TECHNIQUE

COMBI OVENS

COMBI MINI

ELECTRIC

MANUFACTURERS INSTRUCTIONS

Part C: Operating manual

- WARRANTY -

To ensure the guarantee on this equipment, you should comply with the MANUFACTURER'S INSTRUCTIONS in this manual.
However if you cannot undertake the required maintenance operations, our installation and service network is available to provide you with a personalized contract.

- WARNING -

- The product delivered to you complies with current standards. If any modifications are made the manufacturer cannot accept any responsibility whatsoever.
The manufacturer cannot be held responsible in the event of inappropriate use of the equipment.
- This equipment is intended for use by suitably trained professionals.
- Read all the documentation before user.
- Keep your documents for future reference.
- Translation of the original manual

3HE390997EU

HOBART

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COMBI MINI ELECTRIC

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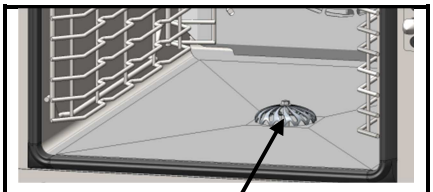
1. RECOMMENDATIONS

- These appliances are for professional use, only appropriately trained personnel should use them.
- Cooking appliances may reach 250°C. BE CAREFUL not to burn yourself when using or handling INNER ACCESSORIES (Plates, modules, filter, duct...).
- These appliances must be installed with sufficient ventilation to prevent the formation of an excessive concentration of substances harmful for health within the premises in which they are installed.
- The equipment is not designed to work in an explosive atmosphere. Accordingly it must not be installed in an area covered by the ATEX directive.
- The door surface temperature exceeds 60°C. BE CAREFUL NOT TO BURN YOURSELF.
- Putting tins and trays into / out of ovens: The height of the upper level of appliances located on a worktop or stand may be 1.66m. If you handle manually, manipulate the baking tins carefully. BE CAREFUL OF SPILLAGE WHEN HANDLING, YOU MAY BURN YOURSELF.
- Never block the condensate exhaust flue, because the pressure could rise in the appliance which could generate a risk of explosion.
- If an error message appears consult the list of error messages and follow the appliance given
- When cleaning high pressure jets or lances should never be used.
- Do not remove the ventilation duct and the drain grid located in the oven. If this grid is missing do not start the oven.



Drain grid

- Always use a qualified installer to install the equipment.
- IMPORTANT: Please be aware that when cooking dishes prepared with alcohol (coq au vin, pears in wine, etc.…). Vapour saturated with alcohol may when heated cause an explosion in the oven and due to the sealed door, create a momentary overpressure which may cause an irreversible deformation of the panels. This risk is further increased when the user adds alcohol to the products near the end of the cooking cycle and closes the door to complete cooking.
- The appliance must be isolated electrically during cleaning or maintenance and when replacing parts.
- The control panel is operated via a serigraphic touch screen using your fingers. We recommend the exclusive use of your fingers and no other items such as knives, forks or spoons etc.
- **For long term reliability and safety it is advisable to have the unit serviced twice a year by suitably qualified technicians**. (Cleaning of vents, checking possible leaks, checking control elements, regulating and safety accessories …).
- The oven must be meticulously maintained on a DAILY basis (see the “Maintenance” chapter). In particular, the fans, heating elements and walls must be kept clean, without accumulation of grease and mineral deposits (lime or other).
- THE APPLICATION OF ANY CLEANING PRODUCT ONTO A HOT SURFACE, OVER 60°C, IS STRICTLY FORBIDDEN. The surface will be damaged beyond repair (darkened, virtually black).
- Combination ovens should be cleaned with specific products which can resist temperature of up to 70°C. An inappropriate cleaning or descaling product may have a slightly corrosive effect.

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- We strongly recommend the use of cleaning products supplied by the manufacturer to ensure good results and optimize the service life of its components.
  Except for the UK market: No detergent product is recommended or supplied. Any detergent used with this appliance must have been verified to represent no greater risk than Fluid Category 3. If the detergent used represents a Fluid Category risk greater than Fluid Category 3 alternative backflow protection to the double check valve supplied with the appliance will be required immediately upstream of the appliance. The backflow protection used must be appropriate to the risk posed by the detergent.

- For maximum efficiency of the descaling product without damaging the material and components of the oven, you should use the appropriate descaler. The use of certain acid has a destructive role that can irreversibly and significantly damage your device. The descaling product must contain corrosion inhibitors to prevent from metal attack. The descaling product must also comply with the regulations in law, in particular on material intended to come into contact with foodstuffs.
  Chemical products containing nitric acid are strictly prohibited.
  Recommended composition:
  - Phosphoric acid <50%
  - Corrosion inhibitor

- The automatic cleaning system is exclusively designed to achieve an introduction of cleaning and degreasing chemical. **Never use a descaling agent. This would damage the hydraulic system of the oven irreversibly**.

- Remember the dangers identified on the safety data sheet for detergent
  - Harmful if swallowed.
  - Can result in serious burns.
  - Irritates the eyes.
  - Irritates the respiratory tracts.
  - Risk of serious eye lesions.

- Danger of irritation to the skin and eyes or acid burns.
  Detergents and descalers will cause irritation and possible burns if in direct contact with the skin or eyes.
  - Do not inhale the mist or spray
  - Avoid direct contact with these products
  - Never open the oven door during the automatic cleaning cycle
  - Wear protective clothing, gloves and hermetic protective goggles in accordance with the safety data sheet.

- Remember the safety advice provided by the safety data sheet for each detergent or descaler
  - Do not each or drink when using these products.
  - Do not inhale their vapours.
  - If case of contact with eyes rinse immediately with plenty of water and seek medical advice.
  - Wear appropriate protective clothing, gloves and face and eye protective gear.
  - In the event of an accident or sickness seek immediate medical attention
  - Dispose of the product and its container as hazardous waste.

- The manufacturer certifies that the packaging meets the provision 94/62/CE (relating to packaging and packaging waste of 20.12.94) and requests that the final installer (or user) observes the rules relating to the removal of the packaging (recycling or reuse).

- « According to article 6 of the decree of 20 July 2005 a marking giving the identity of the manufacturer and the market release date must appear on equipment after 13 August 2005».
  « The Manufacturer has filled in the National Register. »
  As per the legal provisions in force (article 21 & 22 of the decree 2005-829), the customer is responsible for the obligations relating to the elimination of electric and electronic waste, namely:
  - he is to deal with selective treatment, reconditioning and destruction of residue arising from electric and electronic equipment, selectively collected in the installations meeting the technical requirements or in any other installation authorised for the purpose, in another member State of the European Union, or in another State so far the transfer of these residues out of France is made according to the provisions of the Regulation of 1st February 1993 indicated above.
  - he must make sure that all fluids of electric and electronic equipment are drained according to the requirements of the provisions.
  - he must make sure that the information relating to the removal and treatment of these residues is forwarded to any further acquirer.

- **The warranty will not cover problems caused by failure to comply with these recommendations**

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2. USING THE CONTROL PANEL

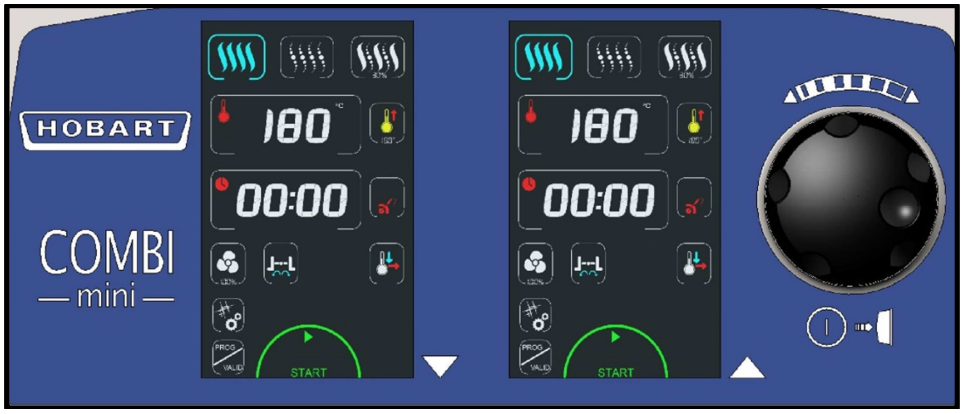
2.1 GENERAL

2.1.1 COMBI MINI

Coder knob:
Used to change parameters (temperature, time…) and validate them by pressing it.
Switches the oven and the display on
Switch on: Push 1 second
Switch off: Push 3 seconds

