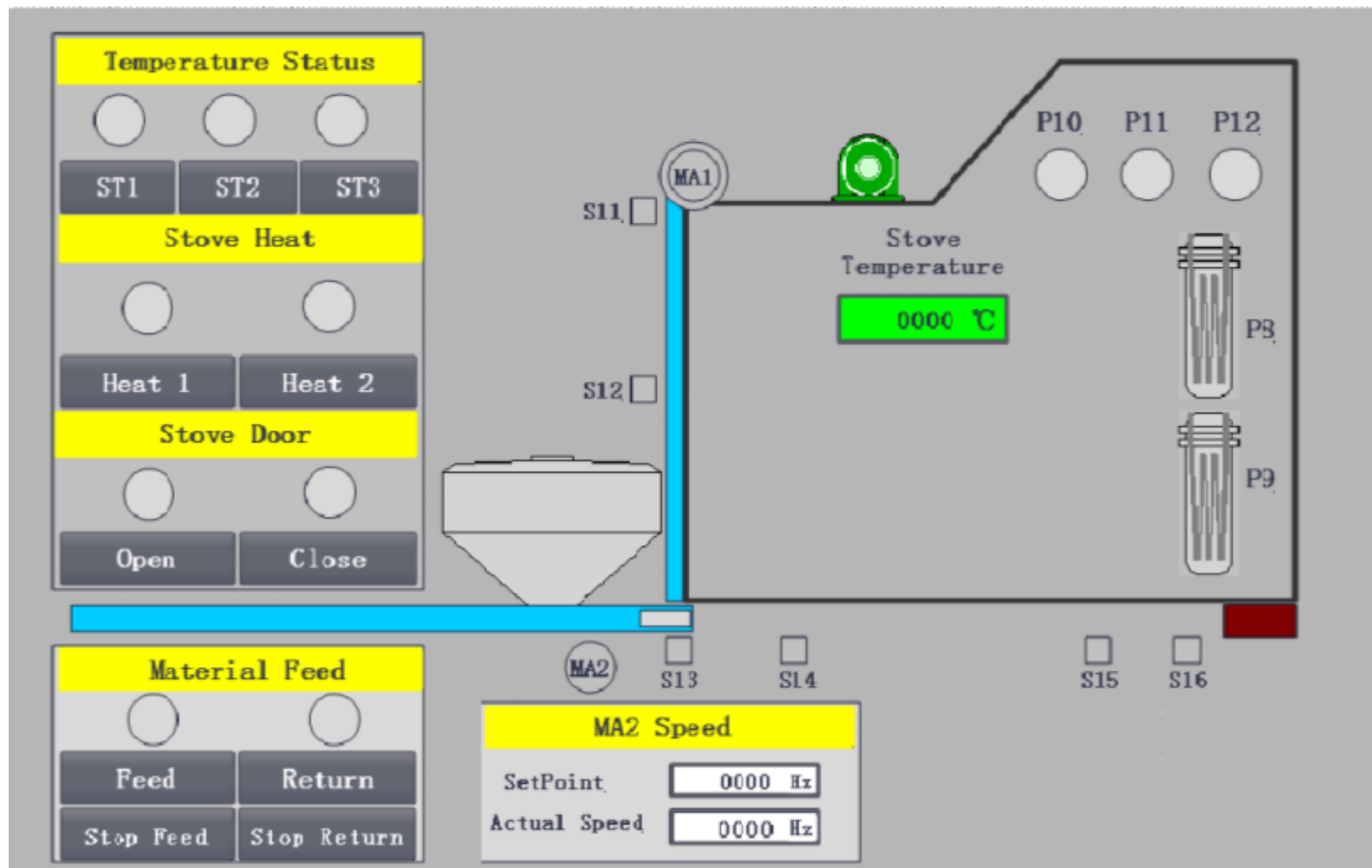


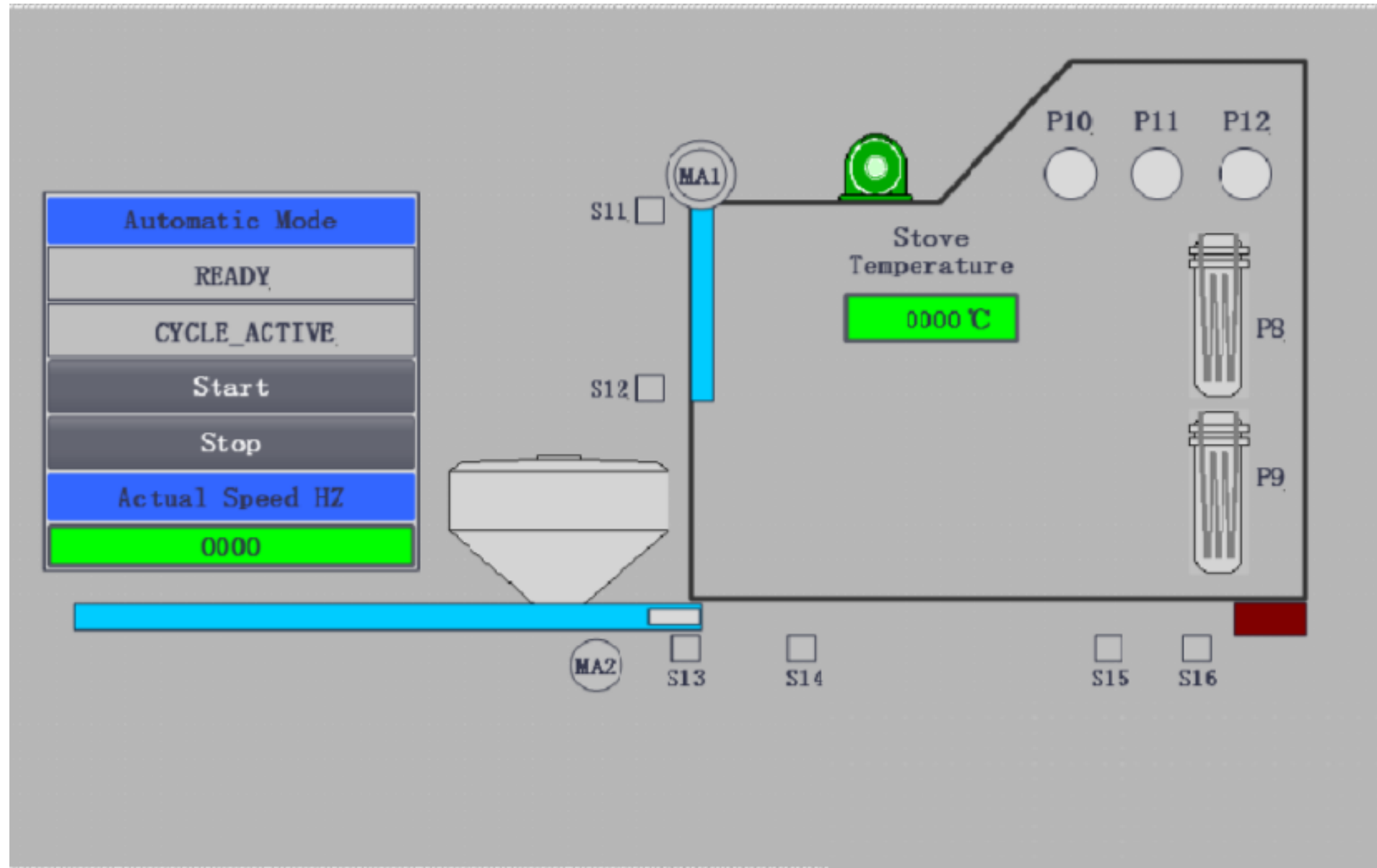


ВСЕРОССИЙСКОЕ
ЧЕМПИОНАТНОЕ
ДВИЖЕНИЕ
ПО ПРОФЕССИОНАЛЬНОМУ
МАСТЕРСТВУ

Финальный (межрегиональный) этап чемпионата 2024 Промышленная автоматика Санкт-Петербург

