

# Operator's Manual

Use and Care Instructions

**CONVOTHERM BY CLEVELAND**

**COMBINATION OVEN-STEAMERS**



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**Cleveland**

**FOR YOUR SAFETY**

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

 **WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

 **WARNING**

**Disconnect power before servicing.**

**IMPORTANT**

IT IS IMPORTANT TO POST INSTRUCTIONS WHICH ARE TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS. THESE INSTRUCTIONS MUST BE DISPLAYED IN A PROMINENT LOCATION, AND MUST BE FULLY UNDERSTOOD BY ALL USERS OF THIS EQUIPMENT. THIS INFORMATION SHOULD BE OBTAINED FROM YOUR LOCAL GAS SUPPLIER.

**ALL SERVICE MUST BE PERFORMED BY A QUALIFIED CLEVELAND RANGE AUTHORIZED TECHNICIAN.**

 **WARNING**

**Do not connect Combi steamer-oven drain connection to any drain material that cannot sustain 140° Fahrenheit.**

This Operation Manual is a part of your new Cleveland Range combination oven steamer. You must keep and maintain it for the entire life span of your Combi and pass it on to the next owner of the unit.

**RETAIN THIS MANUAL FOR REFERENCE  
KEEP IT WHERE YOU CAN USE IT**

This manual may be subject to new technical developments, modifications, and unforeseen errors.

**DO NOT OPERATE OR ATTEMPT TO OPERATE THIS APPLIANCE OR ANY ACCESSORIES WITHOUT READING COMPLETELY AND FULLY UNDERSTANDING THIS MANUAL**

# Cleveland STATEMENT OF POLICIES

## LIMITED WARRANTY

CLEVELAND RANGE products are warranted to the original purchaser to be free from defects in materials and workmanship under normal use and service for the standard warranty period of one year from date of installation or 18 months from date of shipment, whichever ever comes first.

CLEVELAND RANGE agrees to repair or replace, at its option, f.o.b. factory, any part which proves to be defective due to defects in material or workmanship during the warranty period, providing the equipment has been unaltered, and has been PROPERLY INSTALLED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH THE CLEVELAND RANGE OWNER'S MANUAL.

CLEVELAND RANGE agrees to pay any FACTORY AUTHORIZED EQUIPMENT SERVICE AGENCY (within the continental United States, and Hawaii) for reasonable labor required to repair or replace, at our option, f.o.b. factory, any part which proves to be defective due to defects in material or workmanship, during the labor warranty period. This warranty includes travel time not to exceed two hours and mileage not to exceed 50 miles (100 miles round-trip), BUT DOES NOT INCLUDE POST START-UP, TIGHTENING LOOSE FITTINGS, MINOR ADJUSTMENTS, MAINTENANCE, CLEANING OR DESCALING.

The standard labor warranty allows factory payment of reasonable labor required to repair or replace such defective parts. Cleveland Range will not reimburse the expense of labor required for the repair or replacement of parts after the standard warranty period, unless an Extended Labor Warranty Contract has been purchased to cover the equipment for the balance of the warranty period from the date of equipment installation, start-up, or demonstration.

PROPER INSTALLATION IS THE RESPONSIBILITY OF THE DEALER, THE OWNER-USER, OR INSTALLING CONTRACTOR, AND IS NOT COVERED BY THIS WARRANTY. Many local codes exist, and it is the responsibility of the owner and installer to comply with these codes. Cleveland Range equipment is built to comply with applicable standards for manufacturers, including UL, ANSI, NSF, ASME/Ntl. Bd., CSA, and others.

BOILER (Steam Generator) MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER-USER AND IS NOT COVERED BY THIS WARRANTY. The use of good quality feed water is the responsibility of the Owner-User (see Water Quality Recommendations below). THE USE OF POOR QUALITY FEED WATER WILL VOID EQUIPMENT WARRANTIES. Boiler maintenance supplies, including boiler hand hole gaskets, are not warranted beyond the first 90 days after the date the equipment is placed into service. Preventive maintenance records must be available showing descaling per applicable Cleveland Operator Manual for Boiler Proration Program considerations.

### WATER QUALITY RECOMMENDATIONS

TOTAL DISSOLVED SOLIDS	less than	60 parts per million
TOTAL ALKALINITY	less than	20 parts per million
SILICA	less than	13 parts per million
CHLORIDE	less than	30 parts per million
pH FACTOR	greater than	7.5

The foregoing shall constitute the sole and exclusive remedy of original purchaser and the full liability of Cleveland Range for any breach of warranty. THE FOREGOING IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, OR IMPLIED, INCLUDING ANY WARRANTY OF PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR PURPOSE, AND SUPERSEDES AND EXCLUDES ANY ORAL WARRANTIES OR REPRESENTATIONS, OR WRITTEN WARRANTIES OR REPRESENTATIONS, NOT EXPRESSLY DESIGNATED IN WRITING AS A "WARRANTY" OR "GUARANTEE" OF CLEVELAND RANGE MADE OR IMPLIED IN ANY MANUAL, LITERATURE, ADVERTISING BROCHURE OR OTHER MATERIALS.

CLEVELAND RANGE'S liability on any claim of any kind, including negligence, with respect to the goods or services covered hereunder, shall in no case exceed the price of the goods or services, or part thereof, which gives rise to the claim. IN NO EVENT SHALL CLEVELAND RANGE BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES IN THE NATURE OF PENALTIES.



# **Free Start-Up Program**

## **Get the most from your Cleveland Range equipment with Cleveland Range's "Free Start-Up."**

**Performance Check-Out:** Contact your Cleveland Range maintenance and repair center for your Performance Check-Out before starting your new Convothem by Cleveland Combination Oven-Steamer. The Performance Check-Out includes: inspection of installation, review of cleaning and maintenance instructions, and start of warranty protection.

**Equipment Demonstration:** After your Performance Check-Out, contact your Cleveland Range sales representative for your free demonstration of proper operation, optimal use, and correct care of your new equipment.

**Use and Care Video:** After your Equipment Demonstration, your sales representative will present and explain your free copy of the Cleveland Range Use and Care Video. (Combi video release expected in September 2005.)

Consult your Customer Service Directory or call Cleveland Range at 216-481-4900 to begin your free Start-Up Program.

### **Your "Combi" in Action**

You can cook a variety of foods in your Convothem by Cleveland Combination Oven-Steamer, or "Combi," using hot air, steam, and Combi hot air and superheated steam.

Your Combi is extremely versatile and can cook sous-vide as well as steam, blanch, poach, stew, boil, roast, braise, bake, grill, "fry," gratinate, rethermalize and defrost.

Just place food in containers or on wire racks, select the cooking mode, and time, or core temperature and start cooking with your Combi.

**NOTICE:** Cleveland Range Convothem by Cleveland Combi Oven-Steamers (Combis) are intended for commercial use only.

**NOTICE:** The ambient temperature must be between 40°F and 95°F.

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### WARNING

Hot Air, Steam, and Condensate Steam will cause burns and scalds.

When opening Combi doors: ALWAYS stand to the hinge side and back from the Combi doors. Open Combi doors to the “airing” position, and wait for the steam and heat to dissipate before carefully opening the door.

DO NOT lean into the Oven Compartment.

DO NOT breathe steam, hot air, or condensate.

### WARNING

The Oven Compartment and Contents (food, pans, racks, etc.) are HOT. Use caution, and wear DRY heatproof oven mitts when loading, unloading, or reaching into the oven compartment.

### DANGER

Do not place containers with liquid contents or contents that become liquid on oven racks higher than you can see into the containers.



### DANGER

The Preheat Bridge and Oven Compartment can be **HOT**.

- Use caution when placing the Preheat Bridge in the Oven Compartment
- Use caution when removing the Preheat Bridge from the Oven Compartment.
- Handle with DRY heatproof gloves or mitts.
- DO NOT lean into the Oven Compartment
- DO NOT breathe steam, hot air, or superheated steam

### WARNING

Always lock the transport trolley correctly.

The transport trolley can be HOT.

The transport trolley can be unstable and can tip.

Load the transport trolley from the bottom up.

Use caution when:

- Loading Racks, Shelves, and Trolleys
- Placing the Transport Trolley into, or removing it from the oven Compartment.
- Putting on or removing the Thermal Cover.
- Moving the Transport Trolley.





### A. GENERAL SAFETY GUIDELINES FOR INSTALLERS, USERS, AND SERVICE TECHNICIANS

1. Read, understand, and follow the instructions, and heed and obey the warnings of the Installation Manual and Operators Manual, and the labels on the Combi, accessories, and supporting products.
2. Improper installation, maintenance, cleaning, or modifications to the Combi can lead to injury or death, and equipment and property damage.
3. Do NOT use anything but hands to operate the switches and controls on the Combi
4. Before each use of the Combi, inspect the cooking compartment for drain and screen blockage.
5. Before each use of the Combi, inspect the door glass, door gasket assembly, shelves, racks, and accessories for proper installation and cleanliness.
6. Allow only qualified Cleveland Range authorized service representatives to service the Combi.
7. Use only Cleveland Range, LLC factory authorized repair parts.
8. Periodically inspect the flue for signs of sooting or blockage. If any improper operation or malfunction of the burner system is suspected: shut down the Combi immediately and contact your qualified Cleveland Range authorized service representative to inspect and repair the Combi at once.
9. STEAM – To help avoid steam burns:
  - a. Remember at all times that steam can cause severe burns.
  - b. Do not reach into the Combi without wearing DRY heatproof gloves. Wet or damp gloves can conduct heat and may cause burns when touching hot items.
  - c. Stand back and to the hinge side of the door.
  - d. Open the Combi door by turning the handle to the horizontal (“airing”) position.
  - e. Wait for the steam and condensate to clear.
  - f. Stand back and to the hinge side of the door and slowly open the door.
  - g. Wear DRY heatproof gloves or mitts.
  - h. Note: Cooking is interrupted whenever the door is opened.
10. Never breathe steam, condensate, or hot air.
11. HEAT – The Combi, cooking containers, shelves, and inner door and anything else inside the cooking compartment are HOT, as are many of the component parts. Wear DRY heatproof gloves or mitts.
12. EXHAUST VENTS – The top of the Combi, and the gas and steam exhaust vents are very hot during operation and remain hot for some time.
  - Never breathe gas or steam from the exhaust vents.
  - Use extreme caution when working on or near the exhaust vents, surrounding area and component parts.
13. SCALDS – Do not place containers with liquid contents or contents that become liquid on oven racks higher than you can see into the containers.

## Safety

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14. SCALDS – Cover containers (individual or on trolleys) containing hot or hot liquid items to help prevent spills during transport.
15. GREASE SPATTER – Hot grease will spatter and cause burns if sprayed with water. Locate fryers and similar appliances outside the range of the Combi hand shower.
16. ELECTRIC SHOCK – Use the hand shower only on the inside of the oven. Use of the hand shower, hoses, power cleaners, or pressure washers on the outside of the Combi can cause electric shock and / or damage electrical and electronic components.
17. CLEANING AND DAILY MAINTENANCE – Wait for the Combi to cool before cleaning and performing daily maintenance.
18. CLEANING AND DAILY MAINTENANCE – Do NOT spray water in a hot cooking compartment.
19. CLEANING AND DAILY MAINTENANCE – Do not use hoses, power cleaners or pressure washers, or harsh or abrasive cleaning agents inside OR outside the cooking compartment.
20. CLEANING AGENTS – Use only genuine Convotherm by Cleveland and Cleveland Range cleaning and descaling products.
21. CLEANING AGENTS – Follow the instructions and heed and obey the warnings on the labels.
22. CLEANING AGENTS – Products other than genuine Convotherm by Cleveland and Cleveland Range cleaning and descaling products can damage the Combi, cause injury, or present health hazards.
23. Wear BOOTS appropriate to the work area to help protect feet, and to help prevent slips and falls.
24. Use non-slip, draining, anti-fatigue FLOOR MATS (not included) rated for use in wet, greasy, and dry work areas to help prevent slipping and / or falling injuries.
  - Obtain the best mats for your needs from your local supplier.

### **B. Safety Training and Operator's Training**

1. To help avoid injuries, accidents and damage to the Combi Oven-Steamer, the owner / operator must instruct and train employees on a regular basis.
2. The appliance may only be used by trained employees.
3. Regular **safety training** for the operating staff is very important.
4. Convotherm by Cleveland Combi Oven-Steamers are intended for commercial use only.

### **C. NEVER!**

1. Combis must never be operated in a toxic atmosphere, or in an area at risk of explosion.
2. Combi must never be started or operated at a temperature lower than 40°F, including after transport, or storage outside, or in an unheated area.
3. The Combi must never be operated outside.

## Safety

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4. Combis must never be used to cook foodstuffs in sealed containers not designed for this purpose. (Combis are excellent for “purpose built” containers such as sous vide packages.)
5. Combis must never be used to heat flammable items such as oils, fats, cloths, or similar items.
6. Combis must never be used to heat non-food items (except suitable appliance accessories).

### D. Gas Supply and Electricity Supply

1. The installer / owner is responsible for furnishing and installing gas supply lines, valves, regulators, and accessories (Gas Combis.)
2. The installer / owner is responsible for furnishing all electrical lines and accessories.
3. When installing gas and / or electric supply lines and accessories, observe the following:
  - a. The gas supply type must match the type of gas specified on the rating plate. (Gas Combis.)
  - b. The electricity supply must match all electrical and wiring requirements specified on the rating plate.
  - c. For further information regarding gas and electricity supply: refer to the Installation Manual.
  - d. For gas Combis: Obtain and post gas leak procedure instructions in a prominent location. These instructions may be obtained from your gas supplier.
4. The installation of this Combi must conform with:
  - a. The Basic Plumbing Code of the Building Officials and Code Administrators International, Inc. (BOCA)
  - b. The National Fuel Gas Code, ANSI Z223.1 / NFPA 54 (latest edition) or the Natural Gas and Propane Installation Code CSA B1 49.1 as applicable. (Gas Combis).
  - c. The National Electrical Code, ANSI/NFPA 70 (latest edition) or the Canadian Electrical Code, CSA C22.2 as applicable.
  - d. The Food Service Sanitation Manual of the Food and Drug Administration (FDA).
  - e. All applicable state and local laws, codes, and regulations.
  - f. If any pressure testing is required: The Combi must be isolated from the gas supply system during any pressure testing as follows:
    - **HIGH PRESSURE TESTING:** The COMBI and its main manual shut-off valve must be **disconnected** from the gas supply piping system during any pressure testing of that system at test pressures in excess of 14” Water Column (1/2 psi or 3.45kPa). Leak test all joints and fittings with soap and water solution after reconnecting gas supply
    - **LOW PRESSURE TESTING:** The COMBI must be isolated from the gas supply piping system by closing its main manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 14” water column (1/2 psi or 3.45kPa) Leak test all joints and fittings with soap and water solution after opening the main manual shut-off valve.



 **DANGER**

**FIRE OR EXPLOSION HAZARD**

LEAKING GAS CAN CAUSE FIRE OR EXPLOSION. INJURY, DEATH, OR PROPERTY DAMAGE WILL RESULT.

If the operator smells gas, or suspects there is a gas leak, immediately refer to the posted gas leak instructions.

The posted instructions are provided by the local gas supplier, and supersede any other instructions.

Observe the following precautions in addition to the posted instructions:

- Do not light or start any appliance.
- Do not touch any electrical switch.
- Do not use any phone in the building.
- Immediately call the gas supplier from a phone away from the building.
- Follow the gas supplier's instructions.
- If the gas supplier cannot be reached, call the fire department.

 **DANGER**

Use extreme caution during testing or service with the access covers removed.

Death, severe electrical shock, or equipment damage can result from touching any component inside a Combi when the main external power switch is in the ON position.

 **DANGER**

**Do NOT attempt to operate a Combi during a power failure!**

**In the event of a power failure: turn OFF the Main External Power Switch and the Control Power Service Disconnect Switch.**

**If the power failure is prolonged: turn OFF the gas and water supplies.**

**When power is restored: restart a Combi with the Startup Procedure.**



### **E. Damage to or Malfunction of the Door**

1. If the glass door panels are nicked, scratched, or cracked: remove the Combi from service and replace the glass immediately. Otherwise, the glass panels may shatter during operation.
2. The Combi Oven-Steamer can only work with a functioning magnetic door switch. If a malfunction occurs, immediately contact your qualified Cleveland Range authorized service representative.

### **F. All Combis**

1. To help your CONVOTHERM by Cleveland Combi Oven-Steamer remain in good working order, it must be serviced regularly by a qualified Cleveland Range authorized service representative.
2. Keep the disappearing door guide rails clean.
3. Lubricate the disappearing door guide rails regularly with food-grade grease and a soft, lint-free cloth.
4. Check regularly to ensure that the screws and hinges of the disappearing doors are firmly in place and operating properly.
5. When not using the Combi for extended periods, shut off the water, gas and electricity supplies to the Combi Oven-Steamer.
6. Do not place or store anything on top of or underneath the Combi
7. The exhaust vent area and the top of the Combi are hot.
8. KEEP THE APPLIANCE AREA FREE AND CLEAR FROM COMBUSTIBLES.
9. Do not block or obstruct the area beneath the gas Combi with objects of any kind.
10. Use the gas Combi Oven-Steamer in a draft-free and well vented environment.
11. Proper air supply for combustion and ventilation is REQUIRED for and CRITICAL to safe, efficient operation of a Combi.
12. Make sure the air vents of the Combi are not blocked.

### **G. Cleaning**

1. Use the hand shower only inside the oven chamber.
2. Never use the hand shower, hose, pressure washer or similar device on the outside of the Combi.
3. Never spray the air intakes or outlets of the Combi.
4. Clean and maintain the Combi Oven-Steamer only when the Combi is cold.
5. Do not spray water into a hot oven chamber.
6. Regular cleaning of the Combi Oven-Steamer after use, inside and out, will help guarantee many years of satisfaction from your CONVOTHERM by Cleveland Combi Oven-Steamingers.
7. Use only genuine Convotherm by Cleveland and Cleveland Range cleaning and descaling products. Follow the instructions and heed and obey the warnings on the labels. Other products can damage the Combi, cause injury, or present health hazards.
8. Never use irritant, acidic, or highly alkaline cleaners, or abrasive agents.
9. Damage caused as a result of improper cleaning will invalidate any warranty claims.
10. Do not use hoses, pressure washers, high-pressure cleaners, or water jets to clean your Combi Oven-Steamer.