Touch screen :
Welcome menu: This screen appears every time the unit is started

2.1.2 STACKED COMBI MINI

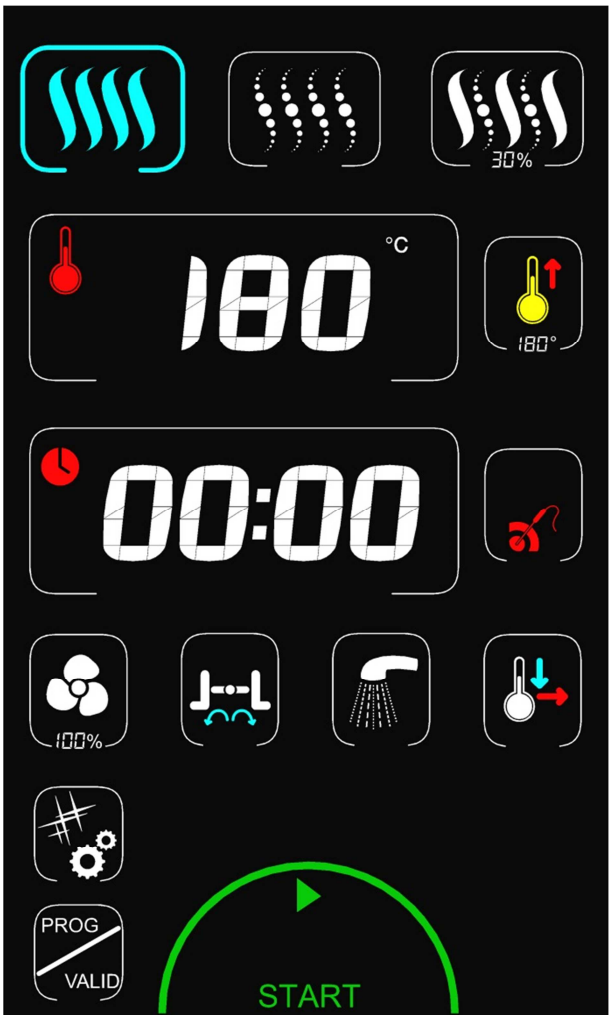


Coder knob:
Used to change parameters (temperature, time…) and validate them by pressing it.
Switches the ovens and the displays on
Switch on: Push 1 second
Switch off: Push 3 seconds

Touch screens :
Welcome menu: These screens appear every time the unit is started.
The relationship between the screen and the oven is indicated by the symbol next to each screen
▼ **:** Bottom oven
▲ **:** Top oven

2.2 MANUAL MENU

2.2.1 GENERAL



➔ 3 cooking modes: Convection, Steam and Combined (from 0 to 100%)

➔ Display of actual and set temperature
Preheat activation

➔ Time / Core temperature display
Select Time / Probe temperature

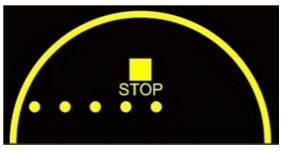
➔ Ventilation speed (1 to 100%)
Vent outlet
Manual humidification
Rapid cooling & Holding mode (hot cupboard)

➔ Cleaning Programme, HACCP activation, Data exchange
Modification and creation of programmes
Installation parameters / operating / technical

➔ Access and Validation of programmes

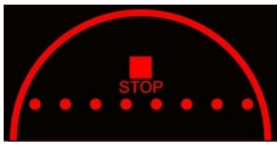
START / STOP cooking button. Changing colour:

Before start cooking :
Green colour



Cooking cycle running :
Yellow colour

Pause (open door) :
Yellow colour



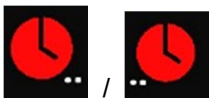
Cooking finished :
Red colour

Temperature zone

➔ Displays the ambient and set temperatures
The ambient temperature is adjustable by pressing the corresponding zone
The setting entered is validated after 5 seconds or by pressing on another zone/button
Adjustment can be made using the coder or with the ▼/▲ buttons in 1° intervals

Timer zone

➔ Displays the “running time” or “remaining time”.
The time is adjustable by pressing the corresponding zone
The setting entered is validated after 5 seconds or by pressing on another zone/button
Adjustment can be made using the coder or with the ▼/▲ buttons in 1 minute intervals



➔ The location of the white dots at the side of the timer logo indicates what is displayed:
Dots on the left: remaining time
Dots on the right: running time

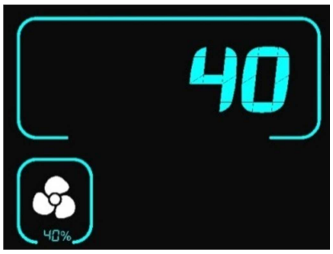
Core temperature button

➔ Pressing this touch button switches automatically from time control to core temperature control zone

➔ The core temperature zone is adjusted by touching the corresponding zone
The setting entered is validated after 5 seconds or by pressing on another zone/button
Adjustment can be made using the coder or with the ▼/▲ buttons in 1° intervals
To return to Timer mode (timer zone) touch the button again opposite the display

Fan button

➔ Pressing this button allows you to change the fan speed (default is 100%) moving to speed adjustment mode



➔ Adjustment can be done using the coder in 10% steps or using the ▼/▲ buttons in 1% steps.
The setting is validated after 5 seconds or by touching another zone/button

Vent button

Vent closed

/

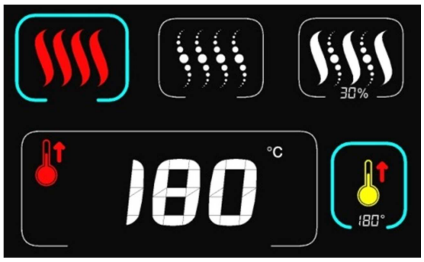
Vent open

➔ Touching this button controls the opening/closing of the vent
The symbol changes to indicate whether the vent is open or closed
This button only works when cooking in convection (dry) mode

2.2.2 PREHEATING

When the oven is switched on the oven preheat starts if the Automatic preheat function is activated in the Clients parameters. The preheat temperature is programmable and controllable (CHEF menu).

Preheating before cooking

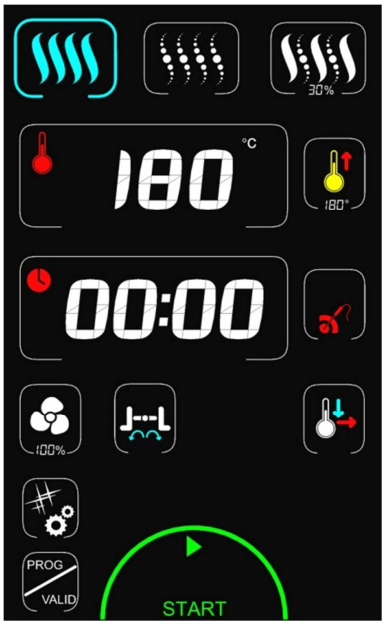


➔ The first touch on the preheat button activates it. The button is active if its surrounding border is blue.
Pressing a second time allows the set temperature to be changed
A third press deactivates preheating before cooking

Adjustment can be done using the coder in 10% steps or using the ▼/▲ buttons in 1% steps.
The setting is validated after 5 seconds or by touching another zone/button

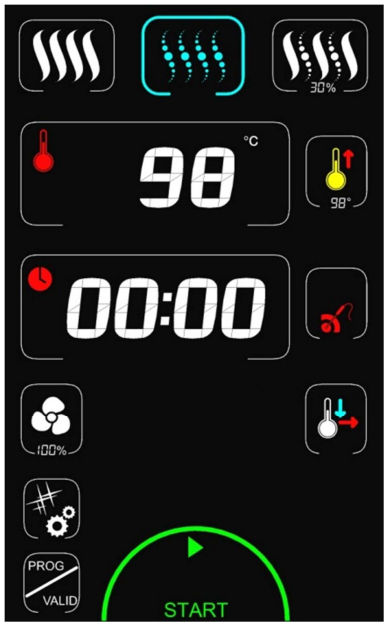
2.2.3 MODES

Convection Mode (Dry)



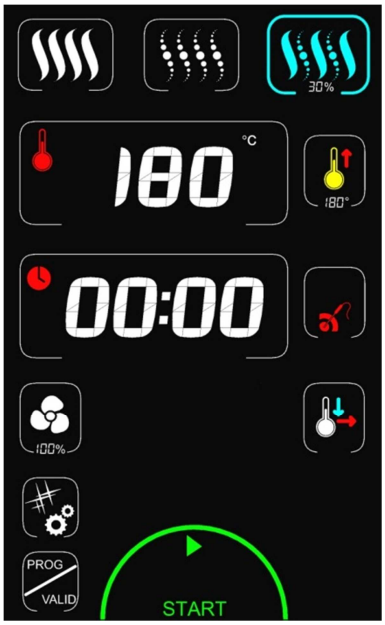
The manual humidification function is inactive: button masked. It is only active during cooking

Steam Mode



The manual humidification and the vent outlet functions are inactive: buttons masked

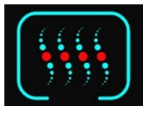
Combi Mode



The vent outlet function is inactive: button masked
The humidification function is only active during cooking

Convection Mode

Steam Mode



Combi Mode

Cooking in progress, part of the logo for the mode selected turns red and the surround is blue.

