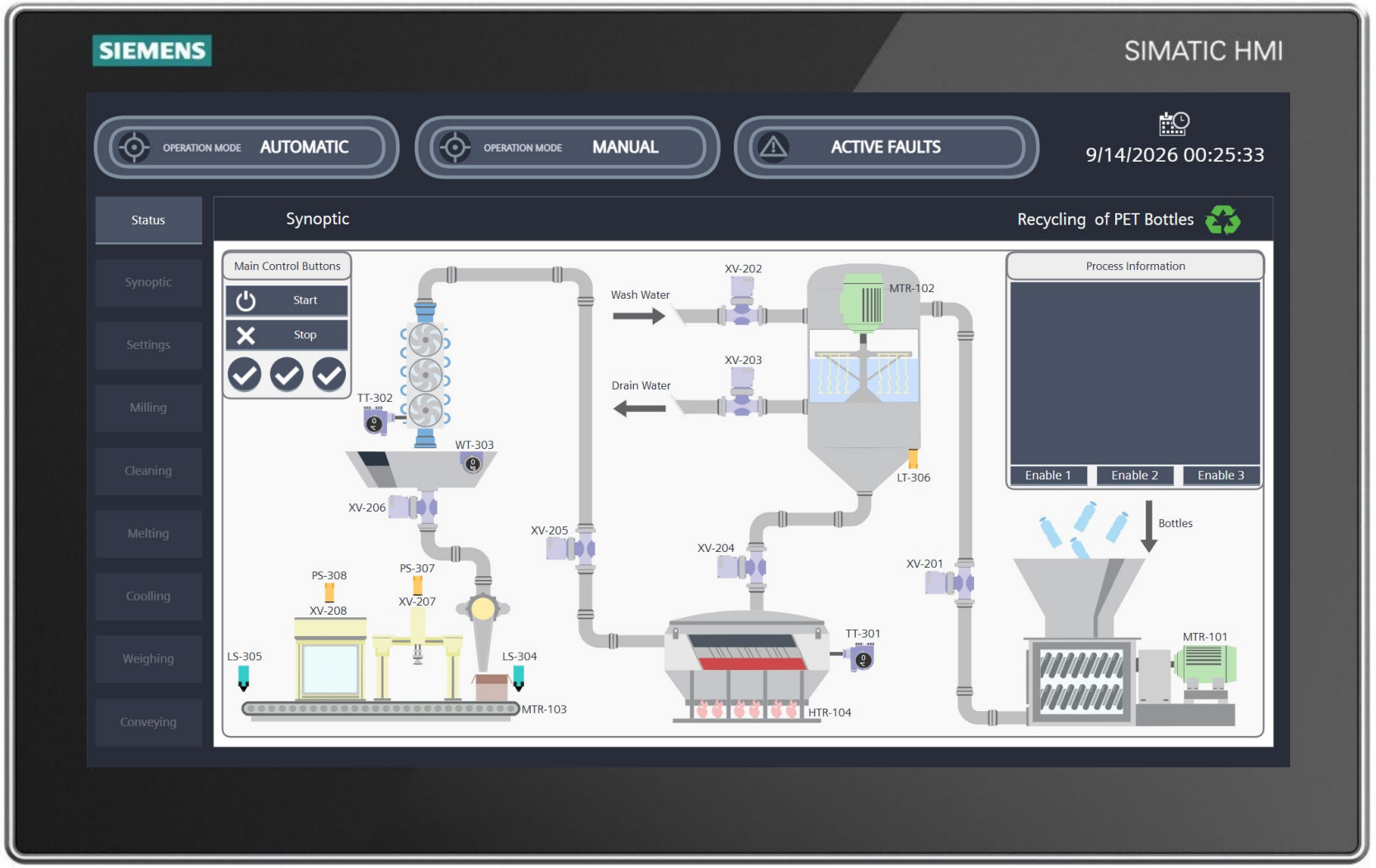
ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	@HMI_Connection_2_PLC_OpState	Background - color	Value “0” NO STATUS = color = Value “4” STOP = color = Value “6” STARTUP = color = Value “8” RUN = color = Value “10” HOLD = color =
2	@SystemActivationState	Background - color	Value “0” NO STATUS = color = Value “3” STOP = color = Value “1” STARTUP = color = Value “2” RUN = color =
3	PLC_ProfinetStatus_ACT	Background - color	Value “0” NO STATUS = color = Value “3” OFFLINE = color = Value “2” WARNING = color = Value “1” ONLINE = color =
4	PLC_ProfinetStatus_S210	Background - color	Value “0” NO STATUS = color = Value “3” OFFLINE = color = Value “2” WARNING = color = Value “1” ONLINE = color =

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
5	PLC_ProfinetStatus_ET_eco	Background - color	Value “0” NO STATUS = color = Value “3” OFFLINE = color = Value “2” WARNING = color = Value “1” ONLINE = color =
6	E-stop	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
7	MTR101_error	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
8	MTR102_error	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
9	QF1	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
10	PLC_Servo_error_power	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
11	PLC_Servo_error_torque	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
12	PLC_PSE_CH1	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
13	PLC_PSE_CH2	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
14	PLC_PSE_CH3	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*
15	PLC_PSE_CH4	Background - color	State “0” = color = State “1” = color = *Flashing:Yes / Frequency:Fast*

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
16	PLC_Fault_2	Line - color	State "0" = color =  State "1" = color = 
17	PLC_But_Res_PSE	Button Events	Set/Reset Bit In Tag
18	PLC_Actual_current	IO field	Range 0 to 10 Mode: Output Output format: {F1}
19	PLC_But_Res_MTR101	Button Events	Set/Reset Bit In Tag
20	PLC_But_Res_MTR102	Button Events	Set/Reset Bit In Tag
21	PLC_But_Res_MTR103	Button Events	Set/Reset Bit In Tag
22	PLC_Fault_1 PLC_Fault_2 PLC_Fault_3 PLC_Fault_4	Alarm Control	Alarm Source: Pending Alarms Filter: Individual Faults

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Synoptic Screen



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Details Synoptic Screen – Part 1



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Start	Button Events	Set/Reset Bit In Tag
2	PLC_Stop	Button Events	Set/Reset Bit In Tag
3	PLC_Enable_1	Background - color	State "0" = color = State "1" = color =
	PLC_Enable_1	Button Events	Invert Bit In Tag
4	PLC_Enable_2	Background - color	State "0" = color = State "1" = color =
	PLC_Enable_2	Button Events	Invert Bit In Tag
5	PLC_Enable_3	Background - color	State "0" = color = State "1" = color =
	PLC_Enable_3	Button Events	Invert Bit In Tag

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
6	process_information	Screen Window	Start screen: A0 Position - left: 904 Position - top: 97 Size - height: 231 Size - width: 284
7	screen_enable_1	Button Events	Change Screen: Enable 1 Screen Window: process_information
8	screen_enable_2	Button Events	Change Screen: Enable 2 Screen Window: process_information
9	screen_enable_3	Button Events	Change Screen: Enable 3 Screen Window: process_information

Details Synoptic Screen – Part 2



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Bottle_type	SVG Interface - BasicColor1 SVG Interface - BasicColor2	Value "1" = color = Value "2" = color = Value "3" = color = Value "4" = color = 
	PLC_Bottles	Visibility	State "0" = not visible State "1" = visible
2	PLC_Bottles	SVG Interface - BasicColor	State "0" = color = State "1" = color = 
3	PLC_Total_Bottles * 10	SVG Interface - BarValue	Range 0 to 100
4	MTR101	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =  *BasicColor1:* *Flashing:Yes / Frequency:Fast*
5	XV201	SVG Interface - BasicColor	State "0" = color = State "1" = color =  *Flashing:Yes / Frequency:Medium*
6	XV201	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = 
7	PLC_Water_volume / 3	SVG Interface - FillLevelColor	Range 0 to 100
8	MTR102	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =  *BasicColor1:* *Flashing:Yes / Frequency:Fast*
9	PLC_Water_volume > 0	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color = 
10	XV202	SVG Interface - BasicColor	State "0" = color = State "1" = color = 
11	XV202	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = 
12	XV202	SVG Interface - BasicColor	State "0" = color = State "1" = color =  *Flashing:Yes / Frequency:Medium*
13	XV203	SVG Interface - BasicColor	State "0" = color = State "1" = color = 
14	XV203	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = 

