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1. SAFETY GUIDELINES

General

The information contained in this section applies not only to everyday equipment operation, but also to any procedure carried out on it, whether for preventive maintenance or in the case of repairs and the replacement of worn out parts.

It is very important to observe the safety warnings in this manual at all times. Failure to do so may result in personal injury and/or damage to the equipment or the rest of the installation.

Before beginning work on the equipment, read this manual carefully, and in case of any doubt, contact our Technical Service Center. We are available for any clarification that you might need.

Keep manuals in perfect condition and within reach of personnel that use the equipment and perform maintenance on it.

Also provide necessary safety material: appropriate clothing, footwear, gloves and safety glasses.

In all cases, observe local regulations regarding risk prevention and safety.

Symbols

The symbols used on both the melter/applicator equipment and in this manual always represent the type of risk we are exposed to. Failure to abide by a warning signal may result in personal injury and/or damage to the equipment or the rest of the installation.

**Warning:** Risk of electrical shock. Carelessness may produce injury or death.

**Warning:** Hot zone with high temperatures. Risk of burns. Use thermal protective equipment.

**Warning:** System under pressure. Risk of burns or particle projection. Use thermal protective equipment and glasses.

**Warning:** Important information for the correct use of the system. May include one or several of the previous hazards, and therefore must be kept in mind to avoid damage and injury.

**Warning:** Dangerous area. Risk of entrapment. Carelessness may produce injury or death.
Mechanical components

The hot-melt installation, which is installed to this device, requires moving parts that can cause damage. Use the equipment correctly, and do not remove the safety guards while the equipment is in operation; prevent the risk of possible entrapment due to moving mechanical parts.

Do not use the equipment if the safety devices are not in place or appear to be inadequately installed.

For maintenance or repair operations, stop the movement of moveable parts by turning off the main switch.

The device has no moving mechanical parts, so it does not pose risks to consider in this section.

Electrical components

The system works with single-phase or three-phase current of a certain power. Never handle the equipment with the power connected, as this may result in powerful electrical shocks.

The installation must be correctly grounded.

The installation’s power cable conductors must match the required electric current and voltage.

Periodically inspect the cables to check for crushing, wear and tear, as well as to prevent tripping and falls as a result of their placement.

Although the system meets EMC requirements, it is inadvisable to use devices that transmit high levels of radiation, i.e., mobile phones or soldering equipment in their vicinity.

Hydraulic components

As this is a pressurized system, precautions related to this type of equipment must be observed.

Before each operation, always make sure that the adhesive circuit is completely free of pressure. There is a high risk of hot particle projection, along with the corresponding danger of burns.

Use caution with the residual pressure that may remain in the hoses when the adhesive cools. When reheated, there is a risk of hot particle projection if the outputs are left open.

Pneumatic components

Some equipment uses compressed air to 6 bar pressure. Before any manipulation, please ensure that the circuit has lost fully air pressure. The risk of projection of particles at high speed can cause injury to a certain severity.

Extreme precautions with the residual pressure that could be contained in the circuit, before disconnecting any pneumatic feeding tube.
Thermal components

The entire system works with temperatures that can exceed 200°C (392°F). The equipment must be operated using adequate protection (clothing, footwear, gloves and protective glasses) that completely cover exposed parts of the body.

Keep in mind that, due to the high temperatures reached, the heat does not dissipate immediately, even when the power (in this case, electric) source is disconnected. Therefore, use caution, even with the adhesive itself. It may remain very hot, even in a solid state.

In case of burns:
1. If the burn is the result of contact with melted adhesive, do not try to remove the adhesive material from the skin. Do not try to remove it once it has solidified either.
2. Cool the affected area down immediately with lots of cold and clean water.
3. Seek medical attention as soon as possible either from the company’s medical service or the nearest hospital. Provide the medical staff with the Safety Information Sheet of the adhesive.

Materials

Meler systems are designed for use with hot-melt adhesives. They should not be used with any other type of material, and especially not with solvents, which may cause personal injury or damage to internal system components.

Some units are specifically designed to use polyurethane reactive (PUR) hot-melt adhesives. Using PUR on a unit that is not prepared for that purpose may cause severe damage to the unit.

When using adhesive, follow the corresponding guidelines found in the Technical and Safety Sheets provided by the manufacturer. Pay special attention to the advised work temperatures in order to prevent adhesive burning and degradation.

Ventilate the work area adequately in order to remove the vapors produced. Avoid the prolonged inhalation of these vapors.

Always use original Meler components and replacement parts, which guarantee the correct system operation and service.

Noise emission declaration

The A-weighted emission sound pressure level \( L_{eq} \) of the unit in operation does not exceed 70 dB(A) under any circumstances.

The maximum C-weighted sound pressure level \( L_{P[A]} \) and the A-weighted sound power level \( L_{W[A]} \) do not exceed values worthy of mention and thus do not represent a specific risk that must be taken into account.
Intended use

The equipment are designed to be used in the following conditions:

- Hot-melt adhesive fusion and pumping at temperatures up to 200 °C (392 °F). Consult with Meler technical service to operate with higher working temperatures.
- Use of equipment with Meler accessories.
- Installation of equipment according to the security regulations currently in force and the instructions provided in this manual [anchoring, electrical connection, hydraulic connection, etc].
- Use of equipment in non-explosive, non-chemically aggressive environments.
- Use of equipment following the safety instructions indicated in this manual, as well as on the labels accompanying the equipment, using adequate means of protection during each mode of operation.

Limited use

The equipment should never be used under the following conditions:

- Use with reactive polyurethane or any other material that might cause safety or health risks when heated.
- Use of equipment in environments where cleaning is necessary using water jets.
- Use of equipment to heat or melt food products.
- In potentially explosive atmospheres, aggressive chemical environments or outdoors.
- Use or operation without adequate safety protection.
- If the person in question does not have the necessary training to use the unit or to apply all of the necessary safety measures.

Note: Do not modify the equipment or use components that were not supplied by Meler. For any modification of a component of the equipment or part of the installation, you must firstly consult the After-Sales Service.
2. INTRODUCTION

This manual contains information on installing, using and maintaining the Cantho adhesive melter from Focke Meler.

This unit is designed to melt PUR adhesive blocks (with or without a protective bag) of 2-2.5 kilos, ø130 mm and a height of 165 mm or EVA/APAO-based pellets.

It is designed primarily for use in the wood market for rollers to edge planks. Providing high efficiency and cost savings, high-performance and versatility, simplicity and reduced maintenance costs, it is the ideal melter for fast adhesive or colour changes.

Careful treatment of the adhesive (optimal) to prevent residues, carbonization or deterioration.

Reduced dimensions for easy renovation in the machine or new installation.

In automatic mode, every time the roller coater tank sensor (located beneath the melter) detects a low level of adhesive, it sends a signal to activate the outlet valve, pusher plunger and the adhesive melter.

When the sensor detects the correct level once again, the adhesive transfer stops and waits for the next signal. An alarm system warns of possible faults in the repositioning of the adhesive block.
INTRODUCTION

Description

Operating modes

These melters can be used in the modes described below:

**Operating mode**_The melter keeps the hot components at the temperature indicated on the display, which has been preselected as the desired value. The system continues to wait for the signal to start the piston pressure and to open the discharge valve to the unit’s roller tank.

