OPERATIONAL MANUAL

BULUMOUNT-2

AUTOMATIC ELECTRO HYDRAULIC SPECIMEN MOUNTING EQUIPMENT

CE

BMS Bulut Makina Sanayi Ve Ticaret Ltd. Şti.
Kocaeli KOBİ Organize Sanayi Bölgesi
Köseler Mahallesi, 6.Cadde No: 20/2 Dilovası / KOCAELİ / **TURKEY**
Phone: +90 262 502 97 73-76 / +90 262 503 06 51
web : www.bulutmak.com e-mail : bms@bulutmak.com

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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

LOCK NUT
ASSEMBLY (1)
HEATER
ASSEMBLY (2)
PRESSURE
GAUGE (4)
COVER (3)
DIGITAL CONTROL
PANEL (5)
BULUMOUNT
AUTOMATIC SPECIMEN MOUNTING DEVICE
BULUMOUNT
MOUNTING PRESS

Fig.1

2 MAIN SCREEN

REQUIRED TEMPERATURE

INSTANT TEMPERATURE

ANALYTIC PRESSURE

REQUIRED TEMPERATURE

WAITING TIME UNTIL REACH TO THE REQUESTED TEMPERATURE

MANUAL HYDRAULIC DISCHARGE

MANUAL HYDRAULIC LOADING

ADJUSTMENT OF EQUIPMENT WORK PARAMETERS

START/STOP

SEE ON SCREEN DURING COOLING PROCESS

SEE ON THE SCREEN DURING HEATING PROCESS

SEE ON THE SCREEN DURING THE HYDRAULIC DISCHARGE AND LOADING PROCESS

COOLING TIME UNTIL REACH TO REQUESTED TEMPERATURE

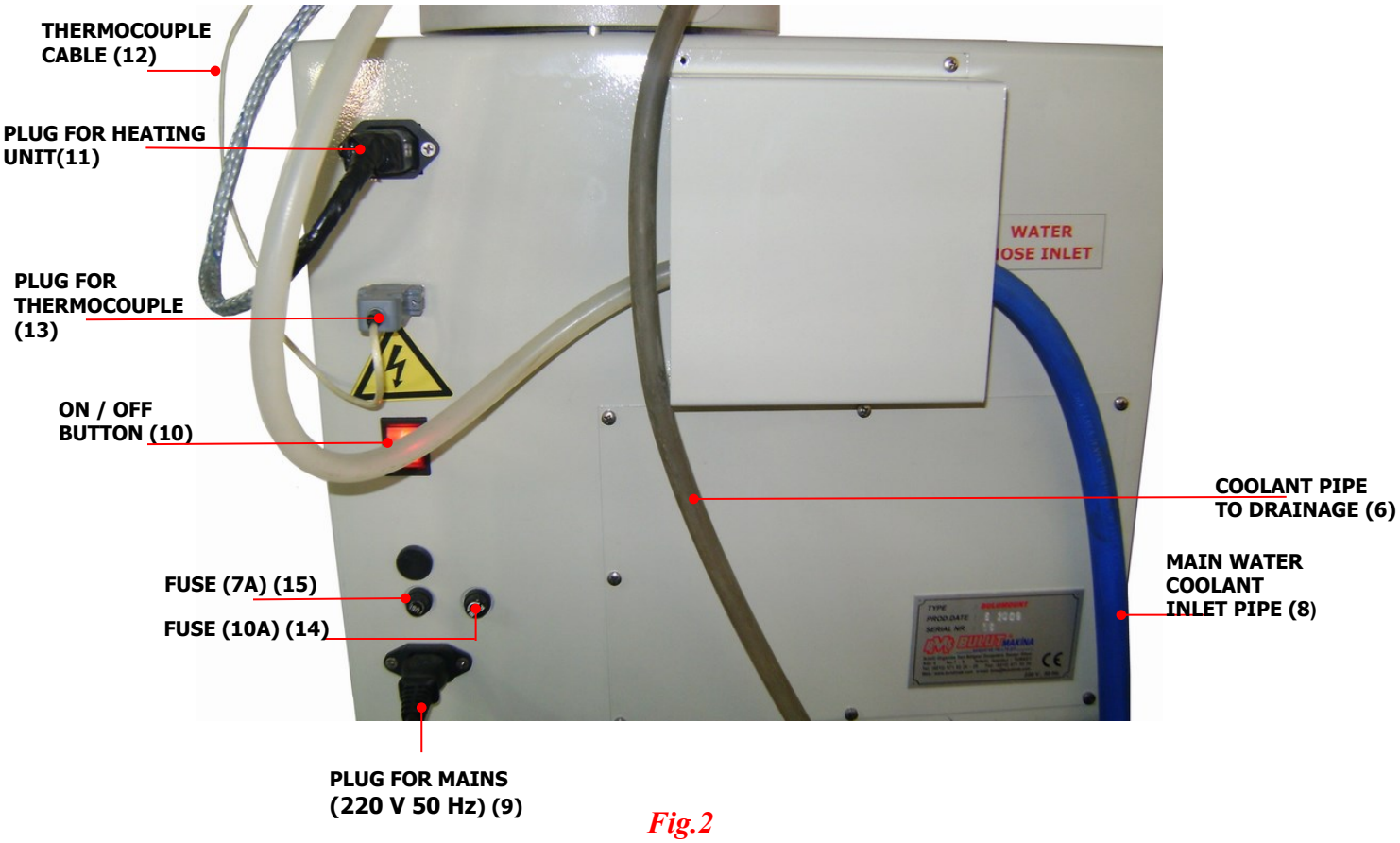


Fig.2

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 TEMPARATURE 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)