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
15	XV203	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
16	XV204	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
17	XV204	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
18	PLC_Heater_pwm / 3	SVG Interface - BarValue	Range 0 to 100
	PLC_Sensor_heating >= 30 **AND** PLC_Sensor_heating <= 150	SVG Interface - BasicColor2 SVG Interface - BasicColor3	State "Default" = color = State "TRUE" = color =
	PLC_Sensor_heating > 150 **AND** PLC_Sensor_heating <= 240	SVG Interface - BasicColor2 SVG Interface - BasicColor3	State "Default" = color = State "TRUE" = color =
	PLC_Sensor_heating > 240	SVG Interface - BasicColor2 SVG Interface - BasicColor3	State "Default" = color = State "TRUE" = color =
	PLC_HTR104	SVG Interface - BasicColor1	State "0" = color = State "1" = color =
19	PLC_Heater_pwm / 3	SVG Interface - SizePercent	Range 0 to 100
	PLC_Heater_pwm > 0	SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
20	PLC_Sensor_heating	IO field	Range 0 to 300 Mode: Output Output format: {I}
21	PLC_Sensor_heating > PLC_Temperature_deviation_positive	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
	PLC_Sensor_heating < PLC_Temperature_deviation_negative	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
22	XV205	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
23	XV205	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
24	PLC_Cooling_F1	SVG Interface - BasicColor2	State "0" = color = State "1" = color =
25	PLC_Cooling_F2	SVG Interface - BasicColor2	State "0" = color = State "1" = color =

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
26	PLC_Cooling_F3	SVG Interface - BasicColor2	State "0" = color = State "1" = color =
27	((24 - PLC_Sensor_cooling) *100) / 34	SVG Interface - FillOpacity	Range 0 to 100
28	PLC_Sensor_cooling	IO field	Range -10 to 24 Mode: Output Output format: {I}
29	PLC_Sensor_cooling <= -10	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
30	PLC_Balance	IO field	Range 0 to 50 Mode: Output Output format: {I}
31	PLC_Balance * 2	SVG Interface - BarValue	Range 0 to 100
32	PLC_Cutting_pallet_simul	SVG Interface - cutVisible SVG Interface - matVisible	State "0" = not visible State "1" = visible
	PLC_Bottle_type	SVG Interface - BasicColor3	Value "1" = color = Value "2" = color = Value "3" = color = Value "4" = color =
33	XV206	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
34	XV206	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
35	PLC_MTR103	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = *BasicColor2:* *Flashing:Yes / Frequency:Fast*
36	LS304	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
37	LS305	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
38	PS307	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
39	PS308	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
40	PLC_Box_Sealer_simul	SVG Interface - PositionY	Range 0 to 35

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
41	XV207	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
42	XV208	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
43	PLC_Actual_MTR103_position	Linear movement horizontal	Range 0 to 500 *Start position: 292 / Target position: 40*
	PLC_Painting_simul	SVG Interface - FillLevel	Range 0 to 100
	PLC_Box_simul_auto	SVG Interface - BoxemptyVisible	Value "0" = visible Value "1" = not visible Value "2" = not visible
	PLC_Box_simul_auto	SVG Interface - BoxsealerVisible	Value "0" = not visible Value "1" = visible Value "2" = visible
	PLC_Box_simul_auto	SVG Interface - PaintingVisible	Value "0" = not visible Value "1" = not visible Value "2" = visible

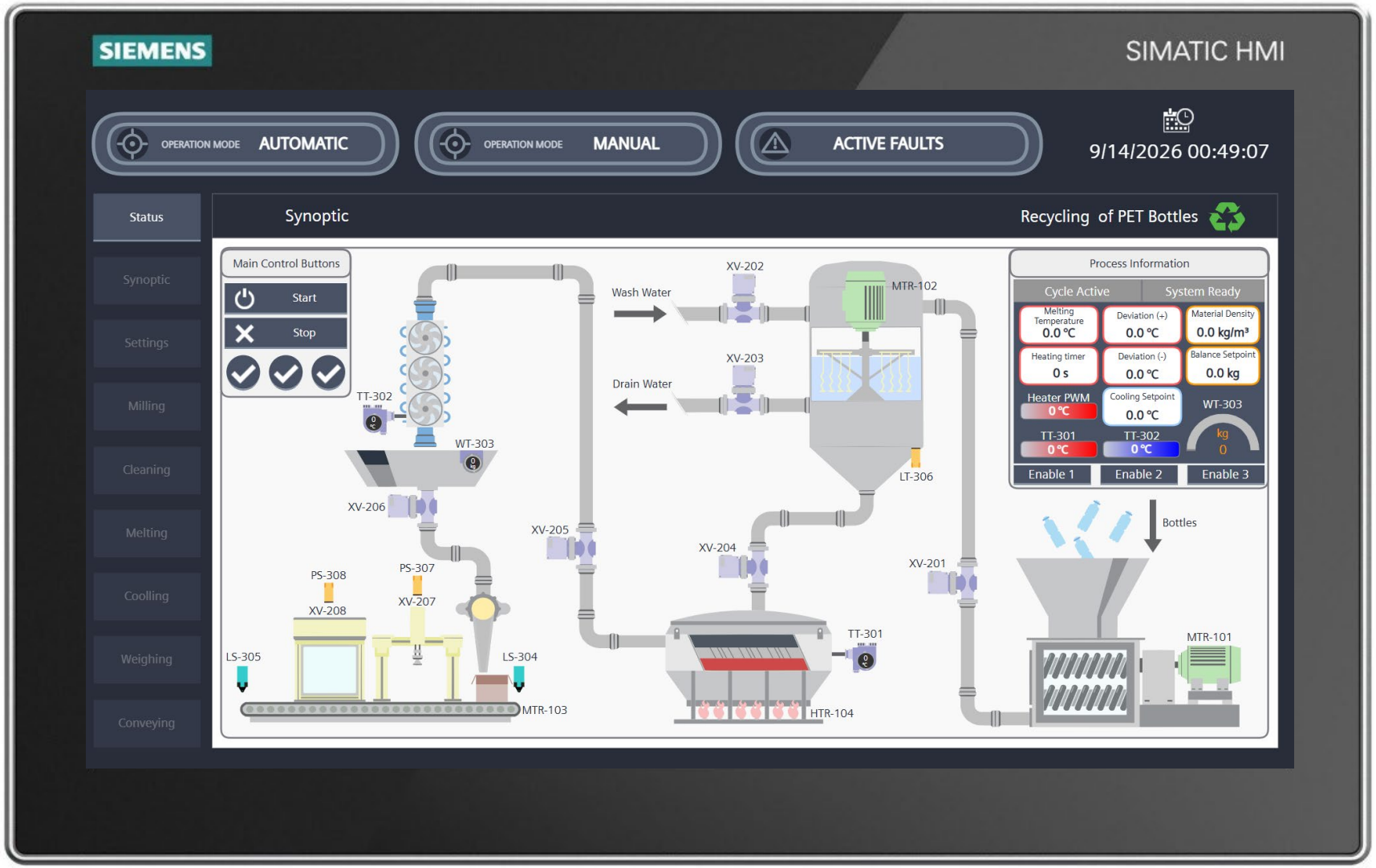
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Synoptic Screen – Process Information Screen 1



