

INSTALLATION AND OPERATION MANUAL

EC-3 COMBI OVEN



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INSTALLATION

Introduction

Observe the following instructions to install your EC-3 oven properly and take advantage of all its features. Not observing the installation instructions below may void its warranty and result in harmful consequences.. The instructions below provide for the minimum requirements for correct oven operation. Ask your local authorities for other restrictions that may apply to your specific location.

Your EC-3 oven installation requires:

- Flat and leveled surface
- Electricity supply: 220 V/ 2 ~/ grounded
- Cold water supply
- Connection to the water drain system

WARNING: There are no user serviceable parts inside the oven. All maintenance requiring the removal of any oven cover must be made by certified technicians.

Location

The EC-3 must be located on a flat and leveled surface, in a place protected from water steam, cooking oil spills, heat, and other gases or liquids, for they can damage the digital electronic control. A clearance of 15 cm (1/2 ft), should be observed from any walls or vertical surfaces to allow the oven circuitry ventilation.

Electricity

EC-3 electric power supply must be provided for the following oven parameters:

Volts.....: 220 V \pm 22 V, Phases.....: monophase,
Frequency.: 60 or 50 Hz Power.....: 6,400 W (maximum output)
Amperes....: 29.1 A

An exclusive circuit breaker must be provided for the oven, at no more than 1,5 m (5 ft), from the equipment. Grounding is mandatory. Do not use the installation neutral phase as ground.

WARNING: Not grounding the oven properly may cause human damage and automatically voids the oven warranty.

Consult with a certified technician to prepare for oven installation.

Water

A cold water outlet of 3/4" BSP thread, male, must be provided at no more than 1,5 m (5 ft), by the right side of the oven, provided with valve. Use the hose provided with the equipment.

Water pressure must be within the range of:

- Minimum water pressure.....: 4.3 psi (9 ft of water)
- Maximum water pressure.....: 11.4 psi (26 ft of water)

WARNING: Using hot water to feed the oven may damage oven internal tubing and automatically voids the oven warranty.

Drainage

A 3/4" hose and clamp are provided with the oven for drainage purposes. The hose must be connected with the clamp to the oven bottle trap outlet, located at the lower back of the oven. Through this hose, excess water and food fat

will be drained. Connect the free end of the hose to the building drain system observing the following instructions:

- *The free end of the hose must be connected to a drainage system at a lower level than the end connected to the oven siphon to allow for gravity flow.*
- *Do not append anything that might restrain hose diameter*
- *Do not connect the hose directly to the building sewer system*
- *Make a loose, i.e., not sealed connection. Even though the oven has its own siphon, a sealed connection with the drainage system may cause air inflow from the drain to the inside of the oven. The hose may be simply put over the kitchen floor water grill, if available.*

The temperature of the water coming from the drain hose may reach 160 °F (70°C).

Draft Hood

Even though the EC-3 oven is designed for the best heat insulation, and minimum steam and hot air generation, consider the convenience of installing a hood over the equipment to trap heat, steam and grease. In this case, the hood should be 16 " (40 cm), above the oven top, and project approximately 12" (30 cm), in front of the oven front panel to catch the steam that escapes when opening the door.

OPERATION OF COMBINED OVEN EC3

CONTROL PANEL

Keys and Displays



Upper Display – Displays the chamber temperature, probe temperature or programmed time (decreasing), programmed function, steam level and messages provided with the instructions.



