WMF

WMF Peak 50

Operating Instructions

Table of contents

1 Legal information

Publisher/Manufacturer

WMF GmbH, WMF-Platz 1, 73312 Geislingen/Steige, Germany

Concept and editing

WMF GmbH, WMF-Platz 1, 73312 Geislingen/Steige, Germany

Copyright©

WMF GmbH, WMF-Platz 1, 73312 Geislingen/Steige, Germany

This document is protected by copyright. All rights reserved. Reproduction, distribution, transmission by electronic systems or translation into other languages is not permitted without the written consent of the manufacturer. This applies to the entire document as well as to individual sections thereof.

The content of this document is based on the most current data available at the time of printing. The manufacturer reserves the right to make changes at any time without prior notice.

All figures, illustrations and display notifications in this manual are examples only. Due to the wide range of options, the machine may differ from the devices shown here.

The manufacturer is liable solely for the contents of the original document.

2 General information

This technical documentation contains important instructions for handling the machine. The technical documentation is an integral part of the product and must be kept in the immediate vicinity of the machine and accessible to staff at all times. Read the technical documentation carefully before working with the machine!

Some of the illustrations in these instructions have been simplified for purposes of clearer presentation. The simplified illustrations may differ slightly from the scale and design of your original machine.

2.1 Symbols used

This chapter contains information on the display of safety notes in this document.

2.1.1 Display of safety notes

⚠ **DANGER**

Immediately dangerous situation that could result in death or serious injury.

The measures described for preventing this danger must be strictly observed.

⚠ **WARNING**

Generally dangerous situation that could result in serious injury.

The measures described for preventing this danger must be strictly observed.

⚠ **CAUTION**

Generally dangerous situation that could result in minor injury.

The measures described for preventing this danger must be strictly observed.

NOTICE

There is a situation that could result in property damage.

The measures described for preventing this danger must be strictly observed.

2.1.2 Warning signs used

Symbols for dangers and instructions can appear both in the operating instructions and on the machine.

Character	Type of danger	Character	Type of danger
	Warning of hot fluids		Warning of hot surface
	Warning of hot steam		Warning of dangerous electrical voltage

Charac-ter	Type of danger	Charac-ter	Type of danger
	Warning of poisonous substances		Warning of hand injuries

2.1.3 Instruction signs used

Charac-ter	Meaning	Charac-ter	Meaning
	Read documentation!		Wear safety gloves!
	Wear safety goggles!		Wash hands!
	Pull out power plug!		

2.2 Liability

The manufacturer accepts no liability for damage caused by:

- Non-compliance with the operating instructions
- Non-intended use or misuse
- Use by unqualified staff
- Unauthorized modifications
- Technical modifications
- Use of non-approved spare parts

The obligations agreed upon in the delivery contract, the General Terms and Conditions and the statutory regulations valid at the time of contract conclusion apply.

2.3 Warranty claims

If the information in the technical documentation is not observed, warranty claims can become invalid.

No liability is accepted:

- For parts which are subject to natural wear. This includes the milk container, the milk-carrying parts (if a milk system is present), seals, mixer, brewing unit and the surfaces of the stainless steel bases.
- For defects as a result of climatic influences, chemical, physical, electrochemical or electrical influences.
- If a water filter is not used and defects occur even though the local water hardness necessitates the use of a water filter.
- For defects caused by non-compliance with the regulations on transport, installation and commissioning, operation, cleaning and maintenance of the machine / device (e.g. operating instructions and maintenance instructions).
- For defects caused by the use of non-manufacturer spare parts or by faulty or negligent assembly or handling by the operator or third parties.
- For defects caused by improper modifications or repair work carried out by the operator or third parties without the consent of the manufacturer.

    ▪   For defects arising from inappropriate or improper use.

2.4 Spare parts and customer service

Information on accessories and spare parts can be found in the spare parts catalog in the **WMF CoffeeConnect**.

For service requests and technical support, please contact the service partner in your country.

You can find a list of all responsible service partners worldwide at **wmf-coffeemachines.com**.

WMF-Service can be reached via a central address if the service center for a particular location is not known.

WMF GmbH

WMF-Platz 1

73312 Geislingen

Germany

Service center

Phone: +49 7331 257 257

Email: info@wmf-professional.com

3 Safety

Safety when handling the electrical device is of the utmost importance. This chapter contains all the information essential for ensuring safe handling and preventing injury to persons and damage to property.

3.1 Proper use

The machine is designed to dispense coffee beverages, hot water, milk beverages and powder beverages (toppings & chocolate) in various versions and combinations in cups, mugs or glasses.

