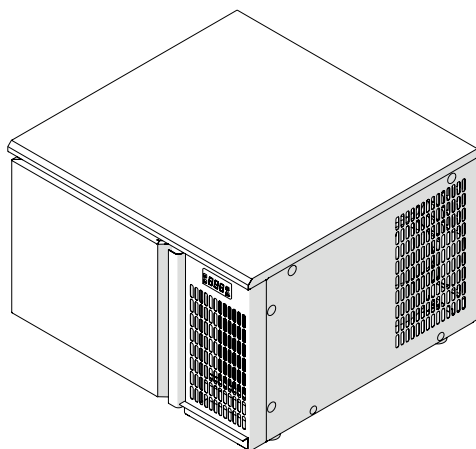


ATILA[®]

BLAST CHILLER

TRANSLATION OF THE ORIGINAL INSTRUCTIONS



ATT02



Revision 01 - 01/2023

EN USE AND MAINTENANCE MANUAL

TABLE OF CONTENTS

TABLE OF CONTENTS	3	8. USE.....	27
TECHNICAL DATA SHEETS	5	8.1. CHECKS BEFORE use.....	27
USE AND MAINTENANCE MANUAL	7	8.2. SWITCH-ON	27
1. GENERAL PRELIMINARY INFORMATION ...	8	8.3. Product load to be blasted	28
1.1. Purpose of the document.....	8	8.4. Product blasting.....	29
1.2. Supply and preservation.....	8	8.4.1. Temperature measurement.....	29
1.3. Consultation notes	8	8.4.2. Blasting modes	29
1.4. Regulatory framework.....	9	8.4.3. Blasting cycle with core probe	30
1.5. Warranty	9	8.4.4. Timed blasting cycle	31
2. SAFETY WARNINGS	10	8.4.5. Blasting times	32
2.1. Obligations and prohibitions	11	8.5. Defrost.....	33
2.1.1. Obligations	11	8.5.1. Manual defrost.....	33
2.1.2. Prohibitions.....	11	8.6. Power off/stand-by	33
3. IDENTIFICATION AND DESCRIPTION	12	9. CLEANING	34
3.1. Equipment identification.....	12	9.1. Cleaning safety warnings	34
3.2. Intended use.....	13	9.2. Table of cleaning operations	35
3.3. Description.....	13	9.3. General cleaning.....	35
3.4. Main components	14	9.4. Cleaning the condenser.....	35
4. RECEIPT AND HANDLING	15	9.5. Core probe cleaning	35
4.1. Equipment receipt.....	15	10. MAINTENANCE.....	36
4.1.1. Handling with packaging	15	10.1. Routine maintenance	36
4.1.2. Packaging removal and inspection.....	16	10.1.1. Inspecting after delivery.....	36
4.1.3. Packaging disposal.....	17	10.2. Special maintenance.....	37
4.2. Handling.....	17	10.2.1. Replacement of motor fan	37
4.2.1. Version and weight division for handling.....	17	10.2.2. Refrigerating unit replacement.....	37
4.2.2. Handling operations.....	17	10.2.3. Door gasket replacement.....	37
5. INSTALLATION	18	11. DIAGNOSTICS	38
5.1. Installation site	18	11.1. Alarms	38
5.1.1. Features of installation site.....	18	12. DECOMMISSIONING AND DISPOSAL	39
5.1.2. Minimum safety distances	19	12.1. Long periods of inactivity	39
5.2. Feet placement and adjustment.....	20	12.2. Disposal	39
5.3. Condensate water drain	20	13. Attachments.....	40
6. CONNECTIONS.....	21	13.1. Wiring diagram	40
6.1. Electrical connection.....	21		
6.1.1. Electrical power supply connection.....	21		
7. CONTROL PANEL.....	22		
7.1. Digital interface	22		
7.1.1. Alarms	23		
7.2. Cycle-dependent interface characteristics.....	24		
7.3. Adjusting operating parameters.....	25		
7.3.1. Table of parameters.....	25		

TECHNICAL DATA SHEETS

**ABBATTITORE
ATTILA
ATT02**

ATT02

Blast chiller, 3 GN 2/3 trays (354 x 325 mm)



SUITABLE FOR BLASTING



GASTRONOMY



MEAT



PASTRIES



FISH



BREAD



ICE CREAM

FUNCTIONS



VENTILATION



BLASTING



FREEZING



PROBE PIN



TIME



DEFROSTING



BUZZER

TECHNICAL FEATURES

Version	- Digital - With incorporated unit (CG) - Cooling fluid R290 (on request)
Cooling type	Ventilated (V)
Operating temperature	+3°C / -18°C / -40°C
Dimensions	L.660 x D.640 x H.420 mm
Chamber dimensions	L.340 x D.363 x H.270 mm
Standard supplies	- Chamber temperature probe - Core probe - No. 3 pairs of guides

USE AND MAINTENANCE MANUAL

1. GENERAL PRELIMINARY INFORMATION

Thank you for purchasing our equipment.

Carefully read this manual before carrying out installation, maintenance and/or before using the equipment.

This manual is attached to the equipment **ATTILA - ATT02**.

The Manufacturer is not liable for breakages, accidents or various problems due to non-compliance with and in any case the non-application of the provisions contained in this manual.

1.1. PURPOSE OF THE DOCUMENT

The **User and Maintenance Manual** represents the reference document, drawn up by the Manufacturer of the equipment, aimed at operators and specialised personnel who will come into contact with it during its entire life cycle.

The purpose of the document is to provide information for the correct use of the equipment, from installation to disposal, bringing attention to the dangers that may arise from incorrect use and taking into account the reasonably foreseeable incorrect behaviour of the operator.

1.2. SUPPLY AND PRESERVATION

The manual is in **electronic format**.

This manual is an integral part of the equipment.

Keep this manual in a place that is accessible to all users for future consultation. In case of transfer or sale of the equipment, be sure to provide the new user with this manual, so that they may be properly informed about the installation procedure, the use and safety requirements.

