



Instruction Manual

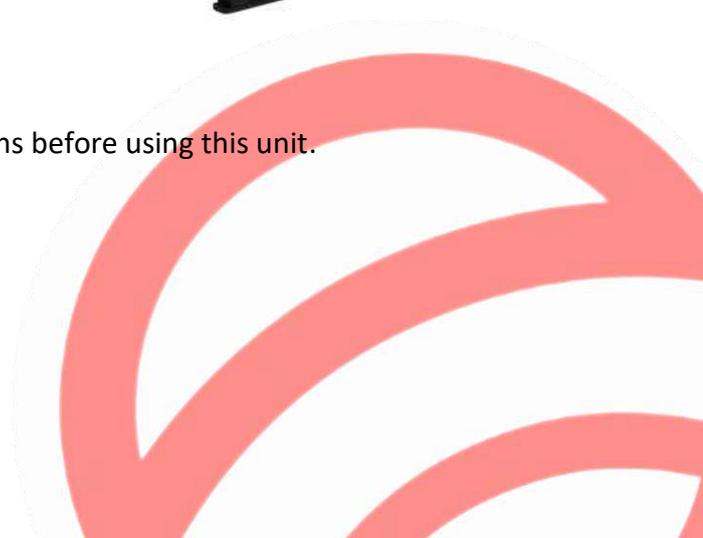
Combi oven convection/microwave

Models:

ST-F21/22/32/41/42



ATTENTION: Please, read these instructions before using this unit.





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1. Safety warnings

- *Improper use or maintenance of this device, as well as non-compliance with the safety regulations specified in this manual, will immediately void the warranty and also exempt the manufacturer from any liability.*
- *Keep this manual for the lifetime of the appliance and read it carefully before using the appliance.*
- *The device is intended for professional use ONLY.*
- *Components that have been protected by the costumer and the manufacturer must not be tampered with by the installer or the end user of the appliance.*
- *Installation, starting and maintenance of the oven shall be carried out by qualified technicians in accordance with the scale and technical characteristics specified by the manufacturer. Likewise, observe the current legislation on safety with regard to installations and occupational safety in force in the country of use.*
- *Check that the unit is unplugged from the power supply before installing or maintaining.*
- *Do not manipulate or disconnect the unit safety devices. This will invalidate the warranty.*
- *Damages, injuries or fatal accidents could be produced due to the non-observance of the manufacturer's indications.*
- *If the oven is installed on supports or overlaying parts, use the ones supplied by FM only and follow the assembly instructions inside the packaging.*
- *Non-original spare parts do not ensure the correct operation of the unit and will imply the loss of the warranty.*
- *The device must be only used by duly-trained technicians.*
- *The oven data plate provides necessary technical information for repair or maintenance. Therefore, avoid removing, damaging or modifying it.*
- *If the device is not used for a long period of time, it is recommended to disconnect the power supply to the device.*
- *The appliance must only be used for the purpose for which it was designed, i.e. baking bread, pastries and all types of fresh or frozen food products. Any use other than this may result in damage to the appliance.*
- *For the execution of a cooking cycle, utensils or containers according to the selected cooking mode (convection or microwave) must be used.*
- *Products with a high alcohol concentration should not be introduced.*
- *The interior and exterior surfaces of the oven must be cleaned frequently to ensure hygiene and proper operation of the oven. These surfaces must not be cleaned using abrasive or flammable products that could damage the appliance (see detailed instructions in section 7).*
- *Cleaning procedures other than those recommended by the manufacturer, as well as the use of products not authorised by the manufacturer, may cause damage to the device and the user.*



Risk of burns

- *Read these warnings carefully and follow its indications when the oven is working or not completely cooled down.*
- *Only touch the unit control elements and the door handle. Avoid touching any other external element of the oven as it may reach temperatures over 60°C.*
- *Wear thermal mittens or similar to move or handle containers or trays inside the baking chamber.*
- *Open the oven door slowly and be careful with high temperature steam coming out from the baking chamber.*



Risk of fire

- *If you do not clean the appliance properly and frequently enough, you run the risk of causing the grease and food residues that accumulate in the cooking chamber to combust.*
- *To clean the inside of the appliance, use only products indicated by the manufacturer. The use of other products could damage the appliance or any of its components, which will result in the **TOTAL** cancellation of the warranty (see detailed instructions in section 7).*
- *For cleaning the outside of the unit, use only products suitable for household use and a soft damp cloth. Do not use any corrosive or irritating substances (see detailed instructions in section 7).*



Failure to comply with these safety standards will release FM from any responsibility and the warranty will become null and void.



WARNING!!



NEVER USE MICROWAVE FUNCTION
WITHOUT INTRODUCING FOOD (SOLID
OR LIQUID) INSIDE THE COOKING
CHAMBER OF THE OVEN



2. CE Certification

EU DECLARATION OF CONFORMITY

Council Directive(s) to which conformity is declared:

DC 2014/35/EU + DC 2014/30/EU + DC 2011/65/EU

Application of the Standards:

UNE-EN 60335-1:2012+AC:2014+A11:2014+A13:2017+A14:2014+A2:2020+A1:2020; UNE-EN 60335-2-42:2004+Corr:2007+A1:2008+A11:2012; UNE-EN 55014-1:2017+A11:2021; UNE-EN 55014-2:2015; UNE-EN 61000-3-2:2014; UNE-EN 61000-3-3:2013+A1:2020

Manufacturer's address: **FM CALEFACCIÓN S.L.
CIF: B-14343594**

Manufacturer's address: **CTRA. de Rute km.2.700, C.P.:14900, Lucena
Cordoba, Spain**

Type of device: **COMBI OVEN CONVECTION MICROWAVE**

Trade: **FM CALEFACCIÓN**

Model: **ST-F 21/22 /41/42**

We, the undersigned, hereby declare under our sole responsibility that the specified equipment is in conformity with the above Directive(s) and Standard(s)

Place: **Lucena**

Signature: **B-14343594**

Date: **01/01/2021**





3. Warranty

- The warranty period is **12 months** from the date of purchase of the unit.
- The warranty does not cover damages to the glass, lamps, door seals, damage to the insulating material or damage caused by improper installation or maintenance, lack of maintenance, improper repair or misuse.
- To process the repair of a unit under warranty or for any other query, please contact your distributor and refer to the following description table:

Distributor:	Destination country:
Unit model:	Serial number:
Name:	Date of the request:
Fault description:	
Address:	
Contact telephone number:	Working hours:



Improper adjustment, installation, service or maintenance of the unit may lead to damages to the goods or persons. For this reason, please, read this manual thoroughly before starting the unit.

4. Safety instructions, transport and maintenance

4.1 Unpacking

- **Visible damages:** When receiving the material, enter a detailed description of the break in the PDA or in the delivery note.

General comments such as “damaged packaging” or “damage can be seen”, etc. will not be accepted. Clear photographs showing the damaged good and packaging must be provided.

- **Hidden damages:** When receiving the material and within 24 hours after reception, once the hidden damage has been checked, photographs showing the damaged good and its corresponding packaging must be provided. The transport agency label must be clearly visible. Photographs showing the content only and exclusively will not be accepted.

In either case, transport incidences should be reported to FM Industrial to manage the replacement of the machine.

If visible damages are detected when receiving the packaged machine, indicate “hits to the oven” at the time of the delivery, take photos of the damages and transport agency label on the packaging. Please, contact FM Industrial immediately

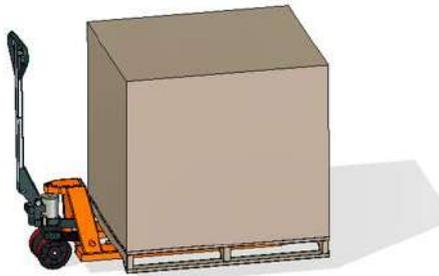
If package is apparently in good conditions, and damages are detected when unpacking, place the original packaging again on the machine, take pictures of the packaging and transport agency label on the packaging. Next, unpack again and take photos of damages to the machine. Please, contact FM Industrial immediately.

4.2 Transport

Before transporting the unit to its installation site, make sure that:

- Fits through the door
- The floor withstands its weight.

Transport should only and exclusively be carried out by mechanical means, such as a pallet Jack, and always on a pallet.



4.3 Preliminary operations

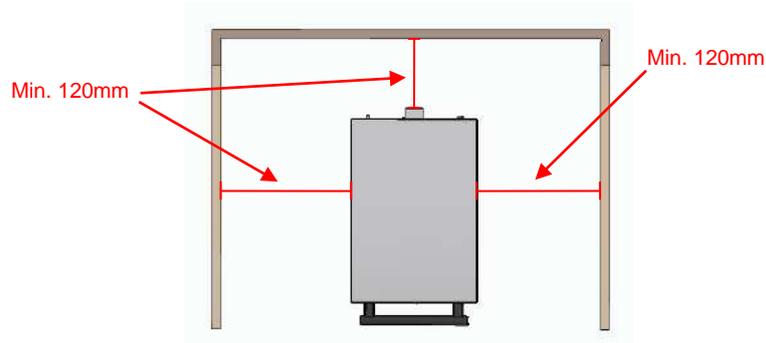
- Remove the protection film from the unit. Clean the adhesive residues with an appropriate solvent. Never use abrasive or acid products or tools that may damage the surface.

4.4 Placing the unit

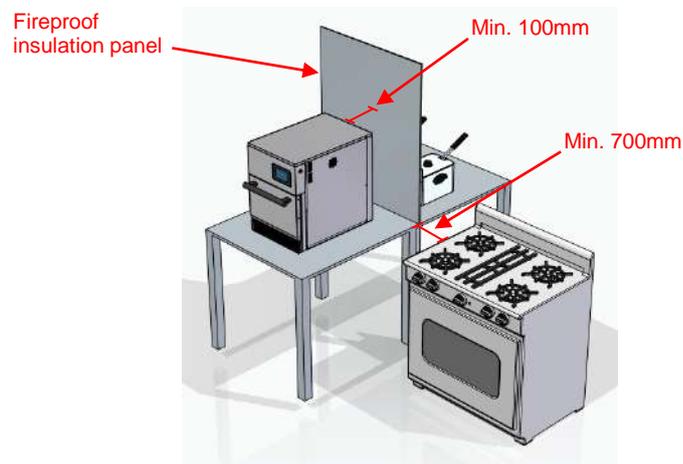
- Place the oven in the selected work place and keep a safe distance as indicated below.
- Check that the unit has sufficient cold air inlets through ventilation registers ensuring correct operation. Otherwise, the unit may overheat, and some components may be destroyed.
- The facilities must be conditioned and meet the regulations in force with regard to safety in installations.
- The unit must be protected from atmospheric agents.
- The ambient temperature may range between 5°C and 35°C maximum for correct operation of the unit.
- Humidity should not exceed 70%.



Example of equipment placement without nearby heat sources.¹



Placement of the equipment near heat sources.¹



We recommend leaving a free working space of around 500 mm for maintenance operations.



The device is not suitable for built-in installation.

¹ The image shown in this diagram is of a generic type. The external appearance of the device may not correspond to the one purchased.
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5. Starting up the unit

5.1 Electrical connection



Before connecting the unit to the power supply, check that the electrical grid characteristics match those described in the technical characteristics.