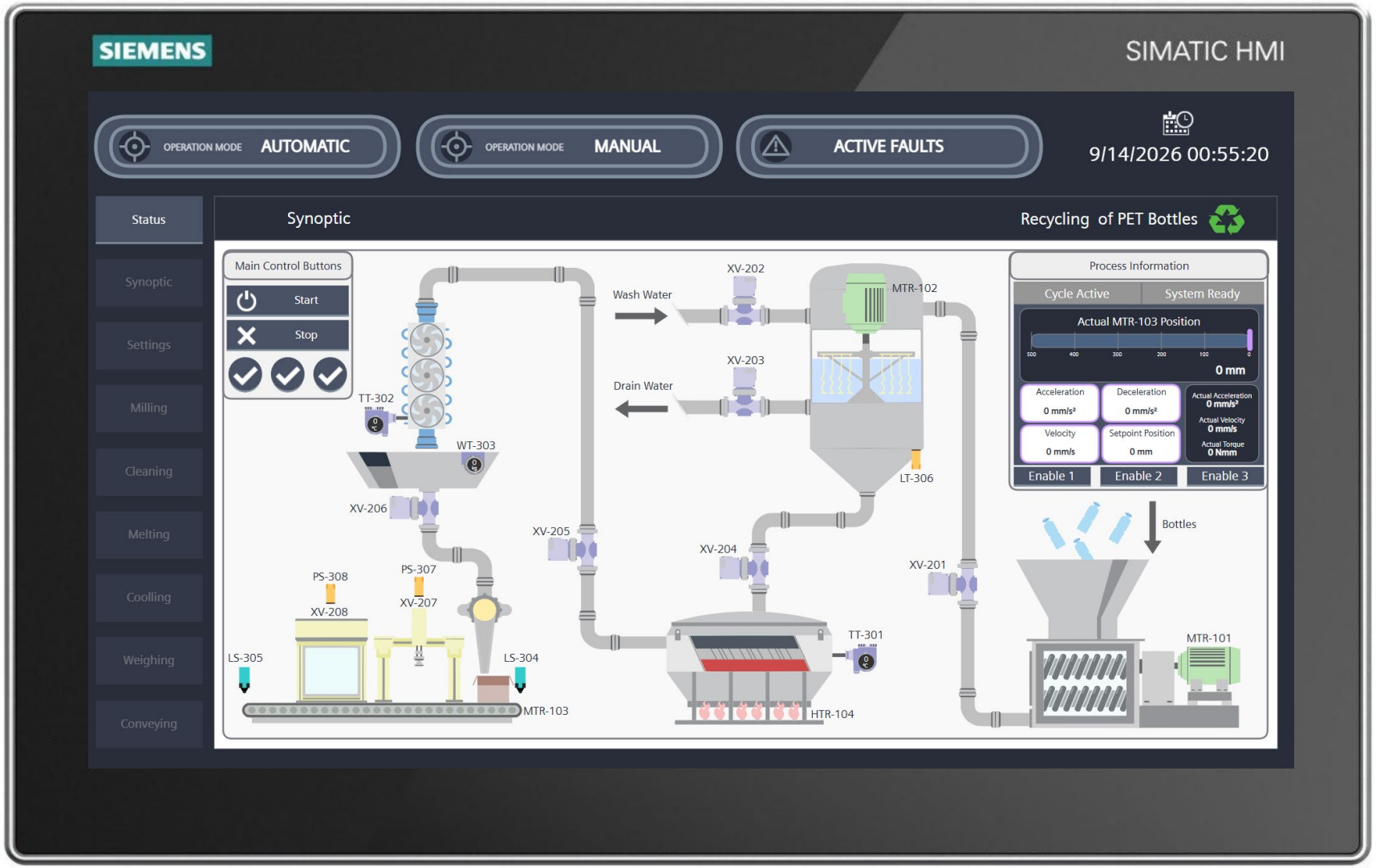
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Synoptic Screen – Process Information Screen 2



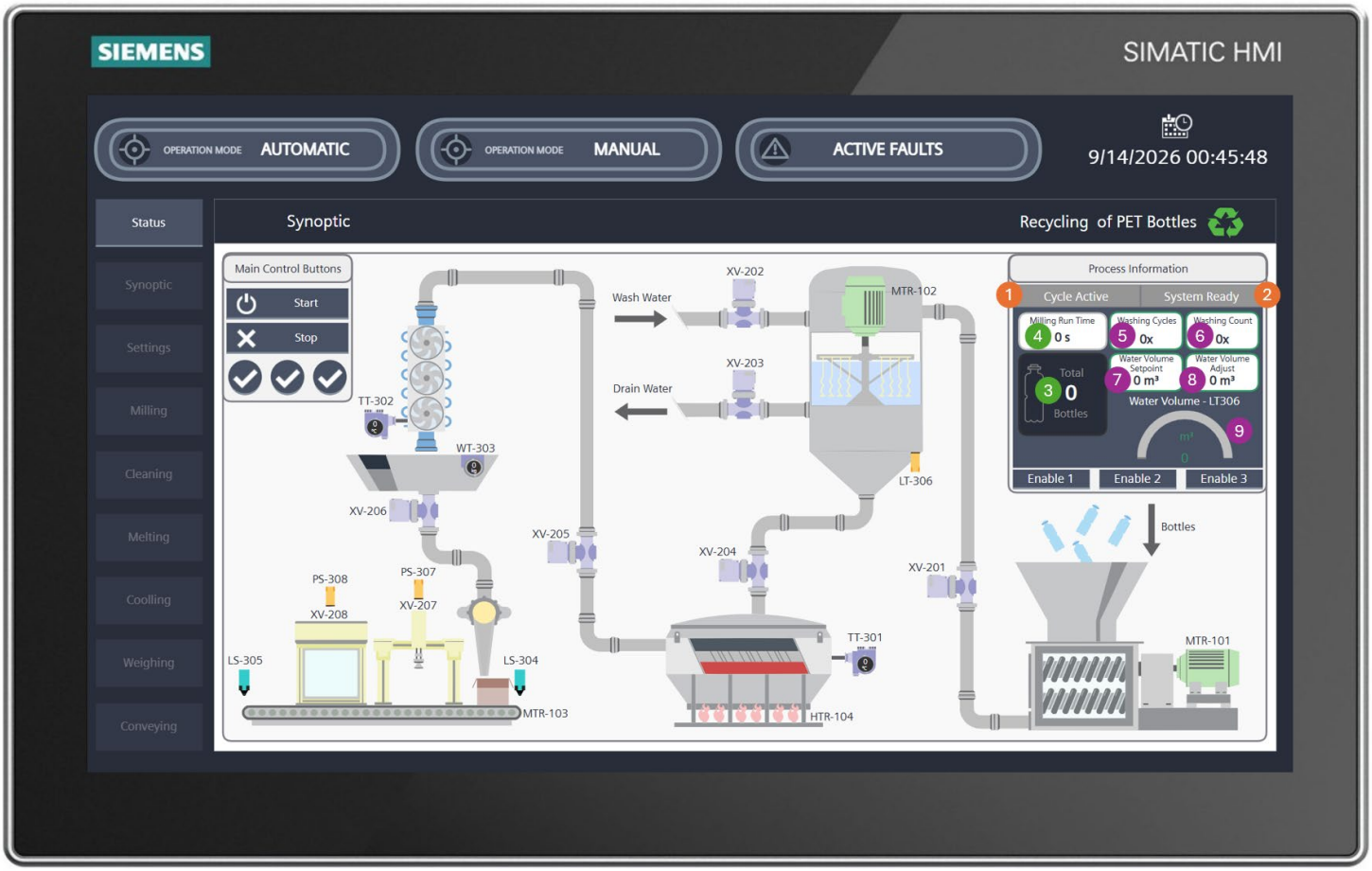
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Synoptic Screen – Process Information Screen 3



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Details Synoptic Screen – Process Information Screen 1



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Cycle_Active	Background - color	State "0" = color = State "1" = color =
2	PLC_System_Ready	Background - color	State "0" = color = State "1" = color =
3	PLC_Total_Bottles	IO field	Range 0 to 10 Mode: Output Output format: {I}
4	PLC_Milling_run_time	IO field	Range 0 to unknow Mode: Output Output format: {P,s} s
5	PLC_Washing_cycles_INT	IO field	Range 0 to 3 Mode: Output Output format: {I}x
6	PLC_Washing_cycles_cnt	IO field	Range 0 to 3 Mode: Output Output format: {I}x

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
7	PLC_Water_volume_setpoint	IO field	Range 37 to 296 Mode: Output Output format: {I} m³
8	PLC_Water_volume_adjust	IO field	Range 12 to 36 Mode: Output Output format: {I} m³
9	PLC_Water_volume	Gauge	Range 0 to 300 Output format: {I}