2.2.4 ADJUSTING THE HUMIDITY LEVEL IN COMBINATION MODE

➔ The first press on the combination made button selects it
A second press allows the humidity level to be adjusted

➔ Adjustment can be done using the coder in 10% steps or using the ▼/▲ buttons in 1% steps. The setting is validated after 5 seconds or by touching another zone/button

2.3 CLEANING MENU

Pressing the Cleaning/Tools button or any inactive zone exits this menu and returns to the previous screen.

Pressing the Cleaning/Tools button gives access to the cleaning menu

Display shows “CLEA” (cleaning) in the timer zone and the intensity in the temperature zone.
By default the last cycle used is displayed.

Possible selections:
- 3 cleaning intensities
- Rinse function
- Cleaning product priming function

Intensity		Time
1		19 min
2		25 min
3		35 min
Rin		2 min
Pri		2 min

The priming function allows the detergent delivery circuit to be refilled when the container is changed so that efficiency is maintained

Pressing the “Start button” starts a wash cycle.

2.4 PROGRAMMES MENU

2.4.1 CONSULTING THE PROGRAMMES

Pressing the PROG/VALID button or any inactive zone exits this menu and returns to the previous screen.

The first press on the PROG/VALID button gives access to saved programmes (recipes)

Display shows “Pr00” in the timer zone.
Moving the coder or the ▼/▲ buttons scrolls through the programmes (Programmes No 00 to 17).
Note: the programmes are pre-recorded.
Only programmes that are not empty are displayed

The dots (white) in the “Start” zone indicate the number of cooking phases in the programme (maximum 6 phases with preheat)

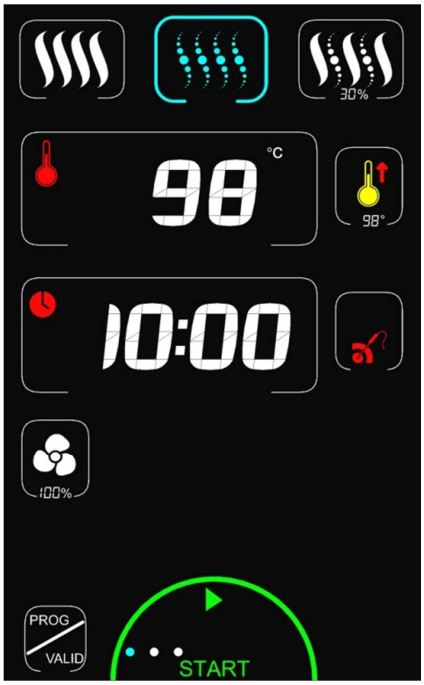
Pressing “Start” launches the programme.

List of pre-recorded programmes:

Pr00	Beef : Rare roast	**Pr06**	Poultry : Chicken 1.2Kg	**Pr12**	Sliced carrots from frozen
Pr01	Meat in sauce short	**Pr07**	Fish : steamed from fresh	**Pr13**	Gratin dauphinois
Pr02	Meat in sauce slow	**Pr08**	Shellfish	**Pr14**	Flaky pastry
Pr03	Meat in sauce sous vide	**Pr09**	Viennoise from frozen	**Pr15**	Bread 80Gr from frozen
Pr04	Pork : Roast	**Pr10**	Choux pastry	**Pr16**	Fondant
Pr05	Pork : Ham slow cooking	**Pr11**	Green vegetables	**Pr17**	Crème brûlée

2.4.2 DISPLAYING THE CONTENTS OF A MENU PROGRAMME

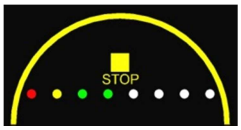
➔ Pressing the display “Prxx” or the coder reveals the content of the programme selected (cooking mode, temperature, time …)



➔ Pressing PROG/VALID or the coder scrolls through the phases one at a time
The phase being displayed is indicated by the colour of the dots in the Start zone:
1st dot is in cyan = 1st phase (other dots are white)
2nd dot is cyan = 2nd phase (other dots are white)
After the last phase consulted the screen shows “Prxx” (the last programme displayed).

Pressing Start starts the programme (from phase 1).

The programmes can be modified if this is authorised (Edit in the Prog menu) but will not be saved permanently. Changes continue to be available until another programme is used
Pressing Start starts the programme (from phase 1).



➔ Whilst cooking the programme’s progress is symbolised by the coloured dots in the STOP zone:
Green = phase not started
Yellow = current phase
Red = phase finished

➔ To stop a programme that is running press the “STOP” zone: The display shows the “Pause” logo “‖”.
If the action is not validated the programme does not stop (It automatically restarts after a few seconds delay if the screen is not touched).
Pressing the zone again restarts the current programme

Confirm the programme should stop validate by pressing the “End” zone: Programme stopped

2.5 PARAMETRES

2.5.1 GENERAL

➔ Pressing the Cleaning/Tools button for the first time, then pressing the Timer zone activates this zone allowing the parameter menu to be scrolled through

➔ Moving from one menu to another can be done with the coder or the ▼/▲ buttons.
Pressing the menu allows access (as does pressing the "PROG/VALID" button or on the coder)

Clients parameter
- *Menu "CLEA": Cleaning, free access*
- *Menu "ProG": Modification of recipe programmes, restricted access*
- *Menu "CHEF": Client parameters, restricted access*
- *Menu "HACC": HACCP data, restricted access*
- *Menu "USb": Data import/export restricted access*

Installation parameters
- *Menu "InSt": Restricted access*

Technicians parameters
- *Menu "tECH": Restricted access*

Pressing the Cleaning/Tools button exits this menu and returns to the previous screen.

2.5.2 RESTRICTED ACCESS: PASSWORDS

Allows the client to access:
- Menu "ProG": Modification of recipe programmes
- Menu "CHEF": Client parameters
- Menu "HACC": HACCP data
- Menu "USb": Data import/export

➔ Pressing the parameter menu allows access (as does pressing the "PROG/VALID" button or on the coder)
"Pin" is displayed in the temperature zone.
"----" is displayed in the timer zone.

The first digit appears in cyan and flashes. Using the coder or the ▼/▲ buttons allows you to change the value of the first digit.
Once the value is correct press the coder or the "PROG/VALID" button moves you on to the next digit which can be altered in the same way
When all the code has been entered and it is correct access the menu or start on the PIN number again

PIN codes
Menus "ProG", "CHEF", "HACC" and "USb":
0000 *(modifiable) or* ***CHEF*** *(permanent)*

Note: Pressing on the "PIN" code entry zone has the same effect as pressing the "PROG/VALID" button

Pressing any inactive zone will exit the menu and return to the previous screen.