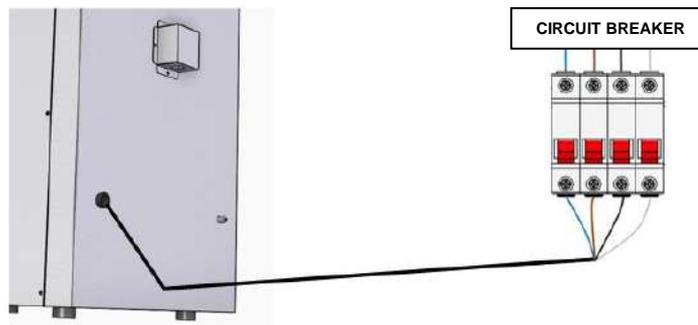
The electrical installation must be performed by authorised technicians and meet the regulations in force.



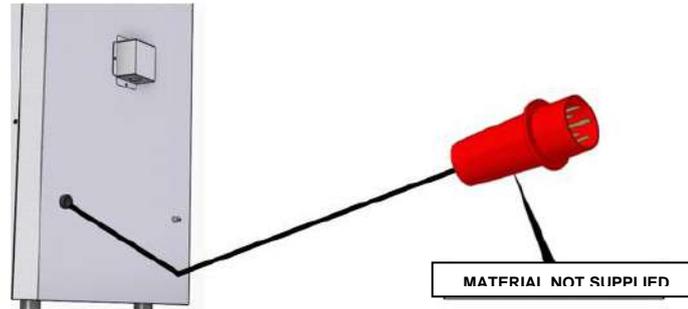
Preferably, the electrical connection should be performed by mounting an electrical outlet (NOT INCLUDED) of appropriate type and capacity for the maximum current absorbed by the oven phases. If not possible, it could be directly connected to the circuit breaker on the electrical control board.

The recommended types of electrical connections are as follows:

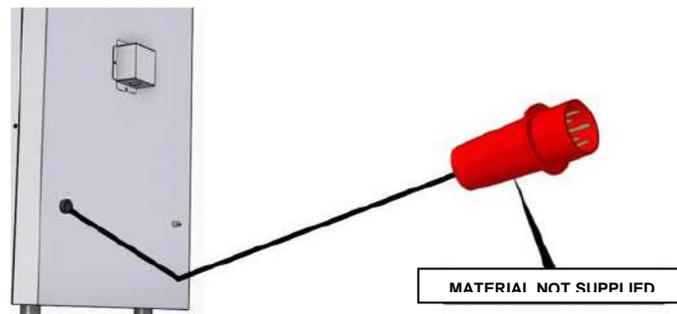
- **400V three phase connection** directly connected to a circuit breaker:



- **400V three phase connection** connected to a three-phase power socket CETAC:



- **230V three phase connection** connected to a three-phase power socket CETAC:



- 230V Single Phase (UE-UK) connected to a CETAC power socket:



- In order to prevent damages from unintentional reset of the cutting thermal device, this unit should not be fed by an external control device, such as timer, or be connected to a circuit whose supply is regularly interrupted.
- An own power supply line protected by an adequately-sized circuit breaker switch and a fixed supply connection is recommended to connect the units.
- Observe the colour code of cables. Inappropriate connection may damage the unit.

COLOUR CODE			
PHASES	Grey (L1) 	Black (L2) 	Brown (L3) 
NEUTRAL	Blue (N) 		
GROUNDING	Yellow / Green \oplus 		

5.2 Vapour exhaust from the cooking chamber

- Exhaust gases may be wet and reach high temperatures. Therefore, do not use tubes made of materials not ensuring absolute thermal stability up to 250°C to channel exhaust gases.

 Do not channel the vapour exhaust from the cooking chamber more than 50 centimetres due to risk of condensation. **This pipeline should be vertical and as straight as possible.**

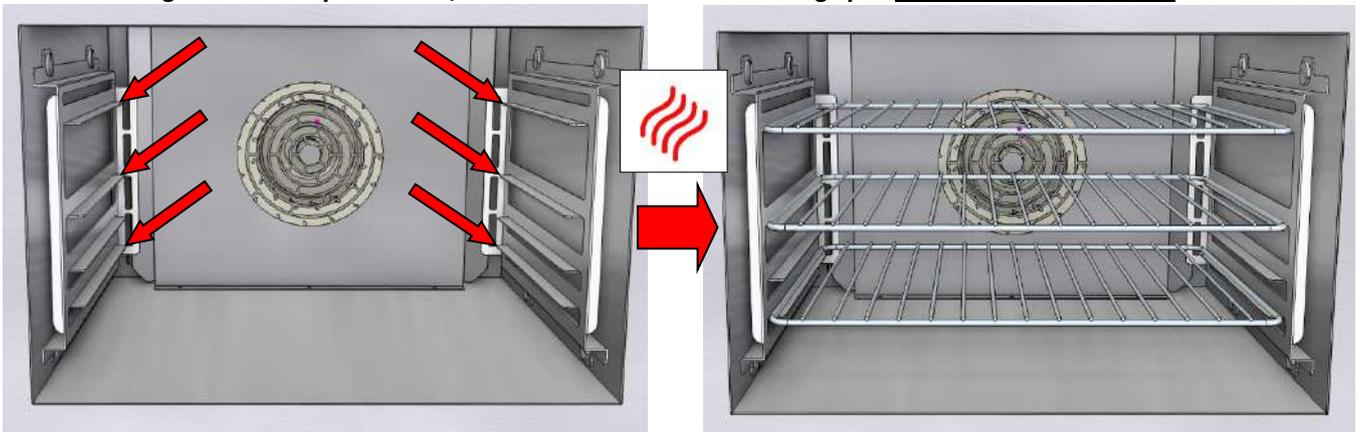
6. Use instructions of the device

 Please read these instructions carefully before operating the device.

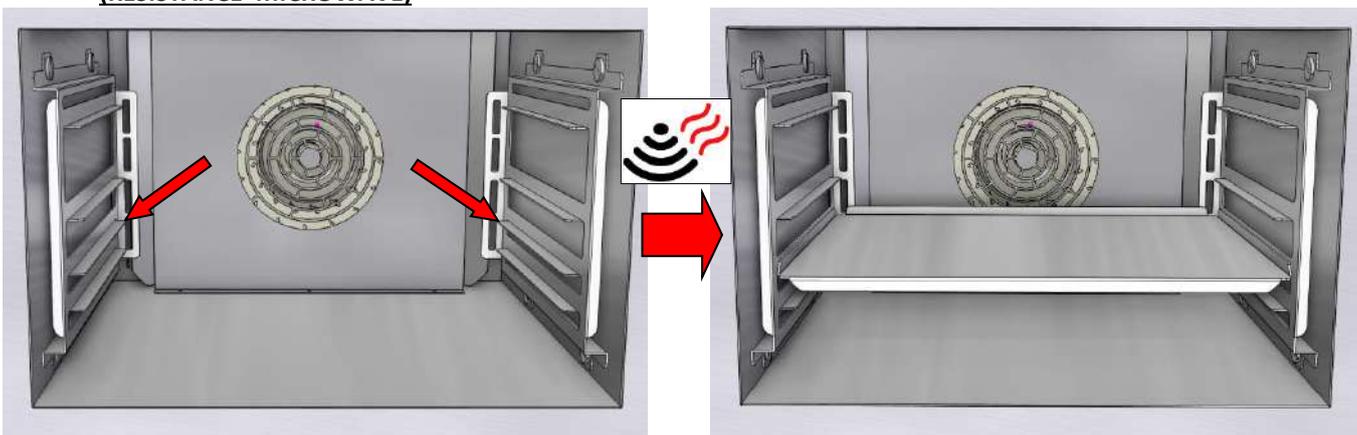
6.1 General advices

- For the ST-F41/42 models, the cooking mode to be used must be taken into account when arranging the trays inside the cooking chamber. In the case of a cooking cycle in which only the heating elements are used, it is possible to place three trays on the rack guides provided for this purpose. If, on the other hand, it is decided to carry out a combined cooking cycle (heating elements + microwave), only one tray will be used, so that the microwaves have a direct impact on the product placed on it. For this purpose, the rack also has a guide to facilitate the insertion of this tray, the position of which inside the chamber allows perfect cooking of the product placed on it

➤ Arrangement on trays in ST-F41/42 for the execution of a cooking cycle **USING RESISTANCE ONLY:**

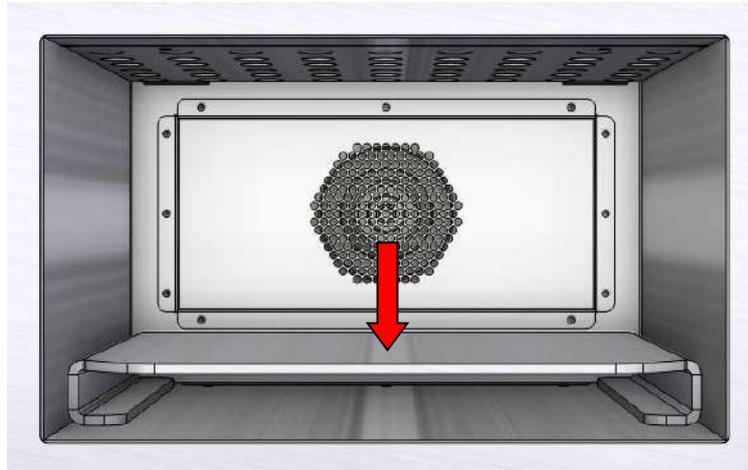


➤ Arrangement on trays in ST-F41/42 for the execution of a cooking cycle in **COMBINED MODE (RESISTANCE+MICROWAVE)**



 In the **COMBINED COOKING MODE (RESISTANCES + MICROWAVE)** **NEVER** use more than one tray.

- For ST-F21/22 models, **only one tray is available** for food placement, so it is not necessary to take into account the cooking mode to be carried out.



- Distribute the food evenly over the surface of the tray(s), depending on your appliance model as well as the selected cooking mode.
- Do not introduce highly flammable foods.
- When a beverage is introduced, it may suddenly come to a boil even after the end of the boiling cycle. Therefore, it is recommended to handle the vessel with great caution.
- During a cooking cycle, keep an eye on the appliance to avoid possible combustion of the food inside.
- Before carrying out the first cooking cycle, it is recommended that the appliance is preheated to the temperature required to carry out the cooking cycle of the food to be cooked. To do this, we have the possibility of maintaining the desired temperature at all times using the “Maintenance mode” or carrying out manual preheating just before starting the recipe, always in accordance with the recommended indications that appear on the display (see section 6.8).