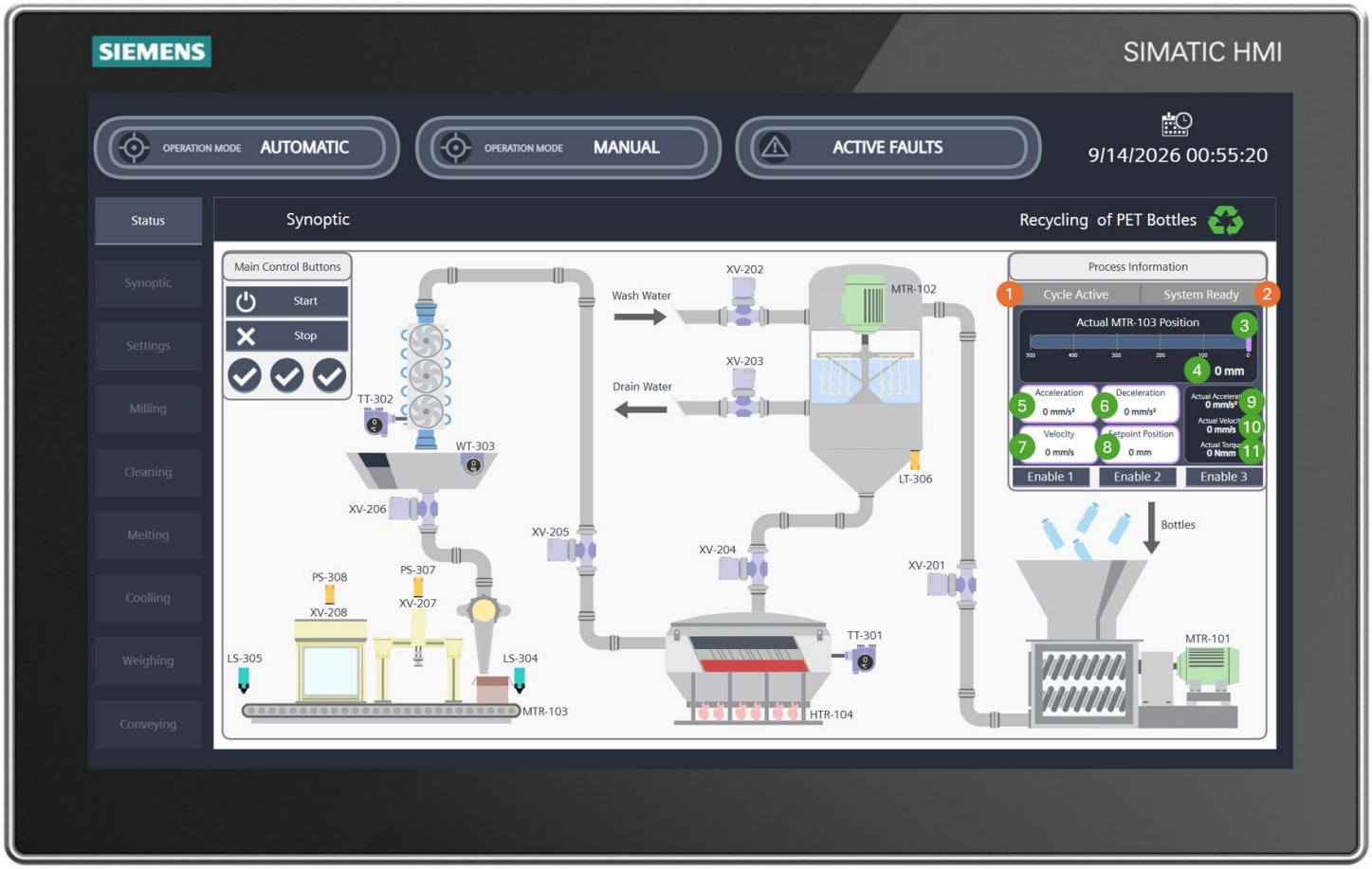
Details Synoptic Screen – Process Information Screen 2



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Cycle_Active	Background - color	State "0" = color = State "1" = color =
2	PLC_System_Ready	Background - color	State "0" = color = State "1" = color =
3	PLC_Melting_Temperature	IO field	Range 0 to 300 Mode: Output Output format: {F1} °C

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
4	PLC_Temperature_deviation_positive	IO field	Range 0 to 330 Mode: Output Output format: {F1} °C
5	PLC_Temperature_deviation_negative	IO field	Range 0 to 270 Mode: Output Output format: {F1} °C
6	PLC_Heating_timer_auto	IO field	Range 0 to unknow Mode: Output Output format: {P,s} s
7	PLC_Heater_pwm	IO field	Range 0 to 300 Mode: Output Output format: {I}
	PLC_Heater_pwm / 3	Fill level	Range 0 to 100
8	PLC_Sensor_heating	IO field	Range 0 to 300 Mode: Output Output format: {I}
	PLC_Sensor_heating / 3	Fill level	Range 0 to 100
9	PLC_Cooling_Setpoint_temperature	IO field	Range -10 to 24 Mode: Output Output format: {F1} °C
10	PLC_Sensor_cooling	IO field	Range -10 to 24 Mode: Output Output format: {I} °C
	((24 - PLC_Sensor_cooling) * 100) / 34	Fill level	Range 0 to 100
11	PLC_Density	IO field	Range 0 to 13 Mode: Output Output format: {F1} kg/m³
12	PLC_Box_kg	IO field	Range 0 to 50 Mode: Output Output format: {F1} kg
13	PLC_Balance	Gauge	Range 0 to 50 Output format: {I}

Details Synoptic Screen – Process Information Screen 3



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Cycle_Active	Background - color	State "0" = color = State "1" = color =
2	PLC_System_Ready	Background - color	State "0" = color = State "1" = color =
3	PLC_Actual_MTR103_position	Linear movement horizontal	Range 0 to 500 *Start position: 267 / Target position: 20*
4	PLC_Actual_MTR103_position	IO field	Range 0 to 500 Mode: Output Output format: {I} mm
5	PLC_MTR103_acceleration	IO field	Range 0 to 120 Mode: Output Output format: {I} mm/s²
6	PLC_MTR103_deceleration	IO field	Range 0 to 120 Mode: Output Output format: {I} mm/s²
7	PLC_MTR103_velocity	IO field	Range 0 to 50 Mode: Output Output format: {I} mm/s

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
8	PLC_MTR103_position	IO field	Range 0 to 500 Mode: Output Output format: {I} mm
9	PLC_Actual_MTR103_acceleration	IO field	Range 0 to 150 Mode: Output Output format: {I} mm/s²
10	PLC_Actual_MTR103_velocity	IO field	Range 0 to 50 Mode: Output Output format: {I} mm/s
11	PLC_Actual_MTR103_torque	IO field	Range 0 to 50 Mode: Output Output format: {I} Nmm

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Settings Screen



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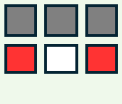
Details Settings Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Add	Button Events	Set/Reset Bit In Tag
2	PLC_Cycle_Active	Operator control - allow	State "1" = op. control = Not Allow State "0" = op. control = Allow
	PLC_Quantity_Bottles	IO field	Range 0 to 10 Mode: Input/Output Output format: {I} *Range Limitation: Upper2 = 10 / Lower2 = 0*
3	PLC_Cycle_Active	Operator control - allow	State "1" = op. control = Not Allow State "0" = op. control = Allow
	PLC_Bottle_type	Symbolic IO field	Resource list: PET_Bottle_type None = Default Clear = Value "1" Light Blue = Value "2" Green = Value "3" Yellow = Value "4"

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
4	PLC_Cycle_Active	Operator control - allow	State "1" = op. control = Not Allow State "0" = op. control = Allow
	PLC_Size_Bottle_type	Symbolic IO field	Resource list: PET_Bottle_size None = Default XS = Value "1" S = Value "2" M = Value "3" L = Value "4" XL = Value "5"
5	PLC_Cycle_Active	Operator control - allow	State "1" = op. control = Not Allow State "0" = op. control = Allow
	PLC_Wash_type	Symbolic IO field	Resource list: Wash_list None = Default Standard Wash = Value "1" Chemical Wash = Value "3" Intensive Hot Wash = Value "5" Rejected Bottle = Value "8"
6	PLC_Cycle_Active	Operator control - allow	State "1" = op. control = Not Allow State "0" = op. control = Allow
	PLC_Box_type	Symbolic IO field	Resource list: Box_list None = Default Tall Narrow Box = Value "3" Wide Low Box = Value "5" Square Bin = Value "7" Hopper Box = Value "10" Lidded Crate = Value "13" Double Chamber Box = Value "16"
7	PLC_Remove	Button Events	Set/Reset Bit In Tag
8	PLC_Quantity_Bottles	IO field	Range 0 to 10 Mode: Output Output format: {I}
9	PLC_Bottle_type	SVG Interface - BasicColor1 SVG Interface - BasicColor2	Value "0" = transparent Value "1" = color = Value "2" = color = Value "3" = color = Value "4" = color = 

