

# User Manual C-gas



 **HOUNÖ**

ENG

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**For further information on the functions and user interface of the oven, see Service & Installation Manual.**

**Dear customer,**

Congratulations on the purchase of your new HOUNÖ oven.  
You are now the owner of one of the leading ovens on the market.

All HOUNÖ products are subjected to intensive product development, which ensures that the products always offer the latest technology and the most up-to-date and energy-saving methods of preparation. Moreover, the HOUNÖ products are entirely up-to-date with the latest developments/technology in terms of

- ERGONOMICS AND SAFETY
- SIMPLE AND LOGICAL OPERATION
- ELEGANT AND FUNCTIONAL DESIGN
- RELIABILITY AND SERVICE

To ensure that our customers get an optimum and reliable product, all HOUNÖ units are passed through an extensive test programme in which all functions are subjected to a continuous and extreme load.

Before you start using the oven and its many automatic functions, we recommend that you study the manual thoroughly so as to ensure optimum cooking results. By going through the manual, you will obtain a better understanding of the advanced technology and feel safer while using the oven in your daily work.

Furthermore, we call your attention to the wide variety of optional extras:

- Handshower
- Core temperature probe
- Additional cassette rack, trolley for rack, wall bracket
- Extraction hood and extraction hood with condenser
- Visit [www.houno.com](http://www.houno.com) for further information on our wide range of additional equipment

**Terms of warranty**

The oven cabinet and the technical parts of your new HOUNÖ oven are covered by a 12-month factory warranty. However, the heating elements in the oven compartment are guaranteed for 24 months and the exterior door glass for 10 years. The period of warranty takes effect from the date of delivery.

**The warranty does not include....**

We especially draw your attention to the fact that the factory warranty does not cover glass parts such as interior door glass, halogen lamps, nor does it cover sealings. Furthermore, the factory warranty does not apply in the case of

1. defects that are due to the fact that installation has not been carried out in accordance with the HOUNÖ Installation & Service Manual at present in force (electricity, water/drain, exhaust).
2. defects and interruptions of operation that are the result of the oven not being handled/operated as specified in the user's manual.

If you utilise all the technological facilities of this oven, you are guaranteed perfect results with only a minimum of resources.

Enjoy your new HOUNÖ oven.

Yours sincerely,  
**HOUNÖ A/S**

## Safety Instructions

### Ready for use....

When the oven is correctly installed, read this manual carefully before the oven comes into service.

This manual should be kept handy to persons using the oven.

Always place trays filled with hot liquid in the bottom runners of the oven chamber to avoid spilling the hot liquid on yourself when you take the tray out of the oven chamber.

Some areas on the outside of the oven may get as hot as 60°C or more, therefore, you should only touch the front of the oven.

Do not open the oven during the automatic cleaning process.

Do not store flammable materials around or under the unit.

When using the roll-in or trolley system, be aware of hot racks sliding out of the oven. Use the parking brakes on the wheels to prevent trolleys from rolling away on uneven floors.

### Gas units only:

If your oven is installed under an extraction hood (recommended), the extraction hood should be switched on when the oven is running.

If your oven is connected to a chimney, the flue duct must be cleaned in compliance with local standards and regulations.

Do not block the exhaust pipes or the area around the oven.

The oven should only be used in calm conditions.

**FAILURE TO COMPLY WITH THE ABOVE INSTRUCTIONS MAY INCREASE THE RISK OF FIRE!**

### If you smell gas....

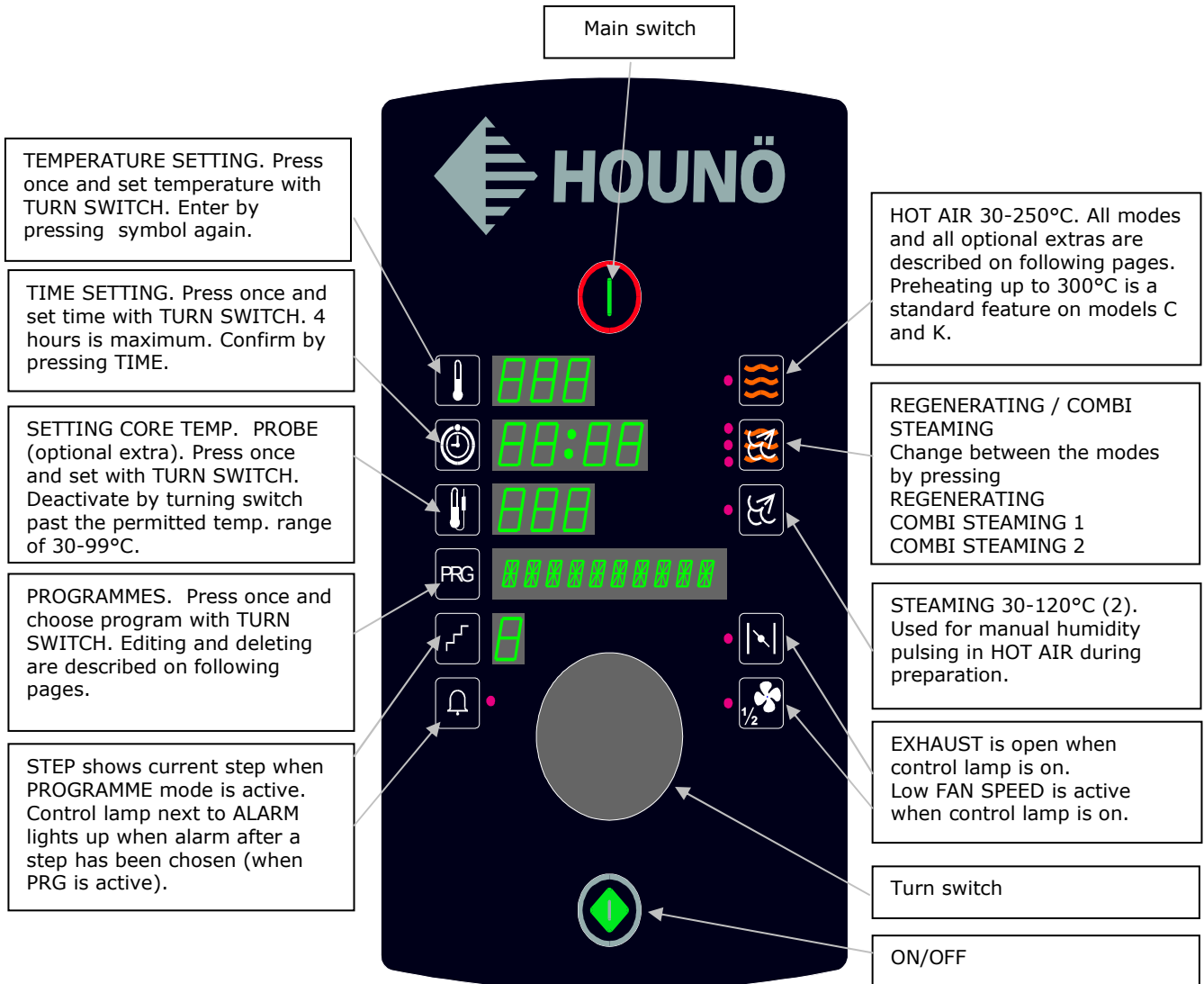
- Turn off the gas supply immediately.
- Do not use the control panel.
- Make sure there is ample ventilation near the oven.
- Avoid open fire and sparks.
- Call the gas supplier, using an external phone.