Lower Display – Displays the bright LED's indicating the operations and troubleshooting. has an adjustable vapour level beyond 95 C

Key	Function	Allowing Changes & Observations
	Steam cooking	Temperature set at 98°C and steam set at 100%
	Combined Steam	Temperature ranging from 30°C to 250°C and adjustable steam level between 2% and 100% inside of chamber. To adjust the steam level repeatedly press this key.
	Hot air	Allows changes to the temperature ranging from 30°C to 250°C
	Crisp	If pressed a second time, the Crisp (*) function will be activated.
	Steamer	Plain steam, with no forced convection. Allows changes to the temperature ranging from 30°C to 100°C
	Generation	Allows for food regeneration. Temperature can be adjusted from 90°C to 130°C. The steam level is also adjustable by repeatedly pressing the key.
	Recipes	Press this key to program available recipes. A total of 16 recipes with 8 steps each may be saved.
	Cleaning	Automatic cleaning. To start this function press this key
	Grill	Activates the resistance installed in the upper part of the oven chamber.
	Play/Pause	Starts or stops a particular function. Also, used to start a recipe and the cleaning process.
	Temperature	Displays the actual temperature inside the chamber.
	Internal Probe	Determines that the control of the function be made through the internal temperature of the
	Time	Determines that the control of the function be made through the cooking time.
	Increase/Decrease	It allows to change time, chamber temperature or internal temperature, according to the context.
	Reverse	Allows to return to the first screen.

* The crisp function helps to dry the air inside cavity, hence making food crispier. It turns on and off as the hot air key is pressed.

Upper Display messages and actions required

Upper display	Meaning
Lack of water	Oven requires water. Check the water supply.
High temperature	Do not clean oven at this time. Oven considered extremely hot.
Spray the oven cleaner	Spray the oven cleaner inside the chamber to continue the cleaning
Steaming	A message with a countdown in seconds when the cleaning process has been activated.
Wait, water	A message with a countdown in seconds when the cleaning process has been activated.
End the process with the manual hand shower	Use the hand shower to rinse the oven.
Pause in the operation	Toggle switch pauses the ongoing operation, or restarts it.
The door is open	Operation is paused. Close the door to resume.

STARTING THE FUNCTIONS

HOT AIR (BAKING):

 30°C to 250°C (dry). This function is used for pastries, all types of breads and to golden brown food in general. Generally, when cooking meat, this function is used at the end of the process. The message "HOT AIR" will be shown in the upper display and the LED  will be lit.

BROILING, GRILLING AND FRYING:

Press the key  and adjust the temperature to 200°C or above.

CRISP

If  is pressed again, the icon  will appear, indicating that the CRISP function is on. When activated it will make the air inside the cavity drier, thus helping in making food crispier. It will be turned on and off as you repeat pressing the hot air key.

STEAM COOKING:

 Temperature at 98°C with 100% of steam. In this function, the steam level, as well as, the chamber temperature have already been set and can not be changed. In general, it is used to cook food that otherwise would be made in a pan with boiling water. It is used for vegetables, with perforated or expanded mesh GN pans, rice, and stir-fried food. The upper display will show the message "STEAM" and the LED  in the lower display will be lit.

COMBINED STEAM:

 30°C to 250°C with a steam level ranging from 20% to 100%.

In order to set the steam level, press again the key . The upper display will show the message "COMBI STEAM" and the LEDs  and  will be lit.

 **Steam baking:** from 130°C to 250°C with steam. The suggested level of steam is above 50%;

 **Cooking delicate food:** up to 90°C. Used for cooking delicate vegetables, e.g. broccoli, cauliflower, or to cook "bain-marie" foods, as condensed milk flans that can be made in appropriate plastic cups dispensing the water-filled pan normally used.

 **Cooking "tough" food:** 110°C with the steam level already set. Used for cooking chickpeas, broad bean.

 **Thawing:** at 60°C; with the level of steam already set;

REGENERATION:

Press . The temperature can be set from 90°C to 130°C and the steam may be adjusted from 20% to 100% using the same key. In general, steam is set to 100%. In case of dry food, use the function "hot air" (0% of humidity). The end of the function can be set by time, which is used for food inside containers, or by the internal probe temperature placed inside food, or containers. The upper display will show the message "REGENERATION" and the LEDs  and  in the lower display will be lit.]

STEAMER FUNCTION:

Press . This function can also be called 'plain steam' or simply 'steaming', since there is no forced convection of air inside the chamber – the turbine will be turned off. The chamber temperature can be adjusted from 30° to 100° C, and it is controlled by the boiler. The upper display will show the message "STEAMER" and the LED  in the lower display will be turned on.

