



CE CONFORMITY CERTIFICATE

CITUS KALIX

6 avenue du Bois de l'Epine
91080 COURCOURONNES
France

Declare that the machine :

- Designation : Lipstick Molding Machine
- Serial number : 30265
- Model : CRLA20
- Trademark : CITUS

is in conformity with dispositions of directive « Machines » 2006/42/CE

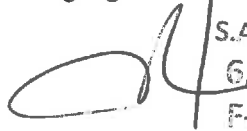
and in conformity with following directives :

- o Directive « Low voltage » 2006/95/CE
- o Directive « Electromagnetic Compatibility » 2004/108/CE

Mr Bruno LAGROST,
6 avenue du Bois de l'Epine
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is authorized to constitute the technical file.

Courcouronnes, October 21st, 2016

Bruno LAGROST
Managing Director


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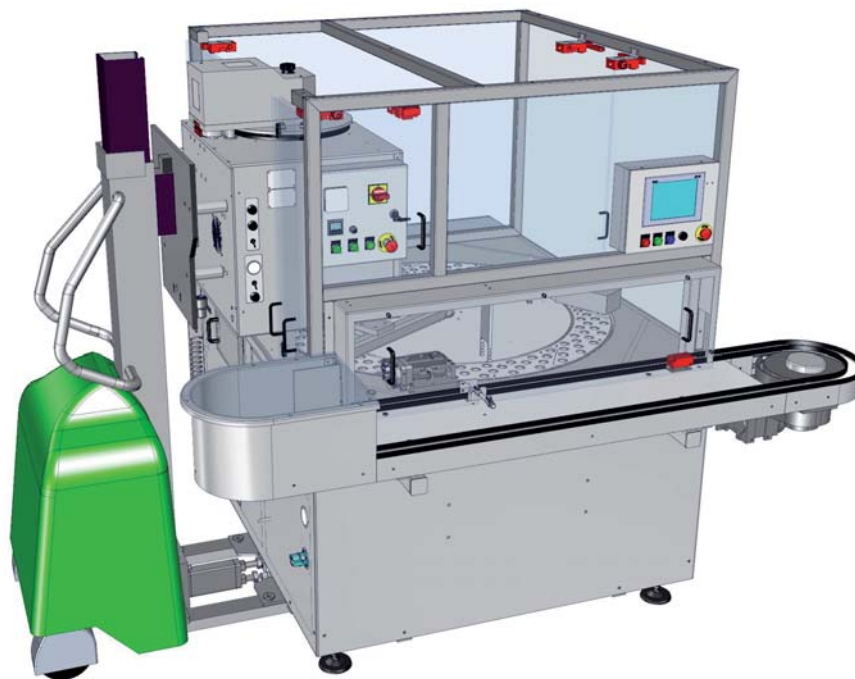
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INSTRUCTION MANUAL



Lipstick filling machine

CRLA20

Please read this document in full before using for the first time.

CITUS KALIX reserves the right to make technical alterations to the machine detailed herein at any time. While the essential aspects of the information described in this document shall be preserved, CITUS has no obligation to modify this publication.





CITUS KALIX would like to thank you for the trust you have placed in us by choosing this filler for lipsticks. This filler for lipstick was specially designed in response to the problems associated with the molding of lipstick tubes and the insertion of the tubes into the machinery.

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Your CITUS KALIX machine has been designed and manufactured to comply with the health and safety regulations in force.

These instructions have been developed in order to remind all partners of the necessary safety regulations and safe work procedures. These have been drawn up by CITUS KALIX so that all operations can be carried out without risk.

This document aims to be as clear as possible. We strongly advise you to pay close attention to the instructions contained in this document in order to avoid machine breakdowns or poor functioning caused by incorrect use or installation. The machine would no longer benefit from factory guarantee in such an event. This same factory guarantee does not cover wear and tear on parts.

CONTENTS

To enable the quick and optimal familiarity of this new machine, these instructions shall deal with the following points:

<p>1 Safety</p> <ul style="list-style-type: none"> General safety instructions 2 Incorrect use 3 Unauthorized use 3 Signage 3 <p>2 Technical specifications</p> <ul style="list-style-type: none"> General 4 Physical 4 Electrical 4 Environmental 4 Noise 4 <p>Transportation / Installation</p> <ul style="list-style-type: none"> Unpacking 5 Installation 5 Calibration 5 Connection 5 <p>3 Description / Presentation</p> <ul style="list-style-type: none"> General presentation 6 Principle of use 7 Detailed presentation 8 Control console 13 Touchscreen 14 Screen view tree diagram 16 Screen view tree diagram (cntd) 18 <p>4 Operating modes</p> <ul style="list-style-type: none"> Start-up 20 Normal stop 20 Emergency stop 20 General resetting 20 Priming 21 Machine cycle 21 Manual demolding 21 	<ul style="list-style-type: none"> Screens 22 Alarms in use 36 <p>5 Change of format / Settings</p> <ul style="list-style-type: none"> Mold replacement 38 Preheating cones replacement 39 Installing the tank 40 Removing the tank 41 Dosing cassette replacement 42 Color change 43 Remelting position setting 43 Picking clamp replacement 44 Picking clamp height setting 45 Opening system disassembling 46 Opening module replacement 47 <p>6 Cleaning</p> <ul style="list-style-type: none"> General cleaning 48 Cleaning the tank 49 Dosing cassette cleaning 49 Cleaning the purge bin 51 Cleaning the release units 52 <p>7 Maintenance plan</p> <ul style="list-style-type: none"> Maintenance schedule 53 Glycol level check 54 Release unit membrane replacement 55 Changing the v-ring gaskets on the release unit 55 Changing the remelting halogen lamps 55 Replacement of the venturi filter 56
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GENERAL SAFETY INSTRUCTIONS

ALWAYS COMPLY WITH THE SAFETY MEASURES DETAILED IN ALL SECTIONS OF THE INSTRUCTION MANUAL.

Conduct a visual check of the machine before starting it to ensure that no undesirable element that may compromise the safety of individuals or the machine is present.

Technical updates, adjustments, breakdown repair or maintenance must be carried out by authorized persons who are familiar with the relevant instruction manual and precautions set out by CITUS KALIX, and who possess all necessary safety and protective equipment.

Before work begins, the person responsible for carrying it out must ensure that the machine is not in use, that the motor power has been switched off and that any residual electrical or mechanical energy has fully cleared.

- Safety devices relating to each machine must be completely checked once per year.
- Never use a machine if any of the safety mechanisms checked proves to be defective.
- Never deactivate any safety mechanisms.
- Ensure that fixed and mobile safety guards are correctly in place. Replace or repair any damaged safety guards before putting the machine into operation.
- Designate a person to be in charge of the machine settings. Section off the zone to third parties.
- Where work requiring the intervention of one or more persons cannot be carried out on a restricted-access machine, those carrying out the work must observe the safety instructions in force in the establishment.
- Panels prohibit access to moving parts. Such panels should only be opened by maintenance workers who must take all precautions deemed necessary to prevent accidents.
- Restrict access to the machine during maintenance work.
- Switch off the electricity supply upstream of the main breaker in the electrical cabinet before performing any form of arc welding operations on the machine.
- Install the earth socket of the arc welding station on the area where you are carrying out your welding operations.
- Failure to observe these instructions may damage the machine in various ways, for example, its filtering capacity may be destroyed.
- When the work is completed, ensure that no loose object remains inside the machine.
- For usual servicing requirements, always use CITUS KALIX parts.
- Do not wait for parts to become worn before replacing them.

YOU ARE RESPONSIBLE FOR ENSURING THE SAFE FUNCTIONING OF THE MACHINE.

CITUS KALIX shall not be held liable for the consequences of any incident or accident resulting from an act of negligence or from the failure to observe the instructions and safety procedures contained in the instruction booklet.

CITUS KALIX will be happy to provide you with further information of a technical or commercial nature.

Should you face any difficulty during use, or in the event of an incident, contact the CITUS KALIX after-sales technicians.

INCORRECT USE

- Operating the machine at speeds which are not those recommended by CITUS KALIX.
- Using products which differ in terms of their characteristics from those defined in the specifications, or which are in poor condition.
- Using liquids in the machine which differ in terms of their characteristics from those recommended by CITUS KALIX.
- Non-standard use of electric-powered devices (in particular, pressing the control buttons inappropriately).
- Inappropriate cleaning, especially using high-pressure cleaning equipment.
- Obstructing passages used by products.
- Failure to undertake maintenance at intervals recommended by CITUS KALIX.

UNAUTHORIZED USE

NEVER OPERATE THE MACHINE USING CONFIGURATIONS OR IN SITUATIONS THAT CONTRADICT THE GENERAL SAFETY INSTRUCTIONS.

Some examples of incorrect and unauthorized use:

- Machine operated by unqualified personnel.
- Maintenance of the machine undertaken by unqualified personnel.
- Obstruction or circumvention of safety guards.
- Continuous blocking of control circuit apparatus.
- Forcing of the power contactors.
- Inserting an object in the safety openings or any passage leading into the machine.
- Obstructing the path of loads, especially blocking access to the doors.
- Use of the machine without its protective housing or other protective devices.
- Obstructing, immobilizing or destroying the emergency stop measures.
- Forcing of the control devices by any means, and in particular any of the electrical distributors which trigger movements.
- Tampering with any of the control or safety devices, besides those mentioned in the customer information.
- Operating machines with parts or components not supplied or approved by CITUS KALIX.
- Use of the machine in a way which does not comply with the information and instructions given by CITUS KALIX.
- Maintaining the machine in a way which does not comply with the information and instructions given by CITUS KALIX.

SIGNAGE

The information boxes which appear in this document are designed to draw the user's attention to the risks incurred if that particular instruction is not followed. There are three types of boxes:

WARNING:



This means that the failure to apply the appropriate precautionary measures may lead to death, serious injury and/or significant material damage.

CAUTION:



This means that the failure to apply the appropriate precautionary measures may lead to minor injury and/or material damage.

NOTE:



This box gives an important piece of information likely to improve the user's understanding of the machine.

GENERAL

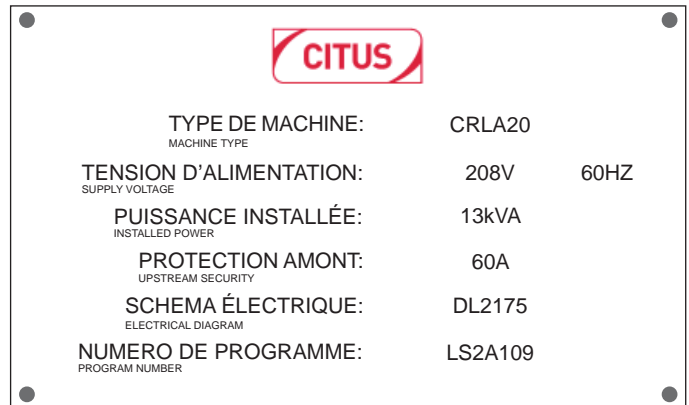
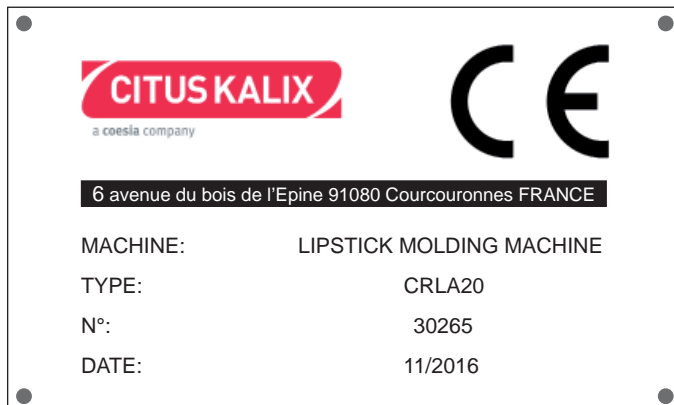
Machine type:	Filler for lipstick with in-built tank
Model:	CRLA20
Rate (unit/min):	20
Capacity (molds):	140
Mobile tank (l):	According to option
Noise level (dba):	75

PHYSICAL

Width (mm):	1530
Width with conveyor (mm):	3175
Depth (mm):	1810
Depth with conveyor (mm):	2205
Height (mm):	1920
Weight (kg):	

ELECTRICAL

Power supply voltage:	3 x 208 V AC
Control voltage:	24 V DC
Installed power:	13 kVA
Upstream protection:	60 A



ENVIRONMENTAL

Temperature (°C):	+ 20 ± 5
Relative humidity (%):	70

NOISE

The measuring method and the conditions of operation and assembly comply with the standard NF S31-048.

The reading, which was taken with the machine in operation over a set of measurement points located at 1 meter around the machine, is lower than 80 dB.



Important: this machine is not designed to process masses containing volatile silicone.

UNPACKING

Delivered on a pallet, wrapped and protected, please have the following tools to hand when unpacking (hammer, various levers, etc.) and during machine handling (forklift truck, pallet truck, etc.).

For optimum installation of the filler for lipstick, CITUS KALIX recommends:

- the storage of boxes and parcels in a covered space upon delivery,
- a floor that is strong enough to support the entire weight of the machine, to ensure proper distribution of the supports,
- a site which has a smooth floor surface without bumps or ruts: at the base of the feet that support the machine, the flooring must be sufficiently flat for the entire surface of each of the feet to be in full contact with it,
- an access route to the production site which is large enough to allow the machine and its means of handling to pass through.



The forks of a forklift truck must always be longer than the load to be transported.

INSTALLATION

Please refer to the general diagram.

The installation of the lipstick filling machine must be performed by CITUS KALIX.

If the lipstick filling machine has to be moved after it has been put into operation, CITUS KALIX recommends that it should perform the operation itself.

CALIBRATION

The frames are mounted on adjustable feet so they can be leveled.

Make sure this is done to every element.

CONNECTION

The main breaker switch for the lipstick filling machine should be connected to the electricity network in accordance with the information given on the signage plate.

The lipstick filling machine is fed with compressed air at a nominal pressure of 6 bars.



GENERAL PRESENTATION

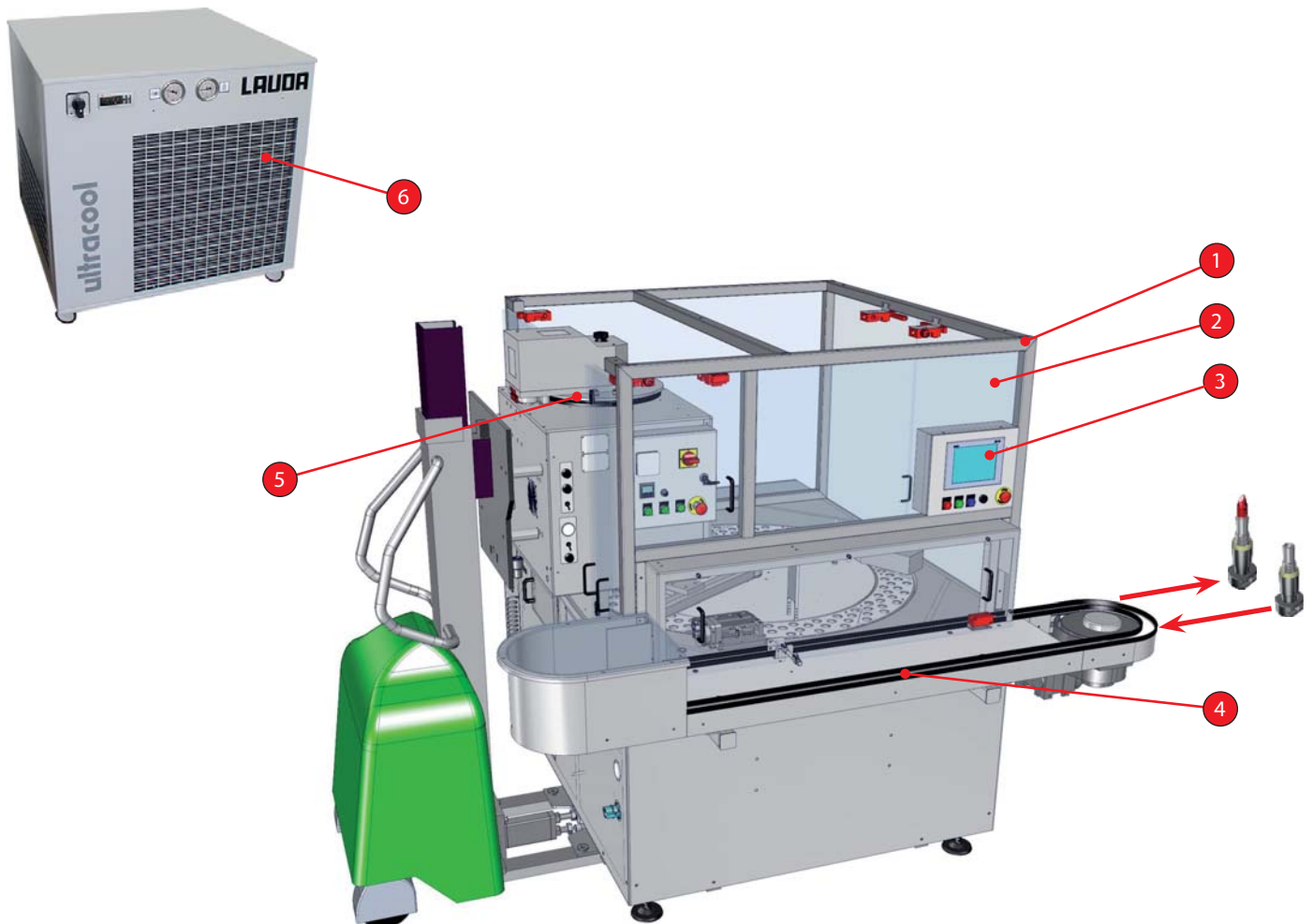
The lipstick filling machine CRLA20 is a semi-automatic machine allowing the sticks to be cast and to be inserted into the acorns. These acorn cups form an intrinsic part of the mechanism.