Модуль Д. НМІ





System Operation

Reset

EXIT Runtime



Ошибка 1



Ошибка 2



Ошибка 3

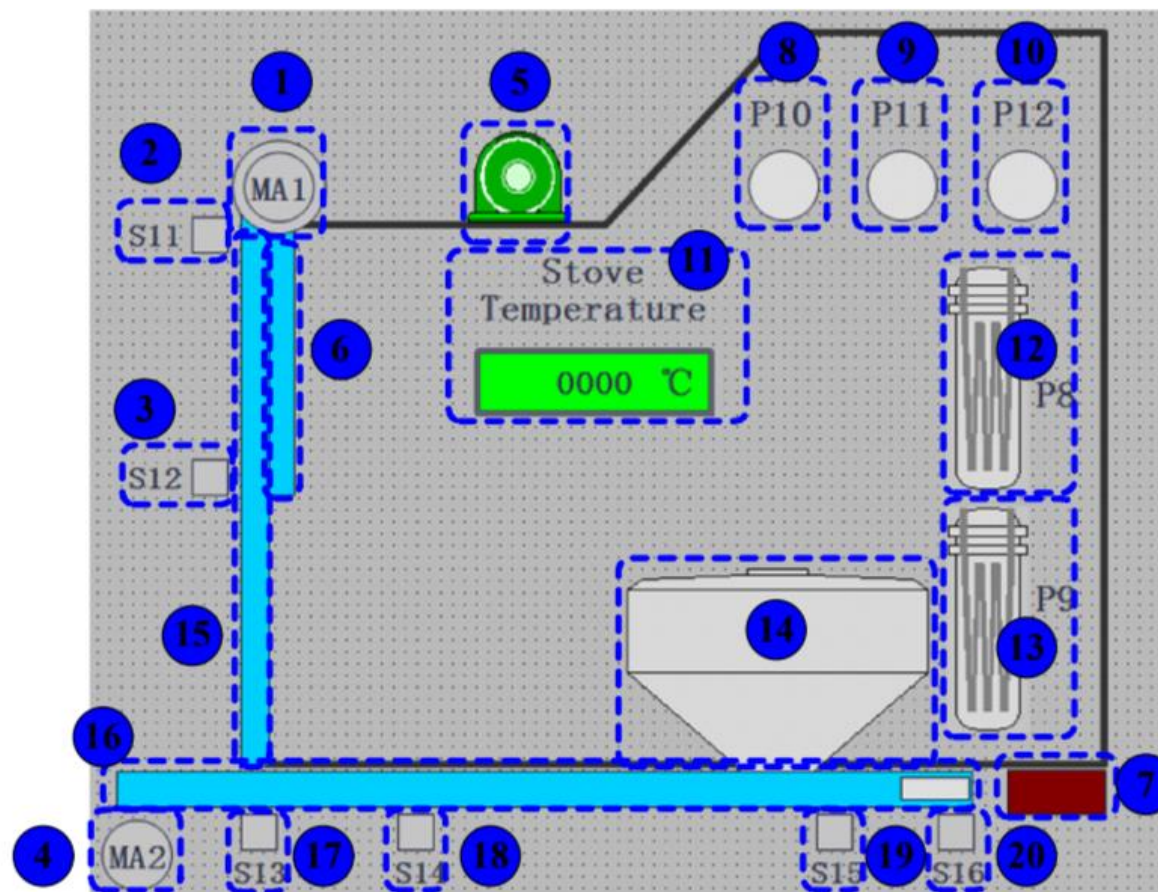


