



Combi oven

Read instructions before use

# Convotherm 4 floor-standing units

User manual - Original, ENG

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## 1 General

#### Purpose of this chapter

This chapter shows you how to identify your combi oven and provides guidance on using this manual.

## 1.1 EC Declaration of Conformity for electric appliances

#### Manufacturer

Convotherm Elektrogeräte GmbH, Welbilt, Talstraße 35, 82436 Eglfing, Germany

#### Validity of Declaration of Conformity

This Declaration of Conformity applies to the following electric appliance models:

C4 12.20 ES	C4 20.10 ES	C4 20.20 ES
C4 12.20 EB	C4 20.10 EB	C4 20.20 EB

#### Declaration of Conformity with directives

The manufacturer declares that the combi oven specified above complies with the following directives:

- 2006/42/EC (Machinery Directive)
- 2014/30/EU (EMC Directive)
- 2011/65/EU (RoHS Directive)

The safety objectives of European Directive 2014/35/EC (Low Voltage Directive) have been met in accordance with Annex I, Section 1.5.1 of the Machinery Directive.

#### Compliance of electric appliances with standards

The electric appliances comply with the requirements in the following European standards:

- DIN EN 60335-2-42: 2012
- EN 55014-1: 2006 + A1: 2009 + A2: 2011
- EN 61000-3-11: 2000
- EN 61000-3-12: 2011
- EN 62233: 2008
- EN 55014-2: 1997 + A1: 2001 + A2: 2008

#### Authorized body for documentation

The following body is authorized to compile the technical documentation in accordance with Annex II A Section 2 of Directive 2006/42/EC: Convotherm Elektrogeräte GmbH, Wellbilt, Talstraße 35, 82436 Eglfing, Germany.

Eglfing, 06.03.2018

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Reine Wasner Managing Director

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**i.A. Lutz Isenhardt** Director Global Product Compliance

i.V. Gisela Rosenkranz Manager Engineering / Technical Documentation

## 1.2 EC Declaration of Conformity for gas appliances

#### Manufacturer

Convotherm Elektrogeräte GmbH, Welbilt, Talstraße 35, 82436 Eglfing, Germany

#### Validity of Declaration of Conformity

This Declaration of Conformity applies to the following types of gas appliances:

C4 12.20 GS	C4 20.10 GS	C4 20.20 GS
C4 12.20 GB	C4 20.10 GB	C4 20.20 GB

#### Declaration of Conformity with directives

The manufacturer declares that the combi oven specified above complies with the following directives:

- 2006/42/EC (Machinery Directive) •
- 2014/30/EU (EMC Directive) 2011/65/EU (RoHS Directive)
- 2009/142/EC (Appliances Burning Gaseous Fuels)

The safety objectives of European Directive 2014/35/EC (Low Voltage Directive) have been met in accordance with Annex I, Section 1.5.1 of the Machinery Directive.

#### Compliance of gas appliances with standards:

The gas appliances comply with the requirements in the following European standards:

- EN 203-1: 2014
- EN 203-2-2: 2006
- EN 203-3: 2009
- EN 60335-2-102:2006 + A1:2010
- EN 55014-1/A2:2011
- EN 55014-2:1997 + A1:2001 + A2:2008
- EN 61000-3-2/A2:2009
- EN 61000-3-3:2008
- EN 62233:2008

#### Type examinations carried out

Notified body for gas testing and electrical safety:

GASTECC Kiwa, P.O. Box 137, 7300 AC Apeldoorn, The Netherlands

Report no.: 140602245

#### Authorized body for documentation

The following body is authorized to compile the technical documentation in accordance with Annex II A Section 2 of Directive 2006/42/EC: Convotherm Elektrogeräte GmbH, Wellbilt, Talstraße 35, 82436 Eglfing, Germany.

Eglfing, 06.03.2018

Reine Wasner Managing Director

**i.A. Lutz Isenhardt** Director Global Product Compliance



i.V. Gisela Rosenkranz Manager Engineering / Technical Documentation

## 1.3 Environmental protection

#### Statement of principles

Our customers' expectations, the legal regulations and standards and our company's own reputation set the quality and service for all our products.

We have an environmental management policy that not only ensures compliance with all environmental regulations and laws, but also commits us to continuous improvement of our green credentials.

We have developed a quality and environmental-management system in order to guarantee the continued manufacture of high-quality products, and to be sure of meeting our environmental targets. This system satisfies the requirements of ISO 9001:2008 and ISO 14001:2004.

## Environmental protection procedures

We observe the following procedures:

- Use of residue-free compostable wadding materials
- Use of RoHS-compliant products
- REACH chemical law
- Recommendation and use of bio-degradable cleaning agents
- Recycling of electronic waste
- Environmentally friendly disposal of old appliances via the manufacturer

Join us in our commitment to protect the environment.

## 1.4 Identifying your combi oven

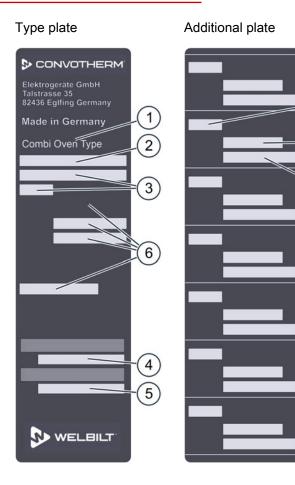
## Position of type plate

The type plate is located on the left-hand side of the combi oven.

### Layout and structure of the type plate on electric appliances

	Item	Name	
CONVOTHERM <sup>®</sup> Elektrogeräte GmbH Talstrasse 35	1	Name of appliance Combi Oven	
82436 Eglfing Germany	2	Trade name	
Made in Germany		Element	Meaning
Combi Oven Type 2		C4	Convotherm 4 appliance series
		eT	easyTouch controls
		eD	easyDial controls
(3)		numbers xx.yy	Appliance size
		EB	Electric appliance with boiler
		ES	Electric appliance with water injec- tion
		-N	for appliances with an NSK certifi- cate
	3	Electrical values	
	4	Serial number	
	4	Element	Meaning
4		Heating method	Electric appliance (X, V)
(5)		Steam generation meth- od	<ul><li>Injection (S)</li><li>Boiler (B)</li></ul>
		Appliance size	<ul> <li>12.20 (5)</li> <li>20.10 (6)</li> <li>20.20 (7)</li> </ul>
		Year of manufacture	<ul> <li>2014 (14)</li> <li>2015 (15)</li> <li></li> </ul>
		Month of manufacture	<ul> <li>January (01)</li> <li>February (02)</li> <li>March (03)</li> <li></li> </ul>
		Sequential number	4 digits
	5	Part number	

### Layout and structure of the type plate on gas appliances



	Name	
1	Name of app Combi Oven	liance
2	Trade name	
	Element	Meaning
	C4	Convotherm 4 appli- ance series
	еT	easyTouch controls
	eD	easyDial controls
	numbers xx.yy	Appliance size
	GB	Gas appliance with boiler
	GS	Gas appliance with water injection
	-N	for appliances with an NSK certificate
3	Electrical value	
4	Serial numbe	r
	Element	Meaning
	Heating method	Gas appliance (Y, W)
	Steam gen- eration method	<ul><li>Injection (S)</li><li>Boiler (B)</li></ul>
	Appliance size	<ul> <li>12.20 (5)</li> <li>20.10 (6)</li> <li>20.20 (7)</li> </ul>
	Year of manufac- ture	<ul> <li>2014 (14)</li> <li>2015 (15)</li> <li></li> </ul>
	Month of manufac- ture	<ul> <li>January (01)</li> <li>February (02)</li> <li>March (03)</li> <li></li> </ul>
	Sequential number	4 digits
5	Part number	
6	Gas data	
7	Country ID	
8	Gas category	/

9 Gas factory setting for the appliance

7

8

9

## 1.5 Structure of customer documentation

#### Contents of customer documentation

The customer documentation for the combi oven includes the following documents:

- Installation manual
- User manual (this document)
- easyTouch operating instructions (extract from the on-screen Help)
- On-screen Help integrated in easyTouch (full instructions on how to use the software)
- easyDial operating instructions

#### Topics in the installation manual

The installation manual is intended for trained professional staff; see 'Requirements to be met by personnel' in the installation manual.

It contains the following topics:

- Design and function: describes the components relevant to installing the combi oven
- Safety: describes all the hazards and appropriate preventive measures relevant to installation tasks
- Moving the appliance: contains necessary information on moving the combi oven
- Setting up the appliance: lists and describes the options for setting up the combi oven
- Installation: describes all the supply connections that are needed
- Putting into service: describes how to prepare the combi oven for use for the first time
- **Removal from service**: describes the tasks that need to be performed at the end of the combi oven life cycle
- Technical data, connection diagrams: contains all the relevant technical information for the combi oven
- Checklists: contains checklists for installing the combi oven in compliance with the warranty

#### Topics in the user manual

The user manual is intended for trained staff and trained professional staff; see 'Requirements to be met by personnel' on page 38 in the user manual.

It contains the following topics:

- **Design and function**: describes the components relevant to operating the combi oven
- Safety: describes all the hazards and appropriate preventive measures relevant to operating the combi oven
- Cooking: describes the rules, working procedures, operating steps and appliance usage instructions for cooking
- Cleaning: lists and describes cleaning methods, cleaning agents, working procedures, operating steps and appliance usage instructions for cleaning
- Servicing: contains warranty information, the servicing schedule, information about faults, errors and emergency use, plus working procedures, operating steps and appliance usage instructions for servicing

#### Topics in the operating instructions and the on-screen help (easyTouch only)

The operating instructions and the on-screen help (easyTouch only) are intended for suitably trained staff and qualified professional staff; see 'Requirements to be met by personnel' on page 38 in the user manual. For easyTouch models, the operating instructions are an extract from the On-screen help.

The operating instructions and on-screen help (easyTouch only) include the following topics:

- Layout of the user interface: explains the combi oven user interface
- Using the software: contains instructions for entering and opening cooking profiles, for opening cleaning profiles, for starting cooking and cleaning processes; describes how to make settings and how to import and export data
- Selected cooking profiles: lists tried and tested cooking profiles

## 1.6 Essential reading relating to safety

#### Safety information in the customer documentation

Safety information relating to the combi oven appears only in the installation manual and the user manual.

The installation manual contains the safety information for the tasks covered by the manual and which are performed when moving, setting up and installing the appliance and when putting the appliance into service and removing the appliance from service.

The user manual contains the safety information for the tasks covered by the manual and which are performed during cooking, cleaning and servicing work.

The safety information contained in the user manual and installation manual must always be considered to be part of the operating instructions. The safety information contained in the user manual and installation manual must always be observed when performing tasks that go beyond merely operating the software.

#### Parts of this document that must be read without fail

If you do not follow the information in this document, you risk potentially fatal injury and property damage.

To guarantee safety, all people who work with the combi oven must have read and understood the following parts of this document before starting any work:

- the chapter 'For your safety' on page 20
- the sections that describe the activity to be carried out

#### Hazard symbol

Hazard symbol	Meaning
	Warns of potential injuries. Heed all the warning notices that appear af- ter this symbol to avoid potential injuries or death.

#### Form of warning signs

The warning signs are categorized according to the following hazard levels:

Hazard level	Consequences	Likelihood
	Death / serious injury (irreversible)	Immediate risk
	Death / serious injury (irreversible)	Potential risk
	Minor injury (reversible)	Potential risk
NOTICE	Damage to property	Potential risk

## 1.7 About this user manual

#### Purpose

This user manual is intended for all people who work with the combi oven, and provides them with the necessary information for carrying out operating tasks, cleaning jobs and minor servicing work properly and safely.

#### Who should read this manual

Name of target group	Tasks
Chef	<ul> <li>Essentially performs organizational tasks such as</li> <li>Entering the cooking profile data</li> <li>Editing existing cooking profiles in the cookbook</li> <li>Developing new cooking profiles</li> <li>Adjusting appliance settings</li> <li>May also perform all user actions if applicable.</li> </ul>
User	Performs specific operating tasks such as <ul> <li>Loading the combi oven</li> <li>Starting cooking profiles</li> <li>Removing food</li> <li>Cleaning the combi oven</li> <li>Minor servicing tasks</li> </ul>

#### Chapters in the user manual

Chapter/section	Purpose	Target group
General	<ul><li>Shows you how to identify your combi oven</li><li>Provides guidance on using this user manual</li></ul>	Chef
Design and function	<ul> <li>Describes the functions of the combi oven</li> <li>Describes specific components of the combi oven and specifies their position</li> </ul>	Chef User
For your safety	<ul> <li>Specifies the intended use of the combi oven</li> <li>Describes the hazards posed by the combi oven and suitable preventive measures</li> <li>You should read this chapter carefully in particular.</li> </ul>	Chef User
Cooking procedures	<ul> <li>Describes what loading options are available and the maximum loads allowed for the combi oven</li> <li>Explains how to switch on the combi oven</li> <li>Contains the instructions for working procedures during cooking and regenerating</li> <li>Contains the instructions for handling operations on the combi oven regularly performed during cooking and regenerating</li> </ul>	Chef User

Chapter/section	Purpose	Target group
Cleaning procedures	<ul> <li>Explains the principles of the cleaning methods</li> <li>Contains the cleaning instructions</li> <li>Describes the cleaning agents and how to prepare them for use</li> <li>Contains the instructions for working procedures during cleaning</li> <li>Contains and refers to the instructions for handling operations on the combi oven regularly performed during cleaning</li> </ul>	User
Servicing procedures	<ul> <li>Contains the servicing schedule</li> <li>Provides advice on what emergency mode is possible when faults occur</li> <li>Contains a catalogue of possible errors and faults and specifies the required actions</li> <li>Contains the instructions for servicing tasks that the user can personally carry out.</li> <li>Refers to the instructions for handling operations on the combi oven required for servicing tasks</li> </ul>	User

### Notation for decimal points

A decimal point is always used in order to achieve international standardization.

## 2 Design and function

#### Purpose of this chapter

This chapter describes the design and construction of the combi oven and explains its functions.

## 2.1 The functions of the combi oven

#### The cooking operating modes

In your combi oven you can cook a range of food. The combi oven can work in the following operating modes to achieve this:

- Steam
- Combi-steam
- Convection

#### Standard cooking methods

You can use the cooking operating modes in conjunction with the ACS+ extra functions HumidityPro, Crisp&Tasty, fan speed and BakePro to perform the following cooking methods for instance:

- Boiling
- Blanching
- Roasting
- Scalloping
- Preserving

#### Special cooking methods

SteamingPoaching

- Grilling
- Gratinate

- Stewing
- Braising
- Baking
- Defrosting

By combining operating modes and extra functions you can perform the following special cooking methods with easyTouch:

- Low-temperature cooking
- Cook&Hold

- ∆T cooking
- Overnight cooking
- ecoCooking
- Low-oxygen slow cooking

#### The regenerating operating modes

In your combi oven you can regenerate a range of dishes. The combi oven can work in the following three operating modes to achieve this:

- à la Carte regenerating
- Banquet regenerating (easyTouch only)
- Plate regenerating (easyTouch only)

#### Cooking profiles and cookbook

A cooking profile is a combination of cooking parameters such as cooking temperature and cooking time. You can create your own cooking profiles and manage them in the 'Cookbook'. You can also find ready-made cooking profiles in the 'Cookbook'.

#### Oven cleaning for an easyTouch appliance

There are two cleaning systems available for oven cleaning:

- ConvoClean+ fully automatic oven cleaning:
  - any combination can be selected from 4 cleaning levels, 3 cleaning-program lengths plus the extra steam-disinfection and drying functions
- Oven cleaning without using cleaning agents; rinsing with water
- Oven cleaning using only ConvoCare rinse aid
- Semi-automatic oven cleaning

#### Oven cleaning for an easyDial appliance

There are two cleaning systems available for oven cleaning:

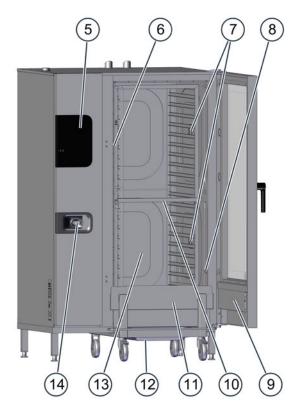
- •
- ConvoClean fully automatic oven cleaning: eight cleaning profiles can be selected for different levels of soiling, some including steam disinfection and drying
  - Oven cleaning without using cleaning agents; rinsing with water •
- Semi-automatic oven cleaning •

## 2.2 Design and function of the combi oven

### Components and function (electric floor-standing units)

The figure below shows a size 20.20 combi oven as an example of all electric floor-standing units:





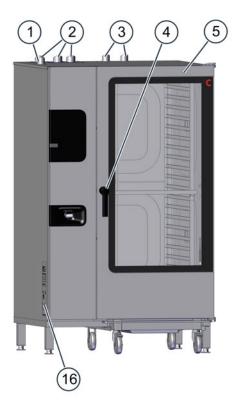
ltem	Name	Function
1	Ventilation port	<ul> <li>External air intake for removing the moisture removal from the cooking chamber</li> <li>Smooths out any pressure fluctuations in the cooking chamber</li> </ul>
2	Air vent	Allows hot vapour to escape
3	Door handle	<ul> <li>Opens and closes the appliance door</li> <li>On-latch position for opening the appliance safely</li> <li>Antibacterial material containing silver ions ("HygienicCare")</li> </ul>
4	Appliance door	<ul> <li>Closes the cooking chamber</li> <li>Can slide back beside the appliance when opened in order to save space ("disappearing door") (optional)</li> </ul>
5	Operating panel	<ul><li>Used for operating the appliance</li><li>Antibacterial ("HygienicCare")</li></ul>
6	Suction panel	<ul><li>Distributes the heat evenly inside the cooking chamber</li><li>Separates the fan compartment from the cooking chamber</li></ul>
7	Oven light	<ul><li>Illuminates the cooking chamber</li><li>Program-controlled</li></ul>
8	Core temperature probe, sous-vide sensor (optional)	<ul> <li>Measures the core temperature of the food being cooked</li> <li>Available in two connection options: permanent internal connection or temporary external connection</li> </ul>
9	Built-in preheat bridge in appliance door	Used for safety purposes during preheating and reduces energy wastage
10	Loading trolley handle	<ul><li>Curved grip for moving the loading trolley</li><li>Detachable</li></ul>

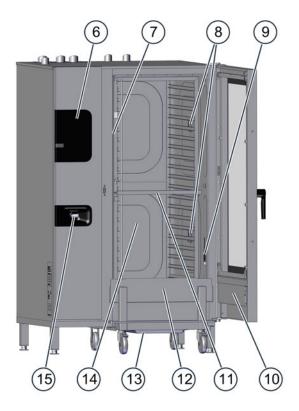
#### 2 Design and function

ltem	Name	Function	
11	Loading trolley	Holds standard-sized food containers	
12	Condensate collecting tray on the loading trolley	Collects dripping liquid and condensate from the cooking cham- ber	
13	Cooking chamber	Contains the food during cooking operation	
14	Recoil hand shower (this is not fitted on certain appliances)	<ul> <li>Intended solely for rinsing out the cooking chamber with water</li> <li>Retracts automatically into the holder after use</li> <li>Antibacterial ("HygienicCare")</li> </ul>	
15	Type plate	Identifies the appliance	

### Components and function (gas floor-standing units)

The following illustration shows a size 20.20 combi oven as an example of all gas floor-standing units:



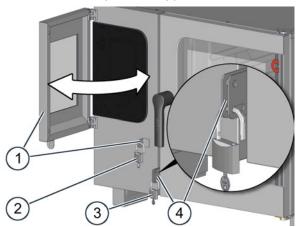


ltem	Name	Function
1	Ventilation port	<ul> <li>External air intake for removing the moisture removal from the cooking chamber</li> <li>Smooths out any pressure fluctuations in the cooking chamber</li> </ul>
2	Exhaust outlet	Takes away hot exhaust gases
3	Air vent	Allows hot vapour to escape
4	Door handle	<ul> <li>Opens and closes the appliance door</li> <li>On-latch position for opening the appliance safely</li> <li>Antibacterial material containing silver ions ("HygienicCare")</li> </ul>
5	Appliance door	<ul> <li>Closes the cooking chamber</li> <li>Can slide back beside the appliance when opened in order to save space ("disappearing door") (optional)</li> </ul>
6	Operating panel	<ul><li>Used for operating the appliance</li><li>Antibacterial ("HygienicCare")</li></ul>
7	Suction panel	<ul><li>Distributes the heat evenly inside the cooking chamber</li><li>Separates the fan compartment from the cooking chamber</li></ul>

ltem	Name	Function
8	Oven light	<ul><li>Illuminates the cooking chamber</li><li>Program-controlled</li></ul>
9	Core temperature probe, sous-vide sensor (optional)	<ul> <li>Measures the core temperature of the food being cooked</li> <li>Available in two connection options: permanent internal connection or temporary external connection</li> </ul>
10	Built-in preheat bridge in appliance door	Used for safety purposes during preheating and reduces energy wastage
11	Loading trolley handle	<ul><li>Curved grip for moving the loading trolley</li><li>Detachable</li></ul>
12	Loading trolley	Holds standard-sized food containers
13	Condensate collecting tray on the loading trolley	Collects dripping liquid and condensate from the cooking chamber
14	Cooking chamber	Contains the food during cooking operation
15	Recoil hand shower (this is not fitted on certain appliances)	<ul> <li>Intended solely for rinsing out the cooking chamber with water</li> <li>Retracts automatically into the holder after use</li> <li>Antibacterial ("HygienicCare")</li> </ul>
16	Type plate	Identifies the appliance

#### Components and function of the special security mechanism (prison model only)

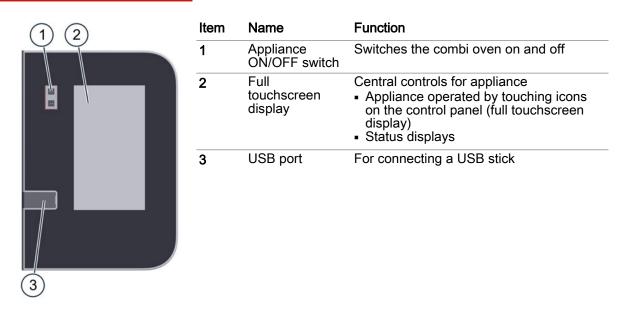
The following illustration shows the optional special security mechanism for a size 6.10 gas combi oven as an example of all appliance sizes:



Item	Name	Function
1	Lockable cover to the op- erating panel	The hinged cover can be closed over the operating panel and locked to the appliance case in order to prevent unauthorized use of the combi oven.
2	Padlock	<ul><li>To lock the operating panel cover to the appliance case</li><li>Not supplied</li></ul>
3	Padlock	<ul><li>To lock the appliance door to the appliance case</li><li>Not supplied</li></ul>
4	Locking mechanism for the appliance door	<ul> <li>Provides a two-stage lock for the appliance door to prevent unauthorized opening and closing of the appliance door</li> <li>Behaviour of the appliance door:</li> <li>When the top locking position is used, the appliance door remains fully closed.</li> <li>When the bottom locking position is used, the appliance door can be opened as far as the on-latch position.</li> </ul>

## 2.3 Layout and function of the operating panel

Layout and elements of the easyTouch operating panel



Layout and elements of the easyDial operating panel



ltem	Name	Function
1	Appliance ON/OFF switch	Switches the combi oven on and off
2	Control panel	<ul> <li>Central controls for appliance</li> <li>Buttons for entering the cooking pro- grams</li> <li>Displays showing the values you have set</li> <li>Prompts for the user</li> </ul>
3	USB port	For connecting a USB stick
4	C-Dial	Combined rotary knob and pushbutton for adjusting and setting the cooking parameters.