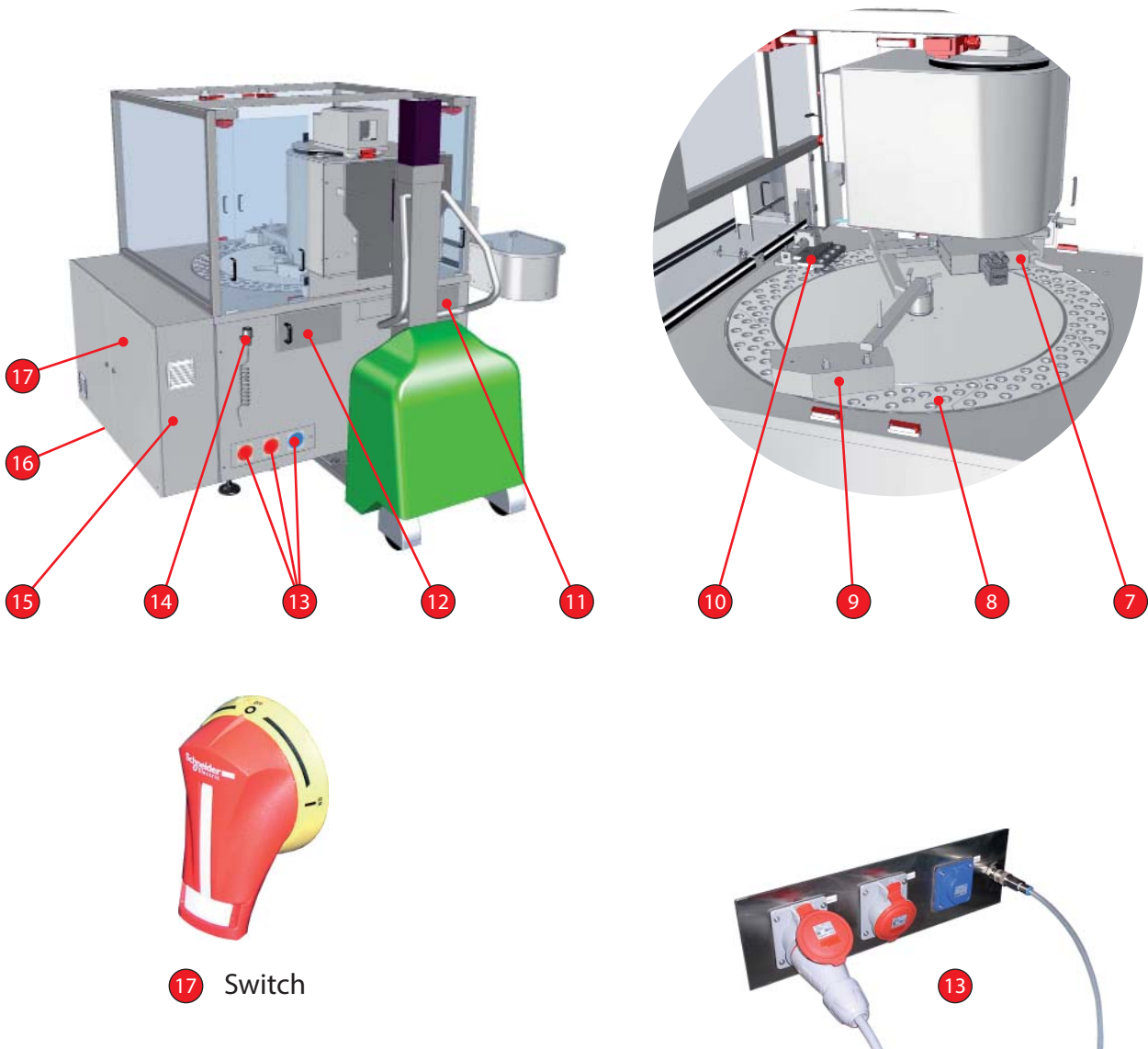
GENERAL PRESENTATION

The filler is mainly composed of the following:

- a stainless steel frame (1),
- a Plexiglas encasing (2),
- a control console (3),
- a conveyor (4) on which the portion cups which transport the mechanisms travel (see details below),
- a moving tank (5) mounted on a carriage and installed above the dosing system,
- a dosing system (7) (see details below),
- a mold-holder tray (8) controlled by a 36-position rotation device (see details below),
- a remelting unit (9) (see details below),
- a clamp tray (10) that ensures the mechanisms are transferred to the molds for the picking operation (see details below),
- a purge bin accessible through an access panel (11),
- a mold opening unit accessible through an access panel (12),
- a set of sockets for connecting the tank (13),
- a manual remolding system (14),
- an electrical cabinet (15),
- a tray for collecting condensates (16), attached under the filler machine.

The filler is connected to an external cooling unit (6) pour which feeds it with a cooling mixture of water and glycol.





17 Switch

PRINCIPLE OF USE

GENERAL

The lipstick filler uses a moving tank to melt the lipstick paste.

The dosing system allows lipsticks to be measured and poured.
The shape of the cast stick is obtained by cooling the mix inside a flexible mold.

Empty mechanisms are fed into the machine manually, and the cast sticks are inserted into these once they are completely solid.
The same operator unloads the filled mechanisms.

A nominal speed of 1,200 lipsticks/hour means cooling time is five minutes.

For each format, the machine must be loaded with:

- 140 flexible molds,
- four pairs of picking clamps,
- fifty portion cups adapted for the mechanism type,
- an opening system equipped with four opening modules.

DETAILED PRESENTATION

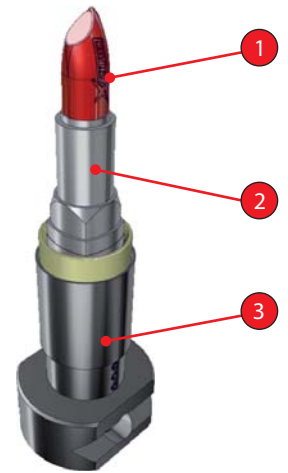
LIPSTICK

This lipstick is made up of the following components:

- the stick of lipstick (1), cast in a flexible mold, and then cooled
- a "mechanism" (2).

The operator loads the empty mechanisms on small pots (3) he then places on the conveyor. The sticks are automatically removed from their molds and inserted into the mechanisms. (Picking).

The operator collects then, at the conveyor outlet, the lipsticks thus assembled and placed in the receptacles.

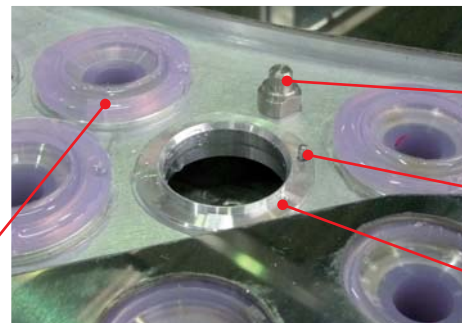
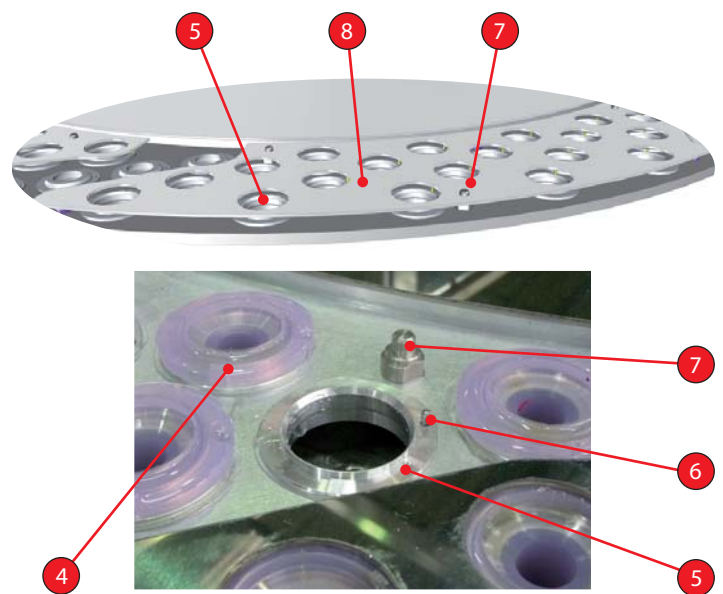
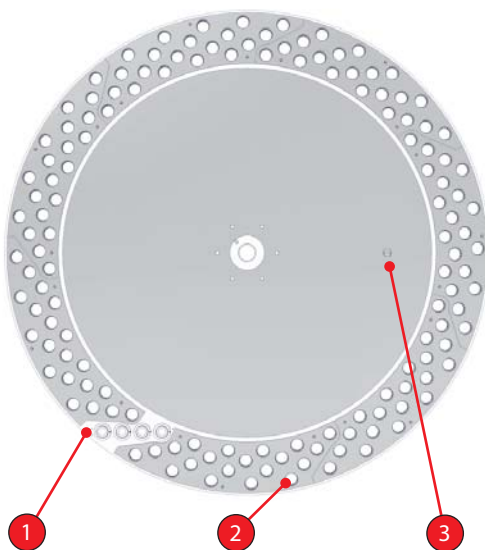


MOLD-HOLDER TRAY

The mold-holder tray provides mold transfer to different positions via a discontinuous rotation controlled by a 36-position indexer. The tray comprises:

- 140 locations (2) for installing the molds, distributed over 35 lines of four,
- a four-opening position (1) for purge and priming,
- a diet (3) for inserting the centering pin for adjusting the recasting position.

The molds (4) are placed inside rings (5). They are oriented by a pin (6). They are maintained in position by magnetic metal sheets (8) placed using positioning pins (7).

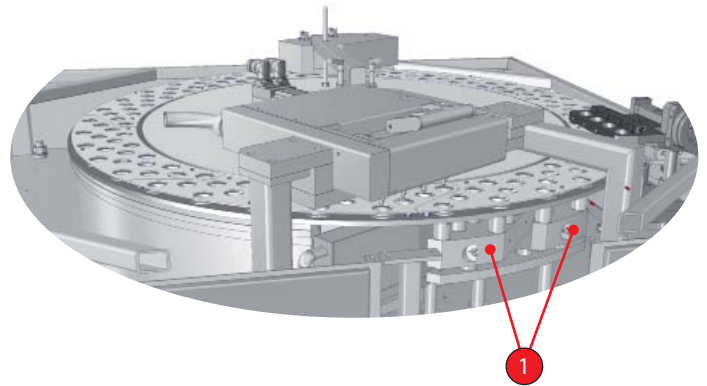


PREHEATING CONES

A mold preheating device is located underneath the mold-holder tray, in a zone located before the dosing station.

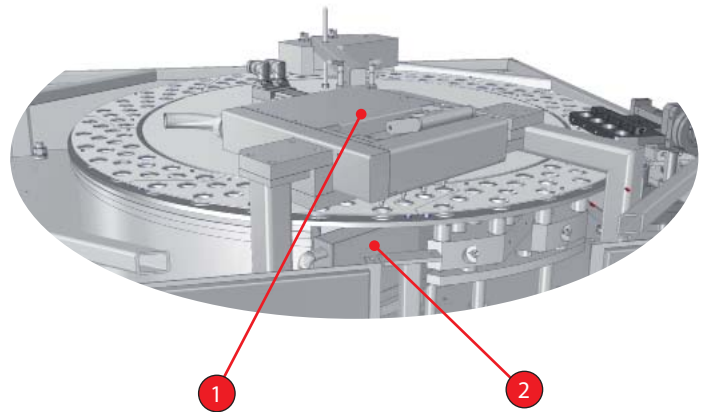
It consists of two blocks (1) of eight contact preheating cones. Before every tray rotation, they are brought to the lower position by means of a cylinder so as to let the plate rotate.

The preheating cones are suitable for the exterior shape of the molds.

**DOSING SYSTEM**

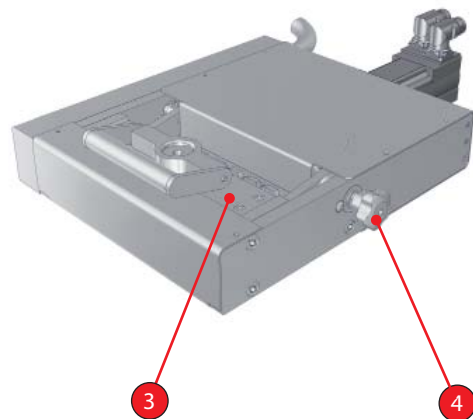
The dosing system (1) is located under the moving tank.

An extractable purge bin is housed under the dosing system (2).



The dosing system is mainly composed of the following:

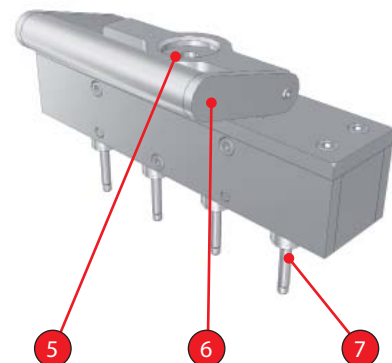
- an extractable dosing cassette (3)
- an unlocking system for the dosing cassette controlled by a knurled knob (4),
- a volume dosing system controlled by servomotor.



The dosing cassette gathers together all parts of the dosing system in contact with the product coming from the tank. Using several cassettes makes possible a quick change of colors and a cleaning as a background task.

The dosing cassette has:

- an input hole (5) for the product coming from the tank,
- a handle (6),
- four distribution spouts (7),
- four off-set spouts (if there is a problem with the weight distribution).



COOLING

After filling, the molds are cooled by the circulation of cold air in a chute located under the tray.

A cooling chamber equipped with an air/water exchanger and a fan ensure air circulation inside the chute, and allows calorie evacuation to the external cooling unit.

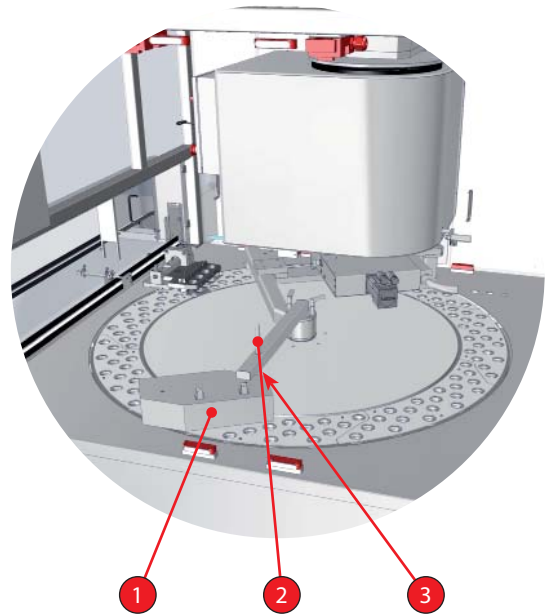
A tray is placed under the machine to collect the condensate that is mainly generated by the cooling chamber.

RE MELTING

A remelting unit (1), equipped with eight halogen lamps mounted on dishes, allows the surface of the lipstick to be smoothed while it is solidifying in order to improve its position in the mechanism.

Remelting is usually carried out in the middle of the cooling zone, when the stick surface is freezing, but its position can be modified according to the behavior of its bulk (see procedure for Adjusting the remelting position).

It is important that the remelting unit is located opposite a tray-stopper unit. For this reason, a centering pin (2) and a hole (3) are provided onto the tray for this adjustment.



PICKING

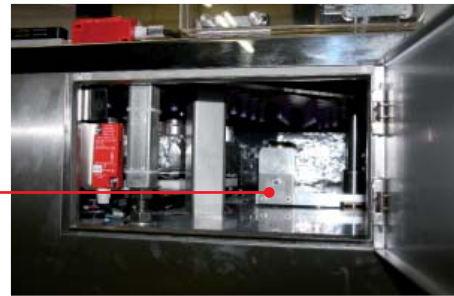
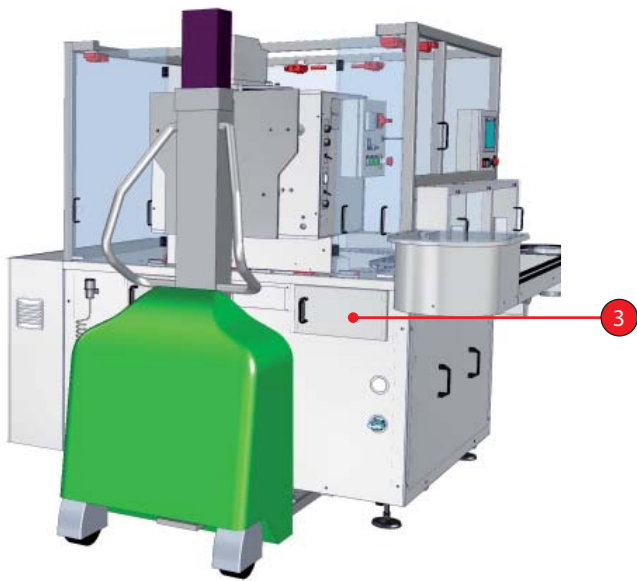
Opening unit

The opening unit (1) is located under the mold-holder tray at the picking unit. It is accessible by the opening of an access door (3) located on the right of the carriage.

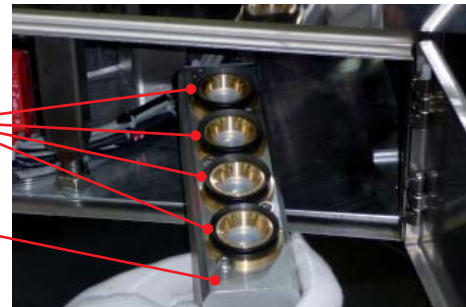
It has four opening modules (2) providing the mold opening during picking and whose main element is a membrane.

Mold opening takes place in two stages: the upper section of the cast stick is released to allow the mechanism to be inserted, while the lower section is maintained, then the whole cast stick is released to allow it to be extracted from the mold.

The opening unit moves vertically to release the molds and to allow the rotation of the mold-holder tray.