Ошибка 4

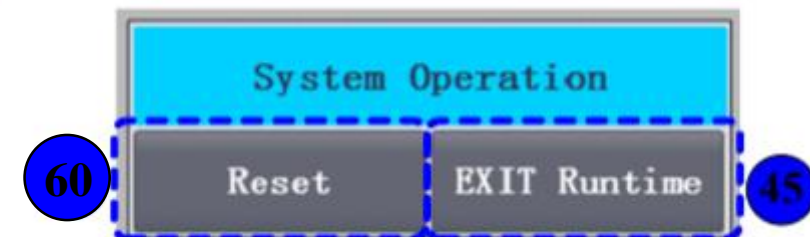
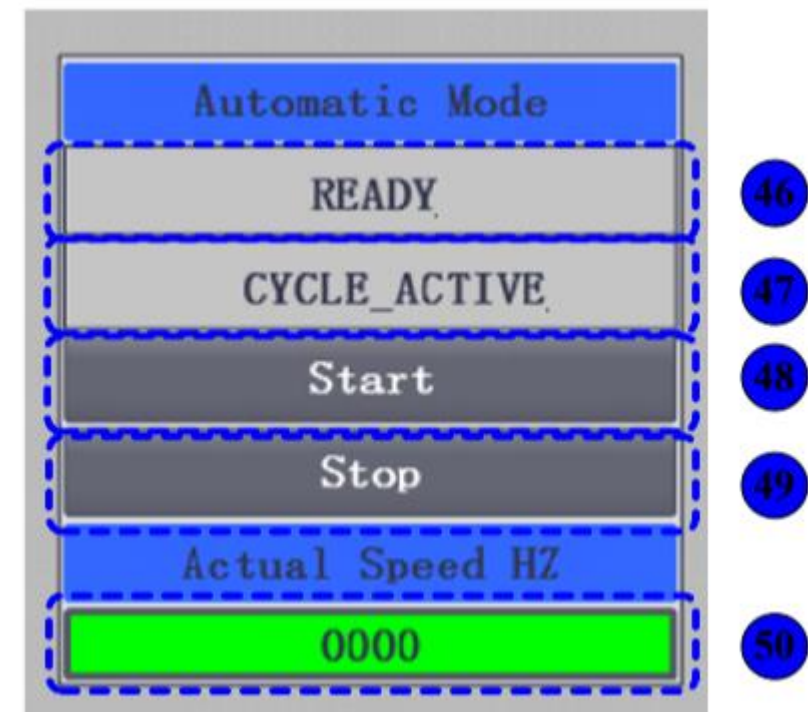
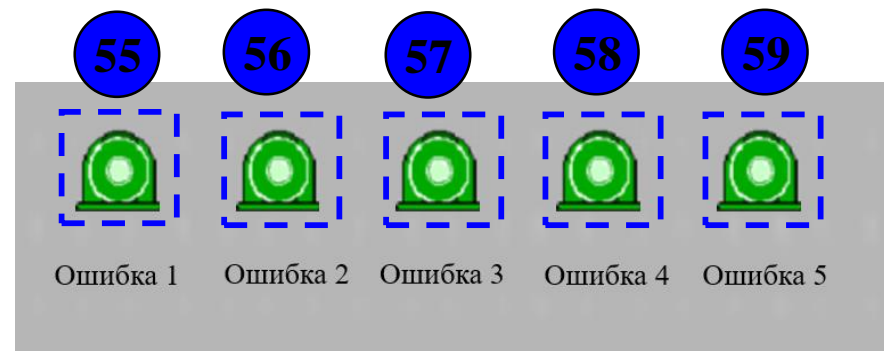
