

BULUMOUNT-2

AUTOMATIC ELECTRO HYDRAULIC SPECIMEN MOUNTING EQUIPMENT



CE

OPERATIONAL MANUAL

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1 Technical Specifications

Machine dimension	45x57x64 cm
Case dimension	65x70x70 cm
Weight (net/gross)	70/100 kg
Mains	220V-50Hz
Mold heater capacity	1250 Watt
Max. Hydraulic system pressure	250 bar
Entering heating, cooling & preheating values	✓
Manual cooling, alarm indicator for cycle completion	✓
Manual raising and lowering piston by motor when required	✓
Full automatic cycle until sampling finalized	✓
Fast & easy operation for inserting the sample and powder as well as extracting mold	✓

1.1 Standard Accessories

Standard mold assembly: 1" - 1, 25" - 1, 5" - 2" (only 1 mold is standard)

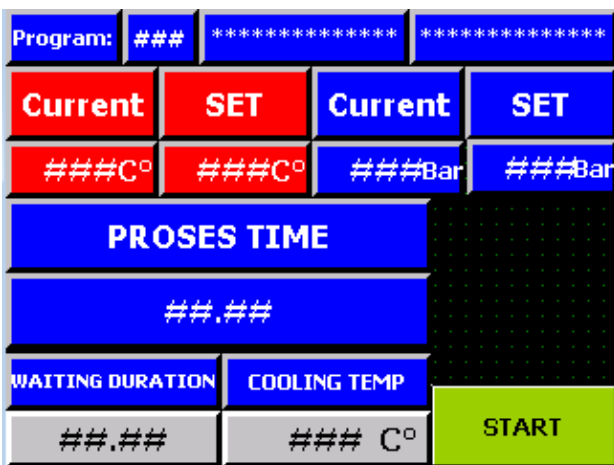
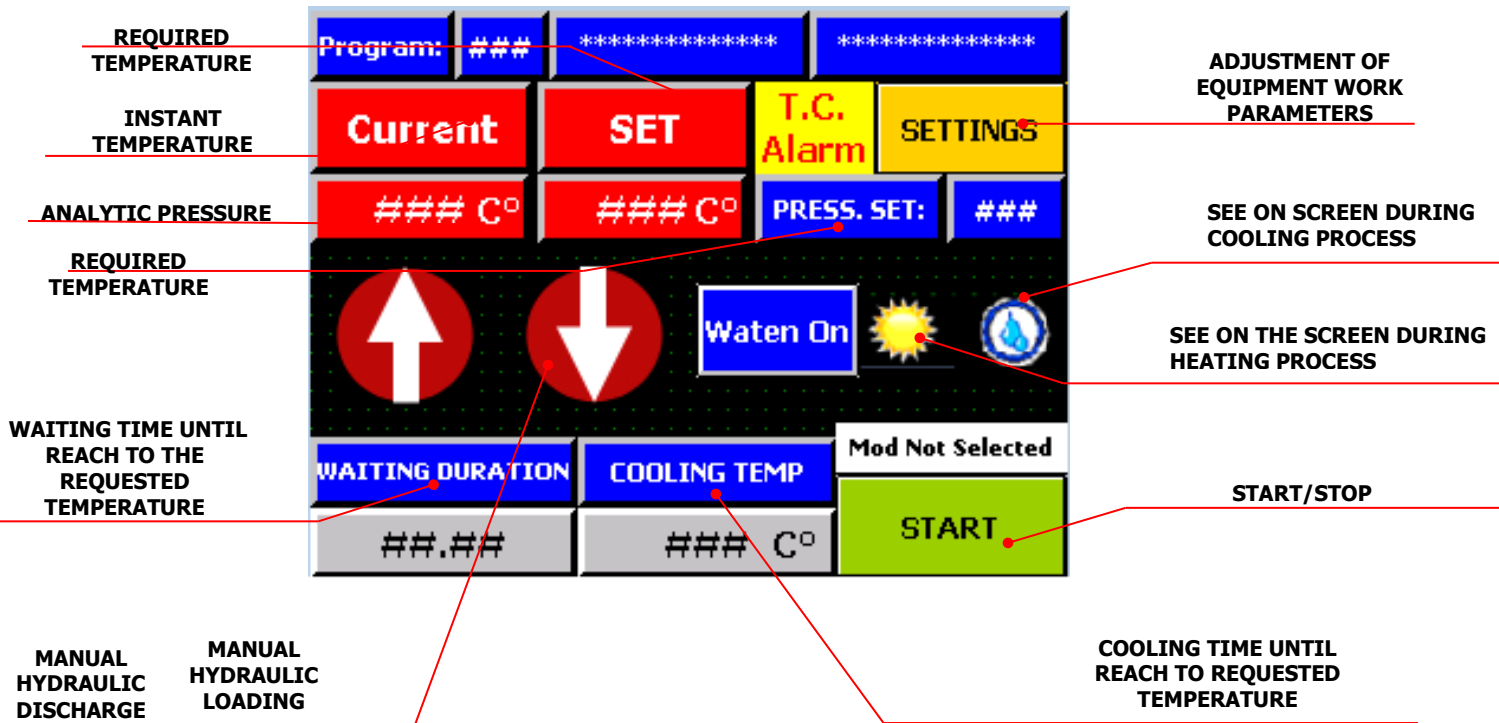
Phenolic powder