2.5.3 « CLEA » MENU: CLEANING

See paragraph “CLEANING MENU”

2.5.4 « PROG » MENU: MODIFICATION OF RECIPE PROGRAMMES

The “ProG” menu gives access to programming of recipes and to authorisation levels
- Creation of recipe programmes: “Pr00” to “Pr17”
- Authorisation to modify programmes: “Ed it”

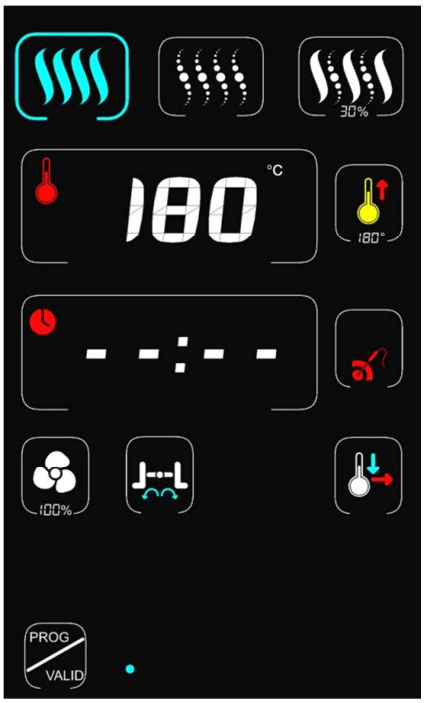
➔ Pressing the “ProG” zone gives access (as would pressing the “PROG/VALID” button or the coder)
Access to this menu is by PIN code (restricted access)

➔ “Pr00” is displayed at first. Moving the coder or the ▼/▲ buttons scrolls through the other programmes up to Pr17 then “Ed it” for other authorisations

Pressing the “Prxx” zone gives access into the programme (as would pressing the “PROG/VALID” button or the coder)
The following screen allows each phase to be programmed: Choice of mode, time settings, temperature and functions …

The number of phases in the programme is indicated by the white dots.

Pressing Cleaning/Tools or any inactive zone exits the menu and returns to the previous menu screen



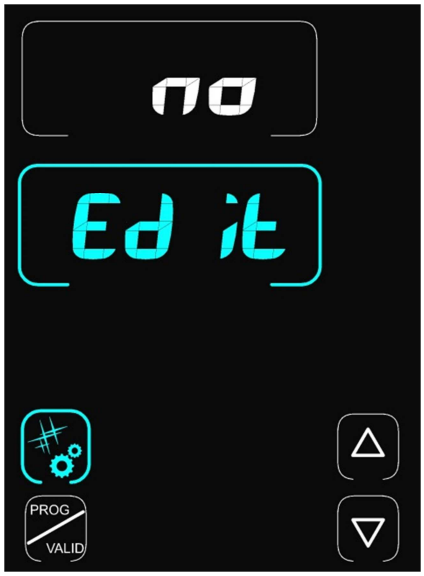
➔ The dots at the side of the “PROG/VALID” button indicates the number of the cooking phase.
1 point = 1st phase ; 2 points = 2nd phase…
Cycle in question = cyan; others = white

Pressing the “PROG/VALID” button moves on to the next phase. If one or more parameters are missing, a “Bip” will sound and the screen will remain in the not validated phase
If no time is set before the end of the recipe (the last cycle not programme dis not taken into account), the screen will return to the “Prxx” display.
The last phase (No 6) corresponds to the preheat before cooking starts. By default the setting is “---“ (no preheating).

The recipe is saved instantly. A successive display of the phases starts …

Removing/Deleting of phases and programmes:
If the set temperature of a cycle is changed to “---“, the effect after pressing the “PROG/VALID” button is to erase all the cycles that follow or the entire recipe if this is done for cycle 1

Empty programmes are not displayed when consulting the programme list



➔

Pressing the “Ed it” zone accesses the parameters that allow changes to be made to recipes (as would pressing the “PROG/VALID” button or the coder)
When consulting the recipes access to the Adjust zone is blocked by this parameter

The current value is displayed in the temperature zone
Change the value with the coder or the ▼/▲ buttons.

➔ Settings:
- “yes”: settings can be modified whilst consulting the details of the programmes
- “no”: modification is not possible

The default setting is “yes”

Pressing Cleaning/Tools or any inactive zone exits the menu and returns to the previous menu screen.

2.5.5 « CHEF » MENU: CLIENT PARAMETERS

➔

Pressing on the CHEF zone gives access (as would pressing the “PROG/VALID” button or the coder)
Access to this menu is by PIN code (restricted access)

➔

Pressing the Parameter allows its value to be adjusted (as would pressing the “PROG/VALID” button or the coder)
The value is displayed in the temperature zone

Moving from one Parameter or from one value to another can be done using the coder or with the ▼/▲ buttons.
Adjustable parameters:
- Choice of language
- Adjust backlighting level
- Buttons Bip
- Buzzer intensity
- Number of times the buzzer sounds at the end of a cooking cycle
- Adjust Date: Year / Month / Day / Hour / Minutes
- Unit of temperature
- Preheating: Preheat temperature
- Default core temperature
- Holding mode: Temperature / Time
- Screen on standby: Time before switching to standby
- Cooling: With or without water
- Choice of language

Parameters / values

➔ Language: « LanG »
« Fr »: French
« En »: English
Default setting is « Fr »

➔ Backlighting: « LuMi »
Adjustable from 1(minimum still visible) to 10
Default setting is « 10 »

➔ Buttons : « biP »
« YES »: Bip
« no »: No bip
Default setting is « YES »

➔ Buzzer intensity: « BuZZ »
Adjustable from 1 (low) to 10 (loud)
Default setting is « 3 »

Number of buzzer bips: « BuZZ »
Adjustable from 1 to 10
« InF »: Continuous
Default setting is « 3 »

Adjust the year: « YY » (in English)
Example : 2015
The temperature shows the Parameter and the timer zone the Value.

Adjust the month: « MM »
Example : 12
The temperature shows the Parameter and the timer zone the Value

Adjust the day: « dd » (in English)
Example : 18
The temperature shows the Parameter and the timer zone the Value

Adjust the hour: « HH » then « Mn »
Example : 10:30
The temperature shows the Parameter and the timer zone the Value

Preheating: « PrEH » (in English)
« YES »: Preheating at start up
« no »: No preheating
Default setting is « YES»

Unit of temperature: « C-F »
« °C »: Degrees Celsius
« °F »: Degrees Fahrenheit
Default setting is « C »

Preheat temperature: « PrEH°C»
Select a temperature
Default setting is « 175»

Core temperature by default: « SC°C»

Temperature in holding mode:
« HoLd°C»
Select a temperature
Default setting is « 75°»

Length of temperature holding cycle:
« HLd »
Select a time
Default setting is « -- -- »

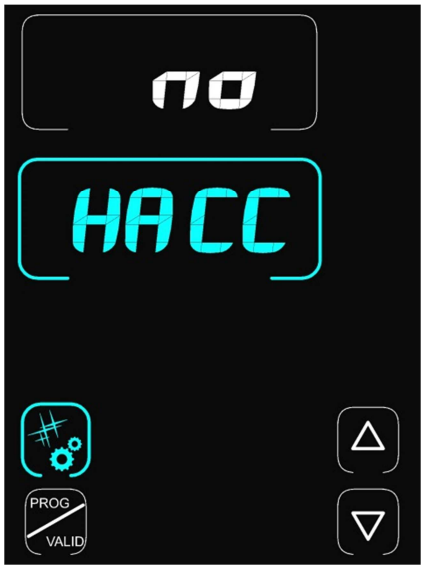
Screen saver: « StbY »
Adjusts: from 5 / 10 / 30/ 60 / 90
« no »: Stays on
Default setting is « 5 »

Cooling cycle with/without water: « H2o »
« YES »: With water
« no »: Without water
Default setting is « YES »

Condensate cooling: « EVAC »
« yes »: cooling
« no »: no cooling
Default setting is « no »

2.5.6 « HACC » MENU: HACCP DATA

Pressing on the “HACC” zone gives access (as would pressing the “PROG/VALID” button or the coder)
Access to this menu is by PIN code (restricted access)



Pressing the Parameter allows it to be adjusted (as would pressing the “PROG/VALID” button or the coder)
Values are shown in the temperature zone

Moving from one value to another can be done using the coder or with the ▼/▲ buttons
Possible settings:
- “no”: no recording
- “1”: Every minute
- “2”: Every 2 minutes
- “5”: Every 5 minutes

Default setting is “no”

Once adjusted pressing the code or the “PROG/VALID” button validates the selection

2.5.7 “USB” MENU: DATA IMPORT/EXPORT

➔ Pressing on the “uSb” zone gives access to it as would pressing the “PROG/VALID” button or the coder)
Access to this menu is by PIN code (restricted access)

➔ The different types of data exchange are displayed in the time zone and the options to import and export are in the temperature zone:

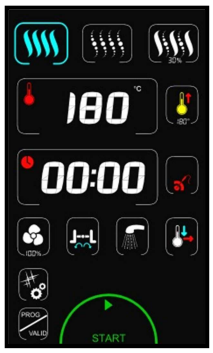
- Import / Export Recipes “ProG”: “ in” or “out”
- Export HACCP “ HACC”: “out”

Pressing Cleaning/Tools or any inactive zone exits the menu and returns to the previous menu screen

Pressing Start commences the import or export of data if a USB stick is connected

➔ During the transfer of data the dots on the “START” button scroll to indicate activity and turn red to indicate the progress.