1



2

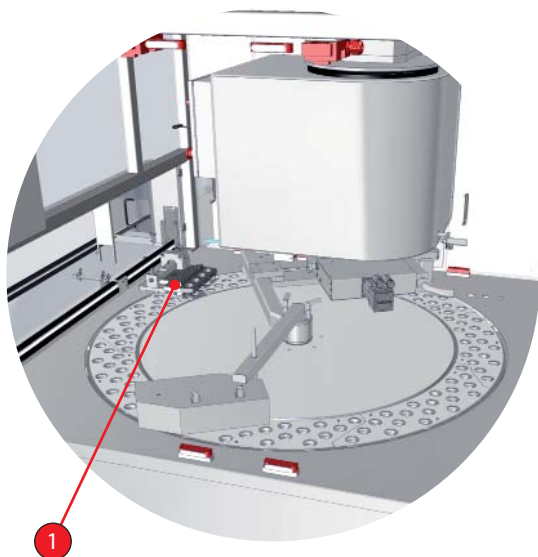
1

Clamp tray

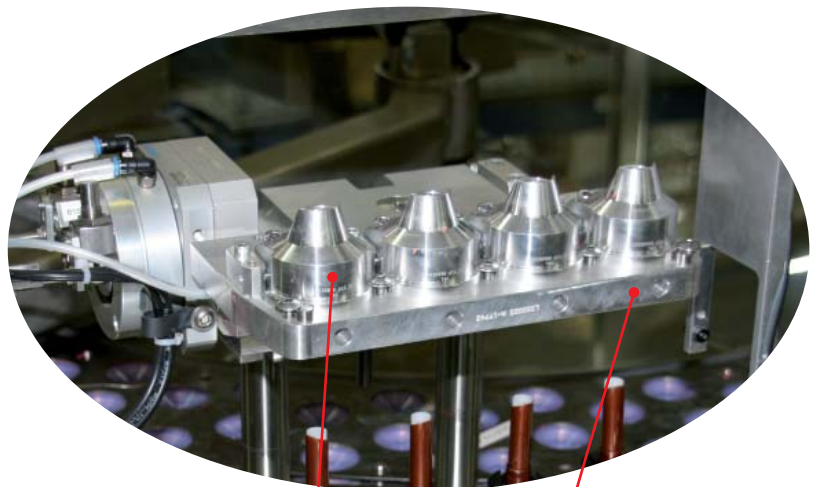
The clamp tray (1) has two movements: one of rotation and one of vertical translation.

It serves for gripping the empty mechanisms from the receptacles transported by the conveyor, for inserting the stick onto the mechanisms and for placing the finished products into the receptacles to be transported at the conveyor's outlet.

The clamp tray (1) has four pairs of clamps (2) according to the format.



1



2

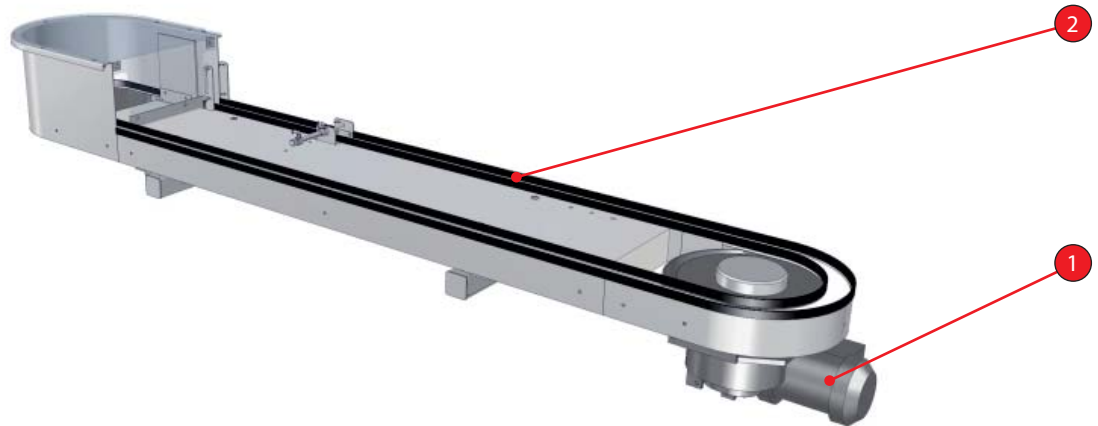
1

CONVEYOR

The conveyor is mainly composed of the following elements:

- a sliding system (1) for moving the receptacles with the mechanisms, and the finished products.
- a motor for driving the receptacles.

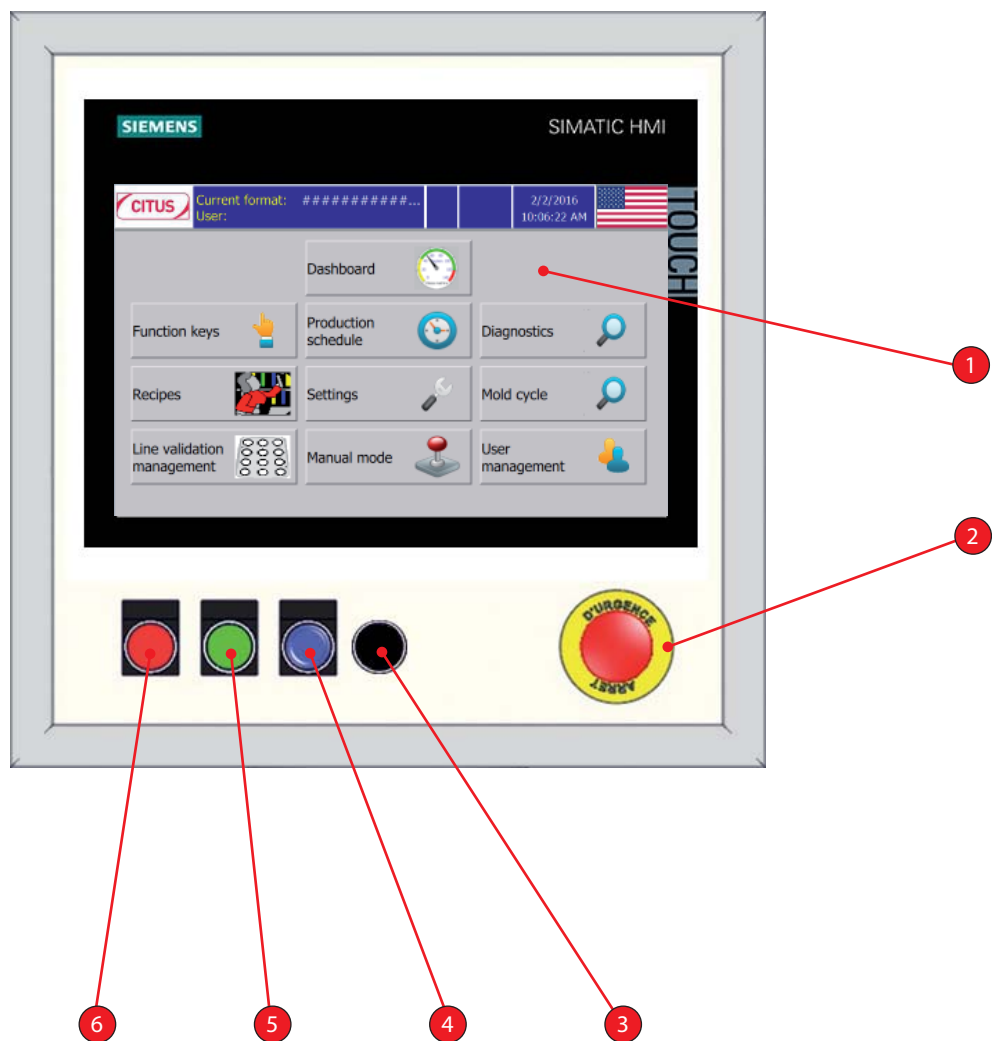
The conveyor can also be equipped with a control station for finished products, provided with a mirror, a screwing device for lipsticks, and an orientation module.



CONTROL CONSOLE

This is made up of the following elements:

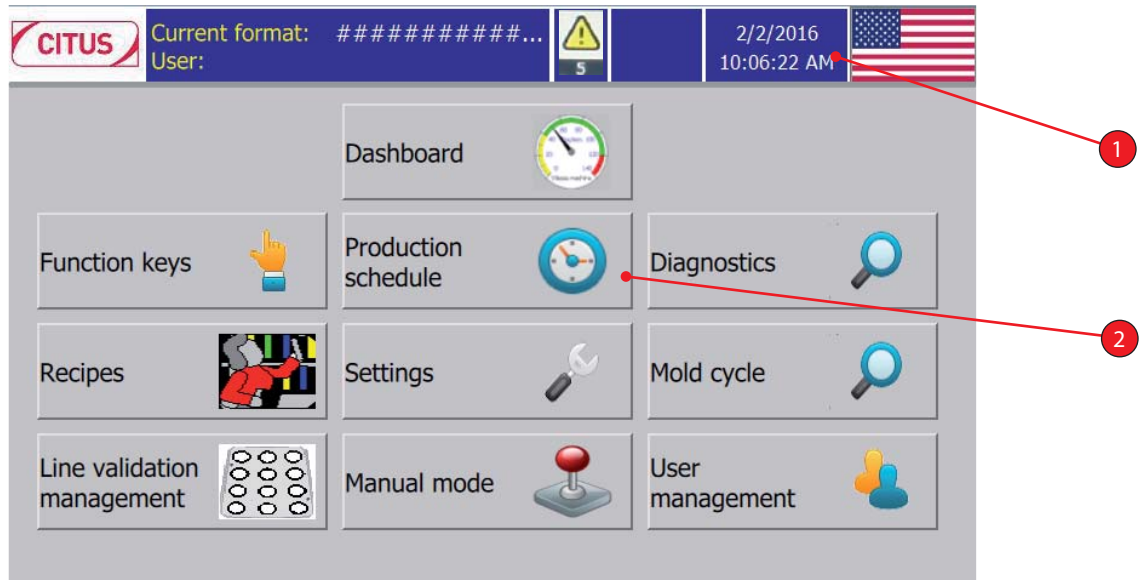
- a touchscreen (1) with touch-sensitive areas to browse through the different screens,
- an emergency stop button (2),
- an RJ45 socket (3),
- a cycle reset button (4),
- a startup button for the (5) filling machine,
- a normal stop button (6) for the filling machine.



TOUCHSCREEN

It is divided into a number of different display areas:

- the system bar (1) for viewing the current state of the machine, the user profile, the date and time, the display language,
- the main display area (2) for accessing the different screens of the functionalities.



The system tray and the navigation tray (except for the main menu) are displayed permanently, at the top and bottom of the screen, respectively.

NAVIGATING WITH THE TOUCHSCREEN

When the screen comes on, the welcome screen appears.

To go into a function, press the button desired:

Press the buttons at the bottom of the screen to browse from one screen to another:

-  "HOME PAGE",
-  "Back",
-  "Next".

MACHINE ALARMS



When machine alarms are generated (end of live o a mold set, machine in the preparation mode, etc.), this icon is displayed in the system bar.

Press this icon to display these alarms.

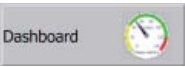





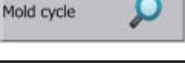
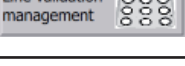
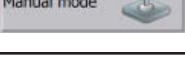

SYSTEM ALARMS



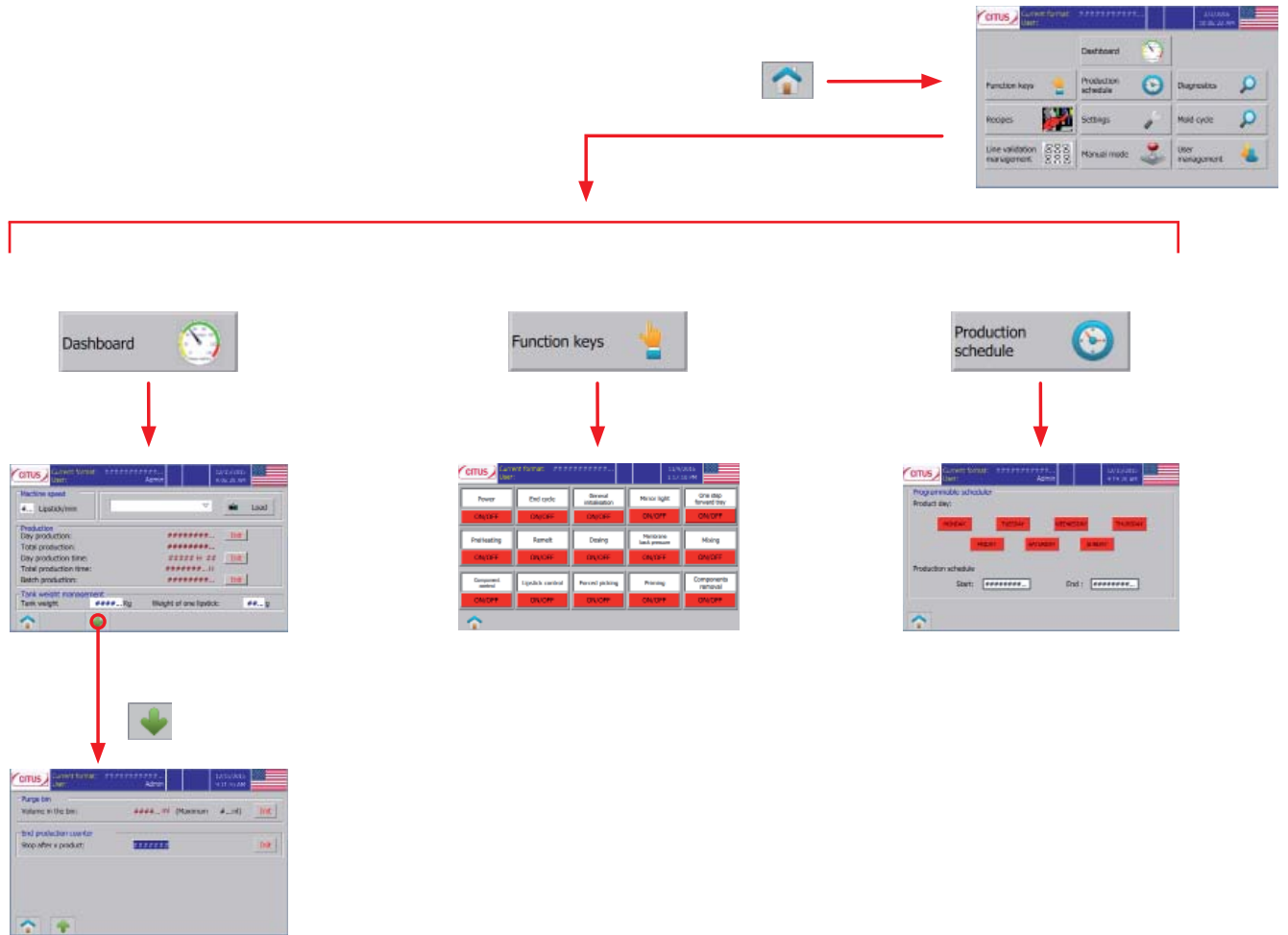
When the system detects anomalies in the system, this icon is displayed in the system bar.

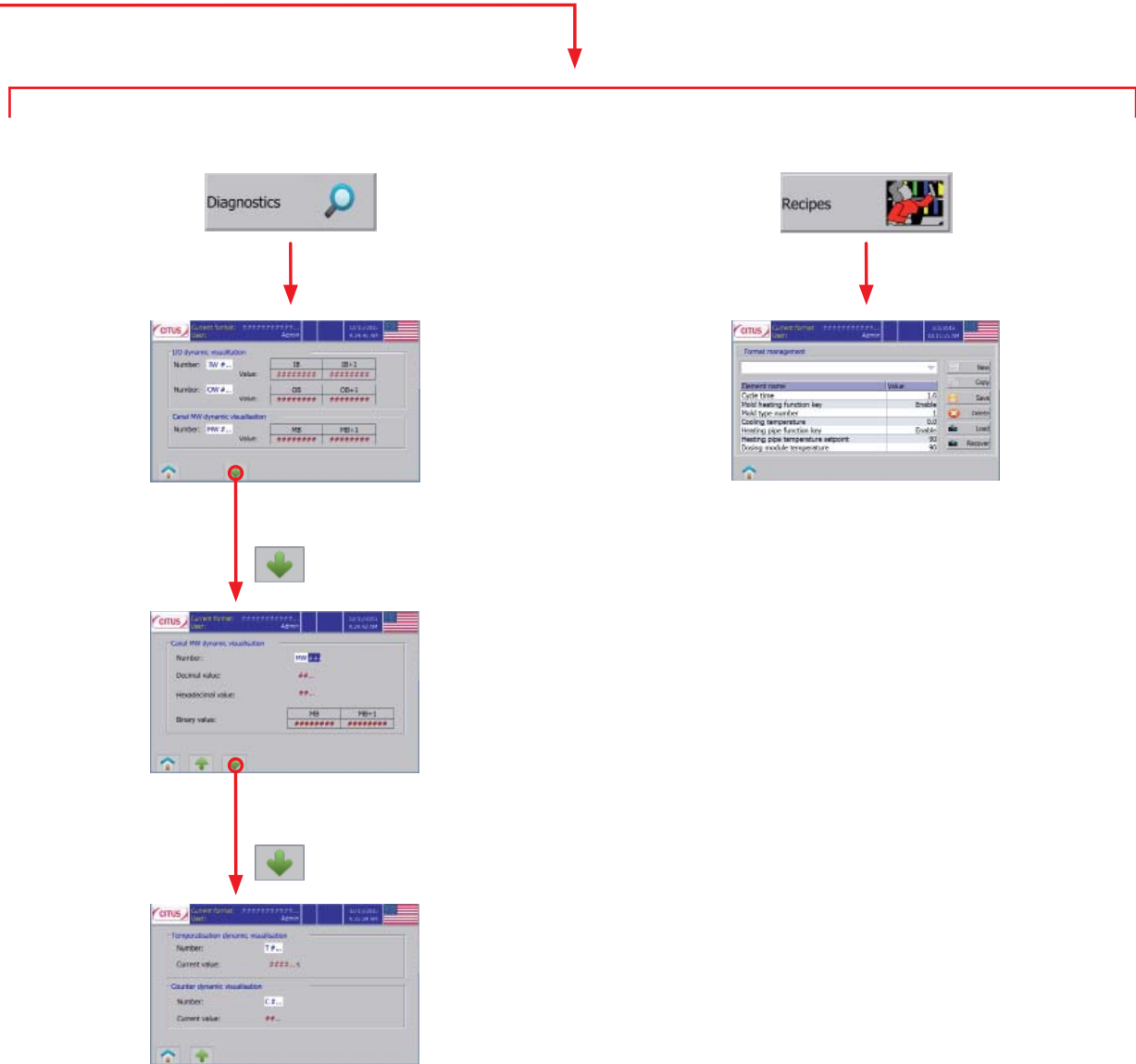
Press this icon to display the alarms for anomalies in the system.