Pipe for water source



Fig.1

2 MAIN SCREEN



THIS PAGE WILL APPEAR WHILE PROCESSING

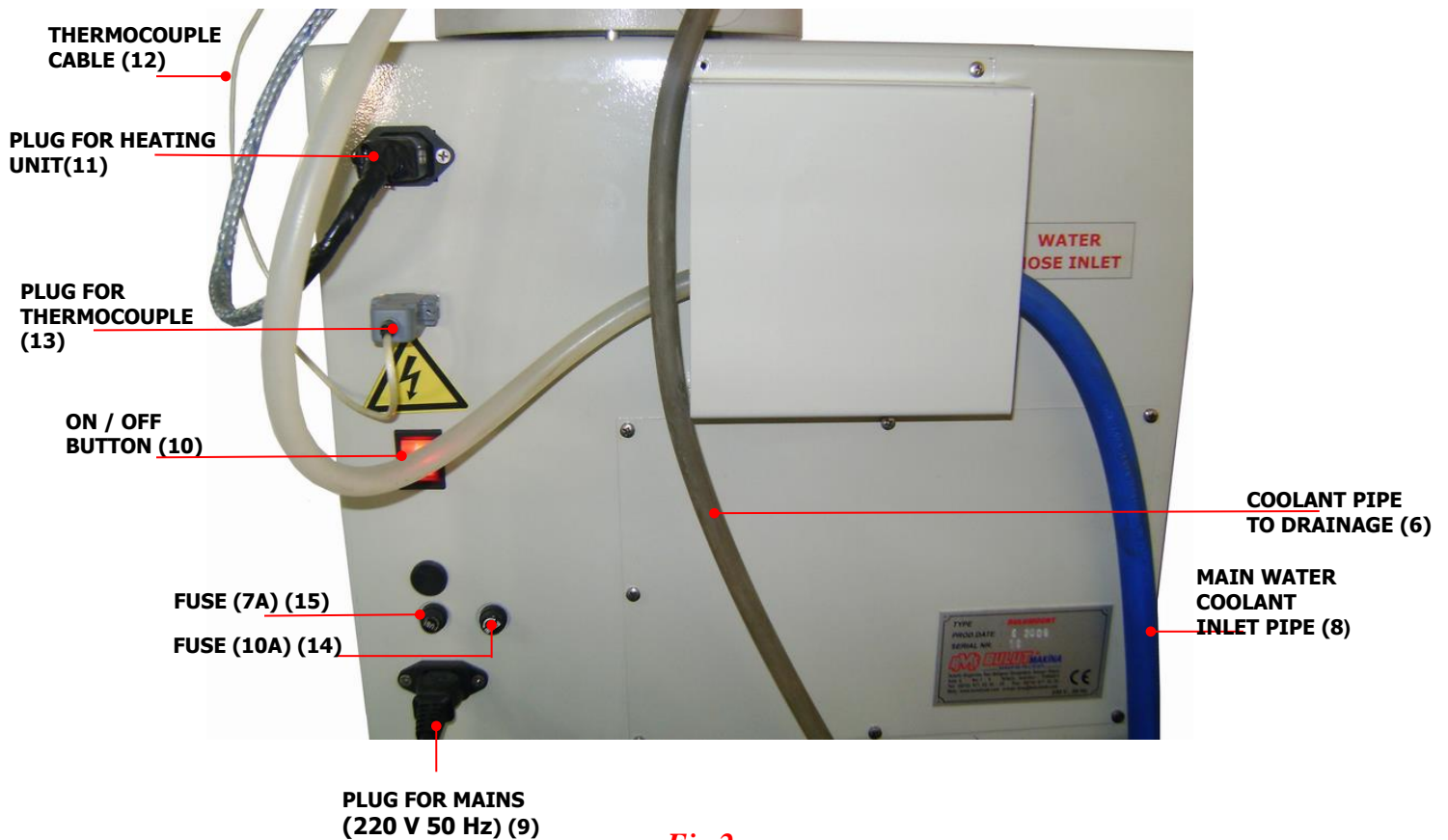


Fig.2



3 Part List

1	LOCK NUT ASSEMBLY	12	THERMOCOUPLECABLE
2	HEATER ASSEMBLY	13	PLUG FORTHERMOCOUPLE
3	COVER	14	FUSE (7 AMPER)
4	PRESSURE GAUGE	15	FUSE (10 AMPER)
5	DIGITAL CONTROLPANEL	16	PHENOLIC POWDER
6	COOLANT PIPE TO DRAINAGE	17	SAMPLE
7	WATER COOLANT PIPE FROM SOLENOID VALVE TO HEATING UNIT	18	LOWER RAM SURFACE
8	MAIN WATERCOOLANT INLET PIPE		
9	PLUG FOR MAINS (220 V 50 Hz)		
10	ON / OFF BUTTON		
11	PLUG FOR HEATING UNIT		

- 1) - **Temperature** : Required temperature settled temp.value (°C)
- 2) - **Waiting time** : Waiting time in required settled temperature (min.)
- 3) - **Cooling set** : Required cooling settled temp.value (°C)
- 4) - **Pre-heat set** : Temperature when machine is on. (°C), but not functioned.
- 5) - **Pressure set** : Adjustment of max.pressure required (Bar)

Recommended pressure between 150-200 bars depending on sample. (Max. applicable pressure is 250 Bars)

Entering required values on Digital Panel (see screens step by step)

By clicking on **TEMPERATURE SET** the temperature setting, the desired value is entered on the screen that opens. Then  (maks.200 °C) For example, 150  value is stored by pressing. Then, this process is repeated in the other parameters. To return to the menu press **EXIT** button. ON / OFF key is used to open the manual water cooling.

4 Operation

By turning clockwise and holding up, remove lock nut assembly. (Fig.3)

