MODULAR

TAGLIAVINI

1934

Code ZM 010002_13-2
Ver. 1.2 of 04/11/13

This manual, is an integral part of the product and provides essential information regarding installation, use, operation and proper maintenance safety and must be handed over to the user. It must be kept handy in a safe place for any future reference and find itself wherever the oven is.
This manual is related to machinery and equipment produced by **TAGLIAVINI S.p.A.**, hence disclosure and/or distribution to third parties, even partial, in any form without prior written permission from **TAGLIAVINI S.p.A.**. is forbidden.
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USEFUL INFORMATION

TAGLIAVINI S.p.a.

Via Ponte Taro 27/B - 43015 NOCETO (PR)

tel. 0521/628844 - FAX 0521/628763

E-MAIL: info@tagliavini.com

WEB SITE: www.tagliavini.com

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1. GENERAL DOCUMENTATION

1.1 Oven identification plate

Information about the Manufacturer:

TAGLIAVINI S.p.A.
Via Pontetaro 27/B
43015 NOCETO (PR)
tel. 0521 / 628844
Fax 0521 / 628763

Model: **MODULAR** mod. **EMT**_____

Serial number: _____

Year of fabrication: _____

Voltage (V): 380-400 415

Frequency (Hz): 50 60

Installed Electrical Capacity [kW]:_____(see § 4.3)

“SUPERSAVER” device: YES NO

Other oven characteristics:

_____
_____
_____
_____

1.2 Label

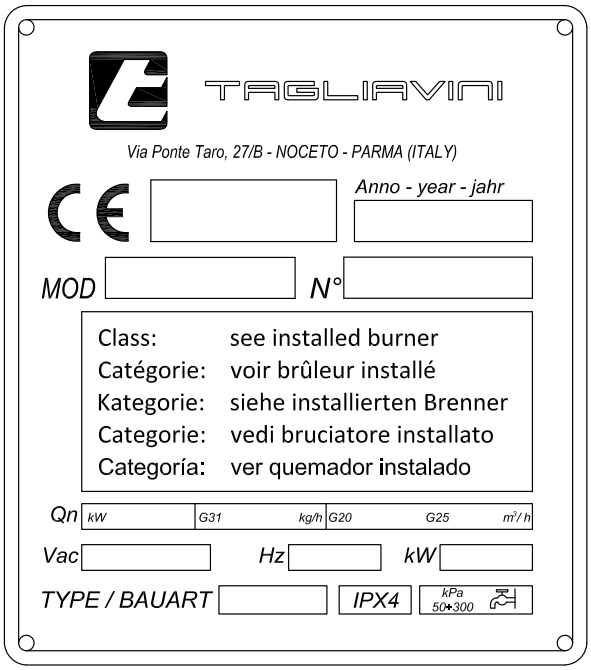
Essential technical data regarding the equipment are displayed on the serial number plate and all connections are marked on the oven as shown in the following figure.

Whenever contacting the manufacturer or the assistance centre please indicate the model, code, and serial number.

The tag contains oven identification data:
- type
- model
- serial number
- year of fabrication
- data required for correct oven connection to energy sources (e.g. electric power, water pressure, etc.);
- CE mark

CE MARKING POSITION

The CE marking is placed on the front right side just behind the controls.



1.3 General warnings

This security symbol identifies imported messages presented throughout this manual. Carefully reading of the following message is advised in order to prevent malfunctions or accidents.

Read this manual thoroughly before proceeding with the installation, connection, use, maintenance, and other oven interventions, carefully following instructions and warnings.
In particular, careful reading and rereading of paragraphs is advised (paragraphs are indicated by the § symbol): General safety rules (§ 1.5) and safety instructions (§ 10), for adequate knowledge of oven safety devices, as well as residual risks that the oven presents, in conclusion a correct use of the oven itself. The employer must provide operators trained for oven safe operation within laboratories where the equipment is installed and also knowledgeable of general and specific workplace risks; this manual can be a valuable support for the accomplishment of such a delicate task, even if, for obvious reasons, cannot be considered as an comprehensive list since it is not strictly related to the oven itself.
Check that all safety devices are present and functioning as described in this manual. If this is not the case please contact immediately the manufacturer.
This manual should be considered an integral part of the equipment intended for professional use and, therefore, can never replace user adequate preparation and experience.

As a recommendation keep this document in a dry place, known and accessible to employees. It's always a good idea store the document in an envelope, allowing protectionist against dust, moisture and light, so as to ensure its integrity during time until the equipment is disassembled.

Keep a copy of this manual in the oven vicinity so all operators (installer, connection responsible, user, routine maintenance responsible, special maintenance responsible) may consult the document in a quick and easy way.
The manual contains all the instructions, data, information required by various operators, from installation to oven disposal with particular reference to safe and proper use, maintenance and cleaning included.
The manual reflects the state of the art technology existing at the time of the oven market release and cannot be considered inadequate only because it is updated based on new experiences and new technical solutions.

The Manufacturer reserves the right to implement updates to the oven and, consequently, to the present document, without being required to update previous oven lots, and/or manuals, except in extraordinary cases.

- **Technicians entrusted with equipment connections:**: people with certain technical skills entrusted with equipment connections: electrical, hydraulic and chimney; registered accordingly, and therefore able to assume full responsibility for their actions.
- **Installer**: qualified technician who performs oven installation and commissioning in accordance with instructions contained in this manual.
- **User**: the one who, after carefully reading the manual, paying particular attention to General safety rules paragraphs (§ 1.5) and safety instructions (§ 10), uses the oven for it's intended purpose
- **Routine maintenance responsible**: qualified technician able to carry out oven routine maintenance operations according to this manual's instructions (§ 9).
- **Special maintenance responsible**: qualified technician, authorized by the manufacturer, capable of carrying out special oven maintenance (see example § 9).

The manufacturer does not guarantee local technical personnel suitability for oven installation and support services, although, all information regarding the equipment's proper connection is presented in a special section of this manual.
In this regard, it is advisable that a user appeals to an expert professional technician's advice regarding laws or local regulations.
The manufacturer reminds the user about his obligation to examine local legislation regarding workplace safety and health.

IMPORTANT: oven warranty is closely linked to compliance with all the rules referred to in this manual.

1.4 Equipment intended use.

IMPORTANT: the oven is designed exclusively for food cooking, more precisely for bread and pastry cooking, and must operate in accordance to the manufacturer's instructions.
The oven should be used only for it's intended purpose. Any other use is considered inappropriate and therefore unreasonable.
The manufacturer cannot be held responsible for any damage caused by erroneous and inappropriate utilisation, such as:
- oven utilisation for non-alimentary product cooking;
- improper use by untrained personnel;
- modifications or unauthorized intervention;
- serious deficiencies in scheduled maintenance;
- use of non-genuine or different model parts;
- failure to respect the instructions, even partially;
- exceptional events.

ATTENTION: inserting alcohol solution in the cooking chamber is dangerous due to the fact that high temperatures cause alcohol evaporation. This phenomenon may cause an explosion. For the same reason drying operations are not permitted (e.g. silicone baking pan drying). Furthermore, combustible substance insertion in the cooking chamber is forbidden (for example sugar). These can create a fire hazard.

ATTENTION: the oven is not suitable for explosive environments

1.5 General safety regulations

The user is liable for the operations performed on the oven by neglecting the instructions presented in this manual.
In particular, in order for someone to use the oven, he needs to have an understanding of oven operational mode, control devices, safety standards and accident prevention as well as warnings regarding the oven.
Learn these concepts prior to equipment start-up.
Do not allow untrained people with lack of appropriate knowledge to use the oven.
Making sure the information is received, understood and put into practice is the employer's duty.

The main general safety rules are listed below:

- do not touch, much less use the oven with wet or damp hands or feet
- do not use the oven for drying products that are not food products
- do not introduce products containing solutions that are alcoholic, flammable or harmful to your health in the cooking chamber
- do not allow children or unauthorized personnel to operate the equipment
- grip and adequately support the tins when removing them from the cooking chamber in order
- to prevent them from falling out
- move the pans from the oven using high temperature gloves
- pay attention to the oven's hot surfaces: cooking chamber doors, oven opening
- be careful during steam delivery, correct positioning is at the sides of the oven
- pay attention to steam and heat flow during the opening of the doors of the cooking chambers
- do not insert tools or other objects between shields or moving parts
- do not tamper with safety devices
- do not remove oven protections (for example the peripheral panels, the crankcase covering the electrical connections)
- do not block ventilation openings, such as those place on the column's sides and above, on the oven's front and on the profile connecting the oven to the floor
- disconnect the power supply before accessing the electrical panel
- position the oven, keeping a minimum distance from any wall as indicated in this manual

- place the oven at a safe distance from flammable surfaces or without heat resistance
- place the oven on a flat surface able to support the required loads
- do not operate the oven if the vapour drain has not been connected. In order to rule out any possible contact with moving parts (impeller), provide the vapour discharge with a pipe, rigidly fixed and resistant to shocks, with a minimum length of 800 mm
- do not put anything on top of the oven, do not step on the oven
- before performing cleaning or maintenance operations, disconnect the oven from the electric power supply network and the water supply
- any repair operations, recording, block, adjustment of mechanical parts must be executed only after the power supply has been disconnected physically and visually in order to avoid oven start-up, even if it's accidental.
- do not wash the oven using water jets
- in case of oven failure and/or malfunction, disconnect power supply, water supply and refrain from any attempt to repair or direct intervention. You will need to contact only qualified personnel
- do not apply accessories that do not comply with safety rules
- perform periodic maintenance as instructed in this manual

Emergency Operations in the event of a fire:

- disconnect the general power supply
- do not use water jets
- use dry powder or foam fire extinguishers.

1.6 Transport and handling

1.6.1 Assembled oven version.

The oven may be packed in wooden box supported by a pallet bench.

1.6.2 Transport (disassembled oven version)

The oven is shipped disassembled as in the photos above, the modules are packaged separately and are stacked from the bottom with the chamber modules, up to the hood extraction module at the top.

The oven is shipped fully assembled, or separated into its modules:

- COOKING CHAMBER MODULE
- CELL OR BASE MODULE
- EXTRACTION HOOD MODULE

It is essential that the packages are not exposed to rain or subjected to relevant temperature variations. In fact, some packages contain electronic and electrical equipment that can be easily damaged by moisture and excessive thermal surge.
Product loading and unloading to/from their transport means and handling can be achieved by using a forklift truck equipped with suitable forks (length equal to at least 2/3 of the load) or by using a crane.
Lifting means and ropes must be adequately selected based on the weight of the package (the following table presents for each oven model, the weight and the size of the chmaber module and hood moule).
When transporting the products, all necessary precautions must be taken to avoid damaging the various parts of the oven.

Table Size and mass of chamber and hood modules

MODEL	Usable surface	Mass Chamber module	Mass steamer	Mass Hood module
	(m^2)	kG	kG	kG
EMT2/6040	0,55	130	43	33
EMT4/6040	1,11	200	43	54
EMT2/4060	0,57	140	33	34
EMT3/4060	0,86	160	33	45
EMT4/4060	1,07	190	63	52
EMT6/4060	1,61	260	63	70
EMT2/4666	0,66	150	33	37
EMT3/4666	0,98	190	33	50
EMT4/6646	1,45	240	43	65
EMT2/4676	0,85	160	43	44
EMT3/4676	1,26	220	43	59
EMT4/4676	1,52	250	63	68
EMT6/4676	2,27	300	63	92

1.7 Oven decommissioning

1.7.1 Prolonged inactivity

When preparing for oven prolonged inactivity, the energy source must be disconnected.
All oven parts must be wiped clean, lubricated, and protected by a waterproof material shell, so dust, insects, rodents, etc. are not able to reach the machine.
The protection process must avoid oven damage due to impacts, tampering and various abuse. The place where the oven is located must be kept dry and protected from atmospheric agents.
Before oven operation is restored a careful preliminary examination of its integrity by specialized personnel must be carried out.

1.7.2 Oven decommissioning

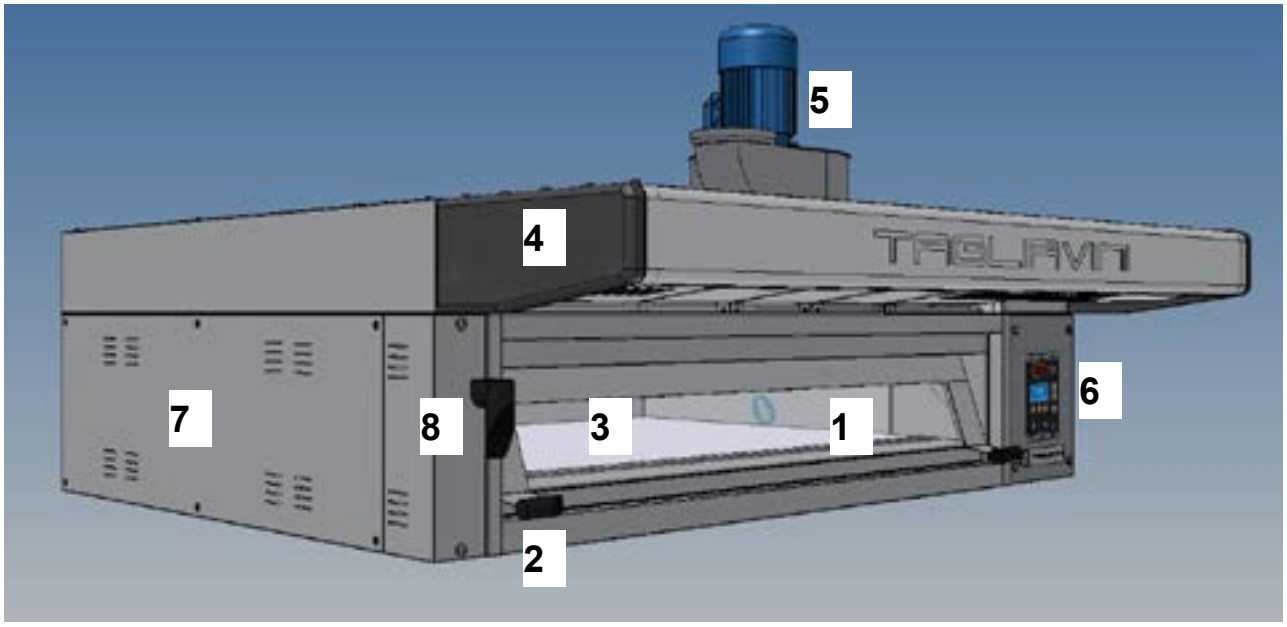
Oven decommissioning must be conducted by a specialist firm authorized for waste disposal.
The same firm will conduct oven dismantling by separating the materials by their type, and send them to a more appropriate final destination: recovery or storage in landfill.

2 Technical Characteristics

2.1 Oven description (chamber module)

SUITABLE FOR COOKING, AT TEMPERATURES NOT HIGHER THAN 280 C°, BREAD AND PASTRY PRODUCTS, EXCLUDING FLAMMABLE, EXPLOSIVE OR ALCOHOL-BASED PRODUCTS SUCH AS CHERRY, COGNAC, ANISE, ETC. , AND THOSE THAT MAY POSSES DANGEROUS CHARACTERISTICS (ENVIRONMENT POLLUTION IS ONE OTHER ASPECT) AS A RESULT OF TEMPERATURE INCREASE.

The product in question is a static modular oven, which is suitable for cooking, at temperatures not higher than 280 °C, focacia and pastry products, excluding flammable and explosive products and those that may posses dangerous characteristics (environmental pollution) as a result of temperature increase.
The chamber module is completely independent and can be supplied together with the basic module or cell and the extraction hood module; it is possible to overlay more chambers according to the needs of the operator.
The product to be cooked, placed inside of the oven, is heated by the air present in the cooking chambers, in turn heated by electrical heating elements which are also arranged, in two batteries (one immediately below the "sky" and the other under the floor), in the cooking chamber.
The independent operation of the cooking chambers allows to set different cooking temperatures for each chamber, thus allowing simultaneous cooking of different products.
The chamber module independently manages the power of the "sky" slab adapting the oven perfectly to the needs of the products. The resistors are designed with a special reinforcement in the opening to compensate as best as possible the dispersions due to the opening of the doors for loading the product or for processes that require repeated access to the chamber. Each chamber is controlled by an independent digital control panel.
The baking chamber is enclosed by double fireproof metal walls with mineral wool interposed between them, which thermally insulates them from the external environment and is accessible through a balanced door, made of tempered glass, which allows to visually control the cooking.
The oven is loaded by introducing the product to be cooked into the cooking chamber, either manually or with the aid of suitable trays or loading pans.
The chamber module can be equipped with one steam generator to allow the cooking in an environment saturated with steam, where necessary, and valves for extracting the steam where it is required to cook in a "dry" environment or proceed to the final drying of the product.
The expected average life of the oven is 15 years.
There are no general revisions during the life of the oven.
This manual deals specifically with the chamber module and the extraction hood module; the rising cell module has an exclusive separate manual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2

The oven is formed of the following components:

COOKING CHAMBERS
They are made from an electro-welded plate, the sides and the bottom are of stainless steel and the remaining parts of aluminized steel. They are watertight and able to contain the steam, enclosed in a thick thermal insulation and equipped with floorings made of a special cement mixture (3). The armored resistors in stainless steel, suitably dimensioned to ensure a perfect distribution of heat, placed above and below the cooking level and for the entire length of the chamber, represent the heating elements. The independent heating between the "sky" and the slab of each chamber allows you to also obtain an optimal cooking for a wide range of bakery products. In the front part of the chamber, a halogen lamp is positioned on the right side for lighting the cooking chamber. In the back of the baking chamber, the special ducts allow the introduction and evacuation of steam.

OVEN OPENING
With doors (1) made of very thick tempered glass, balanced by springs positioned behind the left cover (8). The doors can be easily opened. To close them it is enough to gently push the handle (2) that is glass-filled nylon, ergonomic and with reduced heat transfer. The door will close properly due to its counterbalance

EXTRACTION HOOD MODULE (4)
Entirely made out of stainless steel and with a depth between 150 or 400 mm, the hood is equipped with a vapour extractor (5) able to suck up the excess steam emanating from the chambers. The suction hood, in addition to vapour collection from the oven opening, collects the excess vapour from all the cooking chambers with the use of a collection tube inside the oven.

VAPORIZER
Located on the right side of the cooking chamber, they are heated by armored resistors arranged inside the vaporizer, and are designed for the efficient production of steam, which is essential for the preparation of certain products. The steaming time and temperature can be previously set on the electronic control unit of the respective chamber module.

COATING (7)
The coating can be made out of stainless steel panels at request. The long fibre mineral wool mattress insulation ensures low heat dispersal into the environment.

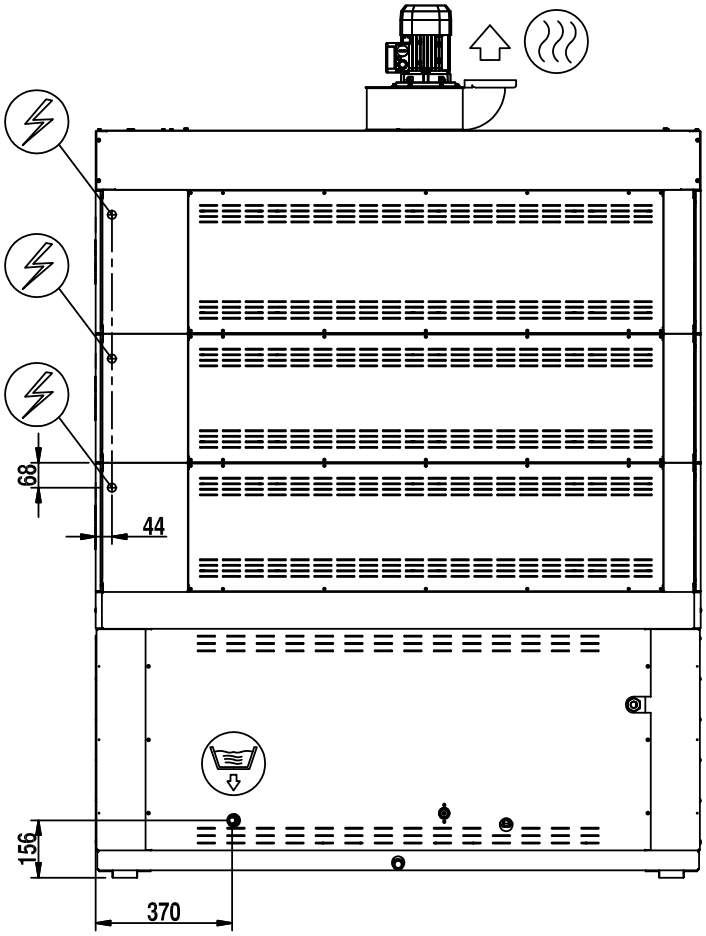
FRAMEWORK AND ELECTRICAL SYSTEM
Consists of an electronic control panel (6) placed on the right front carter and a power panel placed always on the right side just behind the control panel.
The electronic control unit manages all oven functionality including armoured resistors control while the room temperature is kept constant.
The oven's electrical system is built in compliance with the European Union regulations in force.

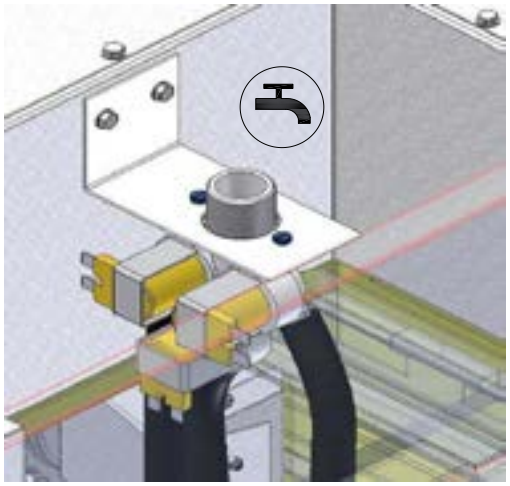
Mobile protection
The oven is equipped with tempered glass or stainless steel doors (1, mobile protection), which divide the cooking area from the work area, thus protecting from the dangers of shearing and from coming into contact with the high temperature area of the cooking chamber.