This function is used for cooking delicate vegetables: greens, cauli-flower, broccoli, for bain-marie and for keeping the temperature of heated moist food (temperature of 75°C).

GRILL:

Press  - Starts the function that allows the superficial browning process of any type of food (BROILING), with a time limit of 10 minutes. It works with the door opened or closed. When the door is closed the system activates  and  to achieve a higher potency. The temperature inside the chamber can be adjusted up to 250°C. When the door is opened, only the resistance in the upper part switches on. Better results will be achieved if the food is placed near the broiler.

Procedure to start the Grill function:

Door opened or closed



Open the door and keep it opened so that the oven will work as a "salamander broiler", for up to 10 minutes.

Place the food close to the resistance (upper part). When the door is closed the turbine starts working.

Procedure to start the broiling function and to heat the food. Close the door to start the process.



Place the food close to the oven's resistance (upper part) and close the door. The turbine will be activated. The temperature inside the chamber can be adjusted up to 250°C.

PROGRAMMING THE TEMPERATURE INSIDE THE OVEN:

The upper display will show the programmed temperature inside the chamber. To verify the present temperature, press the  key once and the actual present temperature will be shown for a few seconds.

To change the temperature inside the chamber, select one of these functions:



 , and then select

 , to adjust the temperature.

In the function  'steam cooking', the temperature is set at 98°C and can not be changed.

PROGRAMMING THE TIME FOR A FUNCTION:

Select a function:

 , or  , or  , or  , or  , or  , or 

, and then select

 , to adjust the time.

 When the timer is set at "000", the oven will work non-stop in the function "Grill".

PROGRAMMING THE PROBE TEMPERATURE:

Position the food into the oven, place the thermometer into the thicker part of the cooking item, then close the oven door. The upper display will show the selected function, the chamber temperature and probe temperature. In order to know the present temperature inside the food press the key .

Select a function:

 , or  , or  , or  , or .

 , and then select

 , to adjust the temperature.

PROBE TEMPERATURES: INNER FINISHING

FOOD		T° PROBE
Beef tenderloin	Rare	60° C
Lamb shoulder	Medium	66° C
Rabbit	Medium	70° C
Stewed Food	Well-done	95° C
Chicken - thigh	Well-done	90° C
Chicken - chest	Well-done	85° C
Whole chicken	Well-done	88° C
Roast beef - tenderloin	Rare	60° C
Roast beef	Rare	60° C
Bread		98° C
Veal shoulder	Well-done	80° C

FOOD		T° PROBE
Veal leg	Well-done	78° C
Stir-Fry Fish	Medium	75° C
Turkey	Well-done	88° C
Salmon - filet	Rare	65° C
Sausage	Medium	72° C
Pork - knee	Medium	95° C
Pork - boneless pork loin	Medium	80° C
Pork - ribs	Rare	75° C
Broiled Food - pie dish	Medium	60° C

SETTING THE STEAM LEVEL :

Select a function



Each time the key is pressed, the steam level is increased by 20%. The oven shows 5 levels of steam.

In the function  'steam cooking', the temperature is set to 98°C as well as, the steam level to 100%.

RECIPES:



Up to 16 recipes with 8 independent steps each may be saved in this oven. In each step of the recipe the following parameters can be defined:

- . the amount of steam (0 to 100%, ranging from hot air and combi steam)
- . chamber temperature
- . time of operation, or internal probe temperature, and
- . use of the grill.

PROGRAMMING THE RECIPES



  to select the recipe to be programmed.

 The upper display will show:

Temperature in °C	Time or temp. probe in °C
Function	Steam level

Step

 or . If you press , press this same key again to choose the steam level, since it is set at 100%, by default.

 and   to set the temperature inside the chamber;

 and   to set the time or

 and   to set the temperature of the internal probe level

 to start the function "Grill". The time is limited up to 10 minutes and, when set in "Recipes" it will only work when the door is closed;

 or  confirm the recipe step. Each confirmed step will be marked with an * (asterisk).