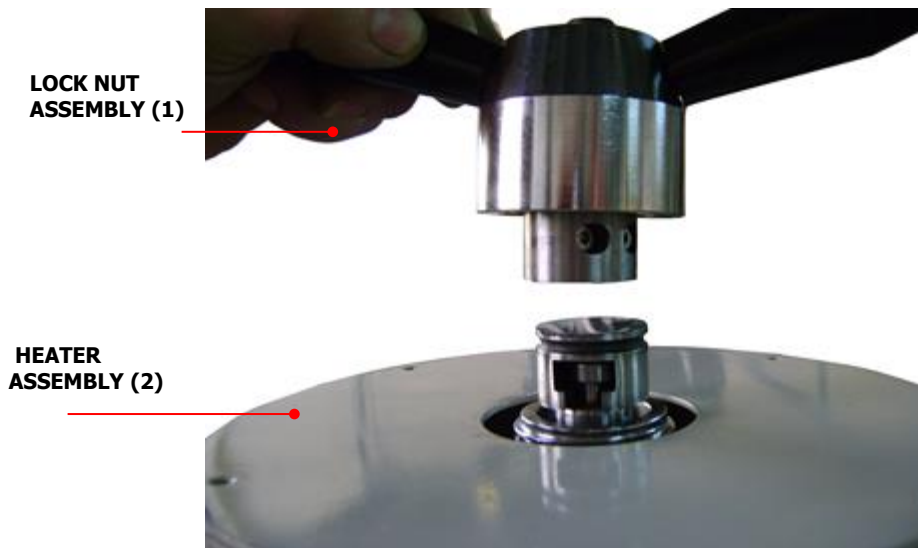


Fig.3

4.1 Inserting the Sample and Powder

By pressing the UP and lift hydraulic cylinder up manually and place the sample by squeezing a mold release agent onto the upper base surface of the plunger. Press the DOWN (Fig.4) key to manually lower the cylinder slightly depending on the sample size.



Fig.4

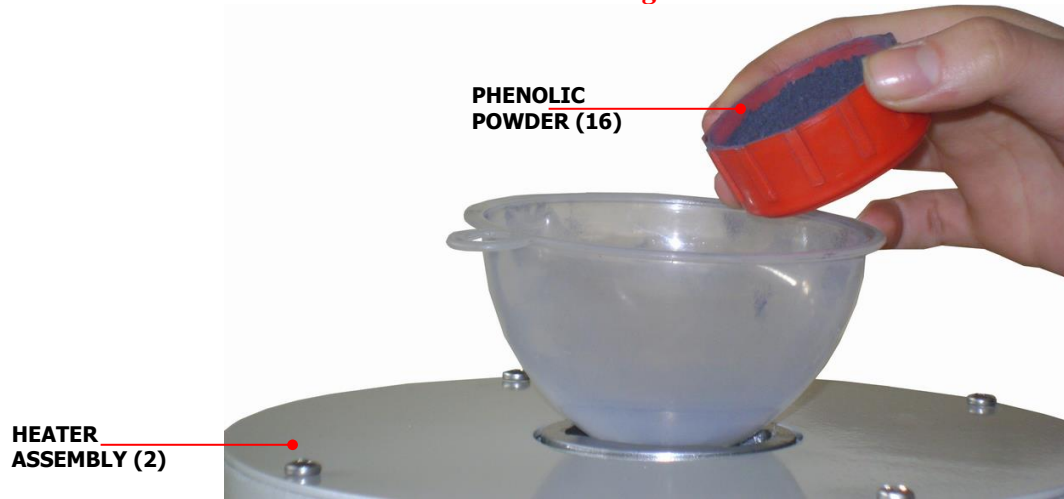


Fig.5

Put suitable amount of phenolic powder according to sample to be mounted. (Fig.5) and lock nut assembly again. (Fig.6)