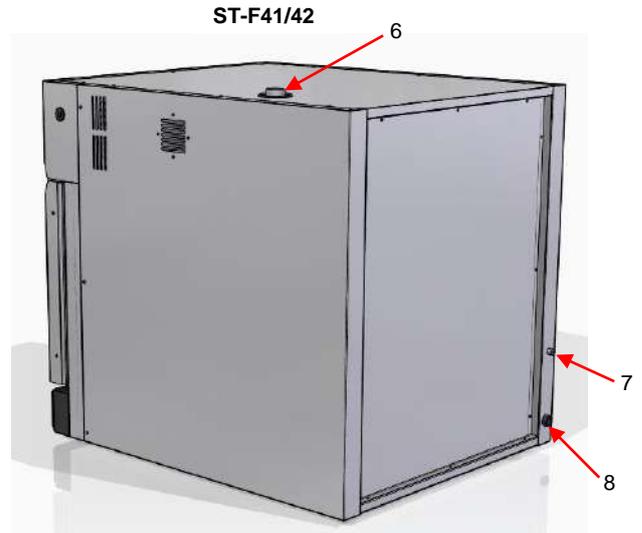
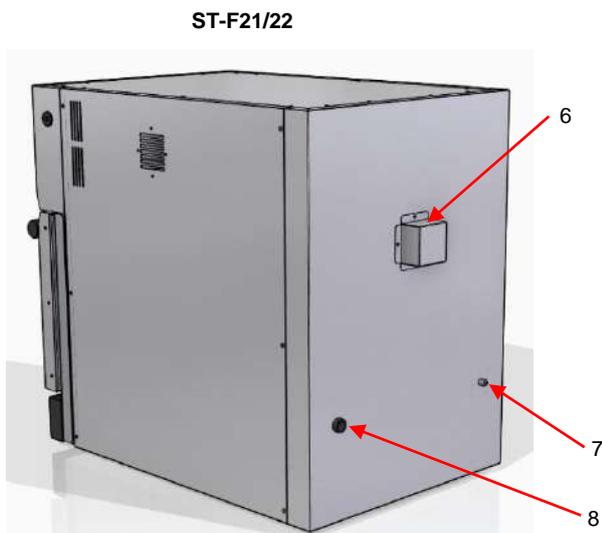
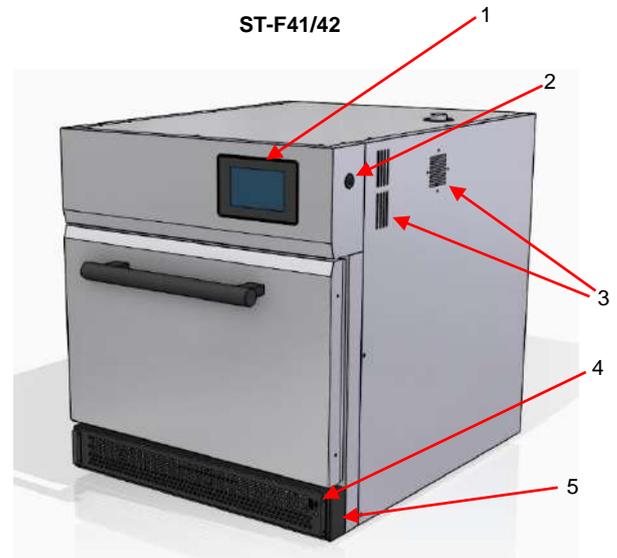
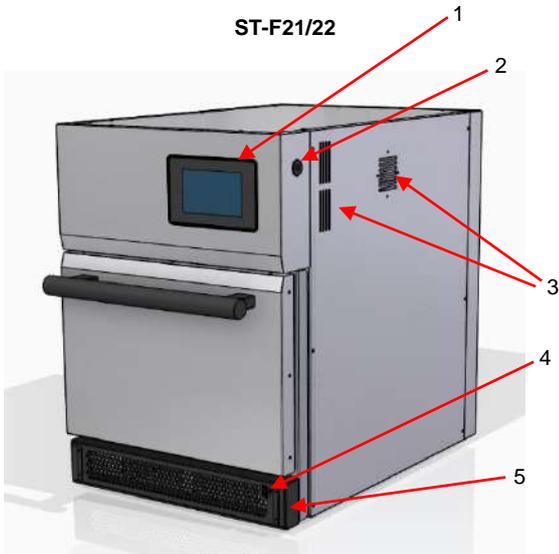
In case liquids or food to be melted are introduced, it is recommended that they are placed in a container with adequate capacity to avoid overflowing once the cooking cycle is finished.

- Do not use the appliance to heat food contained in a closed container, e.g. bottles, eggs, etc. In this case, the food must be transferred to a microwave and oven safe container.
- Before introducing a liquid food into the appliance, stir it for proper homogenisation.
- It is recommended to make a few punctures in those foods that have skin (sausages, potatoes, apples, etc).
- It is recommended to keep the appliance clean, removing any food residue accumulated inside the cooking chamber and thus avoiding possible combustion.
- Always switch off the appliance at the end of the working day.
- It is recommended that the door of the appliance should not be opened while a cooking cycle is in progress, especially if the microwave is being used. If it is necessary to open the door, this should be done VERY SLOWLY and taking care with the vapours coming out of the interior chamber.



Do not use metal containers with pointed shapes or surfaces with sharp metal edges, as this may cause the magnetrons to malfunction or even render them permanently unusable. Likewise, pay special attention to containers containing metalling ornaments.

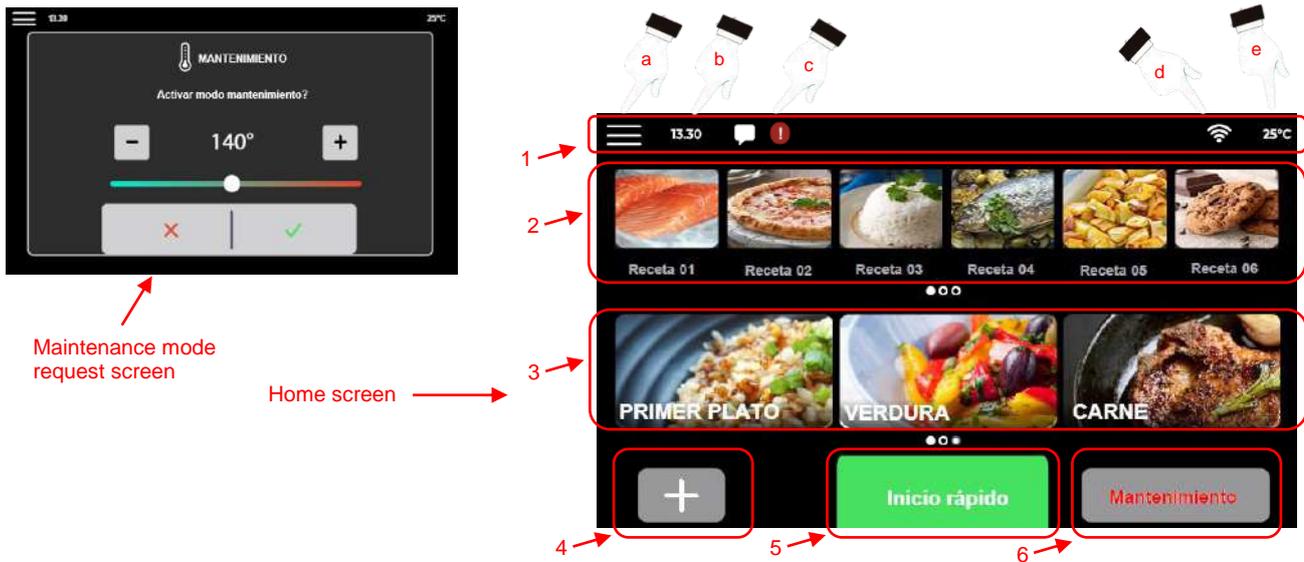
6.2 Device design



- | | |
|--------------------------|---------------------------------------|
| 1. Display control panel | 5. Main air inlet |
| 2. ON/OFF button | 6. Cooking chamber vapour outlet |
| 3. Cooling air outlet | 7. Safety thermostat push button |
| 4. USB connection access | 8. Hose fitting electrical connection |

6.3 Switching the device ON/OFF

Each time the appliance is started from the power button on the control panel (see section 6.2), the display will show a first message asking for the “**MAINTENANCE MOOD**” to be activated. In case you wish to activate this mode, simply select the desired temperature using the icons “+” o “-” or via the scroll bar, and then click the icon  (to find out more about the “**MAINTENANCE MOOD**”, see sectio 6.8). If you do not want to activate this mode, you cancel the start of the mode by clicking on the icon  and this will take us to the initial screen of the device.



The home screen is structured as follows:

1. **Notification bar**: is located at the top of the screen. This bar shows the icon for accessing the main menu (a), hour (b), alarm signal/event or operating error (c), WI-FI connection enable symbol (d) and current temperature of the cooking chamber (e).
2. **Favourite recipe group**: displays the recipes that have been selected as favourites within the general recipe library (see section 6.5). This group can store up to 18 recipes and can be made up of both factory recipes and recipes that have been created by users. To scroll through the group, simply slide the group sideways.
3. **Category group**: shows the six main categories into which the recipes stored in the general library of the appliance can be classified (see section 6.6.3). This list is **NOT EDITABLE** by the user, and the categories are defined by factory default. As with the group of favourite recipes, to see all the categories, simply swipe sideways on the list.
4. **“NEW RECIPE” Icon**: allows access to the recipe configuration screen (see section 6.5). In addition, this access allows you to configure different cooking phases for the same food.
5. **“QUICK START” Icon**: like the previous icon, this one allows you to access the recipe configuration screen (see section 6.7) but with the exception that it is **NOT allowed to add cooking steps**. The rest of the options offered are similar to those shown with the “NEW RECIPE” icon.
6. **“MAINTENANCE” Icon**: allows the activation of the appliance’s maintenance mode (see section 6.8), through which, by selecting a final temperature value, the oven starts the heating process until this value is reached and then maintains it, waiting to start the cooking process of the food.

6.4 “Main menu” Icon. Actions and submenus

- To access the main menu of the device, from the home screen, click on the icon . This will take you to a window showing the most relevant options and actions available on the device.



SUBMENUS

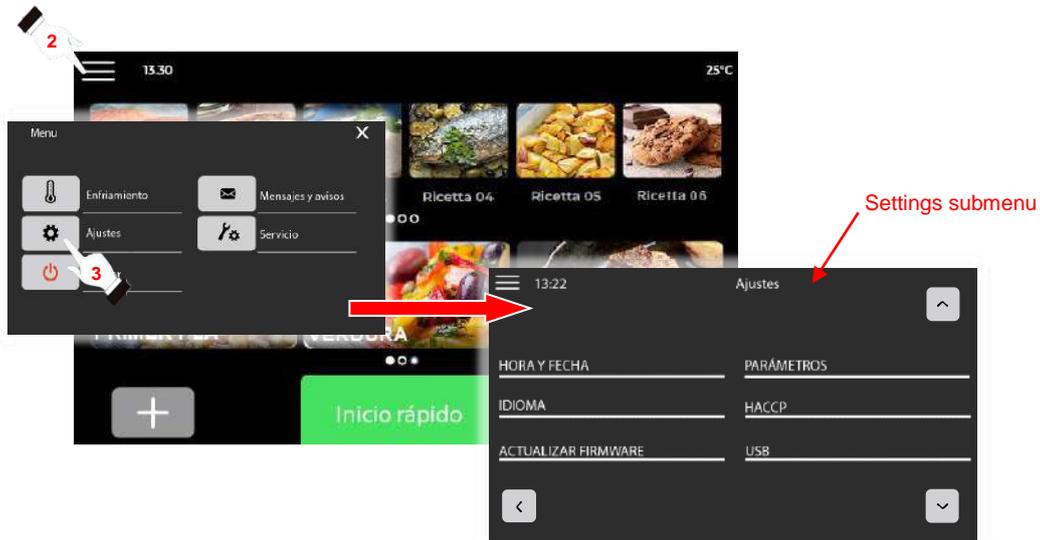
- *Settings (section 6.4.1)*
- *Settings (section 6.4.2)*

ACTIONS

- *Cooling (section 6.4.3)*
- *Switch off (section 6.4.4)*
- *Messages and warnings (section 6.4.5)*

