

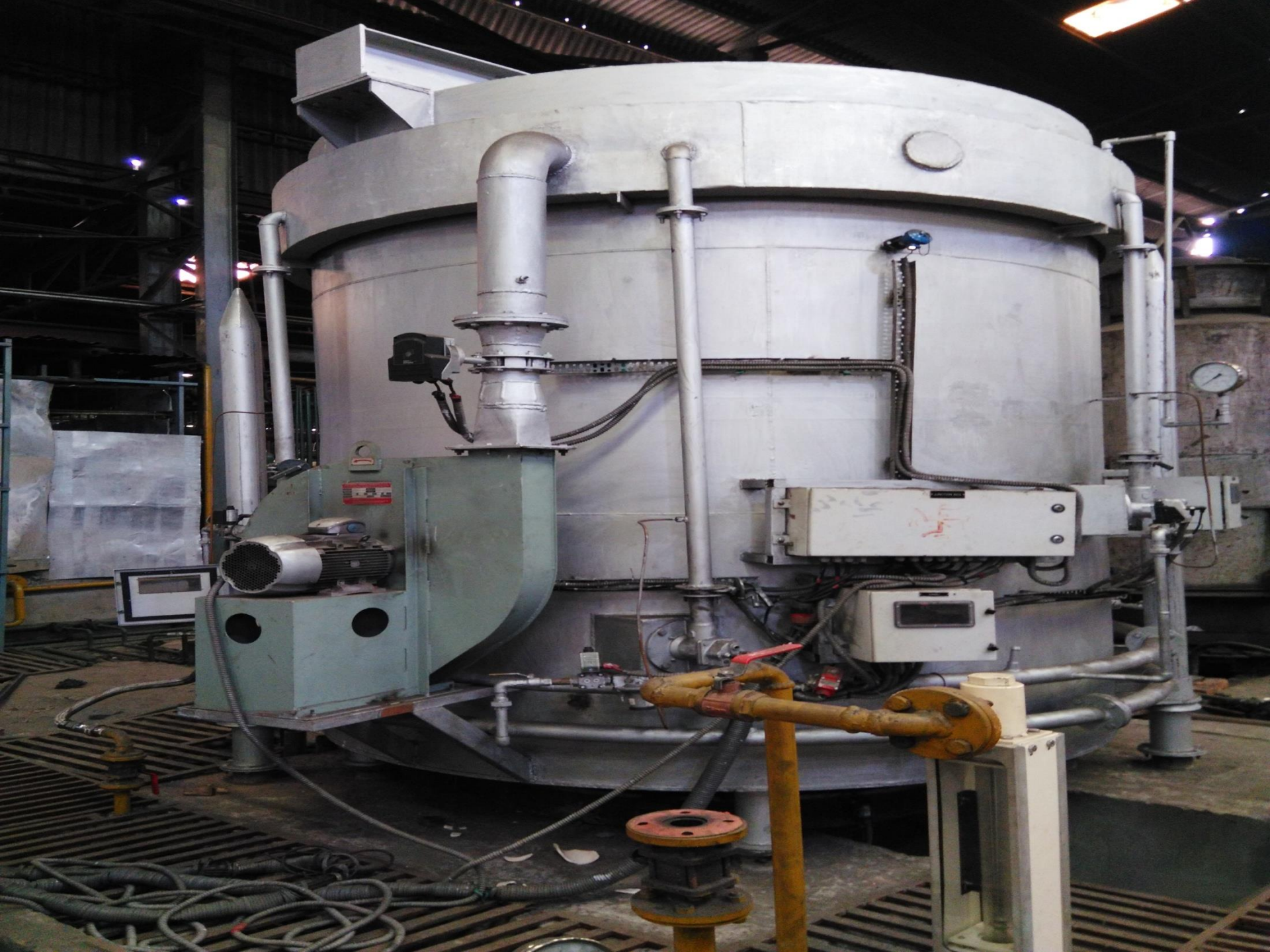
BELL TYPE FURNACE

NEZONE TUBE LTD.