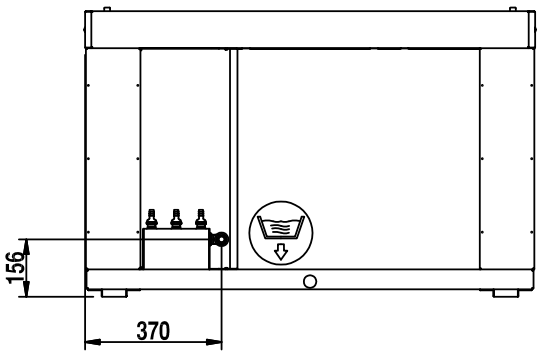
3. Installation standards

Before proceeding with oven set-up, make sure the doors allow oven or bulky part passage, and make sure the establishment has been provided with:

3.1 Connection diagram (oven example 3 chambers + cell or base module)







3.2 Electrical connection

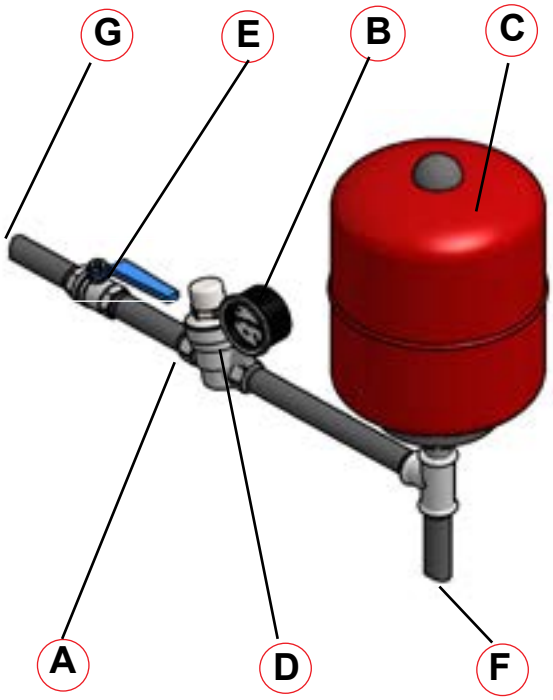
5-pole cable with earth and neutral, with a cross-section and insulation suitable for that particular installed power (see § 4.1), mandatorily provided with an upstream automatic circuit barker (RCD - residual current device)
The connection to the oven's circuit breaker should be made with an appropriate size cable (for sizing see the wiring diagram data), protected by a RCD (minimum 3 mm contact opening) placed in an easily accessible position on a wall. The RCD must have an adequate maximum oven power carrying capacity and a breaking capacity suitable for the assumed short circuit current in the connection point. In addition, provide the oven with an equipotential circuit connection (general earthing of the building), using the appropriate terminal, identified by the symbol placed at the front bottom right-hand column of the oven (minimum cable cross-section^2).
The chamber modules are provided with a 1.5 m silicon cable with 6 mm2 sections with corrugated sheath (see photo below)

IMPORTANT:
- connecting the appliance to a effective earthing system is essential. Check the earthing system's efficiency, and in case of doubt, inspect with the help of a qualified person;
- do not pull on the electrical cables and keep them away from heat sources.

3.3 Water Supply Connection

G1/2 SS drinking water tube with pressure between 1.5 and 2 bar, possibly obtained by installing a suitable pressure reducer. If the water hardness exceeds 12° F, a water softener is recommended to be installed upstream of the oven connection;

A	Filter
B	Manometer (0÷5 bar)
C	5 dm^3 water storage tank
D	Pressure reducer
E	Ball valve
F	Oven
G	Network



N.B.: for a vaporiser and water system longer operating life, the use of water with a total hardness below twelve French degrees 12° F - 6.5° dH (German degrees) or 8.4° Ck (Clark degrees) is recommended. Using water softeners with ion-exchange resins temporary removes water hardness, but at the same time lowers PH. PH values lower than 7 indicate the acidic water therefore a corrosive water. Water acidity can be neutralised by polyphosphates that can be added using a suitable dispensing unit. We recommend in any case always to analyse the water using specialized personnel in order to avoid serious damage to oven parts and water system.

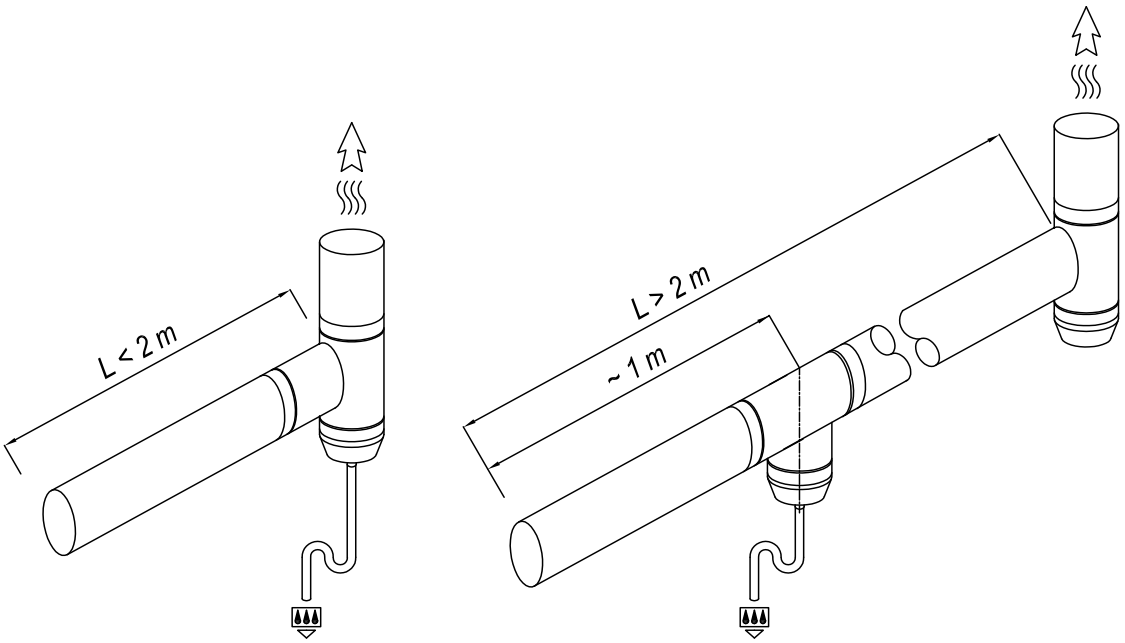
3.4 Overflow drain

Serves as a discharge for non vaporized water. The pipework must be made out of seamless galvanised iron, 60 mm diameter, placed flush with the floor as indicated in the connection plans. Keep in mind that the water discharged from vaporisers has a high temperature (80-90 °C) and in the case of steam generators, the discharged water/steam can even reach 120 °C.
The condensate drain pipe should not: have bottlenecks or reductions in diameter, have slopes less than 4 °, have an excessive length (greater than 2m). A siphon drain should be mounted at the tube's point of insertion into the sewer, to prevent the ascent of malodorous vapours.

3.5 Vapour discharge

Make sure that the discharge course wideness (curves, variations in cross section and slope etc.) is reduced to a minimum. Take care to ensure that the oven connection to the chimney base has an upward trend with a minimum 5 % slope, and proper insulation in order to avoid damaging condensate, noise and excessive temperature.
The pipes must be made out of stainless steel and suitably insulated to avoid harmful condensate, noise and excessive temperature.
For whatever else not specified, follow the laws and regulation. The pipe's diameter will have to remain constant throughout its length, its dimensions being larger or equal to the aspirator's exit diameter, a minimum vacuum of 15Pa (0.17 mbar, 1.7 mm H_2O) must be ensured at the base of the pipe.
For horizontal tube sections smaller than 2 meters insert a cup with condensate drain at the base of the vertical pipe. For horizontal tube sections larger than 2 meters insert after about 1 meter from the aspirator a cup for the condensate drain (see drawing).
The chimney must rise over the roof top at least two meters and be provided with an adequate chimney upwind.
Mixing oven exhaust pipe vapours with fumes from other oven or combustion equipment is not recommended; it could create highly noxious gas apart from and also compromise the chimney draft.

ATTENTION: in order to rule out any possible contact with the vapour aspirator moving parts, the aspirator feeding must be provided with a rigidly fixed and impact resistant pipe with minimum length of 800 mm



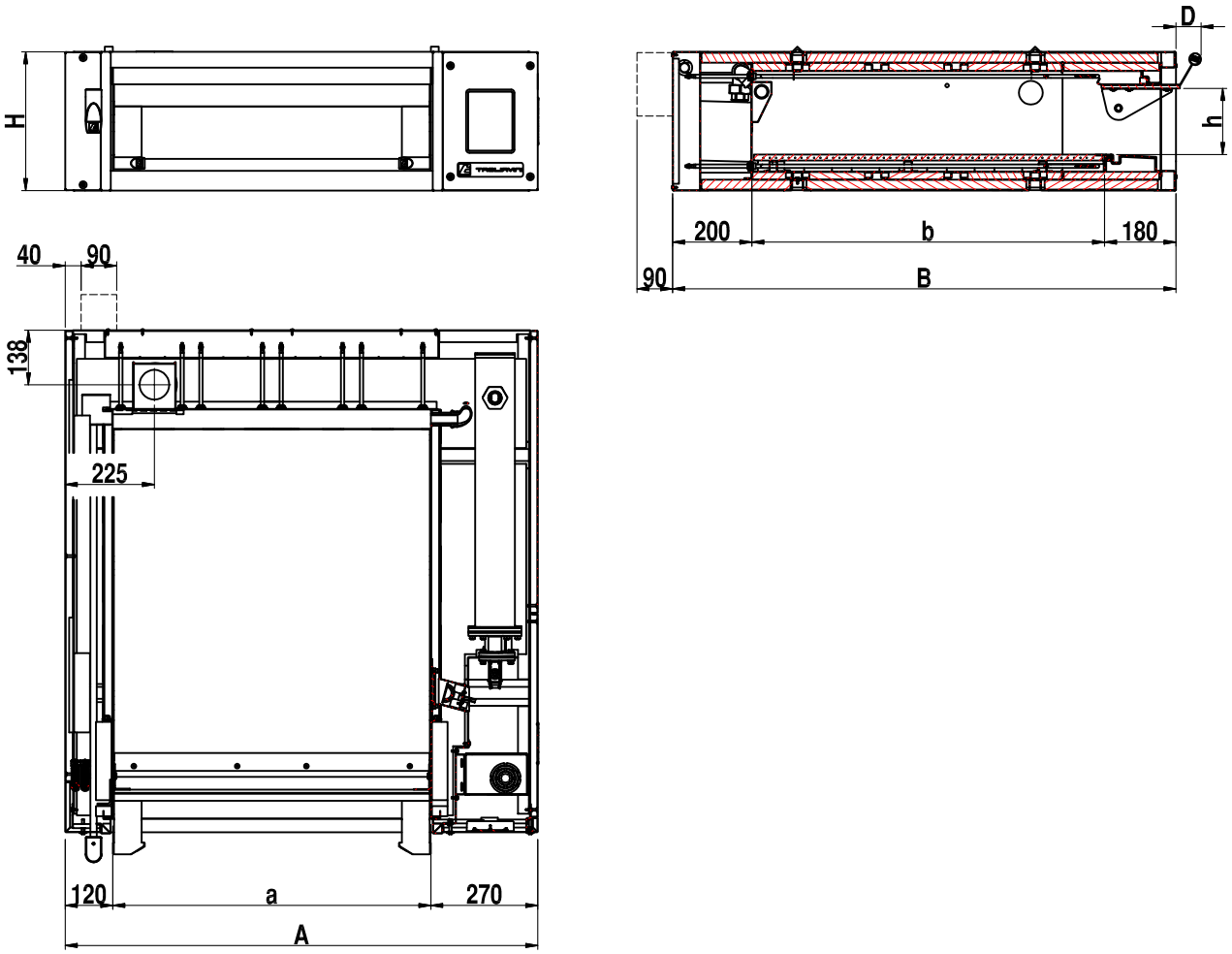
3.6 Establishment ventilation

The establishment must have ventilation slots greater or at least equal to the aspirator's carrying capacity. This can be obtained through a socket equipped with a protection grid facing towards the outside of at least 500 cm2.
If in the room of the oven there are other combustion appliances, air extractors, fume hoods or anything that extracts air from the room you have to increase the capacity of the air intake with the surface necessary for the other equipment.

4. Identification Page

4.1 Image of the oven

4.2 Chamber module general information



GENERAL TECHNICAL CHARACTERISTICS

Description	Data	Pos.
COLD WATER CONNECTION	Ø1/2" TUBE	1
NETWORK PRESSURE	1.5 ÷ 2 bar	
WATER DRAIN CONNECTION	Ø60 mm flush with the floor Fluid max. temperature 120 °C	2
ELECTRICAL CONNECTION	H=2300 mm	4
STANDARD ELECTRICAL VOLTAGE	400V 3N+T	

4.3 Oven model technical data

MODEL	External size mm		Internal size mm		Position hood drain mm	Usable surface	Tray size	Number of trays
	A	B	a	b	F	(m^2)	mm	
EMT2/6040	1010	1270	620	890	220	0,55	400x600	2
EMT4/6040	1640	1270	1250	890	535	1,11	400x600	4
EMT2/4060	1220	1070	830	690	325	0,57	400x600	2
EMT3/4060	1640	1070	1250	690	535	0,86	400x600	3
EMT4/4060	1220	1670	830	1290	325	1,07	400x600	4
EMT6/4060	1640	1670	1250	1290	535	1,61	400x600	6
EMT2/4666	1340	1070	950	690	385	0,66	460X660	2
EMT3/4666	1810	1070	1420	690	620	0,98	460X660	3
EMT4/6646	1810	1400	1420	1020	620	1,45	460X660	4
EMT2/4676	1340	1270	950	890	385	0,85	460X760	2
EMT3/4676	1810	1270	1420	890	620	1,26	460X760	3
EMT4/4676	1340	1980	950	1600	385	1,52	460X760	4
EMT6/4676	1810	1980	1420	1600	620	2,27	460X760	6

Table of heights and handle protrusion

Rated height of chamber module	Useful height at entry	Module external height	Protrusion of handle
	H	h	D
mm	mm	mm	mm
200	166	350	64
240	206	390	104
320	286	470	184

N.B.: BELOW THE FIRST CHAMBER IT IS MANDATORY TO MOOUNT THE INSULATING BASE MODULE (H=100 mm) EVEN IN THE ABSENCE OF THE BASE OR CELL MODULE

MODEL	Usable surface	Installed power	Absorbtion MAX
	(m^2)	(kW)	A
EMT2/6040	0,55	3.18	4.79
EMT4/6040	1,11	6.35	9.59
EMT2/4060	0,57	3.84	5.80
EMT3/4060	0,86	5.76	8.70
EMT4/4060	1,07	5.36	8.09
EMT6/4060	1,61	8.04	12.14
EMT2/4666	0,66	3.84	5.80
EMT3/4666	0,98	5.76	8.70
EMT4/6646	1,45	7.20	10.87
EMT2/4676	0,85	4.23	6.52
EMT3/4676	1,26	6.35	9.59
EMT4/4676	1,52	7.60	11.48
EMT6/4676	2,27	11.40	17.21

Standard electrical voltage 400V 3N ~

* **IN THE EVENT OF ACTIVATION OF THE "BOOSTER" FUNCTION, FOR A CORRECT INSTALLATION AND CONDITIONS OF USE, SEE THE INSTRUCTIONS AT § 13.7**

STEAMER (OPTIONAL)

ADD 1 KW (4.5 A) FOR EACH INDIVIDUAL STEAM GENERATOR

INDIVIDUAL STEAM GENERATOR (for more chamber modules)

VERSION WITH INDEPENDENT STEAM GENERATOR ABSORBTION OF 1.5 O 3 KW BASED ON THE OVEN MODEL
HOURLY GENERATION OF STEAM MOD. MINI KG/H - WEIGHT OF EMPTY GENERATOR KG 50 - FULL ~60 KG
FOR MORE DETAILS REGARDING THE STEAM GENERATOR, SEE THE SPECIFIC MANUAL OF THE GENERATOR.

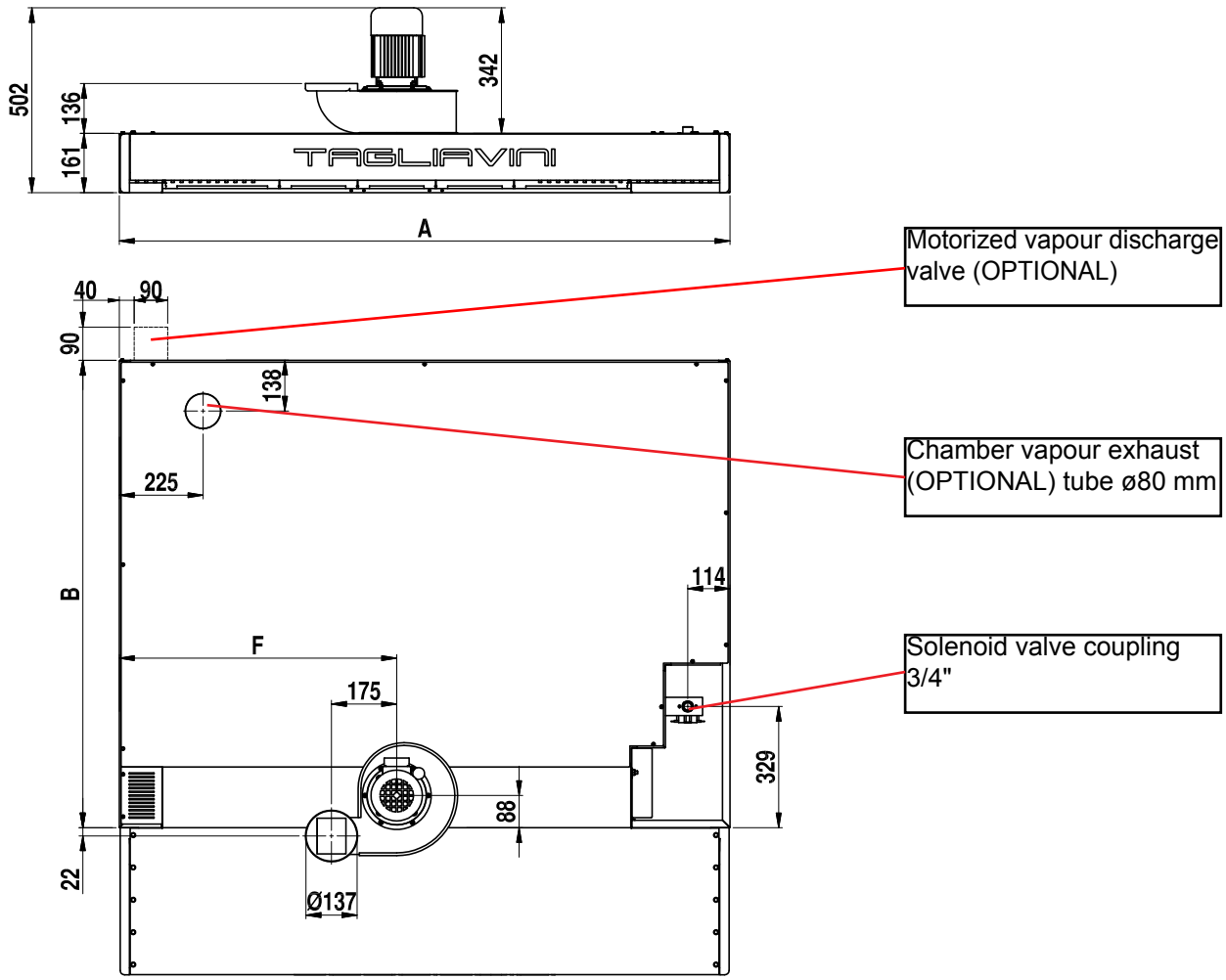
4.4 Extraction hood and accessories

Suitable for the collection and evacuation of vapors, it is insulated in order to protect the upper chamber and is available in two basic versions: 150 mm protrusion and 400 mm protrusion (the top of the wider surface and allows for greater collection). These two extractor versions are completed by the fully closed version called "INSULATING HOOD MODULE". It is possible to mount the vapour aspirator in the two extractor versions (always on request).