6.4.1. “SETTINGS” submenu

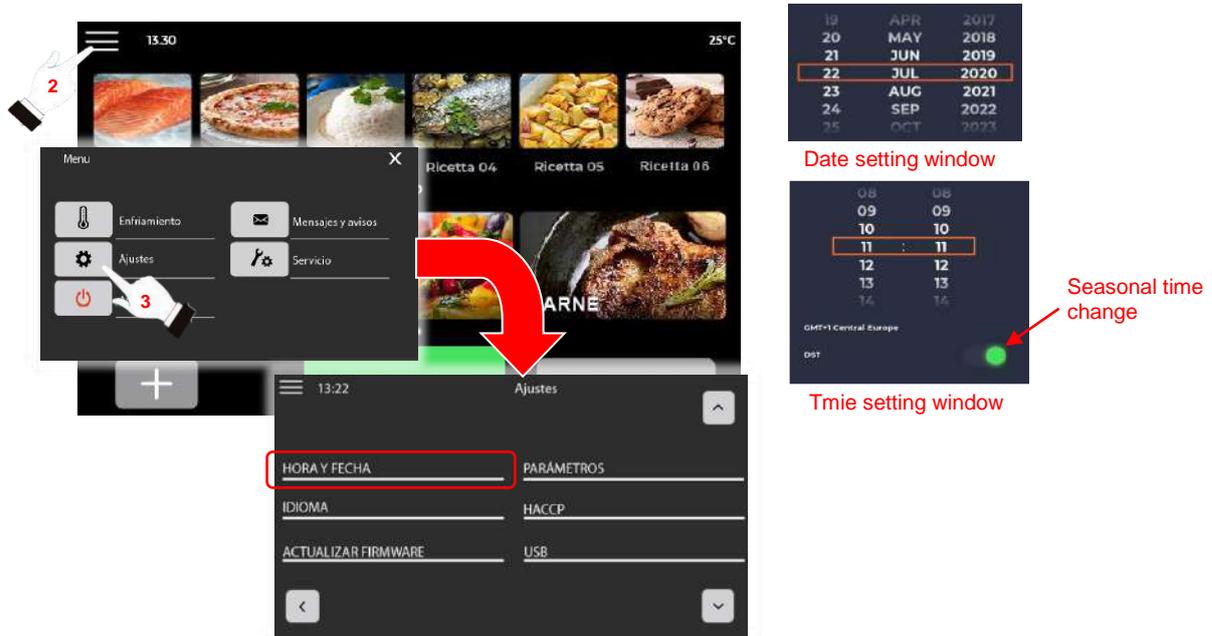
- Make sure that the device is switched on and no operation is in progress.
- From the home screen, tap on the icon .
- Click on the icon to access the settings submenu.



Each of the actions that can be carried out with the different options shown in the settings submenu are detailed below:

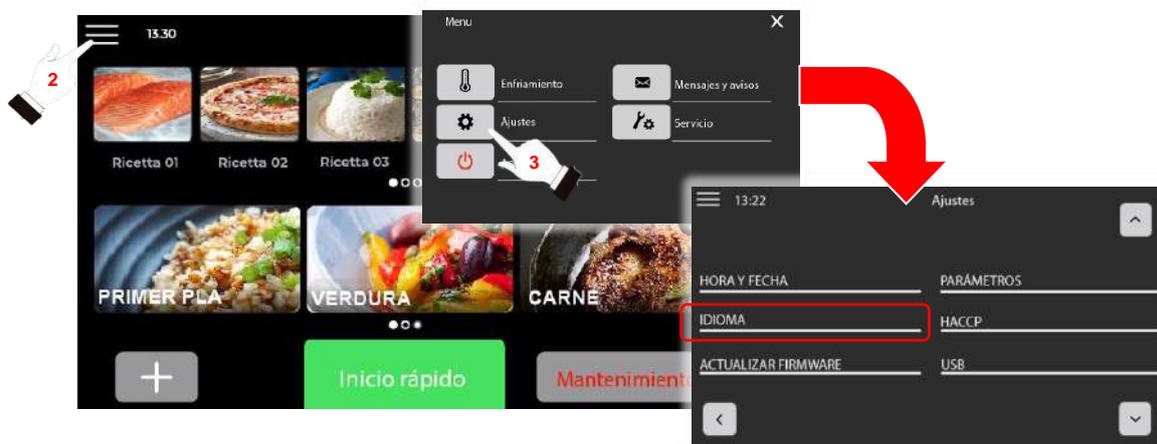
➤ TIME AND DATE

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the icon .
3. Click on the icon  to access the settings menu and then click on **“TIME AND DATE”**.
4. Set the date and time correctly and activate, if desired, the automatic seasonal time change (**DST**).



➤ LANGUAGE

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the icon .
3. Click on the icon  to access the settings menu and then click on **“LANGUAGE”**.
4. Choose the desired language from the options displayed and press **“OK”**.



➤ **FIRMWARE UPDATE**



This procedure may only be carried out by an authorised technical service and, under no circumstances may it be manipulated by the end user. In this case, the warranty of the appliance will be immediately void, exempting the manufacturer from any liability that this may entail.

➤ **PARAMETERS**



The list of parameters accessed through this icon can be manipulated by the end user of the device. FM recommends **NOT ALTERING ANY OF THESE VALUES** without first Consulting the authorised technical service in your area (<https://fmindustrial.es/es/sat>). If the end user modifies or alters any of these values, the warranty of the device will be immediately void and FM will not be liable for the consequences of such actions.

➤ **HACCP**

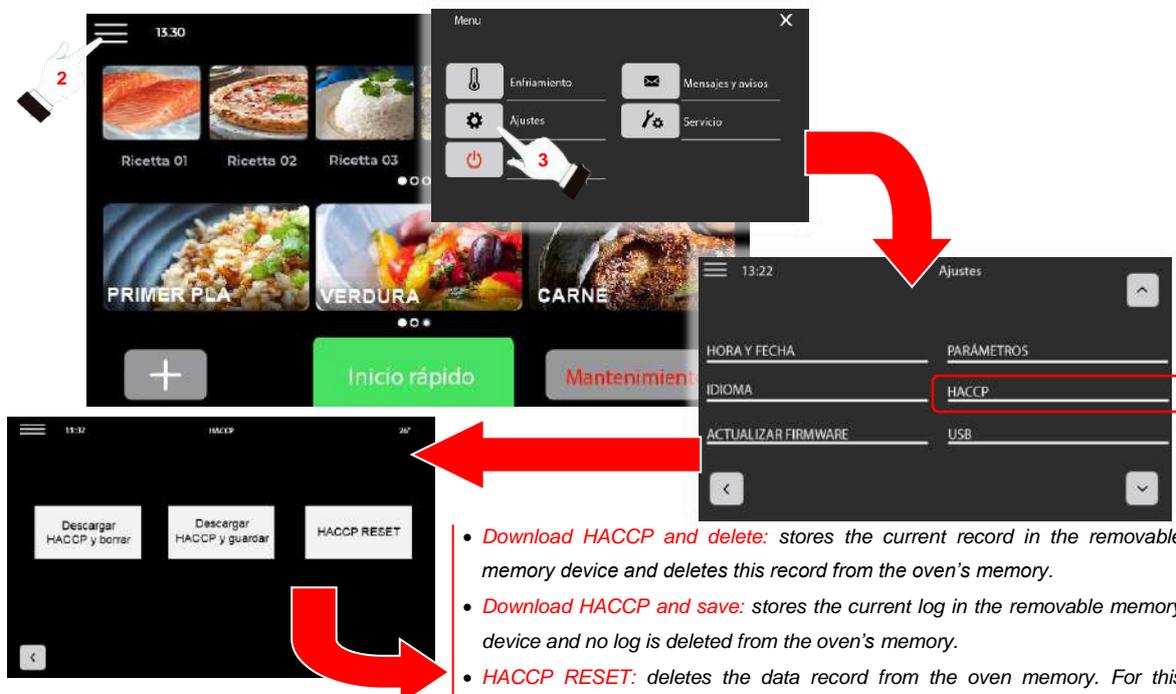


In order to download HACCP data, you must **FIRST** insert a **STORAGE DEVICE** into the **USB slot** provided in your device and enabled for this purpose. The location of this connection is specified in section 6.2 of this document.

This device has the capability to record HACCP data, which enables the assessment of hazards and the establishment of control systems focused on prevention.

To access the HACCP register, perform the following steps:

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the icon .
3. Click on the icon  to access the settings menu and then click on “HACCP”.
4. Choose the desired option from the three options displayed and accept to start downloading.



- **Download HACCP and delete:** stores the current record in the removable memory device and deletes this record from the oven's memory.
- **Download HACCP and save:** stores the current log in the removable memory device and no log is deleted from the oven's memory.
- **HACCP RESET:** deletes the data record from the oven memory. For this option, no removable memory device is required, as there is no option to save the data to it.

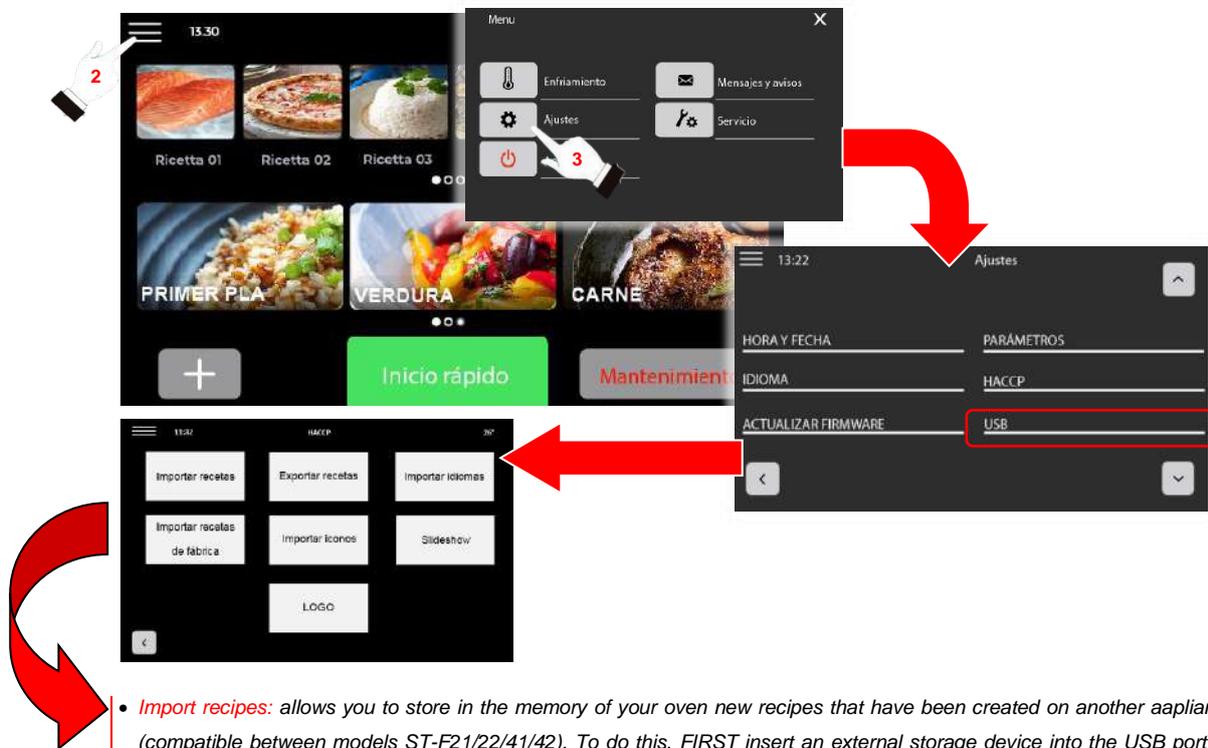
The HACCP option increases the food safety of your appliance and brings other important benefits, such as facilitating the competent authority's regulatory inspection work and promoting International trade, thus increasing confidence in food safety.