KOLKATA

PROSAFE
AUTOMATION
SIEMENS SYSTEM HOUSE









FUR





COOLING HOOD PANEL



AIRFLOW FAN 1



AIRFLOW FAN 2

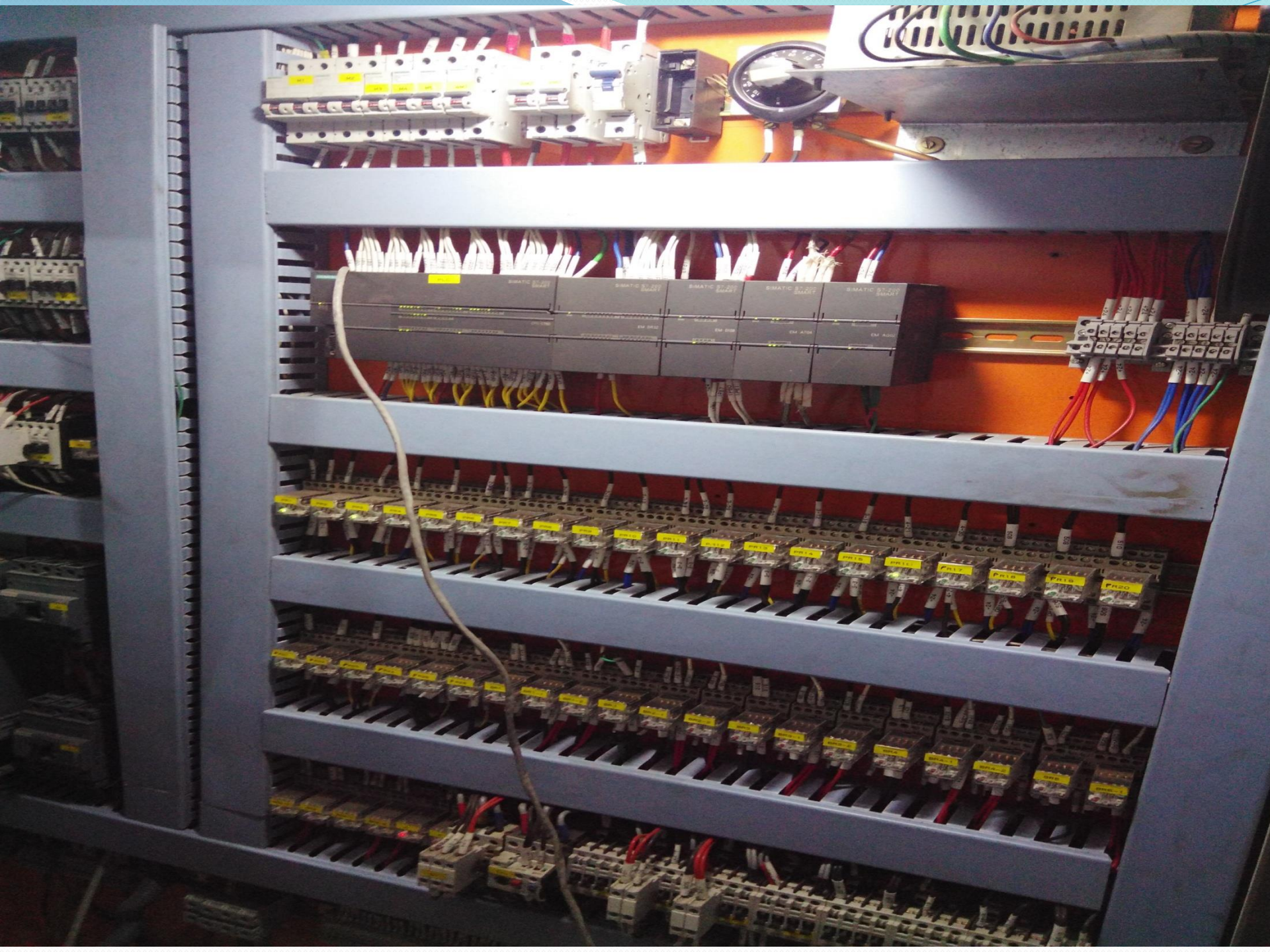


AIRFLOW FAN 3



AIRFLOW FAN 4







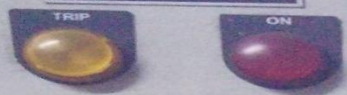