### Maintenance and repair:

Maintenance and repair should only be carried out by trained technicians.

Only use cleaning detergent that matches the specifications from the factory.

## Operation panel



- (1) If the oven does not incorporate CombiWash, the manually operated cleaning system can be activated by pressing the PRG key and turning the turn switch until CLEANING appears in the display.
- (2) The C model has no steam generator, but this mode makes it possible to steam in the oven anyway. At temperatures between 65 and 100°C, you can steam all kinds of vegetables, rice, pasta, meat and fish. In the following, this mode will be referred to as "Combi steaming 3".

## Settings

### Setting of temperature

Press TEMPERATURE key once and set temperature with turn switch.  
Confirm by pressing TEMPERATURE key again.

### Setting of time

Press TIME key.

Time flashes.

Choose desired time (hours and minutes) with turn switch.

If switch is turned all the way down to 0, ":-:--" (continuous operation) appears in the display.

Max. time setting is 4 hours.

Confirm by pressing TIME key again.

### Setting of core temperature (optional extra)

Press CORE TEMPERATURE key.

If the display is off, the core temperature appears as 75°C.

Set core temperature between 30 and 99°C with turn switch.

Core temperature is deactivated by turning switch past 30.

When core temperature is chosen, time changes to ":-:--" .

Confirm by pressing CORE TEMPERATURE key again.

The core temperature probe has several measuring points on its tip.

The computer calculates an average temperature thus ensuring that the core temperature is 100% correct.

If the probe is inserted incorrectly, the advanced technology notifies you at once.

The probe is inserted vertically in the thickest part of the product.

When preparing products of very different sizes, you get a uniform quality by inserting the sensor in the smallest product and then moving it to a larger product when the core temperature alarm sounds.

### Programmes

10 programmes that can hold 3 process steps each. It is possible to write 10 characters and entering alarm after steps 1 and 2.

Press PRG and turn the switch. The first five programmes are preset at the factory (P0 – P4). Start the programme by pressing the ON/OFF key.

To leave PROGRAMME, turn the switch beyond "P O".

To delete an entire programme, press core temperature key and alarm key simultaneously for 2 seconds.

When the keys or the turn switch is idle for 20 seconds, the oven returns to manual operation.

### Entering and changing text

To enter or change text, press PRG for 3 seconds.

The first digit or the relevant letter/"\_" flashes alternately. Change the flashing character with the turn switch. You can choose between all the letters of the alphabet and the digits 0 – 9.

The space sign is next to the letter A.

Move on to the next digit by pressing PRG briefly.

Store text by pressing PRG until "SAVED" appears in the display.

To leave text editing without storing, press ALARM. The original text reappears.

To delete the entire text, press PRG and ALARM simultaneously for 2 seconds.

When a key or the turn switch is idle for 20 seconds, the oven returns to *select programme*.

### **Entering and changing data in steps**

By pressing STEP when PROGRAMME is active, the step display is turned on and shows "1". The data of the first step can now be entered.

To move on to the next step (1-3) and read and change settings, press STEP again. Choose and change temperature, time, core temperature, exhaust and fan as in manual operation.

Stop between steps: To turn the alarm between steps on and off, press ALARM. If the control lamp is on, the programme ends with the current step and a beep is heard. The oven does not proceed to the next step until the oven door is opened and closed or you press ALARM.

To store a change made in the step mode, press PRG for 2 seconds.

Leave STEP by choosing another programme with the turn switch.

Be careful not to use the turn switch when a value flashes. If you turn the switch while you are working in STEPS, the computer switches to the next programme and all changes are lost.

Delete current step by pressing STEP and ALARM simultaneously for 2 seconds.

When the programme has started, you can still change time, temperature, core temperature and the settings of fan and exhaust. These changes will then only be active in the current run. Note that the display shows the total time remaining after start and that it will show the time remaining in the current step when you press TIME.

## Description of Functions

### **Hot air**

30-250°C

The hot air operating mode can be used for roasting, grilling, baking and gratinating. We recommend that you keep the exhaust open when roasting products at very high temperatures. It is possible to roast breaded products such as breaded fish and breaded pork chops. For maximum effect, use enameled cast iron trays / silicone-coated baking sheets and one of the special browning fats available in the shops.

### **Preheating**

251-300°C

By setting the temperature higher than 250°C, you change to the preheating mode and PREHEAT is shown instead of HOT AIR. With this function, you preheat the empty oven. The time can be set to max. 15 minutes, and continuous operation (-:--) is not possible. The preheating mode has been changed so that the countdown does not start until the desired temperature has been reached. This is to ensure that the oven is always in the same condition when the oven is loaded, no matter the starting temperature.

IT IS RECOMMENDED TO ALWAYS PREHEAT THE OVEN BEFORE USE.

### **Combi steaming 1 & 2**

30-250°C

COMBI STEAMING 1 is recommended for the roasting of all kinds of meat cuts. The pores of the meat close quickly, which prevents the juice from leaving the meat.

When using long-time roasting at 80 – 130°C, COMBI STEAMING 1 helps reduce shrinkage.

COMBI STEAMING 2 is recommended for roasts that should be well-done, and if you want to use the juice in the container for gravy. At temperatures higher than 170°C, the crust of the meat becomes nice and brown. A great deal of humidity is added to the oven chamber and the amount of liquid in the tray is increased during production.

### **Cook & Regen**

30-180°C

Regenerating is a very gentle process and therefore very suitable for reheating. Use a core temperature probe to reach the perfect end temperature. For the reheating of sous-vide products, etc., follow the recommendations of the producer as to reheating. The products should not be covered up as this impedes optimum and quick reheating.

### **Manual humidity pulsing**

When you press the key for STEAMING in the HOT AIR mode, you add humidity to the oven chamber. Humidity is added for as long as the key is held down.

### **Steaming in a C model**

30-120°C

Can be used for steaming of all types of vegetables, pasta, rice, meat, eggs and the like. If the oven chamber is 100% loaded with frozen products, hard root vegetables or meat, it will take a little longer until the oven chamber is completely filled with humidity, and the preparation time will be longer than if the oven chamber is only half full.



### **General recommendations for steaming**

STEAMING at 100°C is recommended for all kinds of hard vegetables, rice and pasta.

LOW-TEMPERATURE STEAMING at 70-80°C is recommended for the steaming of fish.

FORCED STEAMING at 120°C is an aggressive and very rapid process, which should be used with care.

IT IS RECOMMENDED TO LET THE OVEN PRESTEAM FOR 8 MINUTES BEFORE LOADING IT. THIS APPLIES TO THE C MODEL AS WELL AS to the K MODEL.

### **Exhaust**

The exhaust is usually closed in all operating modes. It is always closed in the steaming mode. When the control lamp is on, the exhaust is open.

If you wish to reduce the amount of humidity in the oven chamber – when you brown, for instance – the exhaust should be open.

### **Fan speed**

Set the FAN speed by pressing the fan key and turn the switch.

A fan speed between 20 and 50% is recommended for the baking of puff pastry, Danish pastry, cakes and small products as well as in the Delta-T and Cook-and-Hold modes. You may add 1 – 2 minutes' preparation time for each ½ hour when low fan speed is used.

### **Fan speeds below 50% cannot be used at temperatures above 200°C.**

A fan speed between 50 and 100% are recommended if you want a particularly juicy end product and accept a longer cooking time.