To start a new step, press again "Play/Pause"  or ;

Follow the steps mentioned above.

To end recording, press .

STARTING THE RECIPES

 to select the recipe to be made.

 starts the operation.

RE-EDITING RECIPES



 to select the recipe to be edited.

 Shows the steps of each recipe. The steps are marked with an asterisk (*).

 Select the step to be re-edited;

 or  Opens the screen to re-set the step.

Continue the operation following the instructions in "EDITING THE RECIPE".

DELETING RECIPES

When the temperature is set to 0°C (zero) inside the chamber, in a certain step of the recipe, that step will be voided and the asterisk disappears. Therefore, to eliminate a recipe you should "zero" the temperatures inside the chamber for all stages of the recipe.



 to select the recipe to be deleted;

 Shows the steps of each recipe. The steps will be marked with an asterisk (*).

 Select the step to be re-edited;

 or  Opens the screen to re-set each step;

 and  until the temperature inside the chamber is zeroed out.

 Confirms the change;

 Confirms the entire recipe.

BASIC PRINCIPLES FOR OVEN OPERATION

Introduction

Always respect the space between the different foods and gn pans

Set the temperature

Temperature lower than that used in conventional ovens

Temperature x thickness x time

Always preheat the oven

Avoid opening and closing the door all frequently

Simultaneous recipes are allowed only when the temperatures and steam level are compatible

Choose the appropriate gn pan

- 1 - Space:** Because there is a forced flow of heat, we have to respect the room between the food and the gastronorms, so that the heat may freely flow among the food items.
- 2 - Set the temperatures:** Always set the temperature (more or less heat) to start the operations inside the oven.
- 3 - Lower temperatures:** Always work with temperatures lower than the ones used in conventional ovens.
- 4 - Temperature x Time x Thickness:** Because we are dealing with heat, the pair Time/Temperature will vary according to food thickness and texture. The thicker the food, the lower the temperature to be used and longer the time to perform the function. The temperature in the function "Steam Cooking" is always constant – 98°C. If we cook a whole potato, the time spent will be longer than if we cut the potato in small squares. The temperature in the function "Baking", ranges from 130°C to 250°C. When baking a whole shoulder weighing 10 kg, the temperature will be lower and the time spent will be longer than if we bake a three-kilo shoulder.
- 5 - Preheating:** It is important to preheat the oven for 5 to 10 minutes for the function and temperature chosen. The temperature inside the oven can be checked with a light touch on the key . It is important to decrease the final time of the respective preparation.
- 6 - Avoid opening the oven during operation.** This procedure is not forbidden but it increases the time spent to prepare a food, since the oven will keep losing heat each time the door is opened.
- 7 - Preparing several foods at the same time is possible, just observe:** temperature has to be compatible, as well as the steam level. For example, a meat than be can cooked along with vegetables. At the end of a certain time, the vegetables will be cooked and the meat will still need to be cooked requiring additional time at a higher temperature so that we will be able to achieve golden brown color with or without steam. The opposite procedure, that is, if you cook the vegetables and the meat in a high temperature (from 130° to 180 °C), using steam, effectively the result will be roasted meat and baked vegetables.
- 8 - Choose the GN pan to be used according to the desired effect.**

ACCESSORIES/ GN PANS

Gastronorm pans, also known as "GNs": Stainless steel kitchen containers specified according to international standard, used to cook food.