R.C. FAN-2



COMB AIR BLOWER



COMB AIR BLOWER



MAIN PANEL OF BELL TYPE FURNACE



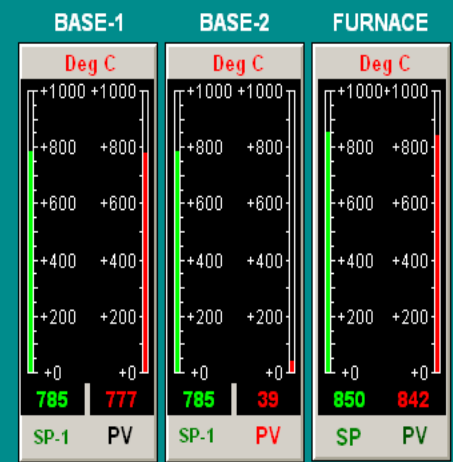
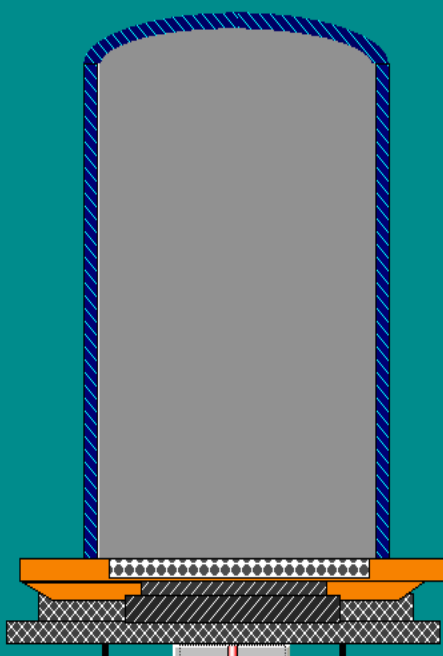
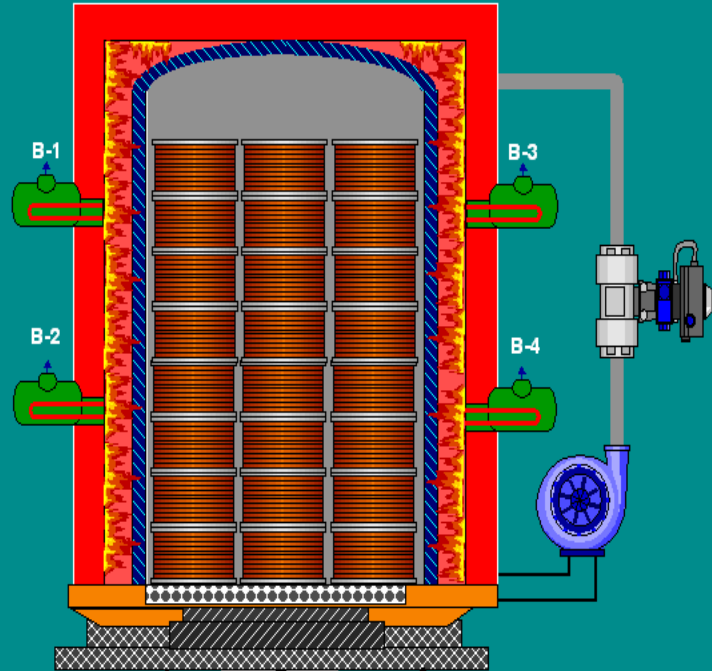
F-PID