## H. Before Switching On

1. Turn ON the exhaust hood before starting the Combi
2. Lock the Suction Plate into place top and bottom.
3. Never reach behind the Suction Plate during operation.
4. Never manually stop the fans.
5. Lock the Engaging Frame or the Shelf Rack into place.
6. If the Combi has been delivered when the outside temperature is below 40° F then wait for the Combi to warm up to room temperature (about 72° F) before operating.
7. If the Combi has been delivered when the outside temperature is below 32° F then the cooking compartment high limit safety thermostat will be tripped.
  - a. The cooking compartment high limit safety thermostat must be reset a qualified Cleveland Range authorized service technician.
  - b. Wait for the Combi to warm up to room temperature (about 72°F) before operating.
8. If the Combi has been delivered when the outside temperature is below 23° F then the steam generator high limit safety thermostat will be tripped.
  - a. The boiler high limit safety thermostat must be reset by a qualified Cleveland Range authorized service technician.
  - b. Wait for the Combi to warm up to room temperature (about 72°F) before operating.
9. Remove the plastic cover from the tip of the Temperature Probe before starting the Combi.
10. In case of an “E...” error message, refer to the chapter “What to do if...”

## I. Before Startup for Use

**Note:** If the COMBI has been delivered when the outside temperature is below 40° F then wait for the COMBI to warm up to room temperature (about 72° F) before operating.

**Note:** If the COMBI has been delivered when the outside temperature is below 32° F then the cooking compartment high limit safety thermostat will be tripped. The cooking compartment high limit safety thermostat must be reset a qualified Cleveland Range authorized service technician. Wait for the COMBI to warm up to room temperature (about 72°F) before operating.


**Note:** If the COMBI has been delivered when the outside temperature is below 23° F then the steam generator high limit safety thermostat will be tripped. The steam generator high limit safety thermostat must be reset by a qualified Cleveland Range authorized service technician. Wait for the COMBI to warm up to room temperature (about 72°F) before operating.

**Note:** Remove the plastic cover from the tip(s) of the Temperature Probe before starting the Combi.

## Safety


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1. After initial installation, check:
  - a. Suction Plate (Hinged Fan Guard) for both swing and latch action.
  - b. Hinged Removable Pan Racks for remove, replace, and latch action.
  - c. Universal Rack for correct installation.
  - d. Loading Trolley for proper roll in and out action (floor models only).
  - e. Pre-heat Bridge for correct fit (floor models only).
  - f. Descaling port cap is on and properly tightened.
  - g. Test Water Supply Lines
    - 1) Check all connections for proper tightness.
    - 2) Remove the side panel of the Combi to inspect water connections inside the Combi.
    - 3) Open the water supply valves.
    - 4) Check all lines and connections for leaks, both inside and outside the Combi.
    - 5) If Startup and Checkout will be performed next, leave side panel off; otherwise, replace the side panel and secure it to the Combi.
  - h. Test Gas Supply Lines
    - 1) Check all connections for proper tightness.
    - 2) Remove the side panel of the Combi to inspect water connections inside the Combi.
    - 3) Open the gas supply valve.
    - 4) Check all lines and connections for leaks with a soap and water solution.
    - 5) If Startup and Checkout will be performed next, leave side panel off; otherwise, replace the side panel and secure it to the Combi.
2. Turn ON the exhaust hood.
3. Turn ON the water supply valve(s).
4. Turn ON the gas supply valve(s).
5. Turn ON the Main External Power Switch.
6. Turn ON the Control Panel Service Disconnect Switch (Fig. 6-2).
7. Turn ON the COMBI with the ON / OFF key .



### J. Startup Procedure (Lighting Instructions)

1. Turn ON the exhaust hood.
2. Turn ON the water supply valve(s).
3. Turn ON the gas supply valve(s).
4. Turn ON the Main External Power Switch.
5. Turn ON the Control Panel Service Disconnect Switch (Fig. 6-2).
6. Turn ON the COMBI with the ON / OFF key .

### K. Shutdown Procedure (Shutdown Instructions)

- a. Turn OFF the COMBI with the ON / OFF key .
- b. Turn OFF the Control Panel Service Disconnect Switch (Fig. 6-2).
- c. Turn OFF the Main External Power Switch.
- d. Turn OFF the gas supply valve(s).
- e. Turn OFF the water supply valve(s).
- f. Turn OFF the exhaust hood.

### M. Risk of Burns!

1. When loading or removing dishes:
  - a. Food containers, grills, the tray trolley, and on the inner side of the door are HOT.
  - b. Wear DRY heatproof gloves or mitts.
2. During operation the temperature of the glass panel in the door and the outer casing can rise above 140°F.

### N. Risk of Scalds!

1. Do not place containers with liquid contents or contents that become liquid on oven racks higher than you can see into the containers.
2. Cover containers (individual or on trolleys) containing hot or hot liquid items to help prevent spills during transport.
3. Observe and heed and obey and obey the additional warnings and warning labels posted on the Combi, trolley, and accessories.



## Safety



### O. Maximum Combined Weight of Food and Containers or Accessories:

Model Number	Maximum Total Weight	Maximum Per Shelf
6.10	66 lbs	Max. 33 lbs per shelf
6.20	132 lbs	Max. 33 lbs per shelf
10.10	110 lbs	Max. 33 lbs per shelf
10.20	220 lbs	Max. 33 lbs per shelf
12.20	265 lbs	Max. 33 lbs per shelf
20.10	220 lbs	Max. 33 lbs per shelf
20.20	397 lbs	Max. 33 lbs per shelf

### P. Fixing and Swiveling the Engaging Frame for Tabletop Model

1. To Swivel: release upper and lower springs.
2. To Disconnect: push pivoted engaging frame upwards and lift out.
3. Make sure that the runners do not become bent; otherwise grills, metal plates and containers will no longer be safely supported.

### Q. Working with the Shelf Rack / Transport Trolley and Loading Trolley

1. **Tip Hazard! Do not load the Trolley so it is top-heavy! It may tip over!**
2. Set the Foot Brake before loading the Trolley.
3. Load the Trolley from the bottom up.
4. Always close the Pan Lock.
5. Set the Foot Brake when loading or unloading dishes onto or from the Trolley.
6. Use the Trolley Handle to push the Transport Trolley into the oven chamber.
7. Push the Shelf Rack Trolley or Transport Trolley to the Stop Position in the oven chamber and set the Foot Brake.
8. Use the Trolley Handle to pull the Transport Trolley out of the oven chamber.
9. During cooking, remove the Trolley Handle and hang it on the left side of the Combi.
10. Empty the removable condensate water tray at the bottom of the Transport Trolley often to reduce the danger of slipping caused by overflowing water, drippings, etc.
11. Snap the Shelf Rack into the Transport Locking Device when transporting the Shelf Rack with the Transport Trolley.

## Safety

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12. Avoid transporting the Loading Trolley, Plated Banquet Trolley, Transport Trolley, and caster mounted Combi Oven-Steamers on slopes or uneven surfaces.
13. If such is unavoidable then use extreme caution and every possible safety measure.

### **R. Working with the Banquet System (optional feature with tabletop models)**

1. Remove the Engaging Frame.
2. Place the roll in frame on the base of the appliance.
3. Insert the Shelf Rack.

### **S. Working with the Core Temperature Sensor**

1. The Core Temperature Sensor may be **HOT!** Wear dry, heatproof gloves or mitts to handle it.
2. The core temperature sensor is a precision measuring device. Handle with care.
3. Hang the Sensor correctly in its rack when not in use.
4. Do not allow the sensor to hang out of the oven.
5. Do not prick yourself or others with the sensor tip(s).
6. Remove the Sensor from the food before removing dishes from the oven,

### **T. Cleaning**

1. When cleaning, wear suitable protective clothing and equipment.
2. After cleaning, leave the door handle in the Open (horizontal) position.

### **U. Descaling**

1. Always wear suitable protective clothing including appropriate gloves, and safety glasses.
2. Read, understand, heed and obey and obey and obey, and follow all directions on the descaler label, MSDS, and related documents
3. Never operate the Combi Oven-Steamer when a descaler has been applied or while descaling.
4. Descale only when the Combi is cold.
5. Immediately wipe up any leaked or spilled descaling fluid.

# Convotherm by Cleveland Combi Oven-Steamers

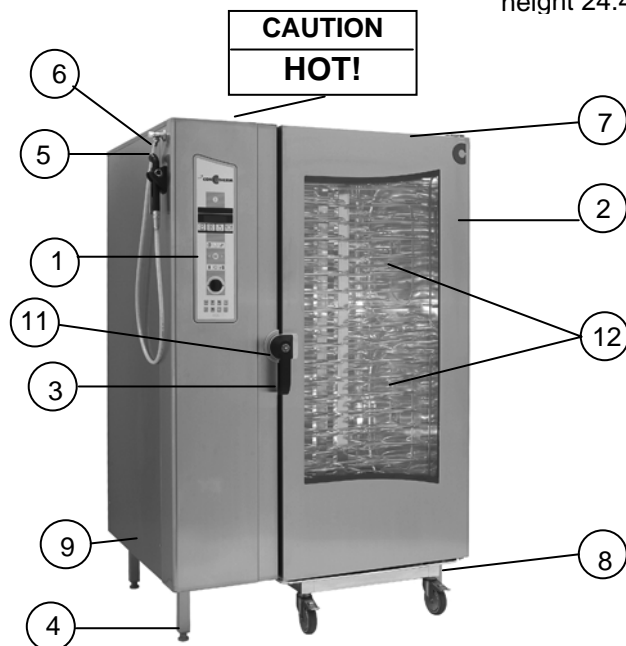
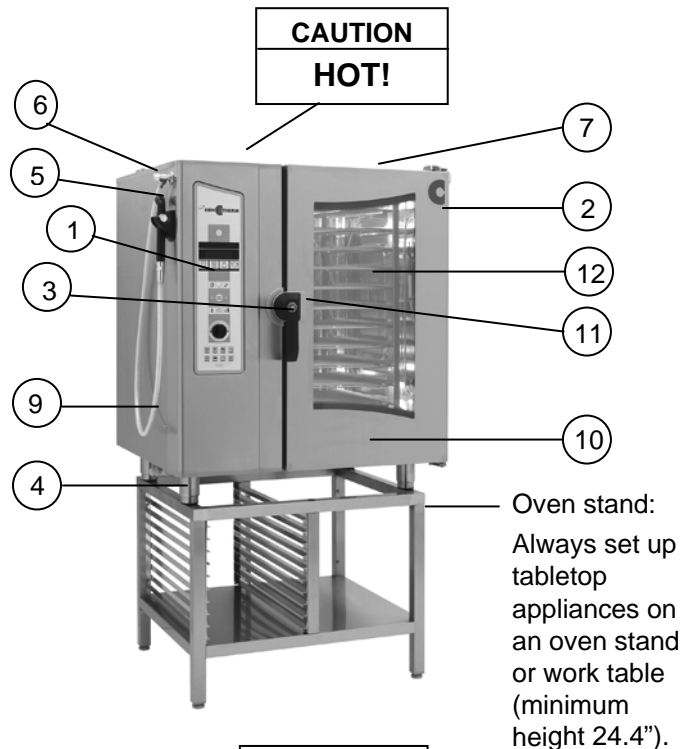


## PRODUCT VIEWS

1. **Control Panel**
2. **Disappearing Door with Double Glass Panel**
3. **Door Handle**
  - Vertical: closed.
  - Horizontal: open.
  - To open the Combi door turn the handle to the horizontal (airing) position.
4. **Combi Supports**  
Adjustable height legs.
5. **Hand Shower**  
Adjustable flow.  
Convenient hanger.
6. **Shut-off Valve**  
Close when the Hand Shower is not in use.
7. **Low-Pressure Failsafe Device**
8. **Infeed Assist Mechanism (floor models)**
9. **Rating Plate**  
Contains the following information:
  - Power Consumption.
  - Gas Type (gas models).
  - Voltage.
  - Number of Phases.
  - Frequency.
  - Model Number.
  - Serial Number.
10. **Door Drip Tray (Behind Door)**  
Built-in, self-emptying.
11. **Door Switch**
12. **Oven light**

**! WARNING**

Anything in the path of the door will be crushed.  
**KEEP HANDS CLEAR!**





## Control Panel



### ON/OFF (1).

- When unit is turned ON:
  - Self-diagnosis is performed.
  - Oven light turns on.
  - Steam generator fills and heats (OEB and OGB models).



### “Steam” cooking mode (2).

- Oven temperature is continuously variable between 86°F and 248°F.



### “Combi Hot Air and Superheated Steam” cooking mode (3).

- Oven temperature is continuously variable between 212°F and 482°F.



### “Hot Air” cooking mode (4).

- Oven temperature is continuously variable between 86°F and 482°F.



### “Retherm” cooking mode (5).

- Oven temperature is continuously variable between 248°F and 320°F.



### Start/Stop (6).

- Start cooking modes, cooking ideas, and recipes from the Cookbook.
- Stop:
  - Stops the cooking activity.
  - The Signal Tone sounds to confirm interruption of cooking activity.
  - Escape or Exit Smart Key functions



### Cookbook (7).

- Call up, exit cookbook.
- View a list of stored recipes in the display.



### Smart Key (8).

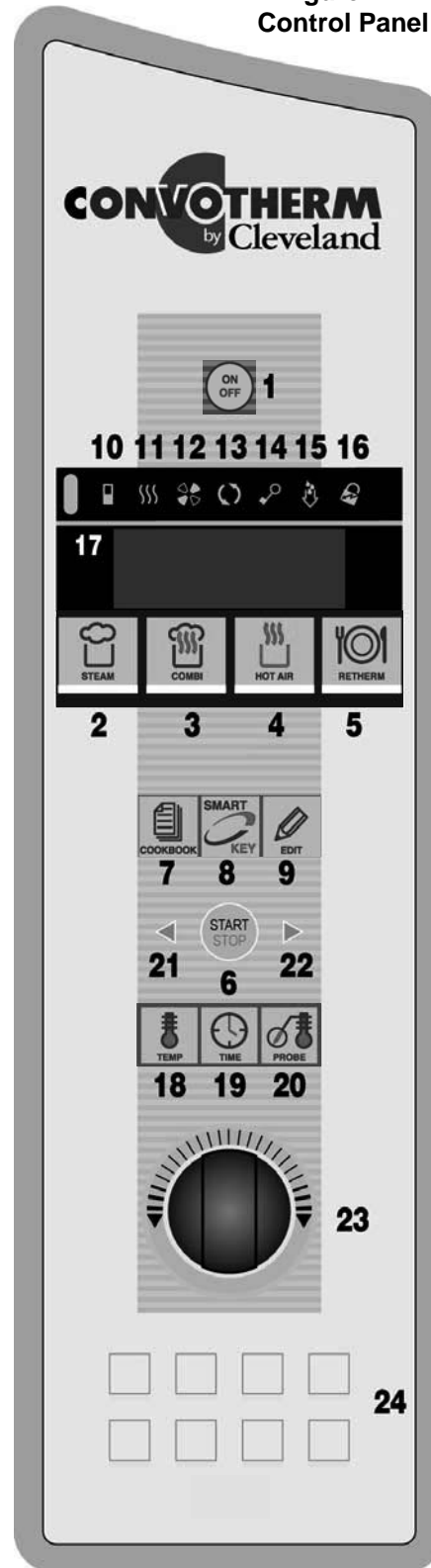
- Set Extra Functions.
- Set-Up the Combi.
- Enter Sub-Menus.



### Write/Edit (9).

- Create, change, copy, and delete Recipes.

Figure 1-4  
Control Panel



# Convotherm by Cleveland Combi Oven-Steamers



## Function and Operation Icons (10-16)

- Light up when function or activity is engaged:



### Reduced Power (10).



### Burner or Electric Heating ON (11).



### Reduced Fan Speed (12).



### Cooking Mode Engaged (13).



### Button Lock (14).



### Crisp & Tasty (demoisturizing) Engaged (15).



### Program Protection (16).

## Display (17).

### • Display in normal mode:

- Date.
- Time.
- Oven Temperature.
- Cooking Time
- Core Probe Temperature.

### • Display in programming mode:

- Clear text.
- Memory.
- Symbols.



## Oven temperature (18).

- Set the nominal oven temperature.
- View the actual or nominal oven temperature.



## Cooking time (19).

- Set the cooking time from 1 minute to 9 hours, 59 minutes.
- Set Continuous Mode
  1. At 9:59 or 0:01, release the Selector Dial.
  2. Turn the Selector Dial again to the left or right.
- See the actual or nominal cooking time.
- See elapsed cooking time when using Core Temperature mode.
- Pre-Set start time.



## Core Temperature (20).

- Set the nominal core temperature.
- See the actual or nominal core temperature.
- See the actual core temperature during cooking time mode.



## Paging / Scrolling left or right (21/22).

- Page / Scroll one step forwards or back in programming mode.



## Selector Dial (23).

- Set:
  - Oven temperature.
  - Cooking time.
  - Core temperature.
  - Program name.
  - Program number.
- Select Smart Key functions and editing functions as well as recipes in Cookbook.

## Press & Go (symbol) (24).

- Start saved recipes with one key.
- LED below key lights up when corresponding recipe is started.

## Notes:

- **Magnetic door switch**

If the oven door is opened during a program, the magnetic door switch automatically interrupts the cooking program. The timer stops. After closing the oven door, the Combi automatically continues the cooking program. If the oven door is opened when the buzzer sounds at the end of a program, it will automatically switch off.
- Operate controls with hands only!



<b>CAUTION</b>
----------------

Dripping fat and fat residues can cause burns.
--

<b>NOTICE</b>
---------------

After roasting fatty foods, clean the interior of the oven thoroughly. Otherwise, smoke may develop during subsequent cooking.
--

<b>CAUTION</b>
----------------

Insert pans and accessories <b>INSIDE</b> the U-Shaped racks. Pans and accessories placed on top of the U-Shaped racks, or with one edge inside and the other on top can tip and spill.
---

### Recommendations:

- **Pre-heating:** Use the automatic pre-heating program under the Smart Key.
- **Crisp & Tasty (demoisturizing):** Breaded products attain an even, crispy finish.
- **Convotherm by Cleveland Wire Basket:** Cook from all sides with **NO** added fat.
- **Convotherm by Cleveland Chicken Grill Rack:** Cooks chickens quickly with **NO** added fat.

 <b>WARNING</b>
--

Hot Air, Steam, and Superheated Steam will cause burns and scalds. When opening Combi doors: always stand to the hinge side and back from the Combi doors. Open Combi doors to the “airing” position, and wait for the steam and heat to dissipate before carefully opening the door. DO NOT lean into the Oven Compartment. DO NOT breathe steam, hot air, or superheated steam
--

### WARNING

The Oven Compartment and Contents (food, pans, racks, etc.) are **HOT**. Use caution, and wear **DRY** heatproof oven mitts when loading, unloading, or reaching into the oven compartment.

### WARNING

Always lock the transport trolley correctly.

The transport trolley can be **HOT**.

The transport trolley can be unstable.

Use caution when:

- Filling
- Placing the transport trolley into the oven compartment.
- Removing the transport trolley from the oven compartment.
- Putting on or removing the thermal cover.
- Moving the transport trolley.

### DANGER

The Preheat Bridge and Oven Compartment can be **HOT**.