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
10	PLC_Size_Bottle_type == 1	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Size_Bottle_type == 2	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Size_Bottle_type == 3	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Size_Bottle_type == 4	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Size_Bottle_type == 5	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Size_Bottle_type >= 1	Visibility	State "TRUE" = visible State "FALSE" = not visible
11	PLC_Wash_type == 1	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type == 1	SVG Interface - BorderColor	State "0" = color = State "1" = color =  *Flashing:Yes / Frequency:Fast*
	PLC_Wash_type == 3	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type == 3	SVG Interface - BasicColor1 SVG Interface - BasicColor2 SVG Interface - BorderColor	State "0" = color = State "1" = color =  *Flashing:Yes / Frequency:Fast*
	PLC_Wash_type == 5	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type == 5	SVG Interface - BasicColor2 SVG Interface - BorderColor1 SVG Interface - BorderColor2	State "0" = color = State "1" = color =  *Flashing:Yes / Frequency:Fast*
	PLC_Wash_type == 8	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type == 8	SVG Interface - BorderColor1 SVG Interface - BorderColor2	State "0" = color = State "1" = color =  *Flashing:Yes / Frequency:Fast*

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
12	PLC_Box_type == 3	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Box_type == 3	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Box_type == 5	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Box_type == 5	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Box_type == 7	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Box_type == 7	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Box_type == 10	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Box_type == 10	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Box_type == 13	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Box_type == 13	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Box_type == 16	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Box_type == 16	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
13	PLC_Milling_run_time	IO field	Range 0 to 45s Mode: Output Output format: {P,s} s
14	PLC_Washing_cycles_INT	IO field	Range 0 to 3 Mode: Output Output format: {I}x

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
15	PLC_Water_volume_setpoint	IO field	Range 37 to 296 Mode: Output Output format: {l} m³
16	PLC_Melting_Temperature	IO field	Range 0 to 300 Mode: Output Output format: {F1} °C
17	PLC_Deviation	IO field	Range 0 to 10 Mode: Output Output format: {F1} %
18	PLC_Cooling_Setpoint_temperature	IO field	Range -10 to 24 Mode: Output Output format: {F1} °C
19	PLC_Box_kg	IO field	Range 0 to 50 Mode: Output Output format: {F1} kg
20	PLC_Density	IO field	Range 0 to 13 Mode: Output Output format: {F1} kg/m³

Milling Screen



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Details Milling Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Bottle_type	SVG Interface - BasicColor1 SVG Interface - BasicColor2	Value "1" = color = Value "2" = color = Value "3" = color = Value "4" = color =
	PLC_Bottles	Visibility	State "0" = not visible State "1" = visible
2	PLC_Bottles	SVG Interface - BasicColor	State "0" = color = State "1" = color =
3	PLC_Total_Bottles * 10	SVG Interface - BarValue	Range 0 to 100
4	MTR101	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = *BasicColor1:* *Flashing:Yes / Frequency:Fast*

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
5	XV201	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
6	XV201	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
7	XV201	SVG Interface - BasicColor	State "0" = color = State "1" = color =
8	PLC_But_XV201_on	Button Events	Set/Reset Bit In Tag
9	PLC_But_XV201_off	Button Events	Set/Reset Bit In Tag
10	PLC_But_MTR101_on	Button Events	Set/Reset Bit In Tag
11	PLC_But_MTR101_off	Button Events	Set/Reset Bit In Tag
12	PLC_But_Clear_Bottle	Button Events	Set/Reset Bit In Tag
13	PLC_But_Blue_Bottle	Button Events	Set/Reset Bit In Tag
14	PLC_But_Green_Bottle	Button Events	Set/Reset Bit In Tag
15	PLC_But_Yellow_Bottle	Button Events	Set/Reset Bit In Tag
16	PLC_Blue_Bottle * 10	SVG Interface - FillLevel1	Range 0 to 100
	PLC_Green_Bottle * 10	SVG Interface - FillLevel2	Range 0 to 100
	PLC_Clear_Bottle * 10	SVG Interface - FillLevel3	Range 0 to 100
	PLC_Yellow_Bottle * 10	SVG Interface - FillLevel4	Range 0 to 100
17	PLC_Total_Bottles	IO field	Range 0 to 10 Mode: Output Output format: {I}
18	PLC_Total_Bottles * 10	IO field	Range 0 to 100 Mode: Output Output format: {I} %
19	PLC_Milling_run_time	IO field	Range 0 to unknow Mode: Output Output format: {P,s} s

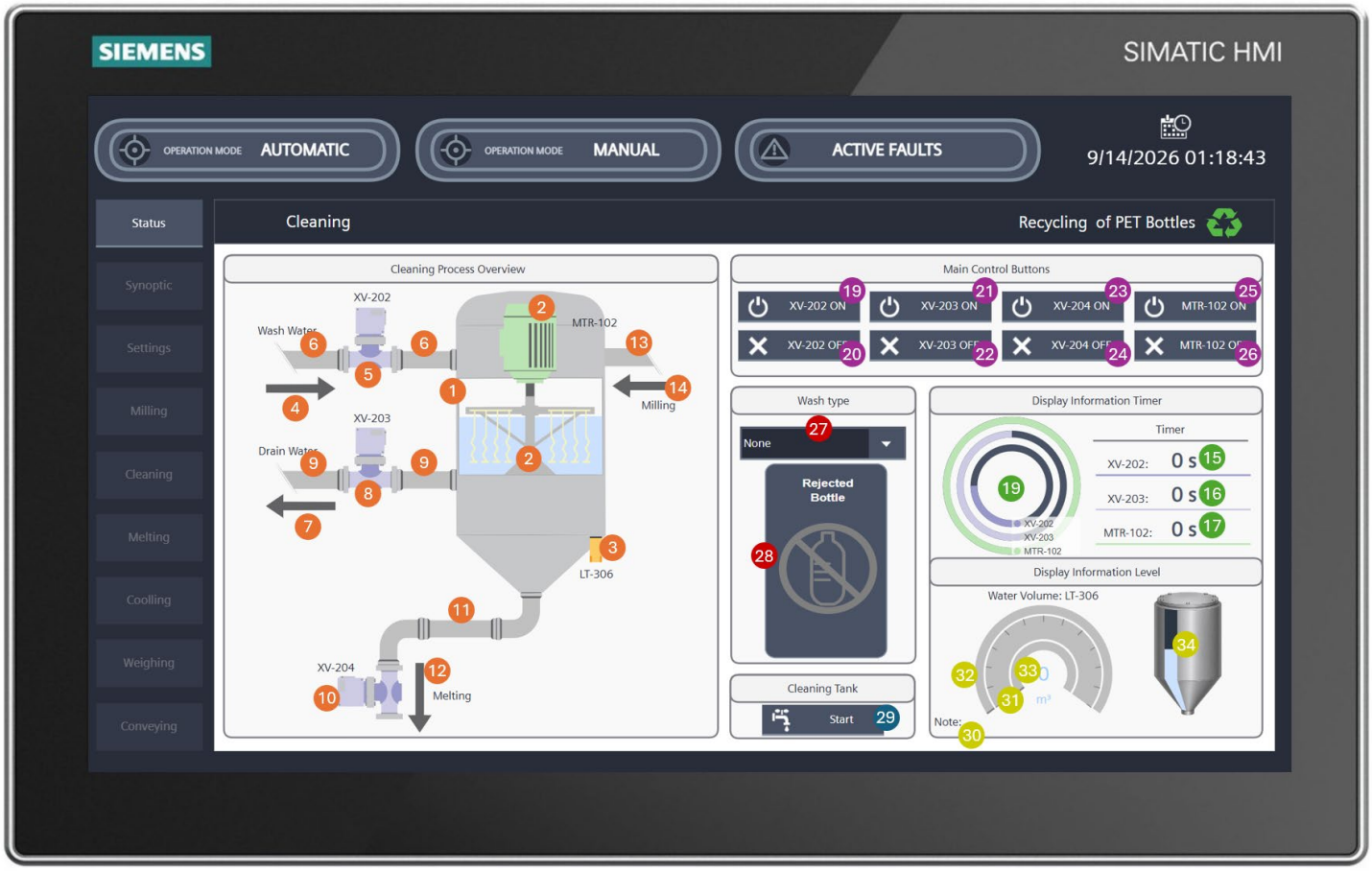
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Cleaning Screen