## 3 For your safety

#### Purpose of this chapter

This chapter provides you with all the information you need in order to use the combi oven safely without putting yourself or others at risk.

This is a particularly important chapter that you should read through carefully.

## 3.1 A Basic safety code

#### Object of this safety code

This safety code aims to ensure that all persons who use the combi oven have a thorough knowledge of the hazards and safety precautions, and that they follow the warning notices given in the user manual and on the combi oven. If you do not follow this safety code, you risk potentially fatal injury and property damage.

#### Referring to the user manuals included in the customer documentation

Follow the instructions below:

- Read in full the chapter 'For Your Safety' and the chapters that relate to your work.
- Always keep to hand the manuals included in the customer documentation for reference.
- Pass on the user manuals included in the customer documentation with the combi oven if it changes ownership.

#### Working with the combi oven

Follow the instructions below:

- Only those persons who satisfy the requirements stipulated in this user manual are permitted to use the combi oven.
- Only use the combi oven for the specified use. Never, under any circumstances, use the combi oven for other purposes that may suggest themselves.
- Take all the safety precautions specified in this user manual and on the combi oven. In particular, use the prescribed personal protective equipment.
- Only stand in the working positions specified.
- Do not make any changes to the combi oven, e. g. removing parts or fitting unapproved parts. In particular, you must not disable any safety devices.

#### More on this ...

Polated topics

R	elated topics	
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## 3.2 **A** Intended use of your combi oven

#### Intended use

- The combi oven is designed and built solely for cooking different foodstuffs in standard-sized food containers (e.g. Gastronorm containers, standard baking trays). Steam, convection and combisteam (non-pressurized superheated steam) are used for this purpose.
- The food containers can be made of stainless steel, ceramic, plastic, aluminium, enamelled steel or glass. Glass food containers must not exhibit any form of damage.
- The combi oven is intended solely for professional, commercial use.

#### Restrictions on use

Some materials are not allowed to be heated in the combi oven:

- NO dry powder or granulated material
- NO highly flammable substances or objects with a flash point below 270 °C, such as highly flammable oils, fats or plastics
- NO food in sealed tins or jars

#### Requirements to be met by operating personnel

- The combi oven must only be operated by personnel who satisfy specific requirements. Please refer to 'Requirements to be met by personnel, working positions' on page 38 for the training and qualifications requirements.
- Personnel must be aware of the risks and regulations associated with handling heavy loads.

#### Requirements relating to the operating condition of the combi oven

- The combi oven must only be operated when all safety devices and protective equipment are fitted, in working order and fixed properly in place.
- The manufacturer regulations for operating and servicing the combi oven must be observed.
- The combi oven must not be loaded over the maximum permissible loading weight for the given model; see 'Loading capacity for the combi oven' on page 43.

#### Requirements relating to the operating environment of the combi oven

#### Specified operating environment for the combi oven

- The ambient temperature lies between +4 °C and +35 °C
- NOT a toxic or potentially explosive atmosphere
- Dry kitchen floor to reduce the risk of accidents

#### Specified properties of the installation location

NO fire alarm, NO sprinkler system directly above the appliance

• NO flammable materials, gases or liquids above, on, beneath or in the vicinity of the appliance

#### Mandatory restrictions on use

- Shelter from rain and wind must be provided if operated outdoors
- Appliance must NOT be shifted or moved during use

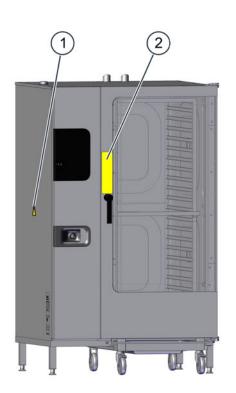
#### Cleaning requirements

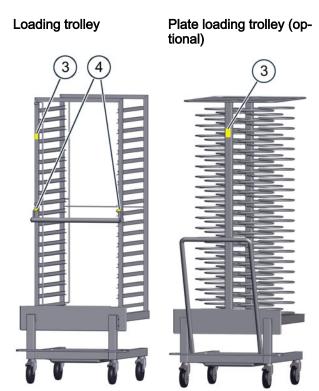
- Use only cleaning agents that have been approved by the manufacturer.
- High-pressure cleaners must NOT be used for cleaning.
- Water sprays must NOT be used for cleaning the exterior. The water spray from the recoil hand shower must only be used for cleaning the cooking chamber.
- The combi oven must NOT be treated with acids or exposed to acid fumes, except for the purpose
  of descaling the cooking chamber and the boiler by an authorized service company in accordance
  with the manufacturer's instructions.

## 3.3 A Warning signs on the combi oven

#### Positioning of warning signs

The following illustration shows a size 20.20 electric combi oven as an example of all floor-standing units:





#### Obligatory warning signs

The following warning signs must be attached to the combi oven and accessories in the area indicated so as to be easily visible at all times.

Area	Warning sign	Description
1	A	High voltage / electric shock hazard warning There is a risk of electric shock from live parts if the safety cover is opened.
2		Hot steam and vapour hazard warning There is a risk of scalding from hot steam and vapour escaping when the appliance door is opened.
2 and 3	X	Warning of hazard from hot food, hot food containers and hot liquids There is a risk of burns from hot food and hot food containers if con- tainers tip out of the shelf levels or food spills from containers that are not held level. This risk is especially high for shelf levels that lie above the sightline of the user. Spillage of hot liquid foods can result in scalds if the upper shelf levels are loaded with liquids or foods that produce liquid during cooking. Do not use the higher shelf levels that lie above your sightline for liquid foodstuffs or food that will liquefy during cooking.

Area	Warning sign	Description
3		Tip-over hazard warning for loading trolley or plate loading trolley There is a risk of the loading trolley or plate loading trolley toppling over if moved. Always take great care when moving the loading trolley or plate loading trolley. When moving the loading trolley or plate load- ing trolley, watch out for objects in the way or unevenness in the floor.
<b>4</b> Only ap- plies to prison model		Hot surface hazard warning There is a risk of burns from a hot handle on the loading trolley.

## 3.4 **A** Summary of hazards

#### General rules for dealing with hazards and safety precautions

The combi oven is designed to protect the user from all hazards that can reasonably be avoided by design measures.

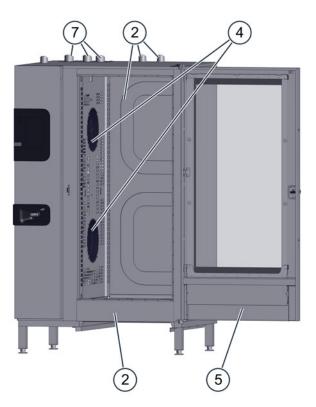
The actual purpose of the combi oven, however, means that there are still residual risks; you must therefore take precautions to avoid them. A safety device can provide you with a certain degree of protection against some of these hazards. You must ensure, however, that these safety devices are in place and in working order.

The nature of these residual risks and what effect they have are described below.

#### Hazard points

The following illustration shows a size 20.20 gas combi oven as an example of all floor-standing units:





#### Heat generation (1)

The combi oven becomes hot inside the cooking chamber, on the inside of the appliance door and on the vents and pipes on the top of the combi oven. This poses:

- A fire risk from heat given off by the combi oven
- A risk of burns on hot surfaces outside and inside the combi oven, and also on hot appliance parts, food containers and other accessories used for cooking
- A risk of burns on the vents and pipes on the top of the appliance
- Risk of burns on the hot loading trolley if it has been removed from the appliance after the cooking process and placed elsewhere

#### Hot steam/vapour (2)

The combi oven generates hot steam and vapour, which escapes when the appliance door is opened, and which is removed through the air vent on the top of the combi oven when the appliance door is sitting closed. This poses:

- A risk of scalding from hot steam when the appliance door is opened. You are protected from the hot steam by the appliance door, provided you use the on-latch position when opening the appliance door and then open the appliance door slowly and carefully. In general, make sure that the appliance door is intact.
- A risk of scalding from hot steam and hot fat if a water spray is sprayed into hot fat
- A risk of scalding from the high temperatures of the vents and pipes on the top of the appliance

#### Hot liquids

Foodstuffs are cooked in the combi oven. These foodstuffs may also be liquid, or liquefy during cooking. This poses:

A risk of scalding from hot liquids, which may be spilled if not dealt with properly

#### Live parts (3)

The combi oven contains live parts. This poses:

- A risk from live parts if the cover is not in place
- A risk of electric shock if the combi oven is cleaned externally using a hand shower

#### Fan (4)

- The combi oven contains either one or two fan wheels, depending on the appliance size. This poses:
  - A risk of hand injuries from the fan wheel in the cooking chamber behind the suction panel if the suction panel is not fitted in place properly

#### Contact with cleaning agents

- The combi oven must be cleaned using special cleaning agents. This poses:
- A risk from cleaning agents, some of which can cause skin burns

#### Parts moving against each other (5)

For various actions, such as opening/shutting the appliance door or cleaning the appliance door, there is the risk that you will crush or cut your hand.

#### Hand shower (6)

There is a hand shower on the combi oven that can result in various hazards:

- A risk of scalding if water is sprayed into the hot cooking chamber using the hand shower, e.g. for cleaning
- A risk of scalding when the combi oven is located in the immediate vicinity of equipment for heating liquid fat, and water is sprayed into this equipment with the hand shower
- A risk of scalding if a container of hot fat is standing in the cooking chamber into which water is sprayed with the hand shower
- A risk of electric shock if the combi oven is cleaned externally using the hand shower

#### Break in the cold chain

The cold chain of chilled food may be broken if food is placed in the cooking chamber ahead of time, e.g. when using a start time preset for the cooking program, or if cooking is interrupted. This poses:

• A risk to your guests from microbiological contamination of foodstuffs

#### Gas (7)

This combi oven is a gas appliance. This poses additional hazards:

- Explosion hazard if a gas pipe is faulty or leaking •
- •
- .
- A risk of burns from hot exhaust gas above the gas appliance A risk of lack of oxygen in the kitchen if a burner is poorly adjusted, there is an insufficient supply of air for combustion and/or insufficient removal of exhaust gas extraction system. •

## 3.5 A Hazards and safety precautions during operation

#### Safety hazard: heat - hot surfaces

Danger	Where or in what situations does the hazard arise?	Preventive action
A risk of burns from hot surfaces	Outside of appliance door	Do not touch surfaces for any length of time
	<ul> <li>Inside the entire cooking chamber, including all parts that are or were inside during cooking mode</li> <li>On the inside of the appliance door</li> </ul>	Wear specified protective clothing, in particular protective gloves
	On top of <b>electric appliances</b> : • Air vent • Ventilation port	_
	On top of <b>gas appliances</b> : • Air vent • Exhaust outlet • Ventilation port	_

#### Safety hazard: heat - hot steam/vapour

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of scalding from hot steam	In front of the combi oven if the ap- pliance door is not intact	Check the condition of the appliance door
	In front of the appliance if the cook- ing chamber is being cooled by the 'Cool down' function	<ul> <li>Step back from the appliance to avoid the hot steam and vapour escaping through the open appli- ance door</li> <li>Do not put your head inside the cooking chamber</li> </ul>
	When opening the appliance door	<ul> <li>Open the appliance door as far as the first latch position and wait a moment to allow hot steam and vapour to escape</li> <li>Slowly and carefully, open the appliance door wider</li> <li>Do not put your head inside the cooking chamber</li> </ul>
	For <b>electric appliances</b> : Above the air vent	Do not move parts of the body into the vicinity of the air vent
	<ul> <li>For gas appliances:</li> <li>Above the air vent and exhaust outlet</li> </ul>	Do not move parts of the body into the vicinity of the air vent or exhaust outlet

## Safety hazard: heat - hot liquid

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of scalding from hot liquid	<ul> <li>Inside the chamber</li> <li>Outside the appliance</li> </ul>	Only use containers with suitable GN dimensions
		<ul><li>When using a plate loading trolley:</li><li>Use only plates of the correct diameter to fit</li></ul>
		Do not exceed the maximum loading weight
		Insert the food containers correctly in accordance with the rules on page 40 for an appliance of size X.10 or on page 42 for an appliance of size X.20
		Containers or plates holding liquids or food that will liquefy during cook- ing must be placed solely on shelf levels that allow a clear view, and must always be kept horizontal on removal
		Wear protective gloves
		<ul> <li>Moving the loading trolley:</li> <li>Lock the shelf-securing bar in place on the loading trolley</li> <li>Always cover hot liquids when conveying them on the loading trolley</li> <li>Take care not to let the loading trolley tip over. This may occur if the loading trolley is moved on a steep slope, bumps into an obstacle or has a top-heavy load.</li> </ul>

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of burns from hot food and hot food con- tainers.	In the cooking chamber and outside the appliance if the food containers are positioned on L-rails	Only use food containers (baking trays, shelf grills) of the correct size to fit in the loading trolley.
		Do not exceed the maximum loading weight
		Insert the food containers correctly in accordance with the rules on page 41 for an appliance of size X.10 or on page 42 for an appliance of size X.20
		When removing food containers, do not pull them forwards too far or they might tip out of the shelf levels
		Wear protective gloves
		<ul> <li>Moving the loading trolley:</li> <li>Lock the shelf-securing bar in place on the loading trolley</li> <li>Take care not to let the loading trolley tip over. This may occur if the loading trolley is moved on a steep slope, bumps into an obstacle or has a top-heavy load.</li> </ul>

## Safety hazard: heat - hot food and hot food containers

#### Safety hazard: heat - miscellaneous

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of fire from heat given off by the appli- ance	If flammable materials, gases or liq- uids are stored near or on the appli- ance	Do not store flammable materials, gases or liquids beside or on top of the appliance
Risk of scalding from water spray	If a container of hot fat is standing in the cooking chamber into which wa- ter is sprayed from a water spray.	Do not spray into hot fat

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk from microbiologi- cal contamination of food	When the food cold-chain is broken by loading the cooking chamber in advance	<ul> <li>Make sure that the cold chain is not broken:</li> <li>Do not store food temporarily in the appliance</li> <li>Only allow qualified staff to perform low-temperature cooking (&lt; 65 °C)</li> </ul>
	When cooking is manually interrup- ted	<ul> <li>Never deliberately interrupt the cooking process</li> <li>Do not store food temporarily in the appliance</li> </ul>
	When cooking is interrupted be- cause of a power failure	Once the appliance is running again, consider how the length of time tak- en to resume operation will affect the food condition.
Risk from microbiologi- cal contamination of food in a warm environ- ment in the temperature range 30 - 65 °C.	If cold food is placed in the appli- ance when in use for low-tempera- ture cooking or holding food at tem- perature	Never place additional cold food in the appliance while it is in use for low-temperature cooking or for hold- ing food at temperature
	In general during low-temperature cooking or when holding food at temperature	<ul> <li>Only allow qualified staff to perform low-temperature cooking (&lt; 65 °C)</li> <li>Reduce the number of micro-organisms on the food before low-temperature cooking, for instance by searing.</li> </ul>

## Safety hazard: contamination of foodstuffs

#### Safety hazard: gas

Danger	Where or in what situations does the hazard arise?	Preventive action
Explosion hazard from gas	If the appliance is moved	Never move appliance during use
Risk of suffocation from lack of breathable air	Where appliance is installed	<ul> <li>Do not obstruct lower area of equipment</li> <li>Only operate appliance in a draught-free environment</li> <li>Ensure that the fitted ventilation equipment is working properly, and that the ventilation requirements stipulated by the gas installation engineer are met.</li> <li>Have the appliance serviced annually</li> </ul>

Safety hazard: mechanical parts of the appliance
--

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of injuries from ro- tating fan	If the cooking chamber is being cooled using 'Cool down' with the appliance door open and the fan wheel is exposed because the suc- tion panel is not fitted	Make sure that the suction panel is fitted and secured in place
Risk of slipping from escaping condensate	<ul> <li>In front of the appliance</li> <li>Under the loading trolley when it is being moved</li> </ul>	<ul> <li>Ensure that the floor around the appliance is dry at all times</li> <li>Empty the condensate tray at least once a day</li> </ul>
Risk of hands being pinched	When sliding in the loading trolley	Always use the loading trolley han- dle when moving the loading trolley

## 3.6 A Hazards and safety precautions during cleaning

### Safety hazard: cleaning agent

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of chemical burns or irritation to skin, eyes and respiratory system from contact with clean- ing agents and their fumes	During fully automatic cleaning: In front of the appliance door	<ul> <li>Do not open the appliance door during fully automatic oven clean- ing using connected canisters.</li> <li>During fully automatic oven clean- ing using single-measure dispens- ing, only open the appliance door after being prompted by the soft- ware</li> </ul>
	For all cleaning actions	<ul> <li>Do not let cleaning agents come into contact with your skin or eyes</li> <li>Do not heat up the appliance if there are cleaning agents inside. This is only permitted under the control of a cleaning program for semi-automatic or fully automatic cleaning.</li> <li>Wait for a prompt by the software or until the cooking chamber tem- perature is less than or equal to 60 °C before spraying cleaning products into the appliance.</li> <li>Do not breathe in spray</li> <li>Wear personal protective equip- ment</li> </ul>
	When handling the cleaning-fluid canisters	Wear personal protective equipment
	When handling the single-measure dispensing bottles	Wear personal protective equipment
	When corrosive cleaning agents are used	Only use those cleaning agents specified under 'Cleaning agents' on page 71

## Safety hazard: contamination of foodstuffs

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of food contamina- tion from cleaning agents	If the single-measure dispensing bottles for the cleaning agent and rinse aid are not handled correctly	<ul> <li>Take care not to get cleaning agent or rinse aid on the work surface</li> <li>Do not place empty single-measure dispensing bottles on the work surface, because the cleaning agent or rinse aid could drip down the outside</li> </ul>
Risk of food contamina- tion from cleaning agents	If the cooking chamber has not been rinsed out properly after semi-auto- matic cleaning on appliances without a hand shower.	Instead of the hand shower, use an external water spray to rinse out the appliance interior or else wipe down the cooking chamber, fittings and the area behind the suction panel thoroughly with plenty of water and a soft cloth.

