

INSTRUCTIONS FOR INSTALLATION, USE AND MAINTENANCE



Ed 02-09

EN



PROFESSIONAL 30



PROFESSIONAL 50



technogel
spa

MACCHINE E IMPIANTI
PER GELATO

ICE CREAM EQUIPMENTS
AND MACHINES

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EDITION 02-09 - This manual is the exclusive property of **TECHNOGEL spa**.
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Introduction

We thank you for purchasing our product and recommend reading this **Instruction Manual** carefully for optimum operation.

The descriptions and illustrations contained in this manual are not to be considered as binding. **Technogel** reserves the right to make any changes deemed necessary, to any of the components of the machine, at any time in order to fulfil constructive and/or commercial requirements.

⇒ Who can carry out the work required

Pay attention of the symbols that appear at the side of each operation required for installation, use and maintenance:



= Technician



= User

The **Technician** symbol (referring to an electrician, refrigeration technician, plumber or mechanic) indicates operations to be carried out exclusively by any of the relative technicians. The same operations carried out by the user **can lead to hazardous situations for the user and others, and it is therefore wise and intelligent not to.**

⇒ Installation and machine start-up

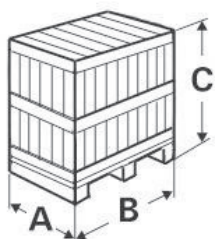


Installation and initial start-up must be carried out by a **Technogel** technician or by a technician **authorised** by **Technogel**.

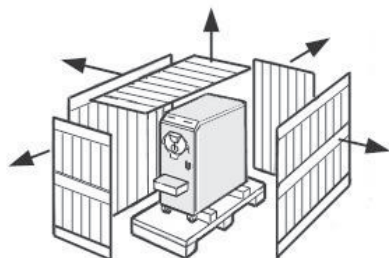
TECHNOGEL spa CANNOT BE HELD LIABLE FOR INSTALLATIONS
AND START-UPS CARRIED OUT BY UNAUTHORISED PERSONS.



How to unpack the machine

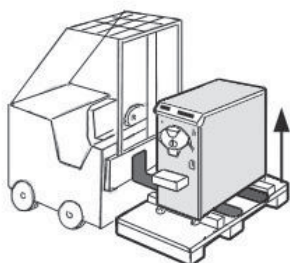


	GROSS WEIGHT	A	B
MIXGEL 30 PROF. = KG. 395	mm. 730	1030	1730
MIXGEL 50 PROF. = KG. 449	mm. 730	1100	1730

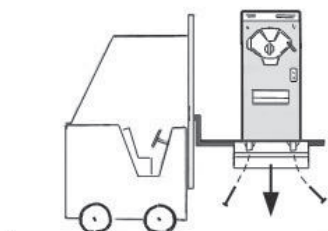


ATTENTION: DUE TO THE LONG AND NARROW SHAPE, THE MACHINE MAY BECOME UNSTABLE WHEN LIFTED.

Remove all the wooden side and top panels from the packaging.



Lift the machine using a forklift truck by introducing the lifting blades between the bottom of the machine and the base of the crate.



Loosen the four bolts that block the machine in place from under the base of the crate.

ATTENTION!

After having removed the bolts, the bottom of the crate comes away from the machine.

After having removed the base of the crate, lower the lifting device and set the machine on the ground.

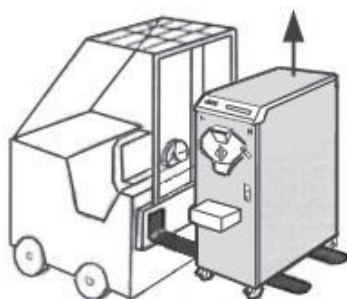
THE TYPE OF WOOD USED FOR THE PACKAGING CRATE IS NATURAL FIR WITHOUT ANY CHEMICAL SUBSTANCE AND THEREFORE PERFECTLY RECYCLABLE.



How to lift the machine



	NET WEIGHT	A	B	C
PROFESSIONAL 30=	KG. 295	mm. 490	810	1470
PROFESSIONAL 50=	KG. 344	mm. 490	960	1470



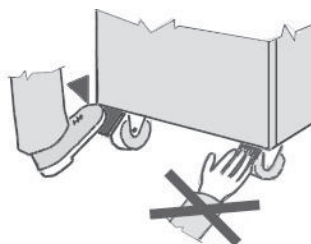
ATTENTION! DUE TO THE LONG AND NARROW SHAPE, THE MACHINE MAY BECOME UNSTABLE WHEN LIFTED.

Lift the machine using a forklift truck by introducing the lifting blades at the side of the machine, between the front and rear wheels.



Lift the machine using belts, holding them near the front and rear wheels, as shown in the figure.

The tie-rod that lifts the machine must be positioned precisely at its centre.



Move the machine by holding the handle of the flange with one hand and the corner of the machine with the other hand.

After having positioned the machine, block the brakes of the front wheels using your feet.

DO NOT USE YOUR HANDS



Machine identification

Each machine is fitted with a plate indicating the:

- type of machine
- serial number
- year of production
- voltage, hertz and maximum absorption in Amps
- power supply
- type of gas and quantity

The plate is applied externally, on the back of the machine.

Below is the serial plate of this machine:

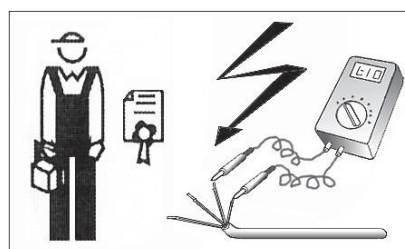
 technogel	
MACCHINA TIPO MACHINE TYPE	
MATRICOLA N. SERIAL NUMBER	N.
ANNO YEAR	
VOLTAGGIO VOLTAGE	V A
POTENZA POWER	KW
GAS FREON	R Kg
Via Boschetti 51, GRASSOBBIO (BG) ITALIA Tel. 035-4522062 Fax 035-4522682	
	

Quote the information found on the serial plate when ordering spare parts and requesting technical assistance:

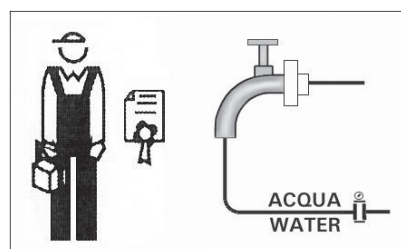
MACHINE TYPE	PROFESSIONAL
SERIAL NUMBER	N°
VOLTAGE	V. Hz

POSITIONING THE MACHINE AND CONNECTIONS

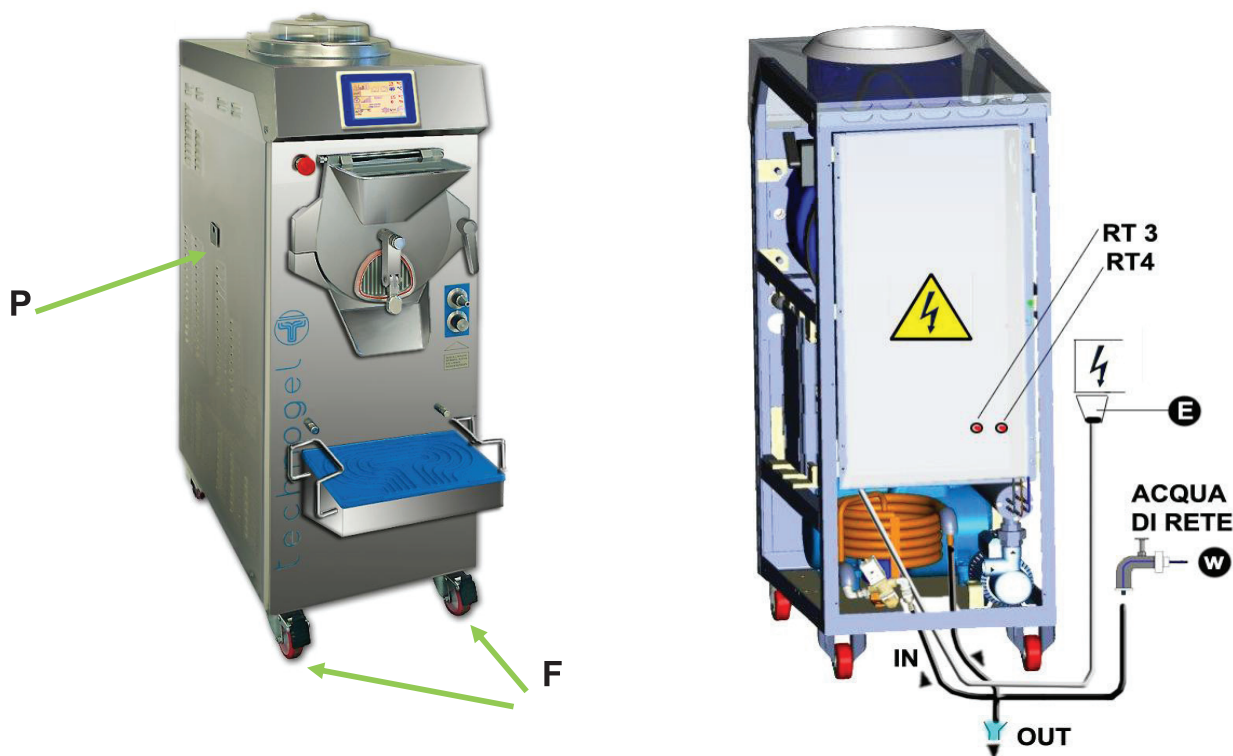
Authorised personnel required:



ELECTRICIAN



PLUMBER



MIXGEL PROFESSIONAL

WARNINGS:

The machine does not require to be anchored to the floor, neither are technical precautions necessary to limit vibrations for it to operate correctly.

