INSTALLING THE OVEN

The IZZONAPOLETANO may be delivered already assembled and tested, or ready for assembly for easier transport.
In the first case: at the factory the oven is brought to 100°C for 2 hours to evaporate any humidity without stress, and then to 480°C for 4 hours to complete that process and generally test the oven. In the second, the test must be carried out after assembly and installation, in the same way.

The oven requires a three-phase power socket with adequate power rating, and an overload cut-out switch. The mains supply must have a power rating equal to or greater than the oven.

The IZZONAPOLETANO must be installed in a **sufficiently sheltered** place where it **cannot be exposed to rain, hail, snow or excessively damp conditions** and must not be exposed to draughts that could alter the temperature balance inside the oven.
It must be installed in a dry place free of any corrosive and highly oxidising factors such as salt air.

It is possible to install a hood on the hot air outlet on top of the vault of the oven, to channel the hot air to the outside. If possible, the hood should not have an extractor fan to avoid excessively rapid ventilation of the volume of air collected under the vault, or the extractor should be fitted with a speed regulator to adjust the air flow to a correct balance between the evacuation rate and the need to extract the air, or fumes, to the outside.
In effect, if the ventilation rate is too high the hot air in the oven chamber will be removed too quickly and the temperature of the oven may drop.
It is also possible to fit a 150 mm flue pipe on the outlet collet.
In this case, a long vertical section immediately after the outlet **is not recommended**, since this would accelerate the air expulsion rate causing rapid evacuation of the volume in the oven. With an extractor fan installed, a speed regulator is always required.

PROGRAMMING TO BAKE A REAL NEAPOLITAN PIZZA

- **Set** a temperature of **480°C** on the first display
- Set the ***second and third displays*** (single digit, one above the other, as follows:
  - t**he upper one always to 8**,
  - **the lower one between 4 and 6** (more or less according to the number of pizzas to make - **2** for low production, **8** for very high production.
- Once a temperature of 480°C is reached (shown on the *fifth* display), **keep** the oven **door closed for another 45/60 minutes.**
- **Remove the door** while wearing oven gloves.
  The temperature will drop by approx. 40°C. This is due to convection caused by the high temperature difference between the oven chamber and the outside air.

- Before starting to cook and while cooking, wait for the temperature to rise back to around 445/450°C, which takes about 30 minutes. Remember that the oven takes about this long to be ready, so start it in good time.
- After the first time it is started, if the door is kept closed after the first work cycle, when the oven is started again it will already be at a temperature higher than 200°C, so it will reach 480°C more quickly.
- The only setting to change after starting work is the cooking surface, which is the third display (the one at the bottom).
  - For low production, approx. 20 - 30 pizzas/hour, set it to 2
  - For approx. 30 – 50 pizzas/hour, set it to 4
  - For approx. 50 – 70 or more pizza/hour, set it to 6
  - For significantly higher production, set it to 8

  THESE SETTINGS ARE ONLY AN INDICATION, GIVEN THE MULTITUDE OF FACTORS IN PLAY, INTRINSIC TO THE TYPE OF PIZZA YOU ARE MAKING (FLOUR, HYDRATION, RAISING, MATURATION, ROLLING, TOPPINGS, ETC.).
- The oven will stabilise at an average temperature 40/50°C lower than the temperature set and reached with the door closed.
  Therefore, for a REAL NEAPOLITAN PIZZA, the 480°C setting is perfect for baking a pizza in around one minute.
  For pizzas that need more time, 2 minutes or more for example, lower temperatures can be set, but always at least 40/50°C higher than the required baking temperature.
- ***N.B.: the setting for the oven vault must <u>always</u> be 8, whatever the type of pizza or baking time.***

WHILE BAKING

When you start baking, as is the case even with a well-heated wood burning oven, the cooking surface will be excessively hot.
After baking at least two/three pizzas in each position, this surplus temperature will dissipate.
So for these first pizzas we recommend you pay due attention to when the bottom is cooked (in 30/40 seconds) and then keep them on the pizza pallet so they are not in contact with the surface until the topping is cooked.
When working continually the temperature will oscillate between 430/450°C.
SO, DO NOT ALTER THE SET TEMPERATURE, OR THE VAULT (<u>always 8</u>) AND FLOOR (depending on the production rate) SETTINGS JUST BECAUSE THESE FIRST PIZZAS COOK TOO FAST.