The bean hopper may only be filled with coffee beans, the powder container only with choco powder, the milk container only with milk and the manual inlet only with ground coffee.

The machine is intended for commercial use in hotels, restaurants or similar places. The machine may be installed at self-service locations if a responsible person is on site during operation.

The machine may be used in stores, offices or similar working environments, hotels, motels and bed and breakfasts and may be operated by non-professionals or customers.

Use for this purpose is subject to these operating instructions. Any other use or use beyond this is considered improper use. The manufacturer does not assume liability for any resulting damage.

The machine can be used by children from 8 years of age and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they are supervised or have been given instruction concerning use of the machine in a safe way and understand the risks involved. Children must not be allowed to play with the machine. Cleaning and user maintenance must not be performed by children without supervision. Cleaning and user maintenance may only be performed by persons who have the knowledge and practical experience with the device, particularly with regard to safety and hygiene.

Use is also subject to the **General Terms and Conditions** of the manufacturer. Any other use or use beyond this is considered improper use. The manufacturer does not assume liability for any resulting damage.

3.2 Foreseeable misuse

Any use of the machine that goes beyond the intended use or any other use is considered misuse and can lead to hazardous situations. Improper handling of the machine can lead to injuries.

☞ Read the operating instructions carefully before use.

☞ Only allow qualified service staff access to the service area of the machine and optional accessories.

☞ Only have cleaning and user maintenance done by persons who have the knowledge and practical experience with the machine, particularly with regard to safety and hygiene.

☞ Have trained persons supervise the machine in self-service mode and in regular operation so that they are available to answer questions from the user and ensure compliance with the cleaning and maintenance measures.

☞ Only use sufficiently cooled milk.

☞ Only fill the bean hoppers with coffee beans.

☞ Only fill the powder container with automatic coffee machine powder.

☞ Only fill the milk container with milk or milk substitute products.

☞ Only ground coffee should be poured into the manual inlet, with the exception of a cleaning tablet during cleaning.

3.3 Obligations of the operator

The operator must ensure regular maintenance and inspection of the safety equipment by a service partner of the manufacturer, its representative or other authorized persons. Material defects must be reported to the manufacturer in writing within 30 days. For hidden defects, the deadline is 12 months from the time of installation (work report, handover protocol), but no longer than 18 months after leaving the factory.

Damaged or defective safety-related parts such as safety valves, safety thermostats, boilers, etc. must be replaced and may not under any circumstances be repaired.

The operator is responsible for complying with the maintenance instructions.

3.4 Staff requirements

> ⚠ **WARNING**
>
> **Risk of injury due to insufficient qualification!**
>
> Improper handling can lead to considerable personal injury and property damage.
>
> All work may only be carried out by qualified staff.

Only persons who can be expected to carry out their work reliably are permitted as staff. Persons whose ability to react is impaired, for instance by drugs, alcohol or medication, are not allowed to work on the machine.

When selecting staff, the age and occupation-specific regulations applicable at the place of use must be observed.

The following qualifications are specified in the operating instructions for various areas of activity:

Instructed person

Has been instructed by the operator about the assigned tasks and the possible dangers of improper behavior.

Specialist staff

Is able to carry out the work assigned to him/her and independently identify and avoid possible dangers based on his/her professional training, knowledge and experience as well as knowledge of the relevant regulations.

Service staff

Is a qualified specialist trained by the manufacturer or the operator specifically for service tasks.

Qualified electrician

Is able to carry out work on electrical equipment and independently identify and avoid possible dangers based on his/her professional training, knowledge and experience as well as knowledge of the relevant regulations. The qualified electrician is trained for the specific location where he/she is working and knows the relevant standards and regulations.

3.5 Residual risks

Maximum safety is one of the most important product features for the manufacturer. The effectiveness of the safety equipment is only guaranteed if the following chapter on preventing of injuries and health hazards is observed.

These safety notes can be requested from the manufacturer or downloaded directly from the website or the Media Pool.

3.5.1 Risk of electrocution!

> ⚠ **DANGER**
>
> **Danger to life from electrocution!**
>
> Improper handling of electrical devices can result in electrocution. There is danger to life.
> - Only have work on electrical equipment carried out by a qualified electrician.
> - Connect the device to a fused circuit.
> - Route the connection through a ground fault circuit interrupter.
> - Observe the relevant guidelines on low voltage and/or the national or local safety regulations and directives.
> - Earth the connection in accordance with regulations and secure it against electric shock.
> - Make sure that the supply voltage matches the specifications on the serial plate of the device.
> - Never touch live parts.
> - Always switch off the main switch or disconnect the device from the power supply before carrying out maintenance work.
> - Make sure that the device can be disconnected from the power supply with all poles. Disconnected connections must be visible at all times from the location of the device and the disconnection must be secured by a locking mechanism.
> - Only have connection cables replaced by qualified service staff.