Safety hazard: heat

Danger	Where or in what situations does the hazard arise?	Preventive action
A risk of burns from hot	Outside of appliance door	Wait until the cooking chamber
surfaces	<ul> <li>Inside the entire cooking chamber, including all parts that are or were inside during cooking mode</li> <li>On the inside of the appliance door</li> </ul>	<ul> <li>has cooled to below 60 °C before starting cleaning work</li> <li>Wear specified protective clothing in particular protective gloves</li> </ul>
	On top of <b>electric appliances</b> : • Air vent • Ventilation port	
	On top of <b>gas appliances</b> : • Air vent • Exhaust outlet • Ventilation port	
Risk of scalding from hot steam if water is sprayed into the hot cooking chamber	In the entire cooking chamber	<ul> <li>Wait until the cooking chamber has cooled to below 60 °C before starting cleaning work</li> <li>Wear specified protective clothing in particular protective gloves</li> </ul>
Risk of scalding from hot steam	In front of the appliance if the cook- ing chamber is being cooled by the 'Cool down' function	<ul> <li>Step back from the appliance to avoid the hot steam and vapour escaping through the open appli- ance door</li> <li>Do not put your head inside the cooking chamber</li> </ul>
Risk of scalding from water spray	If a jet of water is sprayed into the appliance in which a container of hot fat is standing.	Do not spray into hot fat

### Safety hazard: electricity

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of electric shock caused by a short-cir- cuit	If the appliance comes into contact with water	<ul> <li>Do not wash down the outer case with water</li> <li>Always keep the USB cover closed during cleaning</li> </ul>

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of injuries from ro- tating fan	If the cooking chamber is being cooled using 'Cool down' with the appliance door open and the fan wheel is exposed because the suc- tion panel is not fitted	Make sure that the suction panel is fitted and secured in place
Risk of crushing to hands and pinching of fingers	When opening and closing the double glass door	Exercise caution when performing this action
Risk of hands being pinched	When cleaning the preheat bridge by hand	<ul> <li>Make sure that the preheat bridge moves back automatically when it has been pushed backwards.</li> <li>Exercise caution when performing this action</li> </ul>

## Safety hazard: mechanical parts of the appliance

## 3.7 A Hazards and safety precautions during servicing

#### Safety hazard: heat

Danger	Where or in what situations does the hazard arise?	Preventive action
A risk of burns from hot	Outside of appliance door	<ul> <li>Wait until the cooking chamber has cooled to below 60 °C before starting servicing tasks</li> <li>Wear specified protective clothing in particular protective gloves</li> </ul>
surfaces	<ul> <li>Inside the entire cooking chamber, including all parts that are or were inside during cooking mode</li> <li>On the inside of the appliance door</li> </ul>	
	On top of <b>electric appliances</b> : • Air vent • Ventilation port	_
	On top of <b>gas appliances</b> : • Air vent • Exhaust outlet • Ventilation port	_

#### Safety hazard: electricity

	Where or in what situations does the hazard arise?	Preventive action
from live parts	<ul> <li>Under the cover</li> <li>Under the operating panel</li> <li>On the mains power lead</li> </ul>	<ul> <li>Servicing work carried out under the cover, behind the operating panel or on the power supply ca- ble must only be performed by qualified electricians from an au- thorized service company</li> <li>Do not remove the cover or the operating panel</li> </ul>

### Safety hazard: mechanical parts of the appliance

Danger	Where or in what situations does the hazard arise?	Preventive action
Risk of cuts from sharp edges	During servicing work	<ul> <li>Exercise caution when performing this action</li> <li>Wear personal protective equip- ment</li> </ul>

## 3.8 A Safety devices

#### Meaning

The combi oven has a number of safety devices to protect the user from hazards. It is absolutely essential that all safety devices are fitted and in working order when operating the combi oven

#### Position and function (floor-standing units)

The following illustration shows a size 20.20 electric combi oven as an example of all floor-standing units:





Item	Safety device	Function	Check
1	Cover can only be re- moved using tool	<ul> <li>Prevents live parts from being touched accidentally</li> <li>Prevents access to the moving fan from the wiring compartment</li> </ul>	Check that the cover is in place
2	Operating panel can only be removed using a tool	Prevents live parts from being touched accidentally	Ensure that the operating panel is in place
3	Appliance door with magnetic door switch	Appliance door: Protects the user and outside environment from hot steam	Check the door pane regularly for scratches, cracks, indenta- tions etc. and replace it if any are found

ltem	Safety device	Function	Check
		<ul> <li>Magnetic door switch (electrical door sensor):</li> <li>When the appliance door is opened, the switch stops: <ul> <li>rotation of the fan wheel (comes to a stop after a few seconds)</li> <li>operation of the heating element</li> <li>Distribution of the cleaning agents by the fully automatic oven cleaning system</li> </ul> </li> <li>Prompt to close the appliance door</li> </ul>	Check magnetic door switch at low temperature Action: • Open the appliance door fully • Press Start Result: Motor must not start up.
4	Suction panel in cook- ing chamber; can only be removed using a tool	Prevents access to the mov- ing fan and ensures good heat distribution	See 'Releasing and securing the suction panel' on page 97
5	Built-in preheat bridge in appliance door	Prevents scalding from es- caping steam when the load- ing trolley is not in the appli- ance during preheating	None
6 (no picture)	Safety thermostat • Boiler • Cooking chamber	Switches off the appliance if temperature too high	An error code is output in the event of a fault (Please contact an authorized service company to reset the safety thermostat)
7 (no picture)	Restart after power failure in case clean- ing agent was left in the appliance	Restarts fully automatic oven cleaning in a defined state af- ter power failure	None
8 (installed by customer)	Disconnection device	Used to disconnect the appli- ance from the power supply during cleaning, repair and servicing work and in a haz- ardous situation	There is no need for the user to perform a test.
9 (installed by customer)	Gas shut-off device	Used to disconnect the appli- ance from the gas supply dur- ing cleaning, repair and serv- icing work and in a hazardous situation	There is no need for the user to perform a test.

# 3.9 A Requirements to be met by personnel, working positions

#### Requirements to be met by operating personnel

The table shows the skills required to perform the specified roles. One person may perform more than one role depending on need and organization of work, provided this person has the skills required for the role concerned.

Personnel	Skills required	Tasks
Chef	<ul> <li>Has relevant professional training</li> <li>Knows relevant national food legislation and regulations, plus hygiene legislation and regulations</li> <li>Must keep records in accordance with HACCP</li> <li>Trained in how to operate the combi oven</li> </ul>	<ul> <li>Essentially performs organizational tasks such as</li> <li>Entering the cooking profile data</li> <li>Editing existing cooking profiles in the cookbook</li> <li>Developing new cooking profiles</li> <li>Adjusting appliance settings</li> <li>May also perform all user actions if applicable</li> </ul>
User	<ul> <li>Semi-skilled</li> <li>Trained in how to operate the combioven</li> <li>Works under supervision</li> <li>Knows the regulations associated with handling heavy loads</li> </ul>	Performs specific operating tasks such as • Loading the combi oven • Starting the cooking profile • Removing food • Cleaning the combi oven • Minor servicing tasks

#### Working positions during operation

The working position for personnel when operating the combi oven is in front of the appliance door.

#### Working positions during cleaning and servicing

The working position for staff during cleaning and servicing is the entire appliance area.

# 3.10 A Personal protective equipment

### Operation and servicing

Activity	Materials used	Personal protective equipment
Loading / removing food	None	<ul> <li>Work wear as specified in country-specific standards and directives (BGR 111 in Germany) for kitchen work, in particular:</li> <li>Protective clothing</li> <li>Heat protective gloves (compliant with EN 407 in European Union)</li> <li>Safety boots</li> </ul>
Handling the core tem- perature probe	None	<ul> <li>Work wear as specified in country-specific standards and directives (BGR 111 in Germany) for kitchen work, in particular:</li> <li>Protective clothing</li> <li>Heat protective gloves (compliant with EN 407 in European Union)</li> </ul>
Removing and fitting parts	Tools and equipment depend on the task	<ul> <li>Work wear as specified in country-specific standards and directives (BGR 111 in Germany) for kitchen work, in particular:</li> <li>Protective clothing</li> <li>Heat protective gloves (compliant with EN 407 in European Union)</li> </ul>

### Cleaning

Activity	Used cleaning agents	Personal protective equipment
Oven cleaning of any kind	<ul><li>ConvoClean forte</li><li>ConvoClean new</li></ul>	The protective equipment required will depend on the cleaning products being used and the selec-
Handling cleaning agent containers	<ul> <li>ConvoCare K (concentrate)</li> <li>ConvoClean forte S</li> <li>ConvoClean new S</li> <li>ConvoCare S</li> </ul>	ted cleaning method, and may include: • Breathing mask • Safety goggles • Protective gloves • Protective clothing/apron The EC safety datasheet for the relevant cleaning agent contains a more precise specification of these items. An up-to-date copy can be obtained from the manufacturer. Refer to the label on the cleaning agent con- cerned.
Cleaning the double glass door	Common household glass cleaner	Follow the instructions given by the manufacturer of the cleaning agent you are using
Cleaning components and accessories accord- ing to relevant instruc- tions	Common household detergent: mild on skin, alkali-free, pH- neutral and odourless	Follow the instructions given by the manufacturer of the cleaning agent you are using
Cleaning the outside of the appliance case	Common household stainless steel cleaner	Follow the instructions given by the manufacturer of the cleaning agent you are using

#### Purpose of this chapter

This chapter shows you the correct way to place food in the combi oven. It shows you how to operate the combi oven for cooking and what procedures to follow for cooking and regenerating.

The 'Operating principles and instructions for cooking' is a step-by-step guide to the cooking and regenerating procedures. This chapter does not explicitly discuss using the software or handling the appliance parts.

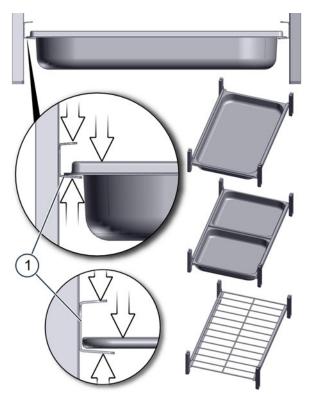
Please read the operating instructions for the combi oven to find out about using the software and the software routines.

'Specific Cooking Instructions' explains the specific actions that must be carried out when using the combi oven and the relevant accessories.

## 4.1 Basic principles for loading the combi oven

## 4.1.1 Placing food containers in appliances of size X.10

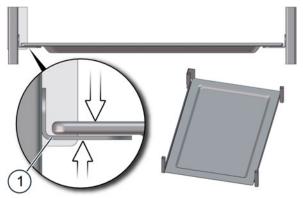
GN containers/baking tray sizes 1/1, 1/2; shelf grill; in U-rails (standard design)



#### Rules for handling

- The containers or the shelf grill must be inserted as far as they will go BETWEEN the two arms of each U-rail (1).
- The containers or the shelf grill must be inserted in the U-rails at the same height on the left and right sides.
- The containers or shelf grill must NOT rest on the top arm of a U-rail.
- Containers must not be placed on the shelf grill.

#### 600 x 400 baking tray in L-rails (bakery model)

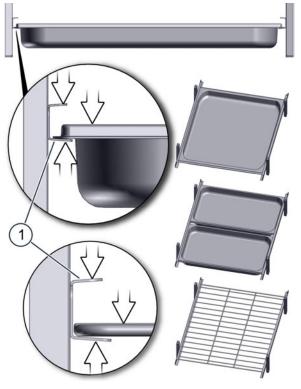


#### **Rules for handling**

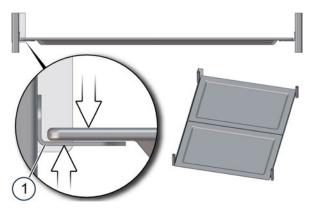
- •
- .
- The baking tray must be inserted on the arm of each L-rail (1) as far as it will go. The baking tray must be inserted on the L-rails at the same height on the left and right sides. The baking tray must not be used to hold liq-uids or food that liquefies during cooking. The method shown for placing trays in the oven must be used solely for baking trays (and if ap-plicable shelf grills), NOT for containers. Containers must not be placed on the baking tray. .
- . tray.

# 4.1.2 Placing food containers in appliances of size X.20

GN containers/baking tray sizes 2/1, 1/1; shelf grill; in U-rails (standard design)



# 600 x 400 baking tray in L-rails (bakery model)



#### Rules for handling

- The containers or the shelf grill must be inserted as far as they will go BETWEEN the two arms of each U-rail (1).
- The containers or the shelf grill must be inserted in the U-rails at the same height on the left and right sides.
- The containers or shelf grill must NOT rest on the top arm of a U-rail.
- Containers must not be placed on the shelf grill.

#### Rules for handling

- The baking tray must be inserted on the arm of each L-rail (1) as far as it will go.
- The baking tray must be inserted on the L-rails at the same height on the left and right sides.
- The baking tray must not be used to hold liquids or food that liquefies during cooking.
- The method shown for placing trays in the oven must be used solely for baking trays (and if applicable shelf grills), NOT for containers.
- Containers must not be placed on the baking tray.

# 4.1.3 Loading capacity for the combi oven

### Maximum load for cooking

C4		12.20	20.10	20.20
Applies to GN containers and for standard-sized baking trays				
Maximum load per appliance	[kg]	120	100	180
Maximum load per shelf	[kg]	15	15	15
num load for regenerating				
C4		12.20	20.10	20.2
Applies to GN containers and for standard-sized baking sheet	s			
Maximum load per appliance	[kg]	36	30	60
Maximum load per shelf	[kg]	1.5	1.5	1.5
Applies to plates of diameter Ø 32 cm				
	[Qty]	74	61	122
Maximum number of plates per appliance	L 7 1			
Maximum load per plate	[g]	360	360	360
Maximum load per plate				
Maximum load per plate num number of food containers C4		360 12.20	360 20.10	360 20.2
Maximum load per plate num number of food containers C4 GN 1/1 loading trolley, shelf spacing 68 mm	[9]	12.20	20.10	20.2
Maximum load per plate num number of food containers C4				
Maximum load per plate <b>num number of food containers</b> <b>C4</b> GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing	[9]	12.20	20.10	20.2
Maximum load per plate num number of food containers C4 GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized	[9]	12.20	20.10	20.2
Maximum load per plate num number of food containers C4 GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized GN 2/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing	[g] [Qty] [Qty]	<b>12.20</b> 24	<b>20.10</b> 20	<b>20.2</b> 40
Maximum load per plate num number of food containers C4 GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized GN 2/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized	[g] [Qty] [Qty]	<b>12.20</b> 24	<b>20.10</b> 20	<b>20.2</b> 40
Maximum load per plate <b>C4</b> GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized GN 2/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized Standard baking sheet 600x400, loading trolley, shelf spacing	[g] [Qty] [Qty] 80 mm	<b>12.20</b> 24 12	<b>20.10</b> 20 -	<b>20.2</b> 40 20
Maximum load per plate num number of food containers C4 GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized GN 2/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized Standard baking sheet 600x400, loading trolley, shelf spacing Number of baking trays	[g] [Qty] [Qty] 80 mm	<b>12.20</b> 24 12	<b>20.10</b> 20 -	<b>20.2</b> 40 20
Maximum load per plate <b>num number of food containers</b> <b>C4</b> GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized GN 2/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized Standard baking sheet 600x400, loading trolley, shelf spacing Number of baking trays Plate banquet trolley, ring spacing 66 mm	[g] [Qty] [Qty] 80 mm [Qty]	<b>12.20</b> 24 12 -	<b>20.10</b> 20 - 17	<b>20.2</b> 40 20
Maximum load per plate <b>num number of food containers</b> <b>C4</b> GN 1/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized GN 2/1 loading trolley, shelf spacing 68 mm Number of GN containers / baking trays when shelf spacing fully utilized Standard baking sheet 600x400, loading trolley, shelf spacing Number of baking trays Plate banquet trolley, ring spacing 66 mm Number of plates, maximum diameter 32 cm	[g] [Qty] [Qty] 80 mm [Qty]	<b>12.20</b> 24 12 -	<b>20.10</b> 20 - 17	<b>20.2</b> 40 20

# 4.2 Operating principles and instructions for cooking

# 4.2.1 A Working safely with the appliance

#### Your safety and the safety of your staff

Before your personnel start working with the combi oven for the first time, familiarize yourself with the information contained in the chapter 'For your safety' on page 20 and make relevant safety arrangements.

Instruct your personnel to learn the safe-working rules given in this section before starting work, and to follow them strictly.

Instruct your personnel to familiarize themselves with the hazard warnings listed in this section and in further instructions below, and instil in them the importance of taking the specified precautions.

#### Personal protective equipment for your personnel

Instruct your personnel to wear the correct personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

#### On smelling gas

If you smell gas, take the following actions:

- Cut off the gas supply immediately.
- Ventilate the room carefully.
- Do not operate any electrical equipment. Do not create a spark.
- Evacuate the building.
- Notify the gas utility company and if necessary the fire brigade using a phone located outside the hazardous area.

#### Basic rules for safe operation

If it is known or evident that the combi oven has been moved after installation without authorization (whether intentionally or unintentionally), the appliance must not be put back into service until all the following requirements have been met:

- The appliance and fittings or accessories being used show no signs of damage.
- The installed electrical power cables, water supply pipes and pipes for wastewater and cleaning
  products show no signs of damage, are fixed securely, are not leaking from any point and appear
  safe and in working order on visual inspection.
- The 'Requirements' relating to the operating condition of the combi oven' on page 21 are met.
- The 'Requirements relating to the operating environment of the combi oven' on page 21 are met.
- All warning signs are in their designated position.

#### On gas appliances only:

 A gas service engineer has leak-tested all the gas components in the combi oven and confirmed that all connection and supply points for these gas components, inside and outside the appliance, are gastight.

#### Rules for safe operation of floor-standing units

To avoid hazards, the following rules must be observed during operation:

- The air vent and exhaust outlet and the ventilation port on the top of the appliance, and the ventilation holes in the appliance base must not be covered, obstructed or blocked.
- The food containers must be inserted correctly in accordance with the rules on page 40 for an appliance of size X.10 and on page 42 for an appliance of size X.20.
- The suction panel must be locked properly in place.

#### Hot surfaces

### 

Risk of burns from high temperatures inside the cooking chamber and on the inside of the appliance door

You may get burnt if you touch any of the interior parts of the cooking chamber, the inside of the appliance door or any parts that are or were inside the oven during cooking mode.

Wear personal protective equipment.

#### Hot steam / vapour

### 

#### Risk of scalding from hot steam and vapour

Escaping hot steam and vapour can cause scalding to face, hands, feet and legs.

- Always open the appliance door initially only as far as the first latch position and wait a moment to let hot steam and vapour escape. Then slowly and carefully, open the appliance door wider.
- Never put your head inside the cooking chamber.
- When cooling the cooking chamber using the 'Cool down' function, step back from the appliance to avoid the hot steam and vapour that escape through the open appliance door.

#### Break in the cold chain

### 

#### Risk of microbiological contamination of foods by breaking the cold chain

If the food is placed in the cooking chamber ahead of time or if cooking is interrupted, the cold chain of chilled foodstuffs may be broken.

- When planning the time at which food is placed in the cooking chamber, e.g. when using a start time preset for the cooking program, always ensure there is no break in the cold chain.
- Never use the appliance for temporary storage of food.
- Never intentionally interrupt the cooking process.
- Once the appliance is running again after a power failure, consider how the length of time taken to resume operation will affect the food condition.
- ▷ Only qualified staff are allowed to perform low-temperature cooking (< 65 °C).

#### Micro-organism growth at 30 - 65 °C

#### 

# Risk of food going bad as a result of micro-organism growth in a warm environment (temperature range 30 - 65 °C)

When the appliance is being used for holding food at temperature or low-temperature cooking, placing cold food in the cooking chamber may reduce the temperature in the cooking chamber so far that micro-organisms can grow to a critical level.

- Never place cold food in the appliance while it is in use for low-temperature cooking or for holding food at temperature.
- Reduce the number of micro-organisms on the food before low-temperature cooking, for instance by searing.
- Only qualified staff are allowed to perform low-temperature cooking (< 65 °C).</p>

#### Escaping gas

#### 

#### Risk of explosion from escaping gas

Escaping gas can ignite and cause an explosion.

Never move the appliance during use

#### Lack of oxygen

### 

#### Risk of suffocation from lack of breathable air

Inadequate ventilation at the installation location can lead to suffocation while the appliance is running.