Its main objectives include:

- Strengthens food safety.
- Facilitates compliance with food law regulations.
- Facilitates agility and provides transparency in regulatory inspection controls.

➤ USB

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the  icon.
3. Click on the icon  to access the settings menu and then click on "USB".
4. Choose the desired option from the seven options displayed and accept to start the procedure.



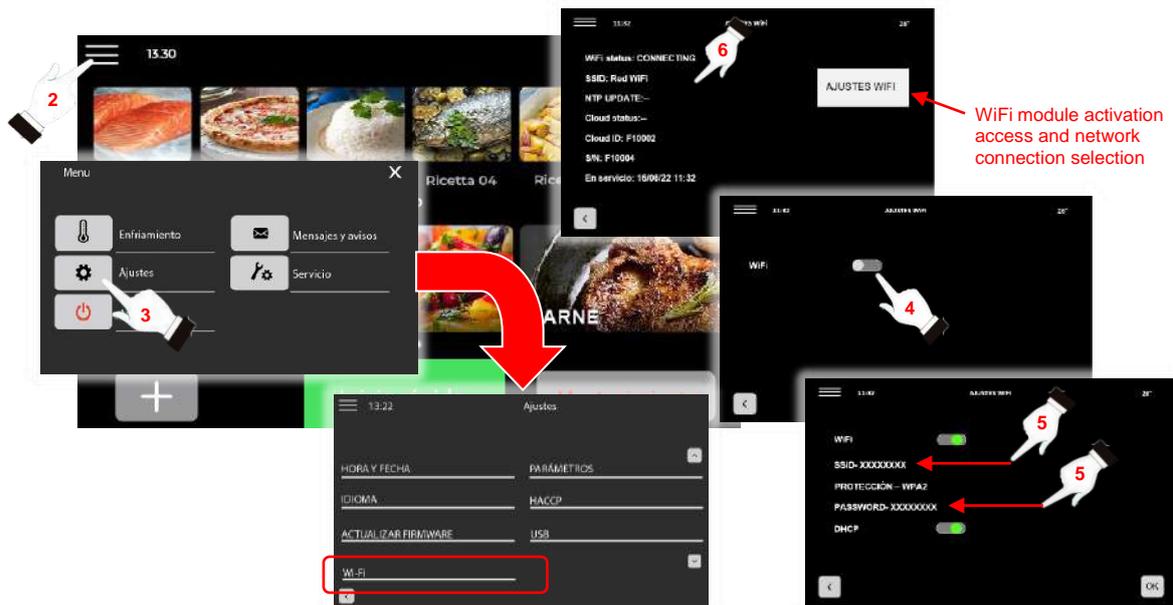
- **Import recipes:** allows you to store in the memory of your oven new recipes that have been created on another appliance (compatible between models ST-F21/22/41/42). To do this, **FIRST** insert an external storage device into the USB port on the oven and then click on the icon to start the procedure.
- **Export recipes:** allows you to make a copy of the recipes that have been created in your oven (compatible between models ST-F21/22/41/42). To do this, **FIRST** insert an external storage device into the USB port of the oven and then click on the icon to start the procedure.

RECIPES INCLUDED BY DEFAULT IN THE APPLIANCE SHALL NOT BE EXPORTED.

- **Import languages:** this action may only be carried out by an authorised service technician.
- **Import default recipes:** this action may only be carried out by an authorised service technician.
- **Import icons:** this action may only be carried out by an authorised service technician.
- **Slideshow:** this action may only be carried out by an authorised service technician.
- **LOGO:** this action may only be carried out by an authorised service technician.

➤ Wi-Fi

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the  icon.
3. Tap on the icon  to access the settings menú and then tap on “Wi-Fi”.
4. Click on the “WiFi SETTINGS” icon and then activate the WiFi module by clicking on the corresponding icon. For the activation of the WiFi module to be EFFECTIVE, before selecting the network you wish to connect to, you must click on the “OK” button to confirm the activation.
5. Select the network you wish to connect to (“SSID”), enter the password (“PASSWORD”) and click “OK” again.
6. The connection is succesful when the WiFi status line shows “CONNECT TO...”. Note that the module status is updated in 5-10 second cycles, so the connection confirmation may take a few seconds to appear.



 It is not necessary to enter a password to access the WiFi module settings and, in case a password is requested, just click on the “OK” button and keep the digit field empty.

6.4.2 “SERVICE” submenu

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the  icon.
3. Click on the icon  to access the service submenu.



 This submenu can only be accessed by an authorised technical service and under no circumstances can it be manipulated by the end user of the device. In order to access it, an access code is required, which will be provided by the

FM technical service to the authorised person at the time of carrying out the repair or maintenance work on the appliance, and whenever the intervention so requires.

6.4.3 “COOLING” action

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the  icon.
3. Click on the “COOLING”  icon. The process shall be activated as soon as the door of the appliance is opened. Likewise, the turbine shall remain running until the temperature of the inner chamber is 70°C or lower or the door is closed again.

 *The cooling process remains active until the appliance door is closed again or the temperature of the interior chamber is 45°C or lower.*

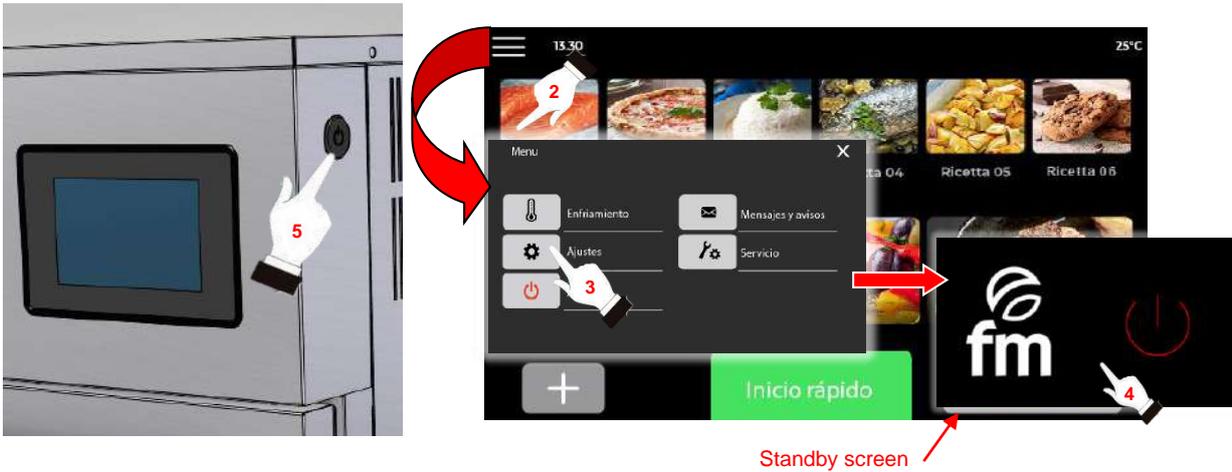


6.4.4 “OFF” action / STAND-BY mode

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the  icon.
3. Click on the “OFF”  icon .

 *In this shutdown mode, the auxiliary cooling system of the appliance will also remain running, so it is **COMPLETELY NORMAL** to hear the sound of the fan motor of the auxiliary cooling system.*

4. To exit the stand-by mode and access the initial screen, simply press any area of the stand-by screen to access the initial screen of the oven again.
5. To **COMPLETELY** switch off all the systems of the control unit, simply press the button on the right-hand side of the control panel (see front view of the unit). In this way, it will also be possible to



6.4.5 “MESSAGES AND ALERTS” Action

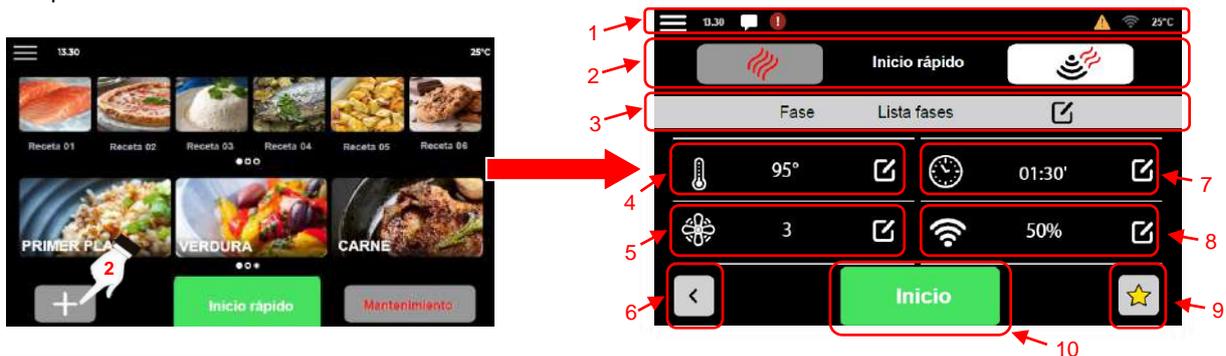
1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click on the icon.
3. Click on the icon “MESSAGES AND ALERTS” . In this way, you will have access to and up-to-date overview of the latest alarms and events that have occurred while using the device.



6.5 “New recipe” Icon

Through this icon you can access the main screen for configuring the parameters of a recipe for its subsequent start-up. To do this, you must carry out the following steps:

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, click the icon and you will get access to the parameter configuration screen of a recipe.



The parameter configuration screen of a recipe is structured as follows:

1. **Notification bar:** contains the same information as the notificación bar on the home screen (see section 6.3)
2. **Cooking mode selection group:** allows you to select the desired cooking mode for each recipe, as follows:
 -  **“CONVECTION MODE”:** in this mode, only the heating element of the appliance is activated to cook the food.
 -  **“MICROWAVE + CONVECTION MODE”:** in this mode, the microwaves are activated together with the resistance of the device.
3. **Phase editing group:** allows you to edit the phases of a recipe by clicking on the icon . In addition, while a firing cycle is running, it displays information on the phase being executed.
4. **“TEMPERATURE” Icon:** allows you to select the desired temperature value for the cooking cycle to be carried out, this can be between 30°C and 270°C. This icon is active in both “convection mode” and “convection + microwave mode”.
5. **“TURBINE SPEED” Icon:** allows you to select the speed of rotation of the inner chamber turbine, with 1 being the minimum speed and 6 the maximum speed. This icon is active in both “convection mode” and “convection + microwave mode”.
6. **“BACK” Icon:** by clicking on this icon, we return to the initial screen of the device.
7. **“TIME” Icon:** icon allows you to select the desired cooking time for the recipe to be cooked. This icon is active in both "convection mode" and "convection + microwave mode".
8. **“MICROWAVE POWER” Icon:** allows you to select the desired microwave power level between 4 percentage values, these being 25%-50%-75%-100%. This icon is only active in "convection + microwave mode"
9. **“FAVOURITES” Icon:** allows you to classify a recipe within the group of favourite recipes if you click on this icon. All recipes in which this icon is shaded in yellow will be recipes that take part of the favourites group.
10. **“HOME” Icon:** by clicking on this icon we start a recipe (see section 6.7) whose parameters have already been pre-set.