### **Hours, date and setting of timer**

Shows the exact time and date when the oven is off. For setting of clock and timer, see USER MENU below.

### **Fully automatic cleaning system, CombiWash (optional extra)**

The cleaning system should be used every day. You choose between levels 1, 2, 3 and 4 and possibly additional detergent, depending on how soiled the oven chamber is. The last thing you do before turning off the light in the evening is activating CombiWash. When CombiWash is finished, the computer automatically switches to an energy-saving standby function.

Follow these steps to start CombiWash:

- Cool down the oven chamber to 80°C.
- Check the level of detergent and rinse aid.
- Press PRG and turn switch until *CombiWash* appears in the display.
- Press STEP to select cleaning level: 0 is 2 minutes' flushing with water – 1 is light cleaning and 4 is very thorough cleaning. Press ALARM for additional detergent.
- Close oven door and press ON.

**Steps 1 and 2** are used after steaming/roasting at low temperatures.

**Steps 3 and 4** are used after roasting of meat / cooking at temperatures higher than 180°C.

We recommend that the oven is cleaned on a daily basis or after each production.

### Semi-automatic cleaning

This cleaning function can also be used on ovens with CombiWash. Simply deactivate CombiWash in the user menu.

- Cool down oven chamber to 60°C.
- Press PRG and *cleaning* appears in the display. Press ON.
- Press ON
- When the alarm sounds (after 10 minutes) and *add soap* appears in the display, open oven door and spray detergent into oven chamber. Close oven door and the programme continues.
- When the programme is over, *rinse oven* appears in the display (after another 10 minutes). Rinse oven chamber.

If the oven is very soiled, activate combi steaming 2 at 80°C for 30 minutes before starting cleaning programme.

Programme/recipe	Mode	Temp./time/misc.	Remarks
<b>0</b> Fillet of beef, 4 kg, trimmed, medium	1) Hot air / preheating Alarm 2) Combi steam 1 3) Combi steam 1	200/5  180/20 60/20	Last step is "holding time" which ensures that the meat is medium done. May be omitted.
<b>1</b> Braised pork, 3-4 kg, well-done	1) Combi steam 2 2) Combi steam 1	165/60 80/45	Last step is "holding time" which ensures perfectly roasted meat. May be omitted.
<b>2</b> Neck of pork with lard, 3-4 kg, well-done	1) Steaming 2) Combi steam 1 3) Hot air	100/40 165/40 190/20/exhaust open	
<b>3</b> Low-temperature steaming for 5 hours, medium (max. 5 kg)	1) Combi steam 1 2) Combi steam 1 3) Hot air	80/105 60/180/low fan speed 200/15/exhaust open	Can be used for all kinds of lean cuts of veal and beef.
<b>4</b> Duck roast, 3000 g	1) Hot air / preheating Alarm 2) Combi steam 2 3) Combi steam 1	200/5  145/40 170/30	

## Indicative core temperatures for beef, veal, pork and lamb

Cuts of saddle, tenderloin and ham	60-65°C
Roast of saddle, ham	65°C
Cuts of meat containing a great deal of connective tissue, such as neck, brisket and shoulder	80°C
Paté	75°C
Terrine	60°C
Foie gras terrine	45°C
A rare roast is achieved at a core temperature of	60-62°C
A medium-rare roast is achieved at a core temperature of	65-67°C
A roast well-done is achieved at a core temperature of (Meat with a great deal of connective tissue)	70°C 80°C)

The more connective tissue the meat contains, the more important is the holding time after the core temperature has been reached.

During traditional roasting at temperatures higher than 150°C, the core temperature may rise by an additional 5°C during the first part of the holding time.

Tender meat such as sirloin steak and trimmed fillet reaches maximum tenderness at 65°C. The meat becomes tougher between 75 and 80°C but becomes increasingly tender again as the temperature rises above that.

Meat containing a great deal of connective tissue, such as shoulder, brisket and neck, needs to be heated for a long time before it is sufficiently tender – for instance, a holding time of 30 – 90 minutes at a core temperature of 65-75°C (then it is “low-temperature tenderising” – see “Low-temperature roasting”).

For meat prepared for a buffet or for display on a sales counter, the indicative core temperature is above 75°C. The meat should be removed after 3 hours or when the core temperature falls to below 65°C. See recommendations from the Ministry of Health.

### Indicative core temperatures for fish

Fish without bones	55°C
Fish with bones	60°C
Fish pâté	65°C

The steaming of fish will succeed at a temperature of 65 – 80°C. The fish does not coagulate and shrinkage is reduced to a minimum.

## Low-temperature and long-time roasting

### Indicative bactericidal holding times

#### Long-time roasting

Roasting at a temperature between 110 and 150°C. Slow heating produces meat that is uniformly cooked.

#### Low-temperature roasting

Can be described as roasting below 100°C, the core temperature of the roast and the oven temperature being almost the same. The advantage of this method of preparation is that the roast is uniformly cooked. Furthermore, the slow preparation/heating process may result in the meat becoming more tender. Can be used for all types of meat and is particularly suitable for the preparation of meat with a great deal of connective tissue. With holding time at a core temperature of 65°C, it is possible to achieve additional tenderising of particularly "tough" cuts of meat (at temperatures above 60°C, the meat starts to dehydrate).

#### Shrinkage during low-temperature roasting

Depending on the meat, the following indicative temperatures can be used for cuts of meat that should be medium-rare or well-done:

5 hours	approx. 25-30% shrinkage
10 hours	approx. 35-40% shrinkage
20 hours	approx. 45% shrinkage

#### Keeping qualities and indicative legal requirements from the Danish Ministry of Health

The keeping qualities of heated meat vary a great deal according to the way the meat is packed while stored – from a few days for small cuts of meat to several weeks for sous-vide products.

The Danish legal requirements governing food hygiene state:

When heated, the food product should have an overall temperature of at least 75°C, with the following exceptions:

- Whole cuts of meat
- Meat which the consumer does not want well-done, served in portions
- Hens' eggs served one at a time
- Other kinds of food which, because of their nature, cannot be heated to at least 75°C. Heating up food should not, however, cause any hygienic problems.

Food that has been heated should either be eaten within 3 hours, kept hot at a temperature of 65°C, or cooled down to max. 5°C in the course of no more than 3 hours.

## User menu

To enter the user menu, press ALARM for 5 seconds while you are in the manual mode.

The display briefly shows "USER MENU". The core temperature display shows "b" and the **number** of the value to be set (see below).

You leave the user menu by turning the turn switch beyond "0".