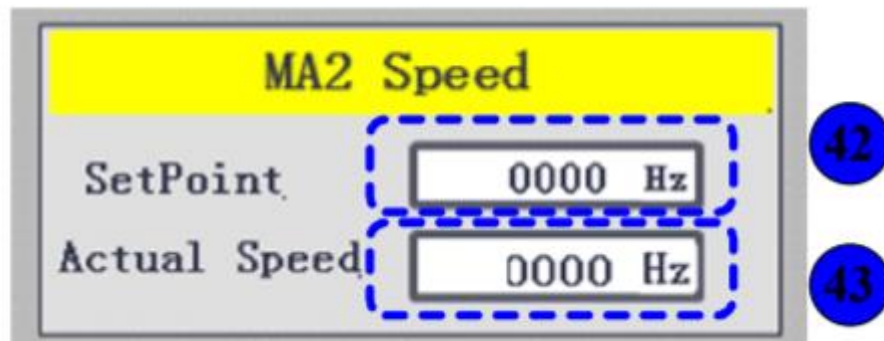
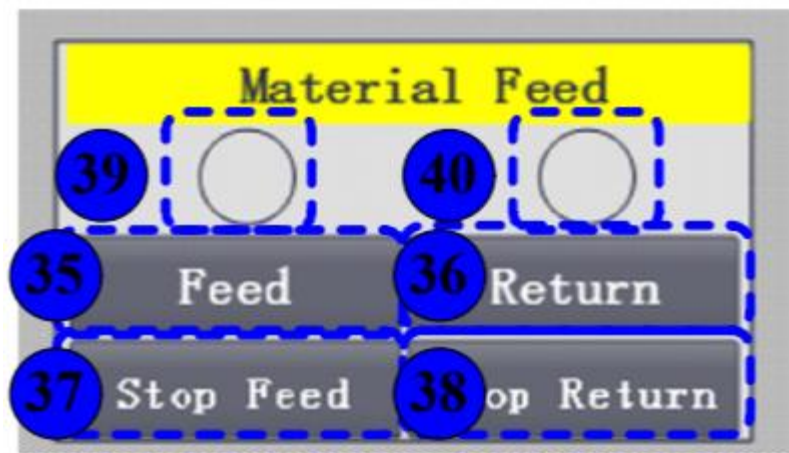
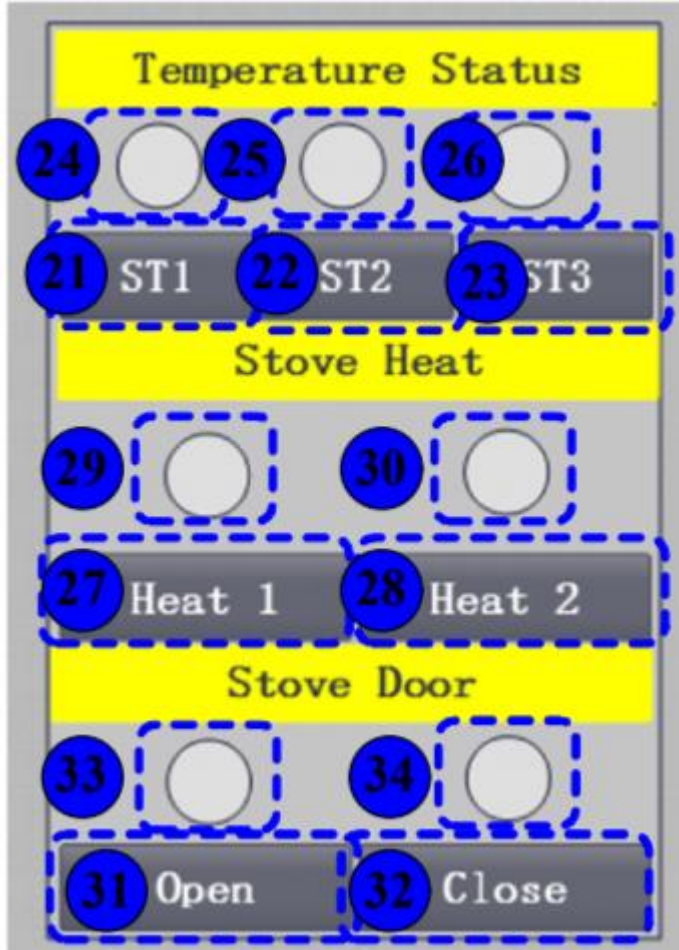