1. Use perforated GN pans 1/1 x 65 mm: to prepare "salad" vegetables(*), and meat when you do not want to have liquid retained during the operation. If cooking vegetables, the limit for filling up the GN is 1 cm below the GN edge.
 2. Solid GN Pans 1/1 x 65 mm deep, are used to stir-fry vegetables, because it keeps the juices and there is no need to stir them, rice, pasta, broiled food, cakes, pies and meat. This type of GN pan is also used as a 'collector' of liquids and fat when placed under the meat to be cooked over perforated GN's or grids. They are also used to display food in heated or cold counter tops.
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3. Solid 30 mm GN pans are used for meat, pasta, pies (pastries and desserts in general) and fried food.
4. The grids are mainly used to prepare roasted meat, grilled food and as support for other metal or refractory containers used in the oven.
5. GN pans with a depth higher than 100 mm (up to 180 mm) are more appropriate to distribute and transport food - mainly rice, stews, beans and other type of side order food.
6. Waved GN pans are specifically used for French bread and baguettes.
7. Expanded Mesh GN pan. Only a little bit of oil is needed to fry any kind of food in this type of GN. It is used to fry vegetables (potato, scarlet eggplant, okra), meat (chicken) and several other food.
8. Tower grill. Used to roast a whole chicken. The chicken is placed standing on the grill, and the wings are placed up and behind the chicken's neck.
9. Lids I / I. They fit all types of GN pans.

Observation: The type of GN pan to be used depends on the way you want to have the food prepared. For instance, if you have four pieces of boneless pork tenderloins and organize them inside the oven - one boneless pork tenderloin over one grid; the second boneless pork tenderloin in a perforated GN 65 mm deep, the third piece in a solid 30 mm (shallow); and the fourth boneless pork tenderloin in a solid GN 65 mm, at the end of a determined period of time and temperature you will have four different dishes as follows:

- Boneless pork tenderloin over a grid: Totally brown (the entire outer surface) showing a low content of fat (the fat melts during the process). In this case, there was no heat flow.
- Boneless pork tenderloin placed in the perforated GN (65mm): Partially golden (mainly in the upper surface) and also showing a low content of fat (also drained during the process) because GN walls provided resistance to the heat flow.
- Boneless pork tenderloin placed in the solid GN 30 mm (shallow): The pork will be almost entirely golden, its lower part, not golden yet, will be surrounded by juices and fat drained during the baking process because of little resistance to the heat flow and liquid retention.
- Boneless pork tenderloin placed in a solid GN 65 mm (average GN): In this case, the meat will be less golden compared to the others and will be partially immersed in juices and fat caused by a lower heat flow.

The same happens when cooking vegetables. When using perforated GN pans the vegetables will be more dry, perfect for a salad. If using solid GN pans, part of the steam condensates in the bottom and the liquid is incorporated in the food seasoning. The structure of the vegetables is kept intact since there is no shock provoked by the boiling water. If you want juicier vegetables, all you have to do is to add more water.

GUIDELINE TABLE:

It is important to notice that the first column of the table shows the product (food) and the second one suggests the type of GN pan to be used. The three columns display the oven programming process: key, temperature and time. The last column shows any observations about the product, regarding the seasoning, oil and so forth. Some food preparation show two or three different lines (for example: stuffed beef rolls), that is, program the first line and the other line afterwards. Therefore, the preparation of that dish will have two or more different steps.

General Cooking

PRODUCT	GN I/I	GN I/I		OBSERVATION	
		Steam	°C		Time
Rice	Solid 65mm			35min	Wash the rice and put it together with the seasonings in a GN with 1.2 liters of water for each kg of rice
French fries	Expanded mesh		200° C	15min	Grease the GN pan and spray oil. Use frozen pre-cooked French fries.
Rosette Potato	Perforated 65mm or Solid 25mm	 	200° C	20min 20min	Grease the GN pan and spray some oil
Brocoli, Cauli-Flower, Green Beans	Perforated 65mm	 	90° C	25min	
Greens	Perforated 65mm			10min	
Sweet puff pastry	Solid 25mm		150° C	20min	
Savory puff pastry	Solid 25mm		180° C	20min	
Broiled Food			220° C	10min	Baking seets may be used over the grids
Vegetables	Perforated 65mm			25min	
Petit fours in general	Solid 25mm		160° C	15min	
Sweet Dough/ / Cakes			150° C	25min	The thicker the dough, the longer the cooking time
Salt Dough And Pies	Solid 25mm or Marinex over the Grids		180° C	25min	The thinner the dough, the less cooking time
Boiled Eggs	Perforated 65mm			10min	
French Bread	Waved Perforad GN		180° C	15min	
Pizzas (Prebaking)			180° C	10min	Prebaking
Pizzas			220° C	6min	Broiling
Coconut Pudding	Individual aluminum baking sheets	 	120° C	60min	Cover the baking sheets with aluminum foil
Condensed Milk Flan	Tube cake pan over the grid	 	95° C	60min	
Condensed Milk Flan	Disposable cups	 	80° C	45min	
Bread Pudding	Solid 65mm		140° C	40min	
Soufflés	Solid 65mm		180° C	25min	
Merengues	Solid 65mm		100° C	60min	