1. **Work mode with piston cylinder**

   **Manual mode**_It does not depend on the low level signal from the roller tank sensor. The discharge process will be carried out providing that this operating mode is selected with the corresponding switch (MAN position) and providing that the piston has been activated using the corresponding selector (down), with the discharge valve being activated at the same time. The discharge process will stop if the operating mode switch is placed in position ‘0’ or the piston switch is placed in the ‘0’ or ‘up’ position.

   **Automatic mode**_If a low level is detected in the roller tank, the piston and the discharge valve will be lowered and will remain in this status until the level of adhesive detected by the sensor is reached. At this point, the signal to lower the piston will be deactivated and the discharge valve will close. This cycle will repeat until the piston switch is moved to the ‘0’ or ‘up’ position, or you exit automatic mode by placing the operating mode switch in the ‘0’ position.

2. **Work mode without piston cylinder**

   **Manual mode**_It does not depend on the low level signal from the roller tank sensor. The discharge process will be carried out providing that this operating mode is selected with the corresponding switch (MAN position), with the discharge valve being activated at the same time. The discharge process will stop if the operating mode switch is placed in position ‘0’.

**Standby modes**_The melter remains in standby mode with the temperatures of the components at a (programmable) value that is below the preselected value.

**Warning/alarm mode**_The melter detects a malfunction and alerts the operator. According to the type of issue, the system will either continue to operate or will stop until the incident has been resolved.

**Stop mode**_The melter remains off without heating the components. However, the unit is still supplied with electrical power and pneumatic air.

Hot-melt melter/applicator identification

When placing orders for replacement parts or requesting help from our service center, you should know the model and reference number of your hot-melt melter/applicator.

This and other technical information will be found on the identification plate located on the side of the lower part of the hot-melt melter/applicator.
Main components of the equipment

1. Depressurised cylinder electrovalve
2. Pusher piston cylinder electrovalve
3. Discharge valve activation cylinder
4. Lid lock
5. Lid closed sensor (in operating position)
6. Pusher piston sensor down
7. Pusher piston cylinder
8. End of adhesive block indicator rod
9. Pusher piston sensor up
10. Pusher piston cylinder pressure regulator
11. Pusher piston cylinder pressure gauge
12. Premelter grid
13. Discharge valve activator system
14. Discharge valve outflow nozzle
15. Discharge valve electrovalve
16. Level reader adhesive level reader
17. Tank cover (Model without piston cylinder)
**Control panel components**

1. Amber tower light signalling warnings/alarms (optional)
2. Control board (see page 2.5 of this chapter)
3. Warning/alarm reset button with light
4. Switch for manual or automatic operation
5. Switch to move the cylinder up/down
6. Inlet bushing for external signals
7. Main switch
**Control board components**

9. Set point temperature display
10. Real temperature display
11. Keys for modifying the temperature value
12. Key to programme the switch on/off time
13. Temperature LED OK
14. Standby function key and LED
15. Key and LED for switching the control board on/off
16. Keys to select the heated component
17. LED indicator for tank operation
18. LED indicator for grille operation
Control board (interior)

1. General thermal magnetic circuit breaker
2. Power supply 230 VAC / 24 VDC 2.5 A
3. LOGO programmer
4. Keys to move the cursor / select the values
5. OK key (select/confirm)
6. ESC key (escape)
7. Main switch
3. INSTALLATION

Warning: The melters/applicators are equipment with current technology and with certain foreseeable risks. Therefore, only allow qualified personnel with sufficient training and experience to use, install or repair this equipment.

Introduction

Hot melters/applicators are delivered with all the materials necessary for their installation. However, some components must be provided by the user himself, according to the location and connections in each particular installation:

- Anchoring screws for the melter/applicator equipment
- Power cord and plug for electrical power
- Pneumatic conduct and connection to the compressed air system (piston pump version)
- Multicore cable for external electrical control

Installation requirements

Before installing hot melter/applicator equipment, we must make sure that the space assigned to it permits installing, connecting and using the entire system. Similarly, we must check to see that the electrical and pneumatic supplies meet the necessary requirements of the melter/applicator equipment being installed.

Free space
1. Cylinder pusher

<table>
<thead>
<tr>
<th>Description</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>A EQUIPMENT LENGTH</td>
<td>284 mm</td>
</tr>
<tr>
<td>B EQUIPMENT WIDTH</td>
<td>250 mm</td>
</tr>
<tr>
<td>C EQUIPMENT HEIGHT</td>
<td>813 mm</td>
</tr>
<tr>
<td>D UNIT LENGTH WITH LID OPEN</td>
<td>400 mm</td>
</tr>
<tr>
<td>E MAXIMUM UNIT WIDTH WITH LID OPEN</td>
<td>290 mm</td>
</tr>
</tbody>
</table>

2. Without cylinder pusher

<table>
<thead>
<tr>
<th>Description</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>A EQUIPMENT LENGTH</td>
<td>285 mm</td>
</tr>
<tr>
<td>B EQUIPMENT WIDTH</td>
<td>250 mm</td>
</tr>
<tr>
<td>C EQUIPMENT HEIGHT</td>
<td>602 mm</td>
</tr>
<tr>
<td>D UNIT LENGTH WITH LID OPEN</td>
<td>317 mm</td>
</tr>
<tr>
<td>E MAXIMUM UNIT WIDTH WITH LID OPEN</td>
<td>283 mm</td>
</tr>
</tbody>
</table>
Unpacking

Before proceeding with the installation of the melter/applicator, it should be removed from its location on a pallet and examined in order to detect any possible breakage or deterioration. Communicate any defect, even to the outer packing materials, to your ‘meler’ Representative or to the Main Office.

Contents

The ‘Cantho’ packing materials may contain accessories that form part of the same order. If this is not the case, the following are the standard components that accompany the melter/applicator:

- Instruction manual
- Guarantee card

Mounting the unit

The unit is fixed to the machine on top of the tank or the roller coater tray using four M8 screws, together with the specific support for this.

Check that the discharge nozzle is positioned correctly and that nothing obstructs the adhesive outflow.

Connecting the electrical panel

All of the unit’s internal control signals connect to the panel via the 24-pin Harting connector. For direct connection to the user’s panel, consult the pin layout on the unit’s electrical diagram.

Only the external signal of the roller tank level sensor should be connected inside the panel to the terminals enabled for this purpose.

It can be a PNP or NPN signal, or a contact signal (normally closed or open, programmable from the LOGO device).

If the level sensor is PNP or NPN, the positive signal will connect to the XLD2 terminal and the negative signal to the XLD3 terminal.
- In the case of a PNP sensor, the signal connects to the XLD2 terminal and the 0 V to the XLD3 terminal.

- In the case of an NPN sensor, the signal connects to the XLD3 terminal and the +24 V to the XLD2 terminal.

- In the case of a contact sensor, it connects to terminals XLD1 and XLD2 and a bridge must also be implemented between terminals XLD3 and XLD4.

**Electrical Consumption**

In order to install a melter equipment of this serie, we should take into consideration the total consumption of the installation, (see characteristics plate).

Before connecting, make sure that the voltage that is being connected to the melter/applicator is the correct one appearing on the equipment’s characteristics plate.

Connect the machine and check to see if it is well grounded.

**Warning:** Risk of electrocution. Even when the equipment is turned off, voltage remains in the intake terminals, which may be dangerous during internal equipment manipulations.

Install a power switch for disconnecting the melter/applicator equipment from the electrical network. It must be protected against overload and short circuits by circuit breaker and install appropriate personal protection leads to mass by differential switch.