1.3. CONSULTATION NOTES

SYMBOL	TYPE	DESCRIPTION
-	BOLD TEXT	Highlights some significant sentences and references in the text.
	GENERIC OR DEDICATED WARNING SIGN	It highlights risks to the health and safety of authorised personnel and/or risks of damage to or malfunction of the machine.
	GENERIC OR DEDICATED PROHIBITION SIGN	Emphasises the prohibition to perform an action.
	GENERIC OR DEDICATED OBLIGATION SIGNAL	Indicates a prescription (obligation to perform an action).
	INFORMATION	Reports relevant information.

1.4. REGULATORY FRAMEWORK

The equipment is designed according to the regulatory framework described in the accompanying declaration of conformity and the identification plate placed on the same, as well as the requirements, which can be downloaded directly from the manufacturer's website.

1.5. WARRANTY

The warranty terms established by law apply. Should the equipment be faulty, contact the nearest Authorised Service Centre, or the reference Dealer.

The following documentation must be forwarded in order to repair the equipment:

- Serial number
- Copy of the invoice with the date of purchase of the equipment
- Description of the fault.

2. SAFETY WARNINGS



The Manufacturer cannot be held liable for any damage, suffered by people or things, caused by non-compliance with the aforementioned requirements or deriving from tampering with even a single part of the equipment and from the use of non-original spare parts.



This professional equipment must only be used and serviced by adults (> 18 years in Europe or other limits defined by the local regulatory framework) with normal physical and mental health and adequately trained and informed on the subject of health and safety in the workplace.



WARNING

Electrical hazard. Disconnect the power supply before carrying out maintenance work.



WARNING

This equipment contains flammable and explosive hydrocarbon refrigerants.



WARNING

Fire or explosion hazard. The machine contains a flammable coolant. Do not use mechanical devices or equipment that can ignite fires and explosions. Use only non-sparking equipment for Ex zones. Do not puncture coolant pipes.



WARNING

Fire or explosion hazard. The machine contains a flammable coolant. Consult the safety data sheets of the coolant before working on the equipment.



WARNING

Fire or explosion hazard. The machine contains a flammable coolant. Follow the handling instructions given.



WARNING

Cutting hazard. The door profile has sharp edges. Use the handle to close the equipment.



Only qualified technical personnel should carry out maintenance work.



Qualified technical personnel must remove the electrical current and earth the entire equipment before carrying out maintenance work. He/she must use ESD clothing, shoes and equipment capable of slowly dissipating electrostatic charges and not producing them.



When charging the flammable cooling fluid, the requirements in the safety data sheet of the substance must be strictly adhered to.



Only use original spare parts.



It is strictly forbidden to make changes to the equipment.



Do not start the equipment with wet hands or when there is contact with water.

2.1. OBLIGATIONS AND PROHIBITIONS

2.1.1. OBLIGATIONS

- Only qualified technical personnel should perform the installation work (see chapter 'INSTALLATION')
- Keep the entire area around the equipment free and clean
- Keep the entire perimeter of the equipment free so that there is air circulation
- Use only food grade containers
- Wait until the set temperature is reached before loading the product into the equipment
- Place a flammable warning sign in the workplace.

2.1.2. PROHIBITIONS

- Do not install the equipment if it appears damaged upon receipt
- Do not allow children to play with the equipment
- Do not use the equipment as a work surface or as a support surface
- Do not modify or tamper with the equipment in any way
- Do not place or store flammable liquids or materials, or easily ignitable objects inside the equipment or in the immediate vicinity
- Do not place any kind of material (boxes or other) on the equipment
- Do not handle the equipment by the handle. Grasp it at the sides
- Do not place the equipment under direct exposure to sunlight and all other forms of thermal radiation
- Do not place the equipment inside a room with high relative humidity (potential formation of condensate)
- Do not place the equipment inside a closed niche or against the wall
- Do not obstruct the air vents
- Do not set temperatures lower than permitted
- Do not damage and bend the evaporator flaps and the cooling fluid pipes
- Do not store medicines, blood and blood products in the equipment
- Do not store explosive substances, such as pressurised containers with flammable propellants, in the equipment
- Do not store chemical and flammable products
- Do not place hot pans, hot products and objects on or near the equipment.

3. IDENTIFICATION AND DESCRIPTION

3.1. EQUIPMENT IDENTIFICATION

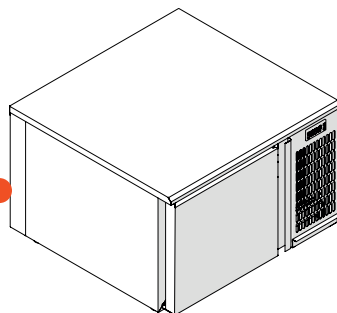
The nameplate is on the rear of the equipment. Contains:

- Serial number
- The type/functional features
- The details of the certification and marking.



**Do not remove the identification plate and/or replace it with other plates.
Contact the manufacturer if required.**

Data produzione Production date	Matricola	Serial Number	Modello	Model
			Code:	
Norma sicurezza Safety norm		Classe climatica Climatic class		
Gas espansione Expansion gas	Tipo Gas type	Carica Gas Load	Carica 2 Gas 2 Load	
Illuminazione Lighting	Resist. condensa Condensation heater	Corrente Rated current		
			XXXXXX	
Tensione Alimentazione Power Supply	Fase Phase	Frequenza Frequency		
Volume netto Net volume	Potenza elettrica Electric power	ARM Sbrinatoria elettrica Electric defrost		



The nameplate may change depending on the country of destination of the equipment.

3.2. INTENDED USE

The equipment is a **BLAST CHILLER** for professional use. It enables previously cooked food products to be cooled rapidly. It works in the following modes:

- Positive blasting = up to +10°C/ +3°C
- Negative blasting or freezing = down to -18°C/ -40°C.