SUCTION HOOD DEPTH 400 mm

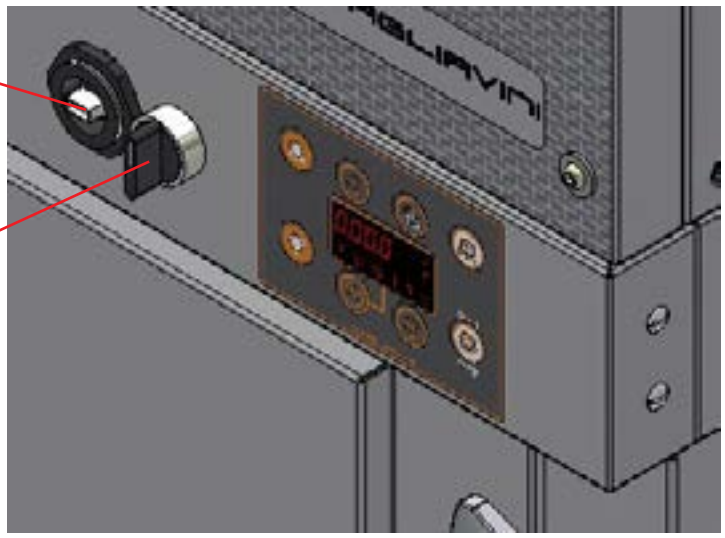
SUCTION HOOD DEPTH 150 mm

ISOLATING HOOD MODULE

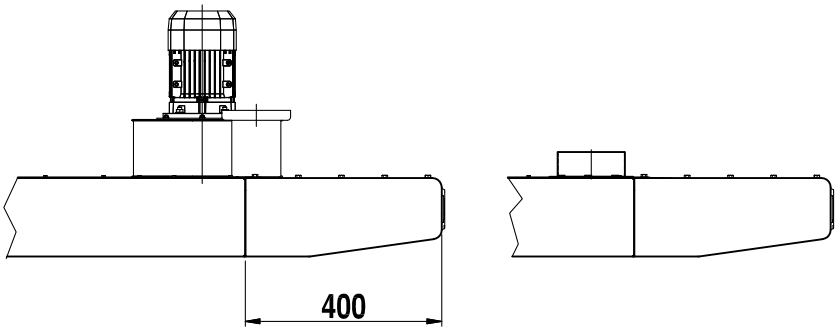


USB PORT ENTRY PROGRAMS AND UPDATE

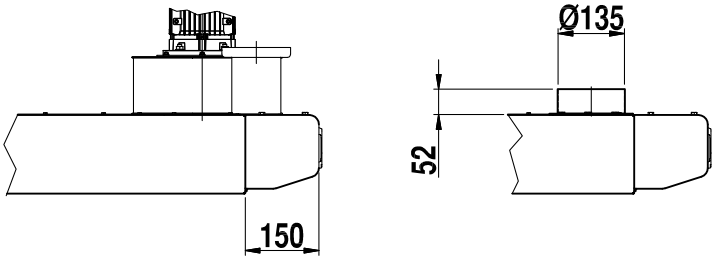
EXTRACTION HOOD SELECTOR PLACED ON THE INSULATING MODULE AT THE BASE OF ALL THE CHAMBERS



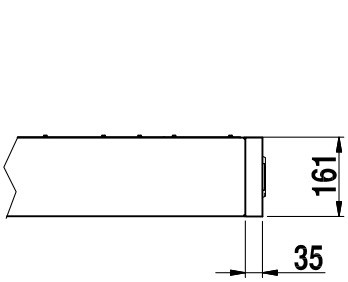
WITH EXTRACTION HOOD **WITHOUT EXTRACTION HOOD**



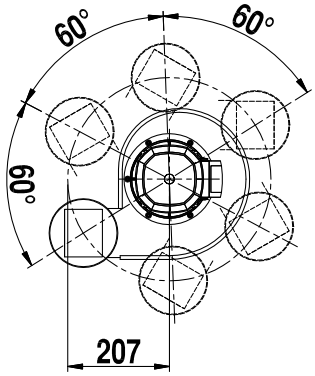
PROTRUSION "400"



PROTRUSION "150"



ISOLATING HOOD MODULE



POSSIBLE PLACEMENTS OF EXTRACTION HOOD

ASPIRATOR MOD.VPA160/MO-RD KW. 0,25/4P B571B4 - SINGLE PHASE V.230 / 50 HZ
ASPIRATOR CAPACITY 12 m³/min = 720 m³/h - pressure 22 mmH_2O

N.B.: The solution without aspirator requires that there are conditions for a good draft of the chamber steam extraction/exhaust hood, by connecting to a central extraction system or a similar system.

5 OVEN ASSEMBLY

ATTENTION: assembly and first oven start-up must be performed by personnel qualified and authorized by the TAGLIAVINI company.
During oven installation, the directives and legislation in force must be respected and abided, in particular the accident prevention regulations.

5.1 Oven assembly instructions

BEFORE STARTING THE INSTALLATION, THE TECHNICIAN MUST MAKE SURE THAT:

the floor is flat and made from heat-resistant materials;
walls adjacent to the oven are not flammable, otherwise you must take adequate thermal precautions, for example, apply heat radiation protections.

ASSEMBLY

unpack the modules (chambers, extraction hood module base or cell)

check component integrity

as packaging materials (wood, nails, plastic etc.) are potential danger sources, make sure none are left in the vicinity of children and that they're stored in special collection sites, especially pollutants or non-biodegradable materials.

Position the oven by observing the minimum distances indicated in this manual

Assemble the components of the various modules according to the instructions received from the company TAGLIAVINI, taking care in particular:
- to use gloves for assembly part handling;
- to perform the sealing of the flexible corrugated coupling hose of the exhaust valves with extreme care, thus minimizing steam loss, as steam could could be damaging.

Remove the protective layer from metal sheets where necessary; if glue traces remain, use a suitable solvent and dry.

Install the electrical system by carefully following the wiring diagram.

Do not obstruct ventilation of heat dissipation gaps or openings (such as those placed on the lateral panels and above the extraction hood)

ATTENTION: Rock wool used as an insulating material may cause irritation on contact with the skin and respiratory system. Use appropriate personal protective equipment including mask and gloves.

USER ADDRESSED INFORMATION

- Provide the user with information regarding the appliance, its operation and utilisation and the instructionbooklet.
- Take note that changes to installation environment can influence air draft and steam exhaust.

6 OVEN CONNECTION

6.1 Norms, technical regulations and directives

Connecting the oven to energy sources must be conducted in compliance with the rules presented below:
· in force law regulations regarding technical aspects;
· electricity and water supply directives and standard;
· in force safety rules:
· for Italy: Law 37/08

6.2 Oven connection instructions

The oven must be installed in a room compliant with the following regulations.

IMPORTANT: the establishment where the oven is installed must be complete with openings able to provide the vapour aspirators with the necessary air.
If other combustion equipment and/or more air aspirators are installed in the room where the oven is operating, make sure that air inlet openings have been provided, their size being able to ensure proper combustion for all the equipment and air exchange suitable for the aspirators.

The oven bearing surface must be flat and suitable to support the loads within the prescribed safety margins. The walls adjacent to the oven should not contain flammable materials, otherwise implement adequate precautions such as heat radiation protections. Before the technical staff in charge with installing the equipment arrives, the establishment must be provided with all the energy supply connections as indicated in the diagrams.

IMPORTANT: oven connection to power supply, water supply and fireplace exhaust must be carried out by professional technicians, capable of carrying out operations in compliance with high standard technical requirements and therefore assume full responsibility, releasing an appropriate declaration of conformity.

BEFORE EXECUTING THE CONNECTIONS, THE TECHNICIAN MUST MAKE SURE THAT:

- the establishment is compliant with in force regulations and is equipped, in particular, with a suitable air inlet suitable for an adequate air exchange rate needed by vapour aspirators;
- the unit's data plate is compatible with the power and water supply values;
- the connections have been executed as specified in this manual (electricity, water);
- fumes exhaust characteristics correspond with the requirements;
- utmost strict compliance with protection requirements is guaranteed.

7 FIRST START-UP (or after long inactivity periods)

The first start-up of the oven must be carried out by a specialized technician.

7.1 First start-up

7.1.1 Preliminary controls

a) Check that the motor of the vapour aspirator is properly connected according to the available voltage supply.
b) Check that the temperature control probes (thermocouples connected to the circuit board panel) are positioned regularly in their seats.
c) The connections to energy sources and related vapour and non vaporized water drains are executed (if steamers are present in the chambers or cell): the oven is ready for the first start.
Supply energy (electricity, water) to the oven.
d) Activate the main switch of each chamber module, positioned on a wall of the room in the vicinity of the oven (switch to position "1").

7.1.2 First start-up

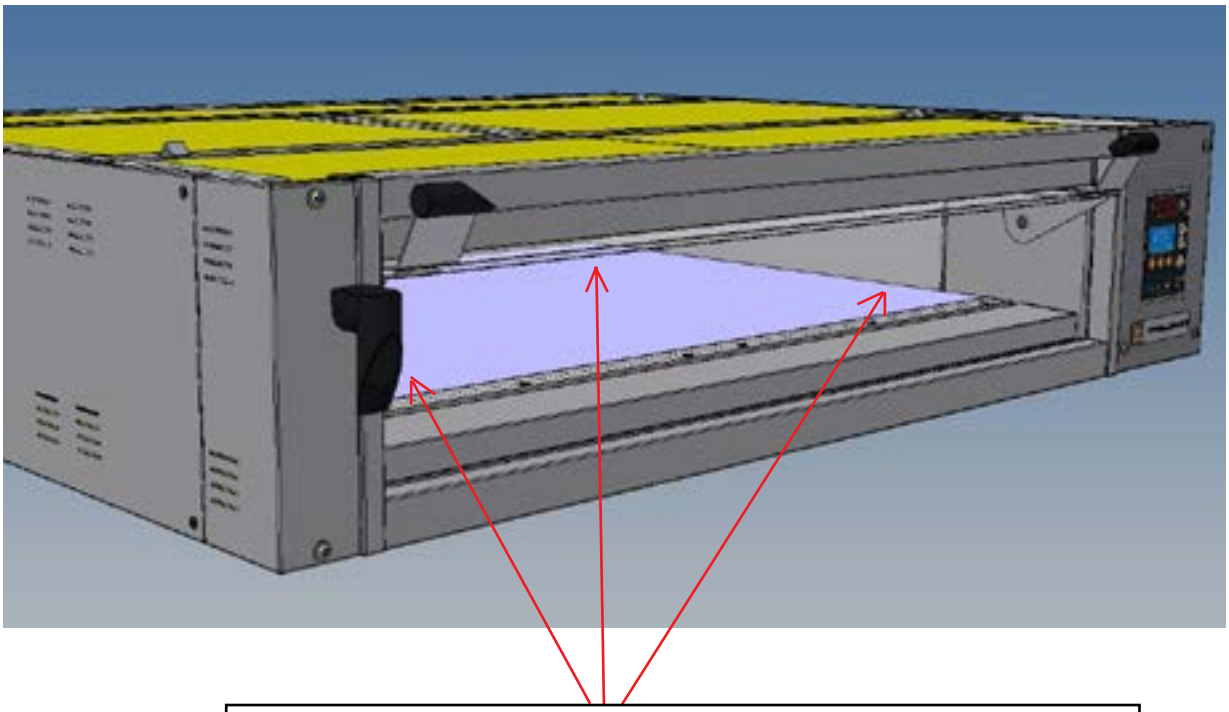
Once all the preliminary checks have been performed, start-up the heating gradually according to the following rules:

· position the weights (e.g. bricks) along the sides of each floor slab (see diagram);
· open the steam exhaust valves of all the chamber modules;
· activate the vapour aspirator (if present);
· ventilate the room (open the doors and windows);
· adjust the power regulator of the room to 30%;
· adjust the power distributer "sky"/ floor to 100% "sky" and 0% floor;
· heat oven at a temperature of 110° C;
· maintain the temperature for 2 hours without opening the doors of the baking chamber;
· after the previous point, set a temperature of 220° C;
· leave the oven at this temperature for 5 hours by opening the doors of the chambers several times.
· After all the moisture of the insulator and from inside of the cooking chamber has evaporated, the oven,
· after the extraction of the weights, it is ready for use.

N.B.: You have to heat the oven using only the upper resistors.

During the first heating, the power regulator should be set to 30% and the distributer to 100% for the "sky" and **0 % floor** .

Diagram of floor loads at first start-up



POSITION THE WEIGHTS IN THE 4 ANGLES OF THE SLABS

ATTENTION: NEVER EXCEED 280°C.

ATTENTION: fumes are released after first heating. In order to avoid poisoning: properly ventilate the oven chamber and do not stand in its vicinity.

IMPORTANT: When the oven operation comes to an end, we recommend to:

- close the water tap;

and in case automatic operation is not used

- disconnect the oven's power supply by acting on the main switch.

For subsequent ignitions set cooking desired temperature by using the control panel.

8 OVEN UTILISATION

DAILY POWER-UP

Power-on the oven 50-60 minutes before you start baking, due to it's considerable size. It can be performed either manually or by means of programmed ignition. Once it has been powered on, the oven will set itself to the set temperature and shall maintain it by turning on the heating elements at intervals on the "sky" and platform of each chamber. In any case it is necessary to open the main water valve, closed at the end of the previous session.
Once the operating temperature has been reached, wait another 10-15 minutes before the first cooking in order to allow the oven to acquire an homogeneous thermal mass sufficient to ensure good cooking results.

LOADING INTO OVEN - COOKING - UNLOADING FROM OVEN

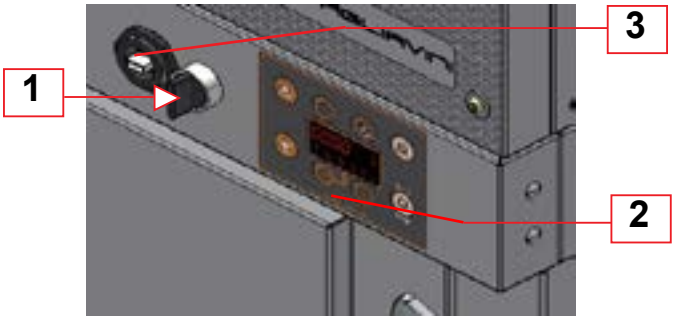
Before oven loading, make sure that the vapour exhaust valves are closed in order to make the vapour phase effective.
It is recommended that you proceed with oven loading always using the entire available surface. Leaving areas of the cooking surface not occupied by products results in appreciable differences in the uniformity of the result.
It is also recommended to quickly load the oven. During cooking do not open or close the doors. The unloading of the oven must ocur in the same order as the loading.
These small rules allow to obtain the perfect and homogeneous cooking of the product.
Use the loading trays by using the appropriate tray clamps at the entrance to each cooking chamber (see drawing below).

Manual handling of the loading tray

CORRECT POSITION OF TRAY HOOK

FUMES ASPIRATOR

The overlying hood can be fitted with an extractor for vapour escaping from the oven door and chambers. Vapours in the rooms are sucked into the hood through a stainless steel tube connected to the steam discharge valve, near the opening, on the left side of eah chamber module. The steam valves are closed when the lever is pushed completely toward the oven and opened when the lever is pulled toward the operator. It is recommended to maintain the steam aspirator on during the unloading phase in order to limit vapour diffusion in the work area. The aspirator can be switched on even when the steam exhaust valve opens in order to dry the product. Do no maintain the vapor aspirator switched on during cooking in order to avoid the formation of an upward air current which could cool the cooking surface from the loading opening.



1 Extraction hood selector

2 Rising cell controls

3 Data transfer USB slot

STEAMER (OPTIONAL)

The steam generators (one per chamber) are heated by appropriate thermostated electrical resistors. The production of steam in the generators is obtained by adding water from the grid using solenoid valves controlled by the corresponding button on the control unit (see §): it is recommended to avoid opening the solenoid for too long periods, which would result in the flooding of the generators and their excessive cooling. It is advisable to proceed with subsequent brief openings (2 or 3) in order to evacuate the excessive internal pressure and steam so as to have the right degree of pressure and humidity. It is necessary to verify that the opening time of the previously calibrated solenoid has expired before the next button is pressed. The intervals for injecting steam in the room (about 2-3 seconds) and temperature (about 140° C) of the steam generators are calibrated during the testing phase of the oven by TAGLIAVINI SpA technicians and any corrections are made only at the user's requests for specific production requirements.

MANUAL STEAM DRAIN VALVES

Each cooking chamber is provided with a vapour evacuation valve used accordingly to the cooked product. Its opening is highlighted by the control lever's (A) protuberant position, located on the right column of the oven, while valve closing is achieved by pushing the control itself toward the oven until it stops. In addition to the two extreme positions you can get more openings, leaving the control lever in an intermediary positions, to allow a fair and balanced steam evacuation from the chamber and avoid the chamber's excessive cooling.

8.1 Adjusting cooking parameteres

* STANDARD basic configuration							
PRODUCT	Size	Baking time	Recommended temperature	chamber power (A)	Power distribution between platform/"sky" (B)		
	g	minutes	°C	%	% platform	% "sky"	
BREAD BAKED ON THE PLATFORM	30÷80	10÷20	225÷230	65 ÷ 70	35	65	
	100÷250	20÷30	220÷225	60 ÷ 65	35	65	*
	300÷600	40÷50	210÷220	60 ÷ 65	35	65	
	700÷1000	50÷60	200÷210	55 ÷60	40	60	
	1000÷2000	60÷80	190÷200	50÷55	40	60	
BREAD BAKED IN A BAKING TIN	30÷80	10÷20	225÷230	70 ÷ 75	40	60	
	100÷250	20÷30	220÷225	65 ÷ 70	40	60	
	300÷600	40÷50	210÷220	60 ÷ 65	40	60	
BREAD BAKED IN A BAKING SHAPE	500	35÷45	215÷225	65 ÷ 70	45	55	
	1000	50÷60	205÷215	60 ÷ 65	45	55	

N.B. valid parameters with a maximum load of 13 kg/m3/h of pasta and for full baking

Small sized PASTRY and biscuits	10÷15	160÷170	40 ÷ 45	15	85	
Small sized PASTRY (beignets and puff pastry)	10÷20	170÷180	45 ÷ 50	20	80	
Medium sized PASTRY (croissants and muffins)	20÷25	190÷200	50 ÷55	25	75	*
Large sized PASTRY (puff pastry pies, panettone and easter dove cake)	40÷60	190÷210	60 ÷65	35	65	
PIZZA/FOCACCIA BREAD IN A BAKING TIN	15÷25	240÷250	70 ÷90	50	50	

Next, you will need to set the cooking parameters (stored on the computerized control units), such as temperature, time, power and its distribution between "sky" and floor. In all cases, the adjustments depend on the product to be cooked, but especially the power adjustment has a fundamental role in the uniformity of cooking, in fact it should be set according to the product, proportionally to the weight of the product. In general, it must be noted that an excessive power leads to an increase of the cooking heat in the central part of the chamber leaving the lateral areas, the opening and the bottom at a lower temperature. The opposite occurs with insufficient power.

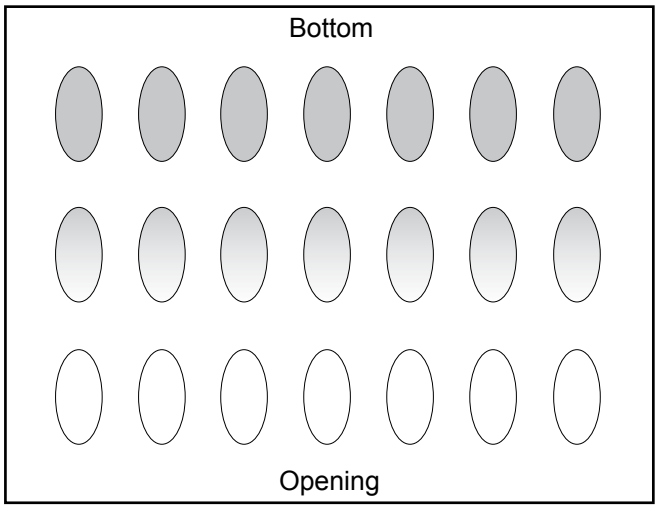
The 1st calibration attempt for certain products is presented on the opposite page.

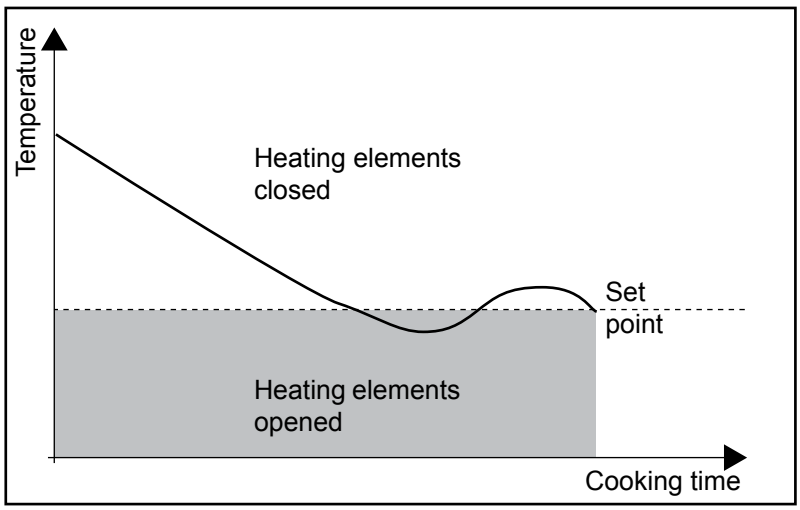
8.2 Controlling the cooking

It can be done visually through the transparent glass doors with the help of the chamber lamp on the right side and controlled from the ignition switch.