**Compressed air**

To install ‘Cantho’ series melters/applicators, it is necessary to have a dry, non-lubricated compressed air system with a maximum pressure of 6 bar.

**Other factors**

While installing these melters, other practical considerations should be kept in mind:

- Keep the load opening accessible for comfortable melter filling.
- Position the melter equipment in such a way that you can easily see the front panel display where temperatures and possible alarm signals are shown.
- Do not install the melter equipment beside powerful heat or cooling sources that may have distorsional effects upon its operation.
- Avoid melter vibrations.
- Make sure that the melter maintenance areas (filter, purging valve, tank interior, etc.) are easily accessible.
Connecting the panel's power supply

The Cantho melters are supplied to be connected to the 230 VAC single phase power supply with neutral.

Open the door of the electric cabinet. Pass the power cable (max. Ø12 mm) through the Pg 13.5 bushing and fix it, ensuring that the cable is perfectly secured.

Connect each of the power cable's wires in their corresponding position in the input terminals [see drawing].

**Warning:** Risk of electrical shock. Carelessness may cause injury or death.

Open the electric cabinet door. Thread the power cord (Ø6-12 mm) through the electrical wall bushing Pg 13.5 and fasten it to the inside anchor, making sure that the cord remains well fixed and allows the plate to be mounted again.

Connect each wire of the power cable in its corresponding place of the input terminals [see drawing].

The unit’s maximum consumption value can be found on the nameplate.

Pneumatic connection

Before connecting the pneumatic supply of the pneumatic cylinder and the discharge valve, ensure that the pressure regulator is completely closed (pressure '0'). To do so, turn the regulator control anti-clockwise; the control is located on the upper lid, next to the cylinder.

Connect the plant’s air supply (6 bar max.) to the equipment input using a flexible tube with an outer diameter of 6 mm. The unit has a quick release coupling for this purpose.

Allow the air to flow and turn the pressure regulator clockwise until you reach the required pressure.

On the pressure gauge, you can see the pressure applied to the cylinder on its scale in 'bar'.
Programming parameters

Once the melter and the control panel have been installed, the correct working parameters must be programmed for the specific application to be performed.

Cantho melters/applicators simplify this task as much as possible, allowing the operator to modify only those parameters that are necessarily variable for each application.

Among the various parameters, it is necessary to program the set point temperature values for each component connected and the value for overheating warnings. There are two other parameters (weekly start-up and shut-down programming and the standby temperature value) left to program in advanced systems, although the factory default values are perfectly valid for operational purposes.

Programming working temperatures

The general process for modifying set up temperature values for any component is described below.

1. Select the component for which you wish to modify the value with the up-down arrow. The corresponding LED will blink quickly.

2. Using the up-down arrow under the display, select the desired value for the set point temperature.

3. After ten seconds, the LED will stop blinking and the display will change by default to the set point temperature, saving the changed data.

This simple procedure should be repeated for each of the components whose set point temperature value you wish to modify.

Selecting the overheating value

1. Press the buttons with the clock symbol and the down arrow under the display at the same time to enter the special menu. The choice of display units (°C or °F) will appear on the display.

2. Using the up arrow for element selection, we advance to the next screen where the overheating symbol appears.

3. Select the desired value with the up-down arrow under the display.
The value displayed corresponds to the increase in real temperature over the set point temperature permitted without activating the alarm message.

4. Use the up arrow for element selection to advance to the next screen.

5. Exit the special menu using the down arrow for element selection and the grid temperatures will once again be displayed.

All the special menu values will be saved.

Changing the parameters on the LOGO controller

On the LOGO controller located inside the panel, the type of connection for the level signal can be selected (activation of the piston and discharge valve):

Off -> Normally closed (NC)
On -> Normally open (NO)

Select the type of connection according to the device used. To modify the type of connection, access the controller inside the panel.

Warning: Risk of electric shock. Carelessness may cause injury or death.

The LOGO screen displays the parameters that can be modified, as well as some information about them:

1. Press the ESC key for a few seconds until the cursor appears below the first parameter '60' [T. ALARM].
2. Use the right and left arrows to move to the parameter you wish to modify. If you press 'OK', the parameter is displayed in negative (light value over a dark background).
3. Change the T.ST value with the up-down arrows.
4. Once modified, press the OK key to validate the value. To exit the edit mode, press the ESC key.
Optional external connections

Finished block signal (without adhesive)

To connect this signal:
1. Disconnect the panel’s power supply.
2. Access the inside with the connection cable via Pg 13.5, located on the left-hand side.
3. Connect the cables to the corresponding terminals, as shown in the drawing.
4. Close the panel and reconnect the power supply.
5. Check that the signal is operating correctly.

Optional tower light signal

To connect this signal:
1. Disconnect the panel’s power supply.
2. Access the inside with the connection cable via Pg 13.5, located on the left-hand side.
3. Connect the cables to the corresponding terminals, as shown in the drawing.
4. Close the panel and reconnect the power supply.
5. Check that the signal is operating correctly.
4. MELTER OPERATION

This section explains how to operate the melter. Although the equipment is very easy to operate, it should not be used by untrained personnel.

Warning: Improper use may cause damage to the machine or injury and even death to the person using it.

General information

The melter has two heating zones: the premelter grid, main device for melting the adhesive, and the small tank that is located between the grid and the discharge valve.

Both zones are controlled from the front panel of the melter.

Loading the adhesive into the cylindrical hopper

The unit is equipped with a sensor that gives a warning via the button indicator (or the tower light if it is connected) when the block has been consumed (amber light).

To fill the cylindrical hopper for the first time or reload the adhesive block:

1. If the cylinder is not in the upper position, push the switch upwards to raise the cylinder (1).
2. Release the retractable positioner (2) and release the unit from the support plate along with the cylinder and pusher disk (3).
3. Once the melter is reloaded, reposition the unit in the support plate along with the cylinder and pusher disk (4) using the retractable positioner (5) and move the switch downwards to lower the cylinder (6).

If the block is going to be used with its protective bag, open its upper part via the indicated marking, leaving approximately 1 cm of the bag inside and insert the block into the cylindrical hopper with the cut part facing downwards.

Warning: There is a risk of burns or particle projection. Use thermal protective gear and goggles.
Warning: Before refilling the cylinder, ensure that the adhesive is the same type as the existing one. Mixing different types of adhesive may damage the melters. If you are going to change the adhesive, the unit must be cleaned thoroughly.

Starting up the melter/applicator equipment

Before starting up the melter/applicator equipment, it is necessary to check to see if the unit has been correctly installed and all its input/output and accessory connections are correctly established.

It is also necessary to make sure that the equipment has been filled with adhesive and that the operational parameters have been programmed.

To start:

1. Connect the melter/applicator’s power switch.

If the control card was turned off the last time the machine was disconnected, it will remain tuned off when the machine is started up again (time display).

If the control card was on the last time that the machine was disconnected, it will turn on when the machine is started up again.

2. Press the ON/OFF button on the control card to turn it on, if it not already activated.

By default, the set point and real temperature values shown are those corresponding to the tank.

The tank heating control LED (green) will light up and the tank will begin to heat.

One it has reached 3\(^\circ\) below the programmed temperature of the grille, a programmable delay timer starts until, guaranteeing fusion, the melter receives permission to operate and the signal will be sent to the main machine, indicated by the two corresponding (green) LEDs.

While the system is running the delay timer both LEDs remains blinking until the programmed time value has been reached. If then, any other element has not reached 3\(^\circ\) below its temperature setting point, the LEDs turn off.