The Manufacturer cannot be held liable for uses other than those indicated.



Do not use this equipment to blast products other than those intended.



Do not use pressurised containers with flammable propellant in the equipment.

3.3. DESCRIPTION

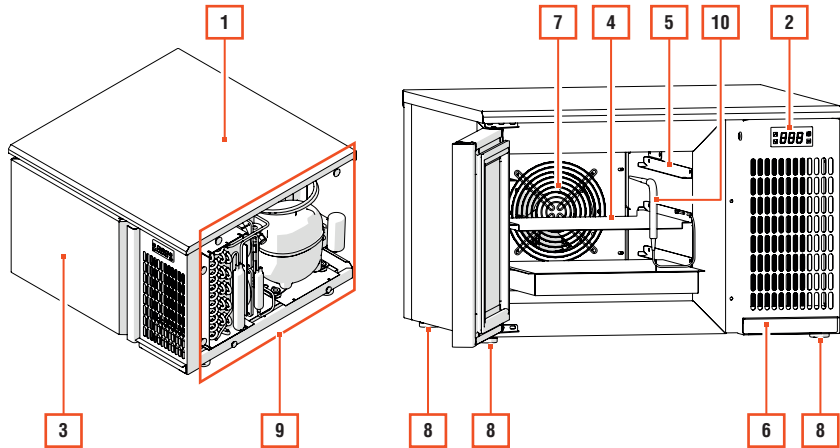
The equipment has a stainless steel internal and external structure. The outer bottom is made of galvanised steel.

It has 40 mm insulation made of polyurethane resins.

It is equipped with a power supply cable.

The insulation is made without the use of environmentally hazardous CFCs.

3.4. MAIN COMPONENTS



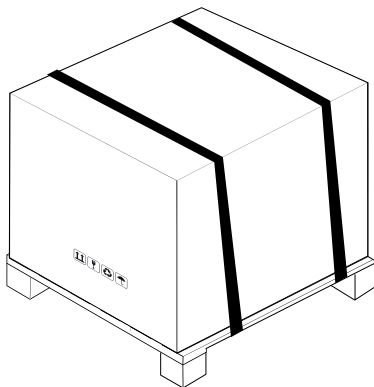
POS.	ELEMENT	NOTES
1	STRUCTURE	
2	CONTROL PANEL	
3	DOOR WITH HANDLE	
4	SHELF	
5	SHELF SUPPORT	
6	REMOVABLE CONDENSATE DRIP TRAY	
7	EVAPORATOR UNIT	Including: - Fan - Resistor
8	FEET	
9	REFRIGERATING UNIT	Including: - Compressor - Capacitor - Chamber temperature probe - Fan
10	CORE PROBE	

4. RECEIPT AND HANDLING

4.1. EQUIPMENT RECEIPT

The equipment is delivered on a pallet packed in strapped cardboard.

Upon delivery, check that the packaging is intact and that it has not been damaged during transport.



4.1.1. HANDLING WITH PACKAGING



Only qualified technical personnel should perform handling operations on the equipment.

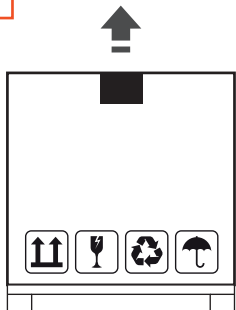


The manufacturer accepts no liability in the event of non-compliance with current safety regulations.

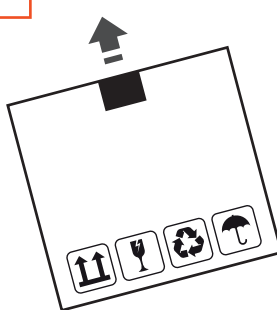
Always handle the packaging in an upright position (see the instructions on the packaging).

If the packaging is tilted, wait at least 8 hours before starting. In this way, the oil in the condenser flows to all parts for lubrication.

YES

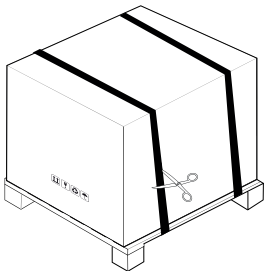
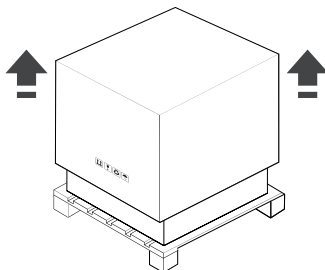


NO



4.1.2. PACKAGING REMOVAL AND INSPECTION

For the removal of the packaging:

STEP	ACTION	PICTURE
1	Remove the bands.	
2	Remove the packaging cardboard.	
3	Lift the equipment to remove it from the pallet. Place the equipment in its designated place. Note: 2 operators are required to lift and handle the equipment manually.	
4	Remove the protective films used to protect the steel (both external and internal).	



Keep the packaging pallet.

After removing all packaging materials, check for any anomalies.

If any anomalies are found, do not install the equipment. Contact your Dealer or Authorised Service Centre within 8 days from the date of purchase.

4.1.3. PACKAGING DISPOSAL

The materials used for packaging are recyclable and must be collected.



Separate the various packaging waste materials and dispose of them in compliance with the regulations in force in the country where the oven is installed.

4.2. HANDLING

4.2.1. VERSION AND WEIGHT DIVISION FOR HANDLING

VERSION	PACKING SIZE	GROSS WEIGHT
ATT02	L.715 x D.725 x H.590 mm	56 Kg

4.2.2. HANDLING OPERATIONS

Carefully read the instructions before moving the equipment.



Only qualified technical personnel should perform handling operations on the equipment.



The manufacturer accepts no liability in the event of non-compliance with current safety regulations.



Move the equipment while keeping it upright at all times. Do not tilt the equipment.

Lifting/handling must be performed by 2 operators.

Lift the equipment manually, gripping it at the base.