8.3 Temperature or % of too high power

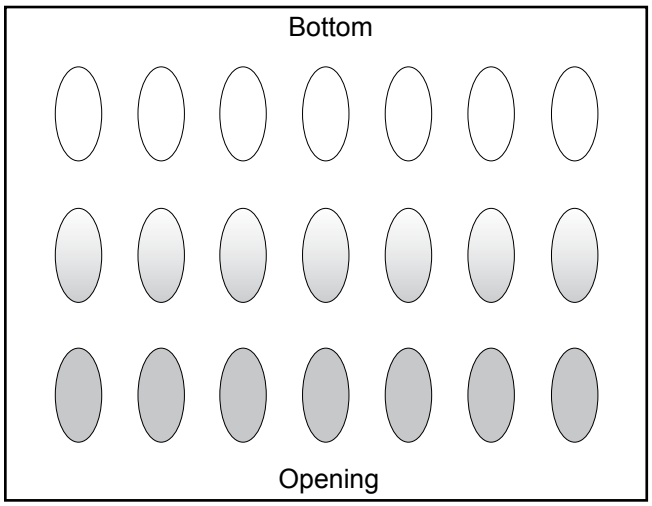
shows cooking towards the bottom

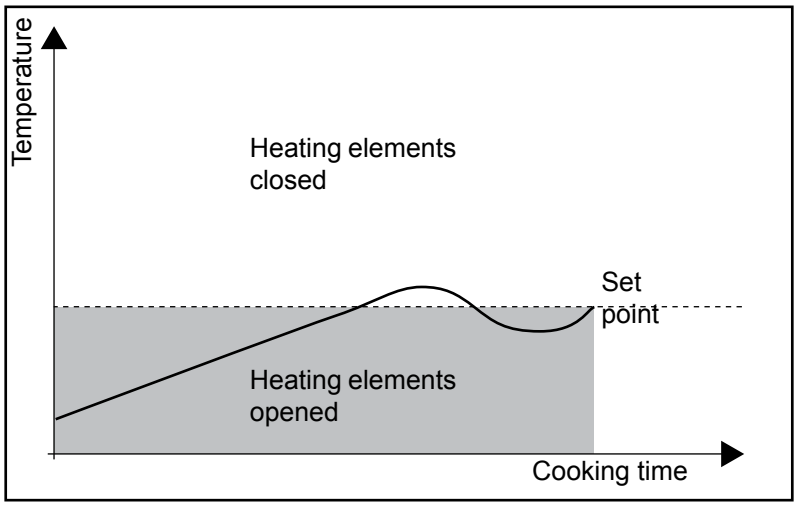




8.4 Temperature or % of too low power

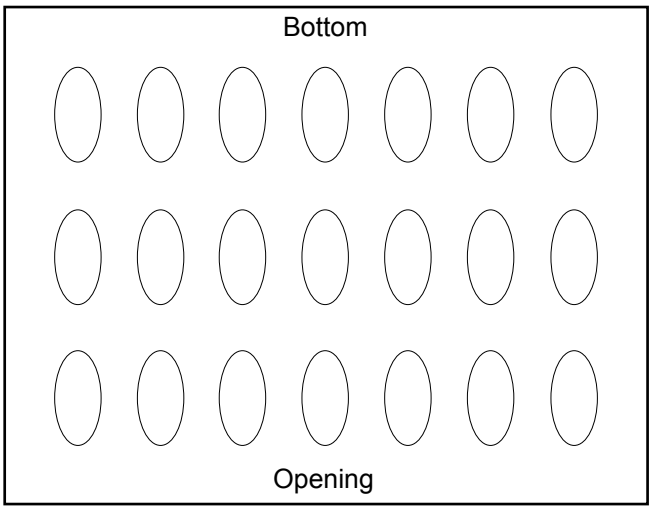
shows cooking towards the opening

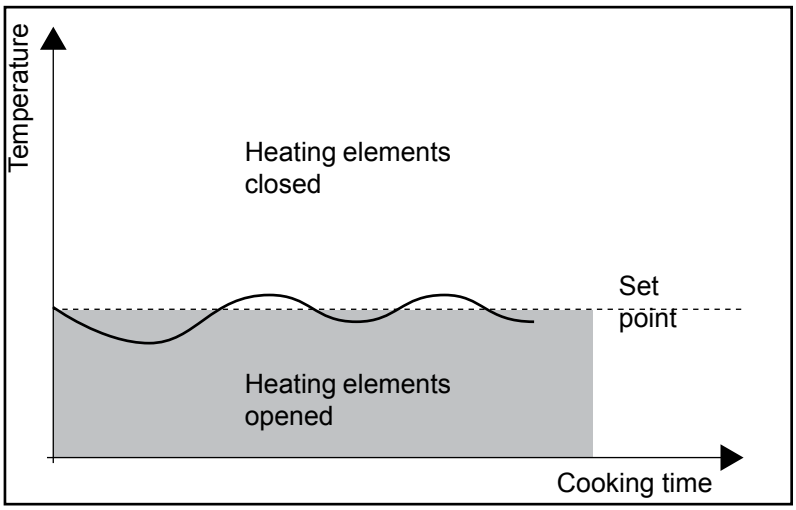




8.5 Temperature and % of correct power

even cooking from opening to bottom





8.6 Shut down

Must be performed manually and implies main water valve closing (if vapour generators are present). It is recommended to set the cooking parameters to the desired values (storable on control panels) before system shut down, parameters such as temperature, power and its distribution between "sky" and floor at the values wanted at restart, as well as at the activation of the steam generator.

DURING THE NEXT SHUT DOWN IN ORDER TO END THE OPERATION CLOSE THE MAIN WATER VALVE AND DO NOT USE THE MAIN SWITCH TO INTERRUPT THE POWER SUPPLY TO AVOID CONTROLLER BACKUP BATTERY DISCHARGE.

9 ROUTINE AND SCHEDULED MAINTENANCE

The following information is intended to aid routine maintenance staff and users

By routine maintenance is intended all the operations carried out periodically in order to maintain efficiency and oven overall good condition, which do not require specific preparations and as such may be performed by non-specialised staff and, therefore, also by ordinary users and/or maintainers provided that this manual's instructions are scrupulously complied with.
Requirements regarding proper stainless steel part cleaning operations.
In order to ensure long life and good health to the oven's stainless steel parts, it is essential to carry out effective and constant cleaning operations, especially for the parts that come most frequently in contact with substances considered aggressive to stainless steel.
In general the following operations are considered sufficient:
washing with soap and water, a thorough rinsing with a water soaked cloth and a final drying. Good results are also obtained by washing the stainless surfaces using warm water and a mild dishware detergent.
Rinse operations may also be conducted using a water and sodium bicarbonate soaked cloth and by delicately and repeatedly running over the areas that need cleaning. Cleaning operations are composed of washing using a soft moistened cloth and a final drying phase (step particularly important for those areas where the water has an elevated hardness and leaves limestone deposits).

ATTENTION
Respect the points listed below in order to avoid stainless steel part problems like early decay and deterioration triggered by corrosive phenomenons:

- do not use scourers, brushes or abrasive discs made from other metals or alloys (e.g. , common steel, aluminium, brass, etc.) or tools that have previously cleaned other metals or alloys, which in addition to scratching the surface, would cause the contamination, with consequent antistatic stains. Spangles and stainless steel brushes are compatible as they do not causesurface contamination, but pay attention not to cause any scratches.
- do not use hydrochloric acid, sulphuric acid, muriatic acid and halogenated organic acids. Also avoid contact with hydrochloric acid vapours, like those emanating from floor washing . In general, direct use of cleaners containing chlorides on stainless steel should be avoided, if used at least provide short contact periods and conduct an abundant final rinse.
- do not use abrasive coated detergent powder that might compromise the aesthetics and, more generally, the surface finish quality (for example scotch brite finish).
- do not use detergents on silver or other metal alloys.

ATTENTION: it is absolutely forbidden to wash the oven with water jets.

9.1 Basic safety standards

Please read the General safety rules (§ 1.6) and safety instructions (§ 11) paragraphs so that the user or routine maintainer can perform routine maintenance operations in absolute safety conditions.

IMPORTANT: All cleaning and maintenance interventions must be performed after:
· the oven's power supply has been disconencted;
· the water supply valve has been closed.

9.2 Cleaning interventions

9.2.1 Door cleaning

Clean the oven doors weekly, or at every 60 operation hours, depending on baked products.

Oven internal and external cleaning operations must be carried out using heat-resistant gloves, a soft cloth, warm water and detergent in order to remove dirt. Absolutely avoid the use of cold water because it could induce a high thermal shock and cause sudden glass shattering

9.2.2 Cleaning control units

When cleaning control units, it is recommended that you use mild detergents and a soft cloth (do not use rough or abrasive cloths).
Cleaning operations must be carried out at least once a month trying to eliminate all traces of dirt before crystallizing,

N.B.: do not use solvents to clean the control panels

9.2.3 Stainless steel front side cleaning

When cleaning the oven's metal front panel, except the two crankcase silk-screened parts, it is recommended that you use a stainless steel spray product that will simultaneously clean and polish the surfaces.
Before cleaning the front panel columns, remove and open the two lateral silk-screen crankcases, to prevent the stainless steel product from ruining the silk screen printing.
Cleaning operations are to be carried out at least once every 3 months, thoroughly clean the grills under the suction hood, that can be removed by unscrewing the "V" screws (see figure below).

9.2.4 Silk-screened and glazed part cleaning

When cleaning the oven's silk-screened and enamel parts (for example, the front panel silk-screened panels see part. S photo above), it is recommended that you use mild detergents and a soft cloth (do not use rough or abrasive cloths).
The silk-screened panels for easy cleaning can be removed (the panel opposite to the controls) or opened in the case of the panel that houses the control units, all of this by unscrewing the V1 screws.
Cleaning operations must be carried out at least once a month trying to eliminate all traces of dirt before crystallizing,
DO NOT USE ALCHOL, THINNERS OR STRONG DETERGENTS

9.2.5 Cleaning the glass of the lamps

Clean every 2 weeks, or every 50 hours, the glass of the lamp (L) located on the right side of the loading opening, inside the baking chambers.
It is advisable that you wait some time after the oven's operation has been disabled to conduct washing operations.
This manoeuvre should be carefully considered:

- Wait until the oven has cooled down because the inner room temperature can be very high and dangerous.
- Proceed with the utmost attention considering the position of the lamps in order to avoid any risk of burns
- Work with care as short circuits or thermal shocks may cause glass breaking.

For this purpose it is recommended to simply use a cloth soaked in liquid detergent or spray (use only suitable detergents to wash surfaces that may be in contact with food).
Always rinse surfaces using a cloth soaked in warm water (40-50 °C). Cold water could can cause the glass to break or crack.

9.2.6 Cleaning the cooking chambers

The parts in contact with the sealing paste are cleaned at the end of the shift or day. Use an aspirator and a water dampened cloth or products suitable for the food industry to remove bread or grease residues from the cooking chambers. Attach the cloth to the end of the carriage extracting rod in order to reach the bottom of the chambers.

ATTENTION: execute operations using gloves and if possibly when the oven is cool!

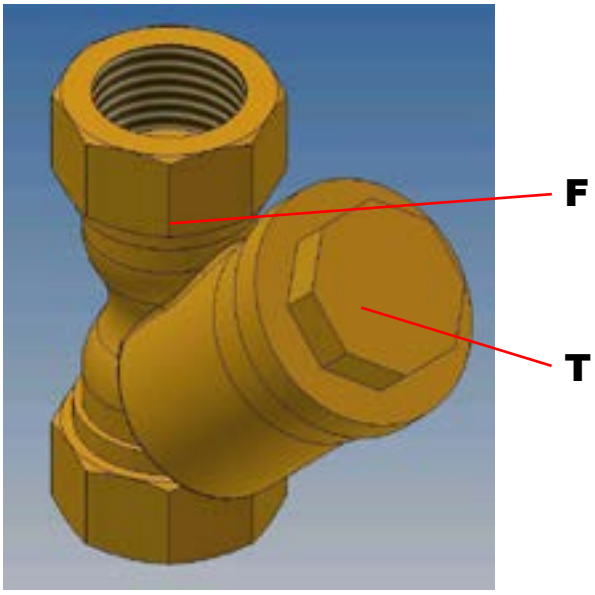
9.2.7 Cleaning the trays, pans

For tray cleaning use warm water (60 °C maximum) and a rag. Low concentration, moderate foam alkaline detergents can be used for pan cleaning because they do not contain aggressive substances. These detergents are designed to clean articles that may come in contact with food. It is obvious that in this case a thorough rinsing using tap water and and consequent drying must be performed. It is recommended not to use steam. Once the pan's non-adhesive coating wares off, entrust the pans to a specialized company that will provide coating regeneration.

ATTENTION: for carriage and tin use and maintenance, in particular tins treated with non-adhesive coating, it is recommended to refer to the instructions provided by the manufacturer or supplyer.

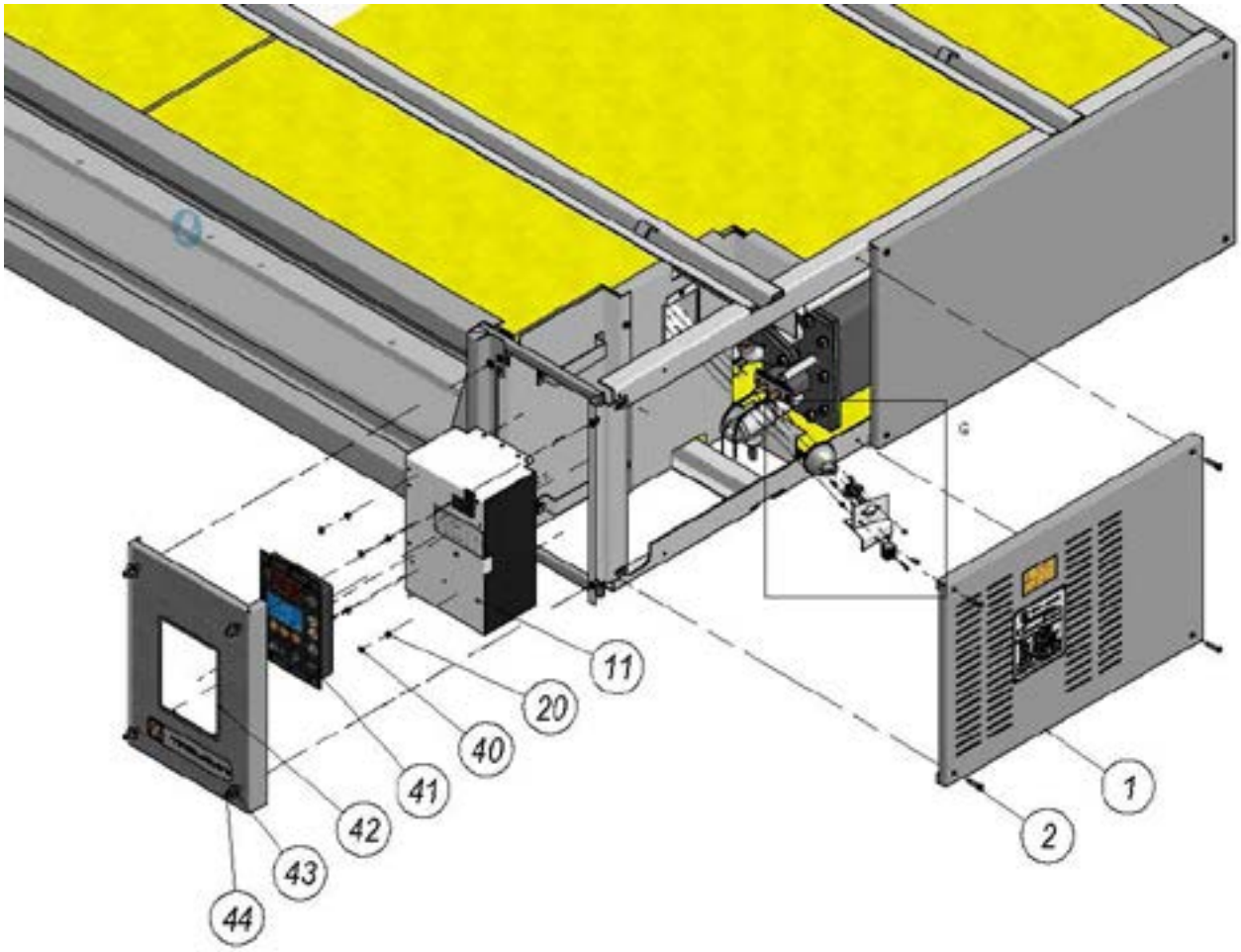
9.2.8 Water filter cleaning (figure below)

Once every two months, or after every 500 operation hours, the frequency is variable, based on steamer utilisation and used water quality, clean the water manifold filter (F). To achieve this, remove lower blocking panel thus accessing the valve compartment where the solenoid valve manifold is located,
unscrew the cap (T) and pull out the filter. Wash the filter using tap water and remove possible clogging, reassemble everything as it was originally. Before you reinstall the filter cap seal the filter's thread using Teflon.



9.3 Replacing the lamps - cooking chamber lamps

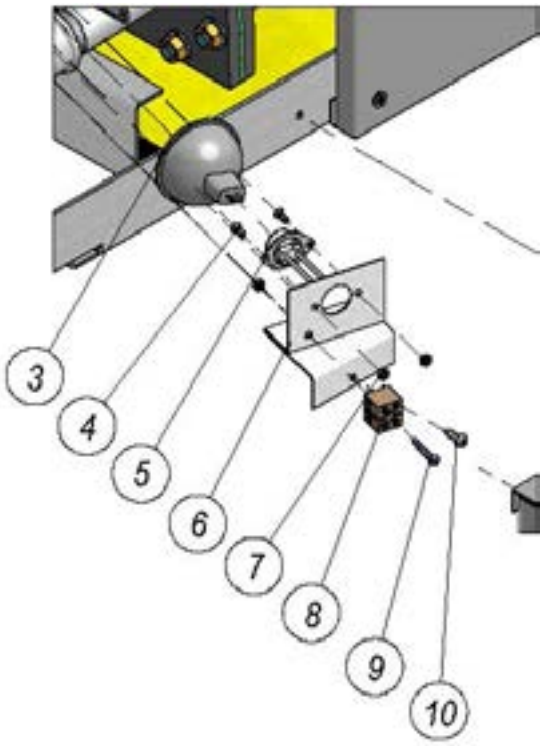
The lamps are low voltage and of halogen type for high temperature with high performance. Located to the right of the cooking chamber, their replacement is possible from the side, removing the corresponding covering side panel (1) or removing the front panel (42) with the control unit (41) and extracting the power unit (11).
Remove panel 1 by unscrewing the 2 screws.



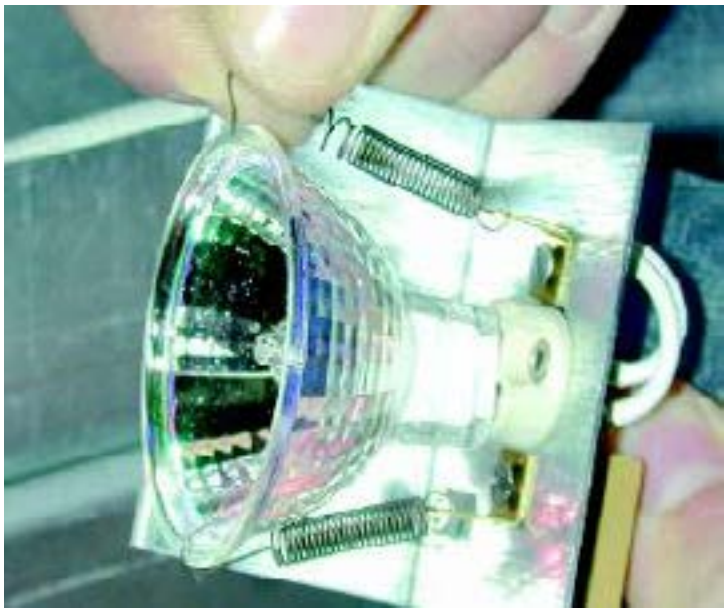
ATTENTION: EXECUTE OPERATIONS USING GLOVES AND WHEN THE OVEN IS COOL!

Unscrew the 9 screw in order to extract the lamp holder 7

After accessing the compartment housing of the lamp, remove the entire bulb holder by unscrewing the screw (9)



after carefully removing the retaining spring (B), remove the damaged lamp gently (3).