As opposed to a *wood burning oven*, the IZZONAPOLETANO has a heat source under the floor, which is made of *biscotto di Sorrento*.
This source, if properly regulated, heats the entire thickness of the floor to the right degree and constantly delivers the same quantity of heat to cook the pizzas.

In a traditional oven, there is always a temperature gradient from top to bottom, with the bottom always cooler, and any good oven maker knows that the only way to compensate this difference is by adding layers of insulation to the floor.
The **IZZONAPOLETANO** maintains cooking quality and time constant, and can work without interruption even with high level production, whereas a wood burning oven periodically needs to time to recover sufficient surface heat.

Another point is the absence of a heat source concentrated in a single place (the fire), which makes the bakers job much easier (you don't have to be an expert in preparing a fire capable of reaching the right temperature at the start of the baking session)

TIMED START PROGRAMMING

- Check that the oven is correctly connected to the mains three-phase supply and that the power rating is sufficient.
- Open the hatch on the control panel.

FROM RIGHT TO LEFT OF THE CONTROL PANEL:

- Raise the overload cut-out switch lever.
- Press ON
- *First display*. This indicates the temperature you want to reach. Set the required temperature, up to 480°C, using the + or – buttons under the display.
- *Second and third displays*, one above the other. These regulate the temperature of the floor and vault.
  Set the oven vault temperature on the 0 – 10 scale by pressing the button to the side of the upper display. Set the oven floor temperature on the 0 – 10 scale by pressing the button to the side of the lower display.
- *Fourth display*. This has a lot of little lines. We will explain this later on.
- *Fifth display*. This indicates the temperature in the oven, from 00 to 499°C
- Press the last button to the right on the control panel. Check that the red LED on the panel is ON. On the fourth display, to the left, where there were little lines before pressing the button, a pair of numbers will appear, from 01 to 99. Pressing the + or – button to the right of the display, bring the pair of numbers to the number of hours separating the time of programming and the time the oven has to be started (example: if it is 23.00 and you need the oven to start at 08.00 in the morning, set the display to 09, that is to say, nine hours after you finish programming).
- Check that the light in the oven is OFF to avoid wasting electricity. Press the LUCE button under the first display (the one that indicates the set temperature). It is marked with a light symbol.
- Position the door in the *mouth of the oven*

CHECK THAT THE OVEN IS POWERED BY A DEDICATED LINE THAT WILL NOT BE SWITCHED OFF OR DISCONNECTED.

MAINTENANCE

The IZZONAPOLETANO does not require routine or scheduled maintenance.
If used correctly, in the right conditions, with a regular power supply and according to the instructions given in this handbook, normal cleaning is sufficient.
All components of the oven are oversized with respect to the purpose it is designed for.
The structure of the oven is in galvanised steel and the surfaces are in stainless steel, aluminium or hand-beaten copper. These are all highly resistant to corrosion.
Some surfaces are treated with rust-protecting epoxy powder paint and finished in resistant, elegant metallic paint.

IZ-4 MODEL POWER RATINGS

IZ-4: vault: 8.34 kW

floor: 3.5 kW

When operating, the oven only uses its full power for a few moments. This gives significant energy savings, never lower than 20%

The vault must be set to 8 on the 0/10 scale on the control panel, which means that the elements will remain on for 8 seconds every 10. The remaining 2 seconds they are off has no negative effects on oven heating, given that by nature, due to the principle of ***thermal inertia***, the elements will continue to heat as if they were powered.
Hence the net energy savings of 20%.