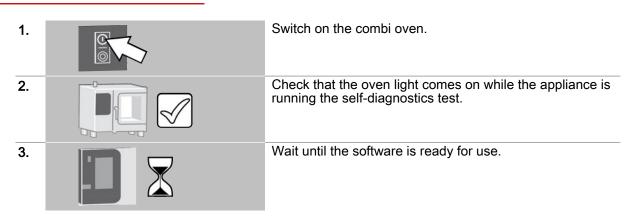
- ▷ Do not obstruct lower area of appliance.
- Only operate the appliance in a draught-free environment
- Make sure that the installed ventilation equipment is working properly and meets all the ventilation regulations specified by the gas installation engineer.
- Have the appliance serviced annually.

# 4.2.2 Turning the combi oven on and off

#### A For your safety when using the combi oven

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 44, and follow the instructions given there.

#### Switching on the combi oven



#### Switching off the combi oven at the end of the working day

1.	Perform the necessary cleaning tasks as specified in the cleaning and servicing schedule.
2.	Switch off the combi oven.
3.	Leave the appliance door ajar in order to let moisture es- cape.

#### Switching off the combi oven before prolonged breaks in use

Switch off the water, gas and electricity on site before prolonged breaks in use.

## 4.2.3 How to cook

#### A For your safety when using the combi oven

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 44, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

	I I I I I I I I I I I I I I I I I I I	
•	Opening and closing the appliance door safely	52
•	Loading and removing food	54
٠	Putting away and retrieving the core temperature probe	63
•	Using a USB stick	66

#### Regulations

Using plates in the combi oven is only permitted for regenerating.

#### Requirements

- You are sufficiently familiar with using the software to be able to select saved cooking profiles or enter new cooking profiles that are suitable for the food you wish to cook, and to run these profiles, see operating instructions
- The combi oven and accessories and fittings used have been cleaned properly.
- There are no foreign objects in the cooking chamber.
- The oven drain is not blocked or clogged with any residues. The filter is fitted in place on the oven drain.
- The interior glass door of the appliance door is secured properly in place.
- The USB cover is covering the USB port.
- The suction panel is properly locked in place.
- You have the food prepared in the loading trolley or plate loading trolley ready to place in the combi oven.

#### How to cook

1.	R	Select a cooking profile from the cookbook or enter a new cooking profile.
2.	I 1	Follow the prompts displayed by the software.
3.		Open the appliance door.
4.		Place the prepared food in the combi oven.
5.		Close the appliance door again.

6.	R	Start the cooking operation.
7.		Wait for the cooking operation to finish.
8.	I 1	An audible signal is given when the cooking operation is finished. Follow the prompts displayed by the software.
9.		Open the appliance door.
10.		Take out the food.
11.		Close the appliance door again.

# 4.3 Specific Cooking Instructions

# 4.3.1 A Working safely with the appliance

#### Your safety and the safety of your staff

Before your personnel start working with the combi oven for the first time, familiarize yourself with the information contained in the chapter 'For your safety' on page 20 and make relevant safety arrangements.

Instruct your personnel to learn the safe-working rules given in this section before starting work, and to follow them strictly.

Instruct your personnel to familiarize themselves with the hazard warnings listed in this section and in further instructions below, and instil in them the importance of taking the specified precautions.

#### Personal protective equipment for your personnel

Instruct your personnel to wear the correct personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

#### On smelling gas

If you smell gas, take the following actions:

- Cut off the gas supply immediately.
- Ventilate the room carefully.
- Do not operate any electrical equipment. Do not create a spark.
- Evacuate the building.
- Notify the gas utility company and if necessary the fire brigade using a phone located outside the hazardous area.

#### Handling heavy loads

Inform your personnel that lifting heavy containers and moving heavy loading trolleys may result in tiredness and discomfiture, and problems may arise with the moving equipment.

#### Hot surfaces

### 

# Risk of burns from high temperatures inside the cooking chamber and on the inside of the appliance door

You may get burnt if you touch any of the interior parts of the cooking chamber, the inside of the appliance door or any parts that are or were inside the oven during cooking mode.

▷ Wear personal protective equipment.

#### Hot steam / vapour

### 

#### Risk of scalding from hot steam and vapour

Escaping hot steam and vapour can cause scalding to face, hands, feet and legs.

- Always open the appliance door initially only as far as the first latch position and wait a moment to let hot steam and vapour escape. Then slowly and carefully, open the appliance door wider.
- Never put your head inside the cooking chamber.
- When cooling the cooking chamber using the 'Cool down' function, step back from the appliance to avoid the hot steam and vapour that escape through the open appliance door.

#### Damp kitchen floor

### 

#### Risk of slipping from escaping condensate

Condensate that drips onto the floor when the appliance door is opened or spills out of the condensate tray when the loading trolley is moved can cause the user to slip in front of the appliance.

- ▷ Always keep the floor dry around the appliance
- Empty the condensate tray at least once a day.

#### Escaping gas

### 

#### Risk of explosion from escaping gas

Escaping gas can ignite and cause an explosion.

Never move the appliance during use

#### Lack of oxygen

### 

#### Risk of suffocation from lack of breathable air

Inadequate ventilation at the installation location can lead to suffocation while the appliance is running.

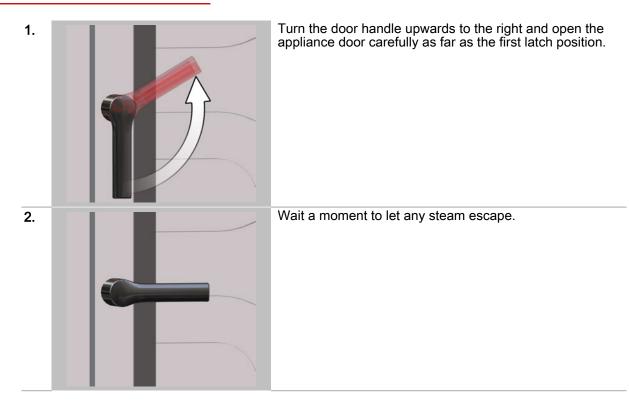
- Do not obstruct lower area of appliance.
- Only operate the appliance in a draught-free environment
- Make sure that the installed ventilation equipment is working properly and meets all the ventilation regulations specified by the gas installation engineer.
- ▶ Have the appliance serviced annually.

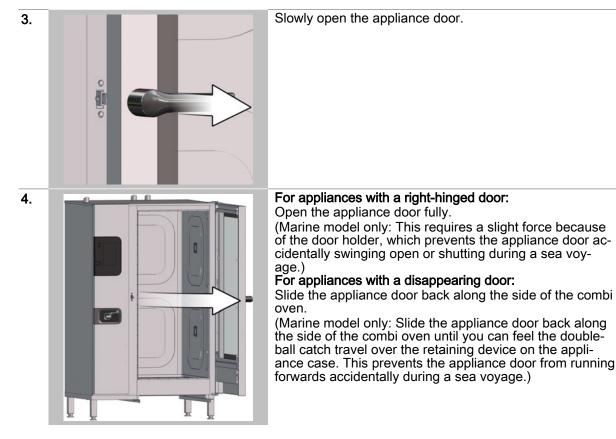
# 4.3.2 Opening and closing the appliance door safely

#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 50, and follow the instructions given there.

#### Opening the appliance door safely





#### Closing the appliance door safely

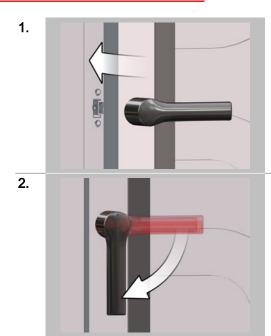
#### For appliances with a right-hinged door:

Push the appliance door closed as far as the on-latch position.

#### For appliances with a disappearing door:

Pull the appliance door forwards along the side of the combi oven and then push the door closed as far as the on-latch position.

- Then turn the door handle downwards in order to close the appliance door completely.
- You can make sure that the appliance door is properly closed when a cooking profile or cleaning profile is in progress by checking that the cooking profile or cleaning profile is still running.



# 4.3.3 Loading and removing food

#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 50, and follow the instructions given there.

#### Hot liquids

### 

#### Risk of scalding from hot liquids

Spilling liquid foods can result in scalds to face and hands.

- ▷ Do not exceed the maximum loading weight during loading.
- Only use containers with the correct GN dimensions or approved plates of the correct diameter to fit.
- Insert the food containers correctly in accordance with the rules on page 40 for an appliance of size X.10 or on page 42 for an appliance of size X.20.
- Always place containers or plates holding liquids or holding food that will liquefy during cooking on shelf levels that allow a proper view into the container for all users. Always take out horizontally any containers or plates holding liquids or holding food that will liquefy during cooking.
- Lock the shelf-securing bar in place on the loading trolley.
- During movement, cover containers or plates holding hot liquids.
- Take care not to tilt the loading trolley. This may occur if the loading trolley is moved on a steep slope or bumps into an obstacle.
- Wear personal protective equipment.

#### Hot food and hot food containers

### 

#### Risk of burns from hot food and hot food containers.

Food containers placed on L-shaped rails can tip off the shelf levels. This can result in burns to the entire body, but particularly to the face and hands.

- Do not exceed the maximum loading weight during loading.
- Only use food containers (baking trays, shelf grills) of the correct size to fit.
- Insert the food containers correctly in accordance with the rules on page 41 for an appliance of size X.10 or on page 42 for an appliance of size X.20.
- Always keep food containers horizontal when removing them from the oven, and do not pull food containers too far forward in the shelf levels.
- ▷ Lock the shelf-securing bar in place on the loading trolley.
- Take care not to tilt the loading trolley. This may occur if the loading trolley is moved on a steep slope or bumps into an obstacle.
- Wear personal protective equipment.

#### Prior knowledge required

You need to know these operations:

Opening and closing the appliance door safely

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#### Using a loading trolley from the +3 range

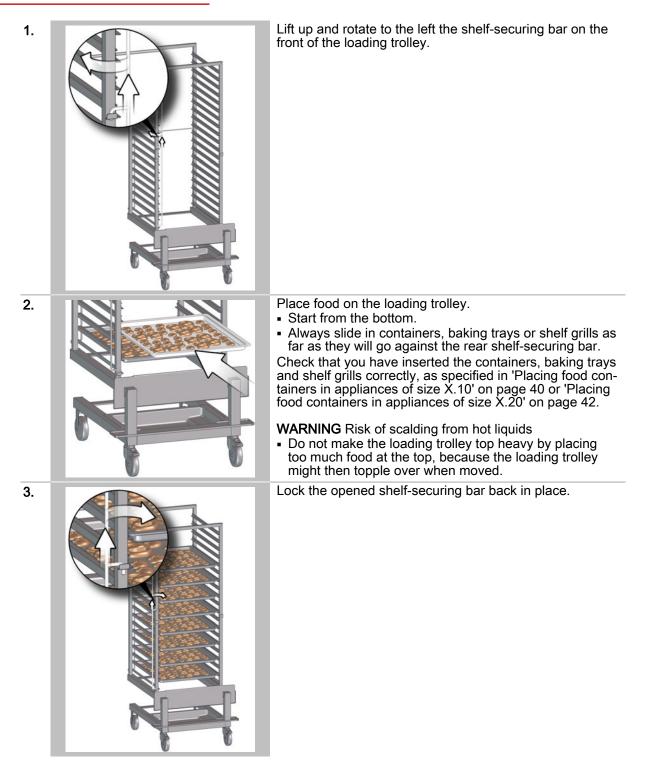
In order to be able to use a loading trolley from the +3 range in a Convotherm 4 combi oven, you can obtain an easy-to-fit upgrade kit from the manufacturer.

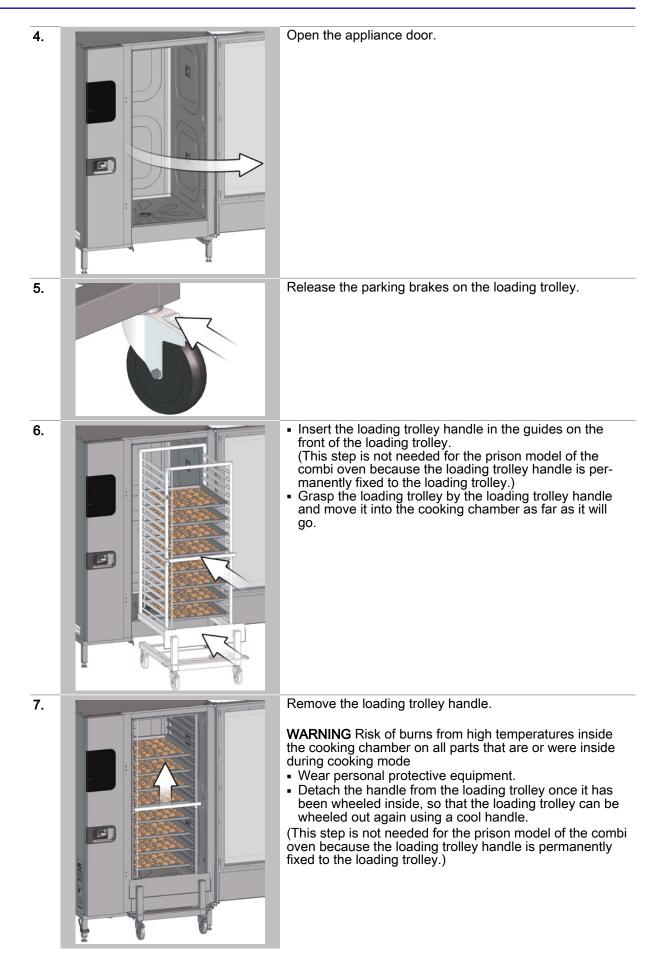
Never wheel a loading trolley from the +3 range into a Convotherm 4 combi oven unless the trolley has been upgraded with this kit, otherwise the appliance may be damaged.

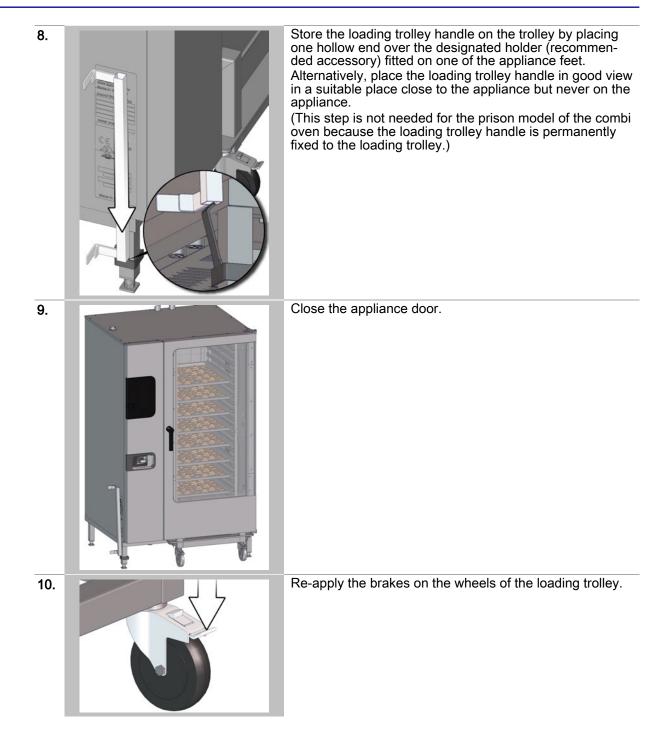
#### Requirements

- The loading trolley has been cleaned and prepared properly.
- The loading trolley handle has been removed. (Does not apply to prison model)
- The parking brakes have been engaged on the loading trolley.

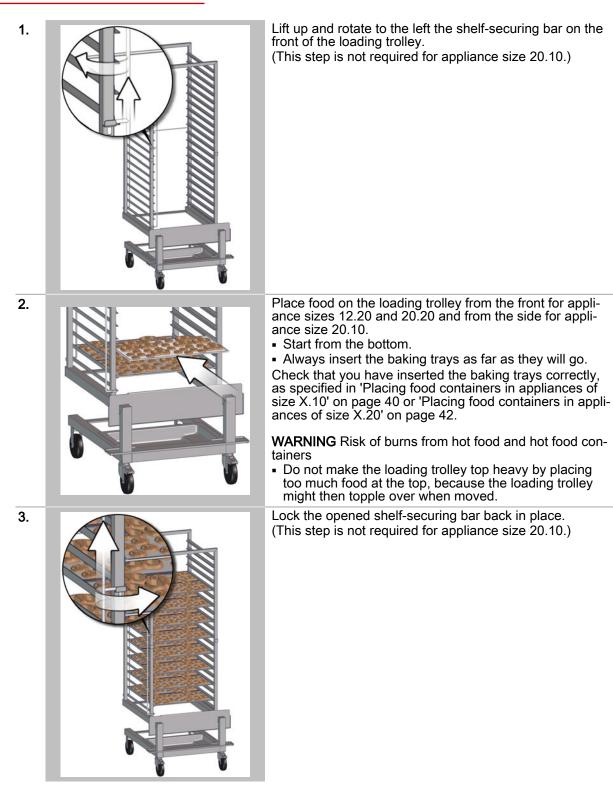
#### Placing food in the combi oven (standard model)

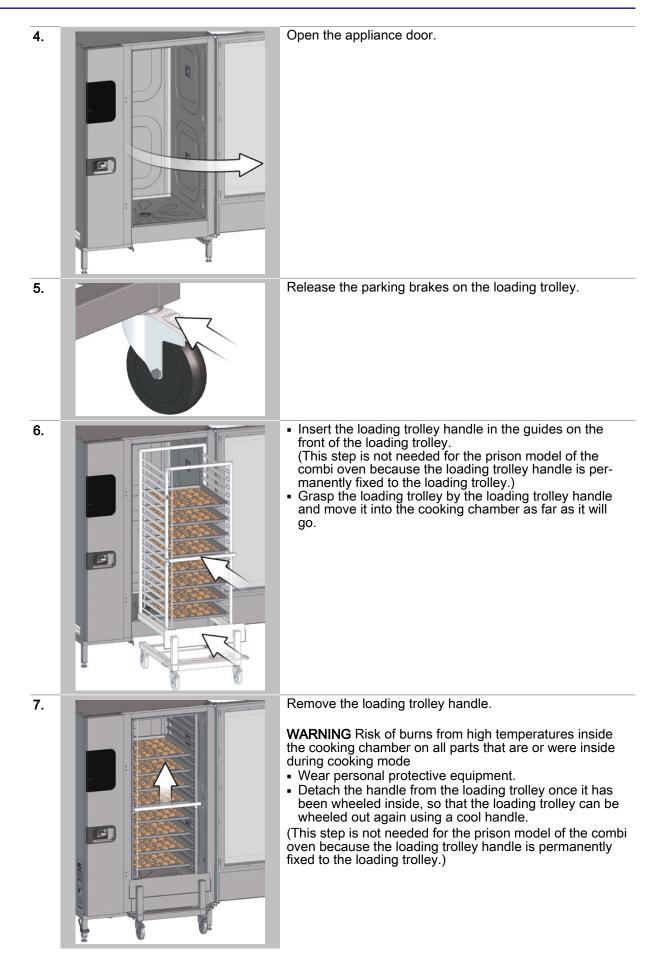


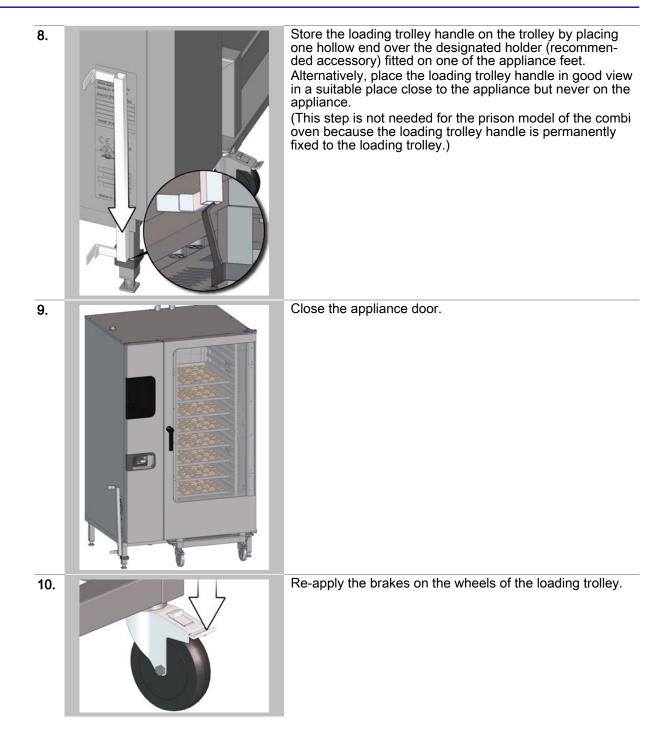




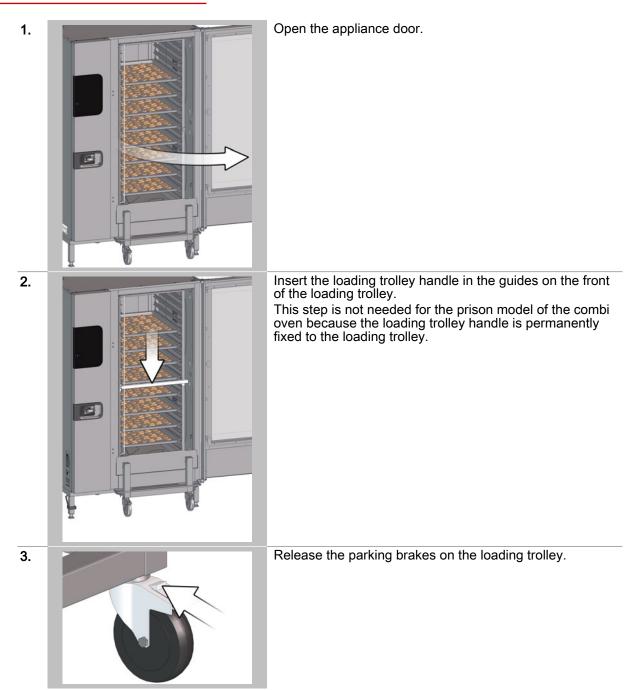
#### Placing food in the combi oven (bakery model)







#### **Removing food**



4.	<ul> <li>Pull the loading trolley out of the cooking chamber by its handle.</li> <li>For the prison model:</li> <li>WARNING Risk of burns from high temperatures inside the cooking chamber on all parts that are or were inside during cooking mode <ul> <li>Wear personal protective equipment.</li> </ul> </li> <li>Despite being made of a special material, the handle on the loading trolley will get hot during cooking. Always wear heat-resistant gloves when wheeling out the loading trolley by the handle after cooking.</li> </ul>
5.	Re-apply the brakes on the wheels of the loading trolley.
6.	Close the appliance door.