Ошибка 5

	HMI Переменные			
	Symbol	Type	Comment	In use
1	S11	BOOL	PLC-Input	Read
2	S12	BOOL	PLC-Input	Read
3	S13	BOOL	PLC-Input	Read
4	S14	BOOL	PLC-Input	Read
5	S15	BOOL	PLC-Input	Read
6	S16	BOOL	PLC-Input	Read
7	P4	BOOL	PLC-Output	Read
8	P5	BOOL	PLC-Output	Read
9	P6	BOOL	PLC-Output	Read
10	P7	BOOL	PLC-Output	Read
11	P8	BOOL	PLC-Output	Read
12	P9	BOOL	PLC-Output	Read
13	P10	BOOL	PLC-Output	Read
14	P11	BOOL	PLC-Output	Read
15	P12	BOOL	PLC-Output	Read
16	Open_stove_door	BOOL	PLC-Variable	Write
17	Close_stove_door	BOOL	PLC-Variable	Write
18	Material_feed	BOOL	PLC-Variable	Write
19	Stop_Material_feed	BOOL	PLC-Variable	Write
20	Material_return	BOOL	PLC-Variable	Write
21	Stop_Material_return	BOOL	PLC-Variable	Write
22	Start_heat_1	BOOL	PLC-Variable	Write
23	Start_heat_2	BOOL	PLC-Variable	Write
24	Turn_on_p10	BOOL	PLC-Variable	Write
25	Turn_on_p11	BOOL	PLC-Variable	Write
26	Turn_on_p12	BOOL	PLC-Variable	Write
27	MA1_CW_ON	BOOL	PLC-Variable	Read
28	MA1_CCW_ON	BOOL	PLC-Variable	Read
29	MA2_Setpoint	DINT	PLC-Variable	Read/Write
30	MA2_Speed	DINT	PLC-Variable	Read
31	Actual_speed	DINT	PLC-Variable	Read
32	MA2_CW_ON	BOOL	PLC-Variable	Read
33	MA2_CCW_ON	BOOL	PLC-Variable	Read
34	MA2_Is_ON	BOOL	PLC-Variable	Read
35	Automatic_Start	BOOL	PLC-Variable	Write
36	Automatic_Stop	BOOL	PLC-Variable	Write
37	Error_1	BOOL	PLC-Variable	Read
38	Error_2	BOOL	PLC-Variable	Read
39	Error_3	BOOL	PLC-Variable	Read
40	Error_4	BOOL	PLC-Variable	Read
41	Error_5	BOOL	PLC-Variable	Read
42	Error_Reset	BOOL	PLC-Variable	Write
43	Ready	BOOL	PLC-Variable	Read
44	Cycle_active	BOOL	PLC-Variable	Read
45	Stove_temperature	DINT	PLC-Variable	Read



DESCRIPTION	SYMBOL LIBRARY	SYMBOL LIBRARY ITEM
Stove	User-defined	User-defined
S11-S16	User-defined	User-defined
P10-P12	User-defined	User-defined
MA1-MA2	User-defined	User-defined
Material	Material handling	Element #108
Heating element P8-P9	Process heating	Element #23
Alarm light	Operator interface	Element #26