There are, however, a number of important rules that must be followed:

- ⇒ Leave an operating space of at least 25 cm around the perimeter of the machine, which is essential for the operations to be carried out adequately.
- ⇒ Ensure machine stability by blocking the brakes (F) of the front wheels using your feet (**do not use your hands**).
- ⇒ Power the machine **electrically** (E), ensuring the electric cable comes from above to avoid it being crushed if laid on the floor. See page 10 Table A ref. **PROFESSIONAL** for power and absorption data.
- ⇒ Connect the **water supply** to the machine (W) with water load and drain for condensation of the refrigerator system. Also connect the hot or cold washing water (L) according to availability
- ⇒ In case of a thermal cut-off, the machine stops and does not restart unless it is reset from one of the buttons (-RT3-RT4) according to the thermal intervention.
- ⇒ Clean the (P) ice cream drip tray daily.



Electrical installation

The electrical system to which the machine is connected must be perfectly executed by a qualified electrician in compliance with current regulations. An efficient electrical system with adequate earthing is of vital importance for your machine to run smoothly and for your safety.

We recommend installing an adequate wall-mounted automatic differential switch. See table (A) for power and absorption data.

Make sure the supply voltage is the same as the operating voltage indicated on the serial plate (see page 6).

The line cable of the **V.220** or **V.200** machine has **4** wires and that of the **V.380** or **V.415** machine has **5** wires.

- When the cable has 4 wires, the **yellow/green** wire is **earth** and the others are the three **phases**.
- When the cable has 5 wires, the **yellow/green** wire is **earth**, the **blue** wire is **neutral** and the others are the three **phases**.

- TABLE -A-

Professional 30	V.220 50 HZ	V.220 60 HZ	V.200 50/60HZ	V.400 50 HZ
Total power KW.				10.1
Maximum Absorption A.				27
Line cable N° of wires and section				5 x 4 mm²

Professional 50				
Total power KW..				12
Maximum absorption A..				32
Line cable N° of wires and section				5 x 4 mm²

It is recommended to check the efficiency of your electrical system with particular attention to the earth connection and safety systems

**TECHNOGEL spa CANNOT BE HELD LIABLE FOR
ANY PROBLEMS DERIVING FROM AN INCORRECT
INSTALLATION OR FAULTS IN THE POWER SUPPLY.**



Water connection

The refrigerator system has a water-cooled condenser; the same water flows to the washing valve with a parallel connection.

Connect the water mains pipe to the **ENTRATA ACQUA - WATER INLET** fitting and the drain pipe to the **USCITA ACQUA - WATER OUTLET** fitting.

To connect the machine to the water mains, we recommend using rubber piping that is suitable for at least **10 Bar**, with an internal diameter of 15 mm (suitable for the fittings supplied with the machine).

If, for any reason whatsoever, the indications on the water inlet and outlet are not legible, please note that the inlet pipe is to be connected to the pressure valve.

HOURLY WATER PRESSURE AND CONSUMPTION

If the machine operates with water from the mains, make sure the water reaching the machine has a **minimum pressure of 1.5 Bar**.

If the water pressure exceeds **5 Bar**, have the plumber install a pressure reducer that reduces it to **4 Bar**.

The average water consumption (when the refrigerator system is running) is:

- **PROFESSIONAL 30 = 150/180 litres/hour***
- **PROFESSIONAL 50 = 200/230 litres/hour***

* depending on inlet water temperature

A purifying filter must be installed if the water contains any impurities, to prevent the formation of any scale deposits and/or damage to the pressure valve.

INTENDED AND UNINTENDED USE

MACHINE OPERATING CONDITIONS

SAFETY WARNINGS

INTENDED AND UNINTENDED USE

The **PROFESSIONAL** model **TECHNOGEL** pasteuriser / batch freezer has been designed to process cream and ice cream mixtures.

Improper use of the machine is entirely at the User / Customer's risk.

TECHNOGEL Spa CANNOT BE HELD LIABLE FOR ANY DAMAGE TO PERSONS OR PROPERTY DERIVING FROM IMPROPER USE, WHICH DIFFERS FROM THE INTENDED USE OF THE MACHINE.

⇒ Machine operating conditions

Below are the **minimum** and **maximum** mixture doses that the various machines can process; the doses are quoted in litres and the mixture is to be introduced in the **upper basin** of the machine at a time:

	minimum load	maximum load
PROFESSIONAL 30	2 litres	9 litres
PROFESSIONAL 50	2 litres	13 litres

WE STRONGLY SUGGEST TO COMPLY WITH THE ABOVE-MENTIONED MINIMUM AND MAXIMUM DOSES FOR YOUR MACHINE TO PROCESS THE PRODUCTS IN COMPLETE SAFETY.

TECHNOGEL spa CANNOT BE HELD LIABLE FOR DAMAGE CAUSED BY HIGHER DOSES THAN THOSE ALLOWED.

Safety warning

Before starting the machine, verify that the safety devices (1) (hopper protection grid) and (2) (outlet protection grid) are mounted and intact.

ATTENTION: the stirrer inside the boiler will stop when the cover (3) is lifted during machine operation. Verify whether this occurs.

During use, do not lean on the edge of the tub with your hands or arms (4) because it is hot.



ATTENTION

Tampering or reducing the safety devices (1) and (2) can cause severe injury to the user during use.

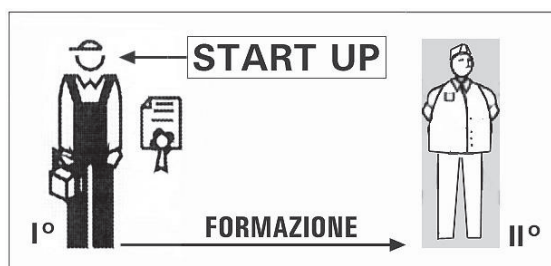
What not to do during operation:

Do not insert foreign bodies into the hopper while the machine is running, example: *spatulas - knives - rubber sticks - etc.*, as they could damage the machine and lead to possible consequences for the user. Do not insert *spatulas or knives* between the protection bars of the outlet (2) as the ice cream comes out.

TECHNOGEL spa CANNOT BE HELD LIABLE FOR DAMAGE CAUSED BY ALTERATIONS TO THE PROTECTION SYSTEMS OF THE MACHINE.

MACHINE FUNCTIONS WITH PRELIMINARY CHECKS AND CONTROLS

The explanation of the machine functions and the preliminary Inspections and Checks described in the following pages must be carried out by the TECHNOGEL Technician or a Technician authorised by TECHNOGEL in collaboration with the User who, after adequate training, will operate on the machine.



Initial start-up

Press the **IG switch** during the first start-up, before connecting the power supply



IG – Main switch - Emergency:

Released: supplies voltage to the **TOUCH SCREEN**, thereby allowing it to be used.

Pressed: stops any moving motor, whilst maintaining the **TOUCH SCREEN** powered.

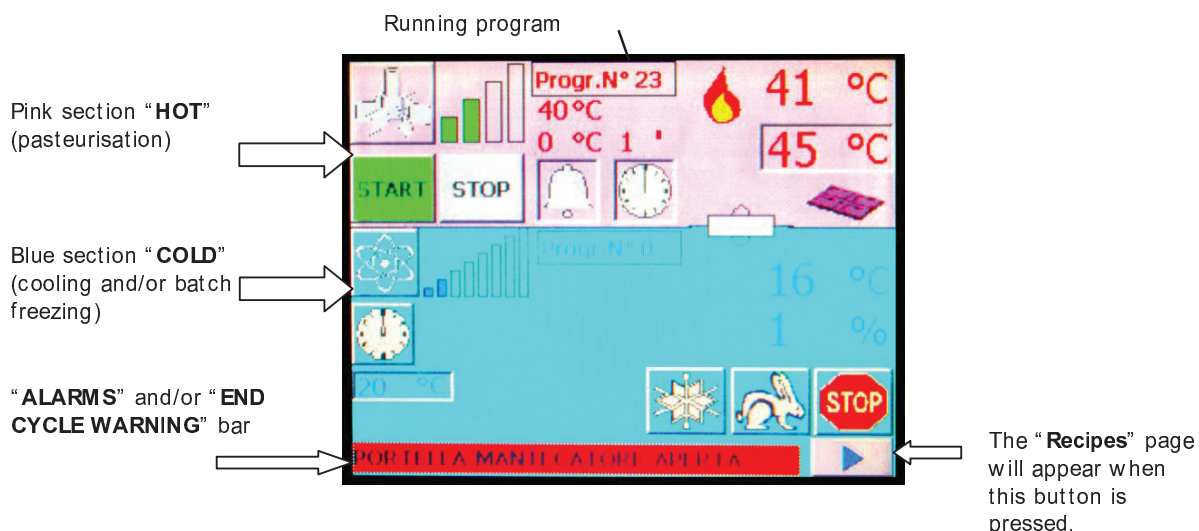
The buttons cannot be used.