- Use caution when placing the Preheat Bridge in the Oven Compartment
- Use caution when removing the Preheat Bridge from the Oven Compartment.
- Handle with **DRY** heatproof gloves or mitts.
- **DO NOT** lean into the Oven Compartment
- **DO NOT** breathe steam, hot air, or superheated steam



### Steaming

With the “Steam” mode, you can boil, steam, blanch, and poach.

#### Steaming at 212°F

Some of the benefits of Steaming at 212° F are:

- Dishes have rich natural color, bite, and intense flavor.
- Vitamins and Minerals are retained.
- Flavors are not transferred if different foods are steamed at the same time.
- Less fat is required.
- Steam is constantly available so work proceeds quickly and smoothly.

#### NOTE:

- Use perforated pans up to 2 1/2” deep. These ensure short cooking times and prevent food at the bottom of the pan from becoming flattened.
- Break up lumps of ice in deep-frozen food so that it cooks evenly.
- When steaming different kinds of food at the same time, observe the cooking times of each individual food item. See the Tray Timer instructions on page 55.

#### Recommendations:

- **Vegetables:** Place a solid pan under the perforated one to collect the stock for use in other dishes.
- **Long-grain rice:** Steam in covered containers. Use 2 parts cold water or cold stock to one part rice.
- **Durum wheat pasta:** Use at least 5 parts cold water to one part pasta.
- **Dumplings:** Steam on greased metal baking sheets. Uncover immediately after cooking. For extended output times: keep hot in a water and starch solution.
- **Potatoes** may be sprinkled and mixed with fine-grained salt before steaming or soaked in salt water for 15 minutes.
- **Vegetables:** Steam in perforated pans
- **Asparagus:** Cook asparagus in unperforated pans.
- **Seasonings:** Season and butter vegetables after steaming.
- **Dim Sum:** Steam dim sum in a perforated pan lined with Savoy cabbage.
- **Roasting:** Place meat on a wire rack. This closes the pores of the meat all over so it cooks evenly and without turning
  1. Place a catch pan on a wire rack under the meat to catch the drippings.
  2. To make stock: add bones, mire poix (vegetable mix for roasts) and seasonings to the catch pan.
  3. Gradually add water.
- **Seasonings** Rub seasoning well into large roasting items so that it is not rinsed off.
- **Quick Roast** - Place quick roast items on wire racks or baking sheets.
  - Do not use deep unperforated containers. These can cause uneven results.
- **Pre-heating** - Always pre-heat well for quick roast items.
- **Core Temperature:** The best cooking results are achieved with the multi-point sensor.
- **NOTE:** Every degree above the required core temperature significantly increases meat shrinkage.





## Tables & Tips for Cooking with the Combi

---

### Steaming at 86°F to 210°F

#### Some of the benefits of Steaming at 86°F to 210°F are:

---

- Precise temperature control ensures optimum quality and nutrient retention.
- Reduced shrinkage of meat with optimized flavor, and aroma.
- Optimum culinary results are achieved for sensitive foodstuffs such as terrines, flans, force, crème caramel and vegetarian dishes.
- Perfect for sous-vide cooking.
- Fan operates for 2 seconds every minute to reduce drying when the oven temperature is set below 212°F.
- Fish poached at 185°F retains its protein.
- Grains swell gently for whole food dishes such as oatmeal, cracked wheat, and farina.
- Ham and sausage can be boiled. No more burst skins.

#### NOTE:

---

- **Sous Vide** cooking times are longer than steaming cooking times.
- Cooking times are longer when steaming at 86°F – 210°F than steaming at 212°F.
- **PRE-HEAT** countertop models for 10-15 minutes and floor models for 30 minutes at 10-20°F **HIGHER** than the cooking temperature.
- Always pre-heat floor models with the trolley or pre-heat bridge in place.
- **SET COOKING TEMPERATURE 10-20% LOWER THAN TRADITIONAL COOKING METHODS.**

#### Recommendations:

- Proof (raise) bread dough at 95°F.
- **Poaching vegetables:** The cooking times for vegetables will be longer for poaching than steaming.

### Steaming at 214°F to 248°F

#### Some of the benefits of Steaming at 214° to 248°F are:

---

- Steaming at temperatures above 212°F is mainly for pulses, cabbage, and dense root vegetables such as potatoes, beets, and turnips.
- Cooking times are reduced by 10 % compared to steaming at 212°F.

## Tables & Tips for Cooking with the Combi



Combi

Use the Combi mode to cook meat and bakery products.

### Some of the benefits of Combi Mode are:

- Combi Hot Air and Superheated Steam Mode guarantee optimum cooking conditions every time.
- The oven climate is matched to the dish and volume being cooked.
- Humidity values need not be set manually.
- Food stays moist.
- The flavor and aroma of dishes are optimized.
- Foods can be cooked very rapidly with minimum loss of weight.
- Flavors are not transferred if different foods are cooked at the same time.
- Bread doughs proof (rise) perfectly.
- The pores of large roasting items are immediately sealed by the steam.
- The interior of the oven can be demoisurized (Crisp & Tasty function) to make juicy, crispy, evenly browned dishes.

### NOTE:

- **PRE-HEAT** countertop models for 10-15 minutes and floor models for 30 minutes at a 10-20% **HIGHER** temperature than the cooking temperature.
- Always pre-heat floor models with the trolley or pre-heat bridge in place.
- The higher the oven temperature, the more darkly food browns, but the loss of weight also increases.
- Browning begins around 248°F.
- **SET COOKING TEMPERATURE 10-20% LOWER THAN TRADITIONAL COOKING METHODS.**

### Recommendations:

- **Roasting:** Place meat on a wire rack. This closes the pores of the meat all over so it cooks evenly and without turning.
  - Place a catch pan on a wire rack under the meat to catch the drippings.
  - To make stock: add bones, mire poix (vegetable mix for roasts) and seasonings to the catch pan. Gradually add water.
- Place **baking dishes or casseroles** on a wire rack for quick and even cooking.
- **Baking:** Use the Combi mode for a shiny surface on your baked goods.
- **Braised meat:** Place meat in deep containers and add stock.
- **Fats and oils** When using the CONVOTHERM by Cleveland for roasting, oils and fats with a high smoking point give very good results.
- **Oven temperature** Select an oven temperature 10-20% LOWER than for traditional methods.
- **Seasonings** Rub seasoning well into large roasting items so that it is not rinsed off.
- **Quick roast** - Place quick roast items on wire racks or baking sheets. Do not use deep unperforated containers. These can lead to uneven results.

## Tables & Tips for Cooking with the Combi



- **Greasing** Always grease quick roast items well. This will ensure better conduction of heat. Use fats and oils with a high smoking point.
- **Pre-heating** - Always pre-heat well for quick roast items.
- **Heat Conduction:** Use non-stick or coated baking sheets. This helps heat conduction and provides a heat reservoir.
- **Grill patterns** If you wish to create a grill pattern pre-heat a wire rack or a grill pan.
- **Meat Loss or Shrinkage:** The Combi mode considerably reduces meat loss.
- **Core Temperature:** The best cooking results are achieved with the multi-point sensor.
  - Every degree above the required core temperature significantly increases meat shrinkage.
- **Roasting on parchment paper:** When roasting, parchment paper provides extremely good browning, even on the underside.
- **Baking in pastry:** Pre-heat the Convotherm Cleveland Combi for perfect pastry-wrapped items.



### Hot Air

The “Hot Air” mode is suitable for all roasted, baked, or grilled foods, and gratinating.

### Roasting and baking

#### Some of the benefits of Hot Air Mode:

- Up to 95% less fat required when compared with standard cooking methods.
- The interior of the oven can be de-moisturized (Crisp & Tasty function) to make juicy, crispy, evenly browned dishes.
- When baking, the Crisp & Tasty function will create a fine crust.

#### Notes:

- **PRE-HEAT** countertop models for 10-15 minutes and floor models for 30 minutes at 10-20%°F **HIGHER** than the cooking temperature.
- Pre-heat floor models with the pre-heat bridge or the trolley in place.
- Higher temperatures increase browning, but the loss of weight (shrinkage) also increases.
- **SET COOKING TEMPERATURE 10-20% LOWER THAN TRADITIONAL COOKING METHODS.**

#### Recommendations:

- **Gratinating:** Vegetables and side dishes can be gratinated with the “Hot Air” mode at 446°F - 482°F in 2 - 5 minutes.
- **Pre-heating:** Before baking, pre-heat countertop models for at least 10 to 15 minutes and floor models at a temperature of 10-20%°F **HIGHER** than the cooking temperature.
- Before loading the oven, wait until the fan has stopped. This will avoid loss of heat.
- **Fats and oils** When using the CONVOTHERM by Cleveland for roasting, oils, and fats with a high smoking point give very good results.
- **Roasting:** Place meat on a wire rack. This closes the pores of the meat all over so it cooks evenly without turning.
  - Place a catch pan on a wire rack under the meat to catch the drippings.
  - To make stock: add bones, mire poix (vegetable mix for roasts) and seasonings to the catch pan. Gradually add water.
- **SET OVEN TEMPERATURE 10-20% LOWER THAN TRADITIONAL COOKING METHODS.**
- **Seasonings** Rub seasoning well into roasting items so that it is not rinsed off.
- **Quick roast** - Place quick roast items on wire racks or baking sheets. Do not use deep unperforated containers. These can cause uneven results.
- **Greasing** Always grease quick roast items well. This will ensure better conduction of heat. Use fats and oils with a high smoking point.
- **Pre-heating** - Always pre-heat well for quick roast items.
- **Heat Conduction:** Use non-stick or coated baking sheets. This will ensure better conduction and heat and provides a heat reservoir.
- **Grill patterns** If you wish to create a grill pattern pre-heat a wire rack or a grill pan.
- **Braised meat:** Place meat in deep containers and add stock.
-

## Tables & Tips for Cooking with the Combi

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- **Core Temperature:** The best cooking results are achieved with the multi-point sensor. Every degree above the required core temperature significantly increases meat shrinkage.
- **Roasting on parchment paper:** When roasting, parchment paper provides extremely good browning, even on the underside of a product.
- **Roasting in pastry:** Pre-heat the CONVOTHERM by Cleveland for perfect pastry-wrapped items.

### LT Cooking: Cooking at Low Temperatures

(Oven temperatures from 86°F to 212°F)

Dark types of meat are particularly suited to low-temperature cooking.

#### Some of the benefits of Low Temperature cooking:

---

- Meat retains almost all its raw weight, and becomes very tender and juicy.
- To prevent the surface of foods from drying out, the fan will run for 2 seconds every minute when below 212°F.
- This method of cooking prevents crustiness.

#### NOTE:

---

- SET the oven temperature only a few degrees higher than the final core temperature.
- The higher the oven temperature, the higher the shrinkage of meat.

#### Recommendations:

Keep prepared dishes warm for up to two hours at an oven temperature of 176°F, with the fan operating, without drying out the surface.



### Retherm

This mode allows you to rethermalize prepared dishes on plates or platters in a short time.

NOTE: This Manual uses the term “rethermalize” for reheating cooking containers, and for “regenerate,” meaning reheating plates or platters

#### Some of the benefits of Retherm Mode:

---

- Rethermalizing, guarantees optimum reheating conditions every time.
- The oven climate is matched to the dish and volume being reheated.
- You can create dishes at off-peak times and arrange them on plates or platters.
- Dishes do not need to be kept hot. This helps prevent loss of quality.
- Ready-prepared dishes stay moist during rethermalization.
- Neither puddles of condensation nor dry edges form on the plates.
- For banquets, you can rethermalize the number of plates you need on demand.

#### NOTE:

---

- **Always pre-heat the CONVOTHERM by Cleveland.**
- Preheat floor models with the pre-heat bridge.
- You will find pre-heat temperatures as well as rethermalization times and temperatures in the table on the following page.
- After rethermalizing for the third time in a fully-loaded oven, always pre-heat again to the original pre-heat temperature.
- When the pre-heat temperature is reached, start rethermalizing again.
- After pre-heating, wait for the fan to stop before opening the doors, and then load prepared plates or platters quickly. This will help keep warm air inside the unit.
- Remember that large, compact foodstuffs such as dumplings, roulades, and casseroles take longer to rethermalize than items such as meat slices, vegetable side dishes, rice, and quartered or diced potatoes.
- Distribute foods evenly over the plate in small pieces. Avoid overlapping large surfaces and arranging food to different heights.
- To achieve good quality, do not interrupt the rethermalization process.
- Pour sauces and garnish plates AFTER rethermalizing.

#### Recommendations:

- Place protein on a base so that it is evenly rethermalized and does not stick to the plate.
- Meat should be cooked rare if it is to be medium after rethermalization.
- Vegetables, rice, and pasta should be oiled and seasoned before rethermalizing.
- **Do not use butter products when rethermalizing vegetables, rice, and pasta.**
- Slice dense foods such as dumplings or whole fillets before rethermalizing.
- When transporting some distance, use a thermal cover.
- For large banquets, work with several plated banquet trolleys.
- Thermal covers will keep plates warm for up to 10 minutes. During this time, you can rethermalize more batches or other dishes. This ensures that dishes can be served to your guests hot and all at the same time.

## Tables & Tips for Cooking with the Combi

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- Make sauces slightly thicker so that they can absorb remaining moisture from fish and vegetables.
- Store optimized culinary ideas for standard dishes as Recipes. This increases efficiency for banquets or à la carte cooking. See page 56.
- For rapid rethermalization, steam chilled food in covered pans at 248°F.
- **Rethermalizing vegetables and side dishes** Arrange chilled foods on plates or platters and rethermalize with "Retherm" mode at 275°F for 5 minutes.
- Cool foods for banquets in a blast chiller, then arrange the foods on plates or platters.
- **Finger food:** Transfer straight from the deep-freeze to the pre-heated Combi.



### Measuring the Core Temperature

Measuring the core temperature is recommended when slow cooking roasts and cooking numerous large cuts of meat.

#### Some of the benefits of Measuring the Core Temperature:

---

- Precise cooking regardless of the size and weight of the meat.
- This precision helps maintain quality results.
- There is no need to spend time and energy checking slow roasts.
- Meat loss (shrinkage) can be reduced up to 50 % compared to standard cooking methods.
- The multi-point sensor takes measurements at several points along the sensor tip and automatically recognizes the coolest core temperature it detects as the center of the roast.
- The multi-point sensor helps prevent incorrect readings and makes safety and quality control easier.
- The PC-HACCP (Hazard Analysis Critical Control Point) software stores the core temperature measurements from the multi-point sensor between 23°F and 302°F for automatic compiling and archiving of HACCP-related data.
- Contact your Cleveland Range sales representative and make PC-HACCP part of your food safety program.

#### NOTE:

---

- Never use the multi-point sensor to place food in the oven, pick up, arrange or rearrange food, or remove food from the oven.
- Before use, cool the multi-point sensor with the hand shower.
- Insert the multi-point sensor through the center (or thickest part) of the piece of meat.
- When the Signal Tone sounds for the end of cooking, slow roasts should be removed immediately from the unit. This will help prevent overcooking.
- When selecting the final core temperature, ensure that slow roasts are able to recover by approximately 37°F after being taken out of the unit.
- The best cooking results are achieved with the multi-point sensor.
- Every degree above the required core temperature significantly increases meat shrinkage.





### Guide values for pre-heat temperatures and rethermalization times and temperatures when the Combi is fully loaded

(Rethermalization times and temperatures are dependent on the number of plates and types of food to be rethermalized)

CONVOTHERM by Cleveland	Retherm racks Ø 10.2"	Plate capacity up to Ø 12.6"	Pre-heat temperature with Combi Hot Air and Superheated Steam	Pre-heat time	Retherm temperature	Retherm time
6.10	-	20	356°F	10 min	257 – 275°F	4 – 8 min
6.20	35	42	356°F	10 min	257 – 275°F	4 – 8 min
10.10	-	32	356°F	10 min	257 – 275°F	4 – 8 min
10.20	50	63	482°F	20 min	257 – 284°F	6 – 10 min
12.20	60	74	482°F	20 min	257 – 284°F	6 – 10 min
20.10	-	61	482°F	20 min	257 – 284°F	6 – 10 min
20.20	100	122	482°F	20 min	257 – 284°F	6 – 10 min
Reheating	After rethermalizing for the third time, pre-heat again to the pre-heat temperature. When the pre-heat temperature is reached, start rethermalizing again immediately.					

## Tables & Tips for Cooking with the Combi



















### Recommendations for core temperature settings:

Food	Degree of cooking	Core temp.
Steak Roast Beef	Medium	131 – 136°F
Braised Beef Roulades Rump steak	Medium Well	185 – 194°F 194 – 203°F
Veal Shoulder	Medium Well	167 – 176°F
Veal Loin	Medium	169 – 172°F
Salmon slices	Medium	145 – 149°F
Pork fillet	Medium	149 – 154°F 165 – 171°F
Cured smoked pork	Medium	149 – 154°F
Leg of lamb Loin of lamb	Medium	136 – 144°F 126 – 133°F
Whole chicken Chicken Breast Chicken Leg	Medium Well	190 – 198°F 167 – 171°F 185 – 192°F

## Tables & Tips for Cooking with the Combi



	 Vegetables, side dishes, egg dishes	Cooking Mode	 TEMP Oven temperature	 TIME Cooking time	 PROBE Core temperature	 Information
Boiling	Pasta (durum wheat semolina)		212°F	10 – 14 min	-	Use unperforated containers. No need to stir, 1 part pasta, 5 parts cold water
	Long-grain rice Short-grain rice Basmati rice		212°F	20 – 25 min	-	Use unperforated containers. 1 part rice, 2 parts cold water or stock
	Vegetables, fresh Cauliflower, carrots, asparagus		212°F	8 – 15 min	-	
Steaming/ blanching	Vegetables, deep-frozen (small chunks)		212°F	10 - 15 min	-	
	Vegetables, deep-frozen (large chunks)		212°F	15 – 20 min	-	
	Potatoes (quartered)		212°F	25 – 35 min	-	
	Dumplings		212°F	20 – 25 min	-	Place on greased baking sheets. After cooking, cover at once.
	Eggs		212°F	8 – 15 min	-	No need for skewering. Soft after about 10 min. Hard after about 15 min.
	Cabbage/kale/pulses Baked potatoes		230 – 239°F	25 – 30 min	-	
Poaching	Royale Deep-frozen scrambled eggs		185°F	20 – 25 min	-	
Baking	Vegetable casserole		266 – 302°F	40 – 60 min	-	Blanch vegetables before preparing casserole.


