Temperature Status

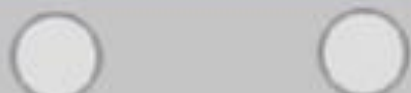


ST1

ST2

ST3

Stove Heat



Heat 1

Heat 2

Stove Door



Open

Close

Material Feed



Feed

Return

Stop Feed

Stop Return

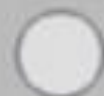
S11 ☐S12 ☐Stove
Temperature

0000 °C

P10

P11

P12



P8

P9

51

52

53

54

MA2

S13

S14

S15

S16

MA2 Speed

SetPoint

0000 Hz

Actual Speed

0000 Hz

System Operation

Reset

EXIT Runtime

Pos	HMI Переменные		
	Variable	Action	Comment
1	MA1_Is_ON	Background Control Colour	0 = Gray 1 = Green
2	S11	Background Control Colour	0 = Gray 1 = Green
3	S12	Background Control Colour	0 = Gray 1 = Green
4	MA2_Is_ON	Background Control Colour	0 = Gray 1 = Green
5	-	-	-
6	S11	Visibility dynamic	0 = Not visible 1 = Visible
7	-	-	-
8	P10	Background Control Colour	0 = Green 1 = Yellow
9	P11	Background Control Colour	0 = Green 1 = Yellow
10	P12	Background Control Colour	0 = Green 1 = Yellow
11	Stove_temperature	Output field	Value: 0-1200
12	P8	Foreground Control Colour	Fill style: shaded 0 = Gray 1 = Red
13	P9	Foreground Control Colour	Fill style: shaded 0 = Gray 1 = Red
14	S16	Visibility dynamic	0 = Not visible 1 = Visible
15	S12	Visibility dynamic	0 = Not visible 1 = Visible

Pos	HMI Переменные		
	Variable	Action	Comment
16	S16	Visibility dynamic	0 = Not visible 1 = Visible
17	S13	Background Control Colour	0 = Gray 1 = Green
18	S14	Background Control Colour	0 = Gray 1 = Green
19	S15	Background Control Colour	0 = Gray 1 = Green
20	S16	Background Control Colour	0 = Gray 1 = Green
21	Turn_ON_P10	Button control	"InvertBit" while botton is pressed
22	Turn_ON_P11	Button control	"InvertBit" while botton is pressed
23	Turn_ON_P12	Button control	"InvertBit" while botton is pressed
24	P10	Background Control Colour	0 = Gray 1 = Green
25	P11	Background Control Colour	0 = Gray 1 = Yellow
26	P12	Background Control Colour	0 = Gray 1 = Red
27	Start_Heat_1	Button control	"InvertBit" while botton is pressed
28	Start_Heat_2	Button control	"InvertBit" while botton is pressed
29	P8	Background Control Colour	0 = Gray 1 = Green
30	P9	Background Control Colour	0 = Gray 1 = Green

Pos	HMI Переменные		
	Variable	Action	Comment
31	Open_stove_door	Button control	"State 1" while botton is pressed
32	Close_stove_door	Button control	"State 1" while botton is pressed
33	MA1_CW_ON	Background Control Colour	0 = Gray 1 = Green
34	MA1_CCW_ON	Background Control Colour	0 = Gray 1 = Green
35	Material_feed	Button control	"State 1" while botton is pressed
36	Material_return	Button control	"State 1" while botton is pressed
37	Stop_Material_feed	Button control	"State 1" while botton is pressed
38	Stop_Material_return	Button control	"State 1" while botton is pressed
39	MA2_CW_ON	Background Control Colour	0 = Gray 1 = Green
40	MA2_CCW_ON	Background Control Colour	0 = Gray 1 = Green
41	-	-	-
42	MA2_Setpoint	Input/Output field	Value: 0-50
43	Actual_speed	Output field	Value: 0-50
44	-	-	-
45		System function	"Stop runtime" while botton is pressed

Pos	HMI Переменные		
	Variable	Action	Comment
46	Ready	Background Control Colour	0 = Gray 1 = Green
47	Cycle_active	Background Control Colour	0 = Gray 1 = Green
48	Automatic_Start	Button control	"State 1" while botton is pressed
49	Automatic_Stop	Button control	"State 1" while botton is pressed
50	Actual_speed	Output field	Value: 0-50
51	S13	Visibility dynamic	0 = Not visible 1 = Visible
52	S14	Visibility dynamic	0 = Not visible 1 = Visible
53	S15	Visibility dynamic	0 = Not visible 1 = Visible
54	S16	Visibility dynamic	0 = Not visible 1 = Visible
55	Error 1	Background Control Colour	0 = Green 1 = Red
56	Error 2	Background Control Colour	0 = Green 1 = Red
57	Error 3	Background Control Colour	0 = Green 1 = Red
58	Error 4	Background Control Colour	0 = Green 1 = Red
59	Error 5	Background Control Colour	0 = Green 1 = Red
60	Error_Reset	Button control	"State 1" while botton is pressed