Supply power to the machine and release the **IG** switch. The machine display will switch-on and after a few seconds, the opening page shown below will appear.



Press the glass with a finger and the work page of the machine will appear (see the following page)

- Work page



ATTENTION IMPORTANT

WHEN THE MACHINE IS FIRST STARTED-UP,
WAIT AT LEAST 60 MINUTES BEFORE
STARTING THE REFRIGERATOR
COMPRESSOR.

IF THE MACHINE POWER SUPPLY IS
DISCONNECTED FOR ONE OR MORE DAYS,
IT IS NECESSARY TO WAIT AT LEAST 60
MINUTES AFTER RELEASING THE "IG"
BUTTON BEFORE STARTING THE
REFRIGERATOR COMPRESSOR.

IF THE POWER SUPPLY IS NEVER
DISCONNECTED, NO IDLE TIME IS REQUIRED

Recipes Page

If you wish to pasteurise
press

If you wish to batch
freeze press

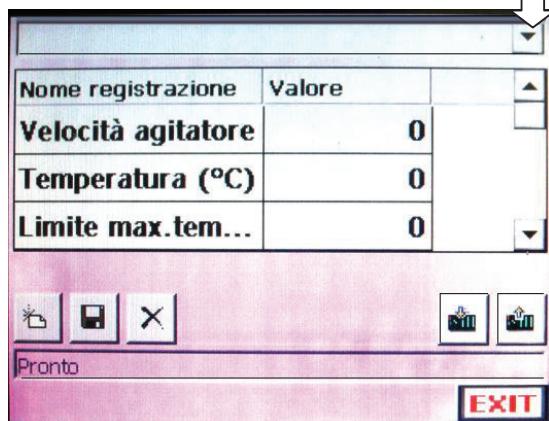
The page with preset
programs will appear
according to the
selection.



- Pasteurisation Program Selection

After having pressed “Boiler Recipes” (see page 17) this page will appear.

Press this button



and the list of Pasteurisation Programs will appear



Press cursors
the list on the display

A and B (see figure) to scroll

Press the desired Program and

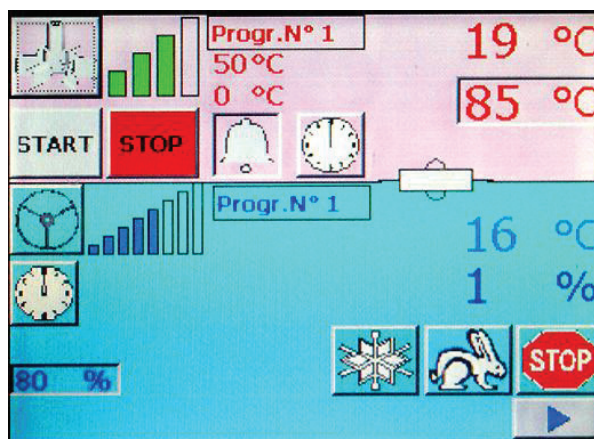
the corresponding page will appear



confirm the program by pressing **ENTER**

exit the page by pressing **EXIT**

and the relative Work page will appear



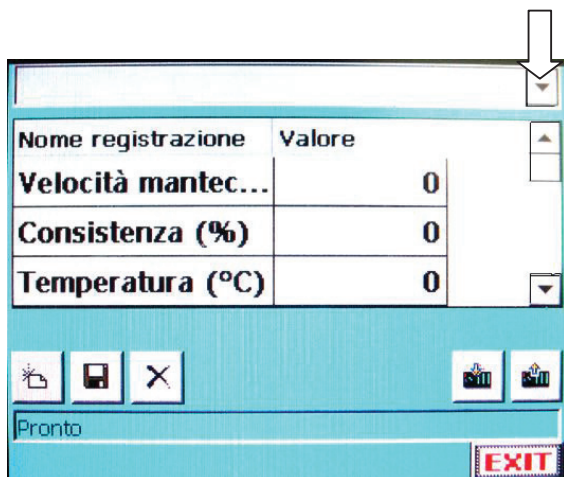
Complete Pasteurising Program List

01	Pasteurising cream ice cream
02	Pasteurising fruit ice cream
03	Pasteurising chocolate ice cream
04	Sorbet
05	Water ice
06	Panna Cotta (Cooked cream)
07	Bavarian Cream
08	Custard
09	Butter Cream
10	Pate a bombe
11	Chocolate pate a bombe
12	Ganache
13	Zabaglione
14	Chocolate Bavarian Cream
15	Cream Coffee
16	Mousse
17	Cream Mousse
18	Marmalade
19	Jelly
20	Béchamel
21	Meringue
22	Sponge Cake
23	Dark chocolate tempera
24	Milk chocolate tempera
25	White chocolate tempera
26	Yoghurt

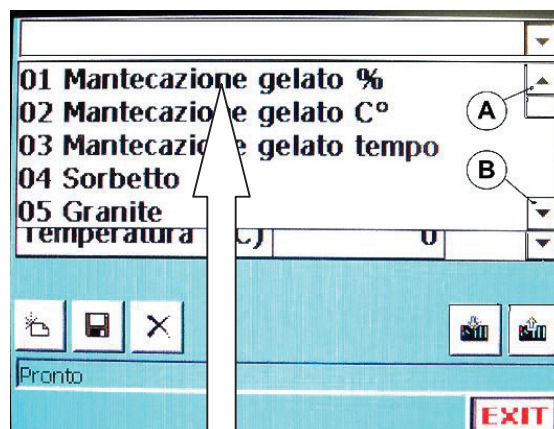
)

- Batch Freezing and Cooling Program Selection

After having pressed “**Batch Freezing Recipes**” (see page 17) this page will appear. Press this button



and the list of Batch Freezing Programs will appear



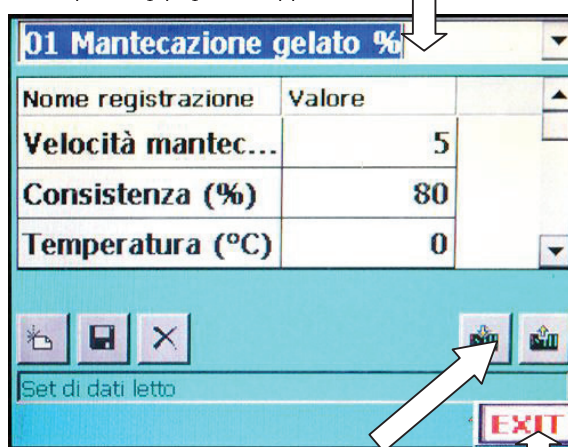
Press cursors the list on the

A and B (see figure) to scroll display

Complete Batch Freezing and Cooling Program List

1	Ice cream batch freezing %
2	Ice cream batch freezing C°
3	Ice cream batch freezing time
4	Sorbet
5	Water ice
6	Panna Cotta (Cooked cream)
7	Bavarian Cream
8	Custard
9	Butter Cream
10	Pate a bombe
11	Chocolate pate a bombe
12	Ganache
13	Zabaglione
14	Chocolate Bavarian Cream
15	Cream Coffee
16	Mousse
17	Cream Mousse
18	Free programming
19	Béchamel
20	Meringue
21	Sponge Cake
26	Coffee water ice
23	
24	

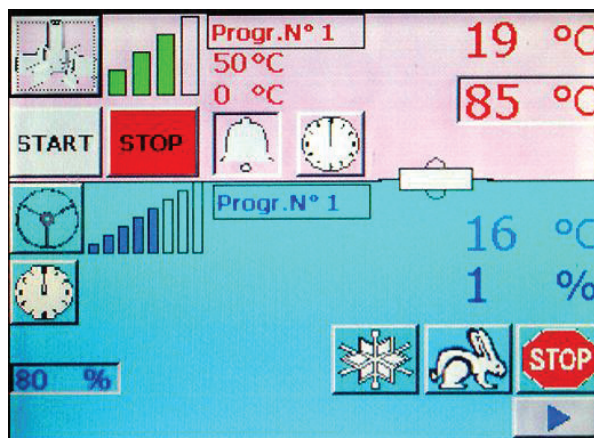
Press the desired Program and the corresponding page will appear