If the system is shut down, for any possible mode, when it is turning on the delay timer only starts again if the tank temperature is 20\(^\circ\) below setting point.

Melter equipment displays

‘Cantho’ melters/applicators have two displays built into their control panel, with three sets of 7 segments each for displaying the temperature values [set point and real temperature], programmable parameters and alarms.

They are equipped with LED indicators to display the heating of each component (1), as well as the temperature OK activations and the main machine connection signal (2).
They are also equipped with LEDs indicating equipment connection/disconnection and standby function connection/disconnection [3].

<table>
<thead>
<tr>
<th>LED display</th>
<th>Component heating</th>
<th>Component status</th>
</tr>
</thead>
<tbody>
<tr>
<td>constantly lit</td>
<td>constant</td>
<td>low temperature</td>
</tr>
<tr>
<td>blinking slowly</td>
<td>as need (according to PID parameters)</td>
<td>temperature near set point</td>
</tr>
<tr>
<td>blinking rapidly</td>
<td>programming or display</td>
<td>change in set point values</td>
</tr>
<tr>
<td>off</td>
<td>not heating</td>
<td>temperature reached</td>
</tr>
</tbody>
</table>

Displaying the temperature for each component

The temperature may be displayed for each component (grille and tank) by selecting the component with the cursor.

Press the up-down arrow until the desired component is displayed.

After 10 seconds, the display will return to the default component (the grille).

If you wish to keep the component displayed permanently, press and hold the up-down arrow for 2 seconds while selecting the chosen element.

Alarm displays

The melter equipments tell the user when a malfunction has occurred in the unit, sending warning messages that may be seen on the control panel display.

When an alarm appears, the control unit takes a series of steps to protect the unit. Simply correct that malfunction and the control unit will reactivate the equipment functions.

Standby function does not generate any alarm.

If a temperature sensor is broken, the system heats all the elements except the one where the failure is located.
In case of overheating the system cuts off immediately the damaged element. After three minutes if the failure continues all the system will be shut down. After repairing the failure the system starts heating normally.

<table>
<thead>
<tr>
<th>Code</th>
<th>Source</th>
<th>Heating</th>
<th>Temp. OK and Main machine signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Err 0</td>
<td>Grille broken sensor</td>
<td>only grille off</td>
<td>off</td>
</tr>
<tr>
<td>Err 1</td>
<td>Tank broken sensor</td>
<td>only grille off</td>
<td>off</td>
</tr>
<tr>
<td>Err 100</td>
<td>Grille overheating</td>
<td>all components off</td>
<td>off</td>
</tr>
<tr>
<td>Err 101</td>
<td>Tank overheating</td>
<td>all components off</td>
<td>off</td>
</tr>
</tbody>
</table>

**Operational pressure display and adjustment**

In these equipments the air pressure with which the pneumatic control of the pusher piston cylinder device works with is shown on the pressure gauge located on the base of the melter/applicator. The pressure must be adjusted according to the application needs.

**Warning:** Never surpass 6 bar of pressure

To regulate the pressure, pull the handle out and turn the regulator clockwise (+) or counterclockwise (-) as needed.
Temperature adjustment

The melters/applicators leave the factory with the following set point temperature values:

- 160 °C (320 °F) for the tank and manifold
- °C displayed
- Overheating value: 20°C
- Standby value: 40%
- Delay time: 10 min
- On/off and standby programming: ON

The general process for adjusting the temperatures of each component is described below.

1. Select the component whose value you wish to modify using the up-down arrow for element selection.
   The corresponding LED will blink rapidly.

2. Select the desired set point temperature value with the up-down arrow under the display. Below 40°C the set point value displays 'OFF' canceling the heating of that element.

3. After ten seconds, the LED will stop blinking and the display will show the tank’s set point temperature value by default, saving the modified data.

This simple procedure should be repeated for each of the components whose set point temperature value you wish to modify.

Programming the applicator parameters

The access to the parameters is performed from the special menu. Simultaneously press the buttons with the clock symbol and the down arrow to enter this menu.

The navigation order is as follows:

<table>
<thead>
<tr>
<th>Function</th>
<th>Symbol on the display</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects the temperature unit to display</td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>Programs overheating</td>
<td></td>
<td>20 °C</td>
</tr>
<tr>
<td>Programs the temperature for the STANDBY mode</td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Delay time to activate of signa temp OK and main machine</td>
<td>t</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>
To select the function to be programmed, press ‘up-down’ arrow on the left side of the panel (1), to advance through the various functions. Once selected, the buttons up and down modify the value. Pressing the arrow ‘up-down’ on the right side of the panel (2) modify the value. Pressing the arrow ‘down’ (on the left side) again the data is stored and passed to the next function.

To exit the special menu press the ‘up’ arrow (on the left side) at any time.

**Programming process**

1. Simultaneously press the buttons with the clock symbol and the down arrow to enter the special menu.
   The choice of temperature display units (°C or °F) will appear on the display.

2. Select the desired value using the up-down arrow under the display.

3. Use the up arrow for element selection to move to the next display where the overheating symbol appears.

4. Select the desired value (between 10 and 25) using the up-down arrow under the display.
   The value shown corresponds to the increase in real temperature allowed over the set point temperature without activating the alarm message.

5. Use the up arrow for element selection to go to the next display where the standby function symbol appears.

6. Use the up-down arrow under the display to select the desired value (between 25 and 55).
   The value shown corresponds to the percent decrease in the real temperature compared to the set point temperature that will occur when this function is activated.

7. Use the up arrow for element selection to go to the next display where delay time value appears.

8. Use the up-down arrow under the display to select the desired value (between 0 and 60 min).

9. Use the up arrow for element selection to return to the initial parameter.

For any parameter, the down arrow for element selection may be used to exit the special menu and display the tank temperatures once again.

To record any parameter you must always move to the next parameter, using the right arrow.
Setting the clock

‘Cantho’ melters/applicators are equipped with a weekly programmable system controlling equipment connection and disconnection and activating and deactivating the standby function.

Before programming these functions, it is necessary to introduce into the control unit data corresponding to the day and hour used to execute these programs.

Programming the current day and hour

1. Press the button with the clock symbol.
   A ‘0’ will appear on the display, indicating the program for current day and hour information.

2. Press the button with the clock symbol once again.
   On the left display, you will see the time with a dot, indicating that this is the value that may be modified, while the minutes appear on the second display.

3. Use the up-down arrow under the display to select the desired value.

4. Press the button with the clock symbol once again.
   Now the dot will appear on the right display.

5. Use the up-down arrow under the display to select the desired value.

6. Press the button with the clock symbol once again.
   A number appears, indicating the day of the week [1- Monday / 7- Sunday].

7. Use the up-down arrow under the display to select the desired value.

8. Press the button with the clock symbol once again.
   The ‘0’ program appears once again.

9. Pressing either the up or the down arrow for element selection will exit this program and return to the tank temperature display.

Programming equipment activation/deactivation

You may program an activation and a deactivation time for every day of the week, from Monday [1] to Sunday [7].

Time is expressed in 15 minute increments, so we cycle from 10.0 [10 hours and 0 minutes] to 10.1 [10 hours and 15 minutes] to 10.2 [10 hours and 30 minutes] to 10.3 [10 hours and 45 minutes].

1. Press the button with the clock symbol.
   A ‘0’ will appear on the display, indicating the program for current day and hour information.