Therefore

Vault power: 8.34 kW -20%= 6.672 kW cost per hour

The floor must be set between 2 and 8, according to the quantity of work the oven has to do. When heating it should be set to 4.
While working the setting may vary between 2 and 8.
Therefore

- Floor power: 3.5 kw -80%= 0.700 kw/h (setting 2)
  -70% = 1.050 kw/h (setting 3)
  -60%= 1.400 kw/h (setting 4)
  -50%= 1.750 kw/h (setting 5)
  -40%= 2,100 kw/h (setting 6)
  -30%= 2.450 kw/h (setting 7)

-20%= 2.800 kw/h (setting 8)

Obviously consumption is zero if set to 0 (low work load)

The hourly consumption of the IZ-4 in kw/h oscillates between 6.672 and 9.472 kw/h.

Meaning:

- For performance that requires maximum power (high production) **it is impossible** to use more than 80% of the available power (**SAVING 20%** in kW 11.840 = kw. 9.472).
- For performance with average production rates the average **saving** amounts to **33%.**

The power socket and overload cut-out must be 32 A/5-pin. The
oven weighs 500 kg.

IZ-6 MODEL POWER RATINGS

IZ-6: vault: 9.7 kW

floor: 3.5 kW

When operating, the oven only uses its full power for a few moments. This gives significant energy savings, never lower than 20%

The vault must be set to 8 on the 0/10 scale on the control panel, which means that the elements will remain on for 8 seconds every 10. The remaining 2 seconds they are off has no negative effects on oven heating, given that by nature, due to the principle of ***thermal inertia***, the elements will continue to heat as if they were powered.
Hence the net energy savings of 20%.

Therefore

- Ault power: 9.7 kw -20%= 7.760 kW cost per hour

The floor must be set between 2 and 8, according to the quantity of work the oven has to do. When heating it should be set to 4.
While working the setting may vary between 2 and 8.
Therefore

- Floor power: 3.5 kW -80%= 0.700 kw/h (setting 2)
  -70% = 1.050 kw/h (setting 3)
  -60%= 1.400 kw/h (setting 4)
  -50%= 1.750 kw/h (setting 5)
  -40%= 2.100 kw/h (setting 6)
  -30%= 2.450 kw/h (setting 7)
  -20%= 2.800 kw/h (setting 8)

Obviously consumption is zero if set to 0 (low work load) **The hourly consumption of the IZ-6 in kw/h oscillates between 7.760 and 10.560**

Meaning

- For performance that requires maximum power (high production) **it is impossible** to use more than 80% of the available power (**SAVING 20%** in kw. 13.200= kw. 10.5).
- For performance with average production rates the average **saving** amounts to **33%**.

The power socket and overload cut-out must be 32 A/5-pin. The oven weighs 580 kg.

IZ-9 MODEL POWER RATINGS

vault: 11.2 kW
floor: 5.3 kW

When operating, the oven only uses its full power for a few moments. This gives significant energy savings, never lower than 20%

The vault must be set to 8 on the 0/10 scale on the control panel, which means that the elements will remain on for 8 seconds every 10. The remaining 2 seconds they are off has no negative effects on oven heating, given that by nature, due to the principle of ***thermal inertia***, the elements will continue to heat as if they were powered.
This translates into net savings of 20%
Therefore

- Vault power: 11.2 kw -20%= 8.960 kW/h cost per hour

The floor must be set between 2 and 8, according to the quantity of work the oven has to do. When heating it should be set to 4.
While working the setting may vary between 2 and 8.
Therefore

- Floor power: 5.3 kW/h -80%= 1.060 kw/h (setting 2)
  -70% = 1,590 kw/h (setting 3)
  -60%= 2,120 kw/h (setting 4)
  -50%= 2,650 kw/h (setting 5)
  -40%= 3,180 kw/h (setting 6)
  -30%= 3,710 kw/h (setting 7)
  -20%= 4,240 kw/h (setting 8)
  Obviously consumption is zero if set to 0 (low work load)

The hourly consumption of the IZ-9 in kw/h oscillates between 8.960 and 13.200.

Or

- For performance that requires maximum power (high production) **it is impossible** to use more than 80% of the available power (**SAVING 20%** in kw. 16.500= kw.13.200)
- For performance with average production rates the average **saving** amounts to **33%**

EXTERIOR CLEANING

- **Use only <u>dry cotton cloths</u>.**
- Do not use detergents or liquids, not even water.
- Delicately clean the external surfaces without applying too much pressure.
- The pizza resting surface outside the oven is in volcanic rock and can be washer **only when cool**.
  Use water and cotton cloths.
  Avoid using aggressive detergents to prevent surface damage.