LIST OF FUNCTIONS

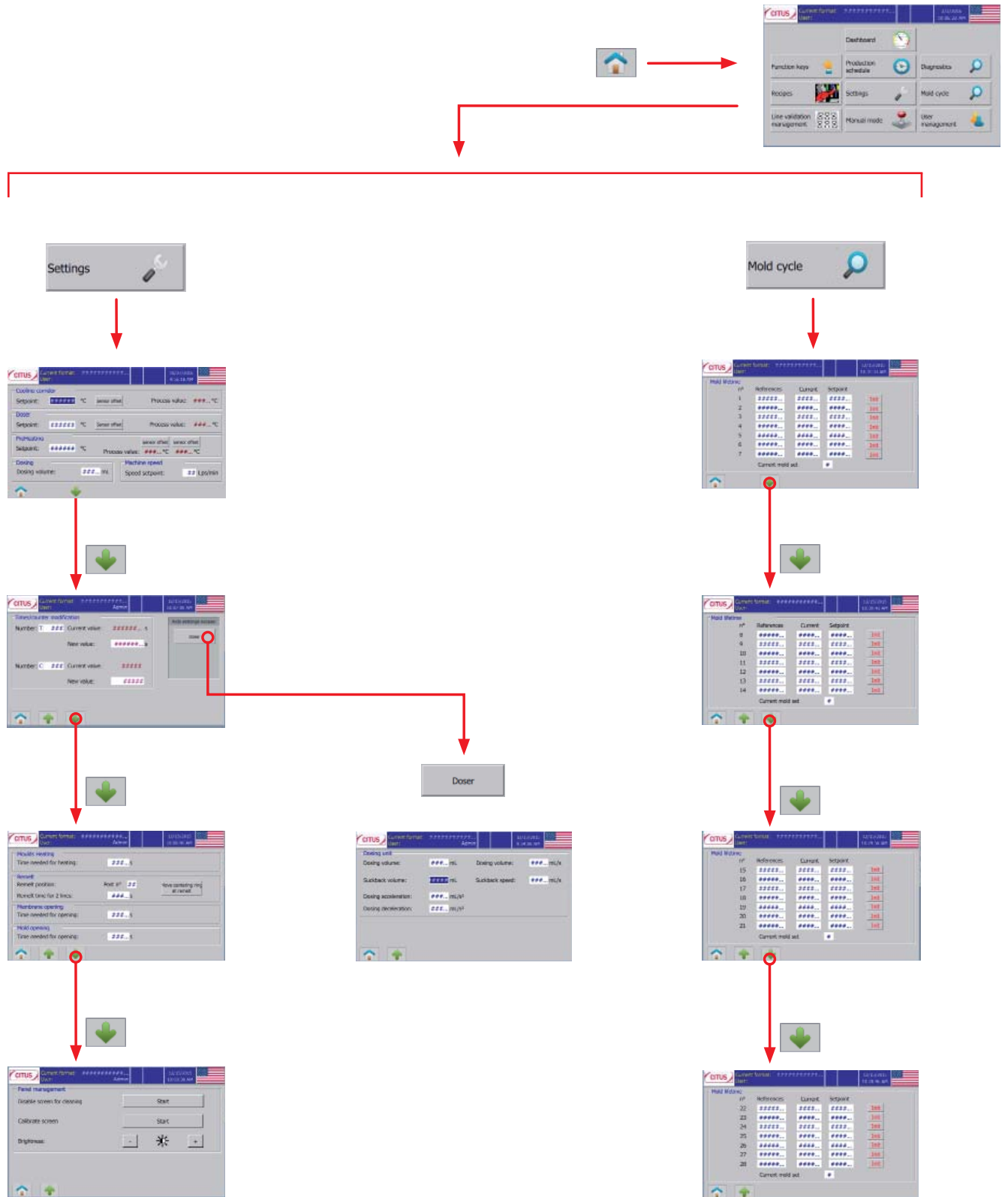
BUTTONS	FUNCTIONS
	Enables the machine production rate to be set, format modification, tank weight management and production figures view.
	Provides access to the screens for activating to the production functions.
	Opens the screen enabling the setting for deferred launch of the machine.
	Gives you access to the screens that enable you to see the exchanges (intakes/outlets) between the system and the sensors/actuators of the machine.
	Opens the screen enabling you to create and manage data about the functioning of the machine.
	Provides access to the screens allowing for the adjustment of each unit in the machine.
	Opens the screen enabling you to adjust the number of cycles (life-span) of the molds before they are replaced.
	Opens the screen for adjusting the line number of the molds to be cast.
	Provides access to the screens allowing for monitoring of each unit and actuator for the machine (diagnostic mode). This function is accessible only when the mold-holder tray is empty.
	Opens the screen that enables you to manage the users of the machine (names, passwords, rights).

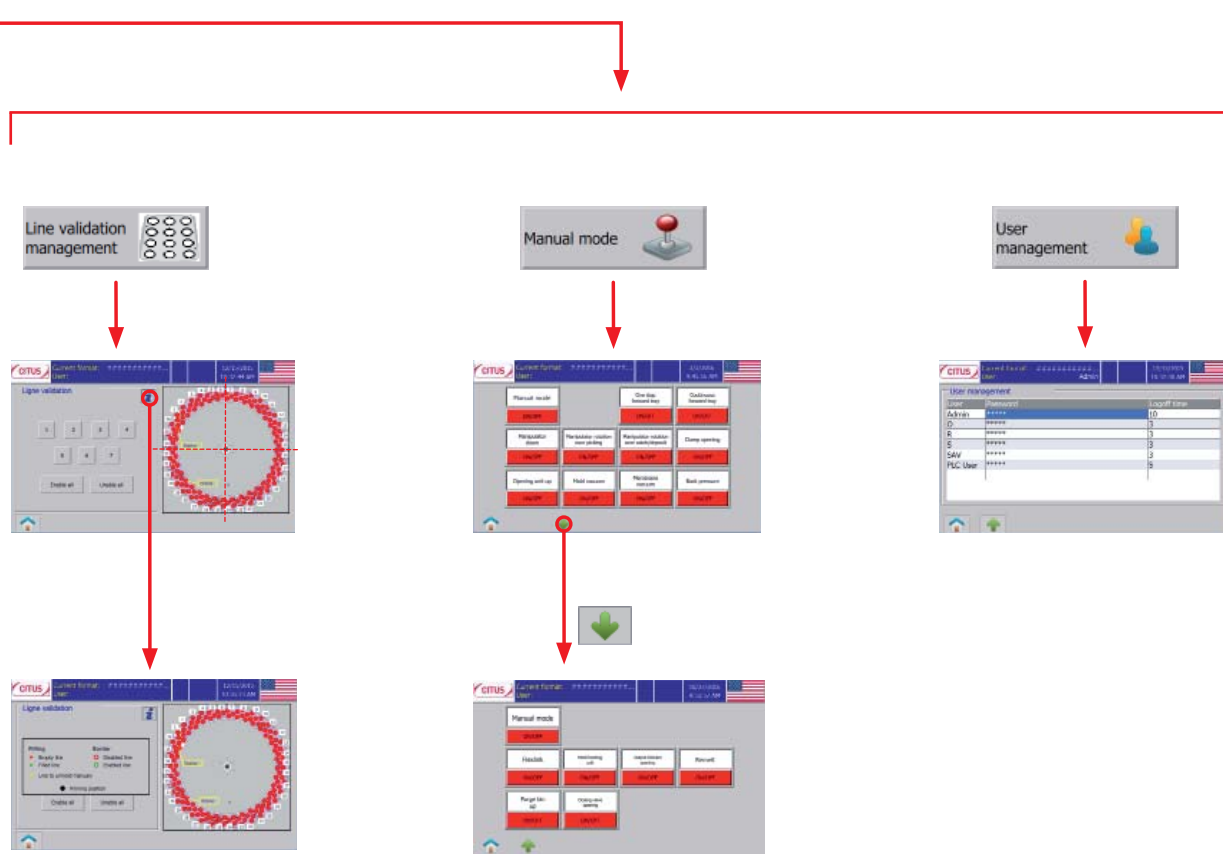
SCREEN VIEW TREE DIAGRAM





SCREEN VIEW TREE DIAGRAM (CNTD)

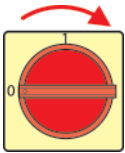




START-UP



- Check that the emergency stop button is released.



- Turn the external electrical cabinet breaker switch to position "1".



- The machine application starts and the homepage screen is displayed on the mobile control console.



- Press the "Startup" button from the "Console" screen. The "ON/OFF" key turns green. The machine is in operator running.

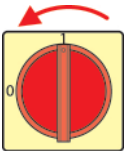
NORMAL STOP



- Press the "Console" button on the tactile screen, to open the "Console" screen.



- Press the "Startup" button, on the "Console" screen, to make the machine stop. The "ON/OFF" key turns red.



- Turn the external electrical cabinet breaker switch to position "0".

EMERGENCY STOP



- Press down on the emergency stop button: a machine alarm message appears and the "ON" button on the touchscreen turns red.

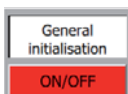
GENERAL RESETTING



- Press the "Console" button on the touchscreen to open the "Console" screen.



- Press the "Startup" button, on the "Console" screen, to make the machine stop. The "ON/OFF" key turns red.



- Press the "General initialization" key on the "Console" screen: the ON/OFF key turns green. AT the end of the initialization, the ON/OFF key of the "General initialization" button turns red.



Important: resetting is an option of last resort which requires a specific cycle restart procedure (used where the tray is emptied through forced picking).

PRIMING



- Check the tank/dosing machine assembly.
- Mount the purge bin.
- Go to the “Console” screen in the touchscreen.



- Press the “Priming” button. The “ON/OFF” key turns green.
- At the end of the priming sequence, pull out the purge bin and empty it.

MACHINE CYCLE



- Press the “Startup” button from the “Console” screen.
The “ON/OFF” key turns green.
The mold pre-heating and cooling device starts operating.



- Press the reset button.



- Go to the “Pallet line management” screen on the touchscreen and make sure that the pallets are selected.



- Go to the “Console” screen; the “Dosing” button should be selected in order to fill the molds.



- Press the start button of the machine.
The start button turns green.
The pre-heating, dosing, cooling, remelting and picking cycles are performed in a continuous manner.



- Access the “Dashboard” screen and conduct regular checks of the weight of the product remaining in the tank.



- The cycle can be stopped by pressing the “OFF” button of the machine.
The machine finishes the movement in progress and goes into standby.



- To bring production to a stop and by so doing demold all the lipsticks present on the tray, press the “Tray emptying” button.
The machine stop button changes to red and the “Preparation mode” message is displayed in the machine’s alarm messages.
 - By leaving the machine off but powered, provided it has been programmed, startup shall take place automatically at the time and on the day scheduled.

MANUAL DEMOLDING

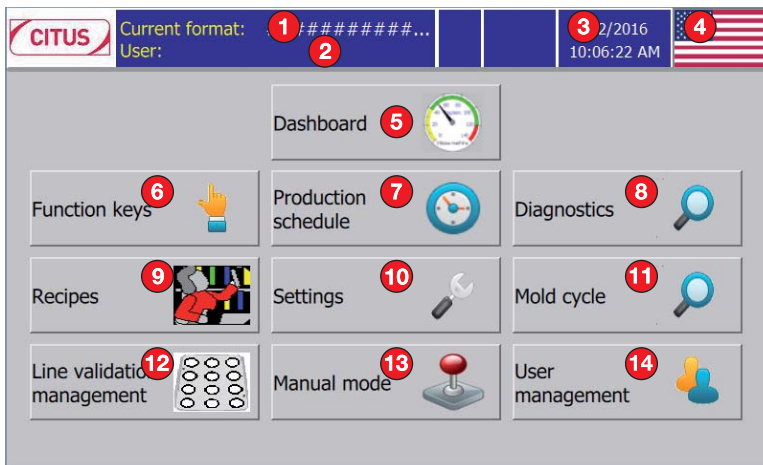
In certain conditions, the “Manual demolding” alarm message is displayed. Use then the device intended for this purpose to manually demold the lipsticks.



- In case of non-demolded lipsticks, the operator has to stop the cycle by pressing the machine stop button and wait for the end of the cycle.
- He can then carry out the manual demolding with a device intended for this purpose.

SCREENS

"HOME PAGE" SCREEN



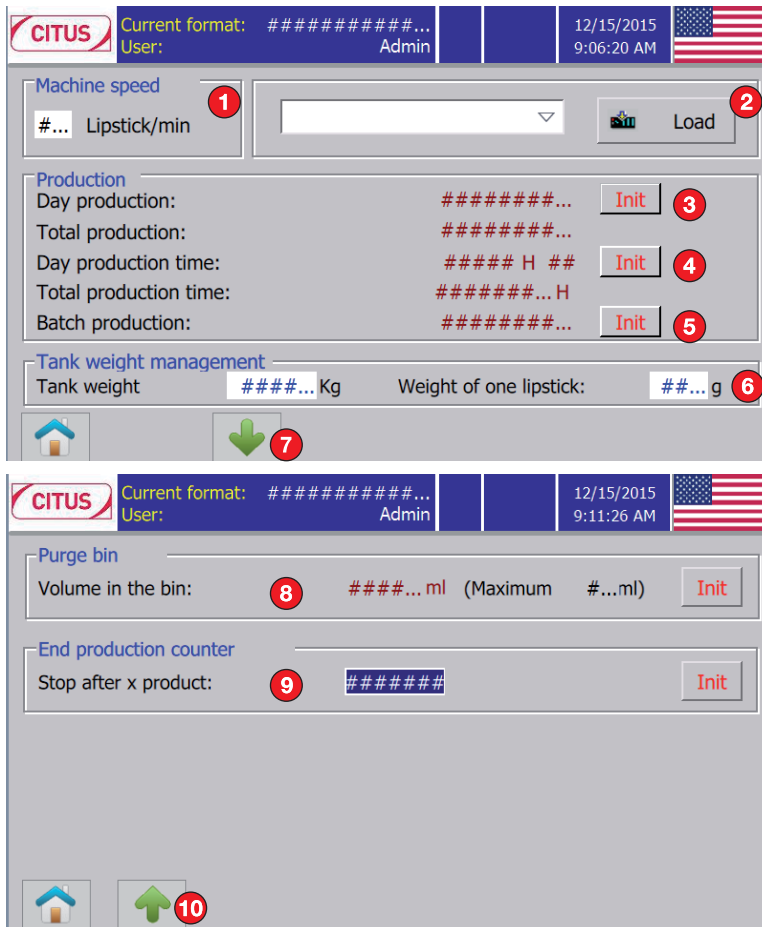
1. Machine status.
2. User profile used.
3. Current system date and time.
4. Display language selection.
5. Access to the "Dashboard" screen.
6. Access to the "Console" screens.
7. Access to the "Programmer" screens.
8. Access to the "Diagnostics" screen.
9. Access to the "Recipes" screen.
10. Access to "Settings" screens (requires a password).
11. Access to the "Mold cycle" screen.
12. Access to the "Pallet line management" screen.
13. Access to the "Manual mode" screen.
14. Access to the "User management" screen.

The "Home page" screen enables you to see all of the modes that are accessible on the machine.

It brings together, via the buttons, all of the machines functionalities: settings, diagnostic mode, management of recipes and users, and information data on the system.

To enter a screen, press the button associated with the function desired.

"DASHBOARD" SCREEN



The screenshot shows the CITUS 'DASHBOARD' screen. At the top, there is a header with the CITUS logo, 'Current format: #####...', 'User: Admin', the date '12/15/2015', and time '9:06:20 AM'. Below this, the screen is divided into several sections:

- Machine speed:** A field labeled '#... Lipstick/min' with a red circle '1' next to it, and a 'Load' button with a red circle '2'.
- Production:** A section with four rows of statistics: 'Day production: #####...', 'Total production: #####...', 'Day production time: ##### H ##', and 'Total production time: #####... H'. Each row has an 'Init' button with a red circle '3', '4', '5' respectively.
- Tank weight management:** A section with two input fields: 'Tank weight: ###... Kg' and 'Weight of one lipstick: #... g', with a red circle '6' next to the second field.
- Purge bin:** A section with an input field 'Volume in the bin: ###... ml (Maximum #...ml)' and an 'Init' button, with a red circle '8' next to the field.
- End production counter:** A section with an input field 'Stop after x product: #####' and an 'Init' button, with a red circle '9' next to the field.

Navigation buttons are located at the bottom of each section: a home icon, a green arrow (7), and another green arrow (10).

1. Production rate adjustment.
2. Selection of format type to load for production.
3. Counter for total number of demolded lipsticks with reset button.
4. Total machine operating time with reset button.
5. Counter for total batches of demolded lipsticks with reset button.
6. Recording of the weight of the paste contained in the tank, as well as of the weight of the paste contained in a lipstick.
7. Move to next screen.
8. Display of the purge bin volume, where the maximum sets of a machine alarm. This alarm is canceled by pressing the "RESET" key.
9. Setting of the number of products leading to the machine stop, with reset button.
10. Return to previous screen.

Access to this "Dashboard" screen is obtained by pressing the "Dashboard" button in the "Home page" screen.

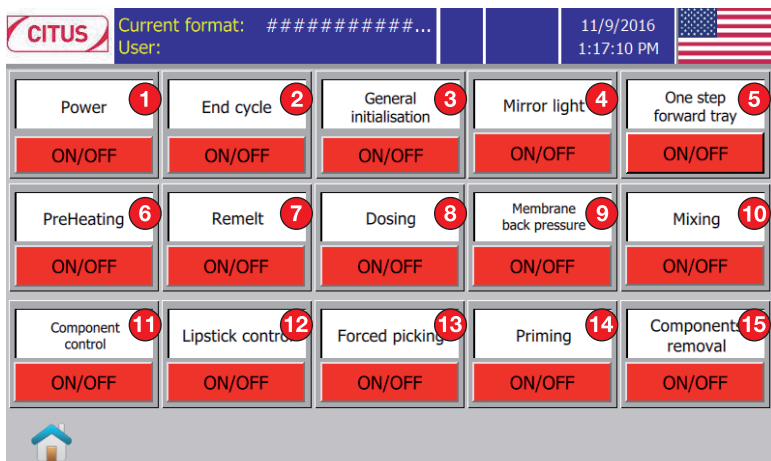
To modify the speed (1), press the "Machine speed" field to make the numeric keyboard appear.