## Tables & Tips for Cooking with the Combi



Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six 12" x 20" x 2 ½" pans	Seven 18" x 26" x 2 ½" pans  Fourteen: 12" x 20" x 2 ½" pans	Ten 12" x 20" x 2 ½" pans	Ten 18" x 26" x 2 ½" pans  Twenty: 12" x 20" x 2 ½" pans	Twelve 18" x 26" x 2 ½" pans  Twenty-four: 12" x 20" x 2 ½" pans	Twenty 12" x 20" x 2 ½" pans	Twenty 18" x 26" x 2 ½" pans  Forty: 12" x 20" x 2 ½" pans
26 lbs	61 lbs	44 lbs	88 lbs	106 lbs	88 lbs	176 lbs
26 lbs	61 lbs	44 lbs	88 lbs	106 lbs	88 lbs	176 lbs
33 - 40 lbs	77 - 93 lbs	55 - 66 lbs	110 - 132 lbs	132 - 159 lbs	110 - 132 lbs	220 - 265 lbs
55 - 66 lbs	128 - 154 lbs	99 - 110 lbs	198 - 220 lbs	220 - 265 lbs	198 - 220 lbs	≤ 397 lbs
53 - 66 lbs	124 - 154 lbs	99 - 110 lbs	198 - 220 lbs	220 - 265 lbs	198 - 220 lbs	≤ 397 lbs
53 - 66 lbs	124 - 154 lbs	99 - 110 lbs	198 - 220 lbs	220 - 265 lbs	198 - 220 lbs	≤ 397 lbs
90 items	210 items	150 items	300 items	360 items	300 items	600 items
360 items	840 items	600 items	1200 items	1440 items	1200 items	2400 items
55 - 66 lbs	128 - 154 lbs	99 - 110 lbs	198 - 220 lbs	220 - 265 lbs	198 - 220 lbs	≤ 397 lbs
53 lbs	124 lbs	88 lbs	176 lbs	212 lbs	176 lbs	353 lbs
53 lbs	124 lbs	88 lbs	176 lbs	212 lbs	176 lbs	353 lbs

# Tables & Tips for Cooking with the Combi



	 Fish, crustaceans, sous-vide process	Cooking mode	 Oven temperature	 Cooking time	 Core temperature	 Information
Roast	Trout, Halibut, Sole, whole		428 – 464°F	12 – 15 min	-	Use every 2nd shelf
	Salmon steak or salmon fillets		410 – 446°F	6 – 12 min	-	Use every 2nd shelf
	Fish fillet, breaded, deep-frozen		410 – 446°F	12 – 16 min	-	Use every 2nd shelf. Use a non-stick baking sheet
	Shrimp		356 – 392°F	4 – 8 min	-	Use every 2nd shelf
Steam	Lobster Crayfish		212°F	Approx. 12 min	-	Use every 2nd shelf
Poach	Mussels		205°F	10 – 12 min	-	
	Trout		162°F	12 – 15 min	-	Lay trout open on belly on a baking sheet
	Shrimp		162 - 176°F	4 – 8 min	-	
	Salmon fillets		149 - 162°F	4 – 8 min	-	
	Fish terrine		149 - 162°F	60 - 70 min	140 – 149°F	Use every 2nd shelf
	Fish dumplings Stuffing in Savoy cabbage		162°F	8 – 12 min	-	
	Trout in vacuum pouch (sous vide)		149°F	18 – 24 min	-	


















# Tables & Tips for Cooking with the Combi



Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six: 12" x 20" x 2 1/2" pans	Seven: 18" x 26" x 2 1/2" pans Fourteen: 12" x 20" x 2 1/2" pans	Ten: 12" x 20" x 2 1/2" pans	Ten: 18" x 26" x 2 1/2" pans Twenty: 12" x 20" x 2 1/2" pans	Twelve: 18" x 26" x 2 1/2" pans Twenty-four: 12" x 20" x 2 1/2" pans	Twenty: 12" x 20" x 2 1/2" pans	Twenty: 18" x 26" x 2 1/2" pans Forty: 12" x 20" x 2 1/2" pans
12 – 15 items	28 – 35 items	20 – 30 items	40 – 60 items	48 – 72 items	40 – 60 items	80 – 120 items
30 – 36 items	70 – 84 items	50 – 60 items	100 – 120 items	120 – 144 items	100 – 120 items	200 – 240 items
18 – 24 items	42 – 56 items	30 – 40 items	60 – 80 items	72 – 96 items	60 – 80 items	120 – 160 items
Depending on size of shrimp						
Depending on size of lobster/crayfish						
Depending on size of mussels						
24 – 30 items	56 – 70 items	40 – 50 items	80 – 100 items	96 – 120 items	80 – 100 items	160 – 200 items
Depending on size of shrimp						
60 – 72 items	140 – 168 items	100 – 120 items	200 – 240 items	240 – 288 items	200 – 240 items	400 – 480 items
12 – 15 items	28 – 35 items	20 – 30 items	40 – 60 items	48 – 72 items	40 – 60 items	80 – 120 items
approx. 240 items	approx. 560 items	approx. 400 items	approx. 800 items	approx. 960 items	approx. 800 items	approx. 1,600 items
24 – 30 items	56 – 70 items	40 – 50 items	80 – 100 items	96 – 120 items	80 – 100 items	160 – 200 items
12 – 15 items	28 – 35 items	20 – 30 items	40 – 60 items	48 – 72 items	40 – 60 items	80 – 120 items

## Tables & Tips for Cooking with the Combi



	 Meat, sausage Large roasting items	Cooking mode	 TEMP Oven temperature	 TIME Cooking time	 PROBE Core temperature	 Information
Roasting	Roast pork Pork loin		275 – 320°F	80 – 90 min	approx. 167°F	
	Leg of lamb Lamb roast		275 – 320°F	60 – 70 min	approx. 144°F	
	Meat loaf		284 – 320°F	70 – 80 min	approx. 170°F	Form into a brick shape or pack into a loaf pan. Cook on a baking sheet.
	Roast veal		275 – 293°F	80 – 100 min	approx. 170°F	
	Steak Fillet of beef in puff pastry	 	320 – 356°F	20 – 25 min 35 – 40	122 – 131°F	Sauté steak. Pre-heat and brush pastry lightly with egg
	Roast beef		275 – 320°F	25 – 30 min	118 – 131°F	
	Baked ham	1.  2. 	1. approx. 172°F 2. 356°F	-	1. 140°F 2. 149°F	After steaming, carve rind. 2-step recipe
Braising	Kale roulades Paprika pods, stuffed		266 – 302°F	60 – 70 min	-	Pre-heat. Unperforated containers with or without stock.
	Roulade Braised beef		266 – 293°F	40 – 60 min 70 – 90	-	After approx. ½ hr, pour sauce over unperforated containers.
	Poaching	Boiled ham		approx. 172°F	32 min per lbs	149°F

## Tables & Tips for Cooking with the Combi





















Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six: 12" x 20" x 2 1/2" pans	Seven: 18" x 26" x 2 1/2" pans  Fourteen: 12" x 20" x 2 1/2" pans	Ten: 12" x 20" x 2 1/2" pans	Ten: 18" x 26" x 2 1/2" pans  Twenty: 12" x 20" x 2 1/2" pans	Twelve: 18" x 26" x 2 1/2" pans  Twenty-four: 12" x 20" x 2 1/2"	Twenty: 12" x 20" x 2 1/2" pans	Twenty: 18" x 26" x 2 1/2" pans  Forty: 12" x 20" x 2 1/2" pans
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
18 items 12 items	42 items 28 items	30 items 20 items	60 items 40 items	72 items 48 items	60 items 40 items	120 items 80 items
8 x 9 lbs tins	18 x 9 lbs tins	12 x 9 lbs tins	18 x 9 lbs tins	24 x 9 lbs tins	24 x 9 lbs tins	36 x 9 lbs tins
6 items 49 – 55 lbs	14 items 114 – 128 lbs	10 items 77 – 88 lbs	20 items 154 – 176 lbs	24 items 194 – 220 lbs	20 items 154 – 176 lbs	40 items 309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
90 items	210 items	150 items	300 items	360 items	300 items	600 items
90 items 49 – 55 lbs	210 items 114 – 128 lbs	150 items 77 – 88 lbs	300 items 154 – 176 lbs	360 items 194 – 220 lbs	300 items 154 – 176 lbs	600 items 309 – 331 lbs



## Tables & Tips for Cooking with the Combi



	 Meat, sausage Small roasting items	Cooking mode	 TEMP Oven temperature	 TIME Cooking time	 PROBE Core temperature	 Information
Grilling	Fillet steak, beef, 6 oz.		410 – 446°F	6 – 15 min	-	Rare 6 – 8 min Medium 8 – 10 min
	Rump steak, 6 – 7 oz.		446 – 482°F	6 – 12 min	-	Rare 6 – 8 min Medium 8 – 10 min
	Veal steak, 5 oz.		410 – 446°F	8 – 10 min	-	
	Pork fillet, 3 oz.		410 – 446°F	5 – 8 min	-	
	Liver cuts		392 – 428°F	4 – 6 min	-	Do not flour
	Pork chop, 5 oz.		356 – 392°F 392 – 428°F	12 – 15 min	-	Grease sheets if necessary (depending on weight)
	Lamb steak, 6 oz.		356 – 410°F	10 – 15 min	-	
	Meat kebab		356 – 410°F	15 – 20 min	-	
	Breaded chop or escalope Cordon bleu		356 – 410°F	10 – 15 min	-	
	Turkey escalope, 7 oz.		356 – 410°F	12 – 16 min	-	
	Sausages		356 – 410°F	10 – 15 min	-	
Steaming/ poaching	Boiled sausage		176°F	70 min	162°F	
	Veal sausage Wiener sausage		Depending on skin	12 – 20 min	-	Heating-up time depends on volume being cooked

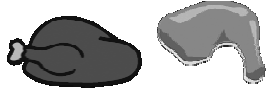












## Tables & Tips for Cooking with the Combi



Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six: 12" x 20" x 2 1/2" pans	Seven: 18" x 26" x 2 1/2" pans  Fourteen: 12" x 20" x 2 1/2" pans	Ten: 12" x 20" x 2 1/2" pans	Ten: 18" x 26" x 2 1/2" pans  Twenty: 12" x 20" x 2 1/2" pans	Twelve: 18" x 26" x 2 1/2" pans  Twenty-four: 12" x 20" x 2 1/2" pans	Twenty: 12" x 20" x 2 1/2" pans	Twenty: 18" x 26" x 2 1/2" pans  Forty: 12" x 20" x 2 1/2" pans
90 items	210 items	150 items	300 items	360 items	300 items	600 items
48 items	112 items	80 items	160 items	192 items	160 items	320 items
48 items	112 items	80 items	160 items	192 items	160 items	320 items
96 items	224 items	160 items	320 items	384 items	320 items	640 items
48 items	112 items	80 items	160 items	192 items	160 items	320 items
48 items	112 items	80 items	160 items	192 items	160 items	320 items
48 items	112 items	80 items	160 items	192 items	160 items	320 items
60 items	140 items	100 items	200 items	240 items	200 items	400 items
48 items	112 items	80 items	160 items	192 items	160 items	320 items
36 items	84 items	60 items	120 items	144 items	120 items	240 items
150 items	350 items	250 items	500 items	600 items	500 items	1000 items
300 items	700 items	500 items	1000 items	1200 items	1000 items	2000 items

## Tables & Tips for Cooking with the Combi



	 Game and poultry	Cooking mode	 Oven temperature	 Cooking time	 Core temperature	 Information
	Duck		338 – 356°F	50 – 65 min	-	Stuff with apple and onion as desired
	Goose approx. 10 lbs		248°F	approx. 3 – 3.5 hrs.	-	Add water as needed
	Turkey approx. 7 – 9 lbs		266 – 284°F	110 – 120 min	approx. 176°F	
	Turkey breast		275 – 302°F	40 – 50 min	approx. 140°F	
	Rabbit		320 – 356°F	15 – 20 min	140 – 149°F	Marinate as desired
Roasting/ braising	Rabbit leg		284 – 320°F	45 – 50 min	approx. 154°F	Braise in stock if required
Grilling	Chicken		356 – 392°F	35 – 40 min	-	Special chicken grill with fat drip tray
	Chicken Leg		356 – 410°F	25 min	-	


















# Tables & Tips for Cooking with the Combi



Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six: 12" x 20" x 2 ½" pans	Seven: 18" x 26" x 2 ½" pans  Fourteen: 12" x 20" x 2 ½" pans	Ten: 12" x 20" x 2 ½" pans	Ten: 18" x 26" x 2 ½" pans  Twenty: 12" x 20" x 2 ½" pans	Twelve: 18" x 26" x 2 ½" pans  Twenty-four: 12" x 20" x 2 ½" pans	Twenty: 12" x 20" x 2 ½" pans	Twenty: 18" x 26" x 2 ½" pans  Forty: 12" x 20" x 2 ½" pans
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
12 items	28 items	20 items	40 items	48 items	40 items	80 items
2 items	2-3 items	4 items	6 items	9 items	8 items	15 items
4 items	9 items	6 items	12 items	16 items	12 items	24 items
12 items	28 items	20 items	40 items	48 items	40 items	80 items
12 items	28 items	20 items	40 items	48 items	40 items	80 items
24 items	56 items	40 items	80 items	96 items	80 items	160 items
49 – 55 lbs	114 – 128 lbs	77 – 88 lbs	154 – 176 lbs	194 – 220 lbs	154 – 176 lbs	309 – 331 lbs
40 – 53 lbs	93 – 124 lbs	77 – 88 lbs	154 – 176 lbs	159 – 220 lbs	154 – 176 lbs	309 – 331 lbs
18 items	42 items	27 items	54 items	60 items	54 items	100 items
60 items	140 items	100 items	200 items	240 items	200 items	400 items

# Tables & Tips for Cooking with the Combi



	 Baked items and desserts	Cooking mode	 Oven temperature	 Cooking time	 Core temperature	 Information
Baking	Sponge bases		1. 221°F 2. 302°F	1. 10 min 2. 15 min	-	2-step recipe
	Cheesecakes		1.221°F 2.320°F 3.176°F	1. 20 min 2. 35 min 3. 05 min	-	Use every 2nd shelf 3-step recipe
	Fruit flans		320 – 356°F	50 – 60 min	-	Use every 2nd shelf
	Small biscuits & cakes, Short crust pastry, Pretzels		338 – 374°F	12 – 18 min	-	Number per sheet depends on size; do not arrange items too closely
	Apple strudel		338 – 374°F	40 – 50 min	-	Use every 2nd shelf Number per sheet depends on size; do not arrange items too closely together
	Mixed-flour bread		338 – 374°F	30 – 40 min	-	Use every 2nd shelf Number per sheet depends on size; do not arrange items too closely together
	Buns / rolls, Puff pastry, Flaky pastry		320 – 365°F	15 – 25 min	-	Number per sheet depends on size; do not arrange items too closely together
	Croissants		284 – 329°F	12 25 – 35 min – 15 min	-	Number per sheet depends on size; do not arrange items too closely together
	Plaited yeast pastry		302 – 320°F		-	Use every 2nd shelf Number per sheet depends on size; do not arrange items too closely together
	Buns / rolls, deep-frozen		320 – 356°F	6 – 12 min	-	Number per sheet depends on size; do not arrange items too closely together
	Baguettes, deep-frozen		320 – 356°F	6 – 12 min	-	Number per sheet depends on size; do not arrange items too closely together
Poaching	Crème caramel Crème Royal		136°F	35 – 40 min	-	Use every 2nd shelf

















## Tables & Tips for Cooking with the Combi



Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six: 12" x 20" x 2½" pans	Seven: 18" x 26" x 2 ½" pans  Fourteen: 12" x 20" x 2 ½" pans	Ten: 12" x 20" x 2½" pans	Ten: 18" x 26" x 2 ½" pans  Twenty: 12" x 20" x 2 ½" pans	Twelve: 18" x 26" x 2½" pans  Twenty-four: 12" x 20" x 2½" pans	Twenty: 12" x 20" x 2 ½" pans	Twenty: 18" x 26" x 2 ½" pans  Forty: 12" x 20" x 2 ½" pans
6 sheets	14 sheets	10 sheets	20 sheets	24 sheets	20 sheets	40 sheets
3 baking tins	7 baking tins	5 baking tins	10 baking tins	12 baking tins	10 baking tins	20 baking tins
3 sheets	7 sheets	5 sheets	10 sheets	12 sheets	10 sheets	20 sheets
6 sheets	14 sheets	10 sheets	20 sheets	24 sheets	20 sheets	40 sheets
3 sheets	7 sheets	5 sheets	10 sheets	12 sheets	10 sheets	20 sheets
3 sheets	7 sheets	5 sheets	10 sheets	12 sheets	10 sheets	20 sheets
6 sheets	14 sheets	10 sheets	20 sheets	24 sheets	20 sheets	40 sheets
6 sheets	14 sheets	10 sheets	20 sheets	24 sheets	20 sheets	40 sheets
3 sheets	7 sheets	5 sheets	10 sheets	12 sheets	10 sheets	20 sheets
6 sheets	14 sheets	10 sheets	20 sheets	24 sheets	20 sheets	40 sheets
6 sheets	14 sheets	10 sheets	20 sheets	24 sheets	20 sheets	40 sheets
90 items	210 items	150 items	300 items	360 items	300 items	600 items

# Tables & Tips for Cooking with the Combi



	 Potato products, Asian food, finger food	Cooking mode	 Oven temperature	 Cooking time	 Core temperature	 Information
Baking without fat with Crisp & Tasty function	French fries		410°F	8 – 12 min		Use the CONVOTHERM by Cleveland frying basket; every 2nd shelf
	Potato wedges / cubes		410°F	10 – 12 min		Use the CONVOTHERM by Cleveland frying basket; every 2nd shelf
	Waffle fries		410°F	8 – 10 min		Use the CONVOTHERM by Cleveland frying basket; every 2nd shelf
	Mini spring rolls		410°F	8 – 10 min		Use the CONVOTHERM by Cleveland frying basket. Use Combi phase if required
	Shrimp roll		410°F	8 – 10 min		Use the CONVOTHERM by Cleveland frying basket every 2nd shelf. Use Combi phase if required;
	Cheese nuggets		410°F	8 -10 min		
	Vegetable Tempura		392°F	8 – 10 min		
Steaming	Dim Sum		212°F	8 – 12 min		
	Sushi rice		212°F	30 – 35 min		Use a 2 ½" Steam table pan
Frying with the Crisp & Tasty function	Chicken fingers Chicken wings		410°F	10 – 14 min		
	BBQ ribs		356°F		167 – 172°F	

## Tables & Tips for Cooking with the Combi



Tabletop models				Floor models		
6.10	6.20	10.10	10.20	12.20	20.10	20.20
Six: 12" x 20" x 2 ½" pans	Seven: 18" x 26" x 2 ½" pans  Fourteen: 12" x 20" x 2 ½" pans	Ten: 12" x 20" x 2 ½" pans	Ten: 18" x 26" x 2 ½" pans  Twenty: 12" x 20" x 2 ½" pans	Twelve: 18" x 26" x 2 ½" pans  Twenty-four: 12" x 20" x 2 ½" pans	Twenty: 12" x 20" x 2 ½" pans	Twenty: 18" x 26" x 2 ½" pans  Forty: 12" x 20" x 2 ½" pans
26 lbs	61 lbs	44 lbs	88 lbs	97 lbs	88 lbs	176 lbs
10 lbs	23 lbs	15 lbs	33 lbs	40 lbs	33 lbs	66 lbs
10 lbs	23 lbs	15 lbs	33 lbs	40 lbs	33 lbs	66 lbs
7 lbs	16 lbs	11 lbs	22 lbs	26 lbs	22 lbs	44 lbs
10 lbs	23 lbs	15 lbs	33 lbs	40 lbs	33 lbs	66 lbs
240 items	560 items	400 items	800 items	960 items	800 items	1600 items
13 lbs	30 lbs	22 lbs	44 lbs	53 lbs	44 lbs	88 lbs
13 lbs	30 lbs	22 lbs	44 lbs	53 lbs	44 lbs	88 lbs
7 lbs	16 lbs	11 lbs	22 lbs	26 lbs	22 lbs	44 lbs
26 lbs	61 lbs	44 lbs	88 lbs	106 lbs	88 lbs	176 lbs
10 lbs	23 lbs	15 lbs	33 lbs	40 lbs	33 lbs	66 lbs
26 lbs	61 lbs	44 lbs	88 lbs	106 lbs	88 lbs	176 lbs





**! WARNING**

Hot Air, Steam, and Condensate will cause burns and scalds. When opening Combi doors: always stand to the hinge side and back from the Combi doors. Open Combi doors to the “airing” position, and wait for the steam, condensate, and heat to dissipate before carefully opening the door.

