



THERMOFLAN



Stamps

MOTORIZED AUTOMATIC PRESS



THERMOFLAN -259 Chemin de la Côte- 30120 MOLIERES CAVAILLAC (France)

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SAS au capital de 300 000 €uros – SIRET 720 201961 00011 – RCS 72 B 196 NIMES

PRESENTATION:

Motorized moulding and vulcanizing press (sizes 350 x 300 mm) for rubber and pre-inked stamp making.

Automatic functioning limits user handling and time to parameter programming (temperatures, preheating and cooking times, cooking pressure).

Pressing a single key automatically starts the procedure : platen rising, contact during preheating time, degassing, pressure and cooking, press opening and alarm when the programmed time is over).

TECHNICAL FEATURES

The press is composed of 2 parts

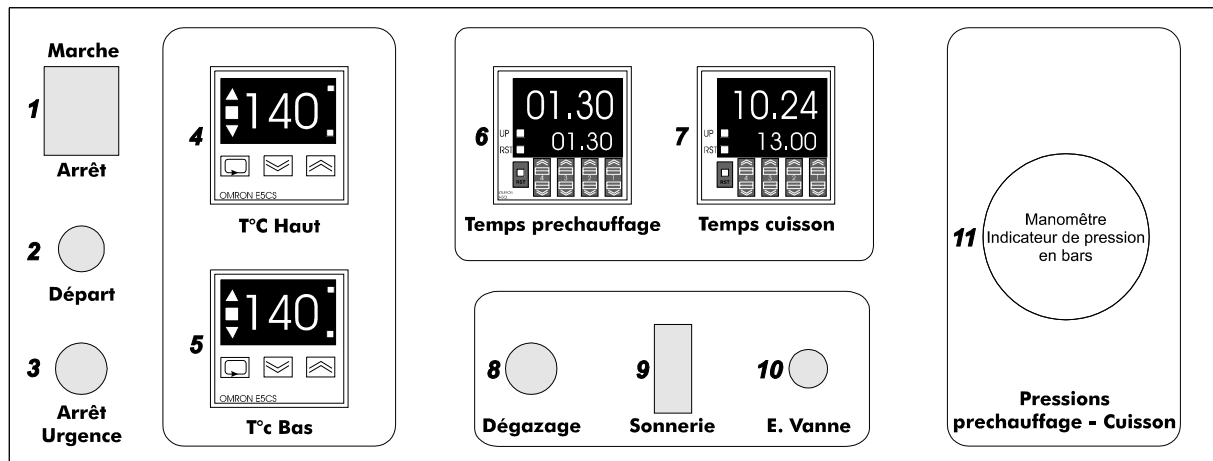
- *upper unit* :

- metallic frame reinforced by an IPN piece supporting the upper and lower platens
- hydraulic jack bearing the lower platen .
- both platens include heating elements providing an accurate temperature distribution by means of PID electronic controllers.
- control board with
 - outside* : adjustable elements : on/off switch, upper and lower temperatures, preheating and cooking times, « START » button additionnal degassing button, alarm switch, emergency stop button, pressure controller light.
 - inside* : all necessary electronics maintaining the automatic cycle monitoring.

- *lower unit* :

- metallic case including hydraulics (motor, pump, penstocks, pressure controllers...) fitted on a sliding drawer for easy repairing or replacement.
- pressure controller in front to adjust moulding pressure

CONTROL BOARD



- 1 MARCHE/ARRET : ON/OFF switch
- 2 DEPART : push this button to start the cycle
- 3 ARRET URGENCE / EMERGENCY STOP : the cycle is stopped and the lower platen comes down
- 4 Upper platen temperature controller
- 5 Lower platen temperature controller
- 6 Preheating timer : user sets the preheating time. When « DEPART » is pressed, this timer starts up to the programmed time, then degass materials for 2 seconds. Then, pressure comes back to the programmed value (on the pressure controller of the press lower unit) during the cooking time (programmed on timer 7)
- 7 Cooking timer : user programs the necessary cooking time. When this time is over, the press opens and rings if the alarm (switch 9) had been activated.
- 8 DEGAZAGE / DEGASSING : allows additional degassing **at any moment**. When the button is pressed, the press opens. When released, the press comes back to the previous pressure and the cycle goes on.
- 9 SONNERIE / ALARM : When on, it indicates that degassing is performed or that cooking is over.
- 10 Voyant ELECTROVANNE /PENSTOCK light : when on, the automatism acts on the penstock when the jack goes down.