3. GUIDANCE AND INFO ABOUT THE CONTROL SCREEN



- Changing the set temperature whilst cooking in Convection or Combi mode does not result in an automatic rapid cooling cycle.
- Starting a cycle when the actual temperature is higher than the set temperature does result in an automatic rapid cooling cycle with water injection (depending on the settings in “Clients parameters”).
- During cooking switching from convection or combination to steam will automatically result in a rapid cooing cycle with water injection until the default set temperature is reached.
- Changing from Convection to Combi or vice versa whilst cooking can be done without changing the set temperature.
- Entering a set temperature of 0°C in Convection mode starts a waiting phase where nothing happens (no heating)

- In “Ed it” mode whist Modification is not allowed, recipe parameters can not be altered
- Selecting a time of 99h00 is interpreted as a holding cycle (no cooking) in the mode and at the temperature selected.
- The phases of a cooking cycle recipe can be viewed by pressing on the zone with the recipe number

- HOLD mode starts cooling down to the set temperature which is then maintained. This is like a non-ventilated heated cupboard preventing products from drying out.
- A holding phase can be selected during a cooking cycle. Press and hold is activated, holding will start when the cooking cycle stops.
- If a core temperature has been set holding will be at this temperature, if not it will be at the holding temperature set in the Client parameter menu.
- Holding mode takes into account the settings within the “CHEF” menu.

- Automatic preheating of the oven at start up can be activated or deactivated and the oven temperature can also be set (Client parameters).

- A reminder message appears 10 days before a routine service visit is required.

- Access to the “Client parameters” menu is by PIN code, the default is 0000 this can be personalized. DO NOT FORGET THIS CODE!
- Access to other parameters is PIN code protected and reserved for installation and after sales service engineers.
- The oven has a screen saver that can be personalised (standby mode), which puts the principle functions of the oven into standby (blank screen, lighting and technical ventilation off).
- The data exchange menu runs HACCP functions: start of automatic HACCP data recording or export to a USB stick in a spreadsheet compatible format.

Safe Mode

- In case of the screen or electronic control panel breaking down: It is possible to launch in Safe Mode: convection mode at the preheating temperature setting (set in client parameters, 175° by default).
- Switch off the oven, isolate and reconnect the mains supply to the unit, then open and close the door 3 times in less than 10s. The light will switch off at every door opening and will flash 3 times at the end of the 3 door openings to indicate that the safe mode has started.
- In safe mode, actions on the screen are not taken into account.
- To stop Safe Mode, just switch off the oven.

4. PRACTICAL TIPS FOR USE

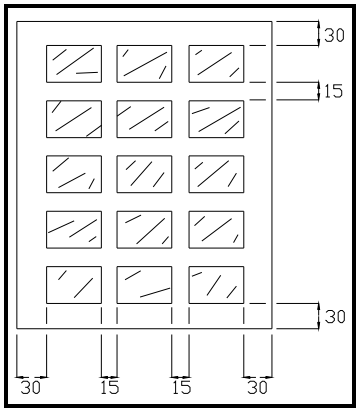
4.1 LOAD LIMITS AND USE

Internal capacity of oven:

Cooking cavity fitted with space optimized runners. Possible capacities:

Capacities	12 levels	6 levels	4 levels
GN 1/1 trays (325 x 530)	12	6	4
Spacing between levels (mm)	22	45	67
Max cavity capacity cavity (kg)	16		

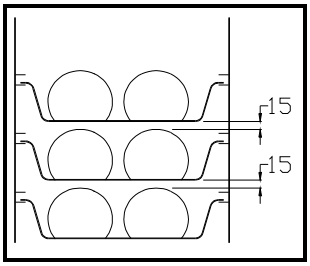
IMPORTANT: The number of levels used for the product to be cooked, as well as the number of portions to be placed on a given level should comply with the following rules.



min 15mm between cooked products

min 30mm between cooked products and the tray edges

15mm between cooked products and the plate above



NOTE: Depending on how these rules are observed, the number of levels used can be reduced (example: 1 level out of 2) depending on the size of the products treated.

UNEVEN COOKING OF PRODUCT ON TRAYS ARISES FROM TWO FACTORS:

LOAD:

Even cooking requires the correct circulation of air between products. These, when cooked, must be sufficiently spaced to allow this.

Too big a load may lead to excessive moisture, generating cooking differences.

TEMPERATURE:

- Preheating: The shorter and more delicate the cooking (less than 15 min), the closer the preheating temperature should be to the cooking temperature.
- Cooking temperature: It is always better to have a lower temperature than a higher one. In case of problems, lower temperature in 10°C steps.

DISCHARGE OF EXCESS STEAM:

Whilst cooking products loose a proportion of their moisture as steam. If this amounts to more than the oven can discharge this will result in uneven browning and inconsistent results.

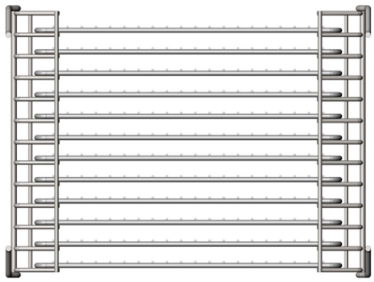
→ reduce the load to obtain good results (after selecting Convection mode with Vent open)

4.2 USE OF OVENWARE

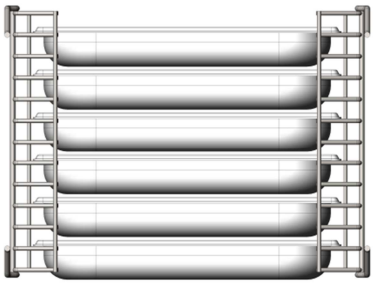
* PASTRIES / VIENNOISERIE: Use backing trays for pastry
* ROASTS: Use gastronorm containers for meat preparations in sauces or for braising….
  For roasting, cook the products directly on the grills (chicken, roast beef, sausages….). In this case place a gastronorm container (20mm deep) on the bottom level to catch the cooking juices.

Positioning of plates, grids and containers

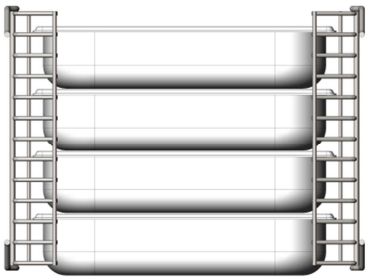
Baking sheets for pastry or stainless steel grills



Pressed roasting tins or gastronorm containers (40 deep)



Pressed roasting tins or gastronorm containers (65 deep)



5. TOOLS FOR OPTIMAL COOKING

5.1 CORE PROBER

The core probe allows the perfect control of the level of your cooking which can be reproduced day after day whatever the size of the product.

The core temperature to be reached will vary, of course, with the kind of product and the cooking level desired.

WARNING: The cooking of a product does not stop at once when removed from the oven.
As a matter of fact, after standstill, the core temperature continues rising to reach a temperature all the higher as the product has been cooked at a high temperature.

Example:

Beef roasted in combined mode at 200°C and removed from the oven at the time when its temperature reaches 40°C will see this later rise to about 57°C.

The same beef, steam-cooked at **low temperature** at 60°C (as a last phase) and removed from the oven at the time when its core temperature has reached 52°C, will evolve very little reaching 56°C.

PRODUCTS	CORE TEMPERATURE **TO BE REACHED**	Core TEMPERATURE **WHEN REMOVED FROM THE OVEN**	
		Classical cooking according to the chart annexed	Low temperature cooking
Red meats			
Very rare	54	37	50
rare	56	40	52
Just done	60	45	56
Well done	62	48	59
White meat			
Veal	72	58	69
Poultry	77	63	75
Fish			
Salmon – Tuna	75	75	75
White fleshed fish	80	80	80
Pork preparations – terrines	67	65	65

NOTE: Recommendation for controlling the core temperature (cooking degree):

To control properly the degree of cooking, the aspect and the weight loss, more especially in the case of red meats, we recommend **finishing cooking with a low temperature steam phase.** Adjust the temperature 8°C above the core temperature desired.