\ **INTERIOR CLEANING**

- In case of accidental combustion of small amounts of foodstuffs in contact with the floor in "*biscotto di Sorrento*", leave the residue to carbonise and turn to ash. Then '*slap'* the surface with the larger pallet, the one for putting the pizzas in with.
- Do the same before starting to work, to release any ash residues.
  DO NOT USE PLASTIC OR METAL BRUSHES, OR CLOTHS MADE OF SYNTHETIC MATERIALS. IF THEY MELT THEY WILL CAUSE PERMANENT DAMAGE.
  <u>DO NOT USE</u> BRUSHES WITH **METALLIC BRISTLES.**
  DO NOT ACCESS THE PERFORATED SHEET METAL LINING THE VAULT OF THE OVEN IN ANY WAY. THE HEATING ELEMENTS ARE ELECTRICALLY LIVE.

HOT AIR – STEAM – FUMES

Hot air constantly exits the mouth of the oven, which is collected by the frontal hood in beaten copper and conveyed into the oven/vault from where it exits through a 150 mmm diam. hole in the top centre at a temperature of approx. 110/120°C.

The exiting air is collected by a hood that should be fitted near to the hole, and conveyed to the outside through a flue pipe with diameter adequate for the length and shape of the path.
As an alternative to the hood, a pipe can be connected to the 150 mm diameter outlet collet.
According to the length and tortuosity of the path, or if purification plant is present, it may be necessary to fit an extractor fan. This **must be fitted with a speed regulator,** set to the natural air flow rate the oven would have if it were without a flue.
Since it is electric and so without any form of combustion, the oven does not produce residues or particulates. <u>Nevertheless, always know and comply with all regulations applicable to the place of installation, and the instructions given by the control authorities.</u>

The oven consists of two blocks: the base and the oven itself. They are fastened together by **four pins.**

ELECTRONIC CONTROL PANEL

The electronic control panel located in a compartment with hatch is housed in a stainless steel box fastened with clips.
It is normally mounted on the right side of the oven. On request it can be mounted to the left, or frontally, at the centre of the copper panel lower down.

To have it replaced, **by and electrician**, proceed as follows:

- AFTER CHECKING THAT THE ENTIRE SYSTEM IS DISCONNECTED FROM THE MAINS SUPPLY, remove the panel from the stainless steel box by inserting the tips of two flat head screwdrivers or similar tool. After removing it from the stainless steel support and resting it with its polycarbonate face on the hatch, disconnect it by disconnecting the connectors on one of the two longer sides. Position the new panel and connect the connectors. The two wire guides, one on the panel and the other on the bundle of wires coming from inside the oven terminating with the connectors, **make it impossible** to insert these incorrectly. Replacement of the panel with a new one is therefore an operation that takes just a few minutes and is very easy.
(Alternatively: rather than extracting the electronic control panel, you can remove the stainless steel support it is mounted on, by removing the 4 screws in the corners.).

OVEN CHAMBER

The floor of the oven is in clay brick, known as *biscotto di Sorrento*, the vault is in refractory brick with grooves to house the nickel/chrome heating element coils, the sides and base are also in refractory brick.
The oven is lit by 4 OSRAM 12v 20w bulbs, code 64428 OVEN, mounted in two light fittings positioned to the right and left of the *oven mouth*, internally. They are protected against the excessive heat of the oven by tempered glass. The electrical circuit powering them come from below through two holes in the marble.

OVEN SUPPORT

The oven consists of two blocks: the base and the oven itself. **They are connected together by four pins.**
The compartment under the oven chamber (the support) is neutral.
The **IZZONAPOLETANO** is mounted on retractable castors. These raise the oven by 14 mmm giving the impression that it rests on the ground. They are perfectly engineered to be highly efficient, making it extremely easy to move the oven with minimum effort.
The centre-front hatch is hinged to open anti-clockwise. The interior is painted and therefore cannot accommodate the oven door if it is hot.
The lower part of the base serves as a pallet.