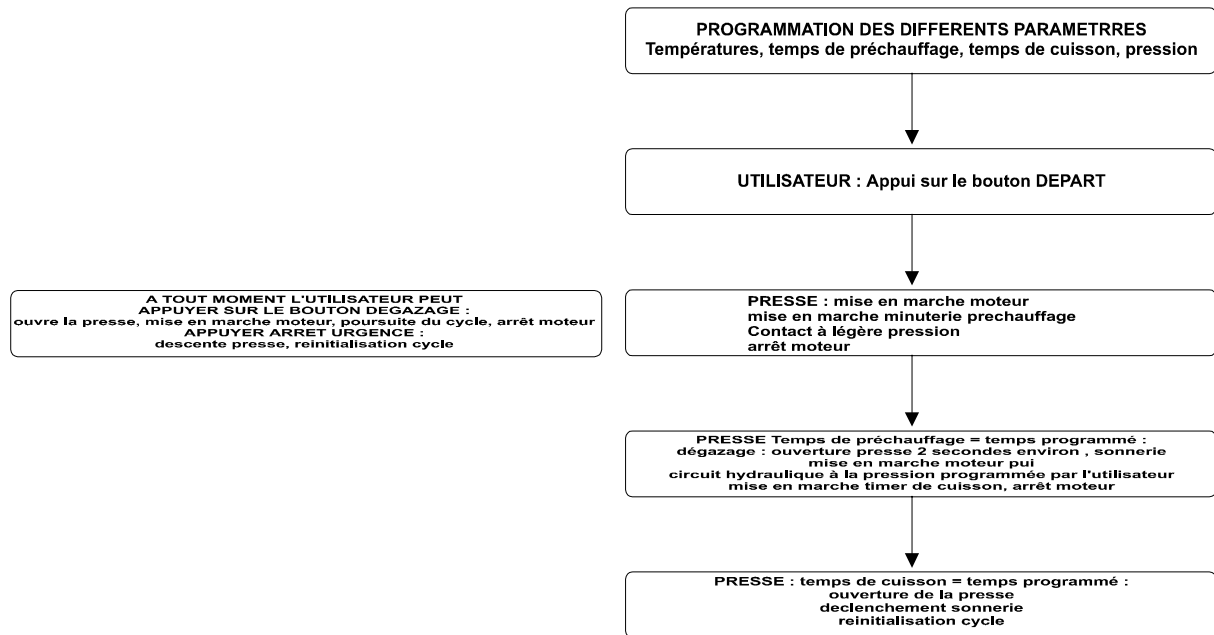
The light is on :

- for 2 sec. or so, during degassing after preheating

- when « DEGAZAGE » is pressed (the light goes off when the button is released)
- for 20 sec. or so , as soon as the cycle is over, when the cooking timer reaches the programmed value

11 Manometre: shows the pressure (in bars) inside the hydraulic circuit .User can have no action on the preheating pressure but can set cooking pressure by means of the pressure controller lever (lower part of the press). Once this pressure is set, changing it in following cycles is not necessary.

AUTOMATIC CYCLE DESCRIPTION



CONTENTS

The press is supplied with 4 and 5 mm thick bearer-bar sets and working tray.

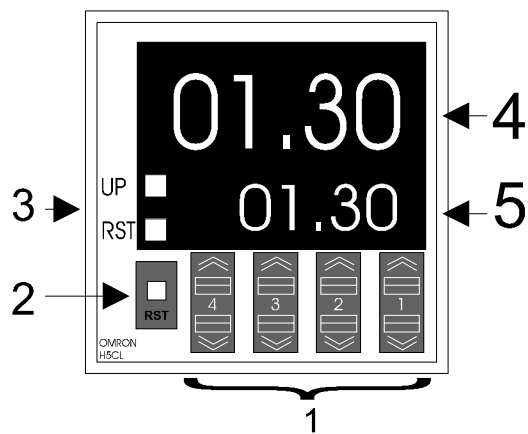
In option, a bearing stand is available to place the machine at optimal height..

CONNECTION

Check electrical specifications (power, voltage) on the constructor plate at the backside of the machine.

According to these information, connect the machine to a proper power point. Then , it is ready to work.