2. Use the up-down arrow under the display to select the value for the desired day of the week, from Monday [1] to Sunday [7].
3. Press the button with the clock symbol once again.
   Two times will appear, one in each display. The display on the left shows
   the start time, while the display on the right shows the finish time.

4. The blinking dot next to the start time indicates that this is the value that
   may be modified. Use the up-down arrow under the display to select the
   desired value.

5. Press the button with the clock symbol once again.
   The dot changes to the finish time.

6. Use the up-down arrow under the display to select the desired value.

7. Press the button with the clock symbol once again.
   The selected program will appear once again. Use the up-down arrow
   under the display to select other programs.

8. Pressing either the up or the down arrow for element selection will exit
   this program and return to the tank temperature display.

The green LED next to the `ON/OFF` button will remain blinking as long as there is
an equipment disconnection time programmed for the current day.

**Disabling the equipment activation/deactivation program**

It is possible to disable the equipment activation/deactivation programming
without canceling the daily programming. This way the programmed data is
saved, but the programming will have no effect on the equipment.

1. Press the button with the clock symbol.
   A `0` will appear on the display, indicating the program for current day and
   hour information.

2. Use the up-down arrow under the display to go past the selection for the
   last day of the week (7).
   The message `ON/OFF` will appear on the display, depending on the
   current status.

3. Press the button with the clock symbol once again.
   The status will alternate each time you press the button.

4. Pressing either the up or the down arrow for element selection will exit
   this program and return to the tank temperature display.

**Programming the equipment’s standby function activation/deactivation**

You may program an activation and a deactivation time for every day of the week,
from Monday (1) to Sunday (7).

Time is expressed in 15 minute increments, so we cycle from 10.0 (10 hours and
0 minutes) to 10.1 (10 hours and 15 minutes) to 10.2 (10 hours and 30 minutes) to
10.3 (10 hours and 45 minutes).
1. Press the button with the clock symbol.
   A ‘0’ will appear on the display, indicating the program for current day and hour information.

2. Press the standby function button.
   A ‘1’ will appear, indicating the first day in the standby function programming.
   [Since the current time and date are values common to both programs, the value ‘0’ does not appear in this menu].

3. Use the up-down arrow under the display to select the desired value for the day of the week, Monday (1) to Sunday (7).

4. Press the button with the clock symbol once again.
   Two times will appear, one in each display. The left display shows the start time, while the right display shows the finish time.

5. The blinking dot next to the start time indicates that this is the time that may be modified.
   Use the up-down arrow under the display to select the desired value.

6. Press the button with the clock symbol once again.
   The dot changes to the finish time.

7. Use the up-down arrow under the display to select the desired value.

8. Press the button with the clock symbol once again.
   The selected program appears once again. You may use the up-down arrow under the display to select other programs.

9. Pressing either the up or the down arrow (left section) or element selection will exit this program and return to the visualization of the grille temperature.

The green LED next to the ‘standby’ button will remain blinking as long as there is an equipment standby function activation time programmed for the current day.

Disabling the equipment standby function programming

It is possible to disable the equipment standby function programming without canceling the daily programming. This way the programmed data is saved, but the programming will have no effect on the equipment.

1. Press the button with the clock symbol.
   A ‘0’ will appear on the display, indicating the program for current day and hour information.

2. Press the standby function button.
   A ‘1’ will appear, indicating the first day in the standby function programming.
3. Use the up-down arrow under the display to go past the selection for the last day of the week (7).

   The message ´ON/OFF´ will appear on the display, depending on the current status.

4. Press the button with the clock symbol once again.

   The status will alternate each time you press the button.

5. Pressing either the up or the down arrow for element selection will exit this program and return to the tank temperature display

**Special function buttons**

The simplicity of programming ´B4´ series melters/applicators reduces the use of the special function buttons to only the standby function.

This manual function allows you to alternate between the operational mode and the standby mode. Using the standby function during periods of melter/applicator inactivity helps save energy and allows the heated elements to return quickly to their set point temperatures once you return to the operational mode.

When the standby function is activated, the set point temperature for all the heated components is lowered to a certain value, according to the programmed parameter [see ´Programming melter/applicator equipment parameters´]. For example, if the tank set point temperature is 160 °C and the standby temperature is programmed as 30 (30%), when you press the standby function button, the tank set point temperature will drop to 112 °C (70% of 160 °C).

The three means for activating the standby function available with ´B4´ melters/applicators have the following priority protocols:

1° Manual standby function button.

2° Standby function external signal.

3° Standby function activation/deactivation programming.

Therefore, if the function is activated by any of the three means, it may always be deactivated using the manual button. On the other hand, if it was activated using the manual button, it may not be deactivated by either of the other two means. The weekly programming may not deactivate a standby function that has been activated by either of other two means.

The following criteria are suggested for standby function use:

- If the period of inactivity is less than 2 hours, allow the melter applicator equipment to heat as normal.
- If the period of inactivity is more than 2 hours and less than 4 hours, use the standby function.
- If the period of inactivity is over 4 hours, use one of the following two options: turn off the equipment if you do not plan on using it for the rest of the day or keep the standby function on if you plan on using the equipment during that same day.
**Start-up and automatic process**

The LOGO controller located on the control panel will manage the following functions:

1. The movement of the cylinder that pushes the adhesive block.
2. Check the level of adhesive in the tank below the roller.
3. The activation/deactivation of the premelter grid and the discharge valve.
4. The machine’s warnings and alarms.
5. The operating screens, settings, warnings and alarms.

**Operation**

**Movements of the pusher cylinder.**

To raise or lower the cylinder, a three-position rotary switch is used. To stop the cylinder movement at the ends, two magnetic sensors located on the same cylinder are used.

For the cylinder to operate, the lid in position sensor must be activated.

Provided that the lowering of the piston is activated with the rotary switch (1), the electrovalve will be activated during 15 seconds and from that moment onwards, the piston will operate according to whether manual or automatic mode is selected on the rotary switch (2).

**Operation of the piston in AUTOMATIC MODE:**

If no level is detected in the roller tank, the electrovalve will be activated to lower and the discharge valve will open, remaining so until the adhesive level goes up and covers the tank’s level sensor. At that point, the electrovalve will deactivate and the discharge valve will close. This cycle will repeat until the rotary switch is moved to position ‘0’ or up, or you exit automatic mode.

The operation of the piston in MANUAL MODE does not depend on the level sensor of the roller tank. The piston goes up or down depending on the position of the movement switch of the cylinder.

**Actions that are common to both operating modes:**

1. If the closed lid sensor detection is lost, the cylinder’s electrovalve will deactivate and the discharge valve will close.
2. If the piston is pushing and stops [for any possible reason], the cylinder depressurisation electrovalve will be activated for 8 seconds.
3. If the piston activates the lower magnetic sensor [block finished or chamber without adhesive], it will stop and indicate this situation.
Check the level of adhesive in the lower tank.

The tank of the machine’s roller applicator has a level sensor. The sensor signal will manage the level of adhesive, providing a low level signal. The level sensor signal is established in the LOGO controller with a delay time of 0.5 seconds.

For its electrical connection and selection of parameters, consult chapter ’3. Installation’ of this manual.

Activation/deactivation signal for the premelter grid.

The activation of the heating of the premelter grid has two operating modes:

1. Rotary switch (2) in AUTOMATIC. The grid will only be activated if the level sensor of the roller tank does not detect adhesive. If a level is detected, the grid will stop heating up.