**! DANGER**

**DO NOT LEAN INTO THE OVEN COMPARTMENT**

**! DANGER**

**DO NOT BREATHE STEAM, HOT AIR OR CONDENSATE**



### DANGER

Always lock the transport trolley correctly.

The transport trolley can be HOT.

The transport trolley can be unstable.

Use caution when:

- Filling
- Placing the transport trolley into the oven compartment
- Removing the transport trolley from the oven compartment.
- Putting on or removing the thermal cover.
- Moving the transport trolley.

### WARNING

The Oven Compartment and Contents (food, pans, racks, etc.) are HOT. Use caution, and wear DRY heatproof oven mitts when loading, unloading, or reaching into the oven compartment.

### DANGER


The Preheat Bridge and Oven Compartment can be **HOT**.



- Use caution when placing the Preheat Bridge in the Oven Compartment
- Use caution when removing the Preheat Bridge from the Oven Compartment.
- Handle with DRY heatproof gloves or mitts.
- DO NOT lean into the Oven Compartment.
- DO NOT breathe steam, hot air, or condensate.



## Steam

The “Steam” mode allows you to boil, steam, blanch, and poach


Turn unit on with the On/Off key .









1. Press the Steam key 
  - a. The default temperature or last temperature selected appears in the display
  - b. The default time value or the last selected cooking time appears in the display
  - c. To start immediately, press the Start/Stop key .

### OR:

2. Press the Temperature key 

The oven temperature appears in the display.

Set the required oven temperature (86°F-248°F) with the Selector Dial .

3. Time or Core Temperature mode:
  - Time: Press the Time key 
  - Set the desired cooking time or select continuous mode (at 9:59 or 0:01, release the Selector Dial  and then turn again to the left or the right until - : - - appears).
  - Core Temperature: Press the Core Temperature key  and set the desired core temperature.
4. Press the Start/Stop key 
  - The cooking mode will start.
  - The display will show the nominal oven temperature, and the cooking time remaining, or the actual core temperature.
5. To change the set values while operating, press the Temperature , Time , or Core Temperature key  and enter the desired value.
6. You can read the actual oven temperature, nominal cooking time and nominal core temperature by pressing the relevant key either once or twice as required.
7. When the set time has elapsed or the core temperature has been reached, the Signal Tone sounds and the program ends. Press the Start/Stop key , or open the door to stop the Signal Tone.

### Notes:




The following extra functions and programs are available through the Smart Key  in the “Steam” mode:

- |   |  |
|---|--|
|  Tray Timer        |  Reduced Power      |
|  Pre-Heating       |  Program Protection |
|  Reduced Fan Speed | $\Delta T$ Delta-T Cooking   |













## Combi



The “Combi” mode is mainly for cooking meat and baked goods.

1. Turn unit on with the On/Off key .
2. Press the Combi key .
  - a. The display will show the last nominal values selected or the default values for Combi mode.
  - b. To start immediately with the values displayed, press the Start/Stop key .


### OR:









3. Press the Temperature key . The oven temperature appears in the display.
  - Select the required oven temperature from 212° F to 482° F with the Selector Dial .
4. Time or Core Temperature mode:
  5. Time: Press the Time key . Set the required cooking time or continuous mode (at 9:59 or 0:01, release the Selector Dial  and then turn again to the left or the right until - : - - appears).
    - Core Temperature Press the Core Temperature key  and set the required core temperature.
6. Press the Start/Stop  key.
  - The “Combi Hot Air and Superheated Steam” mode will start.
  - The display will show the nominal oven temperature, and the cooking time remaining or the actual core temperature.
7. To change the set values while operating, press the Temperature , Time , or Core Temperature key  and enter the desired values.
8. To view the actual oven temperature, nominal cooking time and nominal core temperature: press the relevant key either once or twice as required.
9. When the set time has elapsed or the core temperature has been reached, the Signal Tone sounds and the program ends.
10. Press the Start/Stop key  or open the door.

### Hint:

In TIME mode, to display the core temperature reached during operation: press and hold down the Time key  and the Core Temperature key . The current core temperature appears in the display.

### Notes:














- The following extra functions and programs are available through the Smart Key  in the “Combi Hot Air and Superheated Steam” mode:

	Crisp & Tasty (demoisturizing)		Tray timer
	Pre-heating		Reduced fan speed
	Reduced power		Add moisture manually
	Program protection		Delta-T cooking





## Hot Air


The “Hot Air” mode is for roasted foods and baked goods requiring no moisture.









1. Turn unit on with the On/Off key  key.
  2. Press the Hot Air key .
    - The display will show the last nominal values set or the default values for Hot Air.
    - To start immediately, press the Start/Stop key .
- OR:**
3. Press the Temperature key .
    - The oven temperature appears in the display.
    - Set the required oven temperature from 86°F to 482°F with the Selector Dial .
  4. Time or Core Temperature mode:
    5. Time: Press the Time key . Set the desired cooking time or continuous mode (at 9:59 or 0:01, release the Selector Dial  and then turn again to the left or the right until - : - - appears).
      - Core temperature: Press the Core Temperature key  and set the required core temperature.
  6. Press the Start/Stop key .
    - The “Hot Air” mode will start.
    - The display will show the nominal oven temperature and the cooking time remaining or actual core temperature.
  7. To change the set values while operating, press the Temperature , Time , or Core Temperature  keys and enter the desired values.
  8. To read the actual oven temperature, nominal cooking time, and nominal core temperature: press the relevant key either once or twice needed.
  9. When the set time has elapsed or the core temperature has been reached, the Signal Tone sounds and the program ends.
  10. Press the Start/Stop key  or open the doors.

### Hint:

In TIME mode, to display the core temperature reached during operation: press and hold down the Time key  and the Core Temperature key . The current core temperature appears in the display.

### NOTES:


- The following extra functions and programs are available through the Smart Key  in the “Hot Air” mode (see below).


	Crisp & Tasty (demoisturizing)		Tray timer
	Pre-heating		Reduced fan speed
	Reduced power		Add moisture manually
	Program protection		Delta-T cooking




## Rethermalization

- The “Retherm” mode allows you to rethermalize prepared dishes on plates or platters quickly.
- Pre-Heating is very important for optimal rethermalization.


2. Turn the Combi on with the On/Off key .

3. Press the Retherm key .



- The display shows the last nominal values selected or the default values for rethermalizing.
- To start immediately, press the Start/Stop key .

### OR:


4. Press the Temperature key .




- The oven temperature will be called up on the display.
- Set the required oven temperature from 248°F to 320°F with the Selector Dial .

5. Rethermalizing in Time or Core Temperature mode:

6. Rethermalizing in Time Mode: Press the Time Key . Set the required rethermalization time or continuous mode (at 9:59 or 0:01, release the Selector Dial  and then turn again to the left or the right until - : - - appears).

- Core Temperature: Press the Core Temperature key  and set the required core temperature.

7. Press the Start/Stop key . The “Retherm” mode starts. The display shows the nominal oven temperature and the rethermalizing time remaining OR the actual core temperature.


8. To alter the values set during operation, press the Temperature , Time , or Core Temperature key  and enter the desired values.

9. To read the actual oven temperature and the nominal rethermalizing time: press the relevant key either once or twice as needed

10. When the set time has elapsed, or the nominal core temperature has been reached, the Signal Tone sounds and “Retherm” mode ends.


11. Press the Start/Stop key  or open the door.

### Notes:

- Pre-Heating is very important for optimal rethermalization.
- For best quality: do not interrupt the rethermalization process.
- The following extra functions and programs are available through the Smart Key  in the Retherm mode:

 Tray timer

 Pre-heating

 Reduced fan speed

$\Delta T$  Delta-T cooking

 Reduced power

 Program protection



## Measuring the Core Temperature

**⚠ CAUTION**

**Core Temperature Sensor may be HOT**

**⚠ CAUTION**

**Core Temperature Sensor is SHARP  
Use caution to avoid stabbing yourself or others.**

**NOTICE**














The Core Temperature Sensor is a precision instrument.

- Handle it with care.
- Keep Sensor in its holder when not in use.
- Do not allow Sensor or cable to hang out of the oven.
- Remove it from food before taking items out of the oven.
- Do not use the Sensor to handle food items.
- Do not bend the Sensor.
- Do not pull on the cable.
- Cool the Sensor with the Hand Shower before inserting the Sensor into food items.







## Measuring the Core Temperature

Measuring the core temperature is recommended when cooking large or multiple cuts of meat.

1. Turn unit on with the On/Off key .
2. Insert the multi-point sensor through the center of the food item.
3. Select the mode required    .
4. Press the Temperature key 
  - The oven temperature appears in the display.
  - Set the required oven temperature with the Selector Dial .
  - Press the Core Temperature key  and set the required core temperature with the Selector Dial .
5. Press the Start/Stop key 
  - The selected mode will start.
  - The display will show the nominal oven temperature and the actual core temperature.
6. To change the values set while operating, press the Temperature , or Core Temperature key  and enter the desired values.
7. You can read the actual oven temperature and the nominal core temperature by pressing the relevant key either once or twice as needed.
8. When the set core temperature has been reached, the Signal Tone sounds and the program ends.
9. Press the Start/Stop key  or open the door.

### Notes:

- To display the time elapsed in Core Temperature mode: Press and hold down the Core Temperature  and the Time keys . The time elapsed appears in the display.
- To display the core temperature reached in Timed mode, press and hold down the Time key  and press the Core Temperature key . The current core temperature appears in the display.
- The core temperature sensor is a multi-point sensor. Optimum cooking results are possible without finding the exact center of the meat.

### Recommendations:

- Use the sensor only to measure core temperature.
- Do not use the sensor as a meat fork or similar tool.
- Do not bend the sensor tip(s).
- Do not pull on the cable.
- Cool the sensor with the hand shower before inserting it into food items.













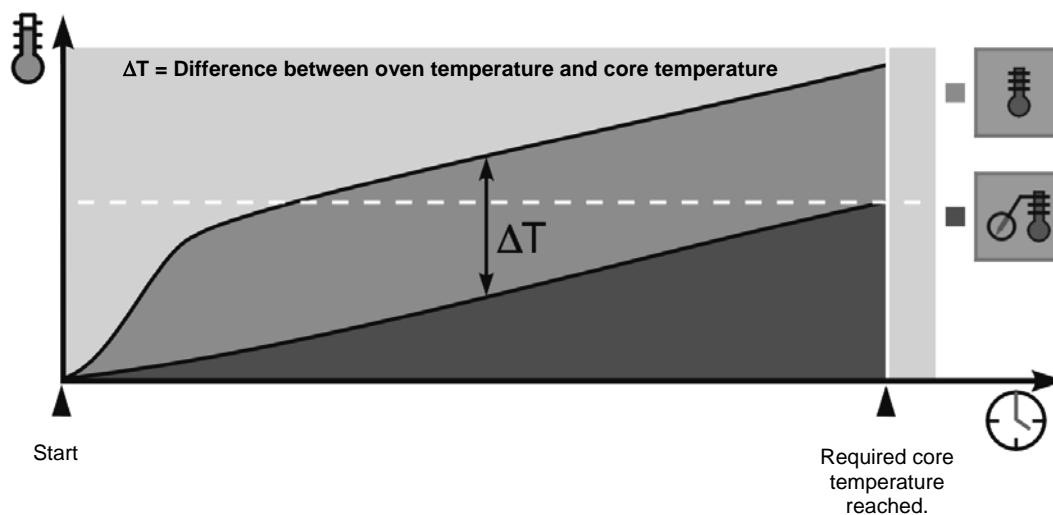
## Delta-T cooking

**Delta – T cooking requires use of the core temperature sensor**

**Note:** The higher the Delta-T temperature, the greater the loss in weight and the darker the browning.

When using Delta-T cooking: use of the core temperature sensor is required, because the oven temperature increases with the core temperature. The oven temperature will always be the Delta – T temperature plus the core temperature (see illustration below).

1. Turn the Combi on with the On/Off key .
2. Select mode.
3. Press the Smart Key .
  - Various options will be shown in the display.
  - Select Delta-T cooking  $\Delta T$  with the Selector Dial .
  - Confirm by pressing the Smart Key .
4. Confirm “Yes” with the Smart Key .
5. Press the Core Temperature key .
6. Set the desired final core temperature with the Selector Dial.
7. Press the Temperature key .
8. Set the desired Delta – T spread temperature.
9. **The Delta-T process starts automatically.**
  - a. **DO NOT** press the Start/Stop key.
  - b. **This will STOP the Delta – T cooking program.**
10. The display shows the Delta-T spread temperature and the actual core temperature.
11. When the set core temperature is reached: the Signal Tone sounds and the Delta -T process ends.
12. Press the Start/Stop key  or open the doors.



Large roasting items	$\Delta T$	core temperature	Large roasting items	$\Delta T$	core temperature
Roast beef	122 – 131°F	118 – 158°F	Roast veal	122 – 158°F	172°F
Steak	122 – 140°F	122 – 160°F	Boiled ham	122 – 140°F	172°F
















## cook & hold

### Cook & Hold

**Cook and hold requires use of the Core Temperature Sensor**

The Cook & Hold function includes a “cook” phase and a “hold” phase.

The switch from cook phase to hold phase is automatic when the set switchover core temperature or time is reached (See illustration “The Principle of Cook & Hold”).

1. Turn the Combi on with the On/Off key .
2. Press the Write / Edit key . Various options appear in the display.
3. Select New Recipe  with the Selector Dial .
4. Confirm by pressing the Write / Edit key .
5. For more information on the Cook Phase and entering recipe names: See the Convothem by Cleveland Cookbook.
6. To enter the hold phase, press the Smart Key  when the mode keys flash.
7. Various options will appear in the display.
8. Select Cook & Hold  with the Selector Dial .
9. Confirm by pressing the Smart Key .
10. Confirm “Yes” with the Smart Key .
11. Press the Temperature key .
12. Set the required hold temperature with the Selector Dial .
13. Accept by pressing the Write / Edit key .

#### Note:

When using the “Hot Air” or “Combi Hot Air and Superheated Steam” mode in the cook phase, a temperature range of 248° F to 300° F is recommended.

The time at which the oven switches to the hold phase will depend on the type of food, volume being cooked, and portion or piece size.

Select the required nominal core temperature for the hold temperature to avoid overcooking.

#### Recommendations:

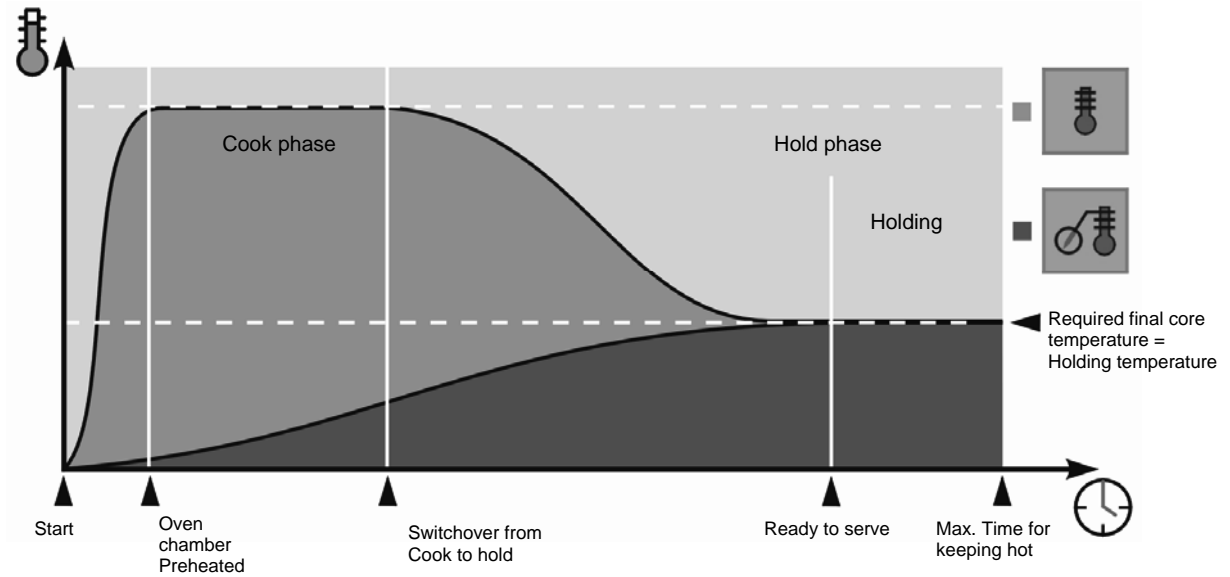
Prepare food during quiet times, load the Combi and start the Cook & Hold process well before the finished dishes are required.

### Examples for Cook & Hold

Roasting Items	Cooking Mode	Oven Temperature	Switchover Core Temperature	Information
Roast beef (meat size approx. 5 lbs)	Hot Air Cook & Hold	266 – 320°F C&H 122°F	154°F	2-step program
Ham (meat size approx. 6 lbs)	Hot Air Cook & Hold	266°F C&H 167°F	131 – 140°F	2-step program



## The principle of Cook & Hold







## Extra Functions

With Extra Functions, your Convotherm by Cleveland enables you to maximize productivity in the food preparation processes and cooking processes.

### Pre-Set Start Time

A pre-set start time will automatically start the required program, cooking plan or recipe.

1. Press and hold down the Time key  and turn the Selector Dial .
2. The display will show time details.
3. See Example below.









#### Explanation of example:

Top: total cooking time of one hour or 1:00 (this value only displayed in time mode).

Bottom Left: the unit will start in 48 minutes (displayed in time and core temperature modes).