If the equipment is tilted, wait at least 8 hours before starting up. In this way, the oil in the condenser flows to all parts for lubrication.



CAUTION

When handling, take care not to damage the equipment itself, persons, animals and/or things in the immediate vicinity.



CAUTION

Do not pull the equipment by the door opening handle to move it.

5. INSTALLATION



Only qualified technical personnel should perform installation operations on the equipment.



The manufacturer accepts no liability in the event of non-compliance with current safety regulations.



Do not install and use the equipment in ATEX classified environments, locations or areas.

5.1. INSTALLATION SITE

5.1.1. FEATURES OF INSTALLATION SITE



Do not install the equipment outdoors, directly exposed to the weather.

The installation room must be a room with adequate and controlled temperature and humidity in order to avoid malfunctions and condensation.

Follow the reported permissible environmental conditions:

PERMITTED ENVIRONMENTAL CONDITIONS

Ambient temperature	max 30°C
Air humidity	max 60%

Do not use the equipment outside the permitted conditions of use and operation.



Do not obstruct the supply and return air ventilation openings in the equipment.

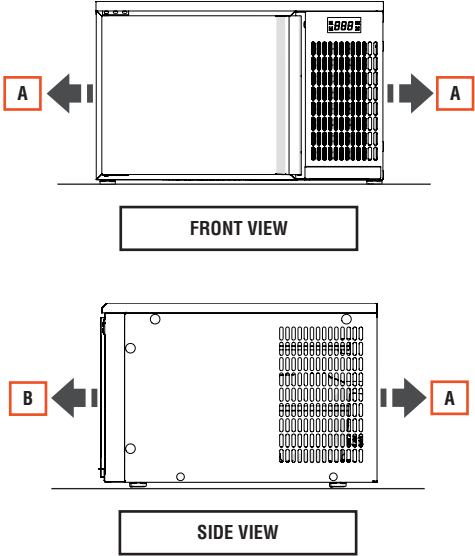


Place the equipment away from heat sources and open flames.

5.1.2. MINIMUM SAFETY DISTANCES

In order to ensure proper functioning of the equipment and thus proper air circulation, observe the minimum safety distances from side walls, other equipment and/or heat sources.

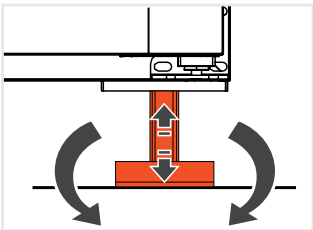
MINIMUM SAFETY DISTANCES		
A	Side / Rear / Upper	10 cm
B	Door side	Distance equal to door opening length



5.2. FEET PLACEMENT AND ADJUSTMENT

Position the equipment perfectly level, so that it can work properly, the condensation water from the defrosting process can drain off correctly and there are no noisy vibrations of the motor.

For **positioning and adjusting the equipment feet**:

STEP	ACTION	PICTURE
1	Place the equipment on a horizontal plane.	
2	Adjust (if necessary) the height of the screw feet.	
3	Check the flatness with a spirit level.	
4	Check the correct positioning of the condensate water collection tray and the relevant drain.	

5.3. CONDENSATE WATER DRAIN

The equipment has a tray for collecting condensation water. Remove the tray at the end of manual defrosting with the door open.

6. CONNECTIONS

6.1. ELECTRICAL CONNECTION



Only qualified technical personnel should perform connection operations on the equipment.



The electrical connection must be carried out in accordance with the legal compendium and regulations applicable in the country where the equipment is installed.

6.1.1. ELECTRICAL POWER SUPPLY CONNECTION

Refer to the attached wiring diagram of the equipment.

To make a correct electrical connection:

- Set up a residual current circuit breaker
- Check that the mains voltage and frequency correspond to those on the nameplate. A variation $\pm 10\%$ of the rated voltage is allowed
- Connect the equipment to an efficient earthing system. Verify operation and declaration of conformity in accordance with the regulatory compendium of the country of installation
- Install a bipolar cut-off switch with opening of the contacts at least 3 mm, upstream of the plug. This switch is mandatory when the load exceeds 1000 watts or when the equipment is connected directly without the use of a plug. It must therefore be placed in the immediate vicinity of the equipment so that it can be clearly seen by personnel in the event of maintenance
- Check that the cross-section of the power cable is adequate for the power absorbed by the equipment

It is compulsory by law to connect the equipment to an efficient earthing system, declared and verified by the relevant authorities.

Do not connect the electrical plug of the equipment to an extension cord and/or reducer.

Proceed as follows:

STEP	ACTION
1	Connect the power supply plug to the wall socket.



WARNING

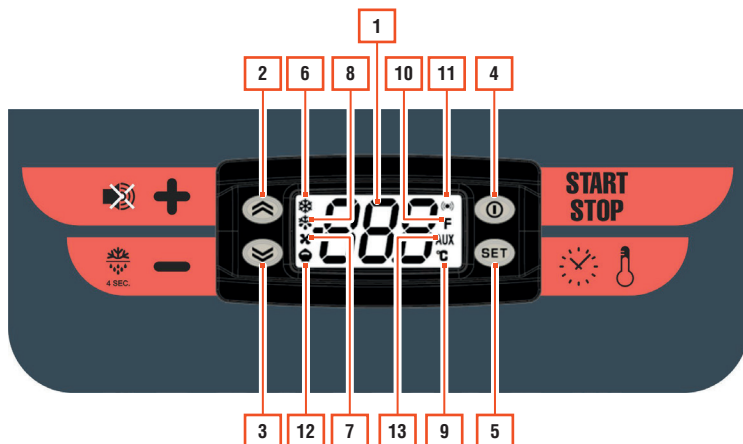
Electrical hazard. If the power cable is damaged, replace it.



The manufacturer disclaims all liability for incorrect connections, not carried out in a workmanlike manner or by unqualified and authorised technical personnel.