# 4.3.4 Putting away and retrieving the core temperature probe

#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 50, and follow the instructions given there.

#### Prior knowledge required

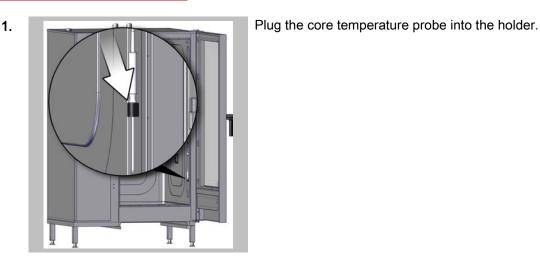
You need to know these operations:

• Opening and closing the appliance door safely

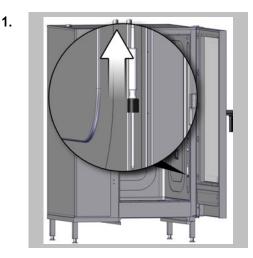
#### Purpose

The core temperature probe must be stowed away when it is not needed for the cooking operation. Otherwise the probe risks getting damaged.

#### Putting away the core temperature probe



Retrieving the core temperature probe



Pull the core temperature probe out of the holder.

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# 4.3.5 Using the external core temperature probe or sous-vide sensor

#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 50, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

- Opening and closing the appliance door safely
   52
- Putting away and retrieving the core temperature probe

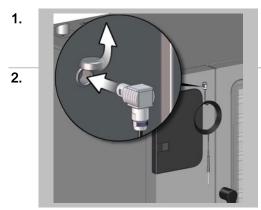
### Principle

In addition to the internal core temperature probe, which is permanently connected inside the cooking chamber, you can also temporarily connector an auxiliary external core temperature probe or sousvide sensor to an external connector on the outside of the appliance case. The internal core temperature probe is disabled as soon as a sensor is plugged into this external connector. In other words, the software gives priority to the external core temperature probe or sous-vide sensor for a cooking operation. It is NOT possible to use the external core temperature probe and/or sous-vide sensor at the same time as the internal core temperature probe in a cooking operation, or to use the internal core temperature probe or sous-vide sensor is connected.

#### Requirements

- The external core temperature probe or sous-vide sensor is clean, in working order and placed ready near the appliance.
- The food has been placed correctly in the cooking chamber.

#### Connecting and using the external core temperature probe or sous-vide sensor



Open the protective cap on the connecting socket for the external core temperature probe or sous-vide sensor, located on the right above the operating panel on the appliance case.

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Connect the external core temperature probe or sousvide sensor to the appliance by plugging it into the socket.



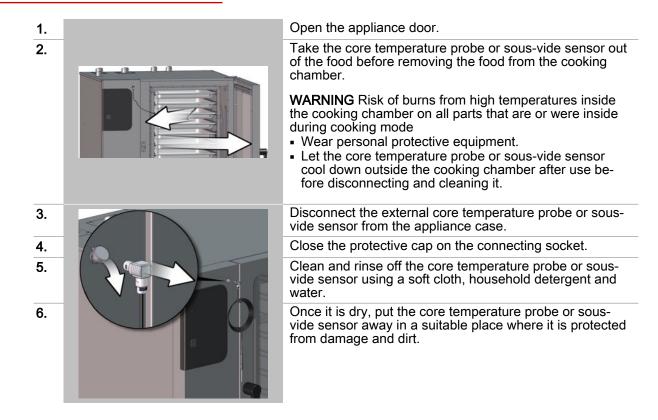
Open the appliance door.

Insert the core temperature probe or sous-vide sensor in the food.

Close the appliance door.

Make sure you feed the sensor cable through a suitable point in the door: the cable must not be fed into the cooking chamber in the area around door-handle closing mechanism; it can be fed into the cooking chamber at any other position and clamped between the appliance door and hygienic plug-in gasket.

#### Disconnecting and putting away the external core temperature probe or sous-vide sensor



# 4.3.6 Using a USB stick

#### A For your safety when using the appliance

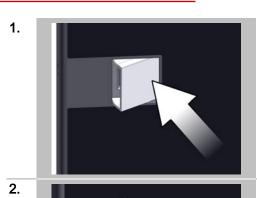
Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 50, and follow the instructions given there.

#### Purpose of the USB cover

The USB cover protects the USB port so that no water vapour can get into the control electronics during cooking or cleaning.

During cooking and cleaning, there must not be a USB stick inserted and the USB port must be closed by the cover.

#### Inserting the USB stick



Open the cover to the USB port on the operating panel.

Plug in the USB stick. If the USB stick is too large, use a standard commercial adapter cable.

# 5 Cleaning procedures

#### Purpose of this chapter

This chapter summarizes the cleaning methods, the cleaning agents and how to handle them, and the cleaning instructions. It explains how to handle the combi oven for cleaning and the correct procedure to follow during cleaning.

The 'Operating principles and instructions for cleaning' is a step-by-step guide to the various cleaning procedures. This chapter does not explicitly discuss using the software or handling the appliance parts.

Please read the operating instructions for the combi oven to find out about using the software and the software routines.

'Specific Cleaning Instructions' explains specific actions that must be carried out when using the combi oven and the relevant accessories.

## 5.1 Basic principles for cleaning the combi oven

## 5.1.1 Cleaning methods

#### **Cleaning methods**

Cleaning methods	Description	Criteria for use
Oven cleaning without using cleaning agents	<ul> <li>A fully automatic process in which the temperature and program length are software-controlled.</li> <li>The cooking chamber is rinsed solely with water without using cleaning agents</li> <li>For easyDial: use CL0 cleaning profile</li> <li>For easyTouch: use H2O cleaning profile</li> </ul>	<ul> <li>To remove very light soiling or odours between separate cooking operations</li> <li>To remove dust, for instance, from the intensively cleaned combi oven after a prolonged period out of use</li> </ul>
Fully automatic oven cleaning using connec- ted canisters (ConvoClean for easyDial or ConvoClean+ for easyTouch)	<ul> <li>A fully automatic process in which the temperature, program length, use of cleaning agents and rinsing are software-controlled.</li> <li>The software controls how much cleaning agent is dispensed, with the cleaning fluids supplied automatically to the cooking chamber from connected canisters.</li> <li>For easyDial (ConvoClean):         <ul> <li>select one of eight preconfigured cleaning profiles: CL1 to CL4 and CL1d to CL4d</li> </ul> </li> <li>For easyTouch (ConvoClean+):         <ul> <li>Select a cleaning level: 1 to 4</li> <li>Select a cleaning program length: eco, regular, express</li> <li>Optionally select: Steam disinfection and/or cook-ing-chamber drying</li> </ul> </li> </ul>	<ul> <li>Daily cleaning after all cooking operations are finished for the day</li> <li>Before putting the combi oven into operation for the first time, to clean the cooking chamber of all dirt accumulated during transportation, setting-up and installation.</li> <li>After servicing work on the combi oven to remove all dirt from the cooking chamber</li> </ul>

Cleaning methods	Description	Criteria for use
Fully automatic oven cleaning using single- measure dispensing (ConvoClean for easyDial or ConvoClean+ for easyTouch)	<ul> <li>A fully automatic process in which the temperature, program length, use of cleaning agents and rinsing are software-controlled.</li> <li>The software prompts the user to supply cleaning agents to the cooking chamber from single- measure dispensing bottles.</li> <li>For easyDial (ConvoClean):         <ul> <li>select one of eight preconfigured cleaning profiles: CL1 to CL4 and CL1d to CL4d</li> </ul> </li> <li>For easyTouch (ConvoClean+):         <ul> <li>Select a cleaning level: 1 to 4</li> <li>Select a cleaning program length: eco, regular, express</li> <li>Optionally select: Steam disinfection and/or cook- ing-chamber drying</li> </ul> </li> </ul>	<ul> <li>Daily cleaning after all cooking operations are finished for the day</li> <li>Before putting the combi oven into operation for the first time, to clean the cooking chamber of all dirt accumulated during transportation, setting-up and installation.</li> <li>After servicing work on the combi oven to remove all dirt from the cooking chamber</li> </ul>
Semi-automatic oven cleaning	<ul> <li>A semi-automatic process in which the temperature and program length of individual wash cycles are software-controlled.</li> <li>The cleaning agents are sprayed into the cooking chamber by hand.</li> <li>The cooking chamber is rinsed out manually using the hand shower or alternatively wiped out thor- oughly using plenty of water and a soft cloth</li> </ul>	<ul> <li>Daily cleaning after all cooking operations are finished for the day</li> <li>As an extra cleaning process after fully automatic oven cleaning if some of the dirt still remains</li> <li>Before putting the combi oven into operation for the first time, to clean the cooking chamber of all dirt accumulated during transportation, setting-up and installation.</li> <li>After servicing work on the combi oven to remove all dirt from the cooking chamber</li> </ul>
Oven cleaning only us- ing rinse aid from con- nected canister or by single-measure dis- pensing	<ul> <li>Only for easyTouch: ConvoCare cleaning profile</li> <li>A fully automatic process in which the temperature, program length, use of rinse aid and rinsing are software-controlled.</li> <li>The rinse aid is either dispensed automatically into the cooking chamber from connected canisters or is added to the cooking chamber by the user from single-measure dispensing bottles after prompting by the software.</li> </ul>	<ul> <li>As an extra cleaning process after fully automatic or semi-automatic oven cleaning if some of the dirt still remains</li> <li>If there is a white deposit or dark discolouration in the cooking chamber</li> </ul>
Oven cleaning by hand	<ul> <li>An entirely manual process without software support</li> <li>The cooking chamber is not heated</li> <li>The user controls how long the cleaning agents are left to act.</li> <li>The cleaning agents are sprayed into the cooking chamber by hand.</li> <li>The cooking chamber is rinsed out manually using the hand shower or alternatively wiped out thoroughly using plenty of water and a soft cloth</li> </ul>	<ul> <li>To remove dirt or odours between separate cooking operations after the cooking chamber has cooled down</li> <li>As an extra cleaning process after fully automatic or semi-automatic oven cleaning if some of the dirt still remains</li> <li>For cleaning specific areas of the cooking chamber such as the oven drain</li> <li>If there is a white deposit or dark discolouration in the cooking chamber</li> </ul>

# 5.1.2 Cleaning instructions

#### Overview

The following illustration shows a size 20.20 gas combi oven as an example of all floor-standing units:



ltem	Name
1	Appliance case exterior
2	Cooking chamber
3	Hygienic plug-in gasket
4	Double glass door
5	Appliance door
6	Transverse gasket above the pre- heat bridge
7	Oven drain with filter
8	Loading trolley (rack)
9	Condensate collecting tray in load- ing trolley
10	Fan grille

Daily cleaning tasks

What must be cleaned?	Procedure	Cleaning agents
Cooking chamber	'How to perform semi-automatic oven cleaning' on page 79	ConvoClean new or forte
	'How to perform fully automatic oven cleaning using connected canisters' on page 75	ConvoClean new or forte and ConvoCare
	'How to perform fully automatic oven cleaning using single- measure dispensing' on page 77	ConvoClean new S or forte S and ConvoCare S
Oven drain	<ul> <li>Remove any residues</li> <li>Rinse out to prevent blockage</li> <li>Spray cleaning agent into the drain and rinse with water</li> </ul>	<ul><li>Use the recoil hand shower</li><li>ConvoClean new or forte</li></ul>
Condensate collecting tray in loading trolley	<ul> <li>'Emptying the condensate collecting tray for the loading trolley' on page 95</li> <li>Clean by hand with a soft non-abrasive sponge</li> <li>Rinse off with water</li> </ul>	Common household detergent
Appliance case exterior	Clean by hand with a soft cloth	Common household stainless steel cleaner

What must be cleaned?	Procedure	Cleaning agents
Check the cooking chamber dai- ly for signs of a white deposit or dark discolouration • Clean only when needed	<ul> <li>By hand:</li> <li>Spray on cleaner when oven is cold</li> <li>Leave to work for 10 minutes</li> <li>Polish with a soft, non-abrasive sponge</li> <li>Rinse out</li> <li>Or</li> <li>Refer to 'How to perform oven cleaning using only rinse aid with the ConvoCare cleaning profile (only available with easyTouch)' on page 83</li> </ul>	ConvoCare
Containers, baking trays, shelf grills and other accessories used for cooking	<ul> <li>Clean by hand with a soft non-abrasive sponge</li> <li>Rinse off with water</li> </ul>	Common household detergent

### Weekly cleaning tasks

What must be cleaned?	Procedure	Cleaning agents
Interior double glass door	'How to clean the double glass door' on page 85	Common household glass cleaner
Cooking chamber behind suction panel	'How to clean the cooking chamber behind the suction panel' on page 86	ConvoClean new or forte
Hygienic plug-in gasket around appliance door	<ul> <li>Wipe all around by hand with a soft cloth and cleaning agent</li> <li>Wipe off thoroughly with a soft cloth and clean water</li> <li>Dry with a soft cloth</li> <li>To let the hygienic plug-in gasket dry, leave the appliance door ajar (do not shut it tight)</li> </ul>	Common household detergent
Transverse gasket above the preheat bridge on the appliance door	<ul> <li>Wipe off by hand using a soft cloth and cleaning agent</li> <li>Wipe off thoroughly with a soft cloth and clean water</li> <li>Dry with a soft cloth</li> </ul>	ConvoClean new or forte
Appliance door and loading trol- ley rack (particularly also the area around the condensate col- lecting tray)	<ul> <li>Clean by hand using a soft cloth and cleaning agent</li> <li>Wipe off thoroughly with a soft cloth and clean water</li> <li>Dry with a soft cloth</li> </ul>	ConvoClean new or forte
Fan grille, left side of oven floor	Clean by hand with a damp cloth	Common household detergent

### Monthly cleaning tasks

What must be cleaned?	Procedure	Cleaning agents
Intensive cleaning of hygienic plug-in gasket	'How to perform intensive clean- ing of the hygienic plug-in gas- ket' on page 87	Common household detergent

# 5.1.3 Cleaning agents

#### **Cleaning agents**

Use solely the cleaning agents specified here to clean the combi oven and its accessories.

Product	Use	Container
ConvoClean new for light soiling • Not intended for cleaning con- tainers, baking trave, shalf	Oven cleaning • By hand • Semi-automatic	Spray bottle
tainers, baking trays, shelf grills or other accessories	Fully automatic oven cleaning	Cleaning-fluid canisters located under the combi oven and con- nected to the cleaning system
ConvoClean forte for normal to heavy soiling • Not intended for cleaning con-	Oven cleaning • By hand • Semi-automatic	Spray bottle
tainers, baking trays, shelf grills or other accessories	Fully automatic oven cleaning	Cleaning-fluid canisters located under the combi oven and con- nected to the cleaning system
ConvoCare K (concentrate)	For mixing a ready-to-use ConvoCare solution in the specified mixture ratio	-
ConvoCare Rinse aid in the specified mixing ratio • Not intended for cleaning con- tainers, baking trays, shelf	<ul> <li>Fully automatic oven cleaning</li> <li>Oven cleaning using rinse aid only (only available with the easyTouch ConvoCare clean- ing profile)</li> </ul>	Cleaning-fluid canisters located under the combi oven and con- nected to the cleaning system
grills or other accessories	Manual aftercare of cooking chamber interior	Spray bottle
ConvoClean new S for light soiling	Fully automatic oven cleaning	125 ml single-measure dispens- ing bottle
ConvoClean forte S for normal to heavy soiling	Fully automatic oven cleaning	125 ml single-measure dispens- ing bottle
ConvoCare S	<ul> <li>Fully automatic oven cleaning</li> <li>Oven cleaning using rinse aid only (only available with the easyTouch ConvoCare clean- ing profile)</li> </ul>	125 ml single-measure dispens- ing bottle
Common household stainless steel cleaner	Caring for the external surfaces of the combi oven	-
Common household glass clean- er	Cleaning the double glass door	-
Common household detergent: mild on skin, alkali-free, pH-neu- tral and odourless	<ul> <li>Cleaning components and fittings according to relevant instructions</li> <li>Cleaning containers, baking trays, shelf grills and other accessories used for cooking</li> </ul>	-

#### Handling the cleaning agents

You must wear personal protective equipment when using certain cleaning agents.

Follow the instructions given in the chapter 'Personal protective equipment' on page 39 and the current EC safety datasheets pertaining to the ConvoClean forte, ConvoClean new, ConvoCare K (concentrate), ConvoClean forte S, ConvoClean new S and ConvoCare S cleaning agents.

Personnel must be trained regularly by the owner of the combi oven.

# 5.1.4 Preparing the cleaning agents

### Preparing the cleaning agents

Preparation form	Handling / Usage	Cleaning agents
Spray bottle	<ul> <li>Never leave the spray bottle unused under pressure for prolonged periods. Open the pump head slowly to release the pressurized air.</li> <li>Rinse out the spray bottle weekly.</li> <li>Rinse out the nozzle, nozzle extension and nozzle pipe after each use.</li> <li>Do not store the spray bottles containing cleaning agents in the immediate vicinity of the combi oven but keep in dedicated storage areas away from food.</li> </ul>	<ul> <li>ConvoClean new</li> <li>ConvoClean forte</li> <li>ConvoCare</li> </ul>
Canister	<ul> <li>Connect the canisters containing the cleaning agents to the combi oven cleaning system.</li> <li>Before every fully automatic oven cleaning program, check that there is enough cleaning agent in each canister.</li> <li>Do not store the spare canisters containing cleaning agents in the immediate vicinity of the combi oven but keep in dedicated storage areas away from food.</li> </ul>	<ul> <li>ConvoClean new</li> <li>ConvoClean forte</li> <li>ConvoCare</li> </ul>
	<ul> <li>Only use ConvoCare K (concentrate) for mixing the ready-to-use ConvoCare solution (in the specified mixture ratio) in an empty canister.</li> <li>Do not store canisters containing ConvoCare K in the immediate vicinity of the combi oven but keep in dedicated storage areas away from food.</li> </ul>	<ul> <li>ConvoCare K (con- centrate)</li> </ul>
125 ml single-measure dispensing bottle	<ul> <li>Do not take the bottles out of the storage box in which they were supplied until just before using the cleaning agent.</li> <li>Do not screw the cap onto the bottle until just before using the cleaning agent.</li> <li>After rinsing out with water and replacing the cap, place the empty bottle in the recycling.</li> <li>Always store spare bottles containing cleaning agent in the box they were supplied in. Do not store the boxes containing the cleaning agents in the immediate vicinity of the combi oven but keep them in dedicated storage areas away from food.</li> </ul>	<ul> <li>ConvoClean new S</li> <li>ConvoClean forte S</li> <li>ConvoCare S</li> </ul>

# 5.2 Operating principles and instructions for cleaning

# 5.2.1 **A** Safe working when cleaning

#### Your safety and the safety of your staff

Before your personnel start working with the combi oven for the first time, familiarize yourself with the information contained in the chapter 'For your safety' on page 20 and make relevant safety arrangements.

Instruct your personnel to learn the safe-working rules given in this section before starting work, and to follow them strictly.

Instruct your personnel to familiarize themselves with the hazard warnings listed in this section and in further instructions below, and instil in them the importance of taking the specified precautions.