6.6 “Main recipe menu” Icon. Actions and submenus

1. To view the recipe menu, you must first access the parameter configuration screen of a recipe. To do this, you can click on the icon  for creating a new recipe or in the **“QUICK START”**.
2. From the parameter configuration screen of a recipe, click on the icon . This will take you to a window showing the most relevant options and actions in the recipe creation section.



SUBMENUS

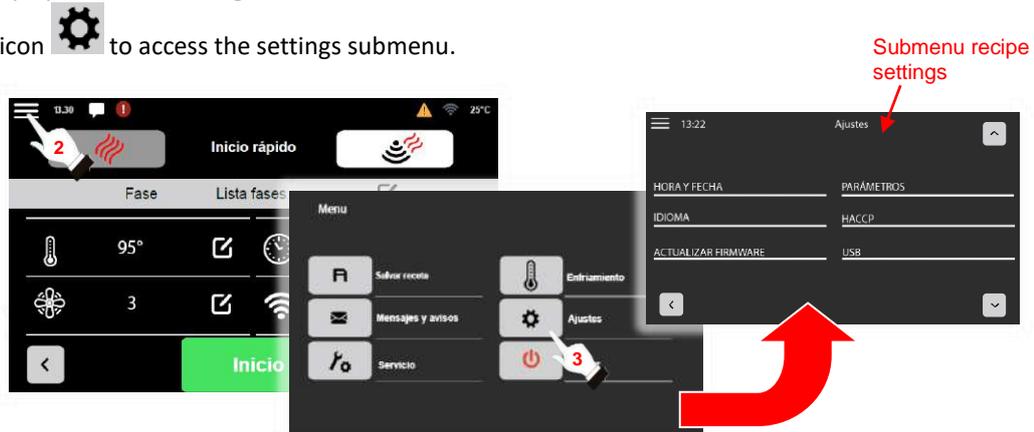
- Settings (section 6.6.1)
- Service (section 6.6.2)

ACTIONS

- Save (+rename+delete) recipe (section 6.6.3)
- Messages and warnings (section 6.6.4)
- Cooling (section 6.6.5)
- Switch off (section 6.6.6)

6.6.1 “SETTINGS” submenu (access from "main menu recipes")

1. Make sure that the device is switched on and no operation is in progress.
2. From the recipe parameters configuration screen, click on the icon.
3. Click on the icon to access the settings submenu.



All actions found in the recipe settings submenu window are similar to those specified in Section 6.3.1

6.6.2 “SERVICE” submenu (access from “main menu recipes”)

1. Make sure that the device is switched on and no operation is in progress.
2. From the recipe parameters configuration screen, click on the icon.
3. Click on the icon to access the settings submenu.



This submenú may only be accessed by an authorised service technician and under no circumstances may it be manipulated by the end user of the appliance. In order to access it, an access code is required, which will be provided by the FM technical service to the authorised person at the time of carrying out repair or maintenance work on the appliance, and whenever the intervention so requires.

6.6.3 “SAVE RECIPE” action (access from "main menu recipes")

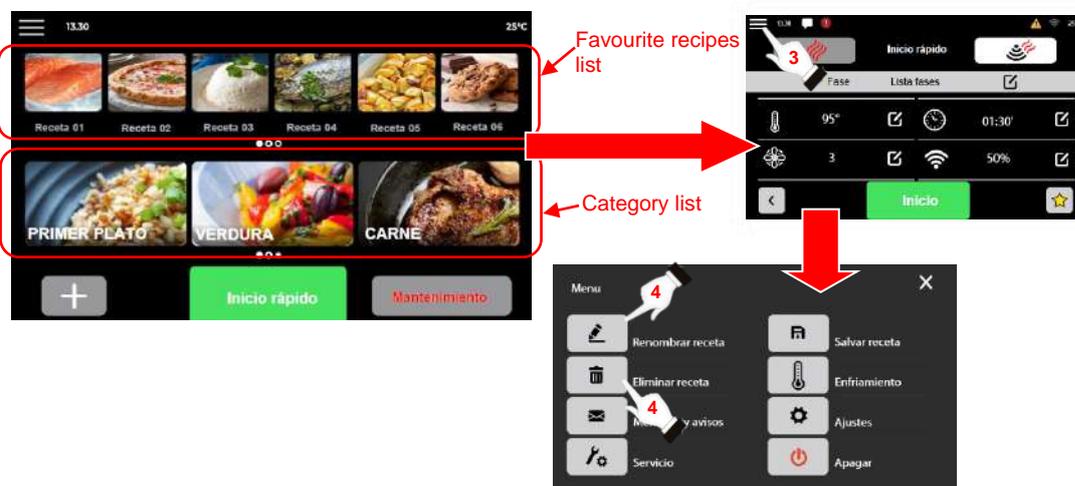
1. Make sure that the device is switched on and no operation is in progress.
2. From the recipe parameters configuration screen, click on the  icon.
3. Click on the icon “SAVE RECIPE”  to start the process of saving a recipe. You must then assign a name to the recipe, classify it into one of the six categories that are already included by default in the appliance’s memory, and choose an icon that corresponds to the product you are going to cook.



To access the recipe already saved, simply go to the initial screen and access the category that was selected during the saving process.

To delete or rename a previously saved recipe, perform the following steps:

1. Make sure that the device is switched on and no operation is in progress.
2. From the home screen, select the recipe you wish to delete. To do this, if it is not included in the list of favourite recipes, go to the category containing the recipe you wish to delete.
3. From the recipe parameter configuration screen, click on the  icon to access the main menu of options.
4. In the main options menu window, click on the “DELETE RECIPE”  icon or the “RENAME RECIPE”  icon, depending on the action you wish to take.





The actions **“DELETE/RENAME RECIPE”** will appear in the main options menu of a recipe if the recipe has been previously saved in the recipe library of the device.

6.6.4 “MESSAGES AND ALERTS” action (access from "main menu recipes")

1. Make sure that the device is switched on and no operation is in progress.
2. From the recipe parameters configuration screen, click on the  icon.
3. Click on the icon **“MESSAGES AND ALERTS”** . This way, you will have access to an up-to-date overview of the latest alarms and events that have occurred while using the device.



6.6.5 “COOLING” action (access from "main menu recipes")

1. Make sure that the device is switched on and no operation is in progress.
2. From the recipe parameters configuration screen, click on the  icon.
3. Click on the **“COOLING”**  icon. The process will be activated as soon as the door of the device is opened. Likewise, the turbine will remain running until the temperature of the interior chamber is equal to or below 70°C or the door is closed again.



The cooling process remains active until the door of the appliance is closed again or the temperature of the interior chamber is 45°C or lower.

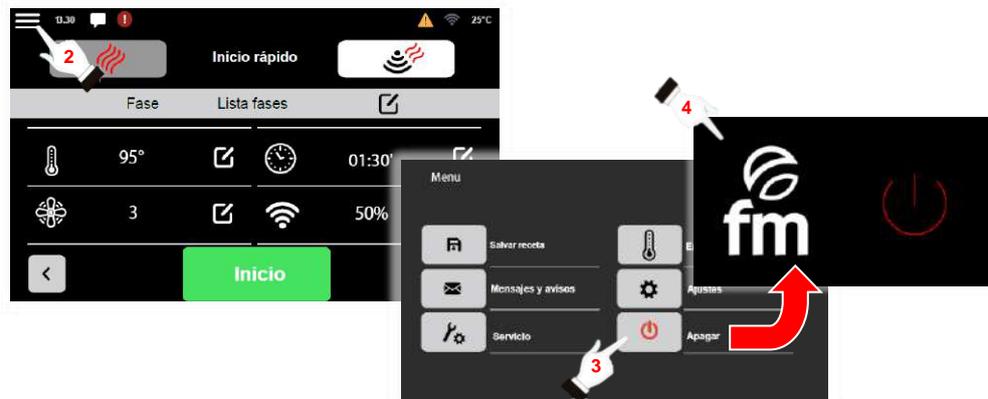
6.6.6 “OFF” action / STAND-BY mode (access from the “main menu recipes”)

1. Make sure that the device is switched on and no operation is in progress.
2. From the recipe parameters configuration screen, click on the  icon.
3. Click on the “OFF”  icon.



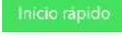
In this shutdown mode, the auxiliary cooling system of the device will also remain running, so it is **COMPLETELY NORMAL** to hear the sound of the fan motor of the auxiliary cooling system.

4. To exit the stand-by mode and access the initial screen, simply press any area of the stand-by screen to access the home screen of the oven again.



6.7 “Quick Start” Icon

As with the “NEW RECIPE” icon, by clicking on the quick start icon, you can access the configuration screen for the parameters of a recipe. To do this, the following steps must be carried out:

1. Make sure that no operations are in progress.
2. From the home screen, click on the  icon and you will get access to the parameter configuration screen of a recipe.
3. Press start to launch the recipe.

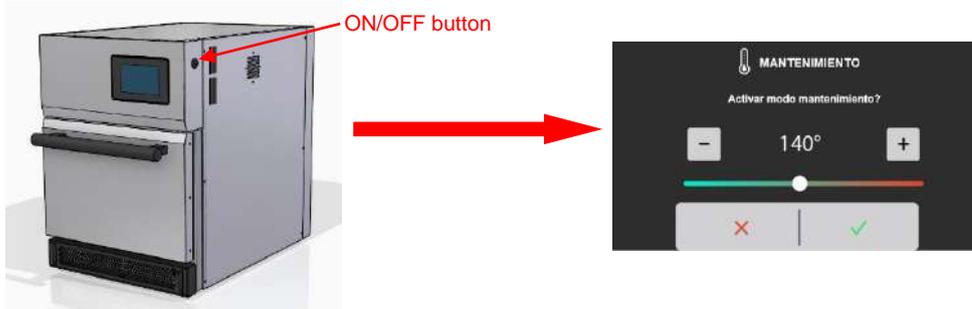


All the functionalities accessed through this icon are similar to those described in section 6.5, except that the inclusion of phases is **NOT ALLOWED**.

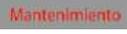


6.8 “Maintenance” Icon

As specified in section 6.3, when the device is normally switched on from the ON/OFF button, the user is offered the possibility of directly activating this mode by displaying a window in which, if he/she wishes to start it up, he/she must select the desired temperature using the temperature increase/decrease icons or scroll bar and then click on the  icon. If you do not wish to activate the “maintenance mode”, simply click on the icon to access the main screen of the device.



If you wish to activate the “maintenance mode” **if this has not already been done when switching on the device**, you should go to the home screen and proceed as follows:

1. Make sure that no operations are in progress.
2. From the home screen, click on the  icon and you will get access to the temperature selection window for activation of this mode.
3. Select the desired temperature by means of the icons  or  or use the scroll bar and press .



4. When this mode is activated, a standby screen will appear on which the temperature increase of the chamber will be shown in real time. Once the desired temperature value is reached, a warning will be emitted on the screen and, in addition, an acoustic signal will be activated informing of this event. To deactivate this signal, simply click on the horn icon or on the icon  and, once this event is recognised, the maintenance process will remain active until it is manually deactivated by clicking on the  icon and then, on the  icon.



While the “maintenance mode” is running, no other operation can be carried out.

7. Cleaning of the device



Before proceeding with the cleaning process, make sure that the appliance is disconnected from the power supply and has cooled down properly. For this purpose, a chamber temperature below 50°C is recommended (see section 6.4.3. **Cooling action**).