7. CONTROL PANEL

7.1. DIGITAL INTERFACE



POS.	ICON	ELEMENT	DESCRIPTION
1		DISPLAY	Displays the equipment operating parameters.
2		UP	Press and release Scrolls through the menu. Increases time or temperature of selected cycle. If the buzzer is active Muting of buzzer (on first press).
3		DOWN	Press and release Scrolls through the menu. Decreases time or temperature of selected cycle. Press for at least 4 sec Manual defrosting start (with equipment in stand-by).
4		START / STOP	Press and release Selected cycle start/stop. Press for at least 4 sec Activates the Stand-by function (with stopped blasting cycles).
5		SET (ENTER)	Press and release Blasting cycle selection.

POS.	ICON	ELEMENT	DESCRIPTION
6		Compressor LED	▪ Steady on: compressor on. ▪ Flashing: delay, protection or activation blocked. ▪ Off: in all other cases.
7		Fans LED	▪ Steady on: evaporator fans on. ▪ Off: in all other cases.
8		Defrost LED	▪ Steady on: defrost on. ▪ Flashing: manual or digital input activation. ▪ Off: in all other cases.
9	°C	Degrees centigrade LED	▪ Steady on: when the instrument displays temperatures (in degrees Celsius). ▪ Off: in all other cases.
10	°F	Degrees fahrenheit LED	▪ Steady on: when the instrument displays temperatures (in degrees Fahrenheit). ▪ Off: in all other cases.
11		Alarm LED	▪ Steady on: presence of an alarm. ▪ Flashing: alarm silenced. ▪ Off: in all other cases.
12		Moneybox LED	▪ Flashing light: blasting in progress. ▪ Off: in all other cases.
13	AUX	Aux LED	▪ Steady on: storage in progress. ▪ Off: in all other cases.

7.1.1. ALARMS

The alarms present are those related to the probes. They are only shown when the relative probe display is required.

CODE	ALARM DESCRIPTION
Pr	Generic or internal probe error.
Pr1	Chamber probe error.
Pr2	Core probe error.
PnS	Core probe not inserted correctly.



If blasting is in progress and a core probe error (Pr2) occurs, the cycle switches to time while the error remains displayed.

7.2. CYCLE-DEPENDENT INTERFACE CHARACTERISTICS

The commands on the interface take on characteristics depending on the operating cycle of the equipment.

STOPPING PHASE

DISPLAY VISUALISATION	The display shows the time (in minutes) if a time cycle is selected, or the temperature of the core probe in °C for a probe cycle. The symbol  lit indicates the selection of a negative cycle.
CONTROL FEATURES	The  button allows you to select the blasting cycle. Pressing the  button for 4 sec. puts the device in stand-by mode. A simple press of the  button starts or stops the selected cycle. Pressing the buttons  and  changes the time or temperature of the selected cycle. If the buzzer is active, the first press of the  button silences the buzzer.

BLASTING PHASE

DISPLAY VISUALISATION	The display shows the remaining time (in minutes) if a time cycle is selected or the temperature of the core probe in °C for a probe cycle. On the right side of the display, the symbol  flashes, indicating that the blasting cycle is in progress. Every 2 minutes the display scrolls "freezer" for positive blasting and "chiller" for negative blasting, and the elapsed time flashes. If the door is open (contact is not closed), "PAP" appears on the display to indicate that it is open.
CONTROL FEATURES	Pressing the  button displays the chamber temperature. Pressing  displays the elapsed time from the start of blasting for 5 seconds. If the buzzer is active, the first press of the  button silences the buzzer. A simple press of the  button ends the blasting/storage cycle.

7.3. ADJUSTING OPERATING PARAMETERS

For **adjusting the operating parameters** of the equipment, via control panel:

STEP	ACTION
1	Press the buttons  and  simultaneously for at least 4 sec. The display shows "ABB". Note: the equipment must be switched off/in stand-by.
2	Press the  key. The number of the parameter itself appears on the display (e.g. "P00").
3	Use the buttons  and  , while the number is displayed, to switch to the next/previous parameter.
4	Press  again to change the selected parameter. Note: to change the parameter, use the buttons  and  (refer to the table below).

7.3.1. TABLE OF PARAMETERS

CODE	DESCRIPTION	DEF.	MIN.	MAX	UNIT
P0	Buzzer sound duration: 0 = disabled. The increase of P0 is in unit steps.	10	0	60	sec.
P1	Door presence: 0 = door absent; 1 = door present.	1	0	1	-
P2	Fan in blasting: 0 = in parallel with the compressor; 1 = always on.	1	0	1	-
P3	Enabling core probe.	1	0	1	-
P4	Enabling negative blasting.	1	0	1	-
P5	Enable defrosting: 0 = disabled; 1 = fan on compressor off with door open; 2 = heaters on fan and compressor off; 3 = hot gas compressor on valve open (on).	1	1	3	-
P6	Stops utilities with open door: 0 = Compressor + Fans; 1 = Fans.	1	0	1	-
P7	Defrost interval hours.	5	0	1	-
P8	Regulation hysteresis.	3	1	20	°C
P9	Compressor protection Off/On (also valid at reset).	2	0	99	min.
P10	Compressor protection On/On.	3	0	99	min.
P11	Defrosting duration minutes.	10	0	99	min.