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Details Cleaning Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Water_volume / 3	SVG Interface - FillLevelColor	Range 0 to 100
2	MTR102	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = *BasicColor1:* *Flashing:Yes / Frequency:Fast*
3	PLC_Water_volume > 0	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
4	XV202	SVG Interface - BasicColor	State "0" = color = State "1" = color =
5	XV202	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
6	XV202	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*

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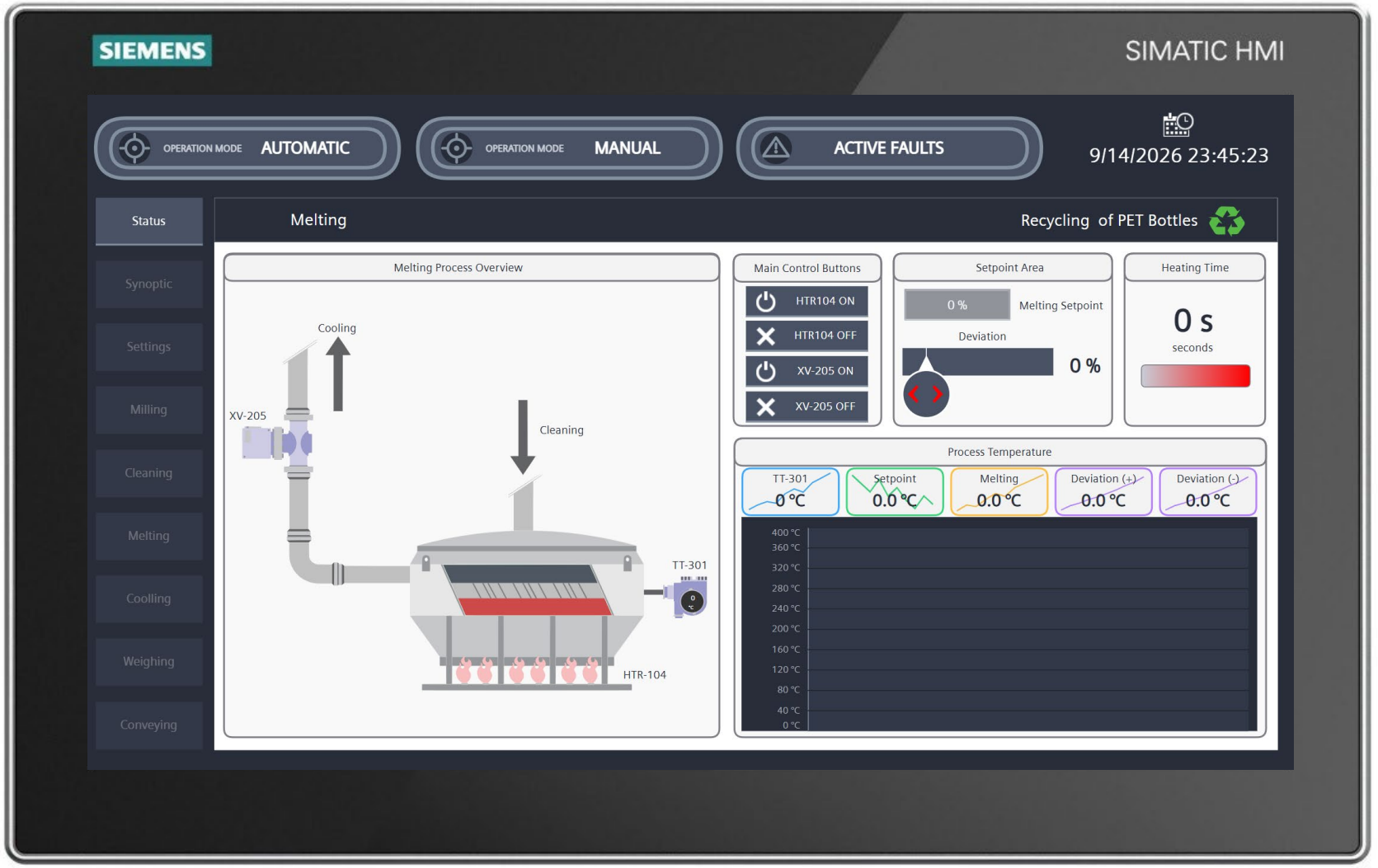
ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
7	XV203	SVG Interface - BasicColor	State "0" = color = State "1" = color =
8	XV203	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
9	XV203	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
10	XV204	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
11	XV204	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
12	XV204	SVG Interface - BasicColor	State "0" = color = State "1" = color =
13	XV201	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
14	XV201	SVG Interface - BasicColor	State "0" = color = State "1" = color =
15	PLC_XV202_timer	IO field	Range 0 to 10 Mode: Output Output format: {P,s} s
16	PLC_XV203_timer	IO field	Range 0 to 12 Mode: Output Output format: {P,s} s
17	PLC_MTR102_timer	IO field	Range 0 to 10 Mode: Output Output format: {P,s} s
18	PLC_Actual_XV202_timer_INT	SVG Interface - Value1	Range 0 to 100
	PLC_Actual_XV203_timer_INT	SVG Interface - Value2	Range 0 to 100
	PLC_Actual_MTR102_timer_INT	SVG Interface - Value3	Range 0 to 100
19	PLC_But_XV202_on	Button Events	Set/Reset Bit In Tag
20	PLC_But_XV202_off	Button Events	Set/Reset Bit In Tag
21	PLC_But_XV203_on	Button Events	Set/Reset Bit In Tag
22	PLC_But_XV203_off	Button Events	Set/Reset Bit In Tag
23	PLC_But_XV204_on	Button Events	Set/Reset Bit In Tag
24	PLC_But_XV204_off	Button Events	Set/Reset Bit In Tag

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
25	PLC_But_MTR102_on	Button Events	Set/Reset Bit In Tag
26	PLC_But_MTR102_off	Button Events	Set/Reset Bit In Tag
27	PLC_Wash_type	Symbolic IO field	Resource list: Wash_list None = Default Standard Wash = Value "1" Chemical Wash = Value "3" Intensive Hot Wash = Value "5" Rejected Bottle = Value "8"
	XV202 **OR** XV203 **OR** MTR102 **==** 1	Operator control - allow	State "TRUE" = op. control = Not Allow State "FALSE" = op. control = Allow
28	PLC_Wash_type **==** 1	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type **==** 1	SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Wash_type **==** 3	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type **==** 3	SVG Interface - BasicColor1 SVG Interface - BasicColor2 SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Wash_type **==** 5	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type **==** 5	SVG Interface - BasicColor2 SVG Interface - BorderColor1 SVG Interface - BorderColor2	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
	PLC_Wash_type **==** 8	Visibility	State "TRUE" = visible State "FALSE" = not visible
	PLC_Wash_type **==** 8	SVG Interface - BorderColor1 SVG Interface - BorderColor2	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
29	PLC_But_Cleaning_on	Button Events	Set/Reset Bit In Tag
30	PLC_Volume_message	Text	Start value = ""
31	PLC_Water_volume	Gauge	Range 0 to 300 Text: m³ Output format: {I}

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
32	PLC_Water_volume_check_high	Gauge	Range 0 to 300
33	PLC_Water_volume_check_low	Gauge	Range 0 to 300
34	PLC_Water_volume / 3	SVG Interface - BarValue	Range 0 to 100

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Melting Screen



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Details Melting Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Heater_pwm / 3	SVG Interface - BarValue	Range 0 to 100
	PLC_Sensor_heating >= 30 **AND** PLC_Sensor_heating <= 150	SVG Interface - BasicColor2 SVG Interface - BasicColor3	State "Default" = color = State "TRUE" = color =
	PLC_Sensor_heating > 150 **AND** PLC_Sensor_heating <= 240	SVG Interface - BasicColor2 SVG Interface - BasicColor3	State "Default" = color = State "TRUE" = color =
	PLC_Sensor_heating > 240	SVG Interface - BasicColor2 SVG Interface - BasicColor3	State "Default" = color = State "TRUE" = color =
	PLC_HTR104	SVG Interface - BasicColor1	State "0" = color = State "1" = color =
2	PLC_Heater_pwm / 3	SVG Interface - SizePercent	Range 0 to 100
	PLC_Heater_pwm > 0	SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
3	PLC_Sensor_heating	IO field	Range 0 to 300 Mode: Output Output format: {I}