BELL TYPE GAS FURNACE-1

WB-1

WB-2



TIMERS

HEATING

SOAKING

COOLING

Program : RUNNING

HEATING

SOAKING

COOLING

Program : STOP



FURNACE START

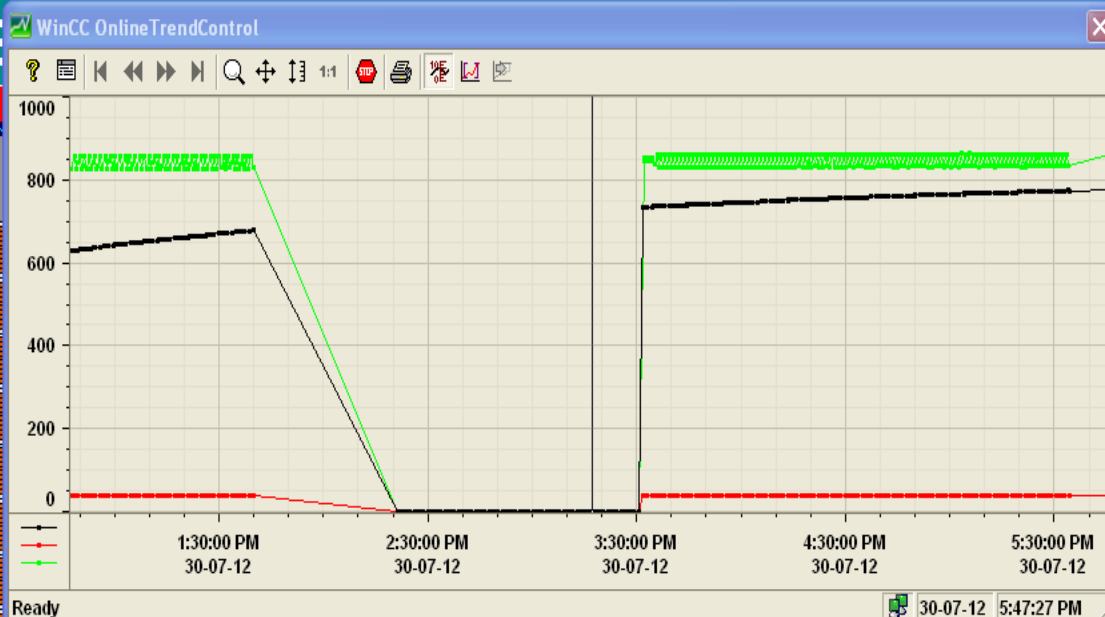
FURNACE STOP

IMP INDC.

RELAYS STATUS

BURNER STATUS

BELL TYPE GAS FURNACE-1



WinCC RulerControl

Name	Y value	X value/time stamp
1 BASE-1 PV	0.0 i.	30-07-12 3:17:15 PM
2 BASE-2 PV	0.0 i.	30-07-12 3:17:15 PM
3 FURNACE	0.0 i.	30-07-12 3:17:15 PM

Source: Control53 5:47:27 PM

BASE-1	BASE-2	FURNACE			
Deg C		Deg C		Deg C	
785	778	785	39	850	835
SP-1	PV	SP-1	PV	SP	PV

TIMERS

	PV	CV
TIME DELAY TO START BURNER - 1	5	0
TIME DELAY TO START BURNER - 2	5	0
TIME DELAY TO START BURNER - 3	5	1
TIME DELAY TO START BURNER - 4	5	0
SOAKING-1 TIMER FOR SP-1	3600	0

- INDICATION
- AUTO MODE SELECTION
 - RC FAN ON CONFIRMATION BASE-1
 - RC FAN ON CONFIRMATION BASE-2
 - FURNACE IN BASE - 1
 - FURNACE IN BASE - 2
 - COMBUSTION AIR BLOWER ON CONFIRMATION
 - PRESSURE SWITCH - 1 FEEDBACK
 - PRESSURE SWITCH - 2 FEEDBACK