Example: Roasting beef:

1st phase:	Coloration	Dry air	210°C	for 15 minutes
2nd phase:	Core cooking	Steam	60°C	Till core T° = 52°C

The cooking time increases to about 1 hour 25 minutes.

5.2 LOW TEMPERATURE COOKING

To optimise certain types of cooking, electronic regulation allows for long low temperature cooking. The set temperature corresponds to the core temperature which must be achieved.

Low temperature is indispensable for treating big pieces (sucking pig, leg of pork (ham), big fish), often treated in vacuum bags (sous vide).

This cooking mode is also worthwhile for perfectly controlling the cooking level (very rare, rare, well done…), for the aspect (external and sliced), for diminishing weight loss, but also for being safer from a hygienic point of view in the preparation of food products.

The quality of cooking is also much less sensitive to the size of the products treated, as well as to their quality.

The time necessary for cooking entirely conducted at low temperatures is of course longer.

LOW TEMPERATURE			
Products	**Mode**	**Cooking T°**	**Approx. time**
Red meats	Steam	55°C	6 h to 12 h
White meats	Steam		
Veal		72°C	
Pork and poultry		77°C	
Pork preparations and terrines	Steam	67°C	
Fish			2 h to 4 h
Salmon - Tuna	Steam	75°C	
White fleshed fish	Steam	80°C	
Miscellaneous			1 h to 1 h 30'
Farm produced foie gras	Steam	70°C	
Fruit	Steam	90°C	
Patatoes	Steam	85°C	

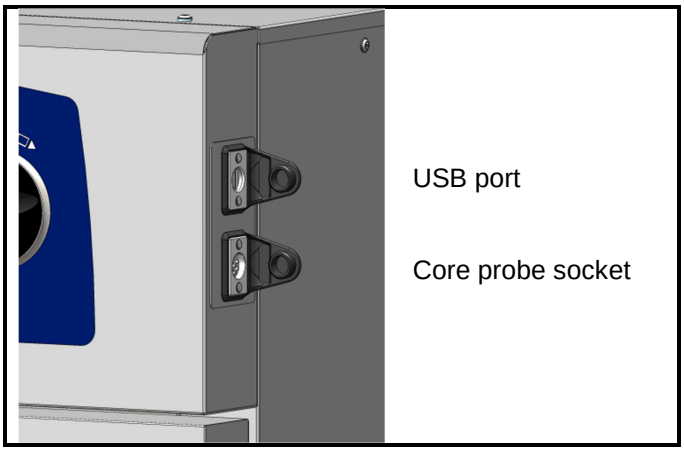
NOTE: Medium size pieces of meat (joints, leg of lamb…)

It is possible to diminish significantly the cooking times (2 or 3 times less), for medium sized pieces, and still partly keep the advantages above, by following:

Products	**1st phase COLORATION**	**2nd phase COOKING**	**3rd phase COOKING**
	Blown air	*Steam*	*Steam*
Red meats	210°C For 15 min	70°C till Core T° = 38°C	60°C till Core T° = 52°C
White meats	210°C For 15 min	90°C to Core T° = 60°C	85°C till Core T° = 73°C

6. CORE PROBE SOCKET / USB PORT (ACCESSORIES)

The core probe socket and USB port are fitted with silicone protective covers. They are located on the right or left of the control panel.



Warning !

- Always put the protective cover in place (lowered to protect connections) whenever sockets are not in use.
- Never “clean” connections with a water hose or a sponge. (If the silicone covers are used and put back in place after use, no maintenance is necessary).
- **The guarantee will not apply if these recommendations are not observed.**

Note: For information on using a USB stick, refer to the “paragraph Exporting data”.

7. ERROR MESSAGES

7.1 ERROR SCREENS

*Client error information: **i**xx*		*After sales error information: **E**xx*	
Yellow screen : Alternative operation	*Red screen : Cooking stopped (pause)*	*Yellow screen : Alternative operation*	*Red screen : Cooking stopped (pause)*
Non-blocking message: reduced functionality Touching the screen anywhere will clear the message	*Blocking message Cooking stops*	*Non-blocking message: reduced functionality Touching the screen anywhere will clear the message*	*Blocking message Cooking stops*

7.2 ERROR MESSAGES

Message on the screen	Consequences	What to do?
i28 : Core probe not connected	Cooking stops.	To continue cooking connect a probe or switch to timer mode.
i31 : Electronics overheating: Temperature reduced to 180°C	Cooking continues automatically at a temperature below 180°C	Clean the lower and rear air intakes. If the problem persists, call a service technician.
i33 : Core probe non function or not plugged	Cooking stops	To continue cooking connect a probe or switch to timer mode.
i81 : Water flow problem	*Reduced functionality or* Pause the cleaning	Check the valve and water pressure. If this message appears during washing: it is imperative to profusely rinse the cavity. If the problem persists, call a service technician.
i82 : Sticking solenoid	*Reduced functionality*	Stop the oven and call a service technician.
E46 : Electronic communication fault	Cooking stops	Possible to launch safe mode: convection mode at 175°C (see guidance and info about the control screen).
E53 : Ventilation non function	Cooking stops	Stop the oven and call a service technician.
E61 : Ambient probe short circuit	Cooking stops	Stop the oven and call a service technician.
E62 : Ambient probe non function	Cooking stops	Stop the oven and call a service technician.
E68 : Cavity at +290°C	Cooking stops	Stop the oven and call a service technician.
E72 : Electronics at over + 75°C	Cooking stops	Stop the oven and call a service technician.
E73 : Detergent pump faulty or on permanently	Drain the hydraulic circuit. *Reduced functionality*	Stop the oven and call a service technician.

8. MAINTENANCE

8.1 INFORMATION ABOUT STAINLESS STEELS

Stainless steel is a steel grade designed that a thin protective sheet is formed on the metallic surface, which protects it against corrosion (Oxide film resulting from the chemical reaction of oxygen on the metallic surface).

Anything hindering the formation of this sheet, or facilitating its partial destruction (Food residues, overflow of liquids, stagnant liquids…) reduces the resistance of stainless steel to corrosion.

Whilst the composition of stainless steel enables it to withstand some chemical aggression better than classical steels, **you must not think that stainless steel is indestructible.**

- 3 main factors contributing to corrosion should be watched for:

- The chemical environment in general:	* Different brines (Salt concentration, Sauerkraut…) * Chlorides contained in particular in: - cleaning products - bleach.
- The temperature:	Any chemical environment is made considerably more aggressive to stainless steel as the temperature rises.
- The duration:	The longer the contact time between stainless steel and the chemicals, the more noticeable the consequences of corrosion will be.

The combination of these three factors may lead to the eventual destruction of parts of the equipment, even if they have been made in very high quality stainless steel.

Note that when stainless steel becomes corroded, it is extremely rare that this is generated by the steel itself. Generally, cleaning products, which are not appropriate or are improperly used, lack of maintenance or extreme conditions of use are often found to be the cause of the damage.

WARNING!

The manufacturer will not be held responsible for cases of corrosion resulting from these conditions and the warranty will not apply.

A list of the most frequent causes follows, to allow you to better identify possible inappropriate use and to ensure the long service life of your equipment.

8.2 THE COMMONEST CAUSES OF CORROSION:

Floor cleaning

Floors are often cleaned with very aggressive products (prior to handover or during a kitchen deep clean). If the product is sprayed, without necessary precautions or suitable dilution, any splashes on the appliances may result in the corrosion of legs, bases and low level trims.

Worse still, if the area is not properly ventilated after application, the vapour from these products may settle on the equipment and result in corrosion spreading to the entire surfaces.

Inappropriate cleaning product (Bleach, Acids, Soda)

If inappropriate products, such as bleach, acid or soda dilutions, (all products which are not specifically designed for the maintenance of stainless steels) are used, irreversible etching of the stainless steel surfaces can occur.

Cleaning product applied when the temperature is too high

All cleaning products are more aggressive at higher temperature. In principle the temperature of any surface **must not exceed 60°C** or permanent staining (blackening) of the stainless steel will result.

Inadequate rinsing after cleaning

After cleaning the surfaces should all be rinsed thoroughly to remove any chemical residues. If this is not done the residue will continue to act over time with the risk of starting the corrosive process.

Worse still, if the affected surface is submitted to temperatures over 60°C (inside of an oven, a tank or tank,...), the impact will be greater and corrosion will almost inevitably occur.