#### Personal protective equipment for your personnel

Instruct your personnel to wear the correct personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

#### Basic rules for safe operation

If it is known or evident that the combi oven has been moved after installation without authorization (whether intentionally or unintentionally), the appliance must not be put back into service until all the following requirements have been met:

- The appliance and fittings or accessories being used show no signs of damage.
- The installed electrical power cables, water supply pipes and pipes for wastewater and cleaning
  products show no signs of damage, are fixed securely, are not leaking from any point and appear
  safe and in working order on visual inspection.
- The 'Requirements' relating to the operating condition of the combi oven' on page 21 are met.
- The 'Requirements relating to the operating environment of the combi oven' on page 21 are met.
- All warning signs are in their designated position.

#### On gas appliances only:

 A gas service engineer has leak-tested all the gas components in the combi oven and confirmed that all connection and supply points for these gas components, inside and outside the appliance, are gastight.

#### Spraying down the appliance with water

## 

#### Risk of electric shock from live parts

Water on the exterior of the appliance can cause a short-circuit, which may result in electric shock on touching the appliance.

- ▷ Do not spray the exterior of the appliance with water.
- ▷ Always keep the USB cover closed during cleaning.

#### Hot surfaces

## 

#### Risk of burns from high temperatures on interior and exterior parts of the appliance

You may get burnt if you touch any of the interior parts of the cooking chamber, the inside of the appliance door or any parts that are or were inside the oven during cooking mode. In addition, touching the air vent and exhaust outlet can result in burns.

- ▷ Wait until the cooking chamber has cooled to below 60 °C before starting cleaning tasks.
- ▷ Wear personal protective equipment.

#### Spraying water into a hot cooking chamber

## 

#### Risk of scalding from hot steam

If water is sprayed into the hot cooking chamber (e.g. using the hand shower), steam will be produced that may scald.

▷ Wait until the cooking chamber has cooled to below 60 °C before starting cleaning tasks.

#### Contact with cleaning agents

## 

#### Risk of chemical burns or irritation to skin, eyes and respiratory system.

Direct contact with the ConvoClean new (S) cleaning agent or ConvoCare (S) rinse aid will irritate the skin, eyes and respiratory system. Direct contact with the ConvoClean forte (S) cleaning agent will result in chemical burns to the skin, eyes and respiratory organs.

- ▷ Do not inhale the vapours or spray mist from the cleaning agent and rinse aid.
- ▷ Do not let the cleaning agent or rinse aid come into contact with skin, eyes or mucous membranes.
- Do not spray cleaning agent or rinse aid into a cooking chamber that is at a temperature of higher than 60° C, because this will increase the caustic and irritating vapours given off by the cleaning fluid.
- ▷ Do not open the appliance door during fully automatic oven cleaning using connected canisters.
- During fully automatic oven cleaning using single-measure dispensing, only open the appliance door after being prompted by the software
- Wear personal protective equipment.

### Contamination with cleaning agents

## 

#### Risk of food contamination from cleaning agent or rinse aid

The ConvoClean new and ConvoClean forte cleaning agents and the ConvoCare rinse aid (whether in cleaning-fluid canisters or in single-measure dispensing bottles) will contaminate food through direct contact or indirect contact from evaporation. This also applies to common household detergents, common household glass cleaners and common household stainless-steel cleaners.

- When using ConvoClean new and ConvoClean forte cleaning agents and ConvoCare rinse aid in spray bottles, only spray inside the cooking chamber.
- For manual cleaning tasks, use a water spray to rinse out again thoroughly any cleaning agent or rinse aid introduced into the cooking chamber. Alternatively for manual cleaning tasks, use plenty of clean water and a soft cloth to wipe out thoroughly any cleaning agent or rinse aid introduced into the cooking chamber.
- Use plenty of clean water to wipe off all residues of any cleaning agents used on the inside of the appliance door, on the hygienic plug-in gasket or on accessories used for cooking.
- After manual cleaning tasks, use plenty of clean water to wipe down all the surfaces outside the cooking chamber on which food will subsequently be prepared and which might have been in contact with cleaning agents or rinse aid, e.g. by the cleaning agent container being placed on the surface.

# 5.2.2 How to perform fully automatic oven cleaning using connected canisters

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Emptying the condensate collecting tray in the loading trolley	95
•	Replacing the rinse aid canister	89
•	Replacing the cleaning agent canister	91

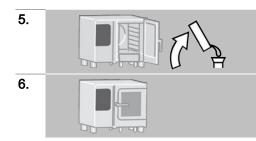
#### Requirements

- You are sufficiently familiar with using the software to be able to select and run different cleaning profiles; please refer to the Operating instructions for the combi oven.
- No food has been left in the cooking chamber. There are no foreign objects in the cooking chamber.
- All containers, baking trays, shelf grills and any other accessories have been removed from the cooking chamber.
- The oven drain is not blocked or clogged with any residues. The filter is fitted in place on the oven drain.
- The condensate collecting tray in the loading trolley (optionally the plate loading trolley) is empty.
- The empty loading trolley (optionally plate loading trolley) has been wheeled into the cooking chamber.
- The interior glass door of the appliance door is secured properly in place.
- The suction panel is properly locked in place.
- The appliance door is closed.
- You have provided the necessary cleaning resources for your cleaning program; see 'Preparing the cleaning agents' on page 72.

#### How to perform fully automatic oven cleaning using connected canisters

1.	R	Select the cleaning profile and start the cleaning process.
2.		Wait for the cleaning process to finish.
3.		An audible signal is given when the cleaning process is finished. Follow the prompts displayed by the software.
4.		<ul> <li>Open the appliance door and check the cleaning result. The cooking chamber should look clean and not smell of leftover food or cleaning agents.</li> <li>Check the cooking chamber for any foreign matter that may have entered with the rinse water. Remove any foreign matter.</li> <li>If the cleaning result is not good enough, either clean and rinse the cooking chamber manually or run a clean- ing profile again.</li> </ul>

## 5 Cleaning procedures



Empty the condensate collecting tray from the loading trolley and rinse it out with water.

Leave the appliance door ajar to let the cooking chamber dry out.

# 5.2.3 How to perform fully automatic oven cleaning using single-measure dispensing

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

-	Opening and closing the appliance door safely	52
-	Emptying the condensate collecting tray in the loading trolley	95
•	Adding cleaning agent from single-measure dispensing bottles to the cooking chamber	93

#### Requirements

- You are sufficiently familiar with using the software to be able to select and run different cleaning profiles; please refer to the Operating instructions for the combi oven.
- No food has been left in the cooking chamber. There are no foreign objects in the cooking chamber.
- All containers, baking trays, shelf grills and any other accessories have been removed from the cooking chamber.
- The oven drain is not blocked or clogged with any residues. The filter is fitted in place on the oven drain.
- The condensate collecting tray in the loading trolley (optionally the plate loading trolley) is empty.
- The empty loading trolley (optionally plate loading trolley) has been wheeled into the cooking chamber.
- The interior glass door of the appliance door is secured properly in place.
- The suction panel is properly locked in place.
- The appliance door is closed.
- You have provided the necessary cleaning resources for your cleaning program; see 'Preparing the cleaning agents' on page 72.

#### How to perform fully automatic oven cleaning using single-measure dispensing

1.		Select the cleaning profile and start the cleaning process.
2.		Wait for the soak cycle to finish (about 5 to 10 minutes depending on the cleaning profile).
3.	I 1	<ul> <li>An audible signal is given when the soak cycle is finished.</li> <li>You are prompted to add the cleaning agent.</li> <li>The software displays for you the number of single-measure dispensing bottles required.</li> </ul>
4.		Open the appliance door.
5.		Add the cleaning agent from the single-measure dispens- ing bottles to the cooking chamber. If necessary for this procedure, pull the loading trolley out of the cooking chamber and then push it back into the cooking chamber after adding the cleaning agent.

6.		Close the appliance door.
7.		Wait for the wash cycle to finish (about 30 to 60 minutes depending on the cleaning profile).
		For easyTouch controls, selecting the 'Express' cleaning program length will skip steps 8 to 12 of these instructions.
8.		<ul> <li>An audible signal is given when the wash cycle is finished.</li> </ul>
	1 1	<ul> <li>You are prompted to add the rinse aid.</li> <li>The software displays for you the number of single- measure dispensing bottles required.</li> <li>In exceptional cases, you may be able to skip this step of</li> </ul>
		adding rinse aid depending on the water hardness and the amount of limescale in the appliance.
9.		Open the appliance door.
10.		Add the rinse aid from the single-measure dispensing bot- tles to the cooking chamber. If necessary for this procedure, pull the loading trolley out of the cooking chamber and then push it back into the cooking chamber after adding the rinse aid.
11.		Close the appliance door.
12.		Wait for the final wash cycle to finish (about 20 to 30 mi- nutes depending on the cleaning profile).
13.		<ul> <li>An audible signal is given when the final wash cycle is finished.</li> <li>Follow the prompts displayed by the software.</li> </ul>
14.		<ul> <li>Open the appliance door and check the cleaning result. The cooking chamber should look clean and not smell of leftover food or cleaning agents.</li> <li>Check the cooking chamber for any foreign matter that may have entered with the rinse water. Remove any foreign matter.</li> <li>If the cleaning result is not good enough, either clean and rinse the cooking chamber manually or run a clean- ing profile again.</li> </ul>
15.		Empty the condensate collecting tray from the loading trolley and rinse it out with water.
16.		Leave the appliance door ajar to let the cooking chamber dry out.

# 5.2.4 How to perform semi-automatic oven cleaning

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Releasing and securing the suction panel	97
•	Emptying the condensate collecting tray in the loading trolley	95

#### Requirements

- You are sufficiently familiar with using the software to be able to select and run different cleaning profiles; please refer to the Operating instructions for the combi oven.
- No food has been left in the cooking chamber. There are no foreign objects in the cooking chamber.
- All containers, baking trays, shelf grills and any other accessories have been removed from the cooking chamber.
- The oven drain is not blocked or clogged with any residues. The filter is fitted in place on the oven drain.
- The condensate collecting tray in the loading trolley (optionally the plate loading trolley) is empty.
- The empty loading trolley (optionally plate loading trolley) has been wheeled into the cooking chamber.
- The interior glass door of the appliance door is secured properly in place.
- The suction panel is properly locked in place.
- The appliance door is closed.
- You have provided the necessary cleaning resources for your cleaning program; see 'Preparing the cleaning agents' on page 72.

#### How to perform semi-automatic oven cleaning

1.	R	Select the cleaning profile and start the cleaning process.
2.		Wait for the soak cycle to finish (about 10 minutes).
3.		An audible signal is given when the soak cycle is finished. You are prompted to spray in the cleaning agent.
4.		Open the appliance door.
5.		Wheel the loading trolley (optionally plate loading trolley) out of the cooking chamber.

	Hinge out the suction panel into the cooking chamber.
	Use the spray bottle to spray cleaning agent around the cooking chamber, the suction panel and the area behind the suction panel, and the oven drain.
	Secure the suction panel back in place.
	Wheel the loading trolley (optionally plate loading trolley) back into the cooking chamber.
	Use the spray bottle to spray the loading trolley (optional- ly the plate loading trolley) with cleaning agent.
	Close the appliance door.
	Wait for the wash cycle to finish (about 10 minutes).
I I	An audible signal is given when the wash cycle is finished. You are prompted to rinse off the cooking chamber.
	Open the appliance door.
	Use the hand shower to rinse off thoroughly the loading trolley (optionally the plate loading trolley).
	Wheel the loading trolley (optionally plate loading trolley) out of the cooking chamber.
	Hinge out the suction panel into the cooking chamber.

18.	<ul> <li>Use the hand shower to rinse out thoroughly the cooking chamber, the suction panel and the area behind it, and the oven drain.</li> <li>WARNING Risk of food contamination from cleaning agent or rinse aid resulting from inadequate rinsing</li> <li>If the appliance does not have a hand shower, use an external water spray instead of the hand shower or wipe down the cooking chamber, fittings and the area behind the suction panel thoroughly with plenty of water and a soft cloth.</li> </ul>
19.	Secure the suction panel back in place.
20.	Check the cleaning result. The cooking chamber should look clean and not smell of leftover food or cleaning agents. If the cleaning result is not good enough, either clean and rinse the cooking chamber manually or run a cleaning profile again.
21.	Empty the condensate collecting tray from the loading trolley and rinse it out with water.
22.	Wheel the loading trolley (optionally plate loading trolley) back into the cooking chamber.
23.	Leave the appliance door ajar to let the cooking chamber dry out.

# 5.2.5 How to clean the cooking chamber without using cleaning agents

## For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Emptying the condensate collecting tray in the loading trolley	95

Emptying the condensate collecting tray in the loading trolley

#### **Requirements**

- You are sufficiently familiar with using the software to be able to select and run different cleaning profiles; please refer to the Operating instructions for the combi oven.
- No food has been left in the cooking chamber. There are no foreign objects in the cooking chamber.
- The oven drain is not blocked or clogged with any residues. The filter is fitted in place on the oven drain.
- The condensate collecting tray in the loading trolley (optionally the plate loading trolley) is empty.
- The loading trolley (optionally plate loading trolley) has been wheeled into the cooking chamber.
- The interior glass door of the appliance door is secured properly in place.
- The suction panel is properly locked in place.
- The appliance door is closed.

#### How to clean the cooking chamber without using cleaning agents

1.	R	Select the cleaning profile and start the cleaning process.
2.		Wait for the cleaning process to finish.
3.		An audible signal is given when the cleaning process is finished. Follow the prompts displayed by the software.
4.		<ul> <li>Open the appliance door and check whether the expected cleaning result has been achieved.</li> <li>Check the cooking chamber for any foreign matter that may have entered with the rinse water. Remove any foreign matter.</li> <li>If necessary, either clean and rinse the cooking chamber manually or run another cleaning profile.</li> </ul>
5.		Empty the condensate collecting tray from the loading trolley.
6.		Leave the appliance door ajar to let the cooking chamber dry out.

# 5.2.6 How to perform oven cleaning using only rinse aid with the ConvoCare cleaning profile (only available with easyTouch)

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Emptying the condensate collecting tray in the loading trolley	95
•	Adding cleaning agent from single-measure dispensing bottles to the cooking chamber	93

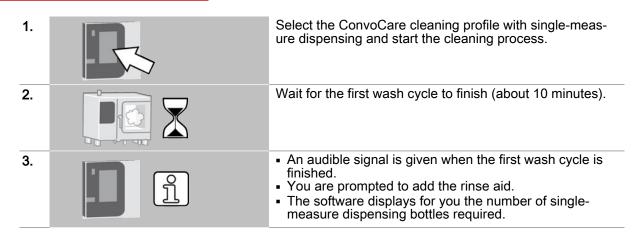
#### Requirements

- You are sufficiently familiar with using the software to be able to select and run different cleaning profiles; please refer to the Operating instructions for the combi oven.
- No food has been left in the cooking chamber. There are no foreign objects in the cooking chamber.
- All containers, baking trays, shelf grills and any other accessories have been removed from the cooking chamber.
- The oven drain is not blocked or clogged with any residues. The filter is fitted in place on the oven drain.
- The condensate collecting tray in the loading trolley (optionally the plate loading trolley) is empty.
- The empty loading trolley (optionally plate loading trolley) has been wheeled into the cooking chamber.
- The interior glass door of the appliance door is secured properly in place.
- The suction panel is properly locked in place.
- The appliance door is closed.
- You have provided the necessary cleaning resources for your cleaning program; see 'Preparing the cleaning agents' on page 72.

#### How to perform oven cleaning using only rinse aid from connected canisters

The cleaning workflow for the ConvoCare cleaning profile using connected canisters is identical to the cleaning workflow described under 'How to perform fully automatic oven cleaning using connected canisters' on page 75.

#### How to perform oven cleaning using only rinse aid from single-measure dispensing bottles



4.		Open the appliance door.
5.		Add the rinse aid from the single-measure dispensing bot- tles to the cooking chamber. If necessary for this procedure, pull the loading trolley out of the cooking chamber and then push it back into the cooking chamber after adding the rinse aid.
6.		Close the appliance door.
7.		Wait for the last wash cycle to finish (about 10 minutes).
8.	i î	<ul> <li>An audible signal is given when the final wash cycle is finished.</li> <li>Follow the prompts displayed by the software.</li> </ul>
9.		<ul> <li>Open the appliance door and check the cleaning result. The cooking chamber should look clean and not smell of leftover food or cleaning agents.</li> <li>Check the cooking chamber for any foreign matter that may have entered with the rinse water. Remove any foreign matter.</li> <li>If the cleaning result is not good enough, either clean and rinse the cooking chamber manually or run a clean- ing profile again.</li> </ul>
10.		Empty the condensate collecting tray from the loading trolley and rinse it out with water.
11.		Leave the appliance door ajar to let the cooking chamber dry out.

# 5.2.7 How to clean the double glass door

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Releasing and securing the interior glass door.	101

#### Requirements

- You have household glass cleaner available as the necessary cleaning product. .
- You have several (at least three) soft clean cloths available for use.
- The appliance door has cooled to room temperature after the last operation. •

#### How to clean the double glass door

1.	Open the appliance door and hinge the interior glass pan- el away from the double glass door.
2.	Use a soft clean cloth and the cleaning product to clean each side of both the interior and exterior glass panels of the double glass door. Take care not to scratch the glass as you clean.
3.	Use a soft clean cloth and clean water to wipe off each side of both the interior and exterior glass panels of the double glass door.
4.	Use a soft clean cloth to dry off each side of both the inte- rior and exterior glass panels of the double glass door.
5.	Hinge the interior glass panel of the appliance door back and secure in place.

# 5.2.8 How to clean the cooking chamber behind the suction panel

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Releasing and securing the suction panel	97

#### Requirements

- You have the required cleaning agent available for use: spray bottle containing ConvoClean new or ConvoClean forte; see 'Preparing the cleaning agents' on page 72
- The oven drain is not blocked or clogged with any residues.
- The loading trolley has been wheeled out of the cooking chamber.

#### How to clean the cooking chamber behind the suction panel

1.	Hinge out the suction panel into the cooking chamber.
2.	Use the spray bottle to spray the cleaning agent onto all sides of the suction panel and onto the area behind the suction panel.
3.	Leave the cleaning agent to work for 10 to 20 minutes.
4.	Use the hand shower to rinse off thoroughly the suction panel from all sides, the area behind the suction panel, and the entire cooking chamber. For heavy soiling, you can repeat the cleaning process.
	<ul> <li>WARNING Risk of food contamination from cleaning agent or rinse aid resulting from inadequate rinsing</li> <li>If the appliance does not have a hand shower, use an external water spray instead of the hand shower or wipe down the cooking chamber, fittings and the area behind the suction panel thoroughly with plenty of water and a soft cloth.</li> </ul>
5.	Secure the suction panel back in place.
6.	Leave the appliance door ajar to let the cooking chamber dry out.

# 5.2.9 How to perform intensive cleaning of the hygienic plug-in gasket

## A For your safety when cleaning

Before starting cleaning work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when cleaning' on page 73, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

- Opening and closing the appliance door safely 52 • 99
- Removing and fitting the hygienic plug-in gasket

#### Requirements

- You have household detergent available as the necessary cleaning product. .
- You have several (at least three) soft clean cloths available for use.

#### How to perform intensive cleaning of the hygienic plug-in gasket

1.		Open the appliance door and remove the hygienic plug-in gasket.
2.		Use a soft clean cloth and the cleaning product to clean the hygienic plug-in gasket in a sink.
3.	100 Million	Use a soft clean cloth and clean water to rinse off the hy- gienic plug-in gasket in a sink.
4.	Jan	Use a soft clean cloth to dry the hygienic plug-in gasket thoroughly.
5.		Refit the hygienic plug-in gasket around the mouth of the cooking chamber.
6.		Leave the appliance door open to let the hygienic plug-in gasket dry off completely.

# 5.3 Specific Cleaning Instructions

# 5.3.1 A Working safely with the appliance

#### Your safety and the safety of your staff

Before your personnel start working with the combi oven for the first time, familiarize yourself with the information contained in the chapter 'For your safety' on page 20 and make relevant safety arrangements.

Instruct your personnel to learn the safe-working rules given in this section before starting work, and to follow them strictly.

Instruct your personnel to familiarize themselves with the hazard warnings listed in this section and in further instructions below, and instil in them the importance of taking the specified precautions.

#### Personal protective equipment for your personnel

Instruct your personnel to wear the correct personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

#### Hot surfaces

## 

#### Risk of burns from high temperatures on interior and exterior parts of the appliance

You may get burnt if you touch any of the interior parts of the cooking chamber, the inside of the appliance door or any parts that are or were inside the oven during cooking mode. In addition, touching the air vent and exhaust outlet can result in burns.

- > Wait until the cooking chamber has cooled to below 60 °C before starting cleaning tasks.
- Wear personal protective equipment.