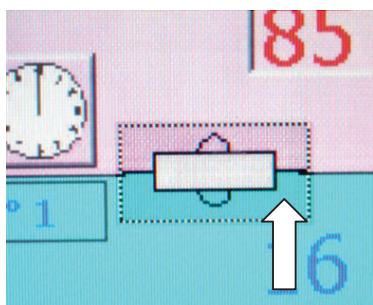
confirm the program by pressing **ENTER**

exit the page by pressing **EXIT**

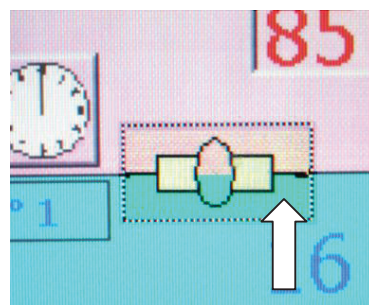
and the relative Work page will appear



- How to open and close the "Tap" found between the "Boiler" part and the "Batch freezer" part:

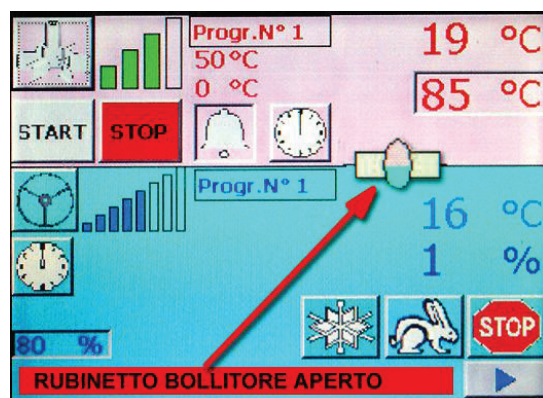


TAP CLOSED



TAP OPENED

To open or close the tap, press the highlighted area on the display (see figure) and the tap will open or close in a few seconds.



ATTENTION: if the tap is open, a red "BOILER TAP OPEN" alarm will appear under the display. The alarm will disappear when it is closed.

Before pouring any product into the Boiler, verify that the tap is in the "CLOSED" position by looking at the display.

Check the efficiency of the flange safety device and the boiler cover

- 1) **Open the Flange (F)** by rotating the handle (MF) anti-clockwise and then pull it outwards.
- 2) Check if the “**ALARMS**” bar appears on the display with the text: “**BATCH FREEZING DOOR OPEN**”
- 3) The machine **must not start** when the star button (cold) is pressed on the display (Cold part).
Close the flange (F) by blocking the handle (MF) and the text **BATCH FREEZING DOOR OPEN** must disappear.
- 4) Open the boiler cover (CB) by lifting it and check if the “**ALARMS**” bar appears on the display with the text: “**STIRRER COVER OPEN**”
- 5) The boiler stirrer **must not start** when the **START** button on the display (Hot part) is pressed.
Close the cover and the text: “**STIRRER COVER OPEN**” must disappear and the stirrer must function when the **START** button is pressed.

If during a periodic control, one or more devices are found to be inactive, immediately call the Technical Assistance Service.



How to verify the rotation sense of the batch freezing turbine

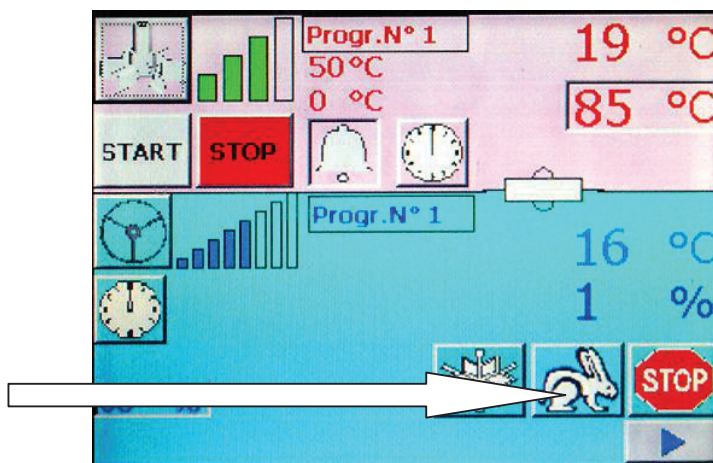
Only the rotation sense of the batch freezing turbine in "FAST EXIT" mode is to be verified

With an empty machine:

Connect the voltage to the control console by releasing the (IG) switch.

As explained on page 19, select the **Ice cream batch freezing %** Program (1)

While observing through the loading hopper, press the button with the **Hare** symbol (**Fast stirring**) for a moment and immediately after the **STOP** button.



The ice cream stirrer (turbine) **must turn anti-clockwise**; if it does not turn anti-clockwise:

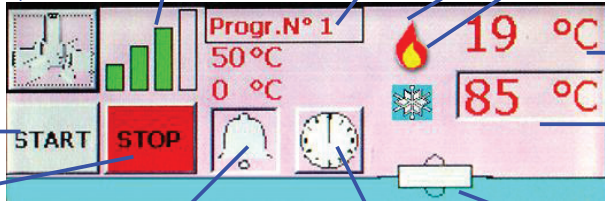
- 1 – Disconnect the voltage to the console by pressing the (IG) button.
- 2 – Unplug the cable of the machine from the mains and invert any two of the three phases.
- 3 – Reconnect the voltage and retry.



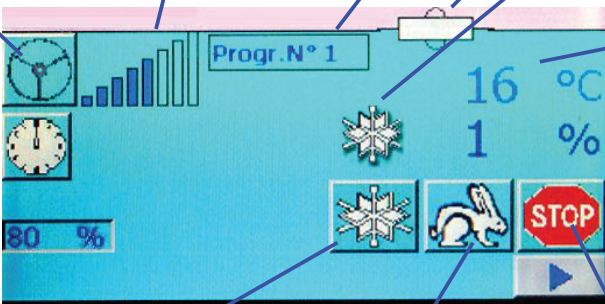
TECHNOGEL spa CANNOT BE HELD LIABLE FOR DAMAGE CAUSED BY IMPROPER USE OF THE MACHINE AND INCORRECT INSTALLATION DUE TO NEGLIGENCE.

THE CONTROL AND VERIFICATION OF THE SAFETY DEVICES AND CORRECT OPERATION ALLOW THE OPERATOR TO WORK SAFELY AND CONFIDENTLY.

Touch screen functions - "Pasteuriser" section

Boiler stirrer: with the machine stopped, press this symbol for the stirrer to start or stop without cooling or heating	Stirrer speed: when the cycle has started, the bars indicate the set speed of the stirrer. Press the bars to increase or decrease the speed, even during the cycle.	Running selected recipe: the number that appears corresponds to the type of program selected.	Flame: in heating mode Star: in cooling mode
START: starts the programmed Cycle. STOP: stops the programmed Cycle.			Actual temperature of the product during the cycle. Temperature set in the cycle that the product must reach.
	Reminder: buzzer warning for ingredients to be added at one or two desired temperatures	Pause when the set temperature is reached: the product is maintained at the set temperature, when this is reached, for a given time before cooling is activated or the Cycle end is signalled.	Tap: indicates the position of the tap, open or closed.

Touch screen functions - "Batch freezing and Cooling" section

Manual turbine command: with the machine stopped, press this symbol for the stirrer to start or stop without cooling.	Ice cream turbine speed: when the cycle has started, the bars indicate the set speed of the turbine. Press the bars to increase or decrease the speed, even during the cycle.	Running selected recipe: the number that appears corresponds to the type of program selected.	Tap: indicates the position of the tap, open or closed. Flashing star: indicates that cooling mode is running
			Temperature of the product during the cycle. Actual ice cream viscosity (hardness) during the cycle. when the set value is reached, the ice cream is ready and a ringtone signals to remove the product.
Value of viscosity (hardness) set for the selected program: it can be changed even during the cycle.	START cycle: starts the mixing turbine and after a few moments the refrigerator compressor too.	High speed button: only to be used to rapidly eject the ice cream	STOP: immediately stops the batch freezing cycle (stirring and cooling)

Warnings and Alarms that may appear on the touch screen

- WARNINGS AND INDICATIONS REGARDING MACHINE USE:

DRAIN VALVE OPEN

When the valve is closed the text disappears

STIRRER COVER OPEN

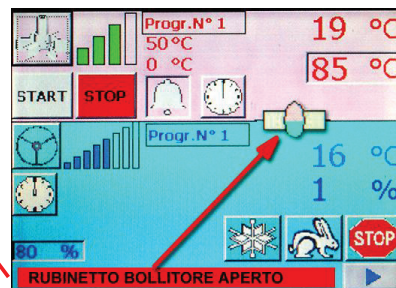
When the cover is lowered the text disappears

BATCH FREEZING DOOR OPEN

When the door is closed the text disappears

EXTRACT THE PRODUCT

The text disappears when STOP is activated



- ALARMS:

HIGH GAS PRESSURE

Cooling water shortage to the refrigerator compressor.
Verify whether the taps are closed or
the water is not sufficient

THERMAL COMPRESSOR

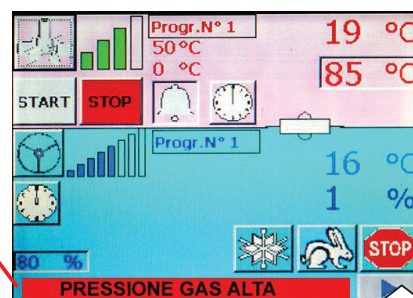
The refrigerator compressor has overheated and the thermal switch
has intervened.