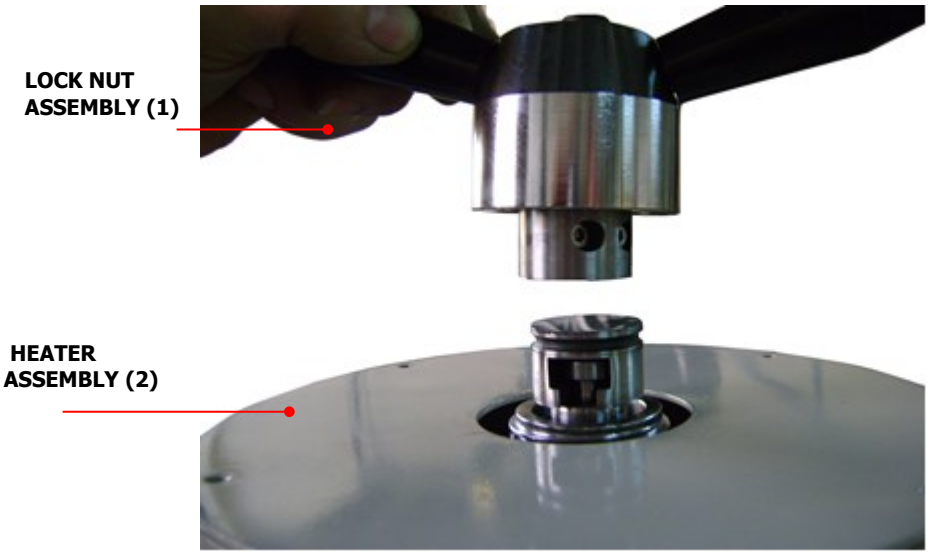


Fig.3

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

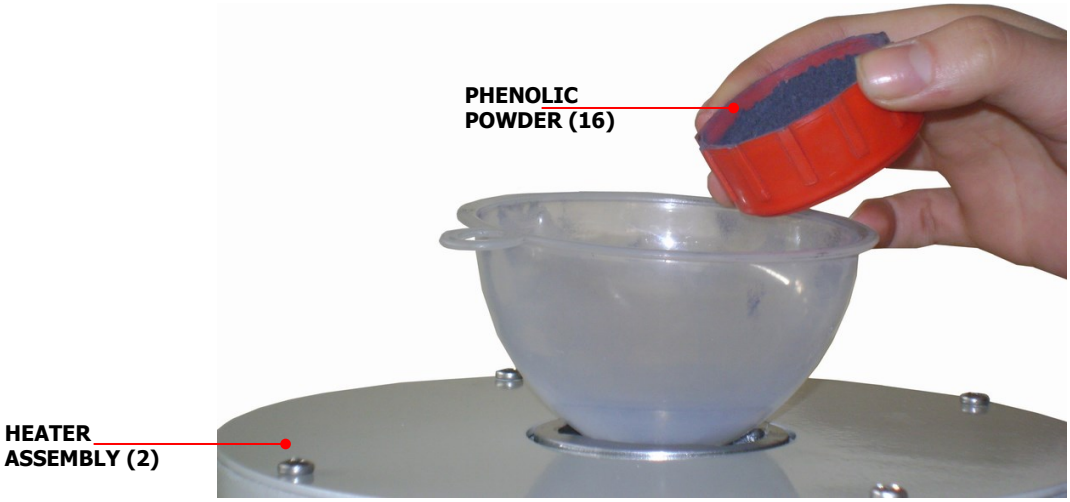


Fig.5

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