1	Store pre-setting	Time and temperature can be changed in HOT AIR, COMBI STEAMING and STEAMING and saved by pressing ALARM. The alarm control lamp flashes when data are ready to be saved. The desired changes should be made before entering the USER MENU.
2	Timer	Press STEP to change the various settings of the timer. 1) DATE. The date flashes in the temperature display. To set the date, turn switch. 0 means daily start. 2) HOUR. Set the hour. 3) MINUTE. Set the minute. 4) MODE. Choose a mode by pressing one of the four mode keys. 5) TEMPERATURE. Set the oven temperature. 6) TIME (duration of program) 0:00 - 4:00. Press ALARM to activate timer (ON appears in the temperature display and control lamp is on). Deactivate by pressing ALARM. The oven can now be turned off with the main switch or it can be left on standby. The oven starts automatically but only in the manual mode.
3	Volume low	Press STEP and adjust the volume of the alarm during operation from 0 to 9.
4	Volume high	Press STEP and adjust the volume of the alarm at the end of a program/mode from 1 to 9.
5	Sound frequency	Press STEP and adjust from 1 to 9.
6	Interior light	Press STEP: 0 = continuously on / 5 = off after 5 min. / 1 (B model) = continuously on but off when door open / 6 = off after 5 min. but off while door open.
7	Current temperature	0 = desired temperature / 1 = current temperature. Adjust by pressing STEP.
8	Extraction	Applicable only if oven has condensing extraction hood. 0 = extraction hood running independently of oven / 1 = extraction hood stops 10 minutes after oven has stopped.
9	Time graphics	Shown in text display during operation. Change by pressing STEP. 0 = Display shows mode chosen 1 = Display alternately shows mode chosen and time remaining.
10	Minutes	Minutes are shown in temperature display. Change by pressing temperature key and turning switch. Store by pressing temperature key again.
11	Hour	Hour is shown in temperature display. See 10.
12	Day	Day of the month, 1-31. Day of the week, 1 - 7, in time display. See 10. In Europe, you can choose to have the computer switch to summer time automatically. 0 = No change, 1 = Change from/to summer time.
13	Month	Month. See 10.
14	Year	The year 2009 is indicated by "9". See 10.
15	CombiWash	For ovens with the automatic cleaning system, CombiWash: If problems occur with respect to some of the CombiWash error messages, the program can be deactivated. 0 is shown in step display.

		Then activate the semiautomatic cleaning program by pressing START (no wash arm required) and follow the instructions in the display.
16	Cook & Regen	Setting of humidity pulsing. Press temperature key and turn switch to change setting. The value indicates the number of seconds between each injection into the oven chamber. If the value is increased, less humidity is added to the oven chamber, if the value is reduced, more humidity is added (factory setting is every 8 seconds).
17	Injection interval 1	Combi steaming 1: See 16 (factory setting is every 12 seconds)
18	Injection interval 2	Combi steaming 2: See 16 (factory setting is every 5 seconds)
19	Save all	Press ALARM to make a backup of all settings in all modes and programmes.
20	Retrieve all	Press ALARM to retrieve all settings saved in all modes and programmes.
21	Retrieve original menu	Press ALARM and retrieve all programmes preset by the manufacturer. In step display, choose which program (0 - 4) to retrieve and press ALARM.
22	Screen saver	Interval of seconds before screen saver becomes active. 0 = 0 sec. / 1 = 10 sec. / 2 = 30 sec. / 3 = 60 sec./ 4 = 180 sec. / 5 = 600 sec. Change by pressing STEP.
23	Language	Change by pressing STEP (1 - 4).
24	SW update	Updating of software. Special memory key required. Contact your local distributor.

## Cleaning

Daily cleaning of the oven is recommended for hygienic reasons and to avoid interruptions of operation.

The design of the HOUNÖ ovens allows quick and easy cleaning. The oven chamber is made of all-welded stainless steel, which makes it splash proof. You will therefore find the easy-to-use handshower (optional extra), which is located under the front panel, very suitable for interior cleaning.

The door sealing is easy to remove, which ensures quick and efficient cleaning under and around it.

Furthermore, the flat front panel makes exterior cleaning simple and efficient.

To give the oven an extra shine, we recommend HOUNÖ steel oil which is available from your oven supplier (0.5 litre: part No. 045650 – 5 litres: part No. 045654).

### **Oven chamber**

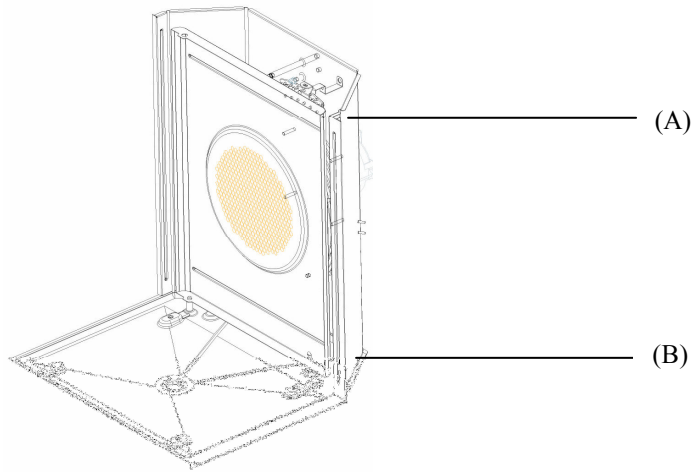
Use CombiWash, level 1-4 (note that CombiWash should be ordered as optional extra together with the oven as it cannot be retrofitted) or the semi-automatic cleaning program (see *Description of functions*), or do as follows:

- A.** Always clean in a cold oven or cool the oven chamber down to below 80°C.
- B.** Let the oven run in COMBI STEAMING 2 at 80°C for 15 minutes.
- C.** Apply HOUNÖ oven detergent to the sides of the oven chamber, racks, etc. (according to requirement) using a soft brush or a spray pistol. Protect your face and hands as the detergent may cause irritation should it come into contact with your skin.
- D.** Let the detergent work for 10 minutes.
- E.** Let the oven run in COMBI STEAMING 2 at 80°C for 15 minutes.
- F.** Rinse the oven chamber with water (using a soft brush or the handshower (optional extra)).
- G.** If the oven is not connected to a soft-water plant, we recommend that you use HOUNÖ rinse aid and wipe the oven chamber with a dry cloth.

### **Cleaning behind filter housing**

For thorough cleaning of the oven chamber, move the filter housing so that it becomes possible to clean round the fan and heating elements.

Loosen the 2 screws (A) and (B) on the filter housing, turn the filter housing and clean behind it. The filter housing can be dismantled entirely by lifting it upwards till it is clear of the pin at the bottom and then tipping it.

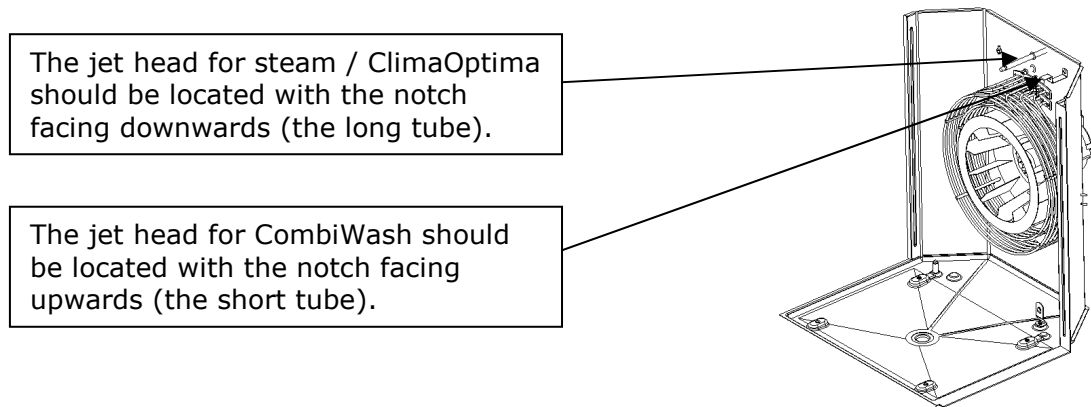


### Cleaning of jet heads

The jet head should be dismantled and cleaned regularly according to how often the combi steaming and ClimaOptima modes are used. The easiest way to clean the jet head is to let it soak in scale remover according to requirement. All ovens are supplied with an additional jet head.