CODE	DESCRIPTION	DEF.	MIN.	MAX	UNIT
P12	Dripping duration.	3	0	99	min.
P13	Core set for positive blasting.	3	-50	99	°C
P14	Core set for negative blasting.	-18	-50	99	°C
P15	Core set for deep blasting.	-35	-50	99	°C
P16	Chamber set for positive blasting.	-2	-50	99	°C
P17	Chamber set for negative blasting.	-35	-50	99	°C
P18	Chamber set for deep blasting.	-40	-50	99	°C
P19	Chamber set for infinite blasting.	-45	-50	99	°C
P20	Chamber set for positive storage.	0	-50	99	°C
P21	Chamber set for negative storage.	-25	-50	99	°C
P22	Chamber set for deep storage.	-35	-50	99	°C
P23	Chamber set for infinite storage.	-50	-50	99	°C
P24	Positive timed blasting duration (configurable).	90	0	999	min.
P25	Negative timed blasting duration (configurable).	270	0	999	min.
P26	Maximum positive blasting duration from standard: • 0 = disabled.	90	0	999	min.
P27	Maximum negative blasting duration from standard: • 0 = disabled.	270	0	999	min.
P28	Max. duration of deep negative blasting: • 0 = disabled.	0	0	999	min.
P29	Max. duration of infinite negative blasting: • 0 = disabled.	0	0	999	n
P30	Compressor on time with door open (min).	3	0	999	n
P31	Temperature display: • 0 = Centigrade; • 1 = Fahrenheit.	0	0	1	n
P32	Stand-by status display: • 0 = Stand-by; • 1 = OFF.	2	0	2	n
P33	Core probe/chamber difference greater than.	5	0	100	°C
P34	Time according to core probe/chamber control.	5	0	999	min.

8. USE

Before using the equipment, check that it is in perfect condition. In the presence of faults, the equipment must be decommissioned and the Technical Assistance Service must be contacted.



CAUTION

Keep all the supply and return air ventilation openings inside the equipment free of obstructions.

8.1. CHECKS BEFORE USE



Only specialised technical personnel should carry out the initial start-up of the equipment.

Before switching on, check that:

- the equipment and surrounding surfaces are dry
- The equipment is in a perfectly flat and level position
- The operating parameters have been adjusted (see chapter “CONTROL PANEL”)
- The main switch is in the “0-OFF” position
- There is no direct or indirect contact with live electrical parts



Do not perform operations with wet or damp hands.

Clean the equipment and its components thoroughly before loading the product (see chapter “CLEANING”).

8.2. SWITCH-ON



Do not start the equipment with wet hands or when there is contact with water.

For switching on the equipment:

STEP	ACTION
1	Press the key. Note: the equipment switches on.

8.3. PRODUCT LOAD TO BE BLASTED



Load a maximum of 1 kg on each shelf. The load must be evenly distributed on the shelf.



Pre-cool the chamber before starting the positive and negative blasting cycle.



For proper blast chilling, do not introduce hot products. Wait for the product to cool down before placing it inside the equipment.

To ensure proper functioning of the equipment, load the product, taking care to meet the following requirements:

REQUIREMENT	PICTURE
Do not overlap products to be blasted	
Maintain a space of at least 70 mm between the trays containing the product to be blasted, so as to allow good air circulation inside the equipment chamber	
Place trays near the evaporator	
Divide the distance between the trays into equal spaces	



Only open the door for the time necessary for loading and unloading products inside the equipment.

8.4. PRODUCT BLASTING

The following is purely indicative. The responsibility for blasting processes lies solely with the user of the equipment, who must comply with the local regulations and Good Practice Manuals (GHP) applicable by him/her. The Manufacturer is not liable for damage to property or persons.

In application of ISO 22042, the Manufacturer guarantees:

- A positive blast from 65°C to + 10°C within 120 min
- A negative blast from 65°C to - 18°C within 270 min



with the load determined in the Energy Consumption Declaration document available on the institutional website.

At the end of the positive blasting phase, there is an automatic switch to storage at a temperature of 0°C to +3°C, and "AUX" is displayed flashing.

At the end of the negative blasting phase, there is an automatic switch to storage at a temperature of -22°C to -25°C, and "AUX" is displayed flashing.

Do not open the door of the equipment during the blasting cycle.

8.4.1. TEMPERATURE MEASUREMENT

When product thickness permits, use the core temperature probe to find out the exact temperature reached at the core of the product.

Do not interrupt the blasting cycle before the temperature of +3°C in positive process and -18°C in negative process has been reached.



8.4.2. BLASTING MODES

The blasting methods are as follows:

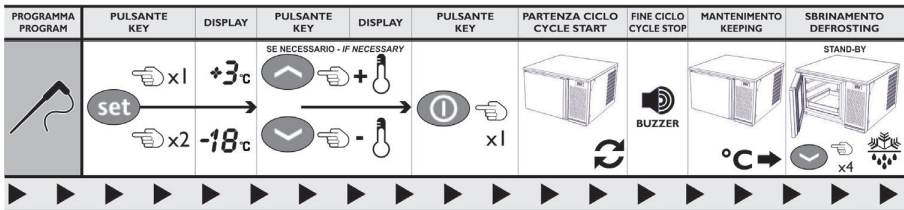
- **TIMED** - if you know the blasting time of the product to be blasted
- **WITH CORE PROBE** - to be inserted into the core of the product.

TYPE OF BLASTING	TYPE OF CYCLE	TYPE OF PRODUCT	CYCLE AT THE CORE OF THE PRODUCT
POSITIVE	At full speed	For all dense or large foodstuffs	+ 3 °C MAX 90 min
NEGATIVE	At full speed	For all dense or large foodstuffs	Up to -18 °C (240 minutes)
	Reduced speed	Delicate products, vegetables, creams, spoon desserts, small products	

8.4.3. BLASTING CYCLE WITH CORE PROBE

To **carry out the blasting cycle with a core probe**, proceed as described below:

STEP	ACTION
1	Press the set button to select standard temperatures (+3°C; -18°C; -35°C; inf.).
2	If necessary, use the buttons  and  to set the temperature of the blast chilling cycle.
3	Press button  to start the cycle.
4	When the cycle is finished (when the buzzer starts to sound), the equipment automatically switches to the storage phase. Note: the buzzer can be muted with the  button.
5	To interrupt the cycle, press the  button.