Bottom Center: start time 10:23 (displayed in time and core temperature modes).




Bottom Right: end of cooking 11:23 (this value only displayed in time mode).

4. Select the time-to-start start, or end time by holding down the Time key  and simultaneously turning the Selector Dial  (in time mode only).
  - a. The Selector Dial moves the time-to-start in hours and minutes (bottom left), the start time (bottom center) and the end time (bottom right) simultaneously.
  - b. Select and set the desired time-to-start, start time, or end time and the other two times will be set automatically.
5. The Combi will automatically begin counting down to the pre-set start time when the Time key  is released.
6. If a Cookbook program, cooking plan, or recipe is counting down to its start time, then "PROG:" and the name of the program will appear in the display above the time information.
7. To change the pre-set start time, press and hold down the Time key .
8. Use the Selector Dial  to set the desired time.
9. When the start time is reached, the set program will start automatically.
10. To delete a pre-set start time, press the Start/Stop key . This will delete the pre-set start time.

#### Recommendations:









- Use the Extra Functions to avoid bottlenecks in food preparation and production.
- Prepare food as normal, load the unit and select the required mode and cooking time or core temperature before the cooking process needs to start.

#### Notes:



- Pre-Set Start Time may be used with Cookbook programs, cooking plans, or recipes.
  1. Press the Cookbook key .
  2. Select the desired recipe with the Selector Dial .
  3. Check the steps with the Smart Key  if desired.
  4. Proceed with Step 1 as usual.















## Extra Functions can be activated with the Smart Key

 Crisp & Tasty (demoisturizing)	 Tray timer
 Pre-heating	 Reduced fan speed
 Reduced power	 Key lock
 Add moisture manually	 Program protection

### Notes on the Extra Functions:






- Extra functions and their symbols appear only if they are compatible with the selected cooking program.
- Smart Key functions can be selected and activated / deactivated at any time during operation by pressing the Smart Key .
- Combine Smart Key functions as desired.
- Smart Key functions (except add moisture manually and Tray timer) are programmable.
- Smart Key functions can be integrated into recipes.
- When a program comes to an end, the Combi will automatically reset the selected extra function (except in Key Lock) to the standard setting.
- Press the Start/Stop key  to exit the Smart Key menu at any time.

## Crisp & Tasty Function (Demoisturizing)




- Use Crisp & Tasty to reduce moisture content.
  - Excess moisture is drawn out the food and then out of the oven.
  - Crisp & Tasty can be used in the “Hot Air” and “Combi” modes.
1. Press the Smart Key .
  2. Various options will appear in the display.
  3. Select “Crisp & Tasty”  with the Selector Dial .
  4. Confirm by pressing the Smart Key .
  5. Select “Yes” with the Selector Dial .
  6. Confirm “Yes” with the Smart Key .
  7. Select the Crisp & Tasty level with the Selector Dial.
    -  low demoisturizing – 25%
    -  medium demoisturizing – 50%
    -  high demoisturizing - continuous
  8. Confirm “Yes” with the Smart Key .
  9. The Crisp & Tasty icon  appears in the display.
  10. The display shows the nominal values for the selected mode, cooking plan or recipe.
  11. Press the Start/Stop key .
  12. The unit will start with the Crisp & Tasty function.



## Notes:




















- Crisp & Tasty can be combined with other Extra Functions.
- Crisp & Tasty is programmable, and can be integrated into recipes.
- Crisp & Tasty can be turned on or off while the Combi is running.
  1. Press the Smart Key .
  2. Select Crisp & Tasty  with the Selector Dial .
  3. Select “Yes” or “No” with the Selector Dial  to turn Crisp and Tasty on or off.
  4. Press the Smart Key  to confirm selection.
- When the program comes to an end, the unit will automatically reset Crisp & Tasty to OFF.





## Recommendations:

Use: High  for moist fruit flans, casseroles, roasts and fryer ready products, Medium  for quick roasts, escallops, flaky pastry, and Low  for omelets.







## Tray Timer

- The Tray Timer function provides you with up to twenty (20) timers for mixed oven loads to keep track of the optimum finish for each different dish.
  - The Combi oven must be ON  and operating in a cooking mode     before the Tray Timer  can be set.
  - The Tray Timer is NOT a programmable function.
  - The Tray Timer icon  does not appear while the Tray Timer is in use.
  - There is no connection between individual Tray Timers and the position or placement of food in the Combi.
  - Tray Timers do not stop counting down while the Combi door is open.
  - While this allows great flexibility in use, careful planning is strongly recommended to make best use of the Tray Timer function.
1. Select Mode: Steam , Combi , Hot Air , or Retherm .
  2. Set the standard oven timer to continuous time ( - - : - - ) before using the Tray Timer.
  3. Set the Temperature .
  4. START the selected cooking mode with the Start / Stop key .
  5. The Oven On icon  must appear before the Tray Timer  can be set.
  6. Press the Smart Key .
  7. Various options will appear in the display.
  8. Select Tray Timer  with the Selector Dial .
  9. Confirm by pressing the Smart Key .
  10. The display will show the nominal (set) time and time remaining.
 

Timer 1:	<u>00:00</u>	<u>00:00</u>
Timer 2:	<u>00:00</u>	<u>00:00</u>
Timer 3:	<u>00:00</u>	<u>00:00</u>
  11. Select the desired Tray Timer (Timer 7, for example) with the Selector Dial .
  12. Use the Right Arrow key  to navigate to nominal time.
  13. Set the Tray Timer with the Selector Dial.
  14. Use the Left Arrow key  to navigate back to the Tray Timer column.
  15. Select the next desired Tray Timer with the Selector Dial .
  16. Repeat steps 12, 13, and 14 as desired, to set up to twenty (20) individual Tray Timers.
  17. The Tray Timers START COUNTING DOWN as soon as a time greater than 0:00 is entered.












18. Exit the Tray Timer function with the Smart Key  or Start/Stop key .
19. When the set time on a Tray Timer has elapsed, the Signal Tone will sound.
20. Take appropriate action (check food, load, unload, stir, etc.)
21. **Note that the cooking program DOES NOT STOP and the Tray Timers CONTINUE TO COUNT DOWN after a Signal Tone sounds, and the Start/Stop key  is pressed and / or the oven door is opened.**
22. Press the Start/Stop key  or open the door.
23. Use steps 6-18 to reset an individual Tray Timer to 0:00. The countdown and Signal Tone for that Tray Timer will stop and make that Tray Timer available for use, if desired.
24. Individual Tray Timers may be added or adjusted as needed without affecting the other Tray Timers by using steps 6-18 without changing the time to 0:00.



## Pre-Heating

The Pre-Heating function heats the oven to the desired temperature before loading food, and helps ensure consistency and quality.

1. Press the Smart Key .
2. Various options will appear in the display.
3. Use the Selector Dial  to select Pre-Heat .
4. Confirm by pressing the Smart Key .
5. Select "Yes" with the Selector Dial .
6. Confirm "Yes" with the Smart Key .
7. Press the Temperature key  and set the pre-heating temperature.
8. Press the Time key  and set the pre-heating time.
9. The display will show the Pre-Heat icon .
10. The pre-heat program will start.









### Recommendations:

- **PRE-HEAT** countertop models for 10-15 minutes and floor models for 30 minutes at 10-20% **HIGHER** than the cooking temperature.
- Pre-heat floor models with the pre-heat bridge or the trolley in place.



## Reduced Fan Speed








Reduced fan speed helps reduce the speed of moving air inside the oven. Use the reduced fan speed for products sensitive to air currents such as soufflés, meringues, sponges, cream puffs and puff pastry.

1. Press the Smart Key .
2. Various options will appear in the display.
3. Use the Selector Dial  to select Reduced Fan Speed .
4. Confirm by pressing the Smart Key .
5. Select "Yes" with the Selector Dial .
6. Confirm "Yes" with the Smart Key .
7. The Reduced Fan Speed icon  appears and the display shows the nominal settings for the selected mode, cooking plan or recipe.
8. Press the Smart Key .
9. The Combi will start with reduced fan speed.

NOTE: When the program ends, the Combi will reset the Reduced Fan Speed to OFF.



## Reduced Power (Electric Models ONLY)

- Reduced Power lowers energy consumption and eliminates power peaks in the kitchen.
  - **Note that reduced power output can mean longer cooking times for food.**
1. Press the Smart Key .
  2. Various options will appear in the display.
  3. Use the Selector Dial  to select reduced power .
  4. Confirm by pressing the Smart Key .
  5. Confirm "Yes" with the Smart Key .
  6. The Reduced Power icon  appears and the display will show the nominal settings for the selected mode, cooking plan or recipe.
  7. Press the Start/Stop key .
  8. The Combi will start with reduced power.

### Recommendations:

- Use the reduced power setting for non-sensitive products such as large roasting items, for low-temperature cooking, when cooking small amounts of food, for pre-heating or when several electrical appliances are being used simultaneously.















## Key Lock

Lock and unlock almost all the keys on the Combi a PIN.





The following control panel features cannot be locked:     and the Press & Go keys.

**NOTE:** The factory setting is "PIN 001". To change the PIN, please contact your qualified Cleveland Range authorized service technician.

### Locking:





1. Press the Smart Key .
2. Various options will appear in the display.
3. Use the Selector Dial  to select the Key Lock function .
4. Confirm by pressing the Smart Key .
5. Select "Yes" with the Selector Dial .
6. Confirm "Yes" with the Smart Key .
7. The display will show "PIN 000".
8. Use the Selector Dial  to select the PIN code.
9. Confirm by pressing the Smart Key .
10. Press the keys to be locked one after the other.
11. Lock selection can be changed to unlocked by pressing the desired key again BEFORE pressing the Start/Stop key .
12. The display will show "Button Locked" or "Button Unlocked".
13. Press the Start/Stop key .
14. Key Lock is activated and the icon  appears in the display.
15. The  symbol appears whenever at least one key (button) has been locked.

### Unlocking:



1. Press the Smart Key .
2. Various options will appear in the display.
3. Use the Selector Dial  to select the Key Lock function .
4. Confirm by pressing the Smart Key .





5. Select "Yes" with the Selector Dial .
6. Confirm "Yes" with the  key. The display will show "PIN 000".
7. Use the Selector Dial  to select the PIN code. (The factory setting is "001.")
8. Confirm by pressing the Smart Key .
9. All keys are now unlocked.

## Unlocking when the Smart Key is also locked:

1. Switch Off the Combi with the  On/Off key.
2. The display will show the time and date
3. Press the Smart Key .
4. The display will show "PIN 000".
5. Proceed with normal unlocking.

## Recommendations:






- The Key Lock function allows you to prevent unauthorized or accidental alterations to your settings on your Combi. This gives you confidence that you can achieve optimum results for your dishes and satisfaction for your guests.
- Choose a PIN with a low number to reduce the time spent entering it.



## Add Moisture Manually







To add moisture, you can activate the steam supply. This will generate a jet of steam. Manually adding steam is **not** programmable, and can **not** be incorporated into a recipe.

**NOTE: The Combi oven must be ON  and in Combi  or Hot Air  modes to use Add Moisture Manually .**


1. Press the  Key.
2. Various options will appear in the display.
3. Use the Selector Dial  to select Add Moisture Manually .
4. Confirm by pressing the Smart Key .
5. Confirm "Yes" with the Smart Key .
6. The unit will produce a jet of steam.



## Program Protection (Electric Models ONLY)

- Compatible, connected energy optimization equipment is required to use this option.
  - Connecting the Combi to an energy optimization unit during power peaks in the kitchen can cause the energy supply to the Combi to be interrupted during critical cooking phases.
  - The Program Protection function protects the Combi program in progress from interruption.
  - The energy optimization unit has no access to the Combi. Instead, it accesses other connected devices.
1. Press the Smart Key .
  2. Various options will appear in the display.
  3. Use the Selector Dial  to select Program Protection .
  4. Confirm by pressing the Smart Key .
  5. Confirm "Yes" with the Smart Key .
  6. The Program Protection icon  appears.
  7. The display shows the nominal settings for the selected program, cooking plan, or recipe.



8. Press the Start/Stop  key.
9. The Combi will start with Program Protection activated.
10. The energy optimization unit cannot interfere with the operation of the Combi.










**Recommendations:**

- Use the energy optimization lock if cooking time is crucial to the quality of a dish, including sensitive foodstuffs with short cooking times, and the regeneration of plates.
- Individual steps in a recipe can be protected by the program protection function.
- The energy optimization can be set so that the energy optimization unit will not intervene during the browning phase but may during a less sensitive cooking step.



## Convotherm by Cleveland Cookbook

### Convotherm by Cleveland Cookbook Icon Key

 Recording	 Copy Recipe	 Insert step
 Accept	 Delete Recipe	 Add step
 New Recipe	 Change Recipe	 Delete step












### Working with Multi-Step Recipes

Use Recipes to simplify the preparation of dishes.

#### Creating a Multi-Step Recipe

A Recipe combines up to twenty (20) individual steps and can include cooking modes, nominal settings, and programmable functions.



- To enter the first step: press **one** of the mode keys     **for 3 seconds**.
- 01/01 for the first step appears in the top of the display, with the time and temperature values underneath.
- EXAMPLE: If a Recipe consists of three steps, then the Combi's display will show 01/03 for the first of three steps. The time and temperature of the current step will be shown beneath as usual.
- When one step has finished, the Combi moves automatically to the next step and the display changes to show the next step is in progress. The example in step 3 would show "02/03" for the second step.
- Press the Temperature  key. The oven temperature appears in the display.
- Set the required oven temperature with the Selector Dial .
- Press the Time  or Core Temperature  keys.
- Set the required cooking time or core temperature.
- To enter more steps, repeat Steps 1-6 as needed.**
- Press the  key. The Recipe will start.
- When all the steps are complete: the Signal Tone sounds and the Recipe ends.
- Press the Start / Stop  key or open the door.
- To exit the Recipes, press any cooking mode key or restart the Recipe with the  key.

#### Notes:

- Extra functions, Delta-T cooking and Cook & Hold can be integrated into Recipes. For more information, see "Cooking with Convotherm by Cleveland".
- Quit a Recipe at any time by briefly pressing a cooking mode key. Information entered is lost.
- Check a Recipe before starting by pressing the Paging / Scrolling keys ◀ and ▶.
- Extra steps can NOT be added to a Recipe when checking steps by pressing the Paging / Scrolling keys ◀ and ▶.
- The oven temperature, cooking time and/or core temperature may be changed for each step.




## Convotherm by Cleveland Cookbook













### Recording a Recipe

Start the Recording function to save all the settings entered for a particular dish in a new Recipe. All mode, temperature and time changes for up to twenty (20) steps, or until deactivated are recorded.

**NOTE: Steps must be at least one (1) minute long.**

**NOTE:** The Start/Stop key  may be pressed while the oven is operating without losing or overwriting saved steps.











1. To start the recorder, press the Write / Edit key . Various options will appear in the display.
2. Use the Selector Dial  to select "Recording" .
3. Confirm by pressing the Write / Edit key .
4. Confirm "Yes" with the Write / Edit key .
5. The symbol  appears in the display.
6. The recorder will continue to record up to twenty (20) steps or until deactivated.
7. For more information, see the operating instructions in the section "Cooking with Convotherm by Cleveland".
8. To stop the recorder, press the Write / Edit key . Various options will appear in the display.
9. Use the Selector Dial  to select "Recording" .
10. Confirm by pressing the Write / Edit key .



### Transferring a Recipe into the Cookbook

The most recent Recipe created or used can be transferred into the Cookbook.

**Use the Write / Edit key  and NOT the Smart Key  to navigate this function.**

1. Press the Write / Edit key . Various options will appear in the display.
2. Use the Selector Dial  to select "Accept" .
3. Confirm by pressing the Write / Edit key .
4. To enter the name of a Recipe, select the letters with the Selector Dial  and use the Paging / Scrolling keys,  and , to switch between placeholders.
5. When the Recipe name has been entered, confirm with the Write / Edit key .
6. Use the Selector Dial  to select a memory location.
7. Confirm by pressing the Write / Edit key .
8. The Recipe will be stored in the Cookbook.

#### Note:

A full memory location can be overwritten with a new Recipe by selecting the full memory location with the Selector Dial  and pressing the Write / Edit key .



## Convotherm by Cleveland Cookbook

---

### Recommendations:












- Use Recipes for gentle cooking in the first steps and perfect browning in the last step.
- Use Recipes for roasts, poultry, casseroles, Delta-T cooking, Cook & Hold, Low Temperature cooking and pastry.
- Save Recipes in the Cookbook. This helps reproduce these dishes at the same high quality level.
- Use Recipes to adjust popular or complex dishes, until the results are perfect.
- Store perfected Recipes in the Convotherm by Cleveland Cookbook.

## Working with the Cookbook

Combine up to 20 steps to make a Recipe.



Save the Recipe under its own name in the Cookbook, call it up and start it as needed.

### Entering a Recipe in the Cookbook

1. Press the Write / Edit key . Various options appear in the display.
2. Use the Selector Dial  to select "New Recipe" .
3. Confirm by pressing the Write / Edit key .
4. The cooking mode keys will flash and the display will show 01/01.
5. Select the required cooking mode and set the time and temperature.
6. Confirm by pressing the Write / Edit key .
7. The cooking mode keys will flash and the display will show 02/02.
8. To add more steps, proceed as above.
9. To finish entering new steps, press the Write / Edit key  when the cooking mode keys are flashing.
10. To enter the name of a cooking recipe, select the letters with the Selector Dial and use the Paging / Scrolling keys,  and , to switch between placeholders.
11. Confirm the Recipe name with the Write / Edit key .
12. Use the Selector Dial  to select a memory location.
13. Confirm with the Write / Edit key .
14. The Recipe is now saved in the Cookbook.

### Notes:










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- Delta-T cooking, Cook & Hold and extra functions can be incorporated into Recipes. For more information, see the section on "Cooking with Convotherm by Cleveland".
- A full memory location can be overwritten with a new Recipe by selecting the full memory location with the Selector Dial  and pressing the Write / Edit key .







## Convothem by Cleveland Cookbook



### Integrating Pre-Heating into a Recipe

1. Press the Write / Edit key . Various options will appear in the display.
2. Use the Selector Dial  to select “New Recipe” .
3. Confirm by pressing the Write / Edit key .
4. The cooking mode keys will flash and the display will show 01/01.
5. Use the Smart Key  to select Pre-Heat .
6. Confirm by pressing the Write / Edit key .
7. The cooking mode keys will flash and the display will show 02/02.
8. Select the required cooking mode and set the time and temperature.
9. Confirm by pressing Write / Edit key .
10. For more information, see “Entering a Recipe” .

### Executing a Recipe from the Cookbook

1. Press the Cookbook key . The saved Recipes appear in the display.
2. Use the Selector Dial  to select the required Recipe.
3. Press the Start/Stop  key. The Combi will execute the Recipe.
  - The steps will follow automatically one after the other.
  - Recipe name, current step and number of steps appear in the top of the display.
  - The time and temperature appear at the bottom of the display.
4. When the cooking time has elapsed and/or the core temperature is reached, the Signal Tone sounds and the Recipe ends.
5. Press the Start / Stop  key or open the door.