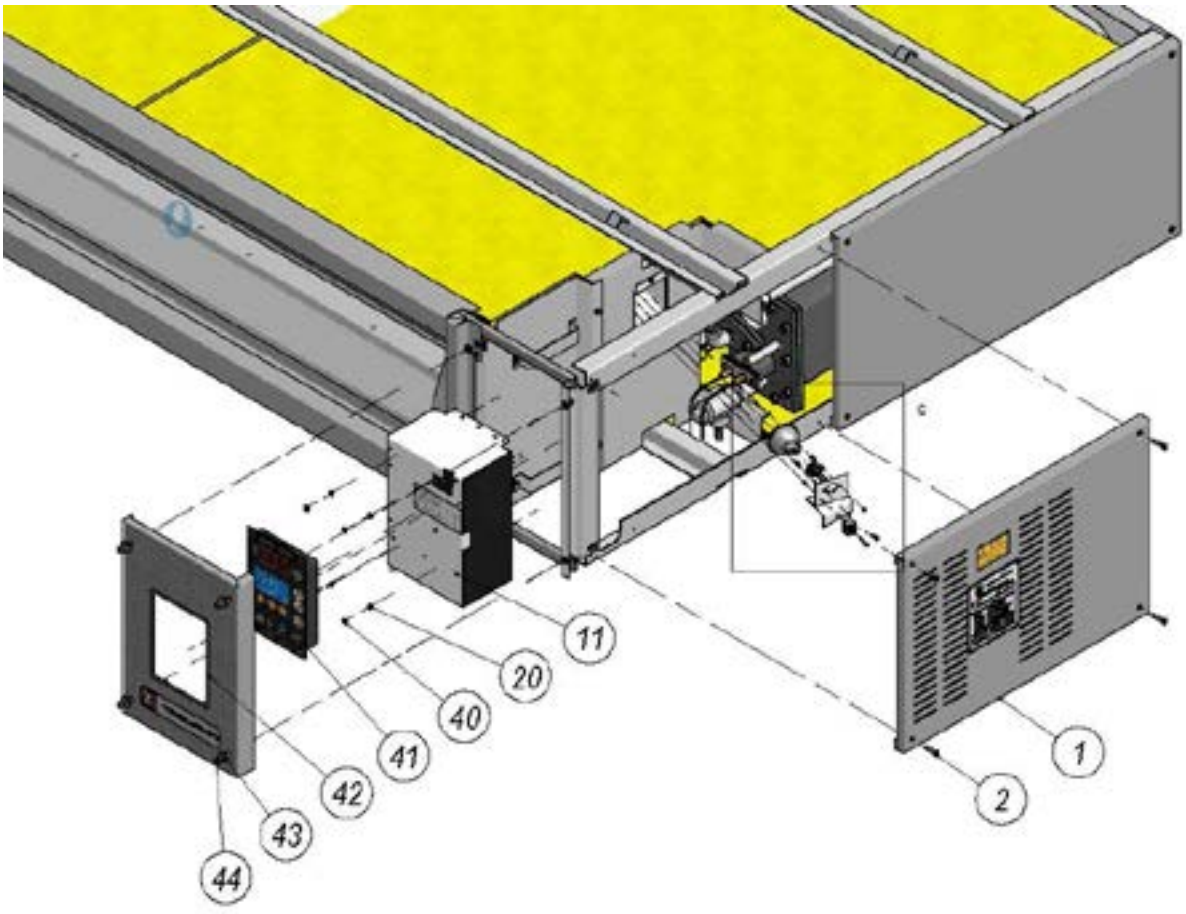


no.	description	code
1	FRONT PANEL RIGHT COVER H=	
2	Screws UNI 7688 M5x25	A1621055
3	HALOGEN LAMP BAB 24V 20W GX5,3	A0500081
4	Screws TSI UNI 6109-M3x8	A1600350
5	HALOGEN LAMP HOLDER X GX5,3-WI(4285500)	A0500009
6	Bolt M3 UNI5588	A1670090
7	LAMP HOLDER EMT 2007	0109999125
8	WEIDMULLER TERMINAL MK 3/2 KRG	A0500005
9	Screws AB 3.5 x 13 UNI 6954	A1620010
10	Screws TCI UNI 6107-M3x20	A1600490

9.4 Replacing fuses and cleaning units (this operation must be carried out by a specialized technician)

Each unit has a self-diagnostic system that signals the failure of one or more of the four protection fuses for the phases of the power circuit by means of an acoustic signal lasting 30 seconds, with a message flashing on the display, uninterrupted until reset. It also has a protection fuse for the heating system of the steam generators.

The reset of the damaged fuse is very simple, but it requires a good knowledge of electrical systems as, in addition to replacing the fuse, it is necessary to eliminate the cause of the damage in order not to ruin the whole operation.



For fuse replacement or cleaning of the power units you must:

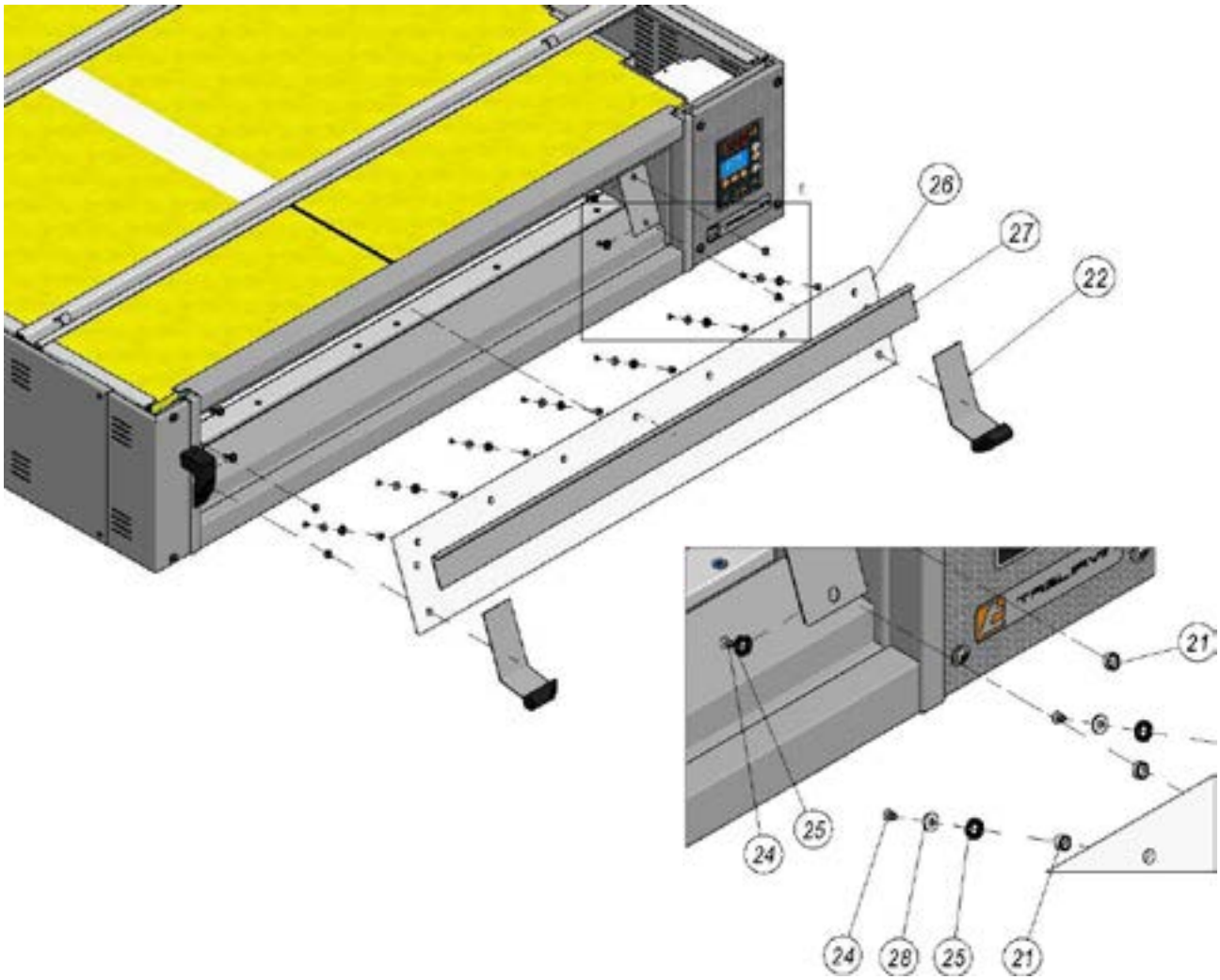
Loosen the screws (44) with a special tool.
Remove the carter 42 with care
Fit the appropriate support for the power units to the column
Unhook the power unit by unscrewingthe locking screw and lifting it
Place it on the proper support and unscrew the 4 screws

Periodically, to prevent heavy deposits of dust or flour inside the control units, it is advisable to remove them and clean all the eventual residue with a jet of low pressurized dry air.

Replace the blown fuse (included in the spare parts) by unscrewing the bolts of the power fuses (C) or steam fuses (D) or extracting them from the fuse spring of the board (F) under the power fuses. Reassemble the unit following the reversed order of dismantling.

9.5 Replacing the glass of the door

ATTENTION: EXECUTE OPERATIONS USING GLOVES AND WHEN THE OVEN IS COOL!



To replace the glass of the doors, proceed as follows:

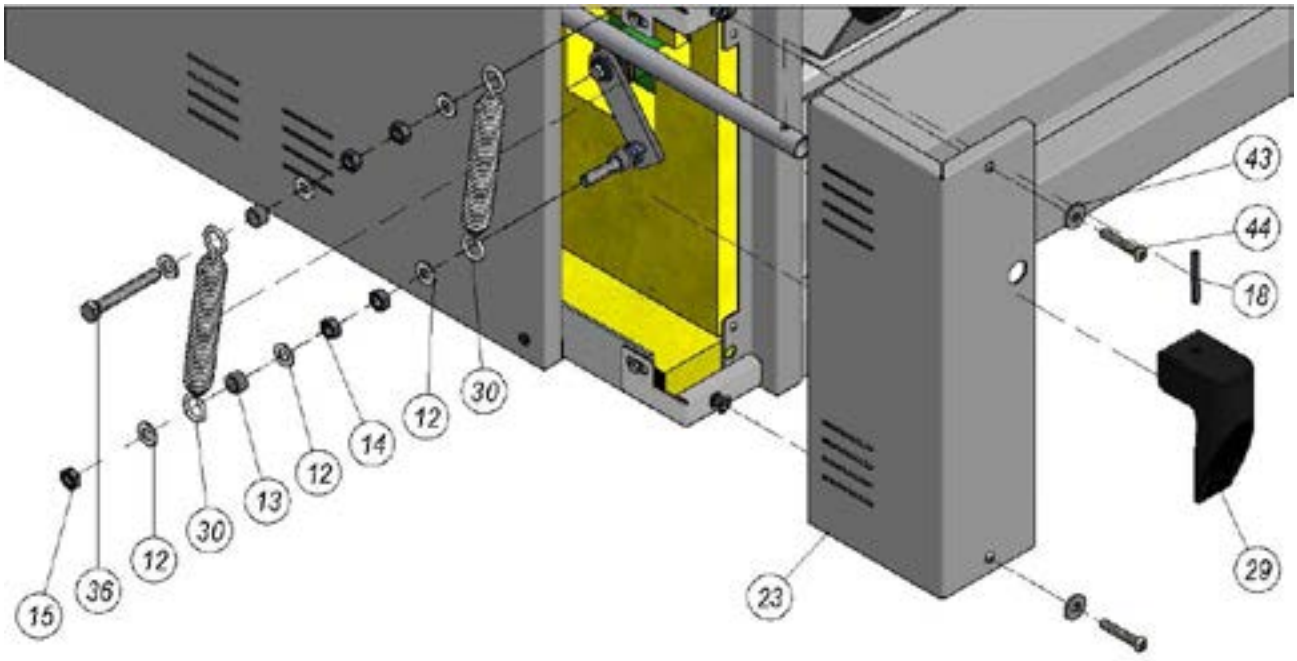
1) open the door in order to reach the fixing screws;
2) remove all the screws (24) that fix the glass (26) and remove the washers 25 and 28;
3) remove eventual glass parts and remove the teflon bushings (21) from the damaged glass;
4) add a few drops of red silicone at high temperature where you are going to attach the glass 2.
5) insert the teflon bushings (21) into the new glass;
6) tighten the screws (24) with the 25 and 28 washers in the appropriate threaded bushes, taking care not to overtighten in order not to not break the glass;

no.	description	code
21	TEFLON WASHER X GLASS	90340415
22	GR. EXTERNAL RIGHT PLATE FIXED TO THE DOOR H=	
24	Screw torx button M5 x 8 ISO 7380	A1620548
25	DOUBLE WASHING AGAINST UNSCREW. M8 STAINLESS STEEL	A1720521
26	DOOR GLASS	See the table below
27	LAMP GROUP SUP.DOOR FRAME L=	
28	STAINLESS STEEL Washer M5 UNI6593	A1720204

MODEL	Code DOOR GLASS	
	H=200	H=240
EMT2/6040	0100954008	0100974006
EMT2/4060	0101954029	0101974019
EMT4/4060		
EMT3/4060	0105954032	0105974029
EMT4/6040		
EMT6/4060		
EMT2/4666	0103954017	0103974013
EMT2/4676		
EMT4/4676		
EMT3/4666	0107954022	0107974027
EMT3/4676		
EMT4/6646		
EMT6/4676		

9.6 Replacing the door opening/closing springs

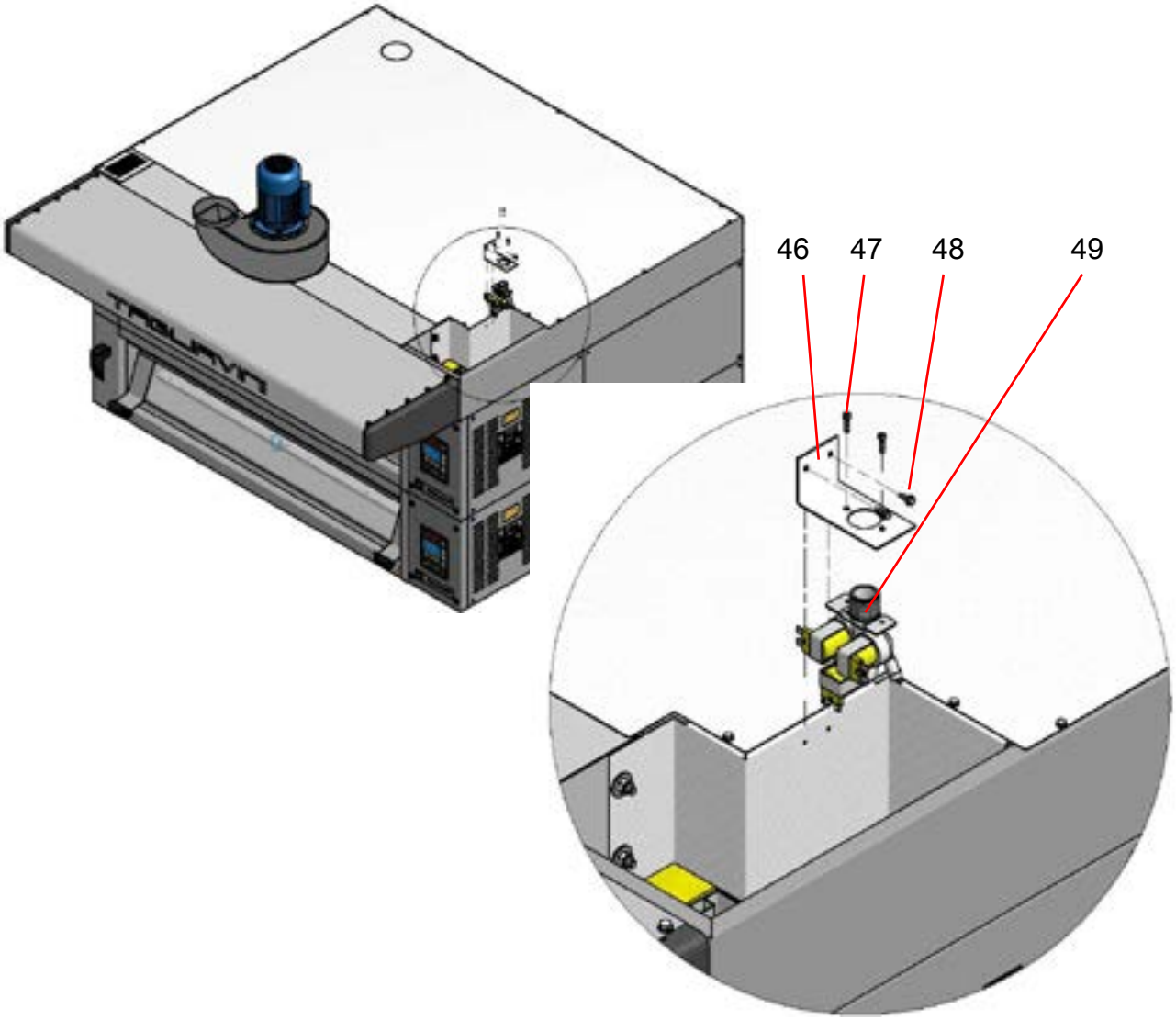
ATTENTION: EXECUTE OPERATIONS USING GLOVES AND WHEN THE OVEN IS COOL!



no.	description	code
12	Washer M8 UNI 6592B	A1700200
13	SPRING SLIDE TUBE OF PIZZA DOOR	10.999.4.13
14	Bolt M8 UNI5588	A1650080
15	Bolt M8 UNI5589	A1650218
18	Elastic outlet 5x40 UNI 6874	A1760140
23	LEFT HEAD PANEL COVER	
29	HANDLE C/DO VALVES	090.999.9.152
30	SPRING FOR PIZZA DOOR	A1590305
36	SCREWS M8 x 60 UNI5739	A1600098
43	Washer M6 UNI 659	A1720208
44	UNMISSABLE SCREWS T.B.E.I. 6X35 UNI 7380 STAINLESS STEEL A2	A1620521

9.7 Replacing the steam solenoid valve

ATTENTION: EXECUTE OPERATIONS USING GLOVES AND WHEN THE OVEN IS COOL!



no.	description		code
46	SOLENOID VALVE HOLDER ON THE HOOD		0109999123
47	Screws TCI UNI 6107-M4x16		A1600506
48	Screws 4.2 x 13 UNI 8117-2		A1620001
49	ELETTR.SING.180 G.V38 + 24 Vac 50Hz	1 STEAMER	A5021323
	ELETTR.2VIE 180 G. V38 + 24 Vac 50Hz	2 STEAMER	A5021324
	ELETTR.3VIE 180 G. V38 + 24 Vac 50Hz	3 STEAMER	A5021325
	ELETTR.4VIE 180 G. V38 + 24 Vac 50Hz	4 STEAMER	A5021326

9.8 Steamer cleaning and maintenance

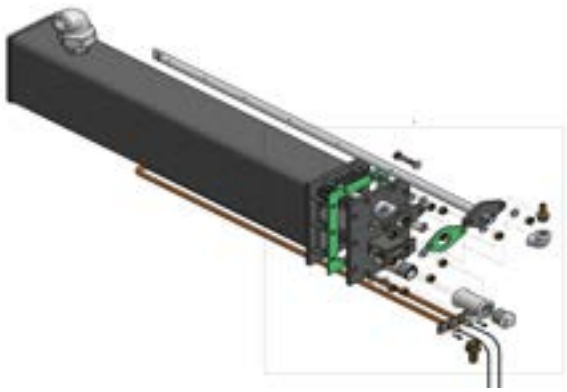
If the chambers are equipped with a steamer, it is necessary to also connect the water supply, inserting the corresponding flexible hose (connected to the water mains by means of a faucet) and connecting the solenoid valve (49) placed on the right side of the extraction hood. The corresponding solenoid outlets shall be connected by using the supplied rubber tube sections. It is also necessary to provide an exhaust pipe for the overflow (54), connecting a rubber tube section to the connector protruding from the lower part to be connected to the condensate drain (12) and sump drain.
Before remounting the side panels, make sure that the electrical connections to the controllers are placed in their seats, that the fuses are intact and undamaged and the fittings of any steam generator are tight.
Once the connections are made, power up the oven by pressing the wall switches and check the correct operation of the oven.
Make sure that on the side where the wall switches are installed, their connections to the network ensure a load that is as balanced as possible between the phases.
In what concerns the other connections, see chapters 3, 4 and 6.

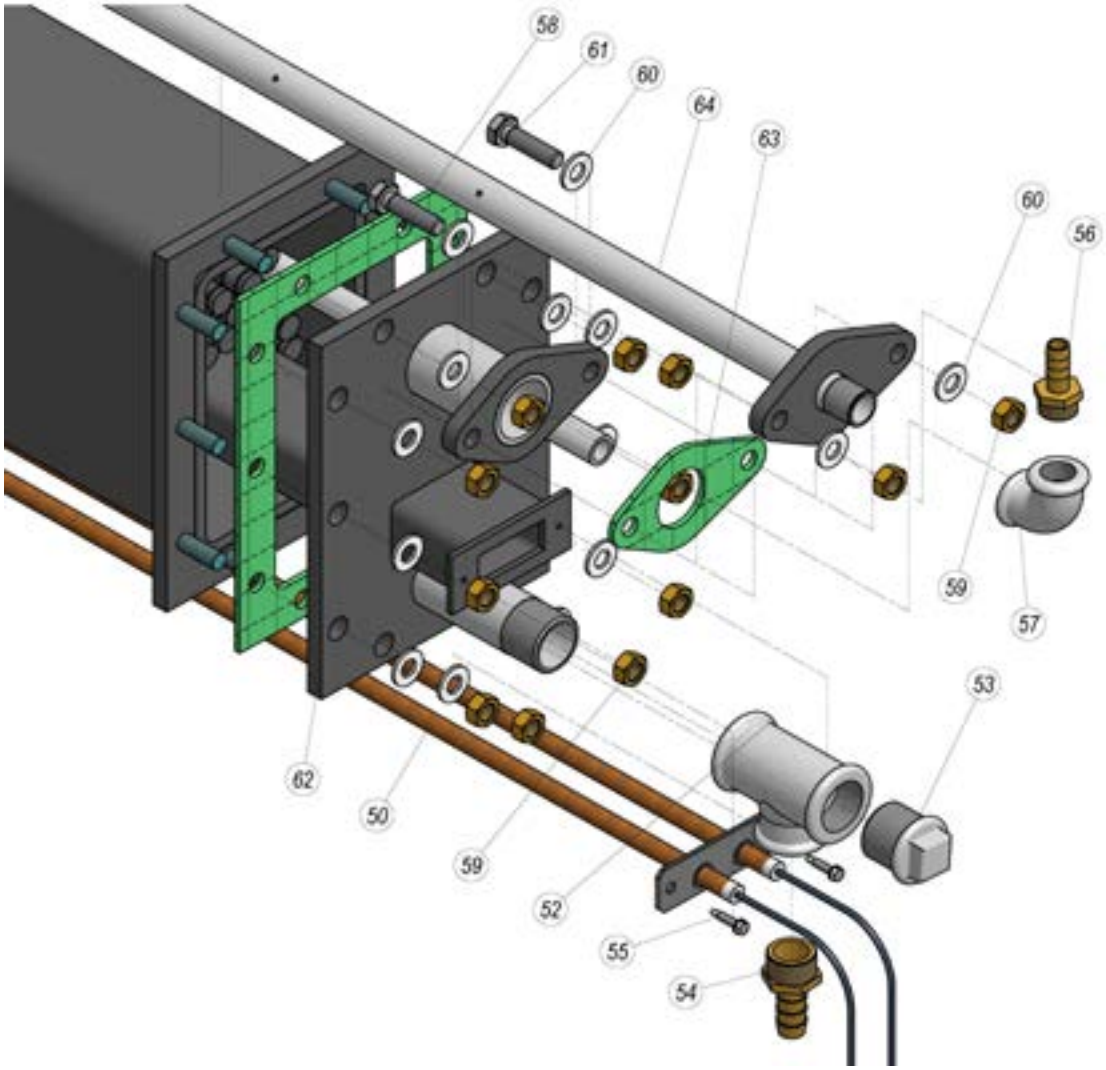
9.8.1 Individual Steam generators

The steam generators are separated for each chamber and are subject to periodic maintenance because the water used may easily form calcium deposits that may clog the generator's passages and reduce its effectiveness. It is recommended to perform preventative maintenance in order to avoid irreparable damage to the steam generators. The frequency of the maintenance operations depends on the water hardness and how the oven is used, however it is good to do a cleaning every 3 months or after 800 hours.