#### Contact with cleaning agents

## **A**WARNING

#### Risk of chemical burns or irritation to skin, eyes and respiratory system.

Direct contact with the ConvoClean new (S) cleaning agent or ConvoCare (S) rinse aid will irritate the skin, eyes and respiratory system. Direct contact with the ConvoClean forte (S) cleaning agent will result in chemical burns to the skin, eyes and respiratory organs.

- ▷ Do not inhale the vapours or spray mist from the cleaning agent and rinse aid.
- ▷ Do not let the cleaning agent or rinse aid come into contact with skin, eyes or mucous membranes.
- Do not spray cleaning agent or rinse aid into a cooking chamber that is at a temperature of higher than 60° C, because this will increase the caustic and irritating vapours given off by the cleaning fluid.
- ▷ Do not open the appliance door during fully automatic oven cleaning using connected canisters.
- During fully automatic oven cleaning using single-measure dispensing, only open the appliance door after being prompted by the software
- Wear personal protective equipment.

# 5.3.2 Replacing the rinse aid canister

#### A For your safety when using the appliance

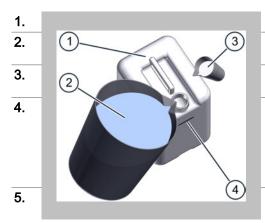
Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

#### Materials required

- One empty canister (10 litres) for the ConvoCare rinse aid
- Enough soft water (approx. 10 litres); (for specification see the 'Water quality' section of the 'Technical data' in the Installation manual)
- ConvoCare K concentrate (0.33 I)

#### Mix up the ConvoCare rinse aid in the canister

To avoid excessive foaming, follow the procedure below when mixing the ConvoCare K concentrate with soft water to produce the rinse aid:



#### Replacing the rinse aid canister

Open the empty canister (1).

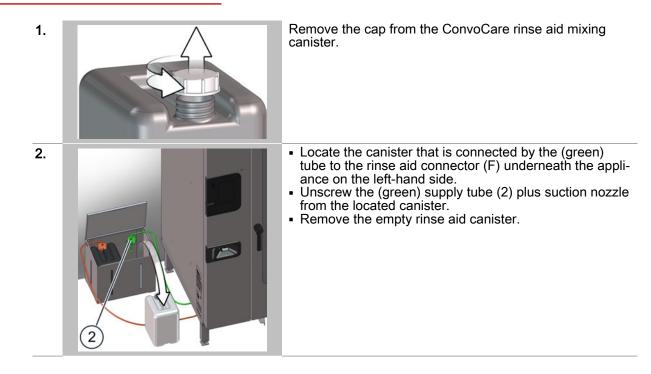
Fill the canister with soft water (2) until it reaches just below the 10 litre mark (4).

Then pour 0.33 I of the ConvoCare K concentrate (3) carefully into the canister (1).

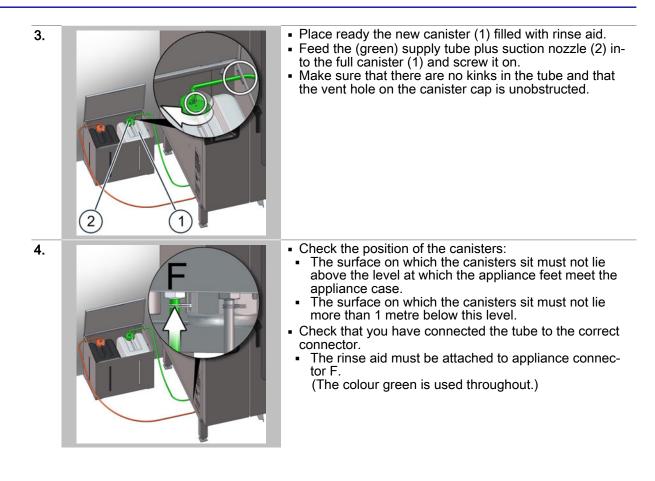
Check the fluid level in the canister:

- If the level is below the 10 litre mark (4), carefully add the extra amount of soft water (2) required.
- If the level is above the 10 litre mark (4), the rinse aid is a little less concentrated than specified. You can still use the rinse aid at the lower concentration.

Replace the cap on the canister and tip it up to mix the liquids together thoroughly.



#### 5 Cleaning procedures



# 5.3.3 Replacing the cleaning agent canister

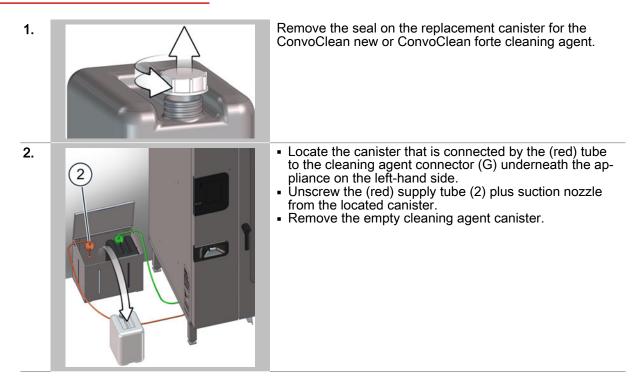
#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

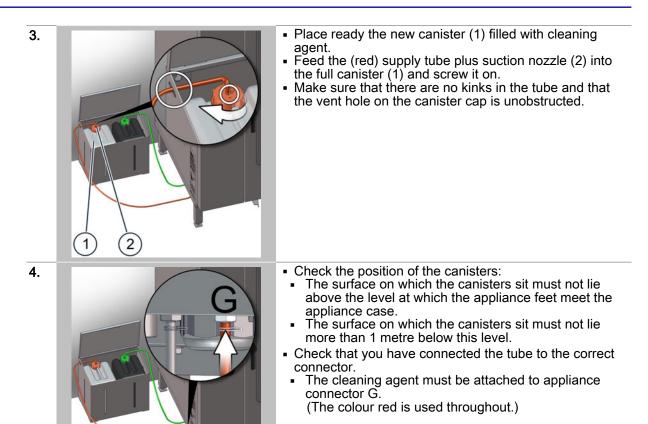
#### Materials required

- ConvoClean new or ConvoClean forte replacement canister

#### Replacing the cleaning agent canister



#### 5 Cleaning procedures



# 5.3.4 Adding cleaning agent from single-measure dispensing bottles to the cooking chamber

### For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

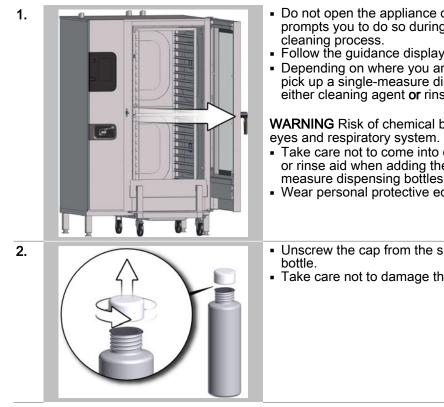
- Opening and closing the appliance door safely
- Preparing the cleaning agents

52 72

#### Requirements

- You have started a cleaning profile for fully automatic oven cleaning using single-measure dispensing. The software is prompting you to add either cleaning agent or rinse aid from the single-measure dispensing bottles to the cooking chamber.
- You have provided the necessary single-measure dispensing bottles containing cleaning agent and rinse aid for your cleaning program; see 'Preparing the cleaning fluids' on page 72.

#### Adding cleaning agent from single-measure dispensing bottles to the cooking chamber



- Do not open the appliance door until the software prompts you to do so during the fully automatic oven
- Follow the guidance displayed by the software.
- Depending on where you are in the cleaning process, pick up a single-measure dispensing bottle containing either cleaning agent or rinse aid.

WARNING Risk of chemical burns or irritation to skin,

- Take care not to come into contact with cleaning agent or rinse aid when adding the contents of the singlemeasure dispensing bottles to the cooking chamber.
- Wear personal protective equipment.
- Unscrew the cap from the single-measure dispensing
- Take care not to damage the foil seal on the bottle.

## 5 Cleaning procedures

3.	Press the bottle approximately vertically onto the spike in the centre of the oven drain in order to pierce the foil.
4.	<ul> <li>Leave the bottle sitting upright on the spike for about 10 seconds so that the liquid drains out completely.</li> <li>Look to check that the fluid has drained out completely. The single-measure dispensing bottle is made of a transparent material so that you can see how much fluid is left inside.</li> <li>If necessary, squeeze the rest of the fluid out of the single-measure dispensing bottle while the bottle is still on the spike.</li> </ul>
5.	<ul> <li>Then pull the bottle carefully off the spike.</li> <li>Remove the bottle from the cooking chamber.</li> <li>Repeat steps 2 to 5 if the software prompts you to add more than one single-measure dispensing bottle of cleaning agent or rinse aid.</li> <li>WARNING Risk of food contamination from cleaning agent or rinse aid</li> <li>Take care not to get cleaning agent or rinse aid on the work surface</li> <li>Do not place empty single-measure dispensing bottles on the work surface, because the cleaning agent or rinse aid could drip down the outside</li> </ul>
6.	Close the appliance door.

# 5.3.5 Emptying the condensate collecting tray in the loading trolley

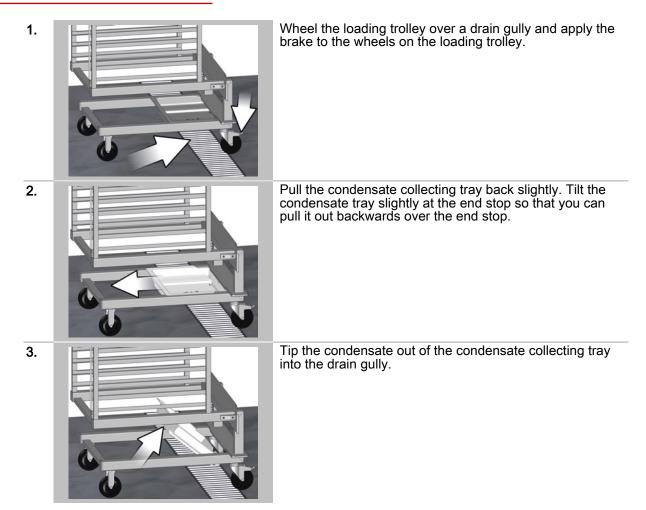
## A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

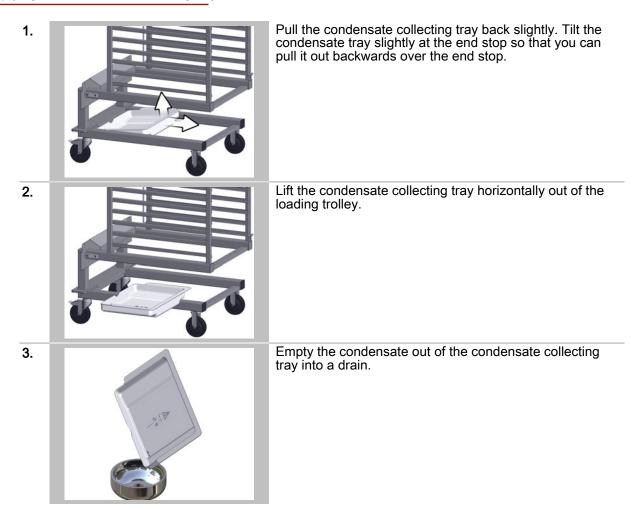
#### Requirements

The loading trolley has cooled down to a temperature of < 60 °C after its last use.

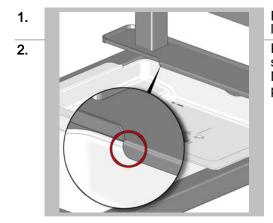
#### Emptying the condensate collecting tray into the drain gully



Emptying the condensate collecting tray into a drain



Inserting the condensate collecting tray



Place the condensate collecting tray at the bottom of the loading trolley.

Push the condensate collecting tray forwards and tilt it slightly so that it slides behind the back lip. Make sure the condensate collecting tray is engaged properly behind the back lip.

# 5.3.6 Releasing and securing the suction panel

#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

52

#### Prior knowledge required

You need to know these operations:

• Opening and closing the appliance door safely

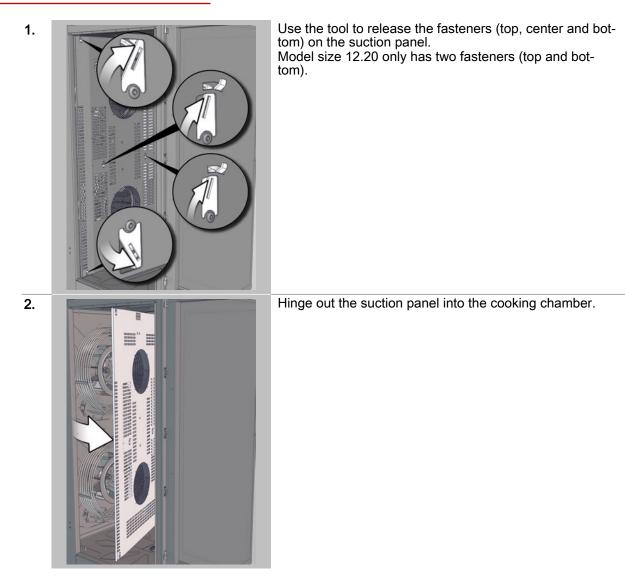
#### Materials required

Suitable tool for undoing the fasteners e.g. flat-blade screwdriver

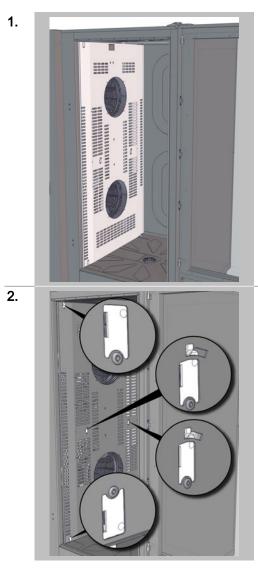
#### Requirements

The cooking chamber has cooled down to a temperature of < 60 °C after its last use.

#### Releasing and hinging out the suction panel



#### Securing the suction panel



To secure the suction panel, follow the steps in the reverse order that you performed to release it.

Make sure that all four fasteners are secured (top, centre and bottom). Model size 12.20 only has two fasteners (top and bottom).

# 5.3.7 Removing and fitting the hygienic plug-in gasket

#### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

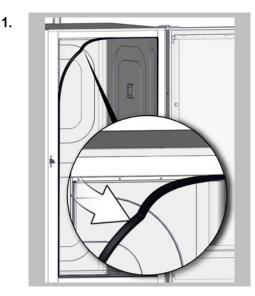
• Opening and closing the appliance door safely

# 52

#### Requirements

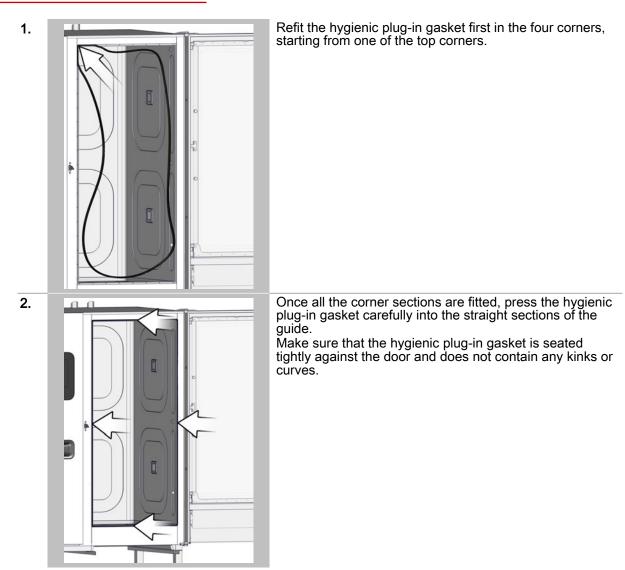
- The combi oven has cooled down to < 60 °C after its last use.
- The appliance door is open.

#### Removing the hygienic plug-in gasket



Pull off the hygienic plug-in gasket from around the mouth of the appliance door. starting from the corners.

### Fitting the hygienic plug-in gasket



100

# 5.3.8 Releasing and securing the interior glass door.

### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

52

#### Prior knowledge required

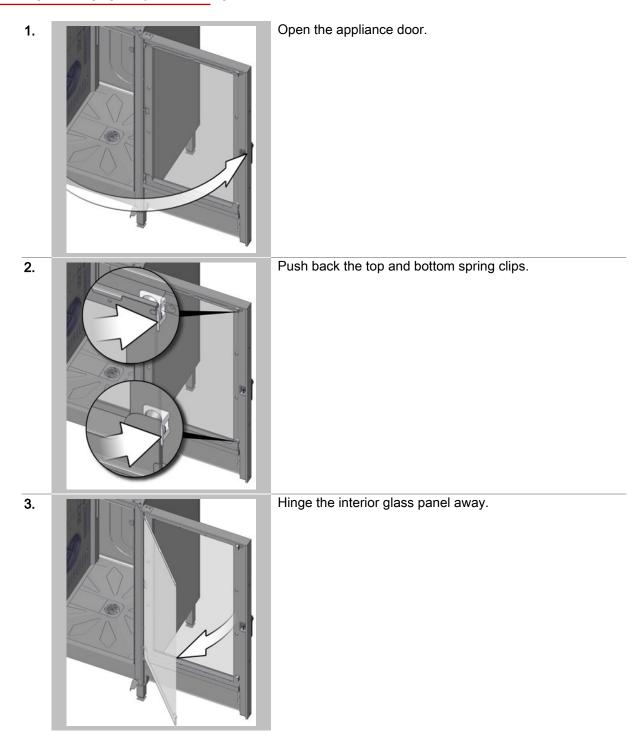
You need to know these operations:

• Opening and closing the appliance door safely

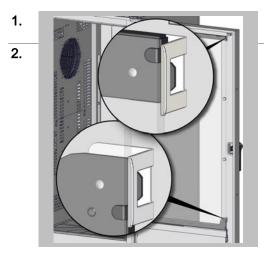
#### Requirements

The cooking chamber has cooled down to a temperature of < 60 °C after its last use.

Releasing and hinging away the interior glass door



#### Securing the interior glass door



To secure the interior glass door, follow the steps in the reverse order that you performed to release it.

Check that the spring clips are securing the interior glass again correctly at top and bottom. The appliance door cannot close until this is the case.

# 5.3.9 Emptying and cleaning the grease collecting canister (only applies to ConvoGrill)

### A For your safety when using the appliance

Before starting work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Working safely with the appliance' on page 88, and follow the instructions given there.

#### Dealing with extracted grease/used grease

- Used oil and used grease must be disposed of in accordance with national laws and regulations and in accordance with regulations from local disposal companies and authorities.
- Used grease must not be disposed of via the drain into the sewerage system.
- Extracted grease/used grease must not be reused for food processing.
- Collect the used grease in suitable collecting containers and take it to waste recycling.
- Personnel must be trained by the owner of the combi oven.

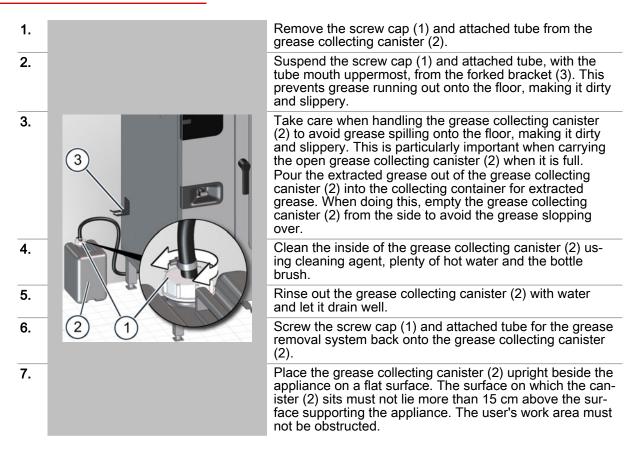
#### Materials required

- Large bottle brush
- Common household detergent
- Suitable collecting container for extracted grease (capacity >> 10 litres)

#### Properties of the grease collecting canister

Only the original grease collecting canister supplied must be used, because it is made of a material that meets the requirements for receiving hot fat.

#### Emptying and cleaning the grease collecting canister



# 6 Servicing procedures

#### Purpose of this chapter

This chapter shows you what servicing tasks need to be carried out on the combi oven at what intervals. It explains how to handle the combi oven for servicing and the correct procedure to follow during servicing. It also summarizes possible faults with the appliance and errors that may arise during operation.

## 6.1 Basic principles for servicing

## 6.1.1 Warranty information and contacting customer service

#### Warranty information

Warranty claims involving your combi oven will only be honoured if the unit has been installed by a qualified Service Engineer from an authorized service company in accordance with the instructions in the installation manual. The manufacturer must be in receipt of a fully completed checklist from the Installation manual before a warranty claim can be dealt with.