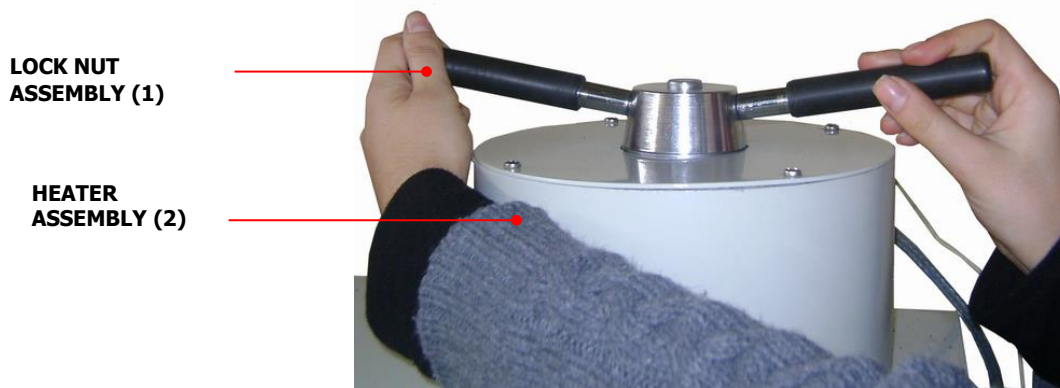
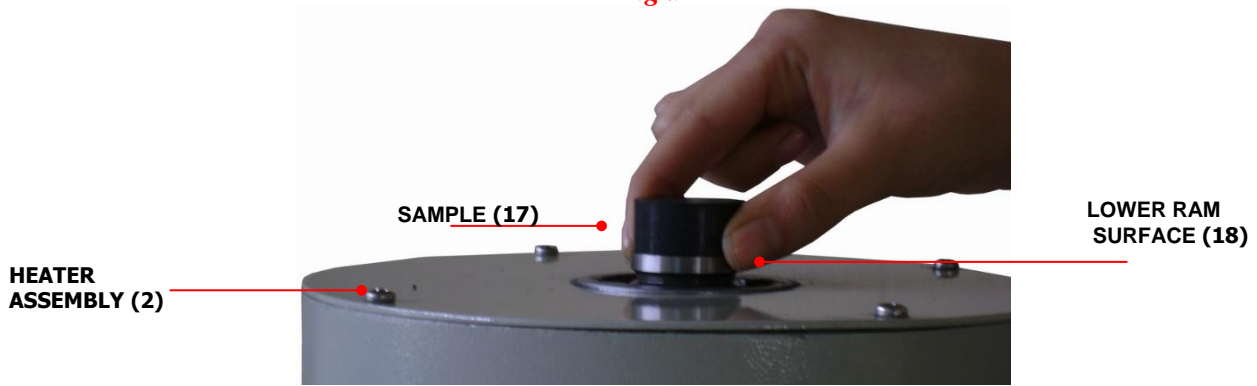