Verified by an **electrician** with
manual reset of the thermal switch.

HIGH SPEED THERMAL TURBINE

The high speed motor has overheated and the thermal switch has
intervened.

Verified by an **electrician** with
manual reset of the thermal switch.



press here to go to the alarms page

To know which and when an alarm has been
triggered,

press the **i** of Alarms
and the page with the text and date will appear

Press the **"Reset Alarms"** button to clear the alarm bar
after having resolved the problem

If the alarm is not reset, the text will not disappear
and the machine will not start



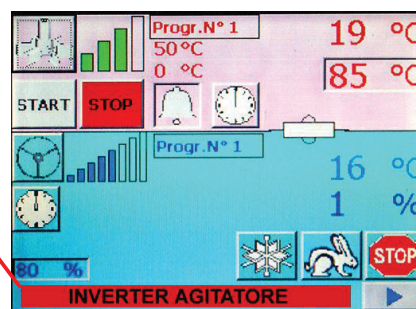
- ALARMS INVERTER:

BOILING STIRRER INVERTER

Overheating of the stirrer inverter.
Wait a few minutes for it to cool and it will restart on its own.
Reset is not required.

ICE CREAM TURBINE INVERTER

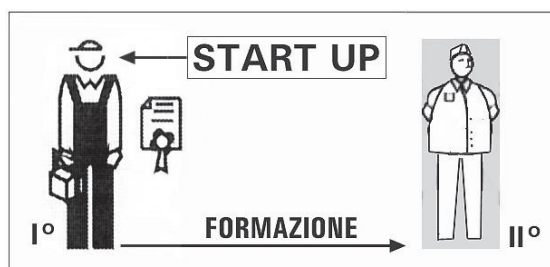
Overheating of the ice cream turbine inverter.
Wait a few minutes for it to cool and it will restart by pressing the
ice cream star again.
Reset is not required.



**ATTENTION: INTERVENTIONS INSIDE THE MACHINE (ELECTRICAL, MECHANICAL AND REFRIGERATION) MUST
BE CARRIED OUT BY QUALIFIED PERSONNEL AND
AUTHORISED BY TECHNOGEL.**

FIRST START-UP OF THE MACHINE

*Initial start-up must be carried out by a **TECHNOGEL** Technician or by a Technician Authorised by **TECHNOGEL** in collaboration with the User who, after adequate training, will operate on the machine.*



Machine start-up:

➤ Selecting the "ICE CREAM pasteurising" recipe

A

Open the page

B

Open the list

C

Select the recipe

D

Confirm the recipe and exit

E

Page is ready for initiation

Verify the valve is closed

1. Open the cover (3) and pour the mixture to be pasteurised in the boiling tank, complying with the minimum and maximum quantities indicated on page 12.

2. Close the cover (3), otherwise the stirrer will not start.

- Default speed of the stirrer
- N° of current Program
- Running heating mode
- Temperature of the actual mixture
- Set Point: Temperature the mixture must reach
- Buzzer warning at this temperature for ingredients to be added

3. Start the heating mode with the stirrer at the set speed by pressing **START**

4. When the Set point temperature is reached (85° C), a sound signal indicates that the mixture is ready to be cooled and the visual "OPEN VALVE" signal appears.



Increasing or decreasing the stirring speed

Jog press the speed bars to increase or decrease the speed of the stirrer in the tank.

E

How to open the valve (tap) to pour the pasteurised mixture from the boiler to the batch freezer

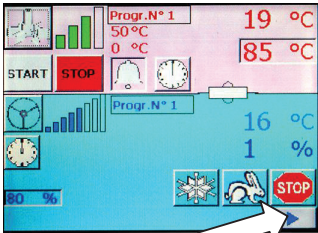
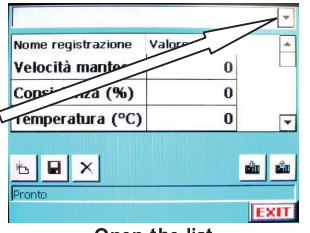
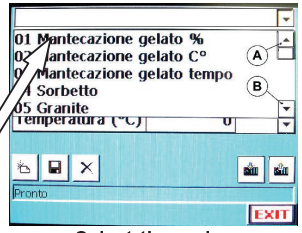
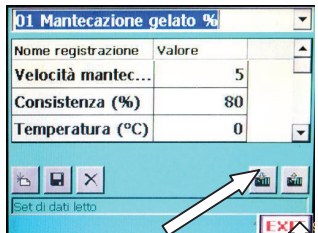
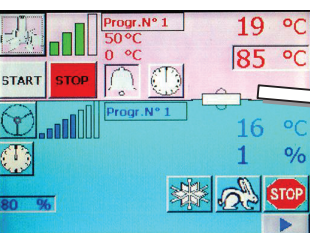
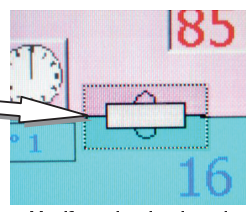
Closed valve

Open valve

Press the Valve symbol until it changes from closed to open

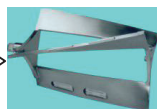
When the pasteurised mixture has been completely poured, close the valve by pressing the symbol until it changes from open to closed and before pouring another dose in the boiler, wait for the red text "open valve" to disappear.

➤ Selecting the "ICE CREAM batch freezing" recipe

<p>A</p>  <p>Open the page</p>	<p>B</p>  <p>Open the list</p>	<p>C</p>  <p>Select the recipe</p>
<p>D</p>  <p>Confirm the recipe and exit</p>	<p>E</p>  <p>Page is ready for initiation</p>	 <p>Verify valve is closed</p>

1. Check that the **Ice cream Turbine** is in the freezing chamber with the scrapers inserted correctly (see page 36)

2. Ensure that the **Flange (F)** is closed well by checking that the handle (**MF**) is blocked by turning it clockwise.



Default speed of the stirrer

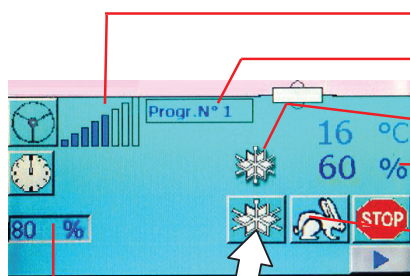
N° of current Program

Running cooling mode

Actual ice cream viscosity (hardness)

High speed control button

Set Point: Viscosity (hardness) that the ice cream must reach



3. Start cooling by pressing this button

Press the **STOP** button to stop the cycle



Operation:

A) Starts the turbine motor at low speed and after a few seconds the refrigerator compressor too.

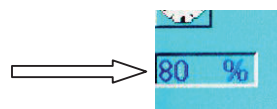
The machine cools until it reaches the Set point value that corresponds to the set Program (in this case 80%).

The initial value will be approx. 60% (see display window) and will slowly increase until it reaches 80%.

B) When the machine reaches the Set point value, a buzzer warning with the text "**EXTRACT PRODUCT**" signals the end of the Cycle and stops cooling the product, whilst continuing to mix it at low speed.

If the ice cream is not extracted within 10 seconds, the cooling restarts and keeps the consistency of the Ice cream constant until it is removed.

C) The Viscosity of the ice cream (80%) can also be varied during the cycle:



Press the number 80 and a small numeric keypad will appear via which the number can be changed.

We recommend changing the value, by a maximum of + -2 units at a time.

➤ Batch freezing and Pasteurising together

Whilst the lower part (Cold) of the machine is Batch freezing the Ice cream, a second dose of the product can be poured in the upper part to be Pasteurised.

1. Make sure the valve is closed before pouring the product in the pasteurising tank (see page 27)
2. Pour the dose in the Tank and close the cover.
3. If the program is still set to "1 Ice cream pasteurising", just press **START** and the machine will start Heating and stirring.



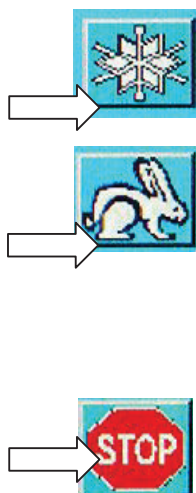
➤ Ice cream extraction

The machine has reached the Set point value, the buzzer warning has been emitted and the text "**EXTRACT PRODUCT**" has been displayed.