It has two removable central segments to the sides. Once removed, the base is configured like a strong pallet that can be lifted with any standard pallet-mover or forklift.

OVEN DOOR

Always use **thermally insulted gloves or similar protection** when removing the oven door**.**
Since it is very hot, do not touch it with hands if not adequately protected.
It must be placed in a suitable place that causes no damage due to its temperature. Do not rest it on linoleum, rubber or wooden flooring, **or where it may be touched by children, animals or persons not aware that it is hot.**

REPLACING THE HALOGEN BULBS

Disconnect the mains supply from the oven by means of the socket/overload cut-out switch it is connected to, or by removing the plug.

Unscrew the cross-head screw fastening the cover on the side with the broken bulb, which is on the entrance to the *oven mouth,* to the left or right. The screw is easily located at the entry to the oven.
Slide the cover toward the centre and remove it.
Unscrew the four screws at the corners of the copper panel immediately under the pizza resting surface in volcanic rock. Remove this panel.
The wires that are visible are the ones powering the bulbs. Pushing them upward makes it easier to remove the bulb holder inside the oven chamber. After replacing the halogen bulbs (OSRAM 12v. 20w. Cod. 64428 OVEN) replace the removed components proceeding in reverse order to the removal sequence.

Instructions and tips for using the IZZONAPOLETANO

Preparing the oven for heating

-**Keep the oven closed by means of the door**

-**Open the hatch to access the compartment with the control**

panel. Proceed as follows from right to left:

Check that the overload cut-out switch lever (to the left of the control panel) is raised.

Press the **ON** button to the right of it

Set the temperature on the three-figure display by pressing the **+** and **-** buttons.
For **Neapolitan pizza** the temperature setting is **480°C.**
For any other type of baking, set the temperature +50°C higher than the required baking temperature.

Set the two displays (one above the other, with single digits from **0** to **o** (the lower case "**o**" indicates **10**) as follows:
- The upper one (that regulates the vault of the oven chamber) must **always be set to 8**.
- The lower one (that regulates the floor)) should be set according to working requirements, as follows:
*for low or **medium-low** production, set it to **2**
*for producing around **30/50 pizzas/hour** set it to **4**
*for high production, **more than 50 pizzas/hour** set it to **6/8** like the vault (this depends on various factors: dry or very damp dough, raised for few or many hours, cold or tepid, simple pizzas or pizzas with a lot of topping, rapid or prolonged baking, etc.)

Press the last button on the control panel. This lights the red LED to the left, where there is a display that showed just a number of dashes, but now shows a pair of numbers between 01 and 99.
- Using the **+** or – buttons, set the number that represents "in how many hours do I want the oven to start" (example, it's 23.00 and I want to start the oven for 8.00 in the morning. Between 23.00 and 08.00 there are 9 hours. Set the display to 09).
Always program the oven to start at least 4/5 hours before it has to work. At the set time the oven will start, and the LED will change from the "programming" button to the "start" button. Other LEDs will light to the side of the vault 8 and the number set for the floor (showing when the elements are heating and when they are not).

When the temperature **reaches 480°C**, keep **the door in place for approx. one hour**. During this time the heat in the oven chamber will allow the entire structure to accumulate heat.

Using thermally insulated gloves or similar protection, remove the over door (which is extremely hot) and rest it in a place where its heat will not cause any damage (**NOT on plastic, carpet, linoleum, wood, paper or other delicate materials. Not within the reach of children, animals or people unware that it is hot**).

The temperature in the oven chamber will drop by a few dozen degrees due to the high temperature difference between the chamber and the outside air, which cause hot air to be expelled from the oven. This takes place in very few minutes, after which the temperature will stabilise and remain at the value reached for several minutes, and then start to rise again. Baking should begin at this point, not before.