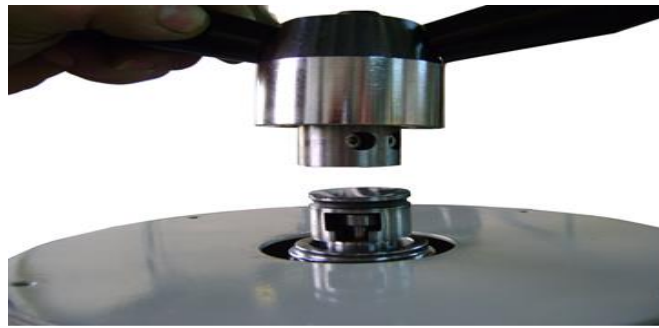
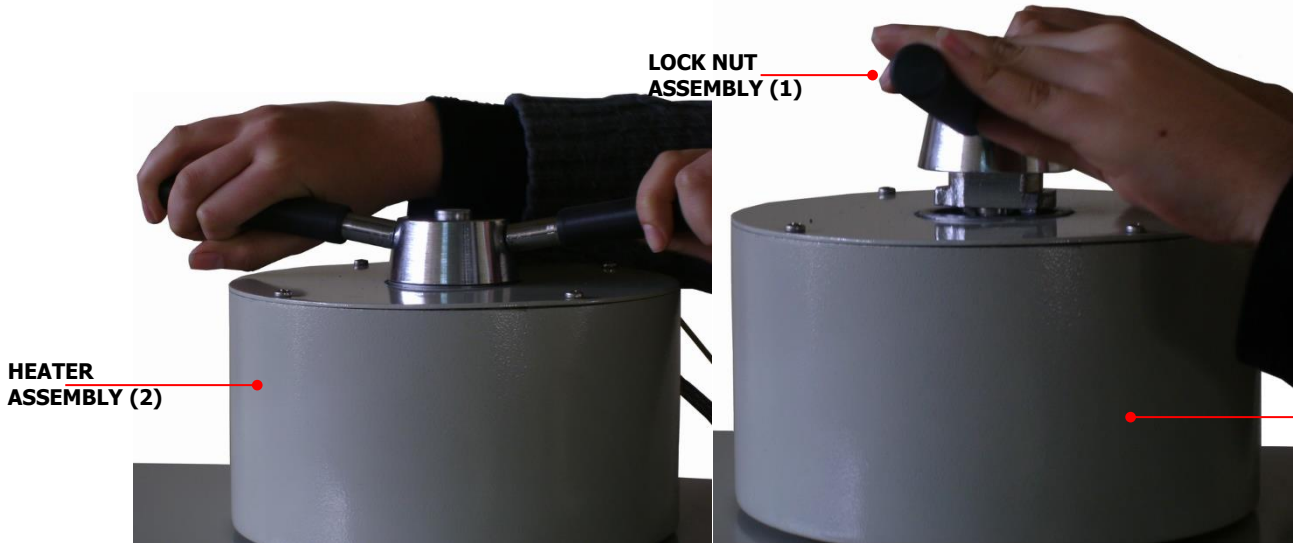