- A. Position the ice cream tank, unblock the plate lever (**LP**) without pressing any buttons and pull it right.
- B. Let the Ice cream pour slowly for a few seconds at low speed with cooling mode activated.
- C. Press "**FAST EXIT**" and the Turbine will spin at full speed to rapidly and completely expel the rest of the Ice cream left inside.

ATTENTION: SWITCH FROM THE "COOLING" BUTTON TO "FAST EXIT" DIRECTLY WITHOUT USING THE "STOP" BUTTON FIRST.

- D. Finish the extraction phase of the ice cream, press "**STOP**" and close the flange outlet by repositioning the plate (**LP**).



"Custard" production

➤ "Custard" Recipes (indicative)

1) "Soft" Custard	2) "Thick" Custard	3) "Premium" Custard
<ul style="list-style-type: none"> - 1 Litre of Milk - 250 grams of Sugar - 160 grams Egg yolks - 80 grams of Maize Starch - Aromas according to taste 	<ul style="list-style-type: none"> - 1 Litre of Milk - 350 grams of Sugar - 80 grams Egg yolks - 60 grams of Flour type "0" - 60 grams of Starch - Aromas according to taste 	<ul style="list-style-type: none"> - 1 Litre of Milk - 300 grams of Sugar - 300 grams Egg yolks - 80 grams of Maize Starch - Aromas according to taste
Cooking temperature - Approx. 90° C	Cooking temperature - Approx. 93° C	Cooking temperature - Approx. 85° C
Cooling temperature in the machine then extraction and preservation in Refrigerator at + 4° C - Approx. 25° C	Cooling temperature in the machine then extraction and preservation in the Refrigerator at + 4° C - Approx. 35° C	Cooling temperature in the machine then extraction and preservation in the Refrigerator at + 4° C - Approx. 25° C

For whatever type and amount of ingredients, the correct result of the Custard preparation depends on the cooking temperature.

➤ Hot "08 Custard" Program Selection

A

Open the page

B

Open the list

C

Select the recipe

D

Confirm the recipe and exit

E

Page is ready for initiation

Verify valve is closed

1) Prepare the Milk and mix the sugar, egg yolks and maize starch separately in a bowl.	2) Pour the milk in the boiler and start heating by pressing START	
3) Activate the buzzer warning at 50° C for the ingredients to be added	Increase the speed of the stirrer by pressing the bars once	At 50° C, pour the sugar, eggs and starch paste, prepared separately, into the boiler.
Check that the ice cream turbine is mounted in the freezing chamber		Whilst the Cream cooks, enter the "Cold" program.

➤ Cold "08 Custard" Program Selection and cooling initiation

A

Open the page

B

Open the list

C

Select the recipe

D

Confirm the recipe and exit

E

Page is ready for initiation

The display will signal the cream is ready with a **Bip Bip** warning and the text **"OPEN VALVE"** appears.

Press the symbol and open the Valve.

Stop the heat, wait a few seconds for the valve to open and the cream to pour into the cooling part, then start the "Cold" mode by pressing the "star" button

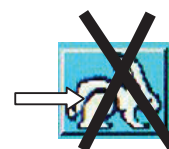
The Mixing speed in the Batch Freezer is Set for cream.

Whilst the cream is cooling, close the valve and another dose of custard can be boiled in the boiler.

The machine has reached the Set point value (**25° C**), the buzzer warning has been emitted and the text **"EXTRACT PRODUCT"** has been displayed.
Position a container under the flange and, without pressing any buttons, open the flange plate completely and let the Cream pour slowly. **Never use this key** in order not to ruin the cream

Once the cream is poured, press **STOP** for the Cycle to be stopped.

Put the Cream in the refrigerator until it reaches the preservation temperature of + 4° C.



➤ Final considerations:

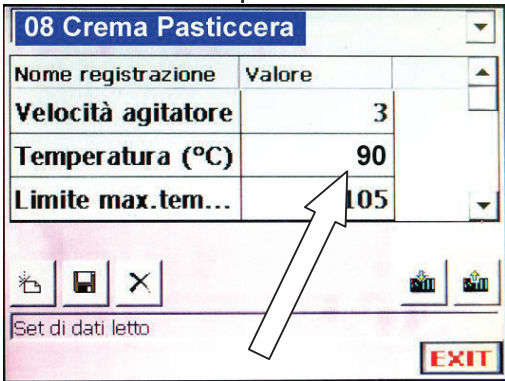
A – In this case, the cream is extracted at 25° C otherwise, if it were colder, it could be ruined when passed from the flange grill. The extraction temperature could also be 50° C for Cream recipes with a few eggs and a lot of Flour and Starch.

B – The procedure described above can be used for all similar products (**Béchamel – Bavarian Cream – Ganache Cream – etc.**) even if made using different ingredients.

ATTENTION: THE VARIOUS PROGRAM SETTINGS PRESENT ON EACH RECIPE DISPLAY DO NOT ALWAYS GUARANTEE THE BEST RESULT. EVERY RECIPE, BASED ON THE INGREDIENTS AND THE QUANTITIES, WILL BE CUSTOMISED USING THE DEVICES THAT THE MACHINE PROVIDES ON THE CONTROL PANEL (CHANGING THE TIME AND TEMPERATURE - CHANGING THE STIRRING SPEED).


- How to vary the parameters (temperature and speed) of the recipe

Retrieve the desired recipe

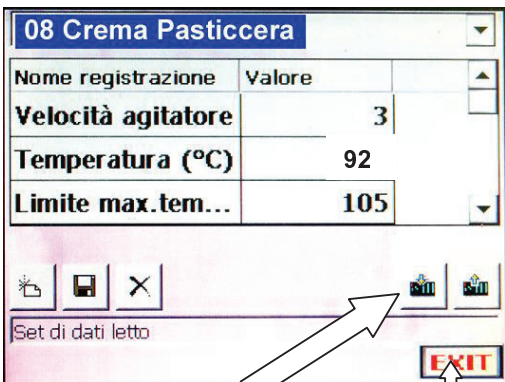


If you wish to change the cooking temperature and/or speed, press the relative number


... and a numeric keypad will appear for the new numbers to be entered
for example **92** instead of **90**



press numbers 9 and 2 and press this button to go back



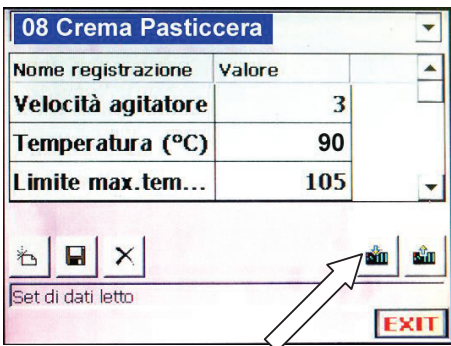
Press ENTER and then EXIT to confirm



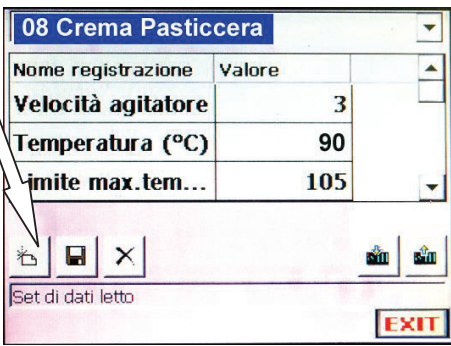
Before sending the new data to the work page, the display asks whether the new data is to be saved. If saved, this recipe will be available in the future

How to create a new customised recipe:

A – Retrieve the recipe that resembles the one to be created

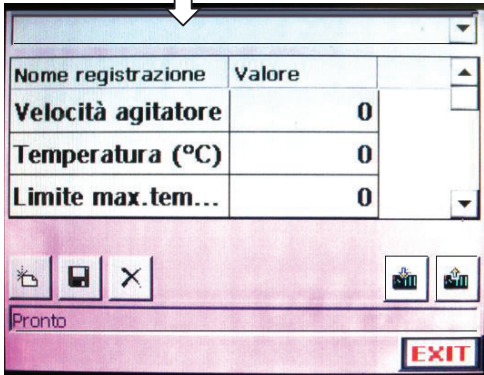


C – Press new program

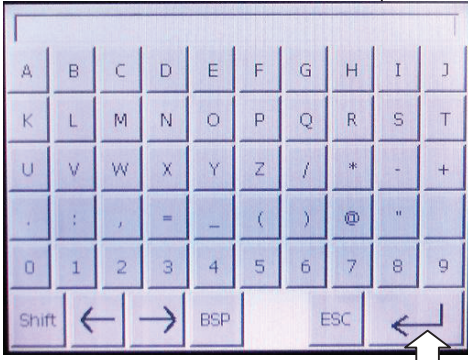


B – Load the recipe by pressing

D – Press on the line

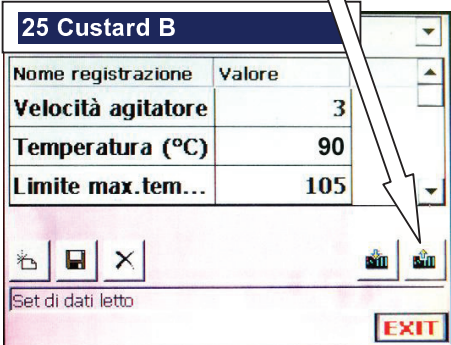


... and a numeric keypad will appear where to set: the number and name of the recipe