2. Rotary switch (2) in MANUAL. The grid is always active.

Opening and closing of the adhesive discharge valve.

So that the discharge valve can open, the melter must be in Temperature OK (both in automatic and manual mode). The activation of this valve has two operating modes:

1. Rotary switch (2) in AUTOMATIC. The discharge valve will only open if the level sensor of the roller does not detect adhesive. If a level is detected, the discharge valve will close.

2. Rotary switch (2) in MANUAL. The discharge valve is always open.

Warnings and alarms.

They are shown on the LOGO controller screen, activate the screen’s amber backlighting and the ‘reset’ button LED (and the tower light if it is installed).

1.1. Lid open:

It occurs when the ‘closed lid’ sensor is deactivated and the piston is stopped, except when the piston is up and the upper magnetic sensor of the cylinder is activated. The warning disappears when the ‘closed lid’ sensor is activated. Prevent any movement of the piston while the warning is active.
1.2. Block finished or chamber without adhesive:

It occurs when the piston arrives at the lowest position (the lower magnetic sensor is activated). This warning stops the pushing movement of the piston and prevents it from pushing until the warning disappears. The warning disappears when the rotary switch [1] for moving the piston is placed in the ‘up’ position and the piston goes up until the upper magnetic sensor is activated.

The finished block can also be detected visually through the dent of the rod that is built into the piston. When this reaches the lid level, the block is finished. This visualisation is just indicative and you should wait for the warning signal before loading a new block.

1.3. Cylinder position fault:

This occurs when the pneumatic cylinder’s magnetic sensors are active at the same time. The warning disappears when at least one of the magnetic sensors is deactivated. Prevent any movement of the piston while the warning is active.

1.4. Piston does not go up:

It is shown if the piston switch is in the ‘up’ position and the upper magnetic sensor is not activated in 30 seconds. The warning will disconnect the cylinder electrovalve. The warning disappears when the upper magnetic sensor is activated. To raise the piston (with the warning still activated), the piston switch [1] must be returned to ‘0’ and turned to the ‘up’ position.

2. Alarms:

They are shown on the LOGO controller screen, it activates the red backlighting of the screen and it also activates the intermittent LED of the ‘reset’ button (and the tower light if it is installed).

2.1. Lid open:

This occurs when the ‘closed lid’ sensor is deactivated and the piston is in movement. This alarm stops the piston movement. It is reset when the ‘closed lid’ sensor is activated, pressing ‘reset’. By resetting the alarm, the piston will move according to the status of the switch [1].

2.2. Block finished or chamber without adhesive:

If the warning for ‘block finished or chamber without adhesive’ is active for a longer time than the time programmed between 0 and 60 minutes (T. ALARM on the main controller (LOGO) screen, the alarm will be produced). This alarm is reset by raising the piston to the upper position (placing the piston movement switch [1] in ‘up’ position and when the upper magnetic sensor is activated, pressing ‘reset’).

2.3. Machine disconnected:

This occurs when the Cantho melter is disconnected from the electrical control panel. The alarm deactivates all of the LOGO controller outputs. To reset the alarm, reconnect the machine to the electrical panel and press ‘reset’. From that moment, the machine will act according to how the rotary control switches are positioned and the status of the roller tank level sensor.
5. MAINTENANCE

**Warning:** The melter/applicator equipment is equipped with current technology, but has certain foreseeable risks. Therefore, only allow qualified personnel with enough training and experience to operate install or repair this equipment.

The following table briefly summarizes the indications for adequate melter/applicator equipment maintenance. Always read the corresponding section carefully.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Frequency</th>
<th>Refer to</th>
</tr>
</thead>
<tbody>
<tr>
<td>External cleaning of cas-ibg</td>
<td>- Daily</td>
<td>Equipment cleaning</td>
</tr>
<tr>
<td>Cleaning the tank</td>
<td>- Presence of burnt adhesive - Each time the adhesive is changed</td>
<td>Cleaning tank</td>
</tr>
<tr>
<td>Cleaning the grille</td>
<td>- Presence of burnt adhesive - Each time the adhesive is changed</td>
<td>Filter maintenance</td>
</tr>
<tr>
<td>Cleaning the tube for the block</td>
<td>- Presence of burnt adhesive - Each time the adhesive is changed</td>
<td>Cleaning the tube for the block</td>
</tr>
<tr>
<td>Cleaning the pusher piston</td>
<td>- Presence of burnt adhesive - Each time the adhesive is changed</td>
<td>Cleaning the pusher piston</td>
</tr>
<tr>
<td>Activation of the thermostat</td>
<td>- When it has been desactivated due to excess temperature</td>
<td>Thermostas maintenance</td>
</tr>
<tr>
<td>Removal of the unit</td>
<td>- Replacing the equipment or repairs</td>
<td>Removing the equipment from its base</td>
</tr>
</tbody>
</table>

If the equipment does not work or works incorrectly, called to your Meler Representative or to the Main Office.

**Equipment cleaning**

To continue to take advantage of the melter/applicator's benefits and to ensure the perfect mobility of its components, it is necessary to keep all its parts clean, especially the ventilation grates on the of the machine.

**Warning:** Risk of electric shock. Carelessness may result in injury or death. Clean the exterior using a cloth moistened with water. Do not use flammable liquids or solvents.

External cleaning:

- Use cleaning products compatible with painted surfaces.
- Apply the cleaning product with a soft cloth.
- Do not use sharp tools or scrapers with sharp edges.
Removal of the front cover (and side covers) of the melter:

1. Disconnect the melter.
2. Remove the four screws (two on each side) from the cover of the melter unit.
3. Remove the cover, sliding it outwards in the direction shown in the figure.
4. You now have full access to the internal components.

Removal of the pusher piston cylinder cover:

1. Disconnect the melter.
2. Remove the six screws fastening the cover that covers the piston cylinder.
3. Remove the cover, sliding it upwards in the direction shown in the figure.
4. You now have full access to the internal components.

Opening the control box to access the components inside:

1. With the corresponding key, turn the lock for opening the control panel door.
2. Tilt the door downwards.
3. You now have full access to the internal components.

Cleaning the tank

Both the cylindrical hopper and hot-melt tank will need cleaning occasionally to maintain their melting and anti-adherence properties. The tank is covered on the inside with PTFE and inclined enough to aid unloading the hot-melt and to avoid it from being retained inside when consequential burning occurs.

Also, when adhesives are mixed, reactions may occur between them, causing degeneration and problems unloading to the pump.

Therefore, it is recommended to clean the deposit every time that:

- A change is made to a different type of hot-melt.
- Too much burnt material is generated in its interior.
Cleaning should be done at a temperature of 40-80°C to facilitate elimination of adhesive residues.

**Warning:** Use the appropriate protective equipment for high temperatures.

**Changing adhesive type**

Remove the part of the adhesive block that is still solid inside:

1. Raise the piston to its highest position.
2. Raise the positioner of the lid and turn it until the tube is uncovered.
3. Remove the remaining part of the block.
4. Close the lid again and fix it with the pin.
5. Use up as much of the tank’s adhesive as possible via the manual opening of the discharge valve.
6. Clean the hot-melt adhesive residues inside the tank (see ‘Cleaning the burnt adhesive’).

**Warning:** Use the appropriate protective equipment for high temperatures.

7. Open the lid again and insert the new adhesive block. Close it again and operate normally.

**Cleaning burnt adhesive**

1. Remove the front cover (see ‘Removing the front cover of the melter’).
2. Follow steps 1 to 5 of the previous section, ‘Changing the type of adhesive’.