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
4	PLC_Sensor_heating > PLC_Temperature_deviation_positive	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
	PLC_Sensor_heating < PLC_Temperature_deviation_negative	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =
5	XV205	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
6	XV205	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
7	XV205	SVG Interface - BasicColor	State "0" = color = State "1" = color =
8	XV204	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
9	XV204	SVG Interface - BasicColor	State "0" = color = State "1" = color =
10	PLC_But_HTR104_on	Button Events	Set/Reset Bit In Tag
11	PLC_But_HTR104_off	Button Events	Set/Reset Bit In Tag
12	PLC_But_XV205_on	Button Events	Set/Reset Bit In Tag
13	PLC_But_XV205_off	Button Events	Set/Reset Bit In Tag
14	PLC_Melting_Setpoint_Manual	IO field	Range 0 to 100 Mode: Input/Output Output format: {I} % *Range Limitation: Upper2 = 100 / Lower2 = 0*
	PLC_HTR104 == 0	Operator control - allow	State "TRUE" = op. control = Allow State "FALSE" = op. control = Not Allow
15	PLC_Deviation	Slider	Range 0 to 10 Mode: Input/Output Output format: {I} % *Range Limitation: Upper2 = 10 / Lower2 = 0*
16	PLC_Heating_time_input	IO field	Range 0 to 15 Mode: Input/Output Output format: {P,s} s
17	PLC_Actual_Heating_timer_INT	Fill level	Range 0 to 100

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
18	PLC_Sensor_heating	IO field	Range 0 to 300 Mode: Output Output format: {I} °C
19	PLC_Target_temperature	IO field	Range 0 to 300 Mode: Output Output format: {F1} °C
20	PLC_Melting_Temperature	IO field	Range 0 to 300 Mode: Output Output format: {F1} °C
21	PLC_Temperature_deviation_positive	IO field	Range 0 to 330 Mode: Output Output format: {F1} °C
22	PLC_Temperature_deviation_negative	IO field	Range 0 to 270 Mode: Output Output format: {F1} °C
23	[0] Trend- Y: PLC_Sensor_heating [1] Trend- Y: PLC_Target_temperature [2] Trend- Y: PLC_Melting_Temperature [3] Trend- Y: PLC_Temperature_deviation_positive [4] Trend- Y: PLC_Temperature_deviation_negative	Trend Control	[0] Trend- Y Line Color = [1] Trend- Y Line Color = [2] Trend- Y Line Color = [3] Trend- Y Line Color = [4] Trend- Y Line Color =  Miscellaneous: Online = TRUE Trend: Line - width = 3 Trend: Line - type = Solid Value axis: Output format = {I} °C Value axis: Scale value = 0 to 400 Time axis: Show current = TRUE Time axis: Time range = Time Interval 30s Time axis: Scaling automatic = TRUE

Cooling Screen



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Details Cooling Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Cooling_F1	SVG Interface - BasicColor2	State "0" = color = State "1" = color =
2	PLC_Cooling_F2	SVG Interface - BasicColor2	State "0" = color = State "1" = color =
3	PLC_Cooling_F3	SVG Interface - BasicColor2	State "0" = color = State "1" = color =
4	((24 - PLC_Sensor_cooling) * 100) / 34	SVG Interface - FillOpacity	Range 0 to 100
5	PLC_Sensor_cooling	IO field	Range -10 to 24 Mode: Output Output format: {I}
6	PLC_Sensor_cooling <= -10	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "Default" = color = State "TRUE" = color =

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
7	XV205	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*
8	XV205	SVG Interface - BasicColor	State "0" = color = State "1" = color =
9	PLC_But_Cooling_F1_on	Button Events	Set/Reset Bit In Tag
10	PLC_But_Cooling_F1_off	Button Events	Set/Reset Bit In Tag
11	PLC_But_Cooling_F2_on	Button Events	Set/Reset Bit In Tag
12	PLC_But_Cooling_F2_off	Button Events	Set/Reset Bit In Tag
13	PLC_But_Cooling_F3_on	Button Events	Set/Reset Bit In Tag
14	PLC_But_Cooling_F3_off	Button Events	Set/Reset Bit In Tag
15	PLC_Temperature_Cooling_F1	Slider	Range 13.8 to 24 Mode: Input Output format: {F1}
	PLC_Cooling_F1 == 1	Operator control - allow	State "TRUE" = op. control = Not Allow State "FALSE" = op. control = Allow
16	PLC_Temperature_Cooling_F2	Slider	Range 10.4 to 24 Mode: Input Output format: {F1}
	PLC_Cooling_F2 == 1	Operator control - allow	State "TRUE" = op. control = Not Allow State "FALSE" = op. control = Allow
17	PLC_Temperature_Cooling_F3	Slider	Range 13.8 to 24 Mode: Input Output format: {F1}
	PLC_Cooling_F3 == 1	Operator control - allow	State "TRUE" = op. control = Not Allow State "FALSE" = op. control = Allow
18	((24 - PLC_Cooling_Setpoint_temperature) * 100) / 34	SVG Interface - FillLevel	Range 0 to 100
19	((24 - PLC_Temperature_Cooling_F1) * 30) / 10.2	SVG Interface - FillLevel2	Range 0 to 30
20	((24 - PLC_Temperature_Cooling_F2) * 40) / 13.6	SVG Interface - FillLevel3	Range 0 to 40
21	((24 - PLC_Temperature_Cooling_F3) * 30) / 10.2	SVG Interface - FillLevel4	Range 0 to 30
22	PLC_Sensor_cooling	IO field	Range -10 to 24 Mode: Output Output format: {I} °C
23	PLC_Cooling_Setpoint_temperature	IO field	Range -10 to 24 Mode: Output Output format: {F1} °C
24	PLC_Temperature_Cooling_F1	IO field	Range 13.8 to 24 Mode: Output Output format: {F1} °C

ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
25	PLC_Temperature_Cooling_F2	IO field	Range 10.4 to 24 Mode: Output Output format: {F1} °C
26	PLC_Temperature_Cooling_F3	IO field	Range 13.8 to 24 Mode: Output Output format: {F1} °C
27	[0] Trend- Y: PLC_Sensor_cooling [1] Trend- Y: PLC_Cooling_Setpoint_temperature [2] Trend- Y: PLC_Temperature_Cooling_F1 [3] Trend- Y: PLC_Temperature_Cooling_F2 [4] Trend- Y: PLC_Temperature_Cooling_F3	Trend Control	[0] Trend- Y Line Color = [1] Trend- Y Line Color = [2] Trend- Y Line Color = [3] Trend- Y Line Color = [4] Trend- Y Line Color =  Miscellaneous: Online = TRUE Trend: Line - width = 3 Trend: Line - type = Solid Value axis: Output format = {I} °C Value axis: Scale value = 29 to -15 Time axis: Show current = TRUE Time axis: Time range = Time Interval 30s Time axis: Scaling automatic = TRUE

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Weighing Screen



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Details Weighing Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_Balance	IO field	Range 0 to 50 Mode: Output Output format: {I}
2	PLC_Balance * 2	SVG Interface - BarValue	Range 0 to 100
3	PLC_Cutting_pallet_simul	SVG Interface - cutVisible SVG Interface - matVisible	State "0" = not visible State "1" = visible
	PLC_Bottle_type	SVG Interface - BasicColor3	Value "1" = color = Value "2" = color = Value "3" = color = Value "4" = color =
4	XV206	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color =
5	XV206	SVG Interface - BasicColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Medium*