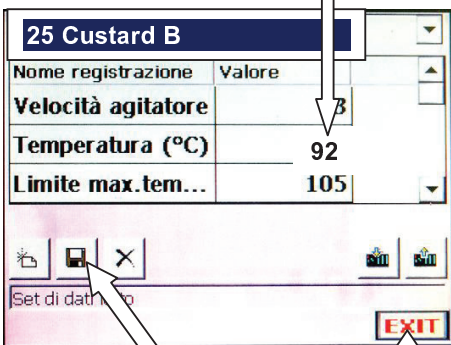


press this button to go back

E – Retrieve the program by pressing



F - Make the desired changes: for example, change the temperature



G – Save the recipe by pressing

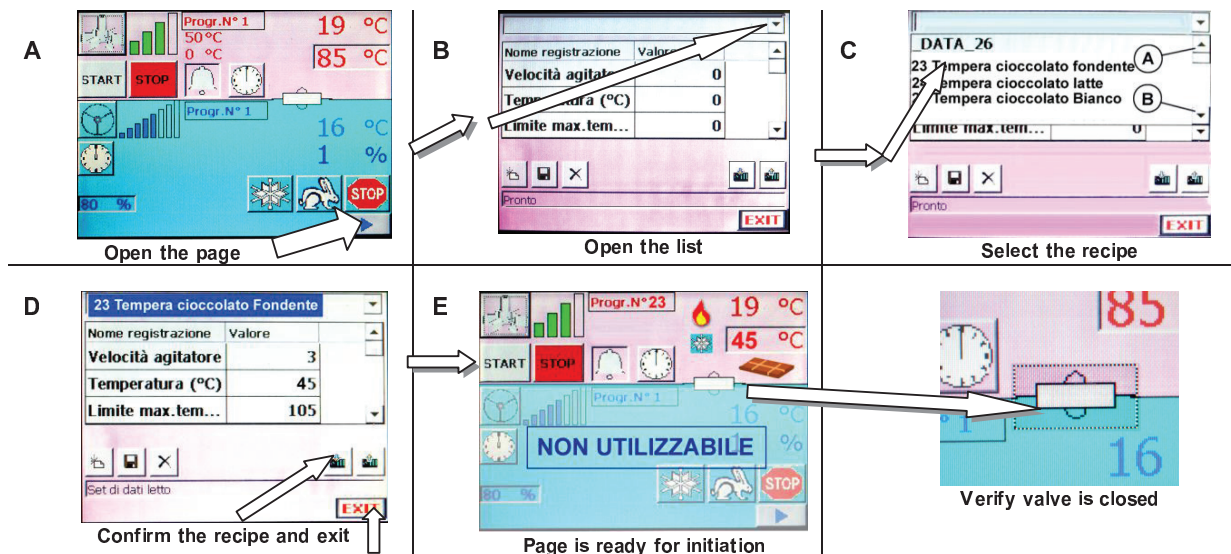
and press EXIT

"Chocolate Tempéra" Production

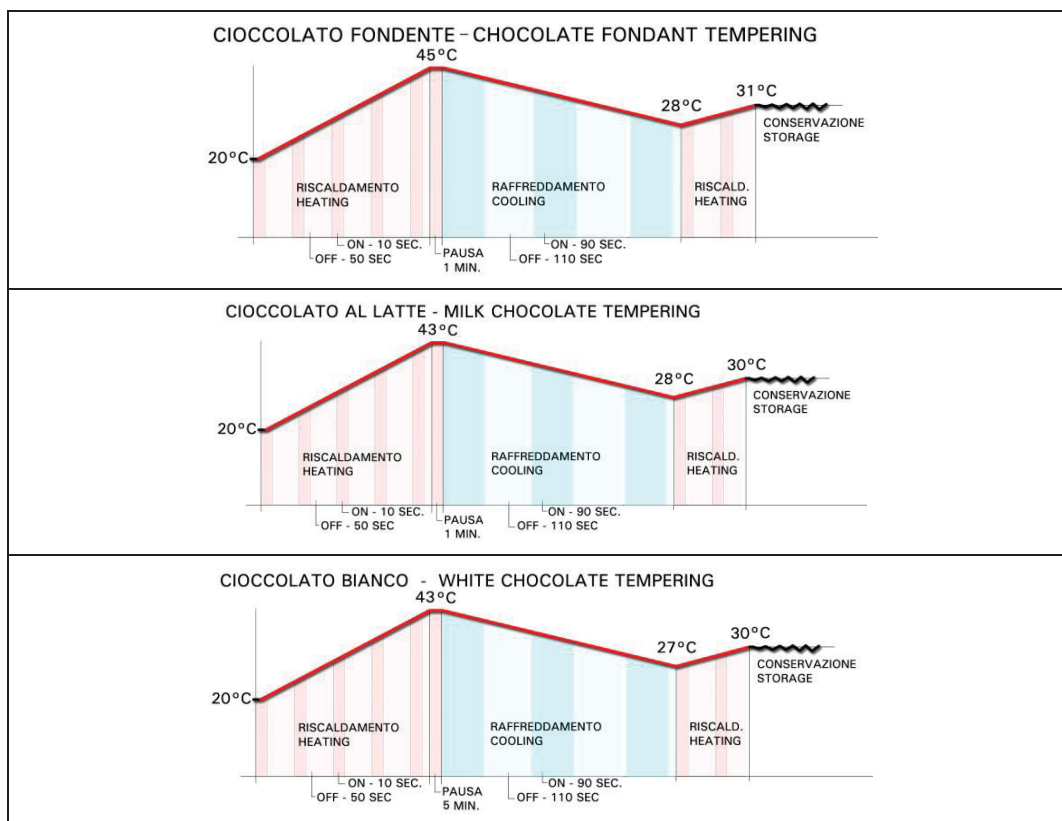
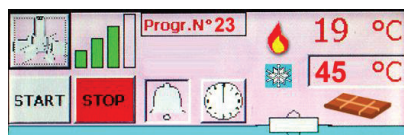
➤ "Chocolate Tempéra" programs added in the touch screen:

- Program 23: Dark chocolate tempéra
- Program 24: Milk chocolate tempéra
- Program 25: White chocolate tempéra

➤ "23 dark chocolate tempéra" hot only program selection



1) Pour the pieces of chocolate in the boiler and start the heating by pressing the **START** button



8-

Maintains the temperature range of the chocolate between **29° C** (minimum) and **31° C** (maximum).

9-

As the machine completes the tempera cycle, open the flange (**F**), remove the mixing turbine and mount the slide (**S**) supplied with the machine, as in the figure, for the extraction of the chocolate.



10-

Once the tempera is complete, open the valve and let the chocolate slide down into the container below.

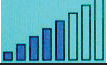




















ATTENTION: if the tempered chocolate is not extracted completely, **do not interrupt the heating or the stirring**. If the chocolate is extracted completely, **immediately wash the machine** as described in the **"WASHING"** paragraph on page 35.



“HOT” programs with programmed and customised Set-points

P	Product	Set Point ° C	Custom. ° C	 at ° C	Notes on additional ingredients		
1	Cream ice cream pasteurisation	85°					
2	Fruit ice cream pasteurisation	85°					
3	Chocolate ice cream pasteurisation	90°					
4	Sorbet	65°					
5	Normal water ice	65°					
6	Panna Cotta (Cooked cream)	85°					
7	Bavarian Cream	82°					
8	Custard	90°					
9	Butter Cream	85°					
10	Pate a bombe	80°					
11	Chocolate pate a bombe	80°					
12	Ganache	90°					
13	Zabaglione	70°					
14	Chocolate Bavarian Cream	90°					
15	Cream Coffee	85°					
16	Mousse	65°					
17	Cream Mousse	90°					
18	Marmalade	98°					
19	Jelly	104°					
20	Béchamel	90°					
21	Meringue	74°					
22	Sponge Cake	55°					
23	Dark chocolate tempera	45°	See Page 33				
24	Milk chocolate tempera	50°	See Page 33				
25	White chocolate tempera	45°	See Page 33				
	Customised programs						
26							
27							
28							
29							
30							
31							
32							
33							