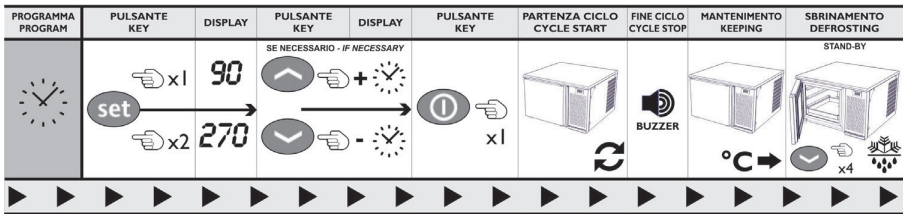


If, when starting a probe blasting, the error “PnS” appears after 5 minutes, reposition the probe in a more suitable way. Alternatively, the blasting will continue in timed mode.

8.4.4. TIMED BLASTING CYCLE

To **carry out the timed blasting cycle**, proceed as described below:

STEP	ACTION
1	Press the set button on the control panel to select the standard times (90; 270).
2	If necessary, use the buttons  and  to set the time for the blasting cycle.
3	Press button  to start the cycle.
4	When the cycle is finished (when the buzzer starts to sound), the equipment automatically switches to the storage phase. Note: the buzzer can be muted with the  button.
5	To interrupt the cycle, press the  button.



8.4.5. BLASTING TIMES



The following is purely indicative. The responsibility for blasting processes lies solely with the user of the equipment, who must comply with the local regulations and Good Practice Manuals (GHP) applicable by him/her. The Manufacturer is not liable for damage to property or persons.

In application of ISO 22042, the Manufacturer guarantees:

- A positive blast from 65°C to + 10°C within 120 min
- A negative blast from 65°C to - 18°C within 270 min

with the load determined in the Energy Consumption Declaration document available on the institutional website.

FOOD	MAXIMUM LOAD	PRODUCT THICKNESS	BLASTING TIME	CYCLE USED
FIRST COURSES				
Béchamel	6 L	4 cm	70 minutes	POSITIVE
Meat broth	7 L	6-7 cm	90 minutes	POSITIVE
Baked cannelloni	4 Kg	3-4 cm	40 minutes	POSITIVE
Vegetable minestrone	5 L	5 cm	90 minutes	POSITIVE
Fresh pasta	1 Kg	5 cm	30 minutes	NEGATIVE
Meat sauce and tomato	5 Kg	5 cm	90 minutes	POSITIVE
Bean soup	5 Kg	5 cm	90 minutes	POSITIVE
Fish soup	4 Kg	5 cm	90 minutes	POSITIVE
MEAT AND POULTRY				
Roast pork	7 Kg	10 cm	90 minutes	POSITIVE
Braised beef	7 Kg	15 cm	90 minutes	POSITIVE
Boiled beef	6 Kg	12-18 cm	90 minutes	POSITIVE
Chicken breast	5 Kg	4-5 cm	30 minutes	POSITIVE
Roast-beef	4 Kg	10-15 cm	80 minutes	POSITIVE
FISH				
Whole baked grouper	3 Kg	5-10 cm	90 minutes	POSITIVE
Sea Cicadas	2 Kg	3 cm	25 minutes	POSITIVE
Vacuum-packed mussels	2 Kg	max 3-4 mm	20 minutes	POSITIVE
Fish salad	4 Kg	3-4 cm	30 minutes	NEGATIVE
Boiled octopus	5 Kg	-	60 minutes	POSITIVE
Stewed cuttlefish	4 Kg	4-5 cm	60 minutes	POSITIVE
VEGETABLES				
Sautéed carrots	4 Kg	40-50 mm	60 minutes	POSITIVE
Sautéed mushrooms	4 Kg	40-50 mm	60 minutes	POSITIVE
Sautéed courgettes	3 Kg	40-50 mm	90 minutes	POSITIVE

FOOD	MAXIMUM LOAD	PRODUCT THICKNESS	BLASTING TIME	CYCLE USED
PASTRY/DESSERTS				
Vanilla and chocolate pudding	6 L	4-5 cm	90 minutes	POSITIVE
English cream	3 L	4-5 cm	90 minutes	POSITIVE
Custard	3 L	4-5 cm	90 minutes	POSITIVE
Panna cotta (single portion)	3 L	6 cm	60 minutes	POSITIVE
Semifreddo	3 Kg	4-6 cm	50 minutes	POSITIVE
Tiramisu	5 Kg	4-5 cm	45 minutes	POSITIVE

8.5. DEFROST

8.5.1. MANUAL DEFROST

Defrosting of the equipment is done in manual mode.

Perform defrosting with door open or door closed. In the case of defrosting with the door closed, the time required will be longer.

To perform **manual defrosting**:

STEP	ACTION
1	Press and hold the  button for 4 sec. Note: the equipment must be switched off/in stand-by.



At the end of defrosting, empty the condensate drip tray.

8.6. POWER OFF/STAND-BY

To **shut down the equipment**:

STEP	ACTION
1	Hold down the  button. Note: the equipment switches off.

9. CLEANING

9.1. CLEANING SAFETY WARNINGS

**WARNING**

Electrical hazard. Disconnect the power supply before cleaning.

**WARNING**

Electrical hazard. Do not use water jets and/or high-pressure lances to wash the internal and external parts of the equipment.

**WARNING**

Do not damage the refrigerant fluid circuit.

The first cleaning of the equipment must be carried out by specialised personnel.

Observe the following indications:

- Clean the surfaces of the equipment regularly, to avoid deterioration of the equipment materials
- Use only lukewarm water with non-aggressive detergents, then dry damp parts with a soft cloth
- Carry out at least daily periodic cleaning of the loading area to prevent the development and accumulation of bacteria
- Carry out at least one internal cleaning per month if the equipment is used to blast chill frozen products
- Do not use water jets to wash the internal parts of the equipment
- Do not direct water jets at electrical parts
- Do not use hard metal tools to remove any ice that may have formed.



Use work gloves when carrying out cleaning operations.



Do not use cleaning agents containing chlorine, dilute solutions, caustic soda, abrasive detergents, muriatic acid, bleach or other products that can scratch or sand.