Fig.6

Press the START button. Automatic molding process will begin and will be completed. (Before you begin this procedure, make sure to enter the correct parameters.) When you are prompted you can stop the machine with press STOP button, after than if you are not going to do any changes about the program you can end with press STOP button and hydraulic pressure will discharge. Make sure that discharge of pressure from PLC screen and gauge before remove the locking lever.

4.2 Extracting the Mold



When operation is over, by turning anticlockwise and holding up remove lock nut assembly (Fig.7-8.)

NOT: To removing the mold locking mechanism, it can be difficult because of trapped air inside. In this case, when prompted, press UP. It can be removed all together, the sample and the locking mechanism. (Fig.9)

IMPORTANT: Pay attention on cleaning residues around of lower and upper rams. Otherwise, it may be difficult for cylinder when lowering.

Attention!

Hydraulic system is filled and tested from our company. You do not need to fill any oil. But, it is required in any case, loosen bolt a) and fill system with Shell Tellus 37 oil (or similar). Loosen bolt b) to check oil level. When there is an oil coming out from b) stop this process. (Fig 12)

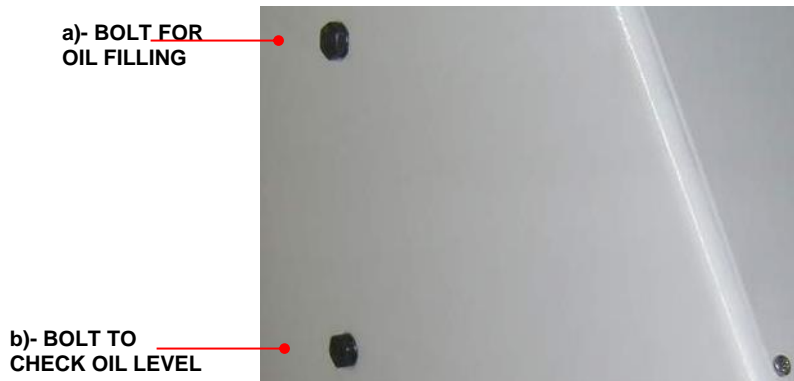
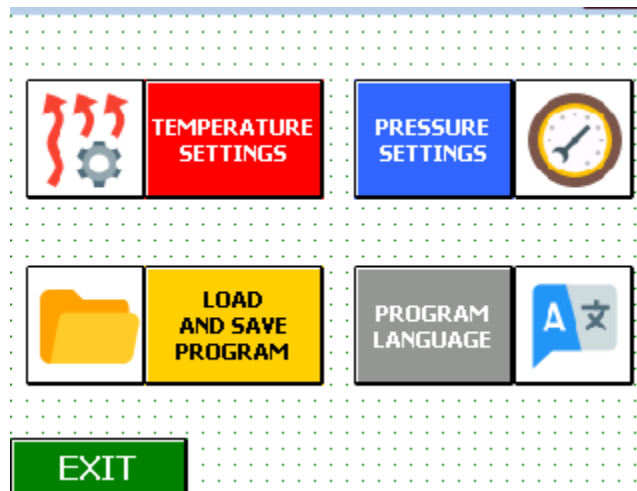