This interior and exterior surfaces of the oven must be cleaned frequently to ensure hygiene and proper operation of the oven. Do NOT use abrasive or flammable products that could damage the appliance to clean the external surfaces. To clean the interior surfaces, use only products indicated by the manufacturer. The use of other products could damage the appliance or any of its components, which will result in the **TOTAL** cancellation of the warranty.

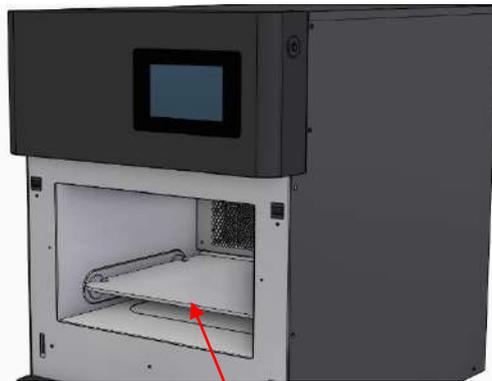


Cleaning procedures other than those recommended by the manufacturer, may result in damage to both the device and the user.



The ST-F21/22 units have a catalytic filter installed behind the rear cover of the interior chamber. This filter makes the air circulating inside the chamber as clean as possible, so this component should **NOT** be exposed to corrosive or abrasive cleaning products not recommended by the manufacturer.

In order to ensure the correct functioning of the device, as well as minimum hygiene conditions, it is recommended to carry out a daily cleaning routine in which the condition of the inner chamber, the cooling air inlet filter and then removable upper tray are checked².



ST-F21/22 interior chamber

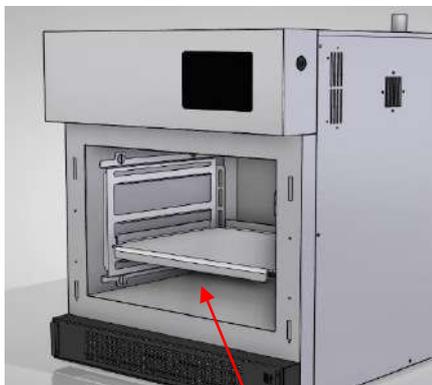


ST-F21/22 Air inlet filter



Catalyst filter
Only in ST-F 21/22 models

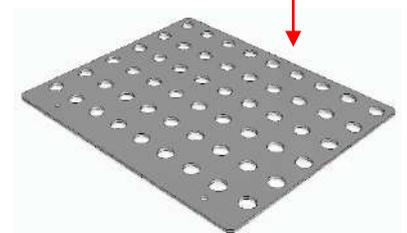
Removable upper tray
Only in ST-F 21/22 models



ST-F41/42 interior chamber



ST-F41/42 Air inlet filter



² ST-F 41/42 models do not have a removable top tray
Ed.:21 - Ver.:01 - 01/01/2021

To carry out a correct cleaning procedure, depending on your oven model, it is recommended to follow the following steps:

1. Interior chamber cleaning: to carry out this task, it is recommended to use non-abrasive cloths or scouring pads and warm water or cleaning products recommended by the manufacturer, depending on the degree of soiling.

- ACCUMULATION OF LIGHT DIRT: microfiber cloth + warm water + neutral soap
- MODERATE DIRT ACCUMULATION: scouring pad for delicate surfaces + warm water + neutral soap
- STRONG DIRT ACCUMULATION: scouring pad for delicate surfaces + warm water + FM detergent

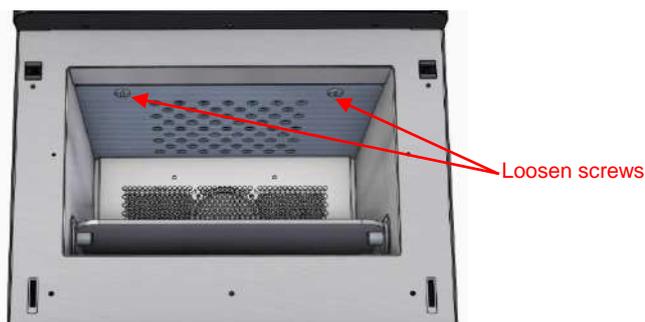
CLEANING PERIODICITY: Daily.

• **ST-F21/22 MODELS**

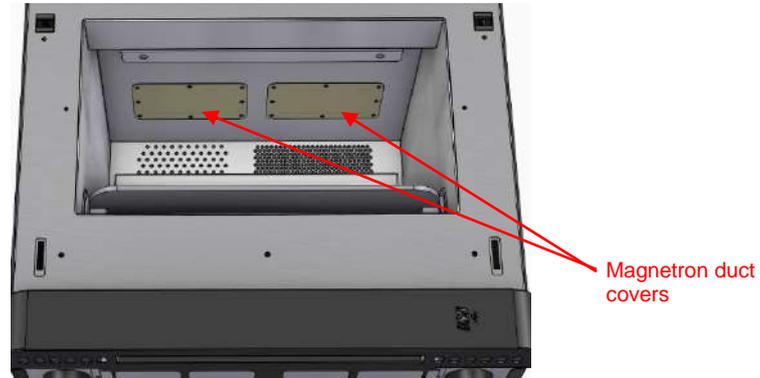
a. Remove the food tray:



b. Remove the removable top tray: to do this, loosen the two screws holding it in place. You can do this manually or using a coin or flat screwdriver. Once loosened, the tray will drop under its own weight from the front area, allowing removal from the interior chamber:

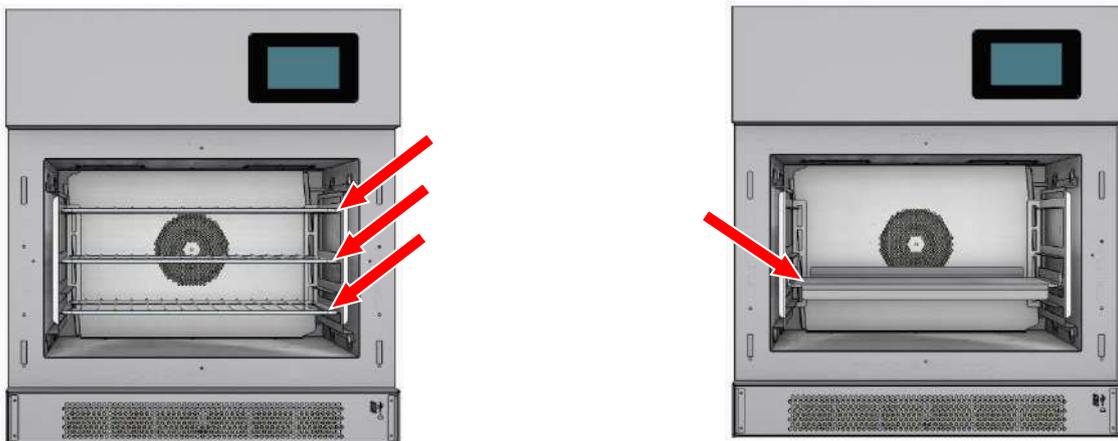


c. Clean the interior chamber of the oven, taking **SPECIAL CARE** with the **PROTECTIVE CAPS** of the **MICROWAVE³** outlet ducts. These caps should **NEVER** be cleaned with corrosive or aggressive products not recommended by the manufacturer, as they may cause immediate deterioration and malfunctioning of the device. If in doubt about the cleaning product to be used, **ALWAYS USE WARM WATER** to clean the interior chamber.

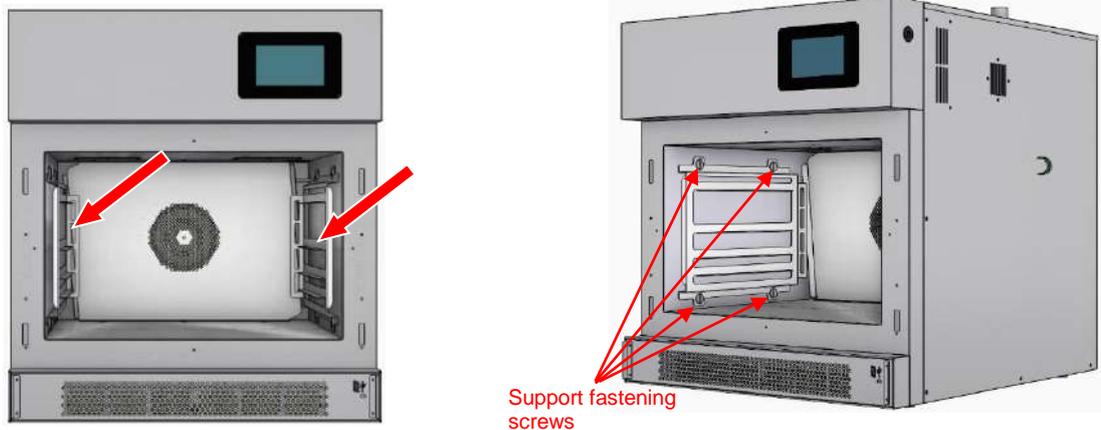


- **ST-F41/42 MODELS**

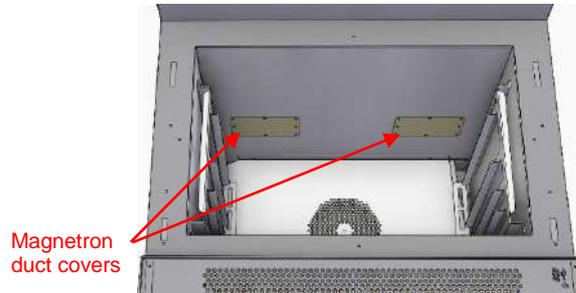
a. Remove the food support tray (or trays):



b. Remove the tray supports (optional) in order to facilitate the cleaning of the inner chamber side covers. To do this, remove the 4 screws provided on each of the supports. If necessary, you can use a coin to make it easier to remove them:



- c. Clean the interior chamber of the oven, taking **SPECIAL CARE** with the **PROTECTIVE CAPS** of the **MAGNETRONS⁴** outlet ducts. These caps should **NEVER** be cleaned with corrosive or aggressive products not recommended by the manufacturer, as they may cause immediate deterioration of the caps and malfunctioning of the appliance. If in doubt about the cleaning products to be used, **ALWAYS USE WARM WATER** to clean the interior chamber:



2. Cleaning air inlet filter: to carry out this task, it is recommended to use only a soft, non-abrasive cloth and warm water or cleaning products recommended by the manufacturer. In this case, if you wish, you can put the components in the dishwasher.

- **CLEANING PERIODICITY: Daily.**



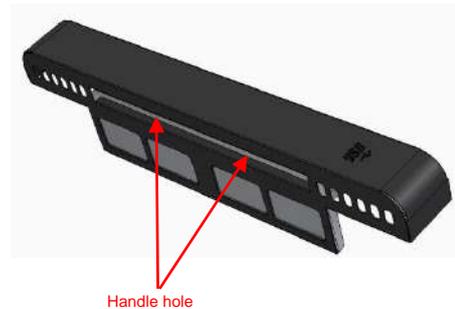
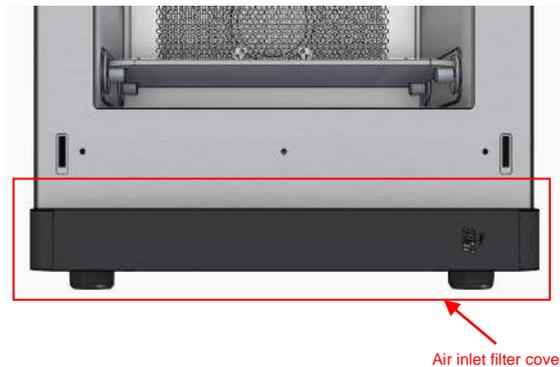
Before starting this cleaning procedure, make sure that the appliance is turned OFF.