If the oven is equipped with the automatic cleaning system, CombiWash, there will be two jet heads. The other jet head will be located to the right of or above the first one. This jet head should also be checked/cleaned regularly.

Please note the position of the jet heads:



### Exterior cleaning

Wash the oven cabinet on the outside with soapy water and dry with a soft and damp cloth.

After drying, apply HOUNÖ STEEL OIL (follow directions on the packaging). The steel oil is available from your oven supplier (0.5 litre: part No. 045650 – 5 litres: part No. 045654) and is only for external use.

**Note!** The exterior of the oven must never be flushed with a water hose or high-pressure cleaner as this may damage the electronic components.



**Filter**

Under the front panel is a filter that should be cleaned on a weekly basis – either manually or automatically.

Remember to fit the filter again after cleaning to prevent dirt, soil, etc. from entering the oven.

**If the filter is not cleaned, the computer may get too hot causing the oven to fail.**

## Error Codes

<b>Error code 3</b>	<b>Generator too hot</b> (Generator thermo switch disconnected. Reconnect by pressing button to the left behind service panel)
<b>Error code 4:</b>	<b>Oven too hot</b> (Reaction from either generator thermo-switch, oven thermo-switch, fan thermo-switch or cold plate sensor. Reconnect generator and oven thermo-switch to the left behind the service panel)
<b>Error code 5:</b>	<b>Fan too hot</b> (Fan too hot. Thermo-switch in motor disconnected. Wait for 10 min. And try again.)
<b>Error code 6:</b>	<b>Drain too hot</b> (Drain temperature has been too hot (above 75°C) for more than 5 min. Check that jet in drain is working)
<b>Error code 7:</b>	<b>Oven sensor defective</b> (Temperature sensor in oven not working properly)
<b>Error code 8:</b>	<b>Core temp. probe not connected</b> (A program using core temp. probe has been chosen, but the probe has not been connected)
<b>Error code 9:</b>	<b>Generator sensor defective</b> (Temperature sensor in generator not working)
<b>Error code 10:</b>	<b>Drain sensor defective</b> (Sensor in drain not working. The oven can still be used)
<b>Error code 11:</b>	<b>Water shortage</b> (Steam generator was not filled within two minutes. Check that the water has been turned on)
<b>Error code 12:</b>	<b>Solid State relay cooling plate too hot</b>
<b>Error code 13:</b>	<b>Generator too hot</b> (Temperature in steam generator higher than 130°C. If error recurs, descale generator)
<b>Error code 14:</b>	<b>Fan too slow</b>
<b>Error code 15:</b>	<b>CPE hot</b> (Temperature in CPU board too high (>60°C))
<b>Error code 16:</b>	<b>IO board hot</b> (Temperature in IO board too high (>60°C))
<b>Error code 18:</b>	<b>Memory error</b> (internal defect)
<b>Error code 19:</b>	<b>Wrong language</b>
<b>Error code 20:</b>	<b>Internal defect</b> (Failure in communication between computer and IO board)
<b>Error code 22:</b>	<b>No restart</b> (Cut-out during program performance. Cut-out has lasted so long that program cannot be restarted)
<b>Error code 23:</b>	<b>Oven too hot</b> (Oven too hot for CombiWash (> 120°C))
<b>Error code 24:</b>	<b>Drain blocked or draining failure</b> (After 10 seconds of draining, the water level in the generator is still high.)
<b>Error code 25:</b>	<b>Core temperature probe defective</b> (1 or 2 of the 3 core temperature probe elements defective).
<b>Error code 28:</b>	<b>Configuration error in main alarms (3, 4, 5, 12)</b> (Warning)
<b>Error code 29:</b>	<b>Failure of door sensor signal</b> (Warning)
<b>Error code 34:</b>	<b>Water pressure too low</b> (Check that water is turned on)
<b>Error code 50</b>	<b>Pressure switch on wenn gas-air control unit not running</b> (timeout 20 sec.)
<b>Error code 51</b>	<b>Pressure switch not on when gas-air control unit running</b> (timeout 20 sec.)
<b>Error code 52</b>	<b>Gas valve does not open</b> (automatic gas burner control has failed (timeout 20 sec.))
<b>Error code 53</b>	<b>Gas-air control unit does not revolve when pressure switch is on</b>
<b>Error code 54</b>	<b>Gas-air control unit does not run at correct RPM just before ignition</b>
<b>Error code 55</b>	<b>Warning: Ignition failed</b>
<b>Error code 56</b>	<b>Flame fails to occur after 3 attempts</b>
<b>Error code 57</b>	<b>Warning: Gas failure during operation</b>

## Recommended Programmes

**The following recipes are for ovens equipped with the modes ClimaOptima and Steaming. To the right is a conversion table which enables you to use the recipes in all HOUNÖ ovens.**

For further inspiration, see the recipes on our website: [www.houno.com](http://www.houno.com)

ClimaOptima 0%	Hot air with exhaust open
ClimaOptima 30 – 60%	Combi 1
ClimaOptima 70 – 90%	Combi 2
ClimaOptima 100%	Combi 3
Steaming	Combi 3

**Note:** Most programmes have a PREHEATING OR PRESTEAMING mode followed by STOP. This means that the products should not be loaded into the oven until this step is completed. **Find program – press start – wait for alarm signal – open door – load oven – insert multipoint core temperature probe, if any – close door. The program continues automatically.**

\*(This value refers to the estimated amount of humidity that the products give off during the below programmes)

Veal & Beef		Mode	%	°C	Min.	CT	Remarks
Tournedos, medium	1	Preheating - Alarm		250	1		Apply special browning fat to meat and tray. Use baking sheets, grilling sheets, enameled iron sheets *20%
	2	Hot air / exhaust open		250		57	
Fillet with flank, 4-6 kg, medium	1	Preheating - Alarm		160	2		*50%
	2	ClimaOptima	60	135	20		
	3	ClimaOptima	20	150		57	
	4	Hot air		185		62	
Tenderloin, roasted whole, 1½-3 kg, medium	1	Preheating - Alarm		210	2		Salting 5-10 g per kg, 6-24 hrs before roasting reduces shrinkage by an additional 2-3% *30%
	3	ClimaOptima	30	185		60	
Roasted cuts of meat, medium	1	Preheating - Alarm		250	1		Salting 5-10 g per kg, 6-24 hrs before roasting reduces shrinkage by an additional 2-3% *30%
	2	Hot air / exhaust open		250		59	
Braising, 3-6 kg, well-done	1	Preheating - Alarm		160	2		*60%
	2	ClimaOptima	70	135		65	
	3	ClimaOptima	40	165		75	
Joint of beef or veal, 3-6 kg, with lard, well-done	1	Preheating - Alarm		140	2		*50%
	2	ClimaOptima	80	110	20		
	3	ClimaOptima	40	135		50	
	4	ClimaOptima	20	165		70	
	5	Hot air / exhaust open		195	15		
Long-time roasting, 10 hours, Meat with lard and fat, well-done	1	ClimaOptima	100	110	30		*50%
	2	ClimaOptima	30	80	180		
	3	ClimaOptima	30	70	370		
	4	ClimaOptima	0	220	20		