3.5.2 Danger due to cleaning products

Read the information on the packaging of the cleaning product carefully before using it. If not available, the safety data sheet can be requested from the sales partner (see cleaning product packaging).

⚠ WARNING

Risk of poisoning from cleaning products!

There is a risk of poisoning if cleaning products are ingested.

- Only use cleaning products recommended by the manufacturer.
- Read the information on the packaging and the safety data sheet carefully before using the cleaning product. If no safety data sheet is available, request one from the sales partner.
- Keep cleaning products away from children and unauthorized persons.
- Do not touch the cleaning products with your bare hands and do not ingest them.
- Never mix cleaning products with other chemicals.
- Only use cleaning and descaling products for their intended purpose (see label).
- Do not eat or drink while using cleaning products.
- Ensure good ventilation when using cleaning products.
- Wear protective gloves and protective goggles when using cleaning products.
- Wash your hands thoroughly immediately after using cleaning products.

Emergency information

Ask the cleaning product manufacturer (see cleaning product label) for the telephone number of the emergency information center of the Toxicological Information Center.

3.5.3 Danger due to allergies

⚠ CAUTION

Health risk due to additives!

Beverages with additives or residues can trigger allergies.

- In self-service mode: Observe the information plate attached to the machine. The information plate contains information about any additives that cause allergies.
- In user mode: Inform staff that any additives used may cause allergies.

3.5.4 Danger due to bacteria

⚠ CAUTION

Health problems due to contaminated water!

Improper handling of water can lead to health problems.

- Make sure that the water is free of dirt and bacteria.
- Do not connect the machine to pure osmosis or other aggressive types of water.
- Make sure that the carbonate hardness is between 4 and 6 °dKH or 8 and 12 °fKH.
- Make sure that the total hardness is higher than the carbonate hardness.
- Do not exceed the maximum chlorine content of 50 mg per liter.
- Make sure that the pH value is between 6.5 and 7 (pH neutral).
- Machines with drinking water tank (internal and external): Fill the drinking water tank with fresh water every day and rinse it thoroughly before filling.

> ⚠️ **CAUTION**
>
> **Health problems due to contaminated coffee!**
>
> Improper handling of coffee can lead to health problems.
>
> - Check the packaging for damage before opening.
> - Do not fill with more coffee beans than are needed in one day.
> - Close the bean hopper lid immediately after filling.
> - Store coffee in a dry, cold and dark place.
> - Store coffee separately from cleaning products.
> - Use the oldest products first ("first in – first out").
> - Use coffee before the expiration date is exceeded.
> - Always close opened packages tightly so that the contents remain fresh and are protected from contamination.

> ⚠️ **CAUTION**
>
> **Health problems due to contaminated/unsuitable milk!**
>
> Improper handling of milk can lead to health problems.
>
> - Do not use raw milk.
> - Only use pasteurized milk or milk that has been heated using a UHT process.
> - Only use homogenized milk.
> - Used pre-cooled milk with a temperature between 3 °C (37.4 °F) and 5 °C (41 °F).
> - Use milk straight from the original package.
> - Check the packaging for damage before opening.
> - Use the oldest products first ("first in – first out").
> - Wear protective gloves when working with milk.
> - Always close opened packages tightly so that the contents remain fresh and are protected from contamination.
> - Use milk before the expiration date is exceeded.
> - Store milk in a dry and dark location with a maximum temperature of 7 °C (44.6 °F).
> - Store milk separately from cleaning products.
> - For machines with internal milk system and cooling unit: Do not fill with more milk than is needed in one day.
> - Never refill milk. Always clean the container thoroughly before filling.
> - Close the milk container cover and cooling unit (internal and external) immediately after filling.

⚠ CAUTION

Health problems due to contaminated automatic coffee machine powder!

Improper handling of automatic coffee machine powder can lead to health problems.

- Check the packaging for damage before opening.
- Do not fill with more automatic coffee machine powder than is needed in one day.
- Close the powder container cover immediately after filling.
- Store automatic coffee machine powder in a dry, cold and dark place.
- Store automatic coffee machine powder separately from cleaning products.
- Use the oldest products first ("first in – first out").
- Use automatic coffee machine powder before the expiration date is exceeded.
- Always close opened packages tightly so that the contents remain fresh and are protected from contamination.