Before cleaning the tank, it is best to clean the grid first, as well as the tube for the block. Any residues from the cleaning of these two parts could fall into the tank and make it dirty again.

3. Remove the six screws from the tank lid (taking care not to break or pinch the sealing gasket).
4. With a soft cloth, remove and clean the adhesive residues and the carbon deposits from inside.

**Warning:** Use the appropriate protective equipment for high temperatures.

5. Once clean, put the lid back on. If the gasket is damaged, replace it with a new one [see Chapter 9, ‘Spare parts’].
6. Put the front cover back on.
7. Insert a new block in the tube and close the lid with the pin. Close it again and operate normally.
Cleaning the grille

1. Remove the front cover (see ‘Removing the front cover of the melter’).
2. Follow steps 1 to 5 of the previous section, ‘Changing the type of adhesive’.

Before cleaning the grid, it is best to first clean the tube for the block. Any residues from the cleaning of the tube could fall onto the grid and make it dirty again.

**Warning:** Use the appropriate protective equipment for high temperatures.

3. Raise the piston again to its highest position and open the lid.
4. Loosen the four screws of the clamps that fix the tube of the block to the block of the grid and the tank. Carefully remove the tube.
5. You now have full access to the grid in order to clean it. With a soft cloth, remove and clean the adhesive residues and the carbon deposits from inside.

Cleaning the tube for the block

1. Follow steps 1 to 3 of the previous section, ‘Changing the type of adhesive’.

**Warning:** Use the appropriate protective equipment for high temperatures.

2. You now have full access to the inside of the tube in order to clean it. With a soft cloth, remove and clean the adhesive residues and the carbon deposits from inside.

Cleaning the pusher piston

1. Follow steps 1 to 5 of the previous section, ‘Cleaning the grid’.
2. With a soft cloth, remove and clean the adhesive residues and the carbon deposits from the piston disk.
3. If necessary for better access, lower the piston manually (using the controls of the valve), ensuring that it does not collide with any part of the machine or the melter.
**Thermostat maintenance**

If either of the two thermostats is deactivated:

1. Disconnect the melter.
2. Remove the front cover (see ‘Removing the front cover of the melter’) and press the button to reset it.
3. Loosen the four screws fastening the support panel of the connector. Remove it carefully.
4. Press the corresponding button to reset it.
5. Refit the support panel and the front casing.

**Remove the unit from its base**

For more thorough maintenance of the equipment, the melter needs to be removed from its location so that it can be handled with greater ease and accessibility.

To do so, it must be removed from its location as follows:

1. Disconnect the electrical connections of the unit. If it has a Focke Meler control box, disconnect the 24-pin connector from the unit.
2. Disconnect any pneumatic or electrical line that joins the unit to the rest of the machine.
3. Remove the screws that fasten the unit to the machine support.
4. The unit is now removed and can be replaced or maintained offline.
6. TECHNICAL CHARACTERISTICS

**General**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank capacity</td>
<td>For using 130 mm diameter adhesive blocks</td>
</tr>
<tr>
<td>Melting rate</td>
<td>variable up to 9 kg/h (*)</td>
</tr>
<tr>
<td>Working temperature</td>
<td>from 20 to 160 °C for PUR / from 20 to 210 °C for others</td>
</tr>
<tr>
<td>Type of temperature sensor</td>
<td>Pt-100 o Ni-120</td>
</tr>
<tr>
<td>Electrical requirements</td>
<td>230 VAC, L+N+PE o L1+L2+PE, 50/60 Hz</td>
</tr>
<tr>
<td>Heating power</td>
<td>2400 W</td>
</tr>
<tr>
<td>Workplace temperature</td>
<td>from 5 to 40 °C</td>
</tr>
<tr>
<td>Dimensions (LxAxH)</td>
<td>250x284x813 mm</td>
</tr>
</tbody>
</table>

(*) Under standard conditions
Dimensions

- Width: 250 mm
- Height: 290 mm
- Depth: 242 mm
- Side dimensions:
  - Width: 119 mm
  - Height: 124 mm

All dimensions are in millimeters.
Dimensions (Without cylinder pusher)
This page is intentionally left blank.
7. ELECTRICAL DRAWINGS
This page is intentionally left blank.
8. PNEUMATIC DRAWINGS
9. SPARE PART LIST

The list of the most common spare parts for adhesive melters Cantho machines appears in this section, providing a quick and reliable guide to choosing them.

The spare parts are grouped together naturally, in the same way as they are located in the melters.

As a visual aid, drawings of the parts are included and are numbered to help identify them in the list.
## A. Chassis Assembly

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150123310</td>
<td>Cantho front casing</td>
</tr>
<tr>
<td>1</td>
<td>150125110</td>
<td>Cantho front casing WITHOUT CYLINDER</td>
</tr>
<tr>
<td>2</td>
<td>150123320</td>
<td>Cantho rear casing</td>
</tr>
<tr>
<td>2</td>
<td>150125120</td>
<td>Cantho rear casing WITHOUT CYLINDER</td>
</tr>
<tr>
<td>3</td>
<td>150123330</td>
<td>Piston cylinder casing</td>
</tr>
<tr>
<td>4</td>
<td>150125130</td>
<td>Adhesive level reader</td>
</tr>
<tr>
<td>5</td>
<td>150125140</td>
<td>Tank cover</td>
</tr>
<tr>
<td>-</td>
<td>150123340</td>
<td>Insulating blanket</td>
</tr>
</tbody>
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### B. GENERAL STRUCTURE

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150114040</td>
<td>Pressure gauge Ø40 R1/8M 10 bar with flange</td>
</tr>
<tr>
<td>2</td>
<td>100451</td>
<td>Pressure regulator G1/8 0.3-7 bar</td>
</tr>
<tr>
<td>3</td>
<td>150119190</td>
<td>Gland PG16 black</td>
</tr>
<tr>
<td>4</td>
<td>150123450</td>
<td>Male wall connector 24 P 16 A 600 V</td>
</tr>
<tr>
<td>5</td>
<td>150123350</td>
<td>Double equal union bulkhead Ø6</td>
</tr>
<tr>
<td>6</td>
<td>150115720</td>
<td>Fast connection 90º elbow R1/8M Ø6</td>
</tr>
<tr>
<td>7</td>
<td>150123360</td>
<td>Fast connection 90º elbow G1/8 Ø4</td>
</tr>
<tr>
<td>8</td>
<td>150028100</td>
<td>Retractable positioner M12</td>
</tr>
<tr>
<td>9</td>
<td>150123370</td>
<td>Fast connection 90º elbow R1/8M Ø4</td>
</tr>
<tr>
<td>10</td>
<td>150112470</td>
<td>Ceramic terminal block 24 A 450 V</td>
</tr>
<tr>
<td>11</td>
<td>150124220</td>
<td>Cylindrical hopper 2kg Ø125 Cantho PA6</td>
</tr>
<tr>
<td>-</td>
<td>R0000632</td>
<td>Fast connection in T Ø6</td>
</tr>
</tbody>
</table>
# C. GRILL- TANK ASSEMBLY