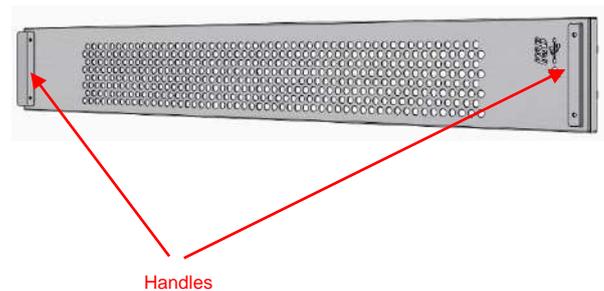
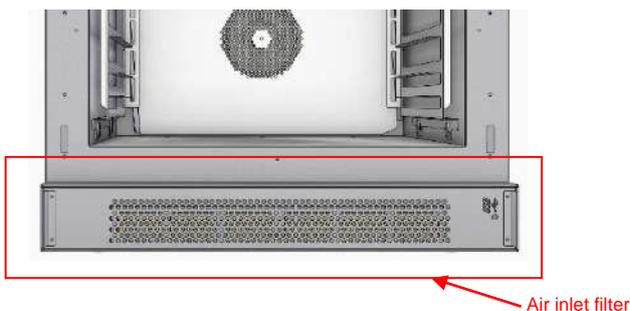
The procedure to remove the filter will depend on each oven model.

- a. Remove the outer cover of the air inlet filter.

- OUTER COVER MODELS ST-F21/22

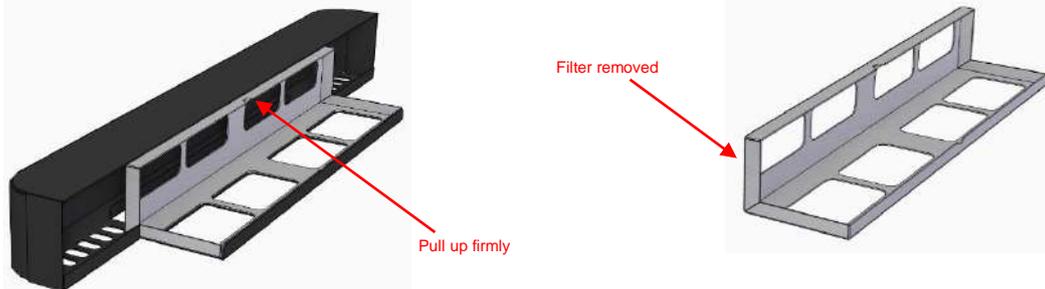


- OUTER COVER MODELS ST-F41/42

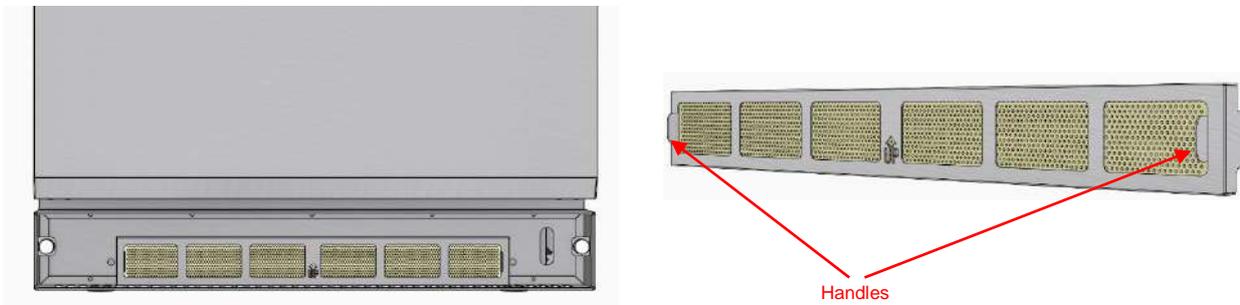


b. Remove the air filter:

- AIR FILTER MODELS ST-F21/22



- AIR FILTER MODELS ST-F41/42



1. Cleaning removable top tray: to carry out this task, it is **MANDATORY** to use only a soft, non-abrasive cloth and warm water or cleaning products recommended by the manufacturer.

- **CLEANING PERIODICITY: Daily.**

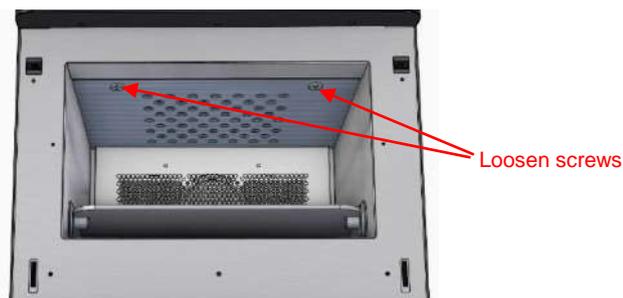


The cleaning procedure for the removable top tray only concerns ST-F 21/22 models.



In case there is a large accumulation of dirt in this filter, it is recommended to soak the filter for at least 30 minutes in hot water with a little diluted soap to soften the food debris and facilitate cleaning.

- a. Remove the removable top tray: to do this, loosen the two screws that hold it in place. You can do this manually or using a coin or flat screwdriver. Once loosened, the tray will drop under its own weight from the front area, allowing removal from the interior chamber:



1. Cleaning of catalyst filter: to proceed with this matter, it is recommended to leave the filter under a copious stream of warm water, and, if necessary, use the cleaning products recommended by the manufacturer. For filter drying, use a non abrasive dry cloth.

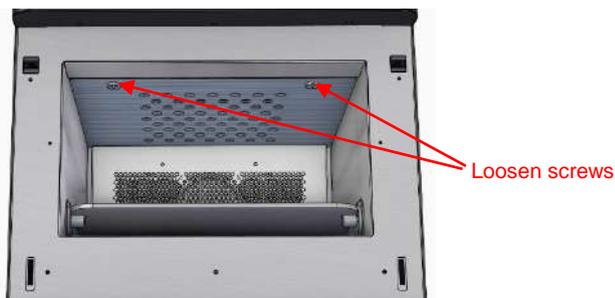


The filter cleaning procedure only affects ST-F 21/22 models and should be carried out **AT LEAST ONCE EVERY 6 MONTHS**.

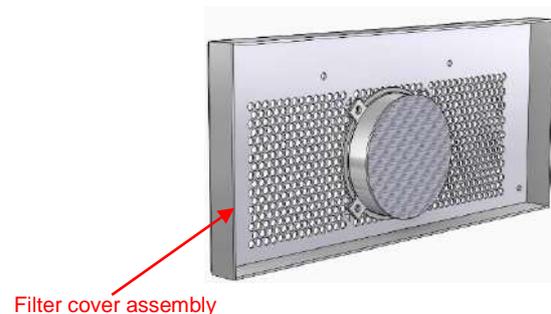
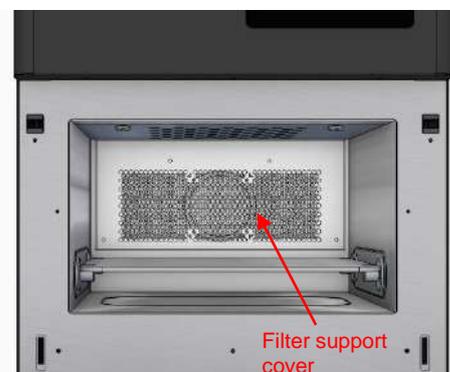


In case there is a large accumulation of dirt in this filter, it is recommended to soak the filter for at least 30 minutes in hot water with a little diluted soap to soften the food debris and facilitate cleaning.

- a. Remove the upper removable tray: to do so, loosen the two screws that hold it in place. You can do this manually or by using a coin or flat screwdriver. Once loosened, the tray will drop under its own weight from the front area, allowing extraction from the inner chamber:



- b. Remove the filter support cover: to do so, loose the twelve screws that hold it in place. Once loosened, pull the cover outwards to remove the filter and carry out the cleaning procedure. If necessary, and to make cleaning even easier, you can loosen the 4 screws that attach the filter to the support cover.



8. Alarms and errors

ALARM/ERROR	CAUSE	SOLUTION
Configuration error. Check card firmware version and parameter version.	<i>Incompatibility between card and display.</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Connection error between card and display.	<i>The physical connection between the card and the display is not correct.</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Safety thermostat intervention.	<i>The cooking chamber has exceeded the maximum permissible temperature limit.</i>	<i>Acknowledge alarm and silence buzzer. Wait at least 5 minutes for the oven to cool down with the door open. Subsequently, reset the safety thermostat (see section 6.2). If the alarm persists, contact the authorised technical service.</i>
High temperature of the magnetron.	<i>The magnetrons have exceeded the maximum temperature limit</i>	<i>Acknowledge alarm and silence buzzer. Wait at least 2 minutes for the magnetron temperature to drop below the upper limit. If the alarm persists, contact authorised technical service.</i>
Error in the functioning of the chamber temperature probe.	<i>Possible deterioration of the probe or connection error</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 1.	<i>Error de inicio del DAC del variador</i>	<i>Acusar alarma y silenciar zumbador. Apagar el aparato desde el botón principal y encenderlo nuevamente transcrito al menos 1 minuto. Si la alarma persiste, contactar con servicio técnico autorizado.</i>
Inverter 1 error 2.	<i>The output current of the inverter has exceeded the maximum limit for one of the following reasons: - Possible short-circuit or ground fault of the motor. - Possible blocking or overloading of the motor. - Possible error in the motor connection (star/triangle).</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 3.	<i>The temperature of the drive heat sink has exceeded the maximum limit for more than 5 seconds for one of the following reasons: - Possible blocking or overloading of the motor. - Possible error in the motor connection (star/triangle)</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 4.	<i>EEPROM connection error on the inverter.</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 5.	<i>Incorrect parameter values in the EEPROM of the inverter</i>	<i>Acknowledge alarm and silence buzzer. Switch off the device from the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 6.	<i>The engine temperature has exceeded the maximum limit : - The engine is blocked or overloaded</i>	<i>Acknowledge alarm and silence buzzer. Switch the device off at the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 7.	<i>The current in one of the motor phases has exceeded the lower limit for more than 3 seconds for one of the following reasons: - Possible error in the motor connection (star/triangle) - One of the motor cables is not in good condition</i>	<i>Acknowledge alarm and silence buzzer. Switch the device off at the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
Inverter 1 error 8.	<i>Error in Modbus communication of the inverter for one of the following reasons: - Possible wiring error in +D, -D or GND drive wiring. - The oven has been turned off incorrectly and there is no communication between the inverter and the main board.</i>	<i>Acknowledge alarm and silence buzzer. Switch the device off at the main button and switch it on again after at least 1 minute. If the alarm persists, contact an authorised service centre.</i>
High temperature electronics compartment.	<i>The temperature of the main board compartment has exceeded the maximum limit</i>	<i>Acknowledge alarm and silence buzzer. Check air inlet filter cleanliness (apt. 7). Switch the device off at the main button and switch it on again after at least 2 minutes. If the alarm persists, contact an authorised service centre.</i>
Oven incorrectly switched off during a cooking cycle.	<i>The appliance has been switched off or has suffered a power failure during a cooking cycle</i>	<i>Acknowledge alarm and silence buzzer. Wait at least 1 minute for regenerated reset test alarms to disappear.</i>



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