“COLD” programs with programmed and customised Set points

P	Product	Set Point	Custom. ° C	Type of Turbine	Notes on additional ingredients		
1	Ice cream batch freezing %	80 % C					
2	Batch freezing ice cream ° C	-6 ° C					
3	Batch freezing ice cream time	600 “					
4	Sorbet	- 7 ° C					
5	Water ice	0 ° C					
6	Panna Cotta (Cooked cream)	10 ° C					
7	Bavarian Cream	20 ° C					
8	Custard	10 ° C					
9	Butter Cream	20 ° C					
10	Pate a bombe	-					
11	Chocolate pate a bombe	-					
12	Ganache	10 ° C					
13	Zabaglione	10 ° C					
14	Chocolate Bavarian Cream	15 ° C					
15	Cream Coffee	28 ° C					
16	Mousse	5 ° C					
17	Cream Mousse	10 ° C					
18	Free programming	20 ° C					
19	Béchamel	10 ° C					
20	Meringue	0 ° C					
21	Sponge Cake	0 ° C					
	Customised programs						
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

WASHING THE MACHINE

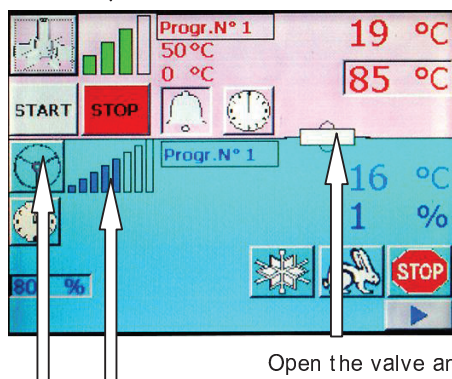
Rinsing



the

Pour water into the boiler and start the stirring by pressing

bars)



Open the valve and pour the water in the batch freezer

Start the stirring of the batch freezer and increase it to maximum speed. After a few seconds, stop the stirring with the same button and drain the dirty water. The machine can now be washed.



Washing the machine

	<p>WEAR THE REQUIRED PROTECTIVE DEVICES WHILE WASHING AND SANITISING THE MACHINE:</p> <p>GLASSES AND RUBBER GLOVES.</p> <p>(USE GLOVES THAT COVER THE ENTIRE FOREARM.)</p>	
--	---	--

- 1 Fill the boiling tank with about six litres of hot water (40° - 50° C) and add the detergent, (e.g. DIVERSEY – SU91 available in Italy, or DIVERSEY – VK3L available in other countries) in concentration solutions of 5 - 10%.
- 2 Start the stirring in the boiler for 4 - 5 minutes and at the end make the same water flow with the detergent to the lower part and start the stirring of the batch freezer for another 3 minutes and then drain.
- 3 Thoroughly rinse the upper part (boiler) and lower part (batch freezer) with clean water.

SANITISING

- 4 Before starting production, sanitise the machine as follows: Prepare an acid solution (e.g. Percitric or Peracetic) and add **COLD** water (MAX 25° C) so as to obtain a final concentration of 0.1 – 0.3%; leave the mixture in the machine (in the boiler and the batch freezer) for about 5 minutes whilst ensuring that all the surfaces in contact with the ice cream are covered by the solution; then drain and rinse thoroughly.

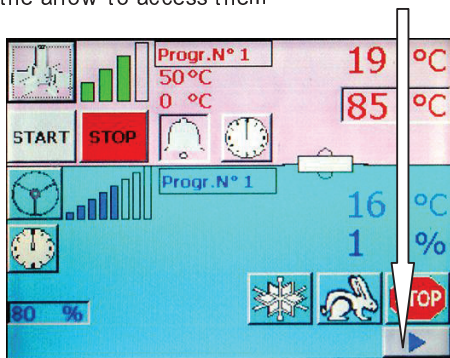
For complete and safe sanitification, remove the stirrer of the boiler and the ice cream turbine and immerse them in a separate container containing cold water and the Percitric or Peracetic acid for a maximum of 5 minutes and then rinse thoroughly.

Re-assemble the pieces and the machine is ready for a new production.

ATTENTION: WE STRICTLY ADVISE YOU NOT TO USE HOT WATER WHEN PREPARING THE ABOVE-MENTIONED ACID SOLUTION. IMPORTANT: TO AVOID SERIOUS PROBLEMS RELATED TO CORROSION, DO NOT LEAVE THE SANITISING SOLUTION INSIDE THE MACHINE FOR MORE THAN 10 MINUTES.

Washing programs

The machine also has 2 Washing programs.
Press the arrow to access them



and the page below appears



Press "Boiler Washing" for the water to start heating together with the stirrer.

Press "Batch Freezer Washing" for the batch freezer stirrer to run for about 2 minutes before stopping automatically



Important recommendations:

- **For no reason is** any type of **Chlorine** or **Acids** to be used to disinfect the machine.
- Seek the advice of Companies that produce cleaning products for food preparation equipment.
- Dry all the internal and external parts after washing. Any residue must be removed.

Removing the pasteuriser stirrer and cover

Extract the stirrer from the pasteuriser by pulling it from the bottom upwards.

The stirrer consists of four parts:

- protection cover (1)
- stirrer body (2)
- side scraping spatulas (3)
- tank bottom scraping spatulas (4)

Remove and clean it with the brush supplied with the machine. Re-assemble while paying attention to insert the scraping spatulas (3) and (4); they must swing in order to scrape well.

Wash the cover separately with hot water and soap.

ATTENTION!!!

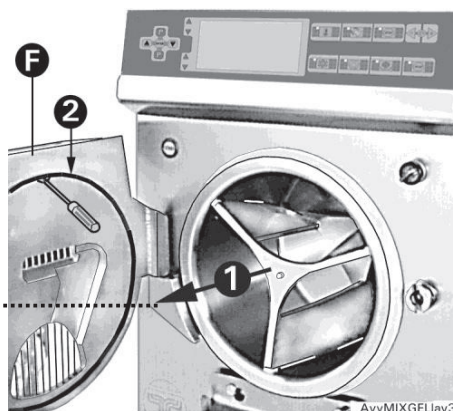
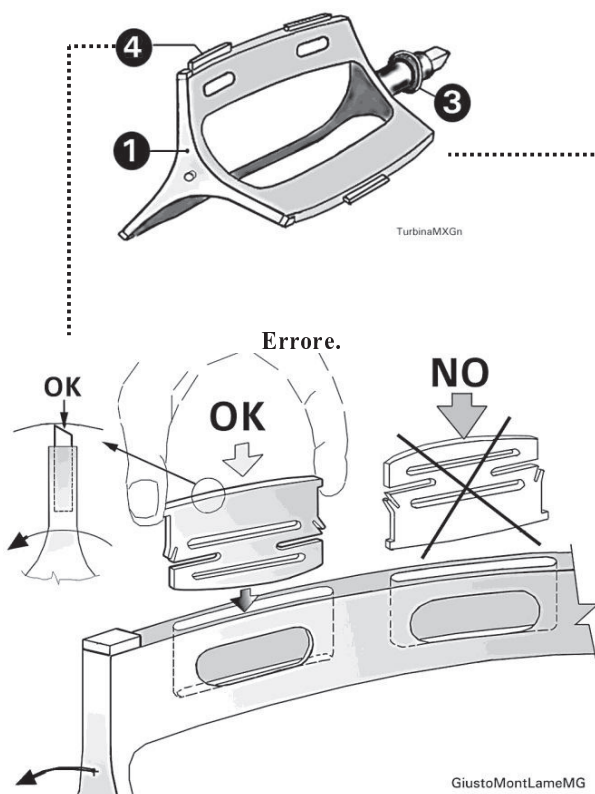
Do not use any type of alcohol or solvent.



• Unloading the batch freezer mixing turbine (1)

Open the flange (F) by turning the handle (MF) anti-clockwise and pulling it towards you.

Extract the mixing turbine (1) by holding it from the spokes and pulling it outwards.



Remove the scraping blades (4) and the mechanical seal (3) and wash them thoroughly in the wash basin.

After having dried them all well, re-assemble the V mechanical seal (3) and slightly grease it and the scraping blades (4) with Vaseline, whilst paying attention to re-assemble them as shown in the figure at the side.

Re-assemble the turbine (1) in the machine, pushing it to the end and engaging the drive triangle in its seat using the spokes of the turbine.

Remove the internal seal (2) of the flange (F); use a screwdriver to insert it into the relative space in the flange and remove the seal. Wash it and re-assemble it after having greased it slightly with Vaseline.

How to clean the cover and the control console

- **Cleaning the transparent cover**

The cover of the pasteurising tub must be cleaned with hot or cold water with liquid and not powder detergent. Kitchen powder detergent can scratch it.

Do not use brushes or metal scouring pads to remove resistant scale deposits - soften them with hot water and then remove them with a sponge or soft cloth.

For no reason whatsoever is any type of Alcohol, Acid or Solvents to be used



- **Cleaning the Touch Screen**

The glass of the touch screen must be cleaned with a sponge, wet with hot or cold water and liquid detergent. An abrasive powder detergent can ruin the glass and cause abrasions and scratches.

No type of acids or solvents is to be used as it would damage the glass and its support.

Do not use brushes with metal or hard plastic bristles or metal scouring pads, normally used in the kitchen.

More resistant dirt must never be removed with blades or metal items (*knives - scissors - screwdrivers - etc.*): these can scratch the glass.

Soften with hot water and remove with a sponge or soft cloth.