The warranty does not cover damage resulting from improper setup, installation, use, cleaning, use of cleaning agents, servicing, repair or descaling.

To extend the spare parts warranty to 2 years, you need to register the appliance on the manufacturer's homepage (www.convotherm.de) after installing the appliance.

#### **Required information**

Please have the following appliance data to hand when contacting our customer service:

- Part number of your appliance (see 'Identifying your combi oven' on page 8)
- Serial number of your appliance (see 'Identifying your combi oven' on page 8)

#### Contact data

Convotherm Elektrogeräte GmbH Welbilt Talstraße 35 82436 Eglfing Germany	
Reception	
Phone (head office)	(+49) (0) 8847 67 - 0
Fax	(+49) (0) 8847 414
e-mail	info@convotherm.de
Internet	www.convotherm.com www.welbilt.com
Application support	
Hotline	(+49) (0) 8847 67 - 899
e-mail	convotherm.chefshotline@welbilt.com
Sales	
Phone (appliances/accessories)	(+49) (0) 8847 67 - 890
e-mail (appliances/accessories)	convotherm.order@welbilt.com
Phone (spare parts)	(+49) (0) 8847 67 - 821
	(+49) (0) 8847 67 - 822
	(+49) (0) 8847 67 - 827

e-mail (spare parts)	convotherm.spares@welbilt.com	
Customer service		
Technical hotline (office hours)	(+49) (0) 8847 67 - 541	
Technical Hotline (outside office hours)	(+49) (0) 175 405 41 09	
e-mail	convotherm.service@welbilt.com	
Service documents download centre (spare-parts lists, circuit diagrams, Service	www.convotherm.com	

(spare-pa manuals)

# 6.1.2 Servicing schedule

#### Rules for servicing the appliance

The combi oven must be serviced regularly to ensure it can operate safely and reliably. Servicing includes maintenance tasks that can be performed by the user as well as maintenance work that must be carried out by a qualified Service Engineer from an approved customer service office.

## Servicing tasks that the user can perform

What must be serviced?	When?	Parts required
Replacing the hygienic plug-in gasket	If the hygienic plug-in gasket is cracked or greasy	As listed in the spare parts list: 1 hygienic plug-in gasket
Replacing the halogen lamp for the oven light	If the halogen lamp does not come on in any operating mode	As listed in the spare parts list: 1 halogen lamp 12V
Correct operation of core tem- perature probe and sous-vide sensor	Perform a weekly test in boiling water, checking the reading on the temperature display	-

#### Servicing tasks that Customer services must perform

What must be serviced?	How often / When?
General servicing	Annually
Water treatment must be adjusted correctly	If there is a white deposit in the cooking chamber
Boiler descaling	When prompted

# 6.2 Troubleshooting

# 6.2.1 Error codes

#### Errors and required responses

The following table lists the errors that you may be able to resolve yourself. If the combi oven continues to display the error after you have tried to resolve it, please contact customer service. Always contact customer service for help if any error messages appear that are not listed here.

Error no.	Description of error	Required response
E01.x	Low water	Switch on water supply / both water supplies
E02	Temp. electrical area too high	<ul> <li>Clean the fan grille located outside at the bottom of the appliance</li> <li>Clear air intake in base of appliance</li> </ul>
E05	no gas	Open the gas shut-off device and re- start the appliance
E10	Error from water filter	Replace the water treatment cartridge
E34.0	Boiler pump error	Unplug the appliance for approx. 10 seconds then restart
E58.0	Error from cleaning-agent dispensing pump	<ul> <li>Fill canister with the correct cleaning agent and restart the appliance</li> <li>Repeat as necessary until the tubes are filled with cleaning agent</li> </ul>
E59.0	Error from rinse-aid dispensing pump	<ul> <li>Fill canister with rinse aid and restart the appliance</li> <li>Repeat as necessary until the tubes are filled with rinse aid</li> </ul>
E81.0	Cooking mode error	Download cooking profile again
E99	Communication lost	Unplug the appliance for approx. 10 seconds then restart
E99.9	Initialization error	Unplug the appliance for approx. 10 seconds then restart

## 6.2.2 Emergency mode

#### Operating the combi oven in emergency mode

Your combi oven has an emergency mode that lets you continue to use it when it has a fault that cannot be resolved quickly.

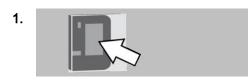
This gives you continued but limited use of the appliance even though it has a fault.

#### Always notify your customer service office however.

#### Requirements

- The appliance is in emergency mode.
- An audible signal is given.
- An error code is shown in the display.

#### Operating the appliance in emergency mode



Confirm the displayed error and start a cooking profile or a cleaning profile that is based on an available operating mode.

#### Limitations

- Cooking times may be longer and uneven cooking may result. So pay particular attention to the cooking operation and the cooked condition of your product.
- Water consumption may increase.
- Fully automatic and semi-automatic oven cleaning may not be possible or only have limited functions available.
- The core temperature probe and the optional sous-vide sensor may not work.
- Only those functions can be selected that will not be impaired by the active fault in question.

#### Functions available in emergency mode

The following table lists the errors under which the appliance can still work, albeit with limitations, in emergency mode when the error cannot be resolved quickly.

Error no.	E B	E S	G B	G S	Functions available in emergency mode	Limitations / Action
E00.0	х	Х	х	х	All functions	Previous fault no longer exists
E01.x	x	x	x	x	<ul> <li>Convection at up to 140 °C</li> <li>Delta-T cooking Convection at up to 140 °C</li> <li>Cook&amp;Hold Convection at up to 140 °C</li> <li>Smoker</li> <li>ecoCooking Convection at up to 140 °C</li> </ul>	<ul> <li>No preheating of boiler</li> <li>Cleaning not possible</li> </ul>
E03.x	X	-	x	-	<ul> <li>Steam at exactly 100 °C</li> <li>Smoker</li> </ul>	<ul> <li>Longer cooking time</li> <li>Uneven cooking re- sults possible</li> <li>Heating element only available for boiler not cooking chamber</li> <li>Cleaning not possible</li> </ul>
E05.1.x E05.3.x	#	#	x	-	<ul><li>Steam at exactly 100 °C</li><li>Smoker</li></ul>	Cleaning not possible

Error no.	E B	E S	G B	G S	Functions available in emergency mode	Limitations / Action
E05.2.x	#	#	X	#	<ul> <li>Convection</li> <li>Delta-T cooking Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	<ul> <li>No preheating of boiler</li> <li>er</li> <li>Cleaning not possible</li> </ul>
E10	х	х	х	х	All functions	-
E21.1	X	-	X	-	<ul> <li>Steam at exactly 100 °C</li> <li>Smoker</li> </ul>	<ul> <li>Longer cooking time</li> <li>Uneven cooking results possible</li> <li>Heating element only available for boiler not cooking chamber</li> <li>Cleaning not possible</li> </ul>
E21.3	Х	Х	х	х	<ul><li>Steam at exactly 100 °C</li><li>Smoker</li></ul>	Cleaning not possible
E22.1.x E22.2.x E22.3.x E22.4.x	x	x	x	x	<ul> <li>All functions, EXCEPT:</li> <li>Delta-T cooking Steam</li> <li>Delta-T cooking Combi-steam</li> <li>Delta-T cooking Convection</li> </ul>	No functions that use the core temperature probe or sous-vide sen- sor when fewer than two measuring points available
E22.5.x	x	x	x	x	<ul> <li>All functions, EXCEPT:</li> <li>Delta-T cooking Steam</li> <li>Delta-T cooking Combi-steam</li> <li>Delta-T cooking Convection</li> </ul>	No functions that use the core temperature probe or sous-vide sen- sor
E23.1 E23.3	X	#	X	#	<ul> <li>Convection</li> <li>Delta-T cooking Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	<ul> <li>No preheating of boil- er</li> <li>Cleaning not possible</li> </ul>
E24.1 E24.3	x	x	X	x	<ul> <li>Convection</li> <li>Delta-T cooking Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	Cleaning not possible
E25.1 E25.3	X	X	х	х	<ul> <li>Convection at up to 140 °C</li> <li>Delta-T cooking Convection at up to 140 °C</li> <li>Cook&amp;Hold Convection at up to 140 °C</li> <li>Smoker</li> <li>ecoCooking Convection at up to 140 °C</li> </ul>	<ul> <li>Increased water consumption through constant cooling of the collector box</li> <li>Cleaning not possible</li> </ul>
E26.1 E26.3	X	#	X	#	<ul> <li>Convection</li> <li>Delta-T cooking Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	<ul> <li>No preheating of boiler</li> <li>er</li> <li>Cleaning not possible</li> </ul>
E27.1 E27.3 E27.4	x	x	x	x	All functions	-
E28.1.x	x	-	#	#	<ul> <li>Steam below 100 °C</li> <li>Delta-T cooking Steam below 100 °C</li> <li>Cook&amp;Hold Steam below 100 °C</li> <li>Manual steaming</li> </ul>	Cleaning not possible

Error no.	E B	E S	G B	G S	Functions available in emergency mode	Limitations / Action
E28.2.1 E28.2.3	Х	#	#	#	<ul> <li>Convection</li> <li>Delta-T cooking Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	Cleaning not possible
E30.1 E30.3	х	х	х	х	<ul><li>All functions, EXCEPT:</li><li>Fully automatic oven cleaning</li></ul>	Only affects the clean- ing process
E33.0	x	#	x	#	<ul> <li>Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	<ul> <li>No preheating of boiler</li> <li>er</li> <li>Cleaning not possible</li> </ul>
E34.0	х	#	x	#	<ul> <li>All functions, EXCEPT:</li> <li>Fully automatic oven cleaning</li> <li>Semi-automatic oven cleaning</li> </ul>	<ul> <li>Boiler not rinsed</li> <li>Affects the cleaning process</li> </ul>
E35.0	х	х	x	X	<ul> <li>All functions, EXCEPT:</li> <li>Crisp&amp;Tasty</li> <li>Fully automatic oven cleaning</li> <li>Semi-automatic oven cleaning</li> </ul>	Affects the cleaning process and Crisp&Tasty
E58.0	Х	Х	х	х	All functions	Error only affects fully automatic oven clean- ing using connected canisters
E59.0	x	x	x	x	All functions	Error only affects fully automatic oven clean- ing using connected canisters
E61.0	х	х	х	х	<ul> <li>All functions, EXCEPT:</li> <li>Fully automatic oven cleaning</li> <li>Semi-automatic oven cleaning</li> </ul>	Only affects the clean- ing process
E62.0	x	x	x	x	<ul> <li>All functions, EXCEPT:</li> <li>Fully automatic oven cleaning</li> <li>Semi-automatic oven cleaning</li> </ul>	Only affects the clean- ing process
E63.0	#	X	#	X	<ul> <li>Convection</li> <li>Delta-T cooking Convection</li> <li>Cook&amp;Hold Convection</li> <li>Smoker</li> <li>Crisp&amp;Tasty</li> <li>ecoCooking Convection</li> </ul>	<ul> <li>No preheating of boiler</li> <li>er</li> <li>Cleaning not possible</li> </ul>
E72.x	х	х	х	Х	All functions	-
E73.1	х	х	х	х	All functions	-
E91.x	х	х	х	х	All functions	-
E92.x	х	х	х	Х	All functions	-
E200.x	х	х	Х	Х	All functions	-

- x Emergency mode available
- Emergency mode unavailable
- # This error message does not exist for this type of appliance and therefore this fault does not restrict the use of the available functions (the restrictions listed in the table only apply to the other appliance types).

# 6.2.3 Problems during use

## Problems with the food being cooked

Problem	Possible cause	Required response
Uneven browning	Suction panel not closed correct- ly	'Releasing and securing the suction panel' on page 97
	Cooking chamber not preheated	Preheat the cooking chamber
	Oven temperature too high	Select a lower oven temperature and extend the cooking time
	Heater has failed completely or part of heater is faulty	Contacting customer service

#### Problems with the appliance

Problem	Possible cause	Required response	
Appliance does not re- spond to any input for 10 - 20 seconds	Software crash	Press ON/OFF for 5 seconds or dis- connect the appliance from the mains supply for 5 seconds	
No longer able to switch the appliance on or off	ON/OFF is blocked for 3 seconds	Try again after 3 seconds.	
Water runs out underneath the appliance when closing the appliance door	Whatever the cause	<b>CAUTION! Contamination hazard</b> Discard any food that has come into contact with this water.	
	Blockage or constriction in the drain pipe or wastewater system	<ul> <li>Check the drain pipe and custom- er's wastewater system and clean</li> </ul>	
	Permanent drain connection on appliances equipped with fully automatic, automatic or semi-au- tomatic oven cleaning	<ul> <li>out if necessary</li> <li>Fit funnel waste trap if necessary</li> </ul>	
	Air vent blocked or covered	Remove obstruction	
	Appliance drain clogged	Clean appliance drain	
For EB appliances: Water is being sprayed in- to the cooking chamber during operation	For EB appliances: Automatic boiler rinsing system has not been run every day	For EB appliances: Emptying and rinsing the boiler	
Water standing in cooking chamber	Oven drain is blocked	Rinse out oven drain	
Steam is escaping from the ventilation port on top of the appliance	Faulty valve in ventilation port	WARNING Risk of scalding from hot steam and vapour Contacting customer service	

## Problems with cleaning

Problem	Possible cause	Required response
Black marks in the cooking chamber	Incorrect cleaning agent	<ul> <li>Use ConvoClean forte for fully automatic oven cleaning using connected canisters</li> <li>Use ConvoClean forte S for fully automatic oven cleaning using single-measure dis- pensing</li> <li>Use ConvoClean forte or ConvoClean new for semi-au- tomatic oven cleaning</li> </ul>
	Water too hard	Adjust water hardness; see 'Technical data' in the installa- tion manual
Poor cleaning result	Incorrect soiling level set	Select a higher cleaning level
	Incorrect cleaning agent used	<ul> <li>Use ConvoClean forte or ConvoClean new for fully au- tomatic oven cleaning using connected canisters</li> <li>Use ConvoClean forte S or ConvoClean new S for fully automatic oven cleaning using single-measure dispensing</li> <li>Use ConvoClean forte or ConvoClean new for semi-au- tomatic oven cleaning</li> </ul>

# 6.3 Servicing tasks

# 6.3.1 A Safe working when servicing the appliance

#### Your safety and the safety of your staff

Before your personnel start working with the combi oven for the first time, familiarize yourself with the information contained in the chapter 'For your safety' on page 20 and make relevant safety arrangements.

Instruct your personnel to learn the safe-working rules given in this section before starting work, and to follow them strictly.

Instruct your personnel to familiarize themselves with the hazard warnings listed in this section and in further instructions below, and instil in them the importance of taking the specified precautions.

#### Personal protective equipment for your personnel

Instruct your personnel to wear the correct personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

#### Basic rules for safe operation

If it is known or evident that the combi oven has been moved after installation without authorization (whether intentionally or unintentionally), the appliance must not be put back into service until all the following requirements have been met:

- The appliance and fittings or accessories being used show no signs of damage.
- The installed electrical power cables, water supply pipes and pipes for wastewater and cleaning
  products show no signs of damage, are fixed securely, are not leaking from any point and appear
  safe and in working order on visual inspection.
- The 'Requirements' relating to the operating condition of the combi oven' on page 21 are met.
- The 'Requirements relating to the operating environment of the combi oven' on page 21 are met.
- All warning signs are in their designated position.

#### On gas appliances only:

 A gas service engineer has leak-tested all the gas components in the combi oven and confirmed that all connection and supply points for these gas components, inside and outside the appliance, are gastight.

#### Rules for replacing appliance parts

Always use only original spare parts from the manufacturer when replacing appliance parts to guarantee continued appliance reliability.

#### Live parts

### 

#### Risk of electric shock from live parts

Touching live parts under the cover and behind the operating panel can result in electric shock.

- ▷ Make sure that the cover and operating panel are fitted.
- Make sure that any servicing work carried out under the covers, behind the operating panel or on the power cord is performed solely by a qualified electrician from an authorized service company.

#### Hot surfaces

## 

#### Risk of burns from high temperatures on interior and exterior parts of the appliance

You may get burnt if you touch any of the interior parts of the cooking chamber, the inside of the appliance door or any parts that are or were inside the oven during cooking mode. In addition, touching the air vent and exhaust outlet can result in burns.

- ▷ Wait until the cooking chamber has cooled to below 60 °C before starting servicing tasks.
- Wear personal protective equipment.

#### Sharp-edged sheet-metal parts

## 

#### Risk of cuts from sharp-edged sheet-metal parts

Working with or behind sharp-edged sheet-metal parts may result in cuts to hands.

- Exercise caution.
- ▷ Wear personal protective equipment.

# 6.3.2 Replacing the hygienic plug-in gasket

#### A For your safety when performing servicing work

Before starting servicing work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when servicing the appliance' on page 114, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

•	Opening and closing the appliance door safely	52
•	Removing and fitting the hygienic plug-in gasket	99

#### Spare parts contents

Spare part required as listed in the spare parts list:

• 1 hygienic plug-in gasket

#### Requirements

Check that the following requirements have been met:

- The combi oven has cooled down to < 60 °C after its last use.
- The appliance door is open.
- The newly supplied gasket has been checked for damage and is intact.

#### Replacing the hygienic plug-in gasket

To remove the old hygienic plug-in gasket and to fit the new hygienic plug-in gasket, follow the instructions given in 'Removing and fitting the hygienic plug-in gasket' on page 99.

# 6.3.3 Replacing the halogen lamp for the oven light

#### A For your safety when performing servicing work

Before starting servicing work, it is essential that you familiarize yourself with the rules and hazard warnings specified in 'Safe working when servicing the appliance' on page 114, and follow the instructions given there.

#### Prior knowledge required

You need to know these operations:

• Opening and closing the appliance door safely

52

#### Spare parts contents

Spare part required as listed in the spare parts list:

1 halogen lamp 12V

#### Materials required

You will need the following materials:

Socket wrench, size 8

#### Handling the halogen lamp

Always wear clean gloves or use a cloth to handle the working halogen lamp. Never touch the glass bulb of new or reusable halogen lamps with bare fingers.

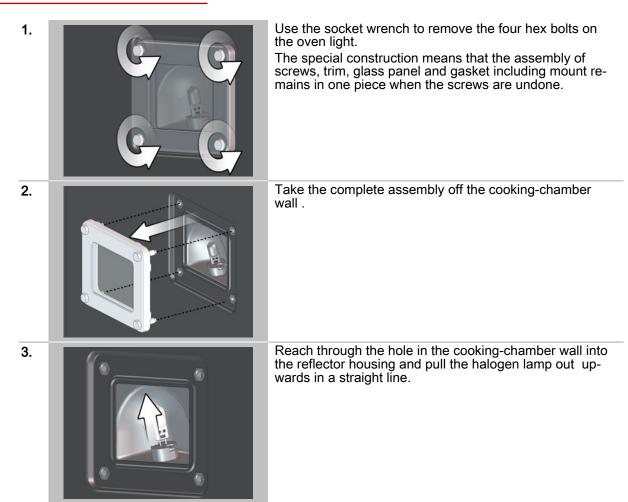
If it is not possible to remove the halogen lamp intact e.g. the contact pins are left behind, contact a service engineer immediately.

#### Requirements

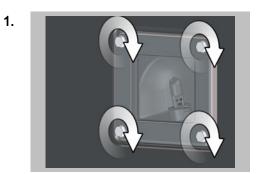
Check that the following requirements have been met:

- The combi oven has been disconnected from the power supply and protective measures taken to ensure the power cannot be switched on again.
- The cooking chamber has cooled down to a temperature of < 60 °C after its last use.
- The loading trolley has been removed from the cooking chamber.
- The halogen lamp has cooled down.
- The new halogen lamp has been checked for damage and is intact.

#### Removing the halogen lamp



#### Fitting the halogen lamp



- To fit the halogen lamp, follow the steps in the reverse order that you performed when removing it. Do not overtighten the screws when refitting, because this may break the moisture-tight seal for the reflector housing. (Overtightening the screws may crack the glass.)
  When you have finished the job, remove all objects
- When you have finished the job, remove all objects from the cooking chamber and wipe down or rinse out the cooking chamber.



Combi oven Convotherm 4 floor-standing units

Serial no. Item no. Order no.

Additional technical documentation can be found in the download center at : www.convotherm.com



Welbilt offers fully-integrated kitchen systems and our products are backed by KitchenCare<sup>®</sup> aftermarket parts and service. Welbilt's portfolio of award-winning brands includes Cleveland<sup>™</sup>, Convotherm<sup>®</sup>, Delfield<sup>®</sup>, fitkitchen<sup>SM</sup>, Frymaster<sup>®</sup>, Garland<sup>®</sup>, Kolpak<sup>®</sup>, Lincoln<sup>™</sup>, Manitowoc<sup>®</sup>, Merco<sup>®</sup>, Merrychef<sup>®</sup> and Multiplex<sup>®</sup>.

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