TIME SETTING : preheating and cooking

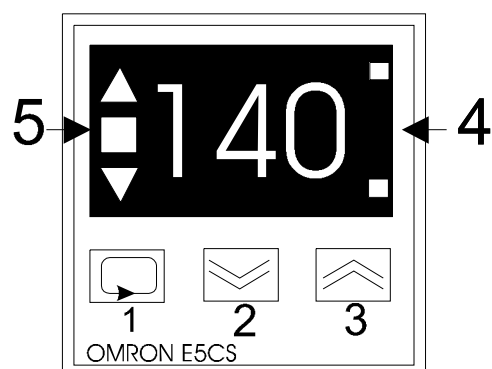


- 1** Wheels to set minutes and seconds for preheating and cooking times.
- 2** RESET : the timer reset corresponds to the end of the programmed time. .
- 3** Timer state control light
- 4** Actual counted time
- 5** Programmed time

N.B. : Programmed times can be changed during the cycle, they will be immediately taken into account. .

Times are set by user, before pressing « DEPART » by means of ↑ and ↓ buttons of tens and units of minutes and seconds.

UPPER AND LOWER TEMPERATURE SETTING



- 1 Temperature setting: press 1 , then 2 or 3 key to increase or decrease temperature to be programmed.
- 2 Temperature decrease (press button 1 first)
- 3 Temperature increase (press button 1 first)
- 4 The upper light on means that the heating elements of the corresponding platen are working. The lower light is not used here. .
- 5 Shows the temperature difference. The light is on when actual temperature is different from programmed one.

PRESSURE SETTING

According to the material placed between the press platens, cooking pressure should be set at the time of the first cycle.

When the cycle is started (pushing « DEPART » switch), and when preheating is over, the press opens for 2 seconds or so, then the motor starts and lifts the jack. Cooking timer is started.

As long as the motor is running, pressure inside the hydraulic circuit can be changed by means of the pressure control device, on the lower part of the machine. Pressure in bars is shown by the manometer.

When motor stops, pressure is maintained inside the circuit (a very small decrease results of material softening and circuit stabilization)

Should setting be improved, user can push « DEGAZAGE » switch, which opens the press, re-engages motor and thus allow to set pressure.

Once the necessary pressure is set for the material to be processed, acting on the pressure control device is not necessary. For each cooking cycle, pressure inside the hydraulic circuit will come to the programmed value.

TO PRESS PHOTOPOLYMER PLATE INSIDE MATRIX BOARD

(see directions for use of the product)

- 1 Set preheating time to 1min 30s
Set cooking time to 13min
Set upper and lower platen temperatures to 140°C or 155 °C.
Check pressure value.
Switch on ringing
- 2 Place matrix board and photopolymer plate between proper bearer bars inside the press.
Push « DEPART » switch
- 3 When the cycle is over, the press opens and rings during 20 sec or so.

TO MOULD RUBBER IN THE MOLD

(see directions for use of the product)

- 1 Set preheating time to 1min 30s
Set cooking time to 13 min.
Set upper and lower platen temperature to 140°C
Check pressure value
Switch on ringing
- 2 Place mold and rubber between proper bearer bars inside the
Push « DEPART » switch
- 3 If degassing is not found sufficient , additional one can be performed pushing
« DEGAZAGE » , when the cycle goes on
- 4 When the cycle is over, the press opens and rings during 20 sec or so.

TO MOULD PHOTOPOLYMER PLATE INSIDE CHASE BOARD

(see directions for use of the product)

- 1 Set preheating time to 1min 30s
Set cooking time to 13 min
Set upper and lower platen temperatures to 155 °C.
Check necessary pressure not to damage chase board
Switch on ringing
- 2 Place chase board and photopolymer plate between proper bearer bars inside the press
Push «DEPART » switch
- 3 When the cycle is over, the press opens and rings during 20 sec or so.

PRE INK GEL PROCESSING

(see directions for use of the product)

- 1 Set preheating time to 0 sec.
Set cooking time to X min (according to the product)
Set upper and lower platen temperatures to à Y°C (according to the product)
Set pressure to 0, not to damage chase board
Switch on ringing
 - 2 Place chase board between proper bearer bars inside the press
Push «DEPART » switch
 - 3 When the cycle is over, the press opens and rings during 20 sec or so.
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