HEATING

SOAKING

RELAY/STATUS

R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
●	○	●	○	●	●	○	○	○

M 1-2 VACUUM PUMP

START STOP

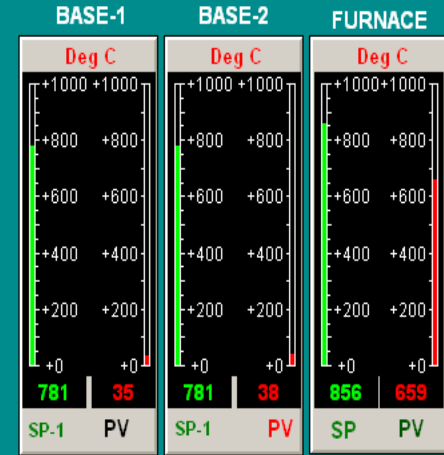
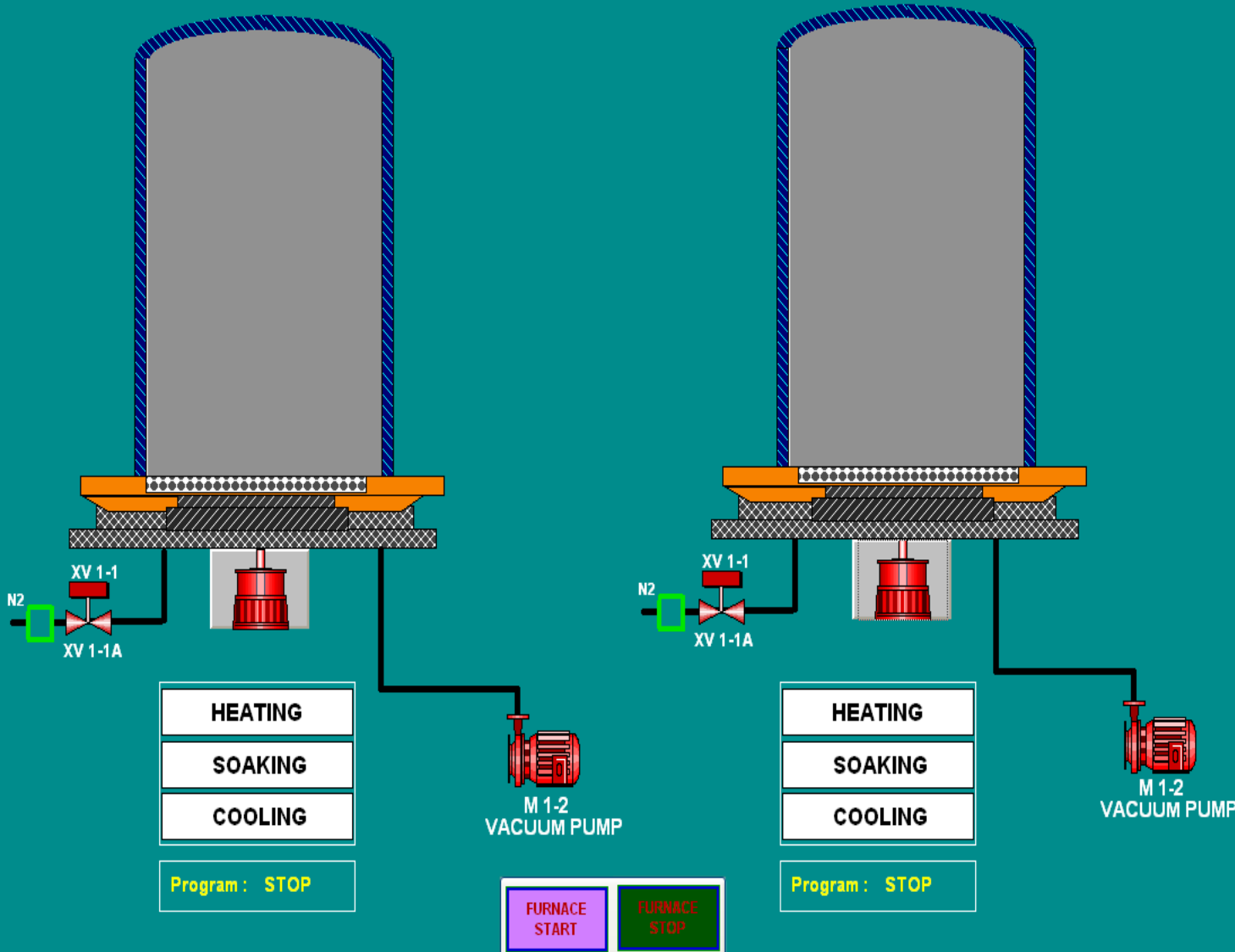
BURNER ON/FAIL

BURNERS	ON	FAIL
BURNERS - 1	○	○
BURNERS - 2	○	○
BURNERS - 3	○	○
BURNERS - 4	○	○

BELL TYPE GAS FURNACE-2

WB-1

WB-2

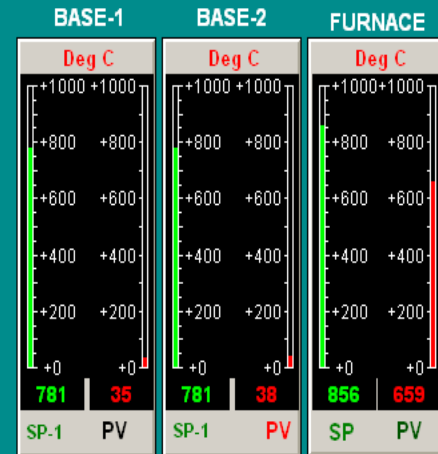
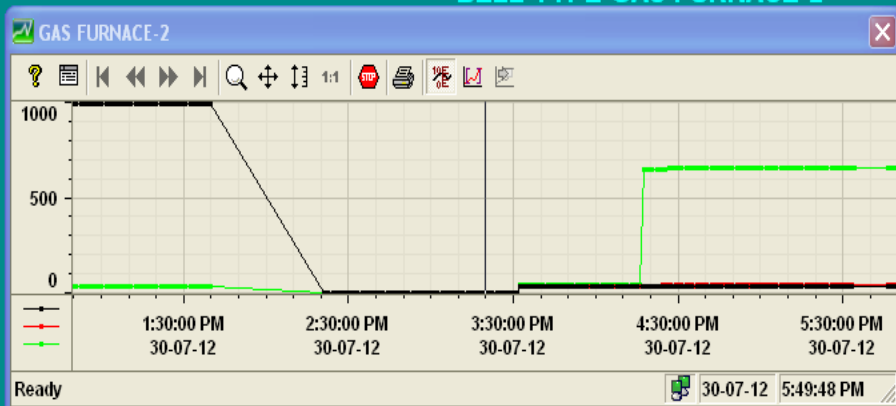