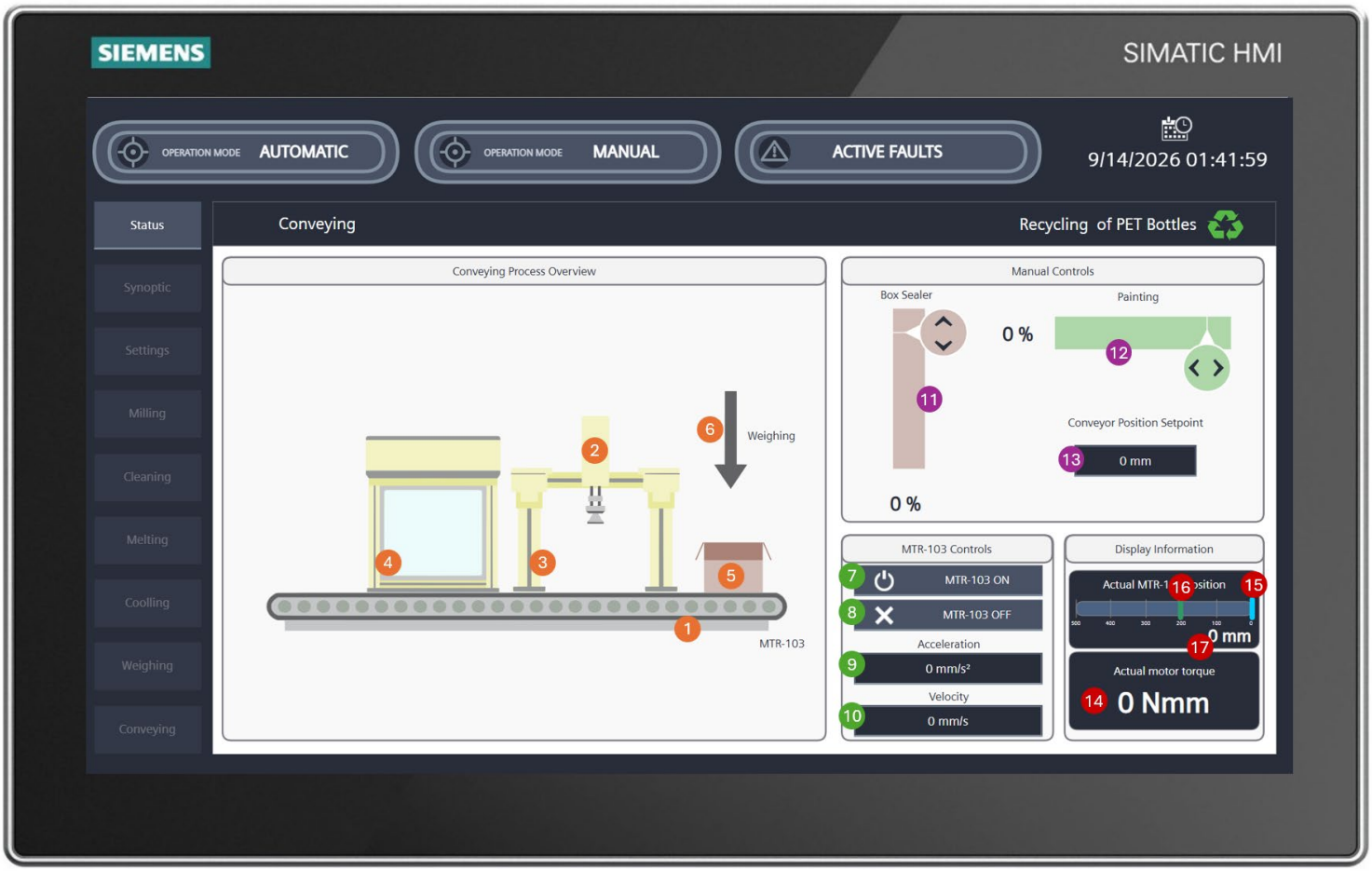
ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
6	PLC_Cutting_pallet_simul	SVG Interface - BasicColor	State "0" = color = State "1" = color =
7	PLC_Box_type	Button Events	Set Tag Value = 3
	PLC_Box_type == 3	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
8	PLC_Box_type	Button Events	Set Tag Value = 5
	PLC_Box_type == 5	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
9	PLC_Box_type	Button Events	Set Tag Value = 7
	PLC_Box_type == 7	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
10	PLC_Box_type	Button Events	Set Tag Value = 10
	PLC_Box_type == 10	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
11	PLC_Box_type	Button Events	Set Tag Value = 13
	PLC_Box_type == 13	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
12	PLC_Box_type	Button Events	Set Tag Value = 16
	PLC_Box_type == 16	SVG Interface - Basic Color SVG Interface - BorderColor	State "0" = color = State "1" = color = *Flashing:Yes / Frequency:Fast*
13	PLC_But_XV206_on	Button Events	Set/Reset Bit In Tag
14	PLC_But_XV206_off	Button Events	Set/Reset Bit In Tag
15	PLC_Density	IO field	Range 0 to 40 Mode: Input/Output Output format: {F1} kg/m³ *Range Limitation: Upper2 = 40 Lower2 = 0*
16	PLC_Balance	Gauge	Range 0 to 50
17	PLC_Box_kg	Gauge	Range 0 to 50

Conveying Screen



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Details Conveying Screen



ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
1	PLC_MTR103	SVG Interface - BasicColor1 SVG Interface - BasicColor2	State "0" = color = State "1" = color = *BasicColor2:* *Flashing:Yes / Frequency:Fast*
2	PLC_Box_Sealer_slider	SVG Interface - PositionY	Range 0 to 35
3	PLC_Box_Sealer_slider **>** 0 **AND** **(**PLC_Actual_MTR103_position **>=** 153 AND PLC_Actual_MTR103_position **<=** 199**)**	SVG Interface - BasicColor	State "FALSE" = color = State "TRUE" = color = *Flashing:Yes / Frequency:Fast*
4	PLC_Painting_slider **>** 0 **AND** **(**PLC_Actual_MTR103_position **>=** 334 AND PLC_Actual_MTR103_position **<=** 378**)**	SVG Interface - BasicColor	State "FALSE" = color = State "TRUE" = color = *Flashing:Yes / Frequency:Fast*

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
5	PLC_Actual_MTR103_position	Linear movement horizontal	Range 0 to 500 *Start position: 545 / Target position: 74*
	PLC_Painting_simul	SVG Interface - FillLevel	Range 0 to 100
	PLC_Actual_MTR103_position **>=** 0 **AND** PLC_Actual_MTR103_position **<** 153	SVG Interface - BoxemptyVisible	State "TRUE" = visible
	PLC_Actual_MTR103_position **>=** 153 **AND** PLC_Actual_MTR103_position **<** 344		State "TRUE" = not visible
	PLC_Actual_MTR103_position **>=** 344		State "TRUE" = not visible
	PLC_Actual_MTR103_position **>=** 0 **AND** PLC_Actual_MTR103_position **<** 153	SVG Interface - BoxsealerVisible	State "TRUE" = not visible
	PLC_Actual_MTR103_position **>=** 153 **AND** PLC_Actual_MTR103_position **<** 344		State "TRUE" = visible
	PLC_Actual_MTR103_position **>=** 344		State "TRUE" = not visible
	PLC_Actual_MTR103_position **>=** 0 **AND** PLC_Actual_MTR103_position **<** 153	SVG Interface - PaintingVisible	State "TRUE" = not visible
	PLC_Actual_MTR103_position **>=** 153 **AND** PLC_Actual_MTR103_position **<** 344		State "TRUE" = visible
	PLC_Actual_MTR103_position **>=** 344		State "TRUE" = visible
6	PLC_Cutting_pallet_simul	SVG Interface - BasicColor	State "0" = color = State "1" = color =
7	PLC_But_MTR103_on	Button Events	Set/Reset Bit In Tag
8	PLC_But_MTR103_off	Button Events	Set/Reset Bit In Tag
9	PLC_Actual_MTR103_acceleration	IO field	Range 0 to 150 Mode: Output Output format: {I} mm/s²
10	PLC_Actual_MTR103_velocity	IO field	Range 0 to 50 Mode: Output Output format: {I} mm/s

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ITEM	NAME / TAG / EXPRESSIONS	ACTION	COMMENT
11	PLC_Box_Sealer_slider	Slider	Range 0 to 35 Mode: Input/Output Output format: {I} %
12	PLC_Painting_slider	Slider	Range 0 to 100 Mode: Input/Output Output format: {I} %
13	PLC_Conveyor_Position_Setpoint	IO field	Range 0 to 500 Mode: Input/Output Output format: {I} mm *Range Limitation: Upper2 = 500 Lower2 = 0*
14	PLC_Actual_MTR103_torque	IO field	Range 0 to 50 Mode: Output Output format: {I} Nmm
15	PLC_Actual_MTR103_position	Linear movement horizontal	Range 0 to 500 *Start position: 1175 / Target position: 976*
16	PLC_Conveyor_Position_Setpoint	Linear movement horizontal	Range 0 to 500 *Start position: 1175 / Target position: 976*
17	PLC_Actual_MTR103_position	IO field	Range 0 to 500 Mode: Output Output format: {I} mm

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