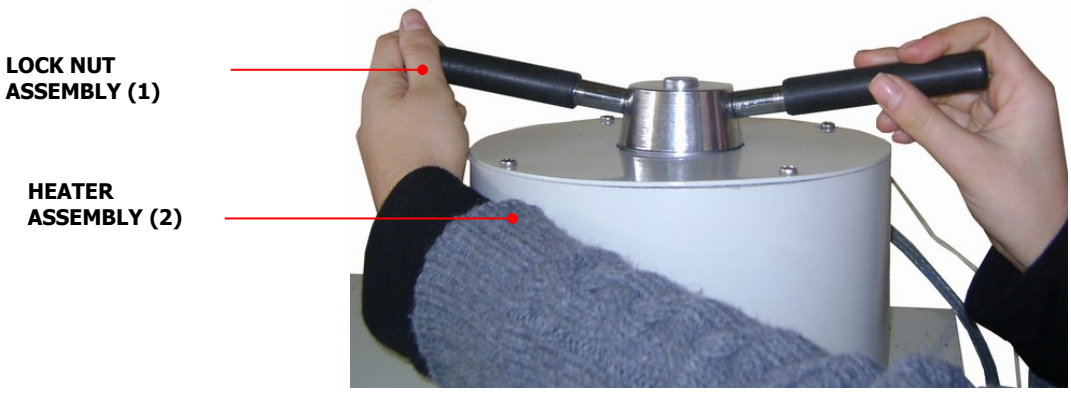


Fig .6

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

Fig.7

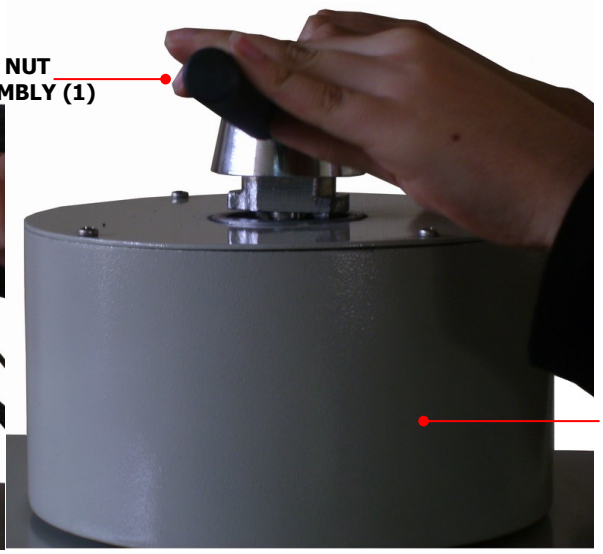


Fig.8

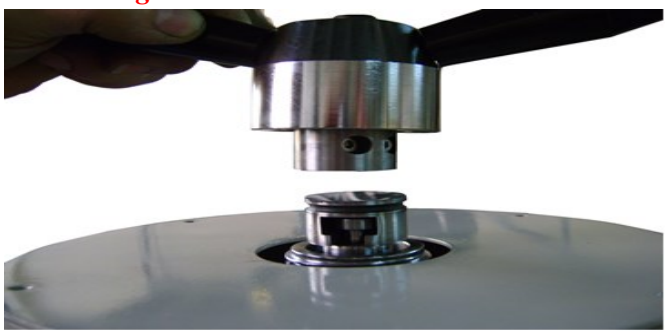


Fig .9