To select the format selection (2), press on the arrow on the drop-down list, then select the format type and press on "Load".

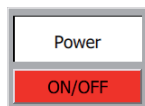
To enter the weight of the paste, press on one of the fields in the "Tank weight management" field (6) - this will make a numeric keyboard appear.

Once the setpoint value entered has been (9) reached, the machine will automatically move to the end of the cycle, with the tray emptied.

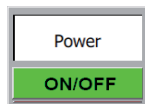
"CONSOLE" SCREEN



This screen enables you to access the different cycle preparation modes.



When the function is deactivated, the ON/OFF key is displayed in RED.



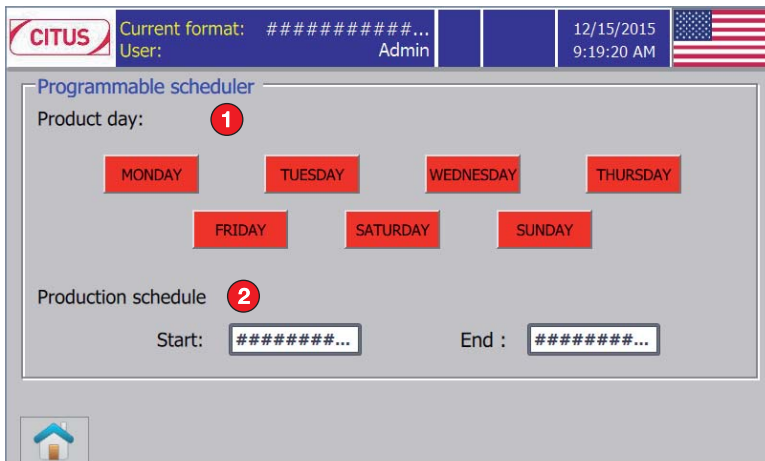
When the function is deactivated, the ON/OFF key is displayed in GREEN.



Important: resetting is an option of last resort which requires a specific cycle restart procedure (used where the tray is emptied through forced picking).

1. Startup of the machine (dosing machine heater and cooling unit).
2. Enabling/disabling of the tray emptying.
3. Machine initialization.
4. Mirror light.
5. Motion of the tray of one lipstick line.
6. Enabling/disabling of mold heating.
7. Enabling/disabling of the lipstick remelting system.
8. Enabling/disabling of dosing.
9. Execution of membrane back pressure.
10. Enabling/disabling of the tank mixing.
11. Confirm that the mechanisms are present in the receptacles at loading.
12. Checking the presence of lipsticks at the machine outlet.
13. Forced demolding of the lipsticks remaining on the rotating tray.
14. Enabling/disabling of the doser priming.
15. Opening of the pickers for removal of the receptacles into the machine.

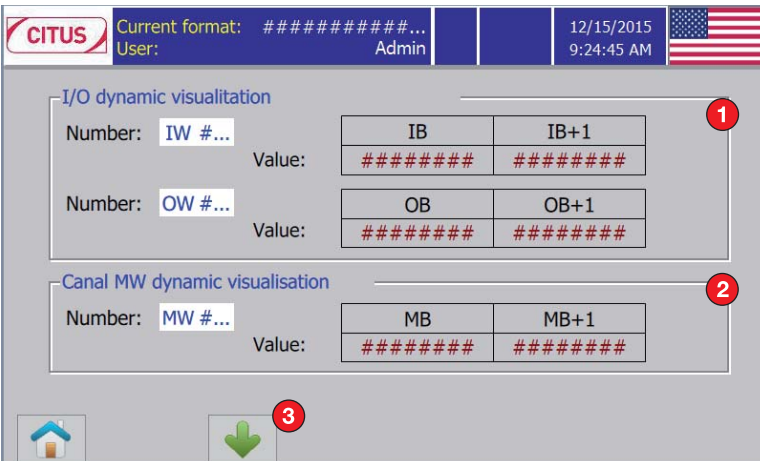
"PROGRAMMER" SCREEN



1. Selection of the days of the week.
2. Fields for changing the launch time and stopping time.

This screen enables you to program the time of automatic launch and stopping of the machine, based on the days of the week selected. The machine does not have to be in cycle in order for it to be brought to a stop. To change the time (2), press on the field; a numeric keyboard will appear.

"DIAGNOSTICS 1" SCREEN



Current format: #####...
User: Admin

12/15/2015
9:24:45 AM

I/O dynamic visualisation

Number: IW #... Value:

IB	IB+1
#####	#####

Number: OW #... Value:

OB	OB+1
#####	#####

Canal MW dynamic visualisation

Number: MW #... Value:

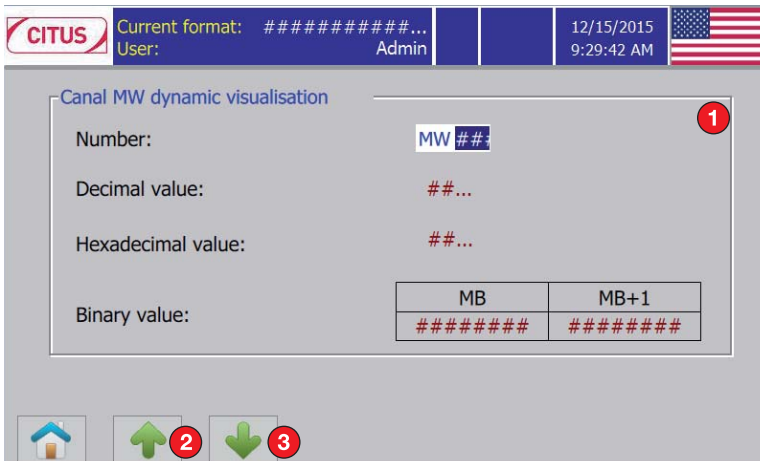
MB	MB+1
#####	#####

Home icon, Green down arrow icon (3), Red circle (1)

1. Dynamic visualization of the machine sensor inputs/outputs.
2. Dynamic visualization of the state of the internal relays.
3. Move to next screen.

This screen enables the status of inputs and outputs between the machine and the system to be displayed. It enables a more detailed diagnostic to be performed in order to resolve machine faults.

"DIAGNOSTICS 2" SCREEN



Current format: #####...
User: Admin

12/15/2015
9:29:42 AM

Canal MW dynamic visualisation

Number: MW #...

Decimal value: #...

Hexadecimal value: #...

Binary value:

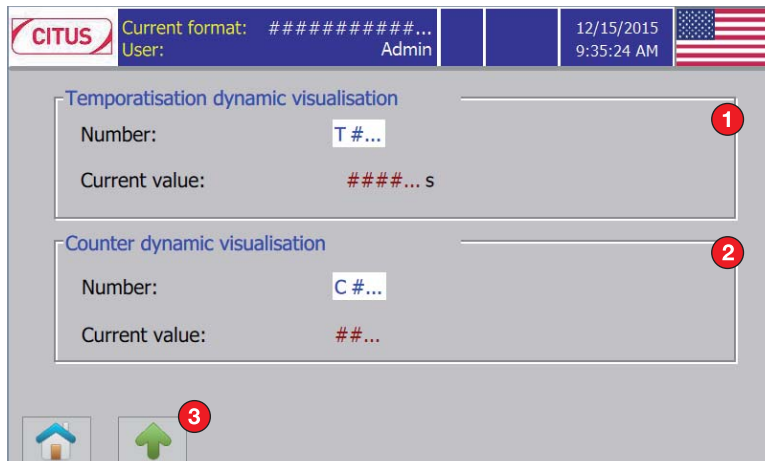
MB	MB+1
#####	#####

Home icon, Green up arrow icon (2), Green down arrow icon (3), Red circle (1)

1. Dynamic visualization of the state of the internal relays.
2. Return to previous screen.
3. Move to next screen.

This screen enables the status of inputs and outputs between the machine and the system to be displayed.

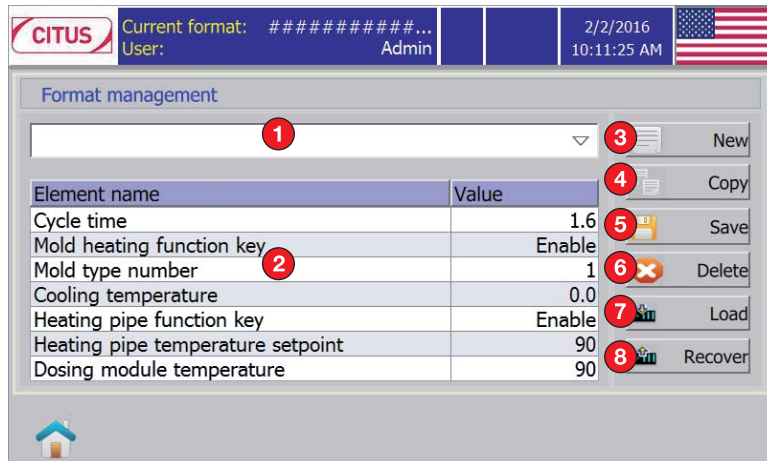
"DIAGNOSTICS 3" SCREEN



1. Dynamic visualization of the timers for the machine's inputs/outputs.
2. Dynamic visualization of the counters for the machine's inputs/outputs.
3. Return to previous screen.

This screen enables you to see the states of the timers and counters for the inputs and outputs, between the machine and the system.

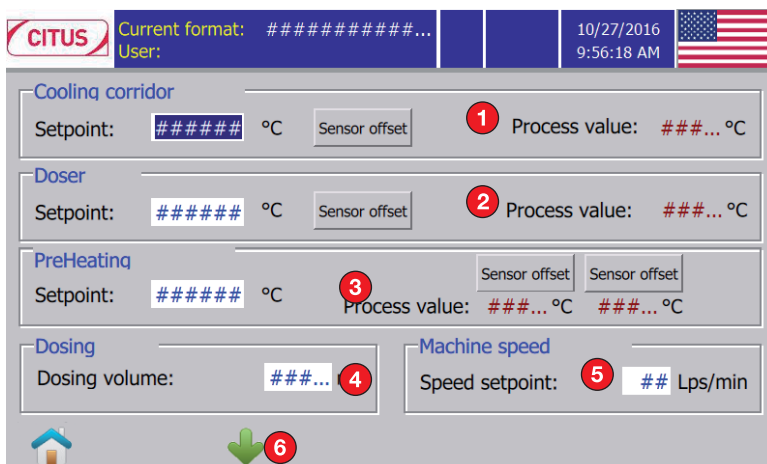
"RECIPES" SCREEN



1. Access to the list of recipe files already created.
2. List of parameters for the recipe file selected.
3. Creation of a new recipe file.
4. Copy of an existing recipe file.
5. Saving:
 - of a new file
 - of the changes to the setting parameters for the recipe file used.
6. Deletion of a recipe file.
7. Loading the recipe file selected in the machine system.
8. Recovery of the recipe file contained in the system, with the machine settings used in the "Settings" screens.

This screen enables you to access the settings parameters of the machine component in the recipe file selected. To alter a parameter for a recipe file displayed in the list (2), press on one of the fields; a numeric keyboard will appear. To save the changes you have made, press the button (5). To change the recipe file, press the button (7). To activate another recipe, the machine should not be in cycle.

"SETTINGS 1" SCREEN



1. Setting the cooling temperature setpoint value for the molds, and the offset of the temperature sensor.
2. Setting the cooling temperature setpoint value for the doser and the offset of the temperature sensor.
3. Setting the heating temperature setpoint value for the molds, and the offset of the temperature sensors.
4. Setting of the dosing volume.
5. Setting of the machine speed.
6. Move to next screen.

This screen enables you to access the settings for:

- the temperatures for the cooling feed system for molds, and for the mold heating,
- the dosing volume, and the machine speed.

"SETTINGS 2" SCREEN

The screenshot shows the 'SETTINGS 2' screen with a header bar containing the CITUS logo, current format, user (Admin), date (12/15/2015), time (10:07:00 AM), and a US flag. The main content area is titled 'Timer/counter modification' and contains two sections. The first section is for 'Number: T' with a 'Current value' and 'New value' field, both marked with a red circle '1'. The second section is for 'Number: C' with a 'Current value' and 'New value' field, both marked with a red circle '2'. To the right, there is an 'Axis settings access:' section with a 'Doser' button marked with a red circle '3'. At the bottom, there are three navigation icons: a home icon, an up arrow marked with a red circle '4', and a down arrow marked with a red circle '5'.

1. Modification of timeouts the machine sensors.
2. Modification of counters on the machine sensors.
3. Access to the "Dosage settings" screen (see "Dosage settings" below).
4. Return to previous screen.
5. Go to the next screen (see "Setting 3").



Important: changes to the timer and counter settings may disrupt the machine operation.

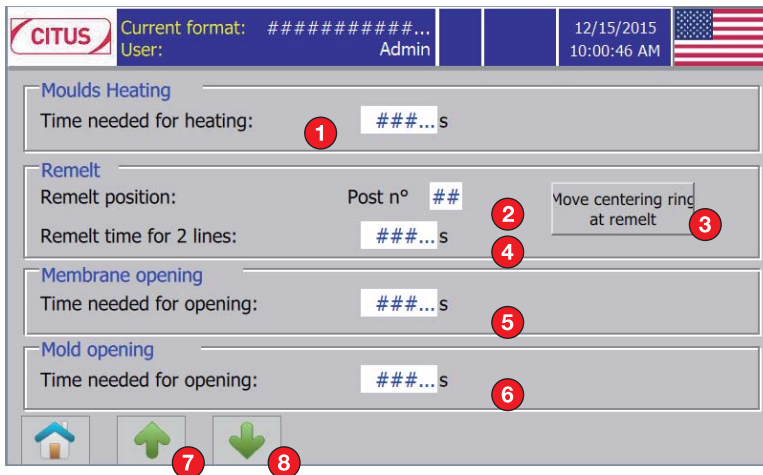
"DOSING SETTING" SCREEN

The screenshot shows the 'DOSING SETTING' screen with a header bar containing the CITUS logo, current format, user (Admin), date (12/15/2015), time (9:54:00 AM), and a US flag. The main content area is titled 'Dosing unit' and contains four rows of settings. Each row has a red circle number (1-4) next to the label and a red circle number (5-6) next to the value field. The settings are: 'Dosing volume: 1' with value '###... mL' (5), 'Suckback volume: 2' with value '###... mL', 'Dosing acceleration: 3' with value '###... mL/s²', and 'Dosing deceleration: 4' with value '###... mL/s²'. At the bottom, there are two navigation icons: a home icon and an up arrow.

1. Setting the volume to be distributed by the filling spouts.
2. Setting the suction volume of the drop.
3. Setting the flow acceleration for the paste through the spouts.
4. Setting the flow deceleration for the paste through the spouts.
5. Setting the speed at which the paste flows through the spouts.
6. Setting the suction speed of the drop.
7. Return to previous screen.

This screen enables you to access the settings for the doser (dosing).

"SETTINGS 3" SCREEN

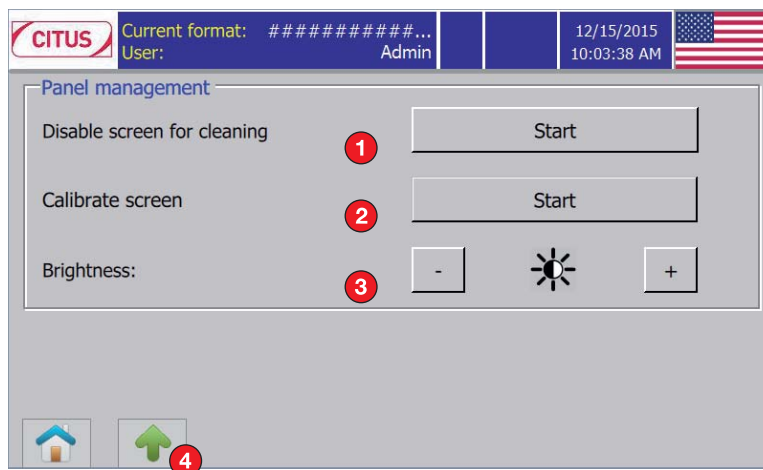


1. Setting the mold heating duration.
2. Setting the position of the remelting arm.
3. Button for validating the current position corresponding to the selected position of the remelting arm (3).
4. Setting the exposure time for remelting.
5. Setting the time for release, by vacuum, of the membrane.
6. Setting the time for release, by vacuum, of the mold on the stick.
7. Return to previous screen.
8. Move to next screen.

This screen enables you to access the settings for:

- the duration of mold heating,
- the remelting of lipsticks,
- the opening time of the membrane and of the molds.

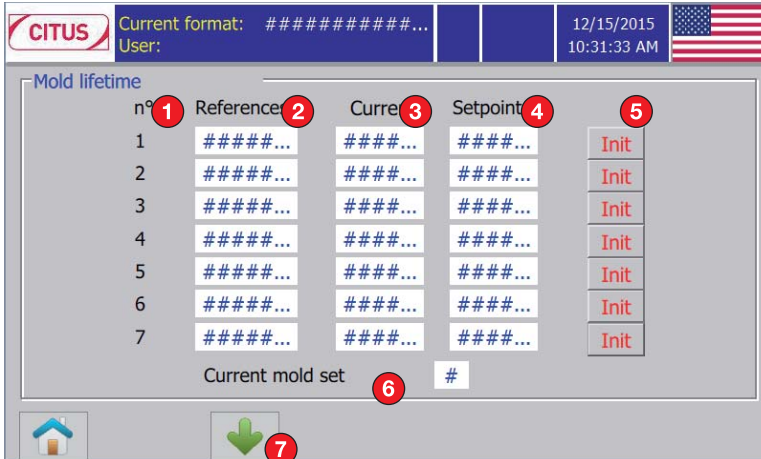
"SETTINGS 4" SCREEN



1. Enabling/disabling of the touchscreen.
2. Calibration of the touchscreen.
3. Setting the brightness of the touchscreen.
4. Return to previous screen.

This screen enables you to access the settings for the touchscreen. To clean the screen, press the button (1) to deactivate it.