Stagnation of cleaning products

In the same way, all the areas that can trap chemicals, especially the channels, gutters, drainage manifolds, traps etc. must be subject to careful and plentiful rinsing. (Use a nylon brush to reinforce the action of rinsing with clean water).

Salt concentration

Salt, much in use in kitchens, is often found to be the origin of pitting that can even penetrate the stainless steel. Spillages on any surface should be cleaned up at once.

Particular case of cooking in boiling salted water:

Salting water in a tank or tank presents a major risk: never put cooking salt into the tank before the water and remember that salt can concentrating on the base of the tank. Salt should be added to the water and stirred until it dissolves, the risk is reduced using table salt which dissolves faster.

Intensive use with brine

Certain products, such as sauerkraut (acid juices), fish and sea food (presence of salt), and in general, all brines, must be subject to particular attention. In the case of occasional use there should be no problem if equipment is carefully and systematically cleaned after each use.

In the case of intensive use, all the cooking equipment (ovens, boiling pans, even utensils) must be selected with a grade of stainless steel specifically adapted to use in such an environment

Too much chlorine in the mains water supply

Sometimes certain networks supply water containing chlorine at above normal levels. In this event it is not unusual to be faced with problems of corrosion, pay particular attention to bain-marie, water baths, and equipment left to soak overnight etc.

Cleaning aluminium or aluminium coated items

The presence of aluminium or items that are aluminium coated in a chlorine solution is a particularly powerful catalyst for damaging stainless steel.

Do not leave fittings such as hood filters, aluminium trays or dishes soaking in tanks, tanks, pots, fryers etc. Just one night is sufficient to etch stainless steel at the point of contact with aluminium.

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77656 Offenburg - Germany

9. MAINTENANCE OF THE OVEN

WARNING: **Regular and thorough cleaning will ensure prolonged service life**

- UNDER NO CIRCUMSTANCES SHOULD CLEANING CHEMICALS BE USED ON SURFACES THAT ARE OVER 60°C.
  The result will be serious discolouration and damage to the surfaces.
- Jet washers and hoses, high or low pressure should never be used for cleaning.
- The warranty will not cover resulting damage if the following guidance is ignored.
- The appliance must be isolated electrically during cleaning or maintenance and when replacing parts.

9.1 MAINTENANCE OF EXTERNAL SURFACES

It is necessary to clean the metal surface carefully so as to eliminate all dust, metal particles and deposits of any kind which could damage the protective layer mentioned above.

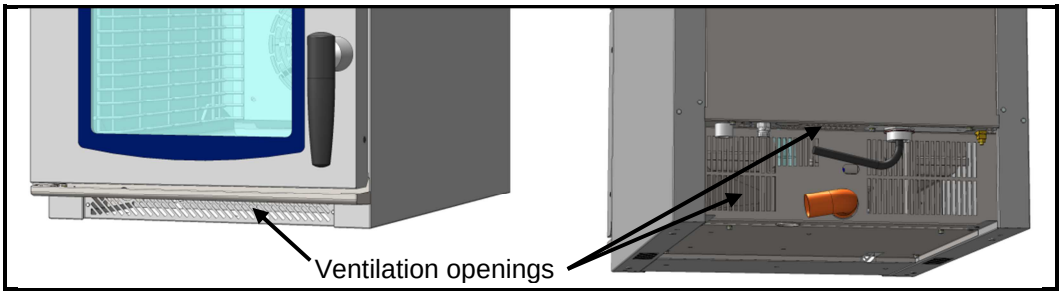
For this purpose, it is sufficient to wash these surfaces with soapy water or any other neutral and non abrasive cleaning product. RINSE CAREFULLY and wipe the surfaces.

Never scrub stainless steel with metal wool, but if necessary, only with a "Scotch Brite" type pad or a similar product, by following the direction of polishing of the stainless steel surface.

9.2 CLEANING THE ELECTRONIC COMPARTMENT VENTILATION OPENINGS

The electronics compartment cooling is via the front air inlet. Hot air is evacuated via the rear.

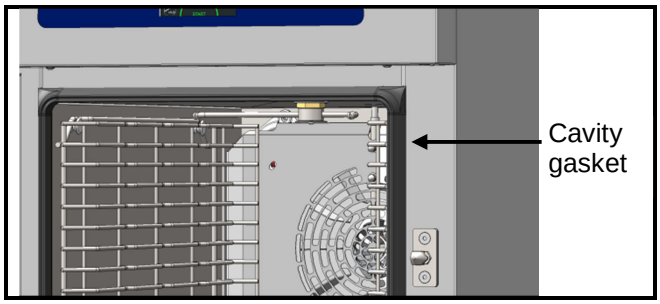
Once a week, check that the aeration grids are clean and not obstructed by dust by cleaning its surface with a dry cloth.



9.3 CLEANING THE CAVITY GASKET

In order to remove traces of grease or food scraps that can damage the gasket, regular and manual cleaning of the cavity gasket should be performed on the inner and outer faces.

Before cleaning, use water with soap or neutral and nonabrasive detergent with a sponge or a soft cloth to remove the grease from the cavity gasket.



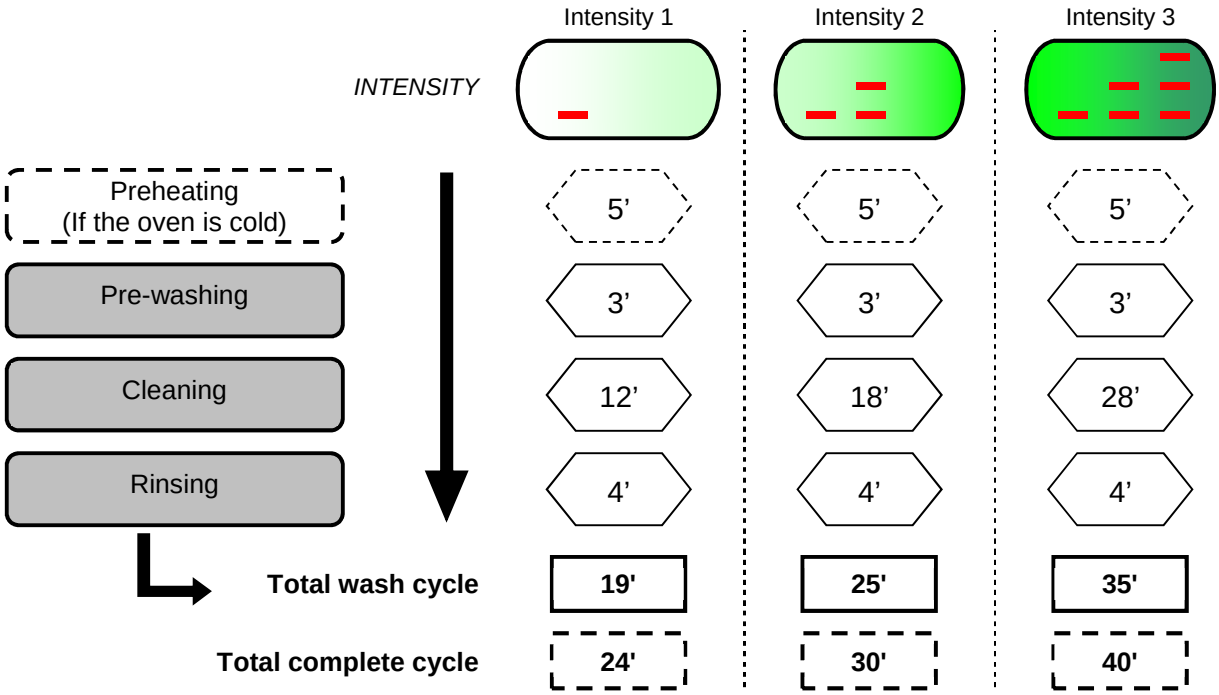
9.4 MAINTENANCE OF INTERNAL SURFACES

The general principle consists in not letting the following settle in certain places:
- Substances likely to become concentrated and so become corrosive.
- Settling of different minerals contained in water and likely to generate corrosion (walls) performance and life-duration (fan balancing, exchanger dissipation, ..) problems.

CLEANING, DEGREASING: Once a day:

9.4.1 USING THE AUTOMATIC CLEANING CYCLE

Cycle and times:



***Procedure*:**

- Switch the oven on.
- Wait a few seconds until the start screen clears.
- Press the button:

➔ **"Cleaning mode"**

- Select the required level of cleaning depending on how dirty the oven is.