It is possible to access the steam generator by removing the right lateral panel. After closing the main tap outlet, disconnect the inlet rubber pipe. The spray tube (64) is dissasembled by removing the bolts (61) that attach it to the flange (62), using extreme caution since the nuts are subjected to thermal shock, and by pulling it from the body of the generator (4), treat the 63 and 58 seals with care and possibly replace them in case they are damaged. The cleaning must be done with the help of buffered acids, easily available on the market, that are able to remove the limestone residues (Ca Co3).
Also check that the T exhaust pipe is not obstructed and clean if necessary by removing the cap (53) or the rubber hose and the corresponding hose outlet.
If a single cleaning operation for the spray tube is not sufficient to completely restore the steam production, it is recommended to open the generator entirely, disconnecting it electrically and also disconnecting the exhaust rubber pipe, to verify its full efficiency.
In this case it is also appropriate to check the operation of the solenoid valves that supply water to the steam generators (49), which should open by pressing the steam injection button and close again after the set time.
Also, ocassionaly check the resistor (50).

ATTENTION: EXECUTE OPERATIONS USING GLOVES AND WHEN THE OVEN IS COOL!

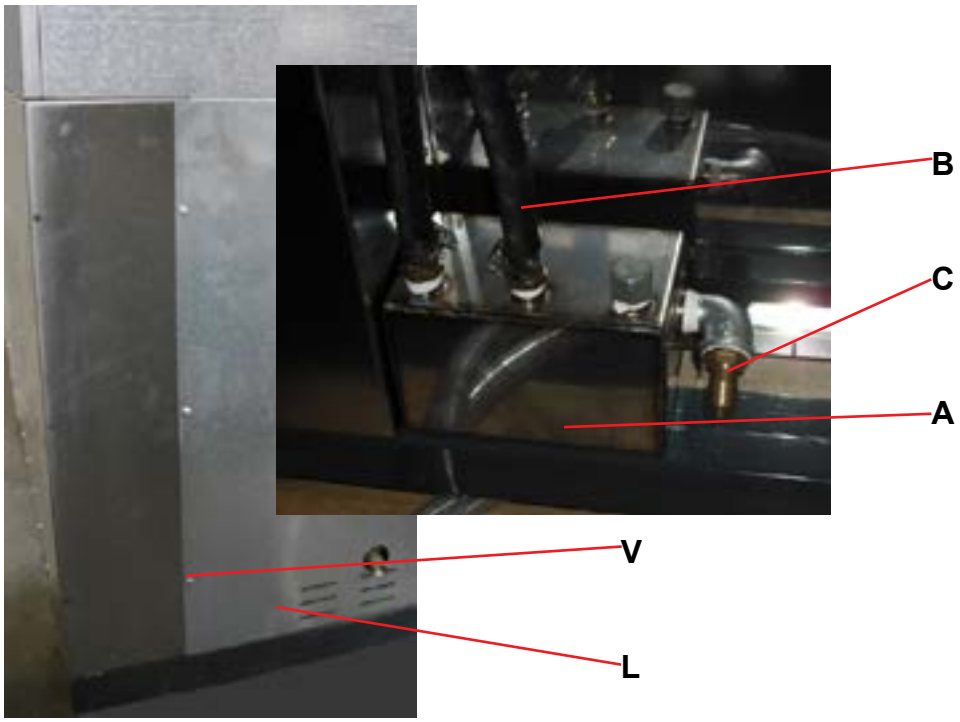




no.	description	code
50	STEAMER RESISTOR	
52	COUPLING TI Z.3/4-1/2-3/4 FIG.130R	A1840097
53	ZINC MALE PLUG 3/4 FIG.290	A1890050
54	RUBBER HOLDER GAS M 1/2 X 13 BRASS	A1880020
55	Screws 3.5 x 16 UNI 8117-2	A1619980
56	RUBBER HOLDER GAS M 3/8 X 10 BRASS	A1880040
57	ANGLE PIPE F.F. ZINC. 3/8 FIG.90	A1810010
58	STEAMER HEAD SEAL	090.170.9.016
59	Bolt M8 UNI5588	A1670130
60	Washer M8 UNI 6592B	A1700200
61	SCREWS M8 x 30 UNI5739	A1600080
62	STEAMER HEAD P=	010.9_9.9.___
63	SPRAY TUBE FLANGE SEAL CT-ET-EMT	090.999.9.164
64	WATER SPRAY TUBE GROUP P=	010.939.9.067

9.8.2 Cleaning the condensation drip tray

Check periodically, recommended at every six months the latest, depending on the water hardness and how the oven is used, that the steam condensation drip tray (A), placed under the base or "sky" of the oven, is not clogged from slag. In order to access the tray it is neccessary to remove the screws (V), dismantle the plate (L), remove the rubber tubes that drain the steam condensate (B), remove the tube (C) connected to the rubber holder which connects the drip tray to the discharge of the chamber and then remove the tray from the position in which it is located. Clean the drip tray with water jets using, if necessary, a suitable product to remove the limescale deposits. If descaling with a product that is particularly aggressive, it is recommended to rinse with plenty of water before putting the tray back in place.
Reassemble everything as before. Check that there are no water leaks, making sure that the discharge between the drip tray and the drain of the chamber flows through a pipe without fittings.



9.9Vapours aspirator hood

In case were the suction is not sufficient and thus effectiveness is reduced, then the correct operation of the aspirator must be checked as well as an outlet duct cleaning. If the extractor shows signs of an irregular or slow rotation, it will be appropriate to find the improper operation cause and possibly replace the aspirator. To do this, after the drain tube has been disconnected, it is neccessary to disconnect the aspirator from the extraction hood by unscrewing the appropriate screws.
For a simple impeller replacement (most of the times the cause for malfunctioning), or motor, just unscrew the nuts and pull the motor-impeller assembly; once removed, the motor will be separated from the impeller and from the mounting flange. When cleaning the impeller avoid losing or moving the balance counterweights used for a silent aspirator rotation.

10 SAFETY

These pages provide the information necessary to maintain system safety and prevent possible injury (the oven was designed and built by respecting the European safety standards or of other countries, if required).
The oven should be used only by qualified personnel, instructed on its use.
The oven was built with appropriate measures in order to ensure the user's and maintenance staff's safety and health

10.1 Safety signs

The oven shape and the safety and protection devices are implemented to provide an equipment with low risk for the operators.
However, in order to further increase the level of security of the oven itself, self-adhesive signboards were mounted in proximity to particularly dangerous or residual hazard areas, with warnings appropriate for each case.
In the event of signboard damage or removal, the user must necessarily and immediately restore all signs or replace them with identical ones.
The operators are explicitly banned to remove or tamper with safety signs.
Figure 6 shows the hazard warning pictogram representing an electrical equipment connected to a power supply, sign fixed on the electrical panel door.
The symbol indicates that within the oven's electrical panel there may be live equipment. Operators are obligated to disconnect the power supply by acting upon a circuit breaker placed upstream of the panel or directly in the distribution panel connected to the oven, before opening the electrical panel.
The figure presents the signboard with pictogram/s for thermal danger warnings due to:

1. oven temperatures in the door's glass area and in areas inside the baking chambers with open doors.
2. steam escaping from the opened door of the baking chambers and lack of steam aspirator operation.

1. temperatures around the glass and the internal area of the chambers can reach high values; and therefore the operator is obligated not to touch the above mentioned areas until the temperature has reached ambient values.
   Operations may be carried out in these high temperature areas by wearing the appropriate heat-resistant gloves.

2. during the opening of the doors high temperature steam could escape when the steam extractor is not functional; it is therefore necessary that the operator activates the steam extractor before opening the doors, the operation of which can be recognized by the characteristic noise. In case of failure, open the doors with the shovel used forunloading, while keeping a safe distance.

In burn on contact with solid parts risk operations, the operator must necessarily use appropriate P.P.E. (personal protective equipment) and devices consisting of: loading and unloading shovels, pans, loading trays etc... and heat-resistant gloves.
During inspections, the operator must be warned to keep an adequate safe distance avoiding to lean against the oven.
When vapour escape occurs, the operator must press the power button of the extraction hood before pulling the hot product from the cooking chamber. In case of failure of vapor extractor (power failure or breakdown), evidenced by the absence of the characteristic noise made by the aspirator, the operator must use the loading shovel to open the doors, while still maintaining an appropriate distance.

10.2 Heat resistant gloves

These are special thermally insulated gloves that must be worn by the operator prior to hot pan extraction.

10.3 Clothing

It is recommended that operators do not wear, during work, articles of clothing that can get caught or hooked with ease: jackets with long sleeves, hanging scarves or ties, etc.
It is also recommended, that people with long hair do not leave it loose but to gather it.

10.4 Residual hazards

The machine's residual hazards are inherent to its operation and are thermal in nature, in particular related to loading and unloading operations and cooking control.
Residual hazards:

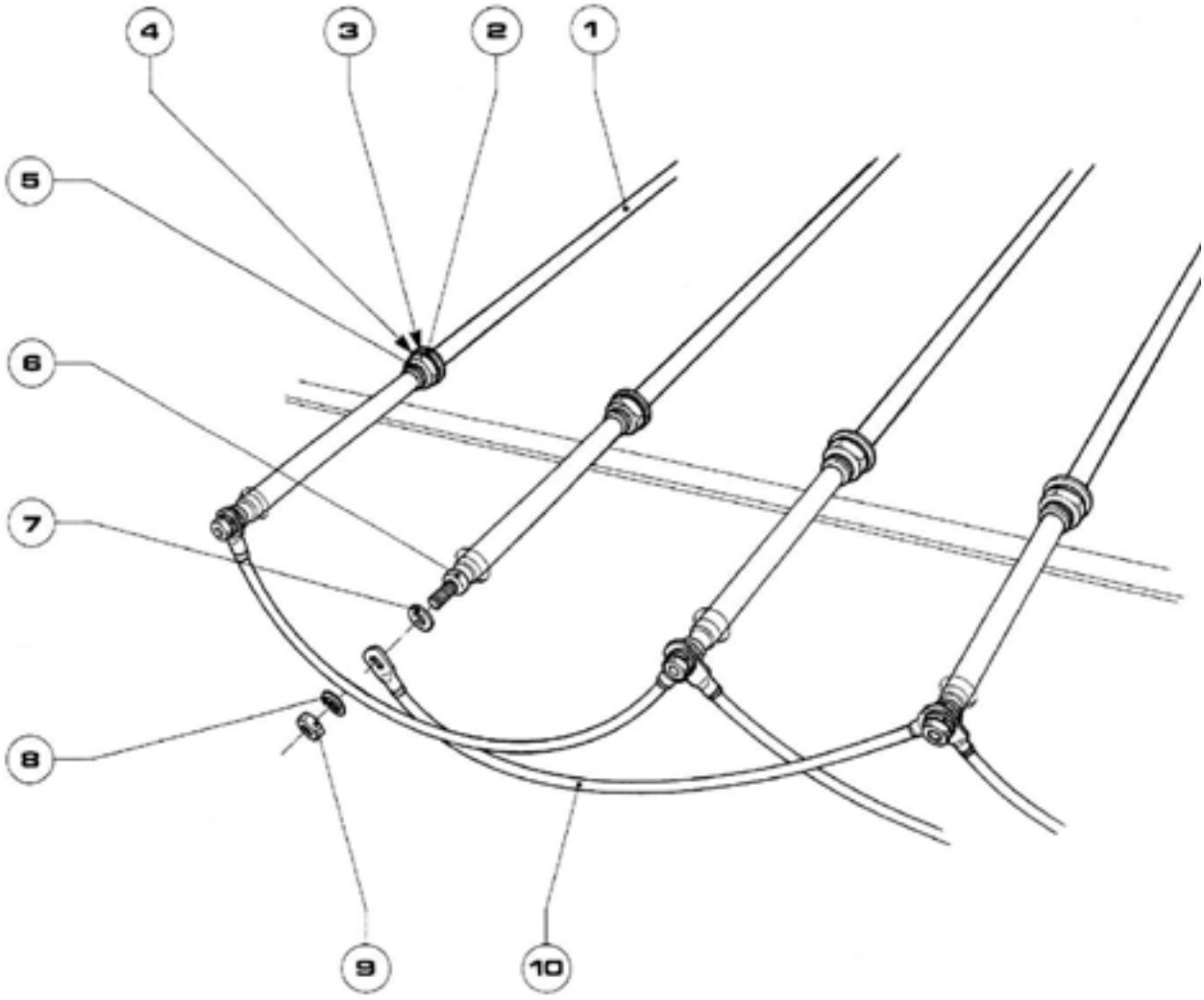
1. Danger of burns caused by the baking chambers and door metal supports when the operator introduces and extracts the product;
2. Danger of burns caused by door metal support and glass during product close control during cooking;
3. Danger of burns caused by vapour escape from the cooking chambers when the doors are opened during product extraction;
4. Machine part projection danger due to door glass possible breaking.

- **noise**: the oven was designed and constructed in such a way that risks resulting from noise emission are reduced to a minimum.
  From measurements carried out on a Modular series oven under the most unfavourable operating conditions, an a continous weighted equivalent acoustic pressure level was measured (A)

  INFERIOR to 70 dB (A).

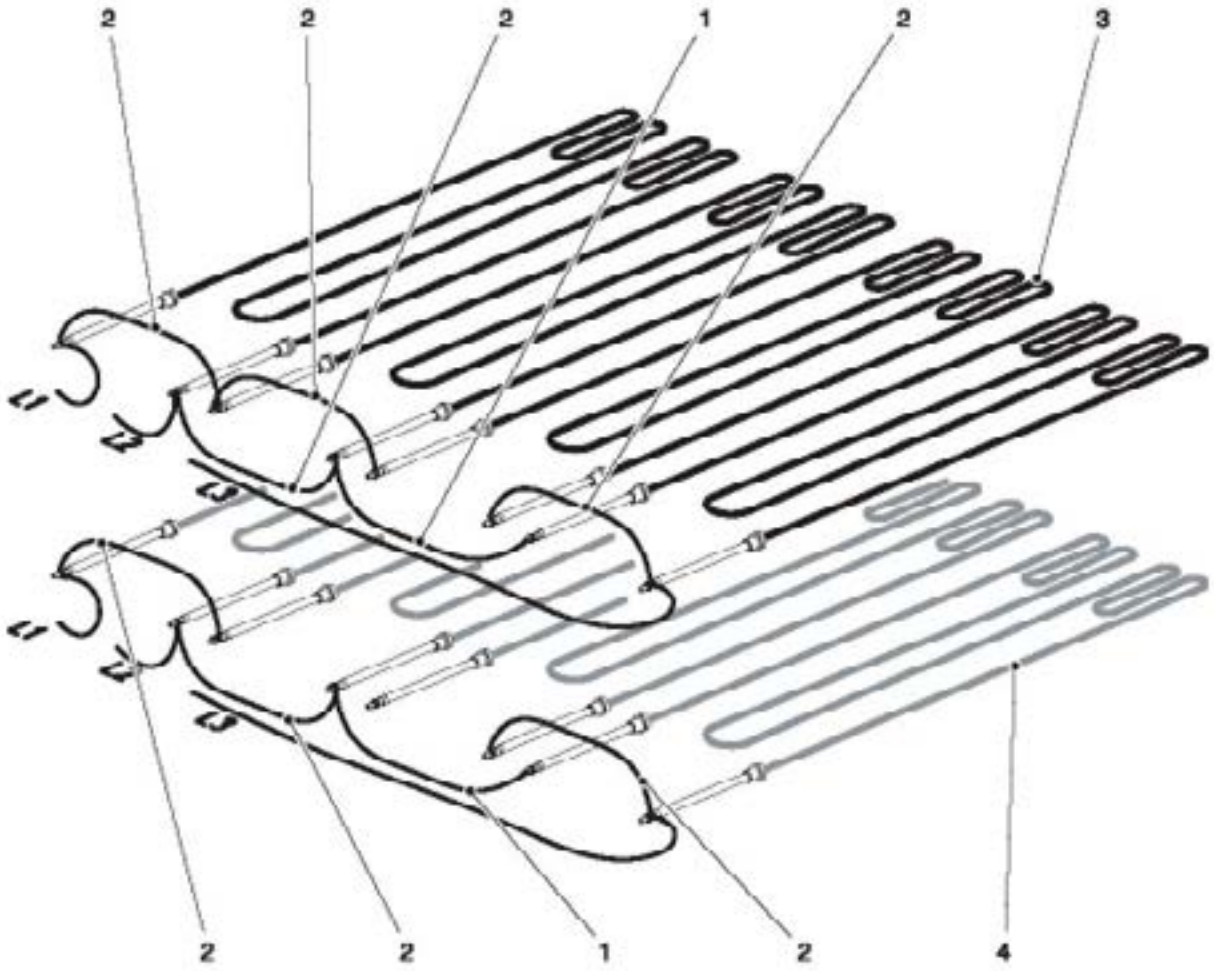
  The measurement was performed at 1.6 m height from the ground and at 1 m from the front panel

11 Resistor connections



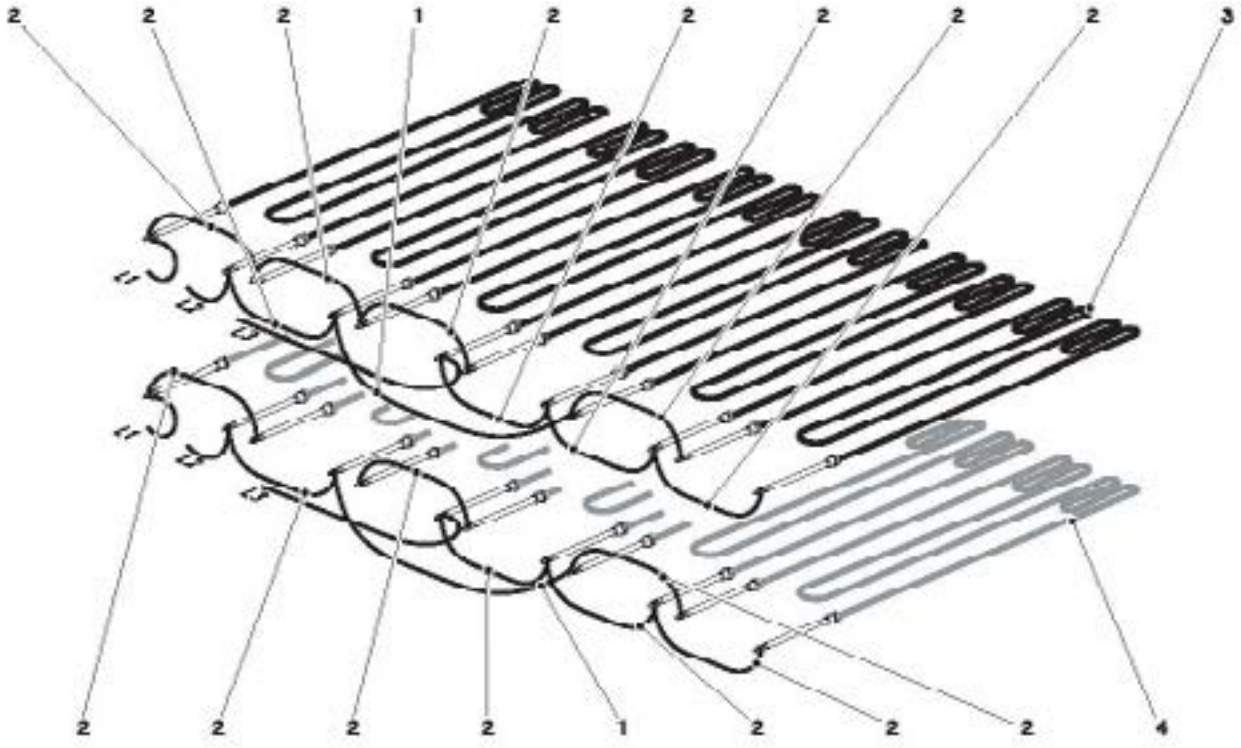
1	Resistor
2	Forged connection 1/4" gas
3	Fibre washer
4	Zinc plated elastic washer diam.14 UNI 1751
5	Low nut 1/4" gas
6	Welded M 5 nut
7	Washer diam. 5x10 UNI 6592 brass
8	Zinc plated elastic washer diam. 5 UNI 1751
9	Brass M 5 nut

11.1 Resistor wiring to 4 resistors



L1 Phase1
L2 Phase2
L3 Phase3
1 Long flexible resistor connection
2 Short flexible resistor connection
3 Heating resistor of chamber "sky"
4 Heating resistor of chamber floor

11.4 Resistor wiring to 6 resistors



L1 Phase1
L2 Phase2
L3 Phase3
1 Long flexible resistor connection
2 Short flexible resistor connection
3 Heating resistor of chamber "sky"
4 Heating resistor of chamber floor

12. Troubleshooting and possible immediate interventions

PROBLEM	CAUSE	SOLUTIONS
The oven does not get hot or it is slowly heated	Main switch	Make sure that the on/off switch and the residual current device is placed upstream of the oven, they are properly plugged in and the power supply cables are connected to the oven
	Main protection fuses interrupted	Check the main protection fuse continuity and if faulty, replace
	One or more transformer protection fuses interrupted.	Check cause and replace blown fuses (reset tripped circuit breaker or replace if faulty)
	One or more power transformers are burned.	Replace the burned transformer.
	The power supply unit of a chamber is not working	Check connection and power supply cables, and replace the cable or replace the card if needed.
	Control unit fuse interrupted	Replace it
	Control unit set to programmed start-up	Make sure the chamber controller is adjusted to "ON" position and programmed start-up is disabled
	Alarm signals displayed in the control unit	see alarm instructions § 13.8
	Electrical connections interruption	Check electrical connection continuity
Tripped general switch or circuit breaker	Current leakage to the ground	look for this dispersion to avoid serious dangers when using the oven. Since it is possible that the contact took place within a deactivated unit, you must first trip the main wall switch (or or circuit breaker). In case it does not remain in off position, one of the units needs to be powered off, disconnecting the power supply from the oven's E.P. (electrical panel) and restore the main switch. In case it does not remain in off position again, the dispersion is not interruptible, and therefore, you will need the intervention of an electrician. If the power stays engaged it will be necessary to turn off all the units for 10 minutes until one of them will not cause the general switch release: the corresponding user will be responsible for the dispersion toward earth, and therefore will not be turned on before the repair. In any case, after these inspections have been carried out, you will be required to notify TAGLIAVINI ASSISTANCE as soon as possible with all necessary data.