#### Notes:

- Individual steps can be checked by stopping all processes, pressing the Cookbook key , and pressing the Smart Key  key. The steps will appear in the display.
- The oven temperature and the cooking time or core temperature of a Recipe can be changed at any time while the Combi is operating.
- Save changes to a Recipe while the oven is operating. See “Transferring a Recipe into the Cookbook”.
- Start any Recipe with the Pre-Select Start Time function. For more information, see “Extra Functions.”


#### Recommendations:

- Use Recipes in the Cookbook for dishes which are regularly prepared and / or prepared by semi-skilled staff.
- To find Recipes in the Cookbook quickly, sort cooking recipes alphabetically by name.








## Convotherm by Cleveland Cookbook

### Writing Recipes in the Cookbook

You can change, copy, or delete Recipes saved in the Cookbook, or Write individual steps at any time. You can quit a Recipe without saving changes and return to the Cookbook at any time by pressing the Cookbook key .







#### Copying a Recipe

1. Press the Cookbook key . The saved Recipes appear in the display.
2. Select the desired Recipe.
3. Press the Write / Edit key .
4. Various options appear in the display.
5. Select “Copy Recipe” .
6. Confirm with the Write / Edit key .
7. For more information, see “Entering a Recipe” .












#### Deleting a Recipe

1. Press the Cookbook key . The saved Recipes appear in the display.
2. Select the desired Recipe.
3. Press the Write / Edit key .
4. Select “Delete Recipe” .
5. Confirm with the Write / Edit key .
6. The Recipe is deleted and the memory location is free.



#### Changing a Step of a Recipe









1. Press the Cookbook key . The saved Recipes appear in the display.
2. Use the Selector Dial  to select the desired cooking recipe.
3. Press the Write / Edit key .
4. Use the Selector Dial  to select “Change cooking recipe” .
5. Use the Paging / Scrolling keys,  and  , to select the step to be changed, correct the cooking mode and/or values entered.
6. Confirm by pressing the Write / Edit key .
7. For more information, see “Entering a cooking recipe” .



## Convotherm by Cleveland Cookbook

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### Inserting a Step into a Recipe









1. Press the Cookbook key . The saved Recipes appear in the display.
2. Select the desired Recipe.
3. Confirm with the Write / Edit key .
4. Select "Change Recipe" .
5. Confirm with the Write / Edit key .
6. Press the Smart Key  key. Various options appear in the display.
7. Select "Insert Step" .
8. Confirm by pressing the Smart Key .
9. A new Step is inserted at the end of the Recipe.
10. All subsequent Steps will be re-numbered accordingly.
11. The new Step will be selected and all cooking mode keys will flash.
12. Then proceed with "Creating a Recipe" .

#### **NOTE:**

---

If a Recipe already has 20 steps, no more steps can be added.

### Add a Step to a Recipe

1. Press the Cookbook key . The saved Recipes appear in the display.
2. Select the desired Recipe.
3. Confirm with the Write / Edit key . Various options appear.
4. Select "Change Recipe" .
5. Confirm with the Write / Edit key .
6. Use the Paging / Scrolling keys, ◀ and ▶, to select the Step **BEFORE** which a new Step is to be inserted.
7. Press the Smart Key . Various options appear in the display.
8. Select "Add Step" .
9. Confirm by pressing the Smart Key .
10. The Combi will add the new Step at the selected point.
11. The new Step will be selected and all cooking mode keys will flash.
12. For more information, see "Creating a Recipe" .

#### **NOTE:**

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If a cooking recipe already has 20 steps, no more steps may be added.





## Convotherm by Cleveland Cookbook

### Deleting a Step from a Recipe

1. Press the Cookbook key . The saved Recipes appear in the display.
2. Select the required Recipe and confirm with the Write / Edit key .
3. Select “Change Recipe” .
4. Confirm with the Write / Edit key .
5. Use the Paging / Scrolling keys, ◀ and ▶ , to select the step to be deleted.
6. Press the Smart Key . Various options appear in the display.
7. Select “Delete Step” .
8. Confirm by pressing the Smart Key .
9. The cooking mode will delete the selected Step.
10. All subsequent Steps will be re-numbered accordingly.
11. For further information, see “Creating a Recipe” .

#### **NOTE:**

When a Recipe has been deleted which contains only one Step or the last remaining Step has been deleted, all cooking mode keys will flash and a new Step can be entered.

#### **Recommendation:**

- Use the Write / Edit function make practical or creative adjustments to Recipes quickly and easily.

### **Working with Press & Go**

- Recipes saved in the Cookbook and cleaning procedures can be assigned to Press & Go keys.
- Start a Recipe or cleaning process with just one touch of a Press & Go key.

### **Assign a Recipe or Semi-Automatic Cleaning Process to a Press & Go Key**

1. Press the Cookbook key . The saved Recipes appear in the display.
2. Use the Selector Dial to select the desired Recipe or cleaning process.
3. Hold down the desired Press & Go key for three seconds.
4. The audible signal sounds indicating the Recipe or cleaning process is assigned to the selected Press & Go key.

### **Assign the CONVOClean Automatic Cleaning System to a Press & Go key**

1. Press the Smart Key . Various options appear in the display.
2. Use the Selector Dial to select “CONVOClean System” .
3. Confirm by pressing the Smart Key .
4. To select the level of cleaning (1 - 4), press .
5. Make the selection with the Selector Dial .
6. Hold down the desired Press & Go key for three seconds.
7. The audible signal sounds indicating the CONVOClean System with the selected cleaning level is assigned to the selected Press & Go key.
8. For more information on the CONVOClean System, see “Daily Servicing and Maintenance”.




## Convotherm by Cleveland Cookbook

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### To Overwrite a Press & Go Key

1. Select the desired Recipe or cleaning process
2. Select, press, and hold down the Press & Go key for three seconds.
3. The audible signal sounds indicating the Recipe or cleaning process is assigned to the selected Press & Go key.

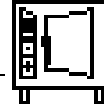
### Executing a cooking recipe with Press & Go

1. Press the Press & Go key
2. The Combi will execute the desired Recipe.
3. The display will show the Recipe name, current step and number of steps at the top.
4. The time and temperature will be shown underneath as usual.
5. When the cooking time has elapsed and/or the core temperature is reached, the Signal Tone sounds and the Recipe ends.
6. Press the Start/Stop  key or open the door.

#### Recommendations:

- The Press & Go keys are particularly suitable for dishes prepared on a regular basis, such as pretzels, rolls and croissants. These can be produced by semi-skilled staff to high quality.
- Locking the control panel when using Press & Go prevents changes to cooking modes and helps ensure consistency and quality.
- Assign a Press & Go key to the pre-heating cooking mode pre-heat the Combi quickly and easily.

## Maintenance and Cleaning






### When starting work:

#### Automatic Emptying and Rinsing of the Steam Generator

Daily rinsing of the steam generator in your Combi helps increase the service life of the steam generator and helps prevent malfunctions.

Daily use of the automatic steam generator rinse immediately after switching on is recommended.






1. Switch on the Combi with the ON/OFF key .
2. After the date changes, the display will show "Rinse steam generator?" "Yes/No".
3. Start the rinsing process for the steam generator by pressing the Start/Stop key .
4. If you do not wish the rinse process to go ahead, select "No" with the Selector Dial and confirm with the Start/Stop  key within ten seconds or the steam generator rinsing process will start automatically.
5. The steam generator is emptied, rinsed, refilled and heated. Depending on the size of the Combi, this process takes 8-12 minutes.
6. The Combi is now ready for use.

### During Everyday Use:

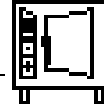


#### Manual Emptying and Rinsing of the Steam Generator

In addition to the daily automatic rinsing of the steam generator, it can also be rinsed manually at any time. For example, at the start of every shift in a 24 hour kitchen.

1. Press the Smart Key . Various options appear in the display.
2. Use the Selector Dial  to select "Manual Steam Generator Rinse" .
3. Confirm by pressing the Smart Key .
4. Confirm "Yes" with the Smart Key .
5. The steam generator is emptied, rinsed, refilled and heated. Depending on the size of the Combi, this process takes 8-12 minutes.
6. The Combi is now ready for use.

## Maintenance and Cleaning



### At the end of the Day or Shift:

#### Cleaning the Oven Chamber

##### **NOTICE**

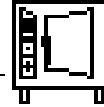
Clean the oven chamber at least once per day or more frequently as needed.

##### **NOTICE**

- Clean the outside the Combi by hand.
- When cleaning the oven chamber, use Convoclean and Convocare.
- Do not open the Combi door during the cleaning process.
- Do not interrupt the automatic cleaning process.
- If the message “Not enough water” is displayed, check your water supply connection.
- If the security questions are not answered within 5 seconds, the unit will reset itself to the query for cleaning level and will not start.
- If the message “No cleaner pressure” appears, check that there is sufficient cleaning fluid and/or nozzle rinsing fluid agent in the correct containers and refill them if necessary (red hose for Convoclean *forte / new*, and blue or white hose for Convocare).
- Hot-air sterilization and Shine+ can be set in the service level. Ask your qualified Cleveland Range authorized service representative about Shine+.
- Cleaning cooking modes may include the instruction “Open and close door” to check the magnetic door switch.
- Poor water quality can cause a dark discoloration inside the oven chamber. Remove these discolorations with CONVOCare Concentrate. Spray CONVOCare on the affected surfaces, wait 10 minutes, wipe off with a soft cloth or sponge, and continue automatic or semi-automatic cleaning as usual.
- If the oven chamber is very heavily soiled, additional manual cleaning may be necessary.
- Pre-clean manually to save water and cleaning agent by selecting a lower cleaning setting.
- Depending on the level of soiling of the oven chamber, the engaging frames and grills may be left in the oven during the automatic cleaning process.

##### **Note:**

- Every new Combi includes comprehensive information about and an order form for CONVOTHERM by Cleveland cleaning materials.



### WARNING

When working with cleaning agents and nozzle rinsing fluid: wear suitable clothing, protective gloves and protective goggles.

### CAUTION

**Damage caused by improper cleaning will invalidate the Warranty!**

### WARNING

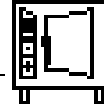
Read, understand, and heed and obey all instructions and safety information found on cleaning agent labels, Material Safety Data Sheets, and related documents and sources.

### CAUTION

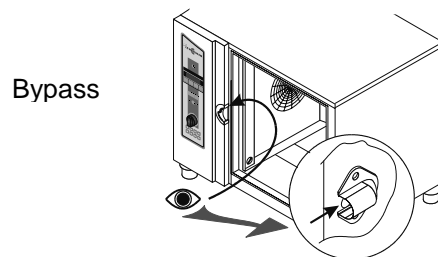
**Only use original Convotherm by Cleveland cleaning agents.**  
**NEVER use harsh, high-alcohol, chlorine, chlorinated, or abrasive cleaning agents, scrapers, or abrasive materials to clean the Combi.**  
**Never leave spray bottles unused and under pressure for long periods.**  
**Turn the spray bottle head slowly to relieve air pressure.**  
**Rinse nozzles, nozzle extensions and nozzle connections after each use.**  
**Rinse cleaning agent bottles once a week.**

1. Clean the Combi daily to prevent discoloration and corrosion of the stainless steel.
  - a. **Be careful not to scratch the oven chamber or engaging frame.**
  - b. Scratches can collect soil and / or allow corrosion to begin.
  - c. Do not use harsh or abrasive cleaning agents, scouring pads, or scrapers.
2. Clean the suction plate (fan guard) and the fan area behind the suction plate at the same time.
  - a. Release the quick-action locks on the oven racks and suction plate.
  - b. Pivot the oven racks and suction plate out into the oven chamber.
  - c. After cleaning, push the oven racks and suction plate closed and fix it in place with the quick-action locks.
3. Clean the interior of the of the double glass doors daily.
  - a. Release the quick-action locks on the door glass.
  - b. Clean the glass with a non-abrasive cleaner and a soft cloth.
  - c. Do not use harsh or abrasive cleaning agents, scouring pads, or scrapers because they will damage the glass.

## Maintenance and Cleaning



4. Regular cleaning of the hygienic plug-in gasket (door gasket) increases service life.
  - a. Wait for the gasket to cool.
  - b. Clean the gasket with mild, scent free dish detergent and a soft cloth.
  - c. Do not use harsh or abrasive agents, scouring pads or scrapers because they will damage the gasket.
  - d. Air dry the gasket
5. Clean the Bypass Measuring Aperture. (Opening in the oven chamber on the left-hand side, slightly below the door latch. See diagram.)
  - a. Spray with CONVOClean *forte* or *new*.
  - b. Rinse clean with the hand shower.



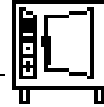
6. Remove and clean the outflow grate.
  - a. Clean food residue and drippings from the tray and outflow in the oven chamber.
  - b. Spray on original Convotherm by Cleveland oven chamber cleaners and allow to take effect.
  - c. Rinse thoroughly with the hand shower.
7. Clean the outflow and make sure that it is not blocked.
8. Clean the demoinsturizing tray.

Outflow Grate  
and  
Outflow










9. Clean the door drip tray, appliance drip trays and accessory drip trays.
10. If a white deposit forms inside the oven chamber, the water treatment system is not correctly set, or the addition of a water treatment system is required.
  - a. Remove this deposit with vinegar and a soft cloth.

## Maintenance and Cleaning







### Semi-automatic cleaning of oven chamber

The Convotherm by Cleveland has a semi-automatic oven chamber cleaning mode: "Cleaning."

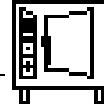
1. Always wear appropriate protective clothing and equipment when using this Sprayer, including protective gloves and goggles.
2. Press the Smart Key . Various options appear in the display.
3. Use the Selector Dial  to select "Cleaning" .
4. Confirm by pressing the Smart Key .
5. Confirm "Yes" with the Smart Key .
6. The display will show the nominal values for the cleaning cooking mode.
  - a. 158°F for 10 minutes in Hot Air mode.
7. Press the Smart Key . The cleaning process will start.
8. After the first signal, open the oven door, spray the oven chamber, base outflow, grills, plates etc. with original Convotherm by Cleveland CONVOClean *forte* or *new*, using the Hand Sprayer, P/N 111598.
9. Close the door and allow the CONVOClean to take effect.
10. **Do NOT press the Start / Stop key**  **again.**
11. The cleaning cooking mode will continue automatically.
  - a. 86°F for 10 minutes in Steam mode.
12. After the second signal, clean thoroughly behind the suction plate. Clean the suction plate (fan guard) and the fan area behind the suction plate at the same time.
  - a. Release the quick-action locks on the oven racks and suction plate (fan guard).
  - b. Pivot the oven racks and suction plate (fan guard) out into the oven chamber.
  - c. After cleaning, push the oven racks and suction plate (fan guard) closed and fix it in place with the quick-action locks.
13. After the next signal, run Combi mode with Crisp 'n' Tasty at level 3 (High) at 212°F for 10 minutes.
14. Turn OFF the Combi.
15. Use the hand shower to rinse the oven chamber, accessories, and behind the suction plate thoroughly.
16. In the case of severe staining or soiling, repeat the cleaning process.
17. After the Combi is clean: repeat steps 1-7 as written, substitute CONVOCare for CONVOClean in step 8, and repeat steps 8-15 as written.
18. After use or after cleaning, leave the Combi door open.






### Automatic cleaning system (optional):

1. The oven chamber must be cold before starting this process.
2. Before starting, remove large pieces food or cooking residue from the oven chamber. This will help prevent the drain from becoming blocked.
3. Check the level of Convotherm by Cleveland CONVOClean and CONVOCare.
  - a. The containers **must** be full.
  - b. The suction pipes **must** be located in the fluid.
4. Press the Smart Key . Various options will appear in the display.
5. Use the Selector Dial  to select "CONVOClean system" .
6. Confirm by pressing the Smart Key .

## Maintenance and Cleaning

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7. Select the level of cleaning
  - 1 light soiling
  - 2 medium soiling
  - 3 heavy soiling
  - 4 heavy soiling with Shine+
8. PRESS the Temperature key  and select cleaning level with the Selector Dial .
9. Press the Smart Key .
10. "Food inside oven?" appears in the display.
11. If the oven is empty then answer "No."
12. Confirm by pressing the Smart Key .
13. "Start auto-cleaning?" appears in the display.
14. Answer "Yes" or "No" as desired.
15. Confirm by pressing the Smart Key .
16. The CONVOClean system starts.

### Notes:

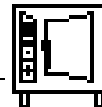
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- External areas must be cleaned by hand.
- If the oven chamber is very heavily soiled, additional manual cleaning may be necessary.
- Hot-Air Sterilization and Shine+ can be set in the service level. Ask your qualified Cleveland Range authorized service technician about Hot-Air Sterilization and Shine+.
- You may see the instruction "Open and close door" to check the magnetic door switch.

 <b>CAUTION</b>
<b>Always make sure the cleaning agent containers are correctly connected: Convoclean <i>forte</i> or <i>new</i> =&gt; RED Convocare =&gt; BLUE or WHITE</b>



## Maintenance and Cleaning



### Descale Steam Generator

Steam generators should be descaled at least once a month, depending on scale buildup. If you have serious steam generator scale buildup, a water treatment system should be installed for the steamer or if this is not possible, the frequency of descaling should be increased.

Cleveland Range, recommends the use of ***DISSOLVE***<sup>®</sup> Descaler Solution, Cleveland Range Part Number 106174. No other system of steamer descaling should be used.

**NOTE:** Part No. 106174 is the Part No. for a case (6 1-gallon containers) of *DISSOLVE*<sup>®</sup> descaler.

THESE INSTRUCTIONS ARE FOR USE WITH *DISSOLVE*<sup>®</sup> DESCALER SOLUTION Cleveland Range Part Number 106174 ONLY.

- **Health Hazard Data, Effects of Overexposure** – This product may cause a burning sensation to eyes or skin.
- **Emergency and First Aid Procedures** - In case of eye contact, immediately flush eyes with plenty of water. If irritation persists, seek medical attention. In case of skin contact: wash with soap and water. If inhaled, remove to fresh air and if burning persists, call a physician. If swallowed, drink 1 or 2 glasses of water and call a physician.
- **Spill or Leak Procedures** – Rinse with plenty of water to dilute. Sodium carbonate or calcium carbonate may be used to soak up liquid. Spent material is considered non-hazardous, and spent material may be disposed of in a sewer system with water flush.

### WARNING

The liquid solution in Cleveland Range Descaler Solution Part No. 106174 can be harmful if not handled properly.

Follow these basic safety rules for handling and using this product:

Wear protective clothing when mixing or applying chemical cleaners.

Wear rubber gloves, and OSHA approved eye protection when descaling to help avoid injury.