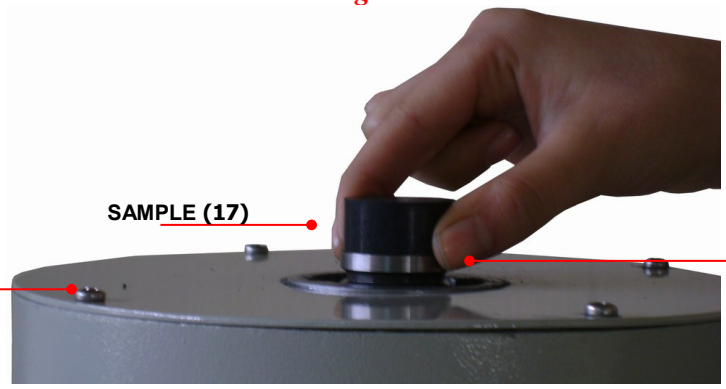


Fig.10

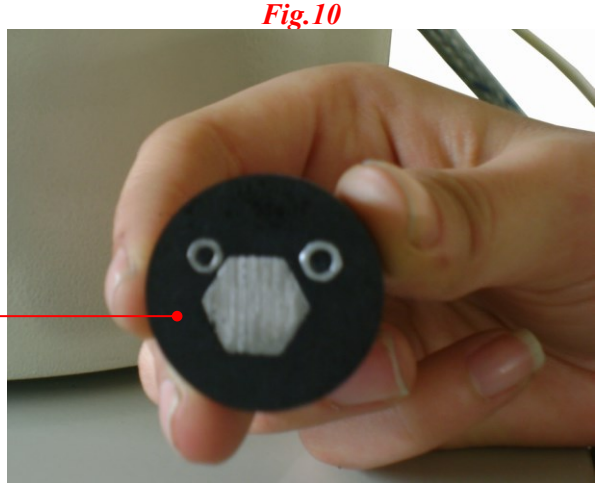


Fig.11

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)

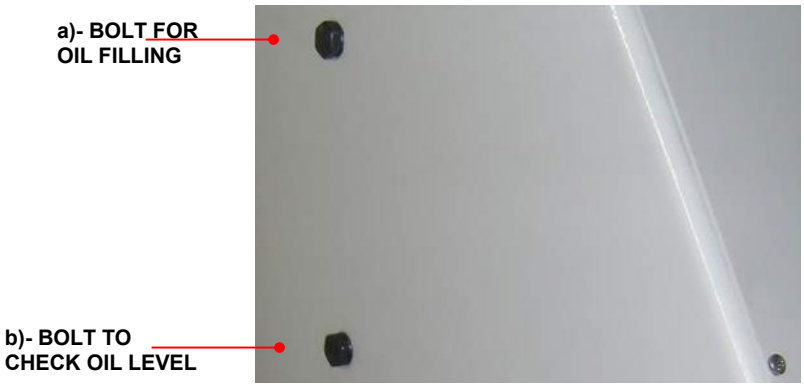
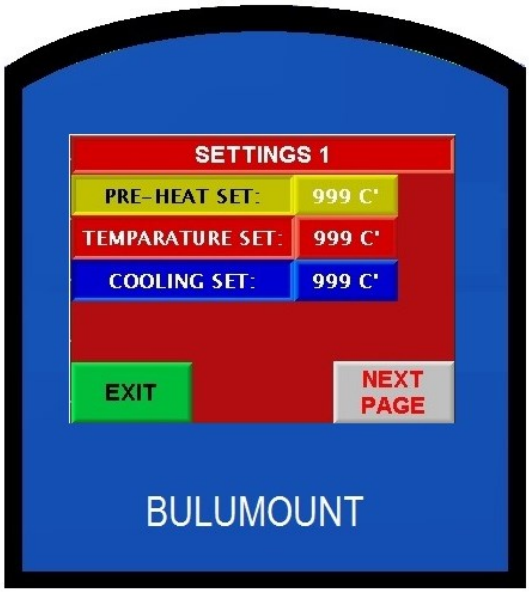