PROBLEM	CAUSE	SOLUTIONS
Uneven cooking	Electrical connections interruption	Check electrical connection continuity of the armoured resistors in the area corresponding to the uneven cooking of the product
	Interruption of the static relay that controls the resistors of the chamber.	Check the main protection fuse continuity and if faulty, replace
	Power % set too high or too low	Adjust the power of the chamber correctly (see § 8.1)
	Faulty temperature probe	check probe operation and if defective, replace
	The armoured electrical resistor is stopped.	Check the operation of the armoured resistors in the area corresponding to the uneven cooking of the product; in case of stopped electrical resitors, replace them.
The temperature in the chamber continues to rise	"Triac" power supply unit is not working	(even if the set temperature has been reached or the power regulator is set to zero) Although the possibility is somewhat remote, considering that the resistors of the chambers are protected by ultrarapid fuses and from varystor against overvoltage, the defect is due to the failure of an electronic power switch. Awaiting the recovery intervention by TAGLIAVINI ASSISTANCE, which should be promptly warned, you will have to disconnect the damaged power unit from the switch of the control cabinet. If you have a spare unit, this should be replaced by qualified personnel and the damaged one shall be sent to TAGLIAVINI ASSISTANCE that will handle the restore and returning operations. Write down the error messages displayed by the control unit and communicate them in writing to TAGLIAVINI service center.

PROBLEM	CAUSE	SOLUTIONS
The oven does not emit steam	Steamer operation has been disabled form the control panel	Check if steamer operation has been disabled form the control panel
	Lack of water	Check if the water valve is open and the water reaches the steamer's solenoid valves
	Dirty filter	Clean the filter on the water manifold
	Solenoid valve not working	Check solenoid valve correct operation, if not, replace it
	Steamer covered with limestone	Check steamer condition, if covered with limestone deposits clean or replace
	Spray tube clogged	Check the steamer's spray tube status. If clogged or dirty, clean it
	Clogged steamer drain	Clean the steamer's non-vaporised water drain
	Steam valve open, locked or faulty	Close the steam drain valve when dispersing steam, check its good functioning. In fact, if the valve was only partially open, the steam will spurt out from the supply duct without reaching the baking chambers
	Faulty control unit	Check the correct operation of the control unit; if faulty replace
	Power unit faulty	Check the correct operation of the power unit placed inside the column; if faulty replace
	The armoured electrical resistor of the steamer is stopped.	Check the operation of the electrical resistor of the chamber steamer in which there is no steam; if the electrical resistor is interrupted, replace it.
	Steamer probe not working	Make sure the temperature control probe is fully inserted into the tube placed in front of the steam chamber in which there is no steam. If the fault persists, replace the faulty part.
	220Vac electric system protection fuse F1 interrupted	Determine the cause and replace the 220Vac electric system protection fuse
	Electrical connections interruption	Check the continuity of the electrical connections to the steam generators arranged under the front pallet

PROBLEM	CAUSE	SOLUTIONS
Oven steam with traces of red rust	Presence of oxides in the water	Install a water softener upstream of the oven's hydraulic system
	Aggressive, acidic water (corrosive)	Check the steamer's water supply quality. Uncontrolled water softeners utilisation may be the cause of acidic water. Eliminate water acidity.
The vapour aspirator does not work	Vapour aspirator circuit breaker tampered with or faulty	Check if the vapour aspirator circuit breaker has been tampered with or faulty; if faulty replace, if tampered with, check cause before resetting.
	Vapour aspirator connector failure	Check if the vapour aspirator connector receives input signals and if not than it's faulty; if faulty replace
	Vapour aspirator electric motor failure	Replace it
	Electrical connections interruption	Check electrical connection continuity
Oven lighting failure of a chamber	Burned lamps.	Replace them (see § 9.3)
	Transformer failure	Replace it
	Interrupted electrical connections	Check the electrical connections and the continuity of light power supply cables
	One faulty control unit	Check the correct operation of the control unit corresponding to the faulty chamber; if faulty replace
	One faulty power unit	Check the correct operation of the power unit corresponding to the faulty chamber (inside the column); if faulty replace
Water presence on the oven's base	Clogged non vaporized water pipe drain	Clean or replace the non vaporised water drain pipes
	Condensate collection tray clogged	Carefully clean the tray and the drain of the tray
	Condensate collection tray drilled	Replace it
	The flange seals of the steamer are leaking	Restore the flange seals of the steamer leaking water/steam.
	Hydraulic system leaks	Check the hydraulic system's sealing: fittings, hose clamps, pipes, solenoid valves. Replace defective parts.
Air recirculation fan noise vibrations and noise	Foreign objects in the impeller	Remove any foreign objects. Before carrying out aspirator operations, disconnect the oven's power supply and operate with extreme caution.
	Worn engine bearings	Replace the motor.

13. "SMART" control panel

13.1 "SMART" control panel description

The control panel is fully electronically managed and contains all major management and control functions of the cooking chamber. The machine is equipped with an anti black-out device able to restore set parameters in case of a power supply failure (if before the black-out, the controller's cooking timer was enabled, when power supply is restored, the controller emits a sound similar to the one determining the end of the cooking time) . For more in-depth knowledge enabling correct use, details regarding system characteristics containing the so-called "invisible settings" access procedures that allow default value modifications, values calibrated as factory settings, read description below. Every key stroke is signalled with a short beep. Continuously pressing some setting keys determines a fast automatic adjustment and beeps are disabled
When the chamber is closed, you can: turn on and off the cooking chamber light, enable programmed ignition and access the invisible settings as described below.
When the chamber is opened, the following operations can be executed: all cooking parameters adjustment, cooking timer used, oven chamber light enabling and activating the steamer and the vapor generating solenoid valve.

Description

Push button for controller and cooking chamber light power-down. By gently pressing the button, the cooking chamber light is turned on. In order to turn off/on the light press the button for 2 seconds. The (red) LED indicates controller status. LED turned on in the case of turned off controller and light.

Setting values increase button (lateral arrow UP)

Setting values decrease button (lateral Arrow DOWN)

By pushing the operation or settings confirmation push-push button, depending on the chosen displayed option, the result will be the alternation of display or size variables. Also allows access, when the controller is turned on, to the cooking recipe menu.

Segment display: when the cooking chamber is powered on it indicates chamber temperature and when the cooking chamber is turned off it indicates programmed ignition set-up by displaying "Pro"

Description

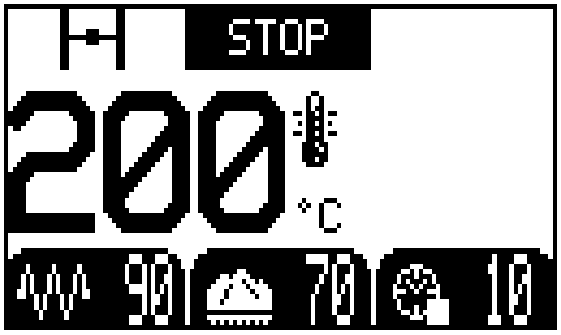
Turn on/off push-push button for cooking timer, cooking's end notice beep and possible alarms. When the controller is on and the "enter" key is pressed, the current day and date may be adjusted. When the controller is in stand-by mode and the "enter" button is pressed, the current day and time are displayed.

Push button for switching on or off the steamer resistor or vapour generator. Press it to turn on the steamer of the chamber or the steam generator, from any chamber. The red LED indicates the power status of the steamer or steam generator (always managed by its thermostat or pressure switch).

Cooking chamber vapour extraction valve opening/closing push-push button, if the oven is equipped with motorized valves. The LED is red in the case of open valve and green in case of closed valve.

Steam dispensing button. In case of automatic delivery (see), the pressure opens the solenoid valve for the time set (see). In case of manual delivery (see), the valve will remain open as long as the button is pressed. The red LED indicates that the steamer has not reached the minimum set-point temperature (see). The green LED indicates that the steamer has reached the minimum set-point temperature. In case of a steam generator existence, the LED is green if the generator is running.

13.2 Manual operation



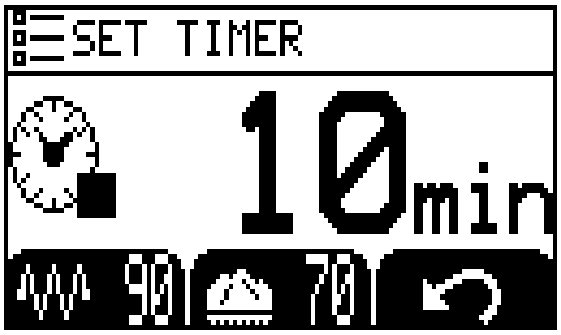
Description

Display STOP mode cooking time. Set temperature is displayed in the centre, the upper area indicates vapour exhaust valve's closed position (automatic optional) and next to the status TIMER COOKING TIME "STOP". The bottom displays the status of 3 parameters, from the left:

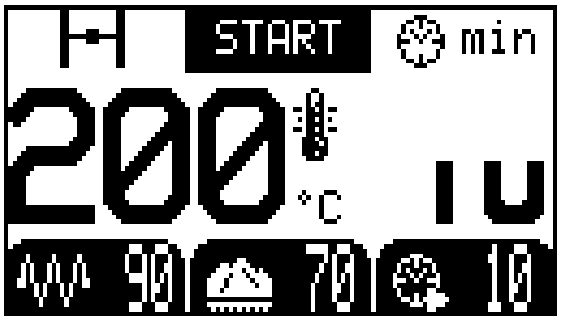
- Chamber power (90%)

- Distribution of power set on the platform of the chamber (70%), the diference up to 100% is the power transmitted to the "sky" (30%)

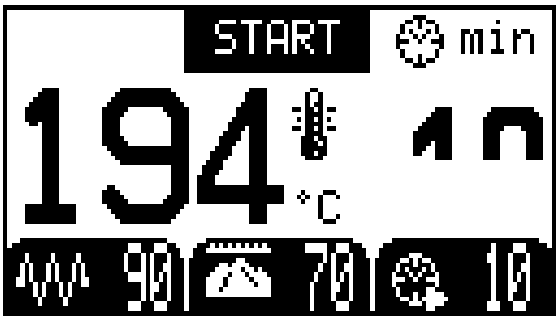
- Cooking time set in minutes



Pressing the first arrow to the right of the cooking timer is going to change the cooking time. The corresponding keys are "UP" or "DOWN". The side figure presents the display during this operation. After the values have been changed, press the key below the curved arrow on the right to confirm, or after 10 seconds the settings are automatically stored. Press the START/STOP button to restart the cooking timer.



START controller status display (after pressing the START-STOP button). The central area displays the set temperature and the right side displays a flashing counting minute count. The upper area displays the vapour exhaust valve position (when the automatic valve is selected, in this case closed) on the left side, the centre displays the "START" controller status, the right side displays the timer symbol with the word "min" next to it. The lower part shows 3 parameters:



Description

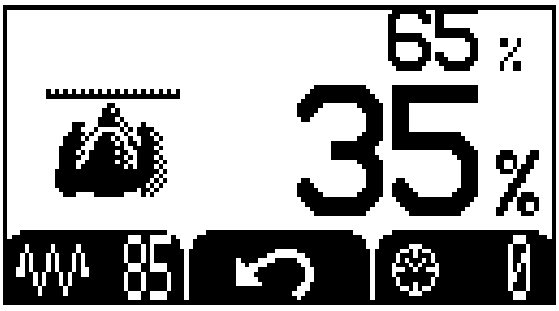
- Chamber power (90%)

- Power set on the platform of the chamber (70%), the diference up to 100% is the power transmitted to the "sky" (30%)

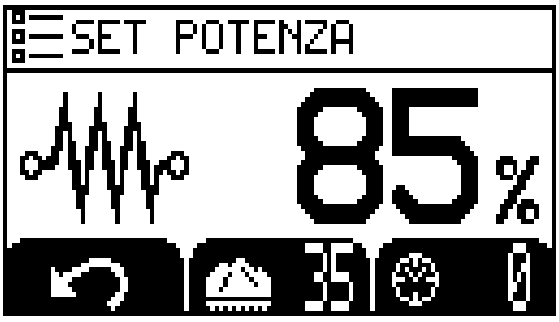
- Cooking time set in minutes (10)

A beep will signal the end of the cooking time, to turn it off simply press the START-STOP button

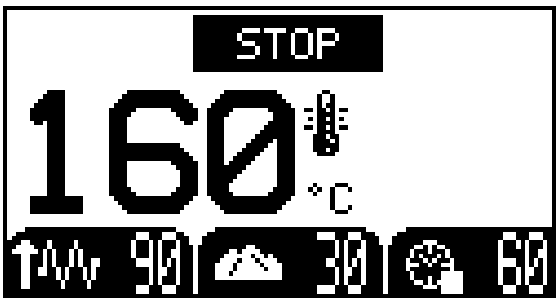
The next display is in the configuration where you can see both the temperature and the flashing remaining time; this type of display can be set by changing parameter 19 in the setup of the first level.



This figure displays the display screen after you press the middle button corresponding to power distribution as programmed for the floor of the cooking chamber. With the "UP" or "DOWN"' arrows you can change the value of the platform power and automatically change the percentage of "sky" power indicated at the top right. After the values have been changed, press the key below the curved arrow in the center to confirm, or after 10 seconds the settings are automatically stored.



This figure displays the display screen after you press the left button corresponding to power distribution as programmed for the floor of the cooking chamber. With the "UP" or "DOWN" arrows you can modify the power value of the chamber. After the values have been changed, press the key below the curved arrow on the left to confirm, or after 10 seconds the settings are automatically stored.

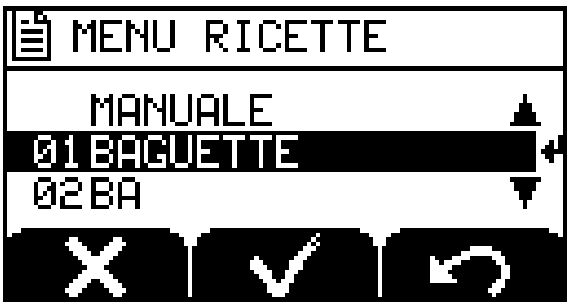


“Booster” device activation:

First the device must be activated in the hidden parameters of the second level; then it must be programmed in the hidden parameters of the first level (the choice is between switching it on each time the control unit turns on, or letting it stored). Now press simultaneously the ENTER key, and the key corresponding to the baking chamber power value while the control unit is turned on. A flashing arrow pointing upwards will appear next to the power symbol. This means that the Booster function is on.

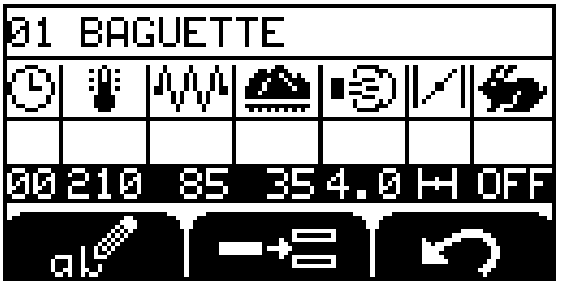
13.3 Automatic operation (using a program)

Description



When the cooking timer is on STOP, press the ENTER key to enter the recipes list. Here you can select an already edited recipe or a new number for a new recipe by using the UP and DOWN arrows. By selecting the desired line, the selected recipe may be launched by pressing the V key, in this case, the controller will load the recipe data and will initiate preheating the oven. The cooking stage will begin when the cooking timer's START/STOP button will be pressed.

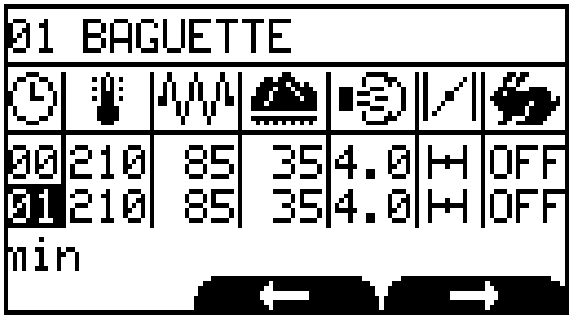
By selecting a nameless line instead (new?), when the ENTER key is pressed, recipe programming will be accessed. The first selected parameter will be the letters that make up the name. To move from a letter to another press ENTER, to select a letter press the UP or DOWN arrows, thus a desired name is created for the recipe (max 16 characters including spaces). After the recipe name has been written, press the V key to confirm. By pressing the ENTER key various parameters may be set up.



The first values we are going to set correspond to the recipe launch parameters, which corresponds to the time " 00 ". Starting from the row's left we see :

- Time in minutes
- Temperature
- Chamber power percentage
- Percentage of power distributed to the floor
- Steam blast OFF, MAN with time in sec.
- Valve status (closed or open)
- BOOSTER function (represented with a rabbit) if provided (OFF-ON)

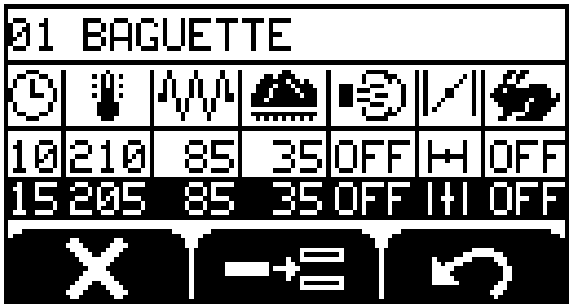
To pass from a parameter to another press the two inferior buttons corresponding to the left and right arrows. Press ENTER to store. To add a row, press the centre key under the symbol, to change the values press the arrows next to the UP and DOWN keys. The parameters provided for selected minute remain valid until the next programmed minute. If you set a new program row with equal parameters to the previous row, it shall not store.



Description

To insert a new program row press the centre key corresponding to "add row" figure

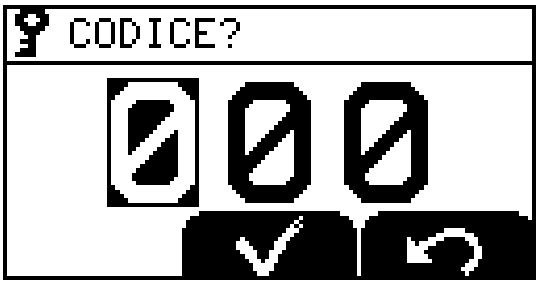
The MINUTES column always displays the total minutes of cooking. By pressing the key below the X symbol, all the selected rows will be cancelled. By pressing the key below the curved arrow, settings are stored and the recipe editing program returns to the recipe list.



When you have finished inserting the desired program rows, including the last minute of cooking, in order to store the entire recipe press the right key corresponding to the curved arrow.

To invoke a previously set program, press ENTER, here you will enter in the recipe list by using UP or DOWN arrows to select the desired recipe and by pressing the centre button corresponding to the V symbol, the recipe is invoked. At this point it is enough to press the START/ STOP button to launch the recipe.

For oven manual operation, without involving recipes, select the manual program.

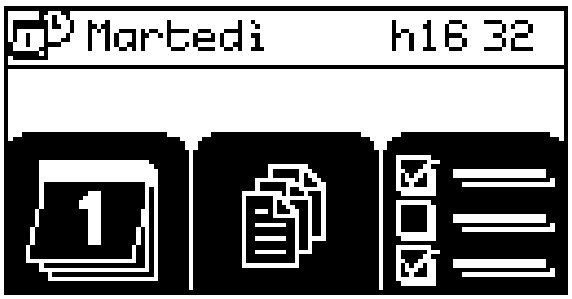


Description

If a recipe must be locked (key symbol next to the name) and if we want to change it, act as following:

Press and hold the ENTER key for at least 5 seconds, enter in the recipe's block code, here you must enter the correct code (previously inserted in first level parameters) and then press the V button.

13.4 Programmed ignition



Description

In order to access the scheduled ignition section, you must press and hold the 2 arrow UP-DOWN keys for at least 5 seconds with a shut-down controller, but with a connected power supply.

This screen will be accessed by pressing the key on the lower left side of the calendar figure and the cooking chamber scheduled ignition management section is accessed.

The screen will display a box where we can set the day of the week scheduled for cooking chamber ignition, using the UP-DOWN arrows to change the day.