BEEF Cooking

PRODUCT	GN I/I	GN I/I			OBSERVATION
		Steam	°C	Time	
Meatball	Solid 25mm		180° C	15min	Grease the GN pan. The cooking time will vary according to the size of the meatball
Meatloaf	Solid 25mm		150° C	35min	Grease the GN pan
Breaded Steak	Solid 25mm or Grid		200° C	10min	Grease the GN pan and spray some oil over the steaks or mix the oil and flour
Stuffed beef rolls	Solid 25mm or Grid		220° C	15min	Serve them with boiling sauce
			120° C	60min	
Grilled Steak	Solid 25mm or Grid		250° C	10min	Add cooked onions or sauce
Stuffed Steak (up to 2kg)	Solid 25mm or Grid		220° C	12min	Slice it, spread the boiling sauce and serve it
			150° C	60min	
Beef Back Ribs	Solid 25mm or Grid		120° C	90min	Wrap it in aluminum foil or cellophane, cook it at 200°C/90min. Remove the aluminum foil or cellophane and cook for an additional of 30min using the function "hot air", at 180° C.
			180° C	30min	
Beef Skewer (Bottom Round)	Solid 25mm or Grid		200° C	15min	
Hamburguer	Grid		210° C	10min	
Baked Kibbeh	Solid 25mm		180° C	25min	The thinner the kibbeh, the less the cooking time
Baked Kibbeh	Solid 25mm or Grid		180° C	30min	
			120° C	40min	
Baked Eye Round (up to 2kg)	Solid 25mm or Grid		220° C	15min	Turn the steak after 8 minutes

CHICKEN Cooking

PRODUCT	GN I/I	GN I/I			OBSERVATION
		Steam	°C	Time	
Chicken Double Breast Fillet	Solid 25mm or Grid		180° C	30min	
			150° C	60min	
Baked Thigh/Legs	Grids		180° C	20min	
			180° C	20min	
Chickens thigh filet	Grids		210° C	20min	
Baked chicken (whole)	Roasting Grills		200° C	15min	Use in the seasoning: Worcestershire sauce, soy sauce, orange juice or any other juice with sugar content.
			200° C	45min	
Deep Fried Chicken	Solid 25mm or Grid		210° C	25min	
Pieces of deep fried chicken	Grids		120° C	40min	Precook the chicken before breading it. After deep frying it, grease the GN and spray some oil over the
Breaded chicken chest	Solid 25mm or Grid		200° C	15min	Chicken or mix it with the flour
			200° C	15min	
Pieces of chicken for stroganoff	Solid 25mm		200° C	20min	Stir after 10 Min

PORK Cooking

PRODUCT	GN I/I	GN I/I			OBSERVATION	
		Steam	°C	Time		
Pork skin	Perforated 65mm or expanded mesh GN		100° C	15min	It can be prepared using the internal probe and is set at 80° C.	
			180° C	30min		
Boneless Shoulder (up 2 Kg)	Solid 25mm or Grid		150° C	60min		
			150° C	30min		
Grilled Back Ribs	Grids		180° C	30min		
Pork loin chop	Grids		200° C	20min		Grease the grids
Toscana sausage	Grids		180° C	25min		
Toscana Baked Boneless Por Tenderloin	Grids		170° C	25min		
			170° C	25min		
Marinated Baked Boneless Pork Tenderloin	Solid 65mm		180° C	50min		Turn in order to golden brown the upper part
Grilled Pork Steaks	Solid 25mm or Grid		210° C	12min		