Fig.12

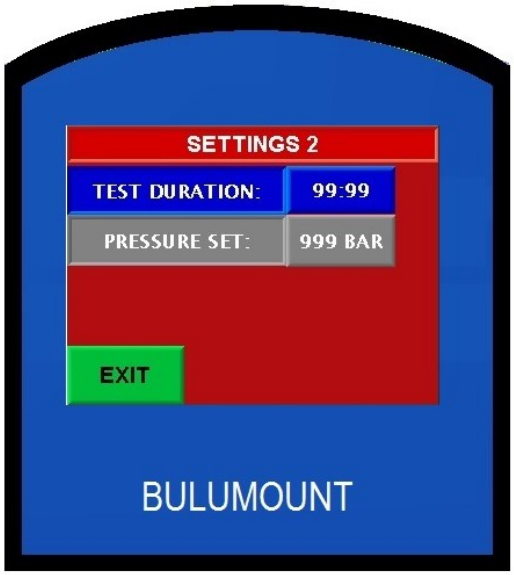
5 Selecting Parameters on the Digital Display



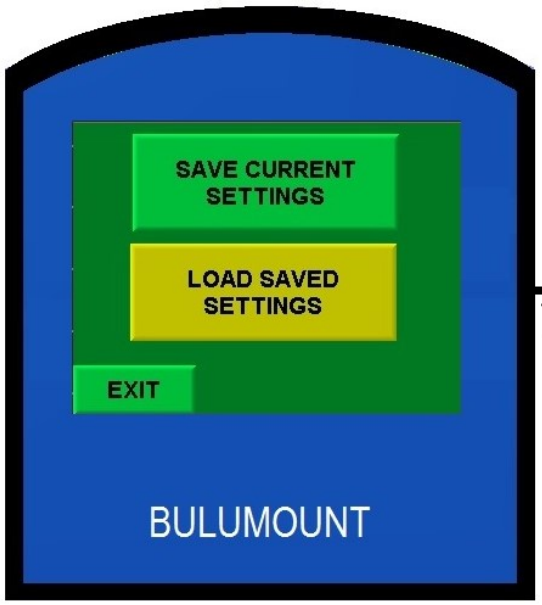
PRESS SETTING ICON THAN PRESS TEMPERATURE SETTINGS TO OPEN

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).

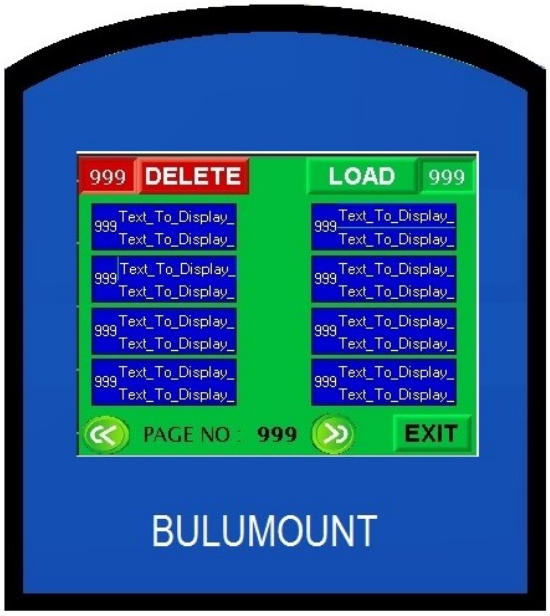


WHEN THE TEMPERATURE REACH TO REQUIRED TEMPERATURE YOU CAN CHOOSE DURATION TIME FOR



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

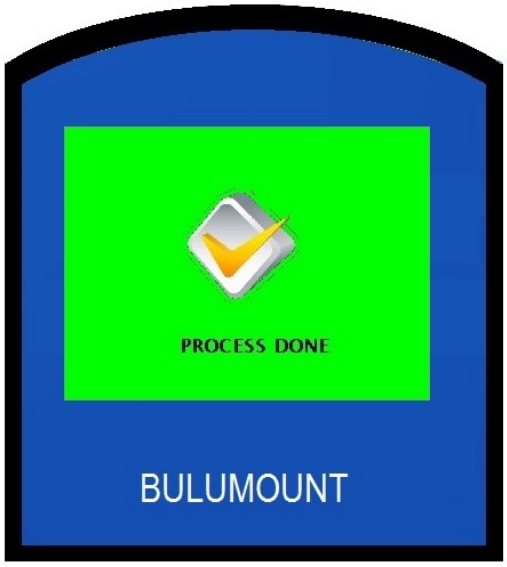
EXIT



PARAMETERS THAT YOU CHOOSE, AFTER PRESS THE

LOAD THE PROGRAM

ICON, YOU WILL ORIENT AUTOMATICLY MEASUREMENT PAGE



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