Pressing the ENTER key to switch to the central parameter that indicates if this is the first or the second power-on of the day.

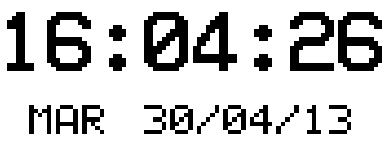
Pressing the ENTER key to store the parameter and move to ignition schedule. The side arrows UP-DOWN are going to change the ignition value. The four horizontal dashes indicate that there will be no scheduled ignition for that day.

Press the button with the curved arrow to exit the weekly schedule section. Press the ON/OFF button for 5 seconds to completely exit. Press the key corresponding to the central symbol P-T to change program type P= permanent and T= temporary. Permanent programming consists of ignition hourly schedule programming that will last for an indefinite period of time until a new programming is implemented. Temporary programming consists of an hourly programming that will become priority with respect to the permanent programming but will have just a 7 day duration. After this time the temporary programming will automatically be cancelled, the permanent one being again valid. In case you want to temporary program a day during which you do not want to turn on the oven, store the OFF schedule. Press the button with the curved arrow to exit the weekly programming section. Press the ON/OFF button for 5 seconds to exit completely.

Description

To enable controller start-up conducted by the weakly schedule, with a powered off controller in stand-by, press the ENTER key and it will display Pro (see left)

:

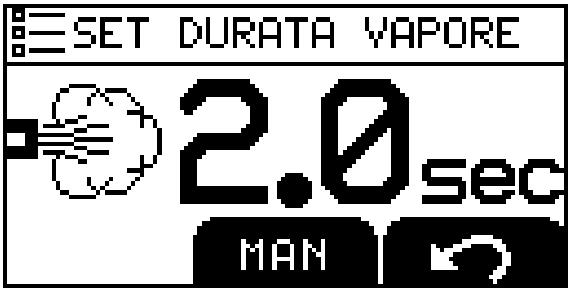


With a controller set to Pro or a powered-off controller, press the START/STOP button to display current time and day.

From here you can view the schedule of the upcoming ignitions programmed by pressing the up arrow on the side of the display, see picture to the side.

13.5 Steam flow adjustment

Description

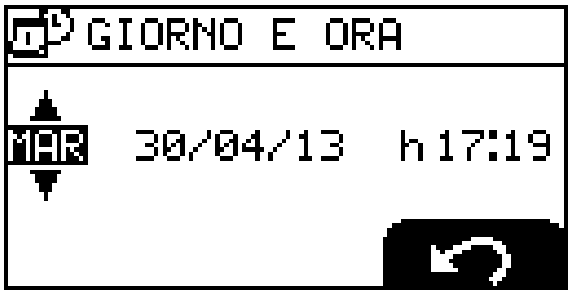


To adjust steam blast duration, simultaneously press the steam blast key and the ENTER key, having the controller opened. In this menu it is possible to modify the solenoid valve opening time expressed in seconds. Press the button with the curved arrow to store and exit

The parameter is only adjustable in the manual program and with steamer/generator inserted.

13.6 Day and hour set-up

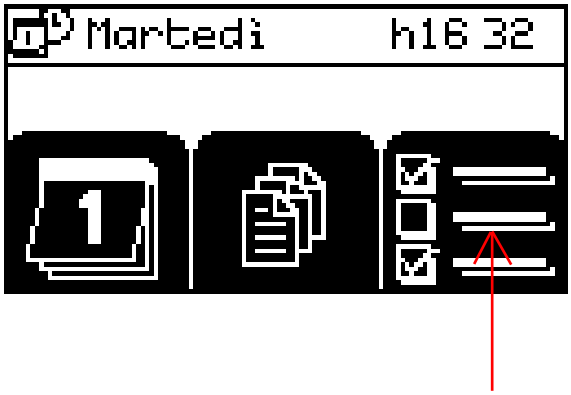
Description



Dour and day setting can be carried out by simultaneously pressing the START/STOP and ENTER buttons for 5 sec. Change the days of the week and the remaining parameters with the UP-DOWN keys and move from one parameter to another by pressing the ENTER key, to exit press the curved arrow. Dour and day setting can be carried out using a single controller. Various oven controllers will automatically synchronize when the programming has come to an end (synchronization between all connected controllers). This synchronization will be implemented immediately or on ignition

13.7 Level 1 set-up

Description



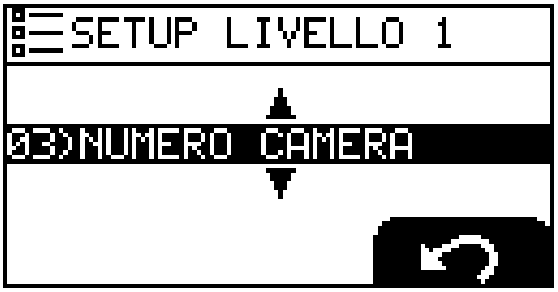
In order to access the first level set-up section, you must press and hold the 2 arrow UP-DOWN keys for at least 5 seconds with a shut-down controller, but with a connected power supply (power-on/off key corresponding led turned on).

This screen will be accessed by pressing the key on the lower right side of the indicated figure and the first level set-up section is accessed.

The first encountered parameter (00) is LANGUAGE. It can be modified by pressing the ENTER key and then selecting desired language by pressing the UP-DOWN arrows and exit and store by pressing the ENTER key

The next parameter is (01) SECURITY CODE. By pressing ENTER we can enter a 3 digit code (values from 000 to 999). To change it, use the UP or DOWN arrows to pass from one digit to the other. Press ENTER until the complete storage of all the digits. This code is used to lock the cooking recipe so it will not be modified by authorized users. To access locked recipes type in the stored code.

Selection (02) OVEN TYPE. By pressing the ENTER key we can select the oven type equipped with the controller, and exit and store by pressing the ENTER key. Check that the oven type corresponds to the controller by viewing compatible models.



Description

Selection (03) CHAMBER NUMBER. By pressing the ENTER key we can select the chamber number equipped with the controller. The number of the chambers start with the first one in the low position (1) and inrease ascendently. Make sure that the first one (1) has the data transmission USB cable connected. For more ovens sharing a serial connection (up to 32 chambers), do not assign the same number to two or more ovens as controllers with the same ID number do not exist, this would block data transmission between chambers

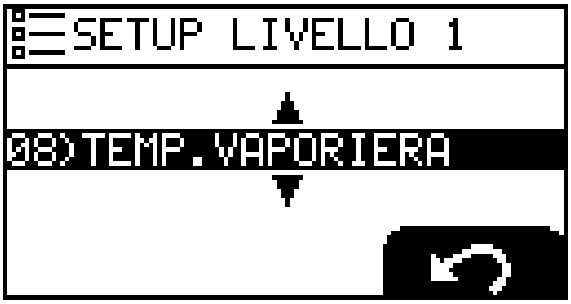
Selection (04) VALVE. By pressing the ENTER key we can select the vapours exhaust valve's status: MANUAL, AUTOMATIC or NO (valve not existing). In case of manual valve, the cooking recipe can be programmed so that the controller can signal valve opening.

Selection (05) STEAM SOURCE. By pressing the ENTER key the steam source can be selected: GENERATOR - STEAMER - NONE, using the UP-DOWN arrows select the oven's steam source exit by pressing the ENTER key. Make sure that all the units of the same oven have the same setting; different settings compromise the automatic switch on of the generator. It is not possible to set the steamer if the corresponding temperature probe is not connected.

Selection (06) STEAM MODE, manual start/ automatic start. With the setting "manual start" the steam will be generated manually only by pressing the corresponding button on the dashboard. With the setting "automatic start" the steam will be generated automatically at the time stored in the recipe.

Description

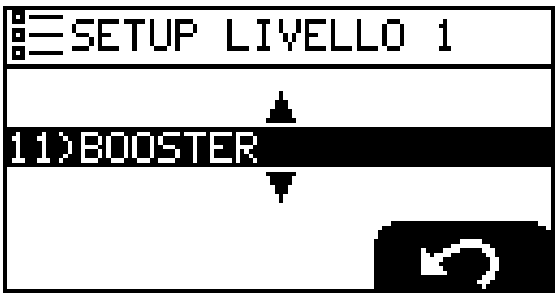
Selection 07 STEAM TYPE. In this parameter you can select the way water is supplied - LITER (the liter-counter is optional); with this setting, the water is always delivered in set quantity regardless of pressure or flow. In this parameter, it is possible to select the SECONDS water dispensing mode. With this setting the water is delivered on time. STEP SECONDS with this setting the water is delivered with a small step in departure and then a long final blast.



Selection 8 STEAMER TEMPERATURE. In this Parameter you can adjust the set temperature of the steamer. The red display at the top displays the actual temperature, in the blue display you can adjust the temperature from 50° to 200°. CAUTION set a lower temperature of at least 50° for the maximum temperature of the steam (see parameter TMAX STEAMER in the settings of the second level).

Selection 9 LAMP SWITCH OFF. In this Parameter you can adjust the lamp switch off to be performed automatically from a minimum of 10 sec. to the FIXED parameter where the lamp is always lit until someone turns it off, and is usually set to 300 sec.

Selection 10 END OF COOKING PRE-ALARM In this Parameter you can set a pre-alarm before the end of the cooking that will appear as a beep and as a flashing of the card. The value that can be set is between 1 and 600 seconds, also including the NO option; the default value is 60 seconds.



Description

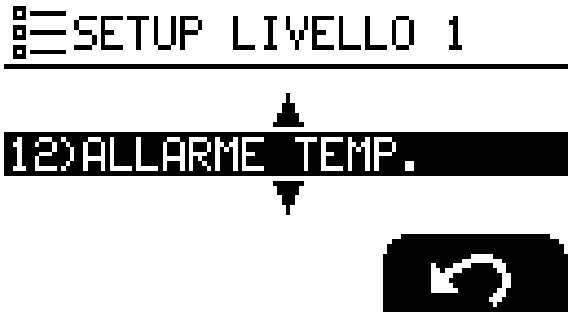
Function selection (11) BOOSTER. It is possible to select the BOOSTER function by pressing the ENTER key: NOT ENABLED - AS IN OFF POSITION (in this case if enabled it shall remain on even after power off). - ONLY FOR A CYCLE (in this case if switched on it shall disable when the control unit is turned off).

Booster Function

The electric leveled oven, MODULAR, with standard power (5 kW/h x m²) is suitable for thorough cooking of bread and pastry with a max. temperature of 300°C, or for a production of about 13 kg of pasta x m²/h. The use of the booster function is recommended for specialties such as productions exceeding about 13 Kg x m²/h of pasta and/or for cooking at temperatures higher than 250°C.

In case of an increased demand for electricity, the users are reminded of the booster function that must have an electrical system sized to twice as much power than indicated in the technical data. (% sky/floor to 50%, Power to 100% and Booster inserted in all the chambers). Remember that the power required for the cooking chamber that uses the booster function is, in the worst case (% sky/floor to 50%, % Power at 100% and Booster inserted) double. Using the booster function without consumption savings (optional) can generate an excessive absorption that exceeds the maximum allowed by the contract with the agency.

Description



Parameter 12 - TEMP. ALARM, by pressing the ENTER key you could select an alarm using the UP-DOWN arrows. (this setting allows you to receive an audible alert when the cooking chamber temperature reaches a setpoint. This feature is useful during a recipe preheating)

Parameter selection 13 - LCD TURN OFF, by pressing the ENTER key we are going to select whether we want the LCD display to always remain turned on (select the Fixed option) or whether we want it to go off after a certain time (select the turn-on time expressed in seconds from 10 to 600). Press any key to turn the display back on.

Parameter selection 14 - END OF COOKING OPERATIONS LIGHT SIGNAL, by pressing the ENTER key to select if cooking chamber light will flash to indicate the end of the cooking time. The options are YES (flash enabled) or NO (flash disabled)

Parameter Selection 15 - ALARM VOLUME, by pressing the ENTER key we are going to select if we want the alarm volume LOW or HIGH.

Description

Parameter Selection 16 - ALARM DURATION, by pressing the ENTER key, select alarm duration between 5 an 120 seconds.

Parameter Selection 17 - LCD REVERSAL, by pressing the ENTER key select letter and background colour (white letters on a blue background or blue letters on a white screen). The options are YES or NO.

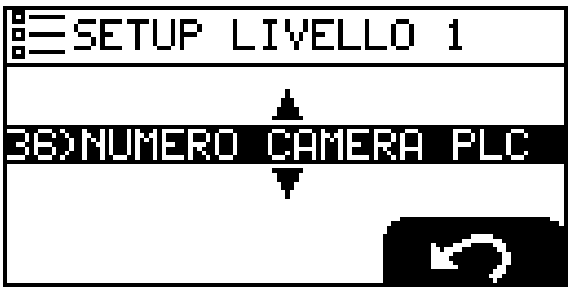
Parameter Selection 18 - LCD CONTRAST, by pressing the ENTER key select the LCD contrast variable from 5 to 40, default being 25.

Adjust this value to also remove any display colour spots

Parameter Selection 19 - DISPLAY MODE, by pressing the ENTER key, select the display type that we want to have during cooking, the options are:

TEMP. + TIME, by selecting this option the temperature and cooking time in minutes will be simultaneously displayed. TEMP. TEMP. / TIME, by selecting this option the set temperature and cooking time in minutes will alternatively be display, press the ENTER key to change display.

Description



Selection of parameter 36 - PLC CHAMBER NUMBER, by pressing ENTER it is possible to setup the chamber number to be communicated to any automatic loading and unloading shovel. Normally, this is not a parameter used for this type of oven.

Parameter Selection 42 - RECIPE TRANSFER, by pressing the ENTER key this controller will begin transmitting the recipes to all the controllers that previously have selected and confirmed the 43 RECIPES RECEIVING parameter .

ATTENTION: this will overwrite and thus erase all recipes present in the controllers receiving the file

Parameter Selection 43 - RECIPES RECEIVING, by pressing the ENTER key receive the recipes from the cooking chamber controller that we are going to select using the previous parameter.

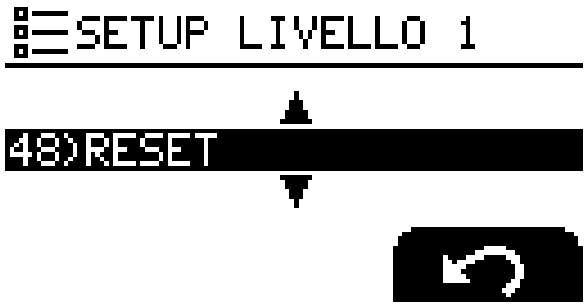
Parameter Selection 44 - RECIPE EXPORT, by pressing the ENTER key export the controller's recipes to a USB stick inserted into the USB port. A VID12.TAG file will be created that can be sent by e-mail or transmitted to the controller of another oven. Press the ENTER key only after you have inserted the USB stick.

Description

Parameter Selection 45 - IMPORT RECIPES, by pressing ENTER key we are going to import the recipe from a USB stick that we have inserted into the USB port. Remember that only .tag files will be imported. Press the ENTER key only after you have inserted the USB key.

Parameter Selection 46 - AGG. VIDEO CARD, by pressing the ENTER key, import control unit software updates from a USB stick inserted into the USB port. This software is called "VID12 …bin". By pressing the ENTER key, the current version of the SW will be displayed, the one present on the stick, if the data match, press the OK button

Parameter Selection 47 - AGG. PANEL BOARD, by pressing the ENTER key go to import power unit software updates from a USB stick inserted into the USB port. This software is called "ELEQU… .bin". By pressing the ENTER key, the current version of the SW will be displayed, the one present on the stick, if the data match, press the OK button



Parameter Selection 48 - RESET, by pressing ENTER key select where a basic set-up recovery is needed, here we can perform a reset to:

COOKING CHAMBER - we will reset in this case, all the control unit data including the hidden settings - the factory settings. We will reset in this the entire switching on schedule of the rooms connected between them.

PRESCRIPTIONS. We will reset and we will cancel in this case all of the programs of the cooking recipes.

13.8 "SMART" unit alarm list

ALARM	CAUSE	SOLUTIONS
"S.INT CAMERA"	Room temperature detection probe interrupted	Check tightening cables. Replace the probe
"S.INT VAPORIERA"	Steamer temperature detection probe interrupted	Check tightening cables. Set the presence of the steam generator. Replace the probe
"S.INT/COR G.F"	Probe detection junction temperature interrupted	Replace the card power panel
"S.INT ALETTA RAFF."	Distributer temperature detection probe interrupted	Replace the card power panel
"TMAX CAMERA"	Room temperature too high	Cool the room down, if the fault persists, replace the power panel board.
"TMAX ALETTA"	Distributer temperature too high	Clean the distributer with a water jet. Check the cooling fan. Replace the card power panel.
"TMAX VAPORIERA"	Steamer temperature too high	Lower the set point of the steamer temperature. Insert steam, if the fault persists, replace the power panel board.
"FUSIBILE INT.C1"	"Sky" fuse 1 interrupted.	Check if the resistors are shortcircuited, replace the fuse
"FUSIBILE INT.C2"	"Sky" fuse 2 interrupted.	Check if the resistors are shortcircuited, replace the fuse
"FUSIBILE INT.P1"	Floor fuse 1 interrupted.	Check if the resistors are shortcircuited, replace the fuse
"FUSIBILE INT.P2"	Floor fuse 2 interrupted.	Check if the resistors are shortcircuited, replace the fuse
"TRIAC INT.C1"	"Sky" Triac 1 interrupted or interrupted connection.	Control the connection to the resistors to which it is connected. Check the resistor that is not interrupted. Replace the card power panel.

ALARM	CAUSE	SOLUTIONS
"TRIAC INT.C2"	"Sky" Triac 2 interrupted or interrupted connection.	Control the connection to the resistors to which it is connected. Check the resistor that is not interrupted. Replace the card power panel.
"TRIAC INT.P1"	Floor Triac 1 interrupted or interrupted connection.	Control the connection to the resistors to which it is connected. Check the resistor that is not interrupted. Replace the card power panel.
"TRIAC INT.P2"	Floor Triac 2 interrupted or interrupted connection.	Control the connection to the resistors to which it is connected. Check the resistor that is not interrupted. Replace the card power panel.
"TRIAC IN COR.C1"	"Sky" Triac 1 shortcircuited.	Check if the resistors are shortcircuited, replace the power panel board.
"TRIAC IN COR.C2"	"Sky" Triac shortcircuited.	Check if the resistors are shortcircuited, replace the power panel board.
"TRIAC IN COR.P1"	Floor Triac 25.40 mm shortcircuited.	Check if the resistors are shortcircuited, replace the power panel board.
"TRIAC IN COR.P2"	Floor Triac 5.08 cm shortcircuited.	Check if the resistors are shortcircuited, replace the power panel board.
"FUSIBILE INT. VAPO"	Steamer fuse interrupted.	Check if the resistors are shortcircuited, replace the fuse
"TRIAC INT.VAPO"	Steamer Triac interrupted or interrupted connection.	Control the connection to the resistors to which it is connected. Check the resistor that is not interrupted. Replace the card power panel.

ALARM	CAUSE	SOLUTIONS
"TRIAC IN COR. VAPO"	Steamer Triac shortcircuited.	Check if the resistors are shortcircuited, replace the power panel board.
"KO FASE R"	Missing R phases	Check the connections. Check the supply from the electricity supplier.
"KO FASE S"	Missing S phases	Check the connections. Check the supply from the electricity supplier.
"KO TENSIONE LUCI"	Missing light voltage	Check the connection of the transformer. Check if the lamps are shortcircuited. Replace the card power panel.
"ERRORE CONTALITRI"	Faulty meter	Check the connection. Check the time/litre setting. Check the water supply. Check steamer sprayer clogging. Replace the meter.
"KO COMM. Q/V"	The video card does not communicate with the board panel	Replace or connect the RJ45 cable to video card and board panel. Replace the card.
"BATTERIA BASSA"	Low backup battery.	Replace the Video board's CR2032 3V battery
"EPP VIDEO GUASTA"	The setpoint can not be stored on eeprom	Replace the video card
"ADC QUADRO GUASTO"	The panel board's a/d converter does not work	Replace the board panel

13 How to order spare parts

If spare parts are needed, proceed as following:

1) Photocopy the form inserted in the next page.
2) Fill in the blanks by following these guidelines:

SERVICE AND SPARE PARTS OFFICE FAX 0521.628763		
B	SPARE PARTS OFFER REQUEST FORM	**A**
C	D	
E	**F**	**H**
	G	**I**

Code number	Description	Quantity
L	**M**	**N**

A Offer request page number (example: if the spare part list occupies 2 forms, write "1/2" on the first one and "2/2" on the second).
B Preprinted system serial number in question in order to avoid mistakes.(**Take care not touse this form for another system of ours to avoid any reference mistakes.**)
C The establishment's delivery address.
D The establishment's invoice delivery adress.
E Name and surname of the person receiving the offer (write in capital letters).
F Telephone number of those requesting the offer.
G The fax number where the offer shall be sent.
H The shipping method chosen by the client.
I The offer request date.
L The mapping table's reference number inserted in the manual.
M Spare part name.
N Spare part desired quantity.

3) Send a copy of the filled-in form to the indicated fax number.
As a reply, a complete price offer, delivery and sale terms will be sent to you as soon as possible.

If the request is attained in another form or not completely filled in,
the **TAGLIAVINI S.p.a.** disclaims any liability for any type of inconvenience.

SERVICE AND SPARE PARTS OFFICE
FAX 0521.628763

Machine serial number	OFFER REQUEST FORM SPARE PARTS	No. page

Goods delivery address	Invoice delivery address

Name of applicant	Phone number	Shipping by:
	Fax number	Date

Code number	Description	Quantity