FISH Cooking

PRODUCT	GN I/I	GN I/I			OBSERVATION
		Steam	°C	Time	
Baked fish (up to two-kilo fish)	Solid 25mm or Grids		180° C	25min	Grease grids or GN pans
			180° C	25min	
Fish stew (Pieces)	Solid 65mm		150° C	30min	Remove the water drained when cooking the fish and add the sauce
Fish filets in corn flower	Solid 25mm		220° C	12min	
Breaded fish	Solid 25mm		200° C	15min	Grease GN pans and spray the oil over the food or stir the oil and the flour
Grilled fish	Solid 25mm		220° C	8min	Grease the GN pans and spray the oil over the food or stir the oil and the flour

EXAMPLES OF RECIPES

ROASTED CHICKEN

- 01 - Preheat the oven, by turning it on and pressing  and adjusting the temperature to 200°C for about 10 minutes, prior to baking the chicken.
- 02 - Place the chicken in the roasting grids (6 chickens in each grid) as if they were "sitting" with the two wings (as if they were hands) behind the back of the neck and tip of the thigh of each bird placed close to one another.
- 03 - In the last grid, place a solid GN 35 mm solid (solid stainless steel sheet 35 mm high), to collect the fat and juices drained from the chicken during the baking process.
- 04 - Press  and choose 50% of steam.
- 05 - Adjust the Temperature to 200°C
- 06 - Adjust the Time for 15 minutes
- 07 - When the oven starts beeping, the combi steam period is ended. Press the key "Hot Air"  and adjust the time for an additional 45 minutes. Keep the temperature at 200°C.
- 08 - After the programmed time, carefully open the oven. Caution: never expose your face first to the steam.
- 09 - Wearing thermal gloves, remove the grids from the oven and place them over or inside a clean container.
- 10 - With the aid of plastic gloves or the own chicken bag, remove the grids using both hands in a shape of a shell, touching the chicken thighs with an upward vertical movement. The chicken may be "dressed" with its own bag while it is still in the grid, as if it were in a hood and using both hands, touching the chicken thighs, remove them out of the grid.
- 11 - Wrap it up and store at a minimum temperature of 60°C.
- 12 - After finishing each baking process, remove and empty the GN pans used to collect the drained fat.

In order to get more golden brown chicken or other white meat, use small amounts of orange juice, Worcestershire sauce, soy sauce, beer or sugar (3 g/kg) in the seasoning. You can use the  Crisp function, also, specially if you are roasting the chicken with its skin.

PORK SHOULDER / FRESH HAM

Because of its size and variable weight and diameter, care must be taken to ensure its core is sufficiently cooked. Therefore, it is important to use a temperature lower than the temperature used to bake a chicken.

01. Preheat the oven by turning it on and adjusting the temperature to 150°C for about 5 minutes.
 02. Place it over a simple grid or in a solid GN 30 mm (Shallow stainless steel 30 mm deep broiler) or in a conventional baking sheet, placing this over a grid.
 03. Adjust the temperature to 150°C.
 04. Adjust the time for 90 minutes.
 05. Press  and adjust for more than 50% of steam.
 06. After 90 minutes the oven will beep. Press .
 07. Keep the temperature at 150°C. The remaining time will vary according to the size of meat. The time to finish this preparation will range from 30 to 60 minutes. An alternate method is to use the internal probe. Press the key "Combined Steam"  activating more than 50% of steam and set the chamber temperature to 150°C. Insert the probe and program it to set the alarm off when the inside part of the pork shoulder reaches 80°C. If the pork shoulder weighs more than 6 kg, use lower chamber temperatures.
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BEEF RIBS, EYE OF ROUND, HUMP – HARD MEAT

To prepare hard meat, more time and attention will be required by the preparer. After placing the meat over the grids or shallow GNs, there are two basic ways of performing this:

First: The meat should be wrapped in aluminum foil or cellophane and placed in the oven with a high temperature (from 200°C to 220°C) for 90 minutes, with no steam. After 90 minutes, remove the aluminum foil or cellophane out, lower the temperature and allow it be processed to a final golden brown which will take approximately 30 minutes.