➔ **Select cleaning intensity** of 1 to 3

Intensity		Time
1		19 min
2		25 min
3		35 min

- Check the pipe is connected to the chemical container and that the quantity is sufficient. If not refer to the paragraph “**Replacing the chemical containers**”
- Then press the “Start” button:

➔ **"Start"** a cleaning cycle.

- It is still possible to change the intensity of the cleaning cycle whilst the zone is flashing (phase before detergent is injected). Whilst the timer is still displayed:

➔ Time remaining before the end of the cycle.

- At the end of the cycle the display indicates "00 00".

9.4.2 STOPPING THE CLEANING CYCLE

To stop a cleaning cycle that is running:

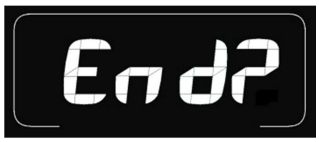
- Press the stop button:

➔ **"STOP"** stops the cycle.

If this action is not validated the cycle is paused but not stopped (It will restart after a few seconds if no further action is taken).

Pressing the button for a second time will restart the cleaning cycle

- Confirm by validating using the “End?”.



➔ **"End?"** Stops the cleaning cycle.

Depending on the progress of the cleaning cycle, it will be immediately stopped or will go directly to rinsing before stopping.

Cycle in progress	***Action in the event the cycle is stopped***
Preheating	Stops immediately
Prewash	
Wash	Automatically switches to rinse mode then stops
Rinse	Finishes rinsing then stop

Warning: If the message **« i81 »** appears during a washing cycle, check the water valve and pressure. It is imperative to rinse profusely the cavity before cooking.

9.4.3 REPLACEMENT OF THE CHEMICAL CONTAINER

Never use descaling product into the automatic cleaning system. This could seriously damage the ovens hydraulic circuits.

Note: Refer to the “Recommendations” chapter when handling or using these chemicals, if in any doubt refer to the products safety sheet

PRODUIT NETTOYANT
CLEANING PRODUCT
PRODUCTO LIMPIADOR
REINIGENDES PRODUKT
PRODOTTO DI PULIZIA
REINIGINGSPRODUCT
PRODUTO PARA LIMPEZA
YAĞ ÇÖZÜCÜ

PRODUIT DETARTRANT INTERDIT
DESCALING PRODUCT PROHIBITED
PRODUCTO DESINCRUSTANTE PROHIBIDA
ENTKALKENDES PRODUKT VERBOTEN
PRODOTTO DISINCROSTANTE VIETATO
ONTKALKER PRODUCT VERBODEN
PRODUTO DE DESCALCIFICAÇÃO PROIBIDOS
KIREÇ ÇÖZÜCÜ ÜRÜN YASAKLANDI

Changing the detergent containers
Use the « Priming Cleaner» functions when changing the chemical container if the supply tube is empty.
For example when you start the unit for the first time.

The oven will prime the product then rinse for several minutes

9.4.4 RAPID RINSING

Rapid rinse function using only water (no chemical) for example between two different types of cooking

9.5 MATERIEL USED FOR COOKING CORROSIVE PRODUCTS (Sea fish, sauerkraut)

The materials used intensively and regularly for cooking corrosive products, such as sea fish, sauerkraut, …, should be cleaned carefully and systematically after each use.

10. CONSUMABLES

10.1 GENERAL

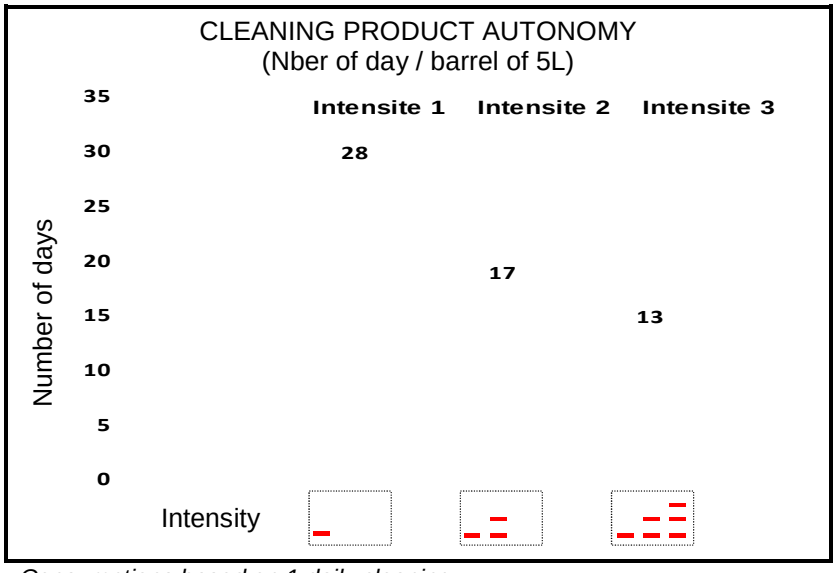
Product sample is supplied with the oven in 1 litre tins.

We recommend the use of products supplied by the manufacturer for cleaning your equipment and to guarantee effective results.

Contact your distributor who can supply these detergent chemicals

<u>Except for the UK market:</u> No detergent product is recommended or supplied. Any detergent used with this appliance must have been verified to represent no greater risk than Fluid Category 3. If the detergent used represents a Fluid Category risk greater than Fluid Category 3 alternative backflow protection to the double check valve supplied with the appliance will be required immediately upstream of the appliance. The backflow protection used must be appropriate to the risk posed by the detergent.

10.2 CLEANING PRODUCT



Consumptions based on 1 daily cleaning

11. PREVENTATIVE MAINTENANCE

The appliance must be isolated electrically during cleaning or maintenance and when replacing parts.

Subject	Daily	Weekly	Monthly	Every year (Or every 3000 h)	Recommendations
Cleaning the external surfaces	x				Use the correct dose of cleaning product; Do not use abrasive products.
Cleaning the cavity seal	x				Use the correct dose of cleaning product; Rinse thoroughly; Do not use abrasive products.
Visual inspection of cavity seal			x		In case of damage, alert the after-sales service
Cleaning and descaling of internal surfaces	x				Respect cleaning product dosage; Rinse thoroughly; Alert the after-sales service if any rust points appear.
Checking the amount of cleaning agent in the container	x				Replace the container as often as necessary
Checking the condition of the hose and of the base valve in the cleaning agent container					Check when replacing the container / Clean the base valve
Cleaning the electronic compartment ventilation openings		x			
Visual check of the presence of inner door stops		x			
Visual check of the condition of the lighting strip label			x		Clean if necessary with a non-aggressive and non-abrasive degreaser. Rinse thoroughly. In case of damage, alert the after-sales service
Visual inspection of the core probe (tip, cable, passage through the bulkhead)		x			In case of damage, alert the after-sales service
Periodic maintenance by the after-sales service				x	

12. GUARANTEE

PLEASE NOTE THAT NO GUARANTEE IS UNCONDITIONAL

Our guarantee applies only for normal use. That is, with the strict observance of the recommendations given in our instructions for use and maintenance.

It will only be valid on condition that the periodical maintenance recommended has been carried out by factory trained engineers.

All appliances are, subject to the above limitations, normally guaranteed for a period of one year, from the date invoice. In the event of a breakdown due to a visible or hidden defect, our equipment will be repaired at our expense, including parts and labour costs.

To benefit from our guarantee, our appliances must not have been modified in any way or repaired using parts which are not genuine and approved for such use or where repairs have been undertaken by personnel who are not qualified or factory trained.

In case of breakdown or failure we should be informed in writing at the earliest opportunity of the nature of the problem. In no circumstances should the defect be remedied by the user or a third party.

Regular service inspections and maintenance by our engineers are an essential condition for correct and reliable operation of our equipment. Such service and maintenance operations can and must only be carried out by our technicians, who are not only fully qualified but also trained to do so. They have the right tooling, original spare parts and are given regular training updates on the appliances. Periodic servicing is essential; it is carried out at a cost but guarantees reliable operation of our appliances

The timing of service and maintenance is relative to the conditions of use. In the event of heavy use certain operations will need to be carried out more frequently.

WARNING! Damage caused by connecting our appliances to a power supply which does not comply with the data plate (voltage, reversal of phase/neutral conductors..) or where phase order cannot be checked (this is important for three-phase motors, fan direction, electric rams,...) will under no circumstances be covered by warranty.

For this reason we advise against connecting appliances until the electrical and gas supplies can be checked and compared with details on the data plate.

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