Do not use a steam cleaner to clean the equipment.

9.2. TABLE OF CLEANING OPERATIONS

The table lists a number of cleaning operations to be performed according to the recommended schedule.

OPERATION	FREQUENCY				
	DAILY	WEEKLY	MONTHLY	AT 6-MONTHLY INTERVALS	YEARLY
Cleaning inside	■				
Cleaning the loading area	■				
Core probe cleaning	■				
External cleaning		■			
Cleaning the condensate drip tray		■			

9.3. GENERAL CLEANING

Carry out general cleaning of the equipment using a soft cloth and non-aggressive cleaning products.

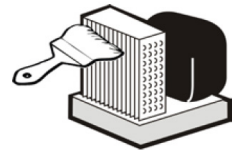
9.4. CLEANING THE CONDENSER

Clean the capacitor periodically to ensure its proper functioning.

Use an air jet blowing from the inside to the outside of the unit. If this is not possible, use a long-bristled brush on the outside of the capacitor.



Do not use water jets.



9.5. CORE PROBE CLEANING

Wash the core probe with water and disinfectant solution.

10. MAINTENANCE



WARNING
Electrical hazard. Disconnect the power supply before carrying out maintenance work.



Only authorised technical personnel should service the equipment.

10.1. ROUTINE MAINTENANCE

Ensure smooth operation over time of the equipment by performing periodic/preventive checks and maintenance.

10.1.1. INSPECTING AFTER DELIVERY

The following table lists a series of controls and activities that need to be carried out according to the recommended frequency.

OPERATION	FREQUENCY			
	WEEKLY	MONTHLY	AT 6-MONTHLY INTERVALS	YEARLY
Check that the door seals and the door itself close properly.		■		
Check that there are no cooling fluid leaks and that the refrigerating system is working properly.				
 Checking for refrigerating gas leaks must be carried out by qualified and authorised personnel in accordance with local regulations.				■
Check that the maintenance status of the electrical system is in complete safety.				■

10.2. SPECIAL MAINTENANCE

Special maintenance includes service, repair, and restoration of nominal operating conditions or replacement of a faulty, defective or worn component.

10.2.1. REPLACEMENT OF MOTOR FAN



For replacement, contact the Authorised Dealer or Service Centre.

10.2.2. REFRIGERATING UNIT REPLACEMENT



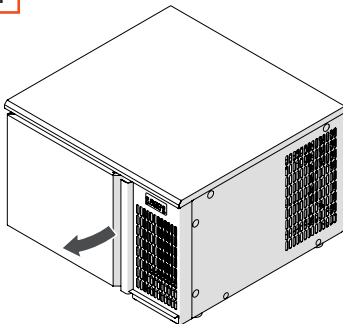
For replacement, contact the Authorised Dealer or Service Centre.

10.2.3. DOOR GASKET REPLACEMENT

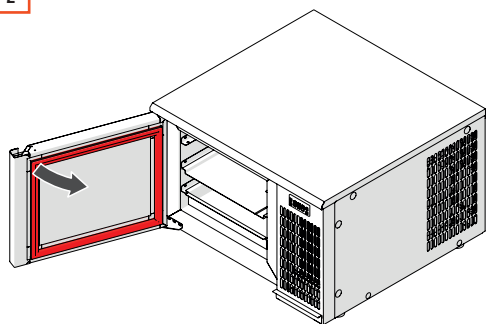
To **replace the door gasket**, proceed as follows:

STEP	ACTION
1	Open the equipment door.
2	Gently pull out one corner of the gasket and remove it from the housing.
3	Replace the gasket with one that has the same characteristics.
4	Close the equipment door.

1



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11. DIAGNOSTICS

11.1. ALARMS

MESSAGE	CAUSE	TYPE OF ERROR	SOLUTIONS
Pr	Check that all terminal board wires are plugged in.	Generic or internal probe error.	If the wire is disconnected, reinsert it into the terminal and tighten the screw.
Pr1	Check that all terminal board wires are plugged in.	Chamber probe error.	If the wire is disconnected, reinsert it into the terminal and tighten the screw.
Pr2	Blasting times too long.	Check that all terminal board wires are plugged in.	If the wire is disconnected, reinsert it into the terminal and tighten the screw.
		Check that the evaporator is not clogged with ice.	Leave the door open for at least 15 min to allow the ice formed to melt.
		Check that you have loaded the product correctly and not excessively.	Lighten the load of trays.
		Check that the internal cell fan turns.	Contact the support.
		Ensure that the temperature in the laboratory is not excessively high and the humidity is high.	Contact the support.
	Failure to maintain the food at the end of the blasting cycle.		Contact the support.
PAP	Door open.	Door open.	Check that the door is closed properly.
SnP	Check the correct insertion of the probe.	Probe not inserted.	Insert the probe deeper or continue timed blasting.

12. DECOMMISSIONING AND DISPOSAL

12.1. LONG PERIODS OF INACTIVITY

If the equipment is not used for a long period of time (more than 2-3 weeks):

STEP	ACTION
1	Disconnect the power supply.
2	Carry out a thorough cleaning of the equipment (see chapter ' CLEANING ').
3	Cover the equipment with a cloth.

12.2. DISPOSAL



The electrical and electronic equipment that make up the appliance, such as lamps, electronic controls, electrical switches, electric motors and other electrical material in general, must be disposed of and/or recycled separately from urban waste according to the procedures of the regulations in force on the subject in each country.

Do not disperse materials in the environment.

In addition, all materials constituting the product, such as sheet metal, plastic, rubber, glass, etc., must be recycled and/or disposed of in accordance with the procedures of the relevant regulations.

Illegal or incorrect disposal of the equipment entails application of the sanctions required by the legislation in force in the country of installation.

Do not disperse the cooling fluid and oil in the environment.

Make the equipment, destined for dismantling, unusable by removing the power supply cables.

13. ATTACHMENTS

13.1. WIRING DIAGRAM