Second: There is no need to wrap the meat in cellophane paper. Adjust the oven to 120°C with 100% of steam and set the timer for 120 minutes. After the meat is tender, increase the oven temperature to 180°C, without steam, to allow the meat to be processed to a golden brown color. If necessary, add the sauce before serving it. The probe sensor can be used and adjusted to 92°C.

CLEANING:

Introduction

- 01 - Cool down the oven
- 02 - spray the oven cleaner over the inner surface
- 03 - Shut the door and press and
- 04 - Wait some minutes
- 05 - If necessary remove the dirt with a non-metallic sponge
- 06 - Rinse it.

Do not use cold water on the hot glass.

Do not use steel sponges, sharp objects or abrasive powders.

At the external surface: Do not use water. Follow the procedure: wet cloth .> cloth with detergent
> wet cloth > dry cloth .

If the oven is going to be off for more than 6 hours, keep the door cracked open.

It is extremely important to use the Personal Protective Equipment such as: wide vision **Glasses** with polypropylene lens;

PVC gloves protecting half of the forearm, **apron** and **mask** to protect the nose and mouth during any kind of operation.

Use an oven cleaner, scale remover or fat remover – It is important to notice that products made of ammonia or sodium hydroxide. Conventional oven cleaner, if used, should be diluted in a ratio of 4 parts of water for 1 part of the oven cleaner.

Never use oven cleaner containing dyes or acid additives.

Clean the oven daily, even when using it for steam cooking. Fat residue may provoke fire inside the oven.

DAILY PROCEDURE

- Cool down the oven until it reaches a temperature below 70°C, using the hand shower.
- Take all the utensils from inside the oven. Only grids can be cleaned during this process
- Spray the oven cleaner throughout the inner surface of the oven.
-   The message "put the oven cleaner" will be on. Open the door and spray the oven cleaner inside the chamber.
-   Press this key to start cleaning. The message "Steaming" will be displayed and the 780 second countdown will start.
- Then, the message "rinse" will be displayed. In the end, you will see the message "Finish with hand shower".
- Use the hand shower to completely remove the oven cleaner, since any kind of residue may contaminate the food.

- If necessary, use a sponge to remove all dirt residue remaining inside the oven. Never use abrasive powders, steel sponge, knife, spatulas or any other sharp object. Try to keep the inner chamber as new (reflexive).
- At least once a week, take the oven rack and internal protection off (in front of the resistances) for a deep cleaning.
- Never use water in the external surface of the oven or over the hot glass since this can damage the control panel and the electronic devices.
- The external surface, control panel and the glass may be cleaned with a wet cloth, detergent and dry cloth. Observe the sequence: wet cloth; cloth with a detergent; wet cloth; dry cloth.

IN CASE THE OVEN IS OFF FOR 6 HOURS OR MORE, KEEP THE DOOR CRACKED OPEN.

SAFETY INSTRUCTIONS:

PPE: The operator of the oven must wear Personal Protective Equipment (PPE). During operation, wear protective thermal gloves and apron. When performing the cleaning process, besides the apron, wear mask, protective glasses and latex gloves.



Luvas de Proteção



Máscara de Proteção



Óculos de Proteção



Avental

HANDLING

- When opening the oven's door, stay behind it and open it in two stages.



1. Open the door slightly and wait until the heat and steam have escaped.



2. Open the door entirely once the steam has escaped.

Make sure there is no cleaning product residue before starting to cook.

Do not use sharp, metal or other type of objects to press the keys in the control panel. Only use your fingers to do so.

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Never use products containing acid when cleaning the oven for they will damage the stainless steel surface, resulting in corrosion of the metal.