Long-time roasting, 10 hours, trimmed meat, medium	1	ClimaOptima	40	100	30		*50%
Braised knuckle of veal	1	Preheating - Alarm		180	2		*60%
	2	ClimaOptima	60	165		60	
	3	ClimaOptima	20	100		70	
Roastbeef, 2-5 kg, medium	1	Preheating - Alarm		160	2		Salting 5-10 g per kg, 6-24 hrs before roasting reduces shrink-age by an additional 2-3%. *40%
	2	ClimaOptima	30	135		57	
Sirloin in puff pastry	1	Preheating - Alarm		180	2		*50%
	2	Hot air		150		50	
	3	Hot air / exhaust open		180		60	
Steamed brisket of veal and beef, 1-4 kg, well-done	1	Steaming		100	8		*60%
	2	Steaming		100		80	
	3	Steaming		80	45		
Lasagne	1	ClimaOptima	30	145		85	*60%
	2	ClimaOptima	0	185	10		
Minced meat dishes	1	ClimaOptima	40	165		80	*60%
	2	ClimaOptima	0	185	10		
Pâté in tins of 1000 g each	1	ClimaOptima	30	80		75	*60%
	2	ClimaOptima	0	100	10		
<b>Pork</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Neck of pork and rib roast with lard, 2-5 kg, well-done	1	ClimaOptima	100	100	30		*50%
	2	ClimaOptima	60	165		78	
	3	Hot air / exhaust open		195	20		
Roasted saddle of pork, 2-5 kg	1	Preheating - Alarm		175	2		*40%
	2	ClimaOptima	30	165		75	
Neck of pork without lard, 2-4 kg, well-done	1	Preheating - Alarm		195	2		*50%
	2	ClimaOptima	30	165		78	
	3	ClimaOptima	20	70	45		
Ham with knuckle, 8-10 kg, well-done	1	Steaming		100	8		*50%
	2	Steaming		100	120		
	3	ClimaOptima	60	135		75	
	4	ClimaOptima	20	185	20		
Ham roast without lard, 2-3 kg, well-done	1	Preheating - Alarm		185	2		*30%
	2	ClimaOptima	60	165		85	
Roasting of pork chops, 140-200 g	1	Preheating - Alarm		250	1		Add special browning fat to meat and tray. Use silicone-coated baking sheets, enameled cast iron trays or specially designed grilling trays. *30%
	2	Hot air		225		16	
Spareribs, basic preparation	1	Presteamng - Alarm		100	8		Season/marinate
	2	Steaming		100	45		

Spareribs, finishing (presteamed, marinated)	1	Preheating - Alarm		200	2		*30%
	2	ClimaOptima	65	170	30		
Braising, 2-3 kg, well-done	1	Preheating - Alarm		160	2		*60%
	2	ClimaOptima	60	135		65	
	3	ClimaOptima	70	165		80	
Suckling pig roasted whole, 20-23 kg, well-done	1	ClimaOptima	60	100	240		Use HOUNÖ rack for suckling pig which is available for model sizes 1.16 and 1.20. *40%
	2	ClimaOptima	20	70	210		
	3	Hot air / exhaust open		250	30		
<b>Delta-T roasting</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Delta-T, medium	1	Preheating - Alarm		210	2		For whole roasts. Perfect program for production during the night. The meat is kept hot indefinitely at the last stage (Co&Ho). Recommended time of preparation before last stage is 60/90 minutes (medium/well done). Optimum tenderness of the meat is achieved. Shrinkage is reduced by approx. 10-15 % as compared to traditional roasting methods. The meat can be taken directly from the oven.
	2	ClimaOptima	20	185	10		
	3	Cooling		40			
	4	ClimaOptima Delta-T	30			62	
	5	Hot air / low fan speed / Cook & Hold				60	
Delta-T, well-done	1	Preheating - Alarm		210	2		Recommended time of preparation before last stage is 60/90 minutes (medium/well done). Optimum tenderness of the meat is achieved. Shrinkage is reduced by approx. 10-15 % as compared to traditional roasting methods. The meat can be taken directly from the oven.
	2	ClimaOptima	20	185	10		
	3	Cooling		40			
	4	ClimaOptima Delta-T	30			80	
	5	Hot air / low-fan speed / Cook & Hold				60	
<b>Poultry</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Chicken, 1000 g	1	Preheating - Alarm		210	2		*60%
	2	ClimaOptima	60	180	10		
	3	ClimaOptima	40	190	15		
	4	ClimaOptima	0	205	7		
Chicken, 1400 g	1	Preheating - Alarm		190	2		*60%
	2	ClimaOptima	60	165	30		
	3	Hot air / exhaust open	0	190	10		
Chicken, 1700 g	1	Preheating - Alarm		190	2		*60%
	2	ClimaOptima	60	165	30		
	3	ClimaOptima	0	190	10		
Foie gras terrine	1	Cooling - Alarm		55			
	2	Hot air / low fan		65		45	
Chicken pie, 1000 g, in tin	1	Preheating - Alarm		180	2		*60%
	2	ClimaOptima	60	160		75	
Duck roast, 3000 g	1	Preheating - Alarm		185	2		*50%
	2	ClimaOptima	50	145	80		
	3	ClimaOptima	25	170	30		

<b>Fish</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Steamed fish, 60-130 g	1	Presteamming - Alarm		70	8		
	2	Steaming		70		60	
Fish terrine	1	Preheating - Alarm		100	2		*70%
	2	ClimaOptima	60	120		65	
Roasted plaice, breaded	1	Preheating - Alarm		250	2		Apply special browning fat to fish/tray. Use silicone-coated baking sheets, enameled cast iron trays or specially designed grilling trays.
	2	ClimaOptima	0	225	16		
Steamed salmon, whole fillet, 1-3 kg	1	Presteamming - Alarm		70	8		Use flat trays and baking paper. Place fish on skin side. After steaming, remove skin and carefully remove dark fat from the back of the fish with a spoon.
	2	Steaming		70		60	
Grilled fish, 80 g	1	Preheating - Alarm		250	2		*20%
	2	Hot air / exhaust open		225	7		
<b>Vegetables</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Steamed potatoes, 70-120 g	1	Presteamming - Alarm		100	8		Max. 8-9 kg, perforated container
	2	Steaming		100	40	98	
Baked potatoes	1	ClimaOptima	60	165		98	*60%
Cream potatoes	1	Preheating - Alarm		180	2		*60%
	2	ClimaOptima	50	150	65		
French fries, Farmfrites Superfarm Service+ (9x9 mm)	1	Preheating - Alarm		250	2		Use special GN wire basket. Tip: Shake the basket 1 time during the preparation process.
	2	ClimaOptima	20	230	7		
French fries, Farmfrites Superfarm Service+ (7x7 mm)	1	Preheating - Alarm		250	2		*20%
	2	ClimaOptima	20	230	5		
Steamed rice (parboiled)	1	Presteamming - Alarm		100	8		Use deep GN container and flat GN container as cover.
	2	Steaming		100	25		
Danish rice porridge	1	Presteamming - Alarm		100	8		Add sugar, salt and perhaps other spices and stir before adding milk. Use flat GN container as cover. 2 kg rice per 90 mm GN.
	2	Steaming		100	105		