"MOLD CYCLE 1" SCREEN



n°	Reference	Current	Setpoint	
1	#####...	####...	####...	Init
2	#####...	####...	####...	Init
3	#####...	####...	####...	Init
4	#####...	####...	####...	Init
5	#####...	####...	####...	Init
6	#####...	####...	####...	Init
7	#####...	####...	####...	Init

Current mold set #

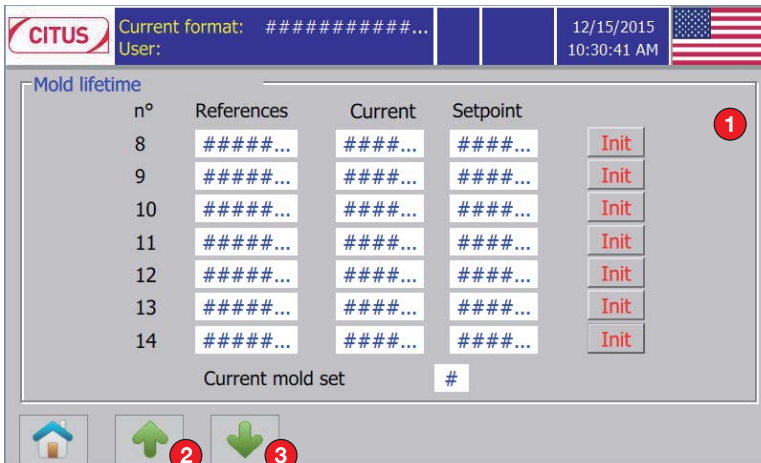
1. Number of the mold set (1 to 7).
2. Reference number for the mold set.
3. Current number of cycles for the mold set.
4. Value of the number of cycles before replacing the molds of the mold set.
5. Reset button and setting of the number of cycles before replacing the molds of the mold set.
6. Mold set under operation.
7. Move to next screen.

This screen enables you to set for the number of cycles before replacing each set of molds.

The number of the mold set (1) appears on the "Recipes" screen, in the "Recipe" setting files.

When the lifetime cycle of molds is reached, a machine alarm message is displayed. It indicates that the setpoint value defined for the current set is reached.

"MOLD CYCLE 2" SCREEN

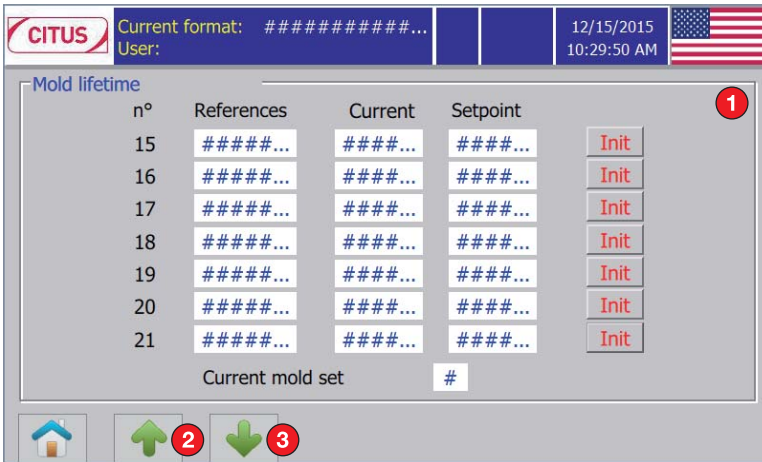


n°	References	Current	Setpoint	
8	#####...	####...	####...	Init
9	#####...	####...	####...	Init
10	#####...	####...	####...	Init
11	#####...	####...	####...	Init
12	#####...	####...	####...	Init
13	#####...	####...	####...	Init
14	#####...	####...	####...	Init

Current mold set #

1. Same screen as the previous screen for the mold sets (8 to 14).
2. Move to next screen.
3. Return to previous screen.

"MOLD CYCLE 3" SCREEN

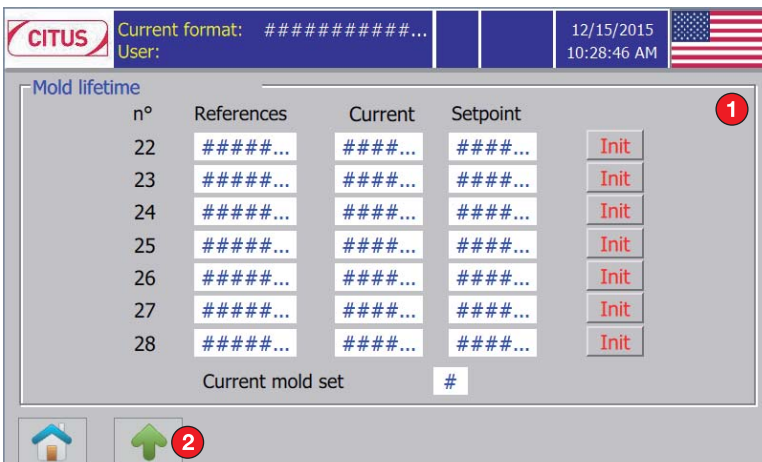


n°	References	Current	Setpoint	
15	#####...	#####...	#####...	Init
16	#####...	#####...	#####...	Init
17	#####...	#####...	#####...	Init
18	#####...	#####...	#####...	Init
19	#####...	#####...	#####...	Init
20	#####...	#####...	#####...	Init
21	#####...	#####...	#####...	Init

Current mold set #

1. Same screen as the previous screen for the mold sets (15 to 21).
2. Move to next screen.
3. Return to previous screen.

"MOLD CYCLE 4" SCREEN

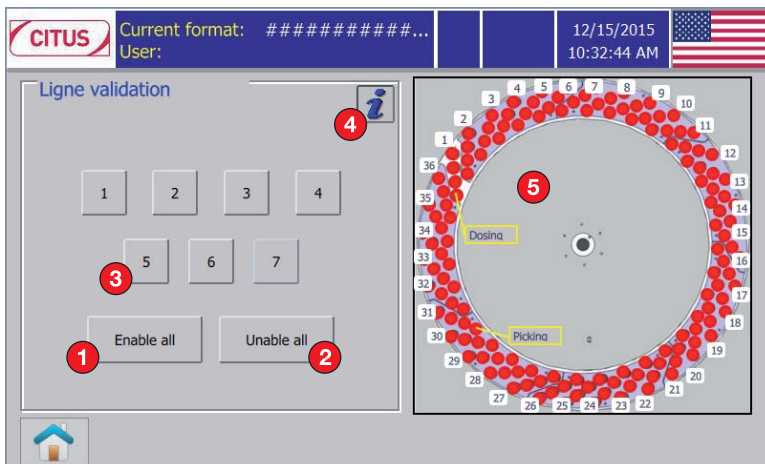


n°	References	Current	Setpoint	
22	#####...	#####...	#####...	Init
23	#####...	#####...	#####...	Init
24	#####...	#####...	#####...	Init
25	#####...	#####...	#####...	Init
26	#####...	#####...	#####...	Init
27	#####...	#####...	#####...	Init
28	#####...	#####...	#####...	Init

Current mold set #

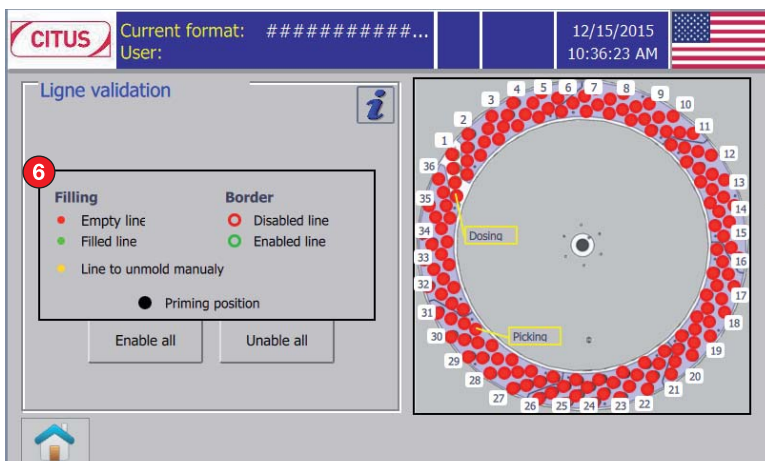
1. Same screen as the previous screen for the mold sets (22 to 28).
2. Return to previous screen.

“PALLET LINE MANAGEMENT” SCREEN



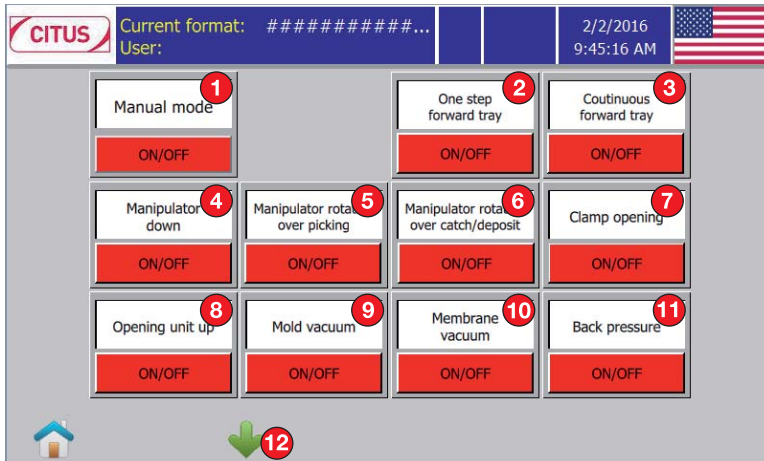
1. Enabling of all tray lines.
2. Disabling of all tray lines.
3. Enabling/disabling of a specific pallet (5).
4. Display of an information zone on the color codes relating to line states (6).
5. Zone for selecting the pallets per dial.

This screen enables you to confirm pallets from 1 to 7 (lines 1 to 36).
E.g., pressing the key (3) validates or invalidates a specific pallet.
Key (1) enables you to select or enable all of the pallets at the same time.
Key (2) enables you to select or disable all of the pallets at the same time.



6. Display of the meaning on the color codes relating to line states.

"MANUAL MODE" SCREEN



1. Enabling/disabling of Manual mode.
2. Enabling/disabling the one-step forward movement of the tray.
3. Enabling/disabling the continuous forward movement of the tray.
4. Enabling/disabling of the clamp tray lowering.
5. Enabling/disabling of the clamp tray rotation in the picking position.
6. Enabling/disabling of the clamp tray rotation in the "gripping/placing" position.
7. Enabling/disabling of the opening of clamps.
8. Enabling/disabling the "opening station" raising.
9. Enabling/disabling of the opening of molds.
10. Enabling/disabling of the opening of membranes.
11. Application of membrane back pressure.
12. Move to next screen.

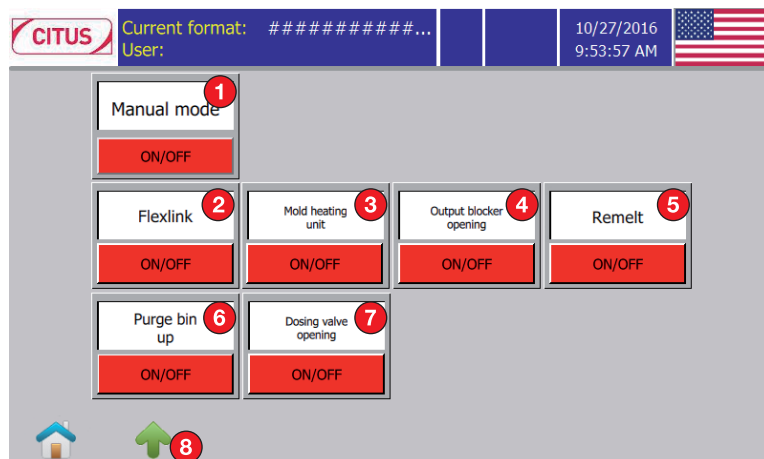
This screen enables you to test, on empty, a production cycle for a new mechanism.

It enables you to set the settings defined in the other screens, one by one, for this new mechanism.

To enable the settings mode, press on the "Manual mode" button.

To modify a value, go to the "Settings" screens.

"MANUAL MODE 2" SCREEN



1. Enabling/disabling of Manual mode.
2. Enabling/disabling of the conveyor.
3. Raise/lower the mold heating unit.
4. Opening/closing the output blocker.
5. Enabling/disabling of the lipstick remelting station.
6. Raising/lowering the of the purge bin unit.
7. Opening/closing the dosing valve.
8. Return to previous screen.

"USER MANAGEMENT" SCREEN



Current format: #####...
User: Admin

12/15/2015
10:42:30 AM

User managemen **1**

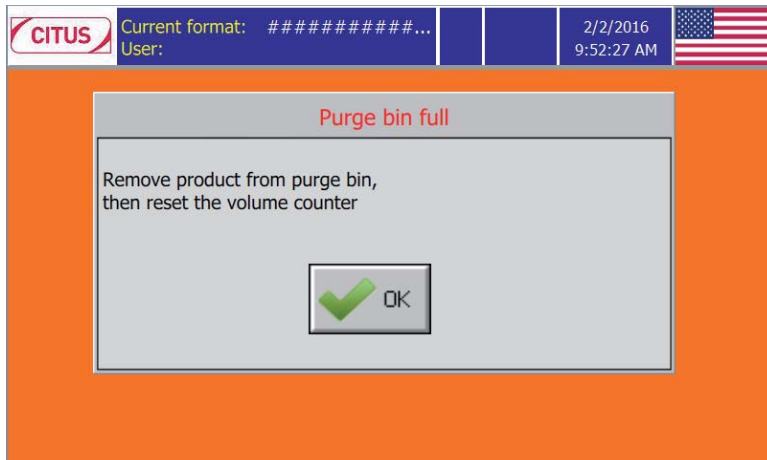
User	Password	Logoff time
Admin	*****	10
O	*****	3
R	*****	3
S	*****	3
SAV	*****	3
PLC User	*****	5

1. List of registered users of the machine.

This screen enables you to create and manage the users of the machine.

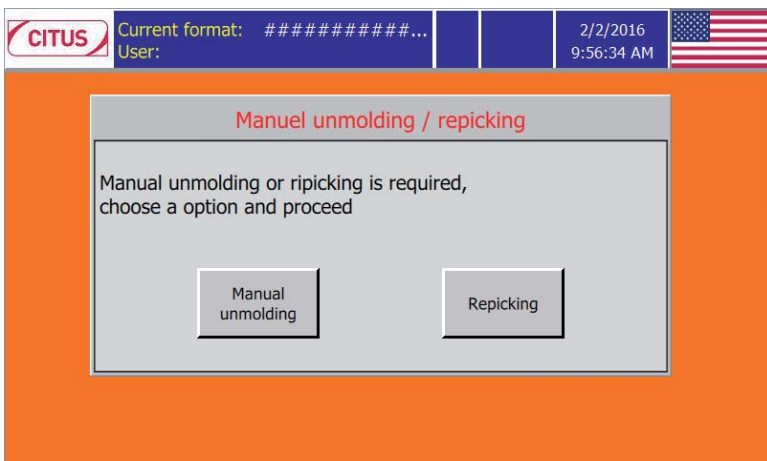
ALARMS IN USE

"PURGE BIN FULL"



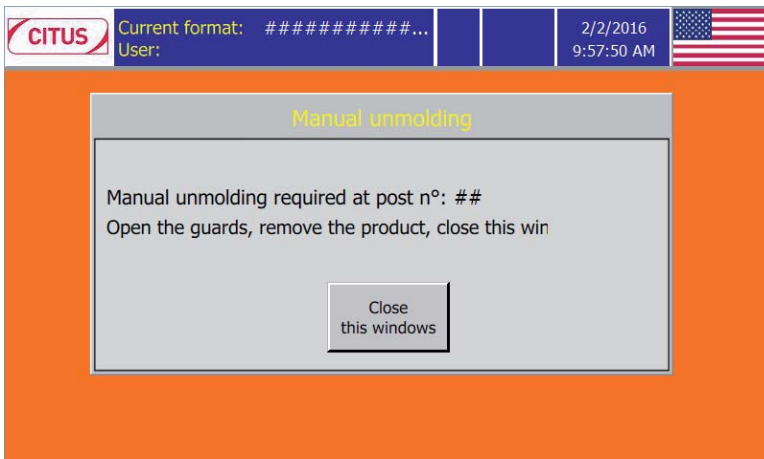
The purge bin is full. Empty the purge bin, and then reset the purge bin counter ("Dashboard" screen).

"MANUAL DEMOLDING / REPICKING"



This alarm message requires that the operator carries out a manual demolding or a repicking.

“MANUAL DEMOLDING”



This alarm message requires that the operator carries out a manual demolding at the indicated position.

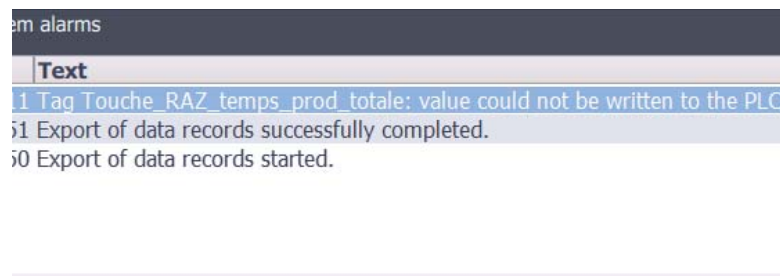
“SYSTEM ALARMS” AND “MACHINE ALARMS”

When the system detects anomalies or when the information about the machine operation are available, an icon is displayed at the top of the screen.



5

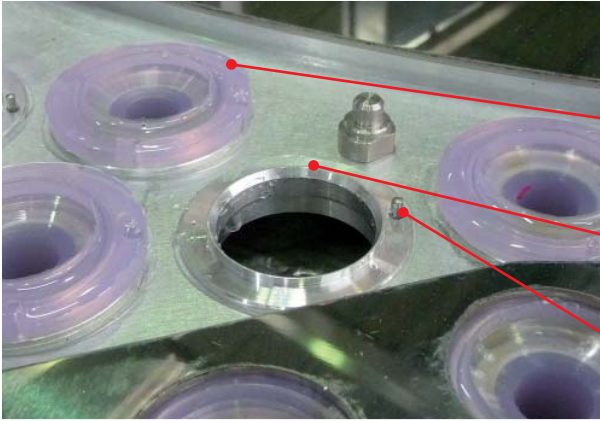
Pressing this icon displays in a window the system and machine alarm messages.