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150091530</td>
<td>Sensor Pt-100 4.8x32 mm, 1.5 m cable</td>
</tr>
<tr>
<td>1</td>
<td>150091530</td>
<td>Sensor Ni-120 4.8x32 mm, 1.5 m cable</td>
</tr>
<tr>
<td>2</td>
<td>10030007</td>
<td>Connection strip, 57 A 450 V current</td>
</tr>
<tr>
<td>3</td>
<td>150114620</td>
<td>Resettable safety thermostat 230ºC</td>
</tr>
<tr>
<td>4</td>
<td>150021710</td>
<td>10x160 400 W heating element</td>
</tr>
<tr>
<td>5</td>
<td>150113750</td>
<td>91x3 NBR70 0-ring</td>
</tr>
<tr>
<td>6</td>
<td>150113760</td>
<td>139.37x2.62 Viton 0-ring</td>
</tr>
</tbody>
</table>
## D. PISTON / CYLINDER ASSEMBLY

<table>
<thead>
<tr>
<th>Nº</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>150123380</td>
<td>Straight fast connection G1/8M Ø6</td>
</tr>
<tr>
<td>2</td>
<td>150115720</td>
<td>Fast connection 90° elbow R1/8M Ø6</td>
</tr>
<tr>
<td>3</td>
<td>21020010</td>
<td>Electrovalve 4/2 24 VDC 5.4 W</td>
</tr>
<tr>
<td>4</td>
<td>150123390</td>
<td>Flat silencer G1/8M</td>
</tr>
<tr>
<td>5</td>
<td>150123400</td>
<td>Fast connection 90° elbow G1/4M Ø6</td>
</tr>
<tr>
<td>6</td>
<td>150060170</td>
<td>Electrovalve 5/3 bistable 1/8 closed centres</td>
</tr>
<tr>
<td>7</td>
<td>150125230</td>
<td>Pusher disk unit</td>
</tr>
<tr>
<td>8</td>
<td>150123440</td>
<td>Double-acting cylinder Ø50x200</td>
</tr>
<tr>
<td>9</td>
<td>150123460</td>
<td>Cylinder position PNP magnetic sensor</td>
</tr>
</tbody>
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### E. DISCHARGE VALVE CYLINDER

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>150123400</td>
<td>Fast connection 90° elbow G1/4M Ø6</td>
</tr>
<tr>
<td>2</td>
<td>150123410</td>
<td>Round double-acting cylinder Ø50X80</td>
</tr>
<tr>
<td>3</td>
<td>150123420</td>
<td>Straight fast connection G1/4M Ø6</td>
</tr>
<tr>
<td>4</td>
<td>150025830</td>
<td>Inductive sensor M5 PNP</td>
</tr>
<tr>
<td>5</td>
<td>150123430</td>
<td>Fast connection 90° raised elbow R1/8M Ø6</td>
</tr>
<tr>
<td>6</td>
<td>150060090</td>
<td>Electrovalve 4/2 1/8 24 VDC 12.7 W</td>
</tr>
<tr>
<td>7</td>
<td>150115720</td>
<td>Fast connection 90° elbow R1/8M Ø6</td>
</tr>
<tr>
<td>8</td>
<td>150123350</td>
<td>Double equal union bulkhead Ø6</td>
</tr>
<tr>
<td>9</td>
<td>150123520</td>
<td>Rod gasket</td>
</tr>
<tr>
<td>10</td>
<td>150123530</td>
<td>Ball valve body gasket</td>
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</table>
**F. CONTROL BOX (OPTIONAL)**

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>150125160</td>
<td>Main Switch 16A 3P</td>
</tr>
<tr>
<td>2</td>
<td>150119180</td>
<td>Gland PG13.5 black plastic</td>
</tr>
<tr>
<td>3</td>
<td>R0006220</td>
<td>Light 24 V 5 W, bushing BA15D, size 16x35</td>
</tr>
<tr>
<td>4</td>
<td>10000204</td>
<td>Front board ML.242.ST-B4</td>
</tr>
<tr>
<td>5</td>
<td>150115830</td>
<td>Yellow plastic button indicator</td>
</tr>
<tr>
<td>6</td>
<td>150130160</td>
<td>Switch head with 3 fixed positions</td>
</tr>
<tr>
<td>7</td>
<td>150123480</td>
<td>Female connector 24 P 16 A 600 V</td>
</tr>
</tbody>
</table>
# G. CONTROL BOX. INTERIOR

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150021010</td>
<td>16 A two-pole power switch</td>
</tr>
<tr>
<td>2</td>
<td>150120510</td>
<td>Solid-state relay, SPST-NO, 3 A 60 VDC</td>
</tr>
<tr>
<td>3</td>
<td>150123490</td>
<td>Solid-state relay 3-32 VDC/280 VAC 12 A</td>
</tr>
<tr>
<td>4</td>
<td>150091600</td>
<td>Power supply 24 VDC 2.5 A</td>
</tr>
<tr>
<td>5</td>
<td>150120670</td>
<td>Programmable relay extension module 6ED1055</td>
</tr>
<tr>
<td>6</td>
<td>150117130</td>
<td>Programmable relay SIEMENS LOGO 0BA8</td>
</tr>
<tr>
<td>7</td>
<td>150123500</td>
<td>Gland M25x1.5 Ø25 mm</td>
</tr>
</tbody>
</table>
## H. CONTROL BOX. INTERIOR DOOR

<table>
<thead>
<tr>
<th>Nº</th>
<th>Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150022490</td>
<td>Yellow LED</td>
</tr>
<tr>
<td>2</td>
<td>15015870</td>
<td>Contact holder ZB5 AZ101 with NO contact</td>
</tr>
<tr>
<td>3</td>
<td>150022530</td>
<td>NO contact</td>
</tr>
</tbody>
</table>
This page is intentionally left blank.
The manufacturer,
Focke Meler Gluing Solutions, S.A.
Pol. Los Agustinos, c/G, nave D-43
E-31160 Orkoien, Navarra - Spain
— A Focke Group Company —

declaring that the machinery, Type: ADHESIVE MELTER
Model: CANTHO N1
Serial Number:

fulfils all the relevant provisions of the Directive 2006/42/EC on machinery,
and the object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

- Directiva 2011/65/EU and its amendments on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

In reference to the harmonised standards:


This declaration of conformity is issued under the sole responsibility of the manufacturer.
The person authorised to compile the technical file is the manufacturer established at the above address in this declaration.

Signed in Orkoien, to date:

Javier Aranguren
Managing Director
The manufacturer,

Focke Meler Gluing Solutions, S.A.
Pol. Los Agustinos, c/G, nave D-43
E-31160 Orkoien, Navarra - Spain
— A Focke Group Company —

states that the design and manufacturing of the partly completed machinery,

Type:
Model:
Serial Number:

fulfils all the relevant provisions of the Directive 2006/42/EC on machinery,
and the object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

- Directiva 2014/30/EU on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.
- Directiva 2011/65/EU and its amendments on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

In reference to the harmonised standards:


Therefore, IT IS FORBIDDEN TO PUT THIS PARTLY COMPLETED MACHINERY INTO SERVICE until it has been incorporated into a machine that complies with the provisions of Directive 2006/42/CE of the European Parliament and the Council of the European Union on machinery, as a whole, which includes the partly completed machinery subject to this declaration.

Please be informed that the technical documentation for this partly completed machinery has been prepared in accordance with Annex VII Section B and may be accessed if required by market surveillance authorities.

Signed in Orkoien, to date:

Javier Aranguren
Managing Director
For more information speak with your Focke Meler representative:

Focke Meler Gluing Solutions, S. A.
Pol. Los Agustinos, c/6, nave D-43
E-31160 Orkoien - Navarra - Spain
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A Focke Group Company