Fig.12

5 Selecting Parameters on the Digital Display



HEATING SETTINGS		
PRE-HEAT SET:	###	C°
TEMPERATURE SET:	###	C°
COOLING SET:	###	C°
CALIBRATION		
EXIT		

***** _ *****

7	8	9	ESC
4	5	6	Clear
1	2	3	←
+/-	0	,	OK

CLICK TO CHOOSE THE REQUESTED TEMPERATURE THAN INTRODUCE TEMPERATURE VALUE (EXAMPLE: 150) AND CONFIRM WITH ENTER

RETURN TO SETTINGS PRESS **EXIT** OR PRESS **ESC** ICON. (THE SYSTEM WILL WARN YOU WITHIN THE AUDIENCE WHEN TEMPERATURE IS ON REQUIRED TEMPERATURE).

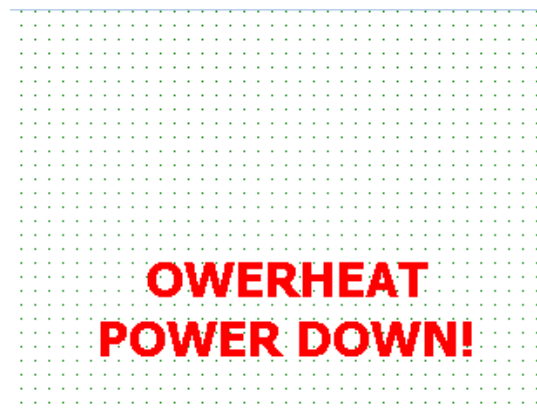
PRESS SETTING ICON THAN PRESS TEMPERATURE SETTINGS TO OPEN

PRESSURE SETTINGS		
WAITING TIME:	##.##	mn:sc
PRESSURE SET:	###	Bar
CALIBRATION		
SPEED SETTING		
EXIT		

PROGRAM SAVED PAGE	
PROGRAM NO:	####
PROGRAM NAME:	*****
ITEM NAME:	*****

EXIT	SAVE

WHEN THE TEMPERATURE REACH TO REQUIRED TEMPERATURE, YOU CAN CHOOSE DURATION TIME FOR



PLEASE SHUT THE POWER DOWN IF YOU SEE THIS SIGN!

SAVE CURRENT SETTINGS

LOAD SAVED SETTINGS

EXIT

THEN ON THE RECORD PAGE YOU CAN FILL THE BOX BY KEYBOARD AFTER SAVING THE INFO USING SAVE ICON YOU CAN LEAVE THE PAGE USING EXIT ICON

EXIT

PROGRAM NO:	###		
CUST. NAME:	*****		
ITEM NAME:	*****		
PRE-HEAT C°:	###	SET C°:	###
COOLING SET:	###	WAITING TIME:	##.##
PRESSURE Bar:	###		

EXIT **LOAD**

Del LOAD



## *****	## *****
## *****	## *****
## *****	## *****

EXIT ◀ ## / 15 ▶


PARAMETERS THAT YOU CHOOSE, AFTER PRESS THE **LOAD THE PROGRAM** ICON, YOU WILL ORIENT AUTOMATICLY MEASUREMENT PAGE

PROGRAM NO:	###		
CUST. NAME:	*****		
ITEM NAME:	*****		
PRE-HEAT C°:	###	SET C°:	###
COOLING SET:	###	WAITING TIME:	##.##
PRESSURE Bar:	###		

EXIT **LOAD**

EXIT



PROSESS DONE

AFTER YOU SEE “PROCESS DONE” ON THE SCREEN THE MACHINE READY FOR A NEW TEST