MOLD REPLACEMENT

The molds (A) are kept on the rotating tray by magnetic sheets.

A ring (B), fixed to the tray, keeps them in position, and a pin (C) maintains their orientation.

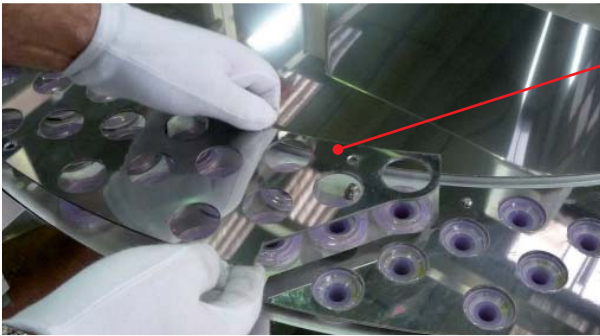


This operation must be performed by a qualified operator.

A

B

C



D

- Before replacing the molds, go to the "Console" screen on the touchscreen and press "Startup".
- Press the emergency stop button to secure access to the rotating tray.
- Remove sheet (D) and extract the old molds (A).
- Replacer the new molds (A) at their location making sure the direction is aligned with the pin (B).

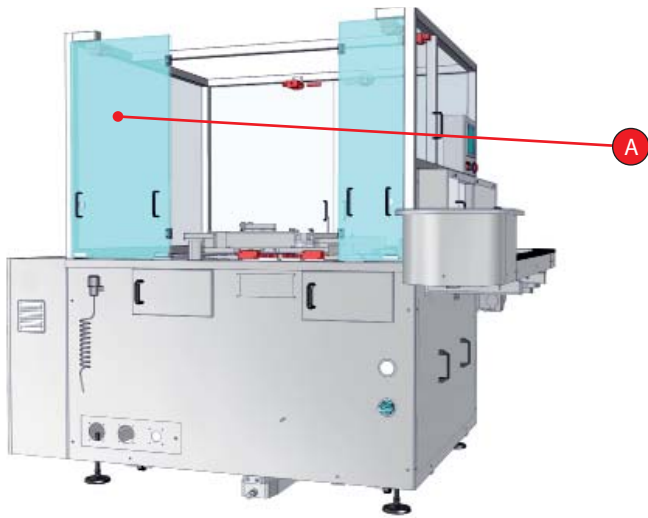


Most of the molds have two holes, making it possible to choose between two directions.

- Put back sheets (D) using positioning pins.

INSTALLING THE TANK

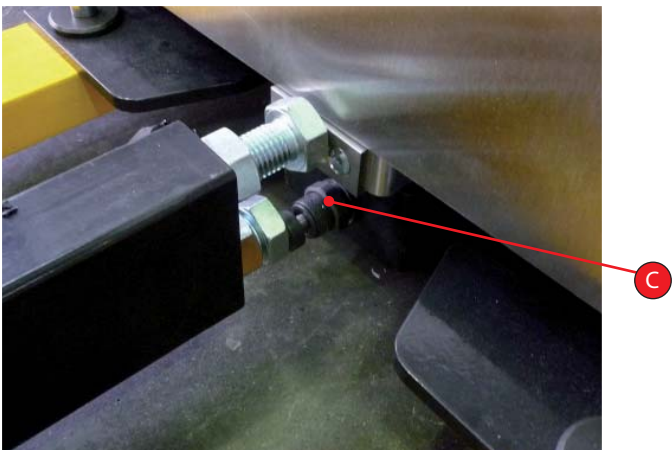
The tank used for melting the bulk to make it liquid, is mounted on the mobile cart.



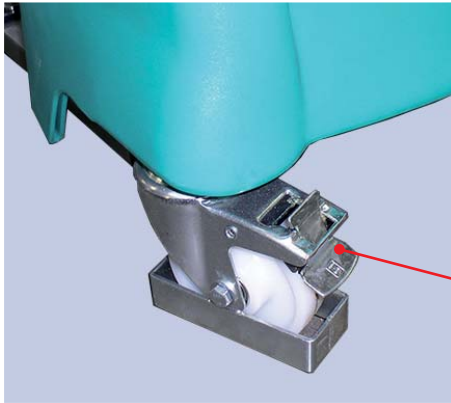
- Fully open the machine casing on the dosing side (A).



- Lift the tank high enough to go over the doser.
- A guiding shoe (B) is placed under the machine to guide the cart when approaching.



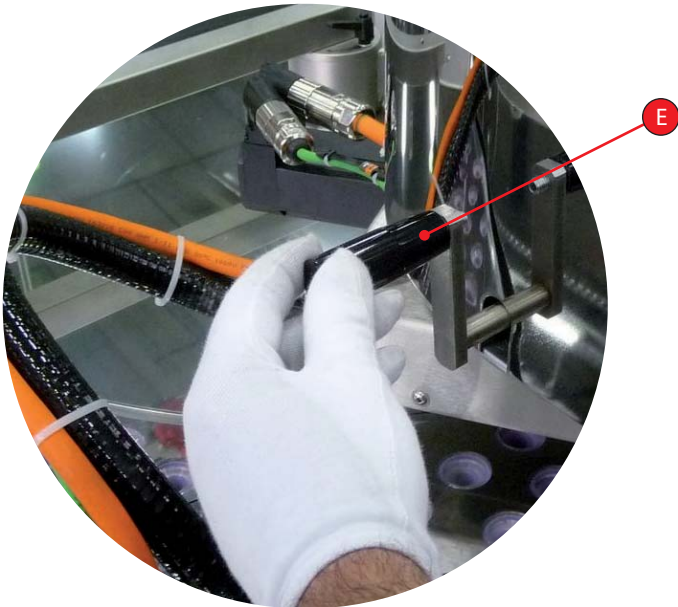
- A stop (C) stops the cart when it is sufficiently advanced.



- Block the (D) cart brakes.



- Place the tank on the doser.

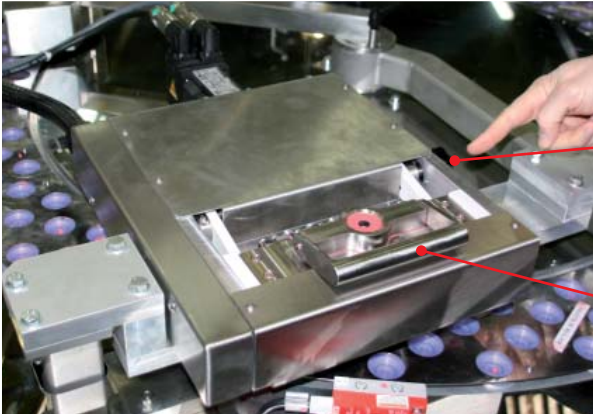


- Close the casing.
- Open the valve (E).

REMOVING THE TANK

- Before removing the tank, close the valve.
- Open the casing.
- Lift the tank.
- Unblock the brakes on the cart.
- Push back the mobile cart.

DOSING CASSETTE REPLACEMENT

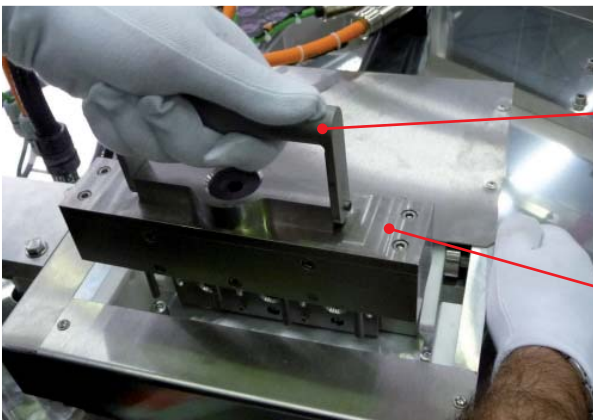


Caution, the doser operates at high temperature. You have to wait for it to cool down, and use gloves to prevent burns.

A

- Remove the tank.
- Unlock the cassette using the knurl knob (A) located at the right of the doser.
- Use handle (B) to pull cassette (C) upwards.

B



B

C



- Place the new cassette by inserting the pistons and valve tails into the control forks. The locking fingers of the cassette retract naturally when the cassette is inserted.
- When the cassette is against the stop, slightly rotate the knurl knob (A) to lock it.

COLOR CHANGE

- Clean the tank and the doser.
- Reassemble the stirrer ("Console" screen, "Lid assembling" action).
- Load the paste into the tank (six liters maximum).
- Close the motorized watertight lid again.
- Adjust the temperature until you get the desired value.
- Launch slow stirring.

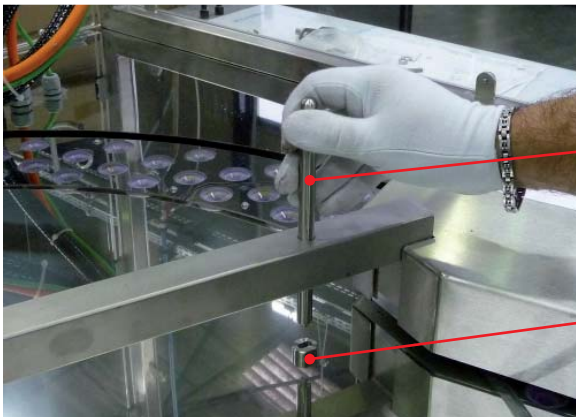


Important: always use heatproof gloves when changing the tank.

RE MELTING POSITION SETTING

Halogen lamps, which emit a concentrated light, enable you to make the surface of the lipstick smoother, to improve picking. The recast is usually located in the middle of the cooling zone, but its position may be changed depending on the behavior of the mass.

It is important for the recast to be located opposite a stopping station on the rotating tray; this is why a centering guideline and orifice on the housing are in place for this adjustment.



This operation must be performed by a qualified operator.

A

- Before positioning the remelting, go to the "Console" screen on the touchscreen and press "Startup".
- Press the emergency stop button to secure access to the rotating tray.
- Stop the rotating tray by placing the die (B) into the desired remelting position.
- Loosen the blocking levers (C) and the remelting unit above the die (B).
- Insert the centering pin (A) into the tray crossing through the arm of the remelting unit so as to provide the proper alignment of the halogen lamps and the molds.
- Block this remelting position using the levers (C).

B



B



The centering pin must be removed before restarting the machine.

C

Remelt time can be adjusted on the console.

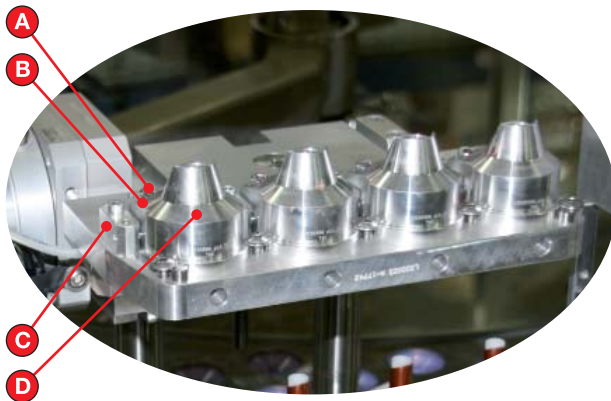
- Go to the "Setting 3" screen on the touchscreen.
- Enter the position number of the remelting station.
- Press the button "Place the remelting centerer".

PICKING CLAMP REPLACEMENT

The picking clamps are installed on the clamp tray. They ensure that the mechanisms are gripped in the receptacles for the picking operation.



- Open the casing to access the clamp tray.

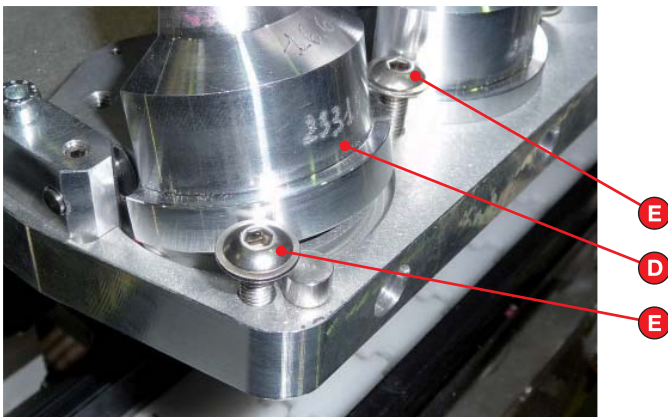


The moving clamps (B) are mounted on the upending systems (C).

- Remove the two fastening screws (A) from each moving clamp (B).
Extract the mobile clamp from its upending system (C).

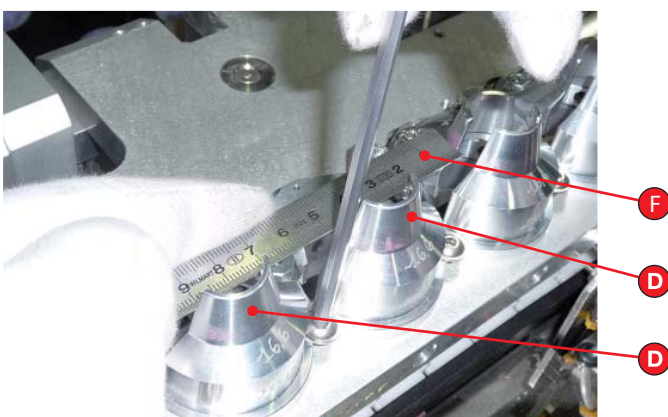
The fixed clamps (D) are mounted in centering grooves on the clamp-tray.

- Remove the fastening screws (E) from each fixed clamp (D).



- Remove the fixed clamp from its centering groove.
- Before the permanently tightening the screws, check the parallelism of the fixed clamps are parallel (D), using, for instance, a ruler (F).

The mobile clamps (B) do not require any particular adjustment.



PICKING CLAMP HEIGHT SETTING

The clamp tray has only a setting for the mechanism gripping height which adapts the picking to the variations in the mechanism length or width, or to different mold filling levels.

There is no setting of the height in the picking position, when the distance between the top of the rotating tray and the clamp-tray is always 34.5mm.



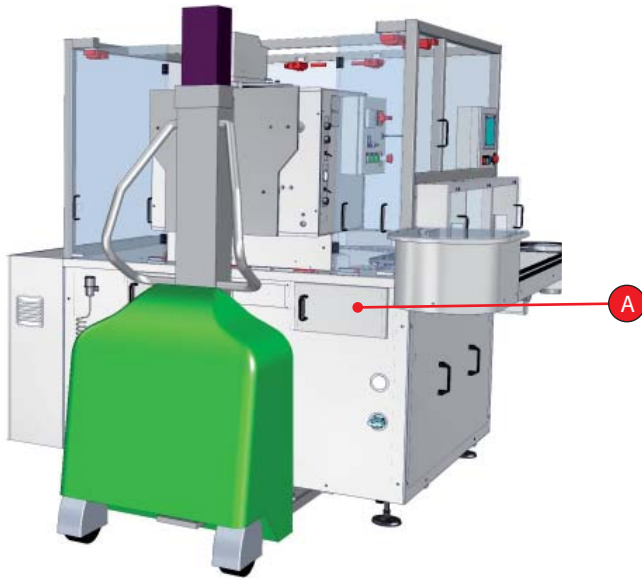
- To set the gripping height, use the screw at the center of the clamp tray, which serves as a stop. The thread is of 1mm per turn.

The nominal height for the pick-up of a mechanism is 34.5mm between the bottom of the cup and the top of the clamp-tray.

OPENING SYSTEM DISASSEMBLING

The release unit bears the four release modules, which are adapted to suit the external shape of the molds and the type of mechanism used (lipstick, pen, mini...).

These release modules consist of a cover fixed to the unit with screws, a soft membrane attached with a central screw, and v-ring gaskets. The unit ensures that the mold can be released by pressing down on the membrane during the demolding phase.

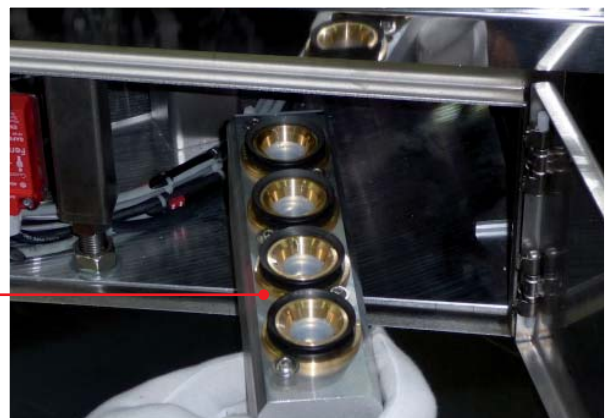
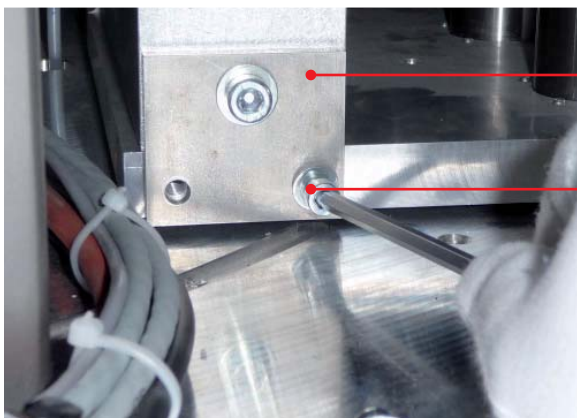
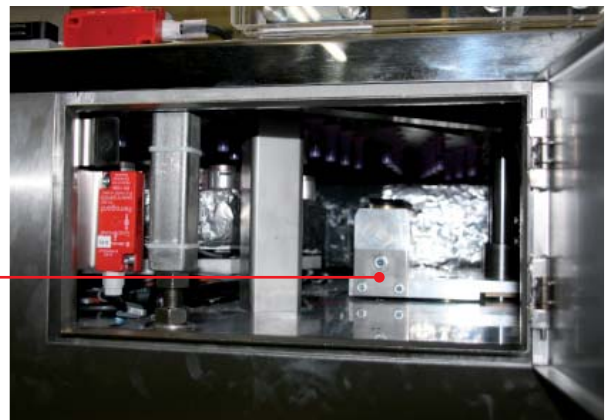
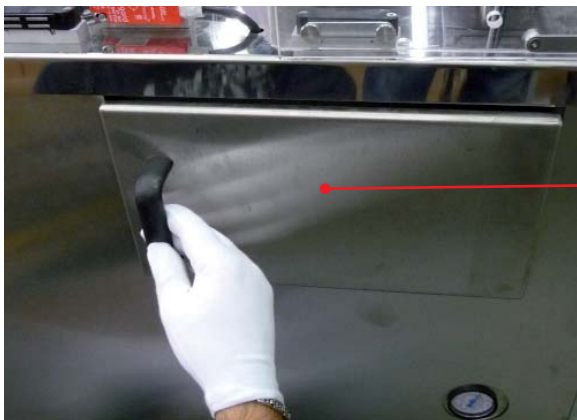


The opening unit is located under the mold-holder tray at the picking unit. It is accessible through an access door (A) located on the right of the doser.