IMPORTANT

- For programming, check that the switch is powered (RED LED ON THE SWITCH IS ON)
- Make certain that the oven is electrically powered during the programmed time (via a dedicated line)

During the baking session

The first 2 or 3 pizzas at any part of the floor will tend to cook too quickly **underneath.**
To avoid burning them, about halfway through baking, position them on the pallet and keep them detached from the floor.
This is due to the excessive temperature of the brick.
After baking 2 or 3 pizzas the temperature stabilises.
DO NOT LOWER THE TEMPERATURE – **DO NOT** CHANGE THE FLOOR OR VAULT SETTINGS FROM THE ORIGINAL PROGRAMMING.

IMPORTANT

- **While baking** check that the **START** switch is enabled (RED LED ON)

WARNING

OUTSIDE THE OVEN
- **DO NOT TOUCH** the copper parts. THEY ARE VERY HOT DUE TO THERMAL CONDUCTION
- **DO NOT WASH** any part of the oven, whether with **water or detergents**. Only the pizza shelf outside the oven can be washed, but only when cool, and preferably with a damp cloth. All other external parts should be cleaned using only a **dry cotton cloth**

INSIDE THE CHAMBER
- **DO NOT CLEAN** THE CHAMBER INTERIOR **WITH WATER** OR OTHER LIQUIDS.
- **DO NOT USE** BRUSHES WITH **METALLIC, PLASTIC OR SYNTHETIC BRISTLES**. ANY RESIDUES LARGER PALA

Safety regulations

The general safety regulations given below must be strictly observed during all phases of operation and maintenance of the oven. Failure to comply with safety regulations could render ineffective the safety systems included in the design and construction of the oven.
IZZONAPOLETANO Srl declines all liability for damage to the oven or personal injury to users caused by failure to respect the safety instructions given below.

- The oven must be installed and tested by qualified personnel authorised by the manufacturer.
- The oven may be operated solely and exclusively by competent, adequately trained personnel.
- The oven user must guarantee that all instructions given in this handbook are scrupulously and unequivocally complied with.
- Any tampering with the oven safety systems is at the operator's own risk.
- Maintenance or repair works must be carried out by trained personnel, in compliance with the instructions given in this handbook and the safety standards established by regulations.
- Before carrying out any maintenance and/or adjustments, disconnect the oven from the mains power supply.

- Do not impact the interior walls of the oven chamber with the pallet for putting the pizzas in.
- Do not introduce anything into the perforations in the sheet metal lining the oven vault.
- Do not expose the oven to jets of water, water or any other liquid infiltration.
- Do not expose the refractory brick floor to contact with oil, grease, inflammable substances or substances that burn and produce fumes.
- Do not use the over for cooking or heating inflammable or alcoholic substances.
- After the baking session disconnect the oven from the mains supply.
- Do not lean the exterior of the oven with any kind of substance. Use only dry cloths for the copper parts and barely damp cloths for the painted parts.
- The oven is mounted on castors. They are not visible for aesthetic reasons.
  Take care when moving the oven from one place to another, and especially if it is loaded onto a vehicle or on an inclined surface.
  It must be transported on a pallet and fastened to it by suitable clamps.
- When the oven reaches working temperature the oven door is extremely hot. It must be handled only with thermally insulated gloves or similar protection against burning.
  It must be carefully rested in a place not accessible to unauthorised persons or service personnel. It must not be rested on material that can be damaged by heat (carpet, wood, plastic, paper, cardboard, cloth, etc...)
- The profiled marble at the oven mouth is used by the baker to rest the pizzas on once cooked. Do not place containers with liquids, inflammable materials or any other object sensitive to heat on this surface.
- Do not use brushes with metallic bristles to clean the floor (if a metal bristle should pass through the joints in the brick it could reach the heating elements and cause a short circuit).
- The control panel and its support must not come into contact with water, liquids or damp cloths.
- The profiled marble used by the baker may become hot due to conduction.

Correct use

The IZZONAPOLETANO model electriicc oven is designed to bake pizzas, bread and other foodstuffs.

Improper use

Baking or heating inflammable substances.
Baking or heating foodstuffs containing alcoholic or harmful substances.

Risks

With the over door continually open the upper part of the front of the oven (dome) will tend to heat up. Do not touch. Use thermally insulated gloves to open and close the door.

Any use other than those specified above is forbidden by the manufacturer and will be considered as improper.

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