Avoid breathing fumes. If liquid comes in contact with skin, wash with soap and water.

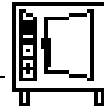
If chemical contacts eyes, flush with water. If irritation persists, seek medical attention

If chemical is swallowed or ingested, drink 1 or 2 glasses of water and call a physician.

### CAUTION

Do not use any other product or method of descaling other than the *DISSOLVE*<sup>®</sup> Descaler method using Part No. 106174. Read, understand, and heed the instructions on the *DISSOLVE*<sup>®</sup> label and MSDS.

# Maintenance and Cleaning







## COMBI ATMOSPHERIC STEAM GENERATOR DESCALING PROCEDURE (For *DISSOLVE*<sup>®</sup> Descaler Solution Part No. 106174)


### **WARNING**

This procedure is slightly different depending on the model being descaled. This entire procedure should be read and fully understand as it applies to the model being descaled, before beginning the actual descaling operation.

This procedure will take approximately 3 hours to complete.

1. Turn ON the Combi at the Control Power Service Disconnect switch located below the hand shower. See Figure 6-2.
2. Turn ON the COMBI with the ON / OFF key .
3. Open the door to the cooking compartment.
4. Run a manual steam generator rinse cycle.  
To Empty and Rinse the Steam Generator:
  - a. Press the Smart Key .
  - b. Select “Manual steam generator rinse” with the Selector Dial .
  - c. Confirm “Yes” with the Smart Key .
  - d. Steam generator will rinse and begin to refill to operating level.
4. Remove the cap from the descale port located at the top of the unit (See Figure 6-1).

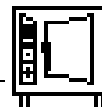
### **NOTE: DO NOT HEAT THE COMBI DURING DESCALING.**
















5. While the unit is filling with water, use a funnel (NOT INCLUDED) to add 3/4 gallon of *DISSOLVE*<sup>®</sup> descaler solution into the descaling port of 20.20 COMBIs, and 1/2 gallon for all other models
  - While adding liquid to the unit through the descaler inlets, pour slowly to avoid overflow.
  - Wipe up any spills at once to avoid etching.
6. After the automatic fill cycle has ended, turn OFF the Combi with the ON / OFF key , and at the Control Power Service Disconnect switch located below the hand shower. See Figure 6-2.



**Figure 6-1 Descaling Port Located at Right Rear of the Combi**

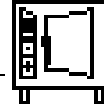
## Maintenance and Cleaning





7. Add cold tap water through the descale port until descaling solution enters the cooking compartment through the steam port or until the descaling port overflows (water required varies depending on the Model).
  - Wipe up any spills and overflows.
8. Let the Descaler work for 1 hour.
9. Turn the Combi ON at the Control Power Service Disconnect switch located below the hand shower. See Figure 6-2.
10. Turn ON the COMBI with the ON / OFF key .
11. Run a manual steam generator rinse cycle (Step 4).
12. After the automatic fill cycle has ended, turn OFF the Combi with ON / OFF key , and at the Control Power Service Disconnect switch located below the hand shower. See Figure 6-2.
13. Add water through the descale port until water enters the cooking compartment through the steam port or until the descaling port overflows (water required varies depending on the Model) to rinse descaler from the area above the normal water fill level.
14. Replace the descale port cap.
15. Turn the Combi ON at the Control Power Service Disconnect switch located below the hand shower. See Figure 6-2.
16. Turn ON the COMBI with the ON / OFF key .
17. After the Automatic Fill ends, run a manual steam generator rinse cycle (Step 4).
18. Run a 30 minute, 212° F Combi Program with Crisp & Tasty function.
  - a. Close the cooking compartment door.
  - b. Press Combi key .
  - c. Press Temperature key .
  - d. Set temperature with Selector Dial  to 212° F.
  - e. Press Time key .
  - f. Set time with the Selector Dial  for 30 minutes.
  - g. Press Smart Key . Various options will appear in the display.
  - h. Select “Crisp & Tasty”  with the Selector Dial .
  - i. Select the Crisp & Tasty level to  “high demoisturizing – continuous” with the Selector Dial .
  - j. Confirm “Yes” with Smart Key .
  - k. The Crisp & Tasty icon  appears in the display.

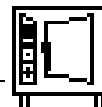
## Maintenance and Cleaning

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








- l. Press the Start / Stop key .
  - m. Signal Tone sounds and steaming stops after 30 minutes.
  - n. Silence the alarm by pressing the Start / Stop key  or by carefully opening the door.
19. Run a manual steam generator rinse cycle (Step 4).
  20. This is the final rinse.
  21. The COMBI is now ready for normal operation.






# Setup




## Setup Symbols

 <b>Signal tone</b>	 <b>Date</b>	 <b>Temperature display</b>
 <b>Volume</b>	 <b>Order of Cookbook</b>	 <b>Network address</b>
 <b>Time</b>	 <b>Default or memory settings</b>	 <b>Language</b>

### To use the Setup Menu:






1. Press the Smart Key .
2. Various options appear in the display.
3. Use the Selector Dial  to select “Setup” .
4. Confirm by pressing the Smart Key .
5. Confirm “Yes” with the Smart Key .
6. Various options appear in the display.

### NOTE:

- The various setup options are described in detail below.
- You can exit the menu at any time by pressing the Start/Stop  key.


## Signal Tone






Select the signal tone from the “Setup” menu .

1. With the Selector Dial , select “Signal tone” .
2. Confirm by pressing the Smart Key .
3. The display will show the selection of available signal tones.
4. To select a Signal Tone, use the Selector Dial .
5. Pause on a Signal Tone to hear it sound.
6. Confirm your selection by pressing the Smart Key .

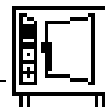
## Volume

When setting the volume, consider the noise levels in your kitchen when food preparation is in progress.

Set the volume from the “Setup” menu .









1. Select “Volume”  with the Selector Dial .
2. Confirm by pressing the Smart Key .
3. The display will show the volume options and an alert tone will sound.
4. Use the Selector Dial  to select the desired volume.
5. Confirm by pressing the Smart Key .

# Setup



## Time

Set the time from the “Setup” menu .









1. With the Selector Dial , select “Time” .
2. Confirm by pressing the Smart Key .
3. The display will show the time format options available.
4. Select the required format with the Selector Dial .
5. To enter the current time, use the Paging / Scrolling keys  and  to switch between hours and minutes.
6. Set the correct time with the Selector Dial .
7. Confirm by pressing the Smart Key .

### NOTE:

If the power is off for more than three days, the time will have to be re-entered.

## 1 Date

Set the date from the “Setup” menu .

1. With the Selector Dial , select “Date” .
2. Confirm by pressing the Smart Key .
3. The display will show the date formats available.
4. Select the desired format with the Selector Dial .
5. To enter the current date, use the Paging / Scrolling keys  and  to switch between day, month and year
6. Set the correct date with the Selector Dial .
7. Confirm by pressing the Smart Key .






### NOTE:

If the power is off for more than three days, the date will have to be re-entered.

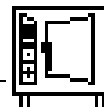


## Order of Cookbook Recipes

Recipes can be organized alphabetically or numerically in the Cookbook with the “Setup” menu .

1. With the Selector Dial , select “Cookbook alphabetic” .
2. Confirm by pressing the Smart Key .
3. Use the Selector Dial  to select “Yes” to sort alphabetically, **OR** select “No” to sort numerically.
4. Press the Smart Key  to confirm the selection.
5. “Please wait” appears in the display. The sorting may take some time.
6. When the sorting is complete the Combi returns to cooking mode.

# Setup












## Default and Memory Settings

Select whether the default or the memory setting (i.e. the last setting used) for cooking time and temperature appears in the display when a cooking mode (cooking mode) is selected.

The factory default settings are adjustable (see table).





Select default or memory settings from the “Setup” menu .

1. Use the Selector Dial  to select “Practical Settings” .
2. Confirm by pressing the  key.
3. To work with memory settings: select “No”. The Combi will use memory settings.
4. **OR** To change the default settings: confirm “Yes” with the Smart Key  key.
5. The display will show a list of the default settings set.
6. Select the default setting to change with the Selector Dial .
7. Use the Paging / Scrolling RIGHT key  to space through to the desired number
8. Set the required default setting with the Selector Dial .
9. Use the Paging / Scrolling LEFT key  to space back to accept the setting.
10. To change more settings, repeat the procedure above.
11. Press the Smart Key  to confirm the new settings.

### Recommendations:

- Using the default settings helps prevent mistakes by semi-skilled staff.
- Every time a cooking mode is selected, your chosen settings will be stored.
- Memory settings are particularly suitable if you regularly cook several batches one after the other. There is no need to select time and temperature settings and the cooking mode can be started immediately.





**Factory Default Settings**

Cooking Mode	Oven Temperature	Core Temperature	Cooking Time
 STEAM	212°F	158°F	25 min
 COMBI	302°F	158°F	70 min
 HOT AIR	338°F	158°F	30 min
 RETERM	275°F	158°F	5 min



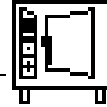
## Temperature Display

You can select °C or °F for temperature display in the “Setup” menu .

1. Use the Selector Dial  to select “Temperature in °C” .
2. Confirm by pressing the Smart Key .
3. Select “Yes” for °C and “No” for °F
4. Confirm the selection with the Smart Key .
5. The temperature display is set as specified.


# Setup





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## Network Address

The network address is required for the use of PC Control, PC-HACCP and the Convotherm by Cleveland Service System.

Set the network address from the “Setup” menu .


1. Use the Selector Dial to select “Network Address” .
2. Confirm by pressing the Smart Key .
3. The display shows the network address currently set.
4. Use the Selector Dial  to select the desired network address (1 - 99)
5. Confirm by pressing the  key.





**NOTE:** The network address 1 is factory set. Select a different network address for each of your appliances.

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## Language

Select a language from the “Setup” menu .

1. With the Selector Dial, select “Language” .
2. Confirm by pressing the Smart Key .
3. The languages available appear in the display.
4. Use the Selector Dial  to select the desired language
5. Confirm by pressing the Smart Key .

### Recommendations:

Select the language of your country or that spoken by your staff.



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## TROUBLESHOOTING

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Convotherm by Cleveland Combi Oven-Steamers are equipped with a fully automatic error diagnosis system.

If an error occurs, the system will display error codes and a description of the error.

To continue operating, emergency operation is available (see below).

The following tables will help troubleshoot if errors or malfunctions occur while a Combi Oven-Steamer is operating. The tables show possible causes and their remedies.

### WARNING

If the Burner or Electric Heating ON icon  and the Cooking Mode Engaged icon  are lit but the burner or electric heater does not start and the fan does not start then remove the Combi from service.

**Call your qualified Cleveland Range authorized service representative at once.**

### WARNING

**If an error cannot be rectified with the aid of this list, contact your qualified Cleveland Range authorized service representative at once.**

## What to do if ...



Error	Message on display	Possible cause	Remedy
E01	Not enough water	Water tap closed	Open water tap
		Solenoid valve dirt filter contaminated	Remove and clean filter
		Solenoid valve fault	Call customer service
E02	Connection area temperature too high	Connection area ventilation fault Air supply blocked	Allow Combi to cool, or continue cooking at a lower oven temperature, and call customer service
E03	Fan malfunction	Motor temperature monitor triggered, external failsafe triggered	Call customer service
		Fan motor fault	Call customer service
E04	Connection area fan malfunction	Auxiliary fan fault	Call customer service
E05	No gas	Gas supply interrupted	Open gas valve
E11/E21	Excess temperature in oven or oven sensor failure	Excess oven temperature	Call customer service
		Oven sensor fault	Call customer service
E13/E23	Excess temperature in steam generator or steam generator sensor failure	Steam generator sensor fault	Call customer service
E15/E25	Excess temperature of condenser or condenser sensor failure	Water tap closed	Open water tap
		Excess temperature in condenser via hot water connection	Connect appliance to cold water, restart
		Solenoid valve dirt filter contaminated	Remove and clean filter
		Solenoid valve fault	Call customer service
		Condenser sensor fault	Call customer service
E22	Core temperature sensor fault	Core temperature sensor fault	Set cooking mode with time, and call customer service
E24	Bypass sensor failure	Bypass sensor fault	Call customer service
E26	Steam generator safety temperature limiter sensor failure	Safety temperature limiter sensor fault in steam generator	Call customer service
E27	Excess temperature of steam generator heater	Steam generator dirty	Descale
E29	Ground connection of sensor	Temperature sensor fault	Call customer service
E33	Steam generator heater error	Steam generator heater fault	Call customer service
E34	Steam generator pump error	Steam generator pump fault	Call customer service
E80/E95/E96	ID error / software error / connection fault	Control fault	Call customer service
E82	Working parameter error	Problems during switch between °C / F	Check settings in Cookbook or check °C/F in settings
Low agent pressure!	No cleaner pressure	Cleaner canister or nozzle rinsing fluid agent empty	Fill canister
		Pump fault	Call customer service

## What to do if ...



The following table shows other operating irregularities which are not displayed with an error message.

Error	Possible cause	Remedy
Uneven browning	Suction plate not correctly locked	Lock suction plate correctly
	Nominal oven temperature too high	Select lower temperature and increase cooking time
	Not pre-heated	Always pre-heat Combis
	Bypass pipe greasy	Clean bypass
	Incorrect accessories, containers	Use suitable accessories and containers
Control elements not illuminated and do not react when switched on	No power connection, external failsafe triggered	Call customer service
Appliance does not react to information entered	Software has hung itself up	Hold down the ON/OFF switch for 5 seconds or disconnect appliance for 5 seconds
Appliance cannot be switched on or off	ON/OFF has been locked for 3 seconds	Try again after 3 seconds
Oven is not lit inside	Oven light fault	Call customer service
Water sprays from air outlet when door is closed	Steam measuring line blocked	Clean steam measurement line; see "Daily servicing and maintenance"
	Appliance drain blocked	Clean outflow
Water sprayed out of steam generator into oven during operation	Automatic rinsing of steam generators has not been carried out for some time, i.e. it is continually deselected	Activate automatic rinsing The next date change or the following day will be adequate
Water inside the oven	Outflow blocked	Descale
Water running out of base of appliance	Outflow connection blocked or covered	Remove object
	Outflow blocked	Rinse condenser and outflow thoroughly, clean/check own drain system
Black marks inside oven	Incorrect cleaning agent	Use genuine CONVOClean and CONVOCare cleaning agents
	Water hardness too high	See Water Quality Recommendations in Warranty
Automatic cleaning (CONVOClean system) gives poor cleaning results	Water pressure too low	Increase pressure at installation location
	Incorrect cleaning agent	Switch to CONVOClean
	Degree of soiling incorrectly set	Select higher cleaning level



**Caution:**

**If an error cannot be rectified with the aid of this list, please contact your qualified Cleveland Range authorized service representative.**

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## CHAPTER 5

### Emergency Operation

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To continue to use your Convotherm by Cleveland Combi Oven-Steamer in the case of an error which cannot be solved immediately, an “Emergency Operation” function is available.

This allows you to use at least some of the appliance functions despite a malfunction.

Call customer service immediately!




**Note:**

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- Cooking times can be longer.
- Monitor the cooking process and the status of the product carefully.

#### Operating Instructions for Emergency Operation

If the Combi has experienced an error:

- the Signal Tone will sound
  - an error number appears in the display, e.g. E01
1. Press the Start/Stop  key to confirm the error.
  2. The modes which can be selected will be indicated by flashing.
  3. Proceed as normal.
  4. Select a program by pressing the corresponding key
    - Note: locked programs will not respond to keys being pressed.
  5. Set operating information as described under the individual programs.
  6. Depending on the error, a limited range of functions (e.g. Temperature) will be available.
  7. To start the Combi in Emergency Operation, press the Start/Stop  key.
  8. When the cooking time has elapsed, press the Start/Stop  key.
  9. When the error has been rectified, the appliance will automatically switch back to normal operation:
    - a. The error number will no longer be displayed,
    - b. The back-lighting / function display of the mode keys will not flash.
    - c. Keys will react to being pressed as normal.

## What to do if ...



### The oven will operate if these errors occur

X: Operation possible -: Operation not possible		1) Cooking time will be much longer, dishes in upper levels will be ready first 2) Injection of water into condenser constantly activated (higher water consumption) 3) Errors E23 and E26 simultaneously, steam generator is not pre-heated									
Error	Message on display	OEB	OGB	OES	OGS	Steaming	Combi Hot Air and Superheated Steam	Hot Air	Retherm	Cook & Hold	Delta-T
E01	Not enough water	X	X	X	X	--	--	up to 356°F	--	X	X
E02	Connection area temp. too high	X	X	X	X	X	up to 284°F	up to 284°F	up to 284°F	up to 284°F	up to 284°F
E03	Fan malfunction	X	X	--	--	up to 212°F (1)	--	--	--	--	--
E04	Connection area fan malfunction	X	X	X	X	X	up to 284°F	up to 284°F	up to 284°F	up to 284°F	up to 284°F
E05	no gas	X	--	X	--	X	X	X	X	X	X
E11	Excess oven temperature	--	--	--	--	--	--	--	--	--	--
E13	Excess temperature of steam generator	X	X	X	X	--	--	X	--	X	X
E15	Excess temperature of condenser	X	X	X	X	--	--	up to 356°F	--	X	X
E21	Oven sensor failure	X	X	--	--	212°F only	--	--	--	--	--
E22	Core temp. sensor fault	X	X	X	X	X	X	X	X	X	X
E23	Steam generator sensor failure	X	X	X	X	X	X	X	X	X	X
E24	Bypass sensor failure	X	X	X	X	up to 210°F	--	X	--	X	X
E25	Condenser sensor	X	X	X	X	X	up to 356°F	up to 356°F	up to 356°F	X	X

## What to do if ...



	failure					(2)	(2)	(2)	(2)	(2)	(2)
E26	Steam generator safety temp. limiter sensor failure	X	X	X	X	X	X	X	X	X	X
E23& E26 <sup>(3)</sup>	Steam generator safety temp. limiter and steam generator sensor failure <sup>(3)</sup>	X	X	X	X	X (3)	X (3)	X (3)	--	X (3)	X (3)
E27	Excess temperature Steam generator heater	X	X	X	X	--	--	X	--	X	X
E 29	Error in ground connection	--	--	--	--	--	--	--	--	--	--
E33	Steam generator heater error	X (1)	X (1)	X (2)	X (2)	X – (1) (2)	X – (1) (2)	X	X – (1) (2)	X	X
E34	Steam generator pump error	X	X	X	X	X	X	X	X	X	X
E80	ID error	--	--	--	--	--	--	--	--	--	--
E81	Program memory error	X	X	X	X	X	X	X	X	X	X
E82	Working parameter error	X	X	X	X	X	X	X	X	X	X
E83	Algo. error	X	X	X	X	X	X	X	X	X	X
E89	I2C error	X	X	X	X	X	X	X	X	X	X
E95											
E96											
Low agent pressure!	No cleaner pressure	X	X	X	X	X	X	X	X	X	X