TIMERS

IMP INDC. RELAYS STATUS BURNER STATUS

BELL TYPE GAS FURNACE-2

WB-2



FURNACE-2 INDICATION

MODE SELECTION

ON CONFIRMATION BASE-1

ON CONFIRMATION BASE-2

IN BASE - 1

IN BASE - 2

ATION AIR BLOWER ON CONFIRMATION

E SWITCH - 1 FEEDBACK

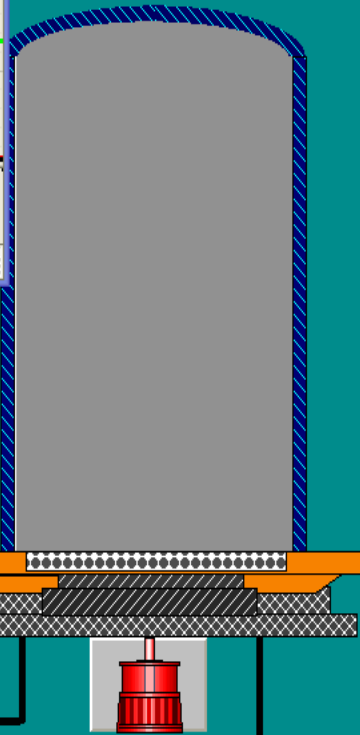
E SWITCH - 2 FEEDBACK

GAS FURNACE-2 BURNER

BURNERS	ON	FAIL
BURNERS - 1	<input type="radio"/>	<input type="radio"/>
BURNERS - 2	<input type="radio"/>	<input type="radio"/>
BURNERS - 3	<input type="radio"/>	<input type="radio"/>
BURNERS - 4	<input type="radio"/>	<input type="radio"/>

GAS FURNACE-2 TIMERS

	PV	CV
TIME DELAY TO START BURNER - 1	5	0
TIME DELAY TO START BURNER - 2	5	0
TIME DELAY TO START BURNER - 3	5	0
TIME DELAY TO START BURNER - 4	5	0
SOAKING-1 TIMER FOR SP-1	3600	0



HEATING

SOAKING

GAS FURNACE-2 RELAY/STATUS

R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Program : STOP

FURNACE START **FURNACE STOP**

IMP INDC. **RELAYS STATUS** **BURNER STATUS**

BELL ANNEALING FURNACE CORPACERO BASE OVERVIEW



FURNACE-1 TEMPERATURE 862.00 °C



WB 3

Time - 0 : 0

35 °C

FURNACE-2 TEMPERATURE 659.00 °C



FURNACE-3 TEMPERATURE 0.00 °C



WB 7

Time - 0 : 0

0 °C

FURNACE-4 TEMPERATURE 0.00 °C



Base Ready

Heating

Soaking

Radiating

F12 Print Screen

BURNER ALARMS

...	DATE	TIME	NUMBER	STATION	MESSAGE TEXT	STATUS
1	30-07-12	17:45:27	2518	GASFURNACE	GAS FURNACE-2 RC FAN BASE-1 NOT RUNNING	+
2	30-07-12	17:45:27	2519	GASFURNACE	GAS FURNACE-2 RC FAN BASE-2 NOT RUNNING	+
▶ 3	30-07-12	17:45:27	2511	GASFURNACE	GAS FURNACE-1 RC FAN BASE-2 NOT RUNNING	+



THANK YOU

PROSAFE AUTOMATION

AUTHORISED SIEMENS SYSTEM HOUSE)