<b>Bread &amp; Pastry</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Danish pastry, 85-100 g, bake-off	1	Preheating - Alarm		210	2		The distance between the sheets should be 130 mm equalling the distance between every other runner. *40%
	2	Hot air		175	13		
	3	Hot air / exhaust open		180	5		
Danish pastry, mini, 40-75 g, bake-off	1	Preheating - Alarm		180	2		The distance between the sheets should be 130 mm equalling the distance between every other runner. *40%
	2	Hot air / exhaust open		170	18		
Prebaked bread, 500-700 g, bake-off	1	Preheating - Alarm		220	2		*30%
	2	Hot air / exhaust open		180	11		
Baquettes, 250 g, bake-off	1	Preheating - Alarm		230	2		*20%
	2	Hot air		180	9		
Prebaked rye bread, 1100 g, bake-off	1	Preheating - Alarm		190	2		*40%
	2	Hot air / exhaust open		160	25		
Semi-automatic bread program	1	Proving		32	45		
	2	Hot air / low fan speed		185	24		
	3	Hot air / exhaust open		185	10		
Bread, 60 g	1	Preheating - Alarm		240	2		*40%
	2	Hot air / low fan speed		180	10		
	3	Hot air / exhaust open		180	5		
Bread, 4-600 g	1	Preheating - Alarm		230	2		*30%
	2	Hot air		180	24		
	3	Hot air / exhaust open		200	4		
Puff pastry	1	Preheating - Alarm		190	2		*50%
	2	Hot air / exhaust open and low fan speed		160	20		
<b>Desserts</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Crème brûlée, in portions of 1½ dl	1	Cooling - Alarm		75			
	2	Hot air / low fan speed		75	80		
Meringue	1	Preheating - Alarm		100	2		
	2	Hot air / exhaust open and low fan speed		95	80		
Genoise	1	Preheating - Alarm		220	2		*30%
	2	Hot air / low fan speed / exhaust open					

<b>Shellfish</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Lobster, approx. 1.2 kg, steamed	1	Steaming - Alarm		100	8		Cooking time: Approx. 1 min. / 100 g + 3 min.
	2	Steaming		100	15		
Mussels, steamed	1	Steaming - Alarm		100	8		
	2	Steaming		100	15		
Prawns, steamed	1	Steaming - Alarm		100	8		
	2	Steaming		100	10		
<b>Game</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Fillet of venison, trimmed, 1-2 kg, medium	1	Preheating - Alarm		190	2		*30%
	2	ClimaOptima	20	180		59	
Saddle of venison, larded, 3-5 kg, medium	1	Preheating - Alarm		190	2		*50%
	2	ClimaOptima	40	160	10		
	3	ClimaOptima	60	165		57	
Haunch of venison	1	Preheating - Alarm		190	2		*50%
	2	ClimaOptima	60	165		57	
<b>Lamb</b>		<b>Mode</b>	<b>%</b>	<b>°C</b>	<b>Min.</b>	<b>CT</b>	<b>Remarks</b>
Leg of lamb, boneless, medium	1	Preheating - Alarm		190	2		*50%
	2	ClimaOptima		60	165	57	
Stuffed venison of lamb (boneless), medium	1	Preheating - Alarm		180	2		*50%
	2	ClimaOptima		60	150	55	
	3	ClimaOptima	0	185		60	
Fillet of lamb, trimmed, medium	1	Preheating - Alarm		180	2		*30%
	2	ClimaOptima	20	180		59	



## Baking

Recommended values (from the HOUNÖ library of recipes 1985 – 2002)

Product	Operating mode	Processing time in minutes	Temperature °C	Remarks and tips
Rolls*	Hot air	15-20	170-180	Manual humidity for the first 10 sec., 40-50 g/ea.
Loaves*	Hot air	25-35	160-180	Manual humidity for the first 10 sec., 650 g/ea.
Buns*	Hot air	15-20	160-170	Manual humidity for the first 15 sec., 40 g/ea.
Baguettes, prebaked	Hot air, possibly exhaust open	10-12 / 2-4	170-180	No humidity pulsing
French loaves/ baguettes	Hot air, possibly exhaust open	15-20 / 2-5	170-180	Manual humidity for the first 10-20 sec.
Danish pastry**	Hot air, possibly exhaust open	10-50 / 5-7	170-180	Different sizes
Marble cake	Hot air	50-70	160-170	In a baking tin
Madeira cake	Hot air	50-80	150-160	In a baking tin
Vanilla biscuits	Hot air	7-10	160-170	
Puff pastry	Hot air	20-25	160-180	½ fan speed
Chou (cream puff)	Hot air	20-30	160-180	½ fan speed
Almond cake	Hot air	8-12	170	
Meringue	Hot air, possibly exhaust open	120-140	80	½ fan speed
	*) Dough products that are not preproved/prebaked by the manufacturer should prove/rise for approx. 15 - 40 min. depending on the product. Frozen products should be defrosted to +5°C before proving.			
	**) Danish pastry products based on bread dough should prove for 15-20 min., whereas certain bake-off products can be baked directly from the freezer. Frozen dough products should defrost longer.			

## Vegetables

Recommended values (from the HOUNÖ library of recipes 1985 – 2002)

Product	Operating mode	Processing time in minutes	Temperature °C	Remarks and tips
<b>Potatoes</b>	Steaming/100% ClimaOptima/Combi 3	30-40	100	Fresh. Different sorts of potatoes require different steaming times.
<b>Potatoes</b>	Hot air + exhaust open	15	100	Pre-boiled
<b>Fried potatoes</b>	Steaming/100% ClimaOptima/Combi 3	15	230	Pre-boiled and sliced - add oil
<b>Baked potatoes</b>	Steaming/100% ClimaOptima/Combi 3	60	185	
<b>Carrots</b>	Steaming/100% ClimaOptima/Combi 3	25	100	Fresh, whole, medium-sized
<b>Small carrots</b>	Steaming/100% ClimaOptima/Combi 3	18	100	Deep-frozen, add spices while frozen
<b>Cauliflower</b>	Steaming/100% ClimaOptima/Combi 3	20	100	Stalks, fresh
<b>Broccoli</b>	Steaming/100% ClimaOptima/Combi 3	15	100	Fresh
<b>Broccoli</b>	Steaming/100% ClimaOptima/Combi 3	18	100	Deep-frozen
<b>Broccoli</b>	Steaming/100% ClimaOptima/Combi 3	2-3	100	Blanching
<b>Beans</b>	Steaming/100% ClimaOptima/Combi 3	10	100	Deep-frozen
<b>Brussels sprouts</b>	Steaming/100% ClimaOptima/Combi 3	20	100	Frozen
<b>Spinach</b>	Steaming/100% ClimaOptima/Combi 3	8	100	Fresh
<b>Celery</b>	Steaming/100% ClimaOptima/Combi 3	20	100	Deep-frozen, add spices while frozen
<b>Leeks</b>	Steaming/100% ClimaOptima/Combi 3	15	100	Fresh
<b>Rice</b>	Steaming/100% ClimaOptima/Combi 3	30	100	Parboiled. 1 part of rice to 1½ part of cold water
<b>Pasta</b>	Steaming/100% ClimaOptima/Combi 3	25	100	Pour pasta into cold water. 1 part of paste to 1½ part of water*
<b>Eggs</b>	Steaming/100% ClimaOptima/Combi 3	8	100	Soft-boiled, perhaps stacked in egg trays
<b>Eggs</b>	Steaming/100% ClimaOptima/Combi 3	12	100	Hard-boiled, perhaps stacked in egg trays

\* The steaming time is reduced if preheated water is used.