- Open the access door (A).
- Remove the two fastening screws (C) from unit (B).
- Pull the unit towards you to extract it.

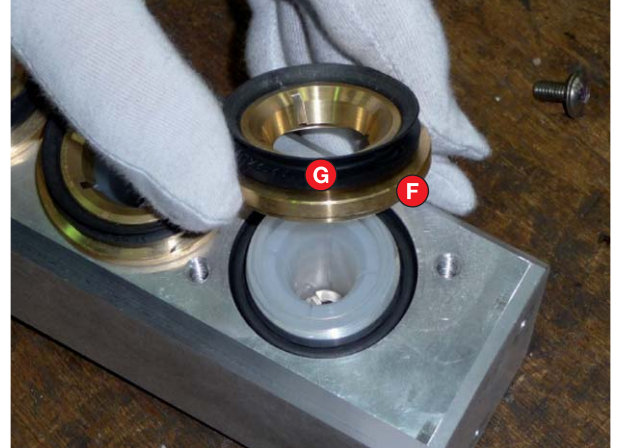
The release unit is positioned in the machine via the groove in its support.

The pneumatic connections and disconnections are automatic.

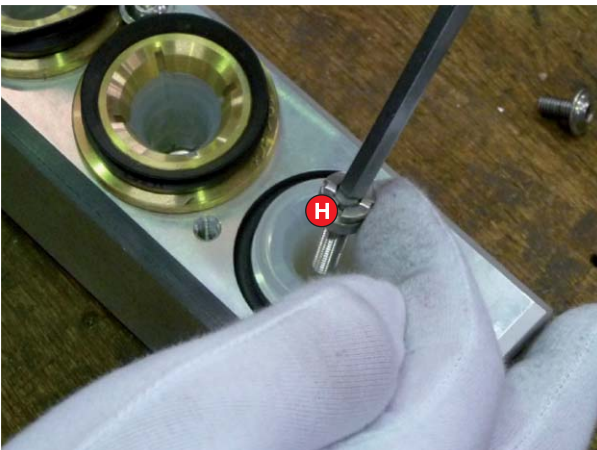


OPENING MODULE REPLACEMENT

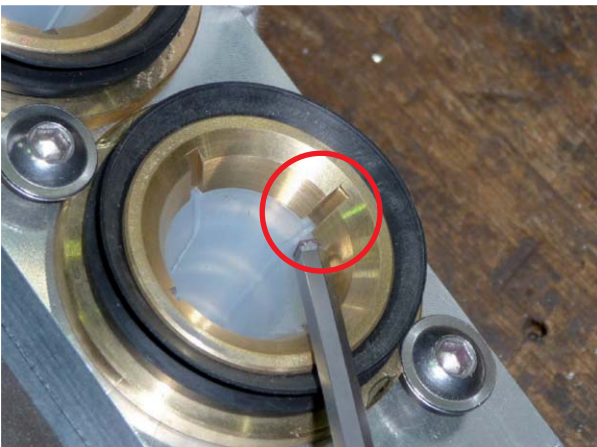
These release modules consist of a cover fixed to the unit with screws, a soft membrane attached with a central screw, and v-ring gaskets. The unit ensures that the mold can be released by pressing down on the membrane during the demolding phase.



- Remove the two fastening screws (E) of an opening module.
- Take off the lid (F) and the upper v-ring gasket (G).



- Take out the central fastening screw (H) on the membrane.
- Take out the body of the module (I) with its lower v-ring gasket (J) and the membrane (K).
- Repeat all these operations for each release module.



Upon reassembly, ensure that the casing grooves match those found in the covers so that the vacuum can be created around the mold.

GENERAL CLEANING

Molds or picking clamps that have got lipstick stains on them have be cleaned using a cloth or cleaning foam, so that no lipstick is transferred onto the mechanisms.

In general, clean the machine (stainless steel panels and upper housing) using a soft cloth and glass cleaning product.

DESIGNATION	TOOLS	FREQUENCY
Casing	Soft cloth	Weekly
Control console	Soft cloth	Weekly

CLEANING THE TANK

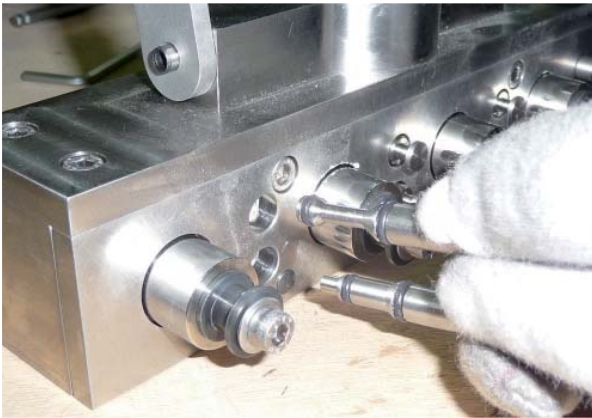
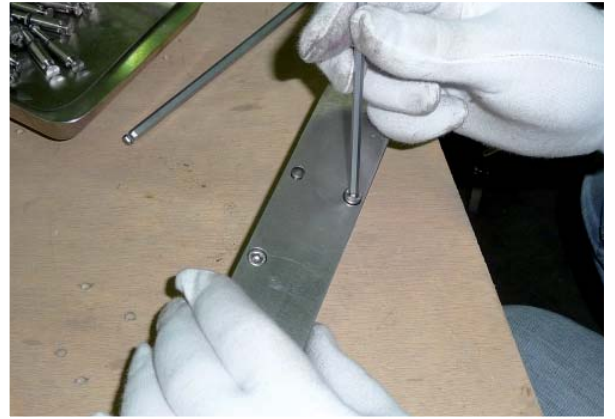
For the tank cleaning, refer to the tank technical instructions.

DOSING CASSETTE CLEANING

The cassette is totally removable. Screws make it possible to disassemble the front and rear flanges, and the collector, providing access to all surfaces and all seals.

Refer to the photos below to see the details of the component parts.





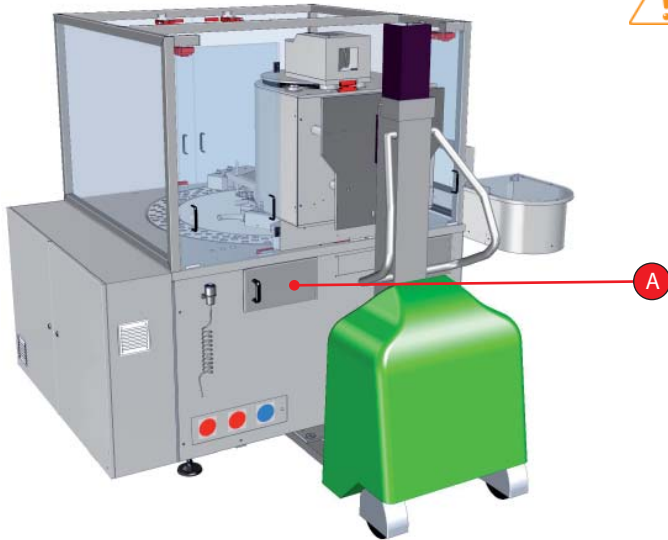
At reassembly, make sure not to invert the inlet and the outlet valves.

CLEANING THE PURGE BIN

A purge bin is placed under the rotating tray at the dosing station. It enables you to perform a purge after the machine has been stopped for a prolonged period.

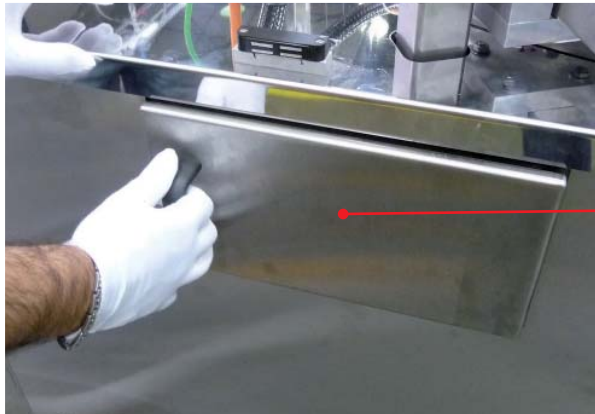


The bin could contain liquid at high temperature; it is recommended that you wait for it to cool down before touching and that you wear protective gloves to minimize the risk of burns.



The purge bin is placed under the rotating tray at the doser. It is accessible through an access door (A) located at the left of the doser.

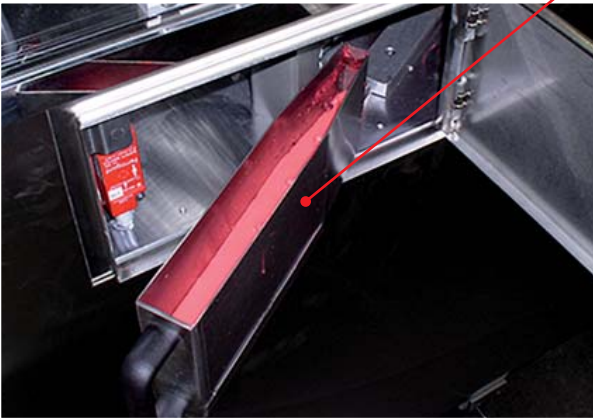
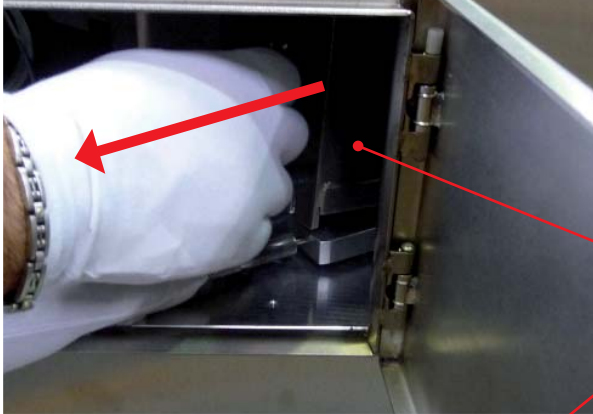
It is maintained by a thumbscrew (B).



- Open the access door (A).



- Loosen the thumbscrew (B) by a few turns.



- Lift the bin (C) by the handle to loose the screw, and the pull the bin backwards.



CLEANING THE RELEASE UNITS



- Take out the four release modules (see the procedure for changing the release modules).
- Clean the covers (A), the soft membranes (B), the frames (C) and the v-ring gaskets (D).
- Put the four release modules back in.

MAINTENANCE SCHEDULE

OPERATION	FREQUENCY
Glycol level check	Weekly
Changing the V-ring gaskets on the release unit	At 2000 hours
Release unit membrane replacement	Every time molds are changed
Checking halogen remelt lamps	Weekly
Replacement of the Venturi filter	Every 6 months

GLYCOL LEVEL CHECK

The external refrigeration unit maintains the temperature in the filling machine cooling area.

The difference in temperature between the values set on the unit and on the filling machine is 4°C. For example, if the temperature of the cold chute is set to +4°C, the temperature of the unit will automatically be set to 0°C.

To safeguard this operation, the glycol level should be checked regularly.



Adjust the temperature of the cold chute on the touchscreen (A) on the external refrigeration unit .



Check the level of glycol water in the reservoir (B).



If frost should appear on the unit intake and outlet connections, the temperature setting on the cold discharge chute must be raised.



- To top up the glycol, remove the reservoir stopper (C).

Use water with 20% glycol when topping up.

Glycol type: DOWCAL* 20-G Heat Transfer Fluid



This operation has to be carried out by a qualified operator, using suitable protective equipment (gloves, goggles).

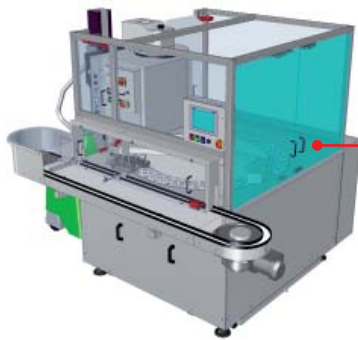
RELEASE UNIT MEMBRANE REPLACEMENT

See the procedure for changing the release modules.

CHANGING THE V-RING GASKETS ON THE RELEASE UNIT

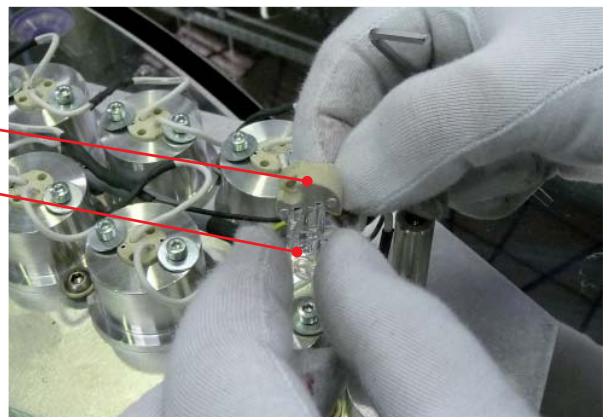
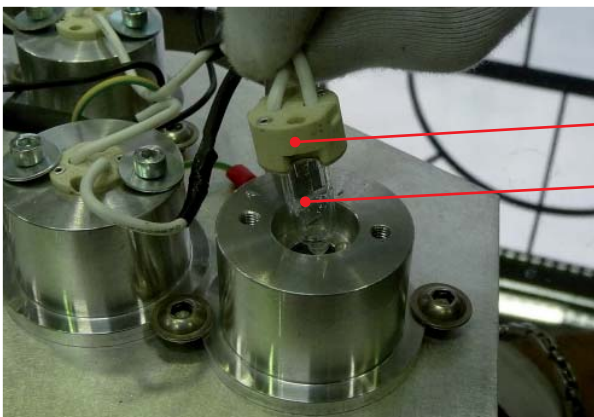
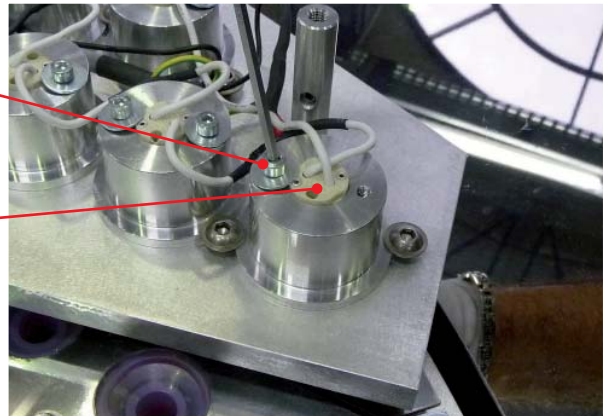
See the procedure for changing the release modules.

CHANGING THE REMELTING HALOGEN LAMPS



This operation must be performed by a qualified operator.

- Press the emergency stop button to unlock access.
- Open doors (A), on the remelting side.
- Remove the two fastening screws (C) of the remelting casing (B).
- Remove casing (B).
- Loosen the two fastening screws (D) of socket (E), and remove it.
- Pull the bulb (F) to extract it from the socket (E).



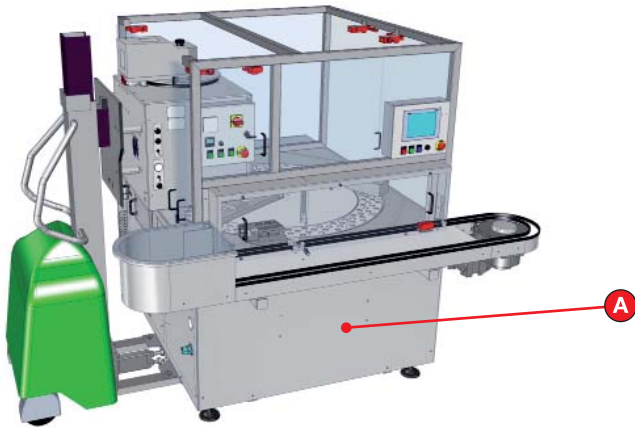
REPLACEMENT OF THE VENTURI FILTER

The Venturis generate a vacuum for the release unit.

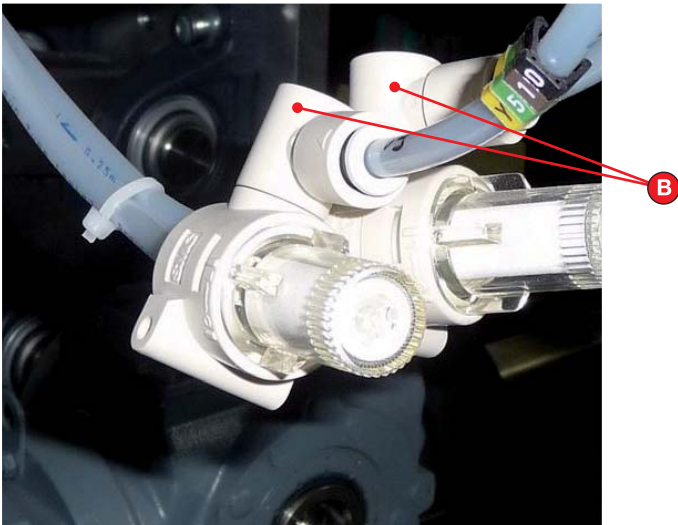
The Venturis are equipped with filters that should be changed every six months.

The Venturis are located under the mold-holder tray at the picking unit. They are accessible by removing panel (A) located at the front of the machine.

- Disassemble casing (A) under the conveyor.



- Unplug the entry and exit pipes leading to each Venturi filter (B).
- Pull out the two Venturis (B).



- Unscrew by a quarter-turn the transparent cover (C) in order to remove it.
- Pull on the filter (D) in order to extract it, then replace it.