## Meat Courses

Recommended values (from the HOUNÖ library of recipes 1985 – 2002)

<b>Products</b>	<b>Operating mode</b>	<b>Processing time in minutes</b>	<b>Temperature °C</b>	<b>Remarks and tips</b>
<b>Beef tenderloin</b>	Hot air + Combi 1 or ClimaOptima 20-40%	5 / 15	200 / 140	Fresh, whole fillet of beef. Add spices before cooking
<b>Roastbeef</b>	Hot air + Combi or ClimaOptima 40%	20 / 25	180 / 140	Add spices before cooking
<b>Joint of beef</b>	Steaming + Combi 2 + Hot air or ClimaOptima 100% + ClimaOptima 50%	15-20 / 70-90 / 20-25	100 / 140-150	Well-hung
<b>Roast veal</b>	Steaming + Combi 2 + Hot air Or ClimaOptima 100% + ClimaOptima 50%	10-15 / 60-70 / 15-20	160-190	Add spices and lard before cooking
<b>Roast pork</b>	Steaming + Combi 2 + Hot air or ClimaOptima 100% + ClimaOptima 30%	10 / 60 / 25	100 / 180 / 190	Neck with lard. Add spices before cooking
<b>Pork chops</b>	Hot air + exhaust open	15	225	Fresh
<b>Schnitzel</b>	Hot air + exhaust open	15	225	Fresh
<b>Meat balls</b>	Combi 1 / ClimaOptima 50%	15	165	Pre-fried in pan, 75 g
<b>Minced-meat dishes</b>	Steaming + Combi 1 + Combi 1 or ClimaOptima 60% in all steps	10 / 45 / 20	100 / 160 / 175	Approx. 2 kg in aluminium tin
<b>Liver pâté</b>	Hot air + exhaust open	45	170	250 g and 500 g aluminium tins placed in water bath
<b>Cured saddle of pork</b>	Combi 1 or ClimaOptima 60%	50-60	180	
<b>Smoked ham</b>	Combi 1 or ClimaOptima 60%	80	175	Apply mustard + clayed sugar
<b>Ham in puff pastry</b>	Hot air or ClimaOptima 20%	15 / 90	160 / 180	Exhaust open or closed
<b>Pickled neck</b>	Steaming / Combi 3 / ClimaOptima 100%	60	100	Fresh, without bones
<b>Liver</b>	Hot air or ClimaOptima 20%	6 / 6	235	Fresh, sliced - add oil
<b>Gratin</b>	Combi 1-2 or ClimaOptima 60%	45	185	
<b>Frankfurter</b>	Steaming / Combi 3 / 100% / ClimaOptima	18	80	
<b>Omelette</b>	Hot air + exhaust open	30		Apply fat to container

## Poultry, Fish and Game

Recommended values (from the HOUNÖ library of recipes 1985 – 2002)

Product	Operation mode	Processing time in minutes	Temperature °C	Remarks and tips
<b>Chicken</b>	Combi 1 + Hot air w. exhaust open or ClimaOptima 60% + ClimaOptima 0%	20-25 / 10-15	160 / 185	Fresh, defrosted, 1000 g
<b>Chicken</b>	Combi 1 + Hot air w. exhaust open or ClimaOptima 60% + ClimaOptima 0%	35-45 / 10-15	180 / 220	Frozen, 800 g
<b>Chicken legs</b>	Combi 1 + Hot air w. exhaust open or ClimaOptima 60% + ClimaOptima 0%	15 / 5	160 / 185	Fresh, defrosted
<b>Duck</b>	Combi 1 + Hot air w. exhaust open or ClimaOptima 60% + ClimaOptima 0%	50-60 / 50-60	170-180	Fresh or defrosted, 3000 g
<b>Goose</b>	Combi 1 + Hot air w. exhaust open or ClimaOptima 60% + ClimaOptima 0%	90-120 / 15-20	160-185	Fresh or defrosted
<b>Turkey</b>	Combi 1 + Hot air w. exhaust open or ClimaOptima 60% + ClimaOptima 0%	80-100 / 10-20	160-185	4000 g, perhaps covered with lard
<b>Flatfish</b>	Hot air	12-18	175-185	Fresh, cover with oil
<b>Greenland Halibut</b>	Steaming / Combi 3 / ClimaOptima 100%	10-20	70-75	Fresh
<b>Trout</b>	Steaming / Combi 3 / ClimaOptima 100%	10-15	70-75	Fresh
<b>Turbot</b>	Steaming / Combi 3 / ClimaOptima 100%	8-12	70-75	Fresh
<b>Cod</b>	Steaming / Combi 3 / ClimaOptima 100%	12-18	70-75	Fresh
<b>Mussels</b>	Steaming / Combi 3 / ClimaOptima 100%	15-20	75-80	Fresh
<b>Saddle of venison</b>	Combi 1 or ClimaOptima 50%	25-23	180-200	Fresh, possibly covered with lard or oil
<b>Haunch of venison</b>	Steaming + Hot air + Combi 1 or ClimaOptima 100% + ClimaOptima 50%	15 / 20 / 30-40	170-180	Fresh, possibly covered with lard or oil
<b>Leg of lamb</b>	Steaming + Combi 1 + Hot air or ClimaOptima 100% + ClimaOptima 50%	20 / 25 / 30-40	170-180 / 140-160 / 160	Without bones, add spices
<b>Meat loaf</b>	Combi 1 or ClimaOptima 60%	15-20	220	Fresh, add spices
<b>Vacuum-packed meat/poultry</b>	Steaming / Combi 3 / ClimaOptima 100%	10-15	70-85	Without bones

At our website [www.houno.com](http://www.houno.com), you will find a great deal of information about HOUNÖ and our extensive range of Visual Cooking combi ovens.

[www.houno.com](http://www.houno.com) provides you:

- Product information on HOUNÖ's combi ovens, customised oven solutions and our wide range of accessories.
- Technical information on combi ovens.
- Visual Cooking user DVD - how to program your Visual Cooking oven.
- Hands-on operating on a combi oven by means of interactive software.
- Delicious recipes which are easy to prepare.
- Latest news from HOUNÖ.
- User manuals
- Intranet with spare parts catalogue, dimensional sketches, wiring diagrams, service bulletins, installation manuals, etc.

To access our Intranet, you need a password. Please contact HOUNÖ: [houno@houno.com](mailto:houno@houno.com) for more information.



## Meeting your needs - worldwide

With more than 30 years' experience in the manufacture of innovative oven solutions, HOUNÖ is one of the world's leading manufacturers of combi ovens and bake-off ovens. As oven specialist, we meet your needs for efficiency, flexibility and reliability.

Through the years, HOUNÖ has grown from a small Danish company into a leading manufacturer of combi ovens worldwide. Today, Visual Cooking is supplied to selective customers all over the world through an extensive network of sales and service partners.

As part of the US based group of companies, the Middleby Corporation, which with its more than 1,500 employees is one of the market leaders in the commercial cooking equipment industry, HOUNÖ has 17 sister companies and a subsidiary in Sweden.

HOUNÖ's top motivated staff is behind Visual Cooking. With the widest range of combi ovens in the industry, we are able to create customised solutions that suit your needs exactly.

Visit [www.houno.com](http://www.houno.com) and be inspired!

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