3.5.5 Danger due to heat

⚠ CAUTION

Risk of scalding due to hot fluid!

There is a risk of scalding in the dispensing area for beverages, hot water and steam.

- Never reach under the dispensing points during dispensing or cleaning.
- Always lock the control unit before cleaning to prevent accidental input.

⚠ CAUTION

Hot surface!

The dispensing points and the brewing unit can be hot.

- Never touch hot machine parts.
- Only touch the beverage outlet at the designated places.
- Only remove the brewing unit when the machine has cooled down.

3.5.6 Danger due to mechanics

⚠ CAUTION

Risk of crushing due to moving components!

The beverage outlet and user panel can be moved manually. The grinder and the brewing unit move during operation. There is a risk of crushing when handling moving components.

- Only touch the beverage outlet using the provided handles.
- Always push the user panel up or down with both hands.
- Never reach into the bean hopper or the opening of the brewing unit when the machine is switched on.

⚠ CAUTION

Risk of injury from hair being drawn in

Very long hair could get stuck in the grinder head and get pulled into the machine.

- Always wear a hair net when exposing the grinder head.

3.5.7 Danger of property damage

> **NOTICE**
>
> **Property damage due to improper handling of the machine!**
>
> Improper handling of the machine can lead to property damage or contamination.
>
> - If the water has a carbonate hardness of more than 6 °dKH, install a limescale filter. Damage may otherwise occur due to limescale.
> - After long periods of standstill (e.g. company vacations), clean the machine before using it again.
> - Protect the machine from the effects of the weather (frost, moisture, etc.).
> - In the event of malfunctions, observe the information in the operating instructions and call in a qualified service technician if necessary.
> - Only use original spare parts.
> - Immediately report externally visible damage and leaks to the service partner and have the affected parts replaced or repaired.
> - Do not spray the machine with water or clean it with a steam cleaner.
> - Do not place the machine on a surface where water jets could be used.
> - When using caramelized coffee (flavored coffee), clean the brewing unit twice a day.
> - Only fill the bean hopper with coffee beans, the powder containers only with automatic coffee machine powder, the milk container only with milk and the manual inlet only with ground coffee (or cleaning tablet during cleaning).
> - Never use freeze-dried coffee. This will clog the brewing unit.
> - If the machine and/or optional accessories are transported at temperatures below 10 °C, store the machine and/or optional accessories at room temperature for three hours before connecting the machine and/or optional accessories to the power supply and switching them on. Otherwise there is a risk of short circuits or damage to electrical components due to condensation.
> - Always use the new hose set supplied with the machine (drinking/waste water hose). Never use old hose sets.

4 Technical data

This chapter contains detailed information on the technical specifications and provides an overview of the most important features, for instance performance and connection values.

4.1 Types of beverages and output

Depending on the machine variant and options, the following beverages can be prepared:

Max. beverage output per hour	
Espresso 35 – 60 ml	Approx. 105 cups
Coffee 120 ml	Approx. 75 cups

Available beverages	Standard	Option
Espresso	x	
Coffee	x	
Coffee/Café crème	x	
Mug (250 ml)^{AW}	x	
Pot (500 ml)^{AW}	x	
Americano$^{AC, AW}$	x	
Cold americano$^{**, **, AC, AW}$		x
Latte (milk coffee light/dark)$^{*, **}$		x
Cappuccino$^{*, **}$		x
Latte macchiato$^{*, **}$		x
Espresso macchiato$^{*, **}$		x
Chociatto***		x
Hot chocolate***		x
Flat white*		x
Hot milk*		x
Hot milk foam*		x
Hot water / Hot water external		x
Powder beverages/Instant beverages		x
Liquor/Coffee		-

Recommended machine equipment:

*	With fresh milk	**	with fresh milk or topping (milk powder)
***	With choco	AC	Brewing accelerator
AW	Additional water		

4.2 Machine data

Pressure	Steam boiler	Hot water boiler
Rated pressure	0.5 Mpa (725 psi)	1.6 MPa (232 psi)

Capacities	
Water tank volume	Approx. 4 l
Coffee bean hopper capacity	Approx. 550 g; with optional extension approx. 1100 g*
Powder container capacity	Approx. 450 g; with extension approx. 1250 g**
Grounds container capacity	Approx. 30 coffee cakes

* The filling quantity depends on the coffee bean size.

** Only with optional powder container. The filling quantity depends on the powder used.

Lighting
LED class 1

Degree of protection
IP X0

External dimensions	
Machine width	325 mm
Height including display/bean hopper standard	473 mm
Height including hopper extension	555 mm
Depth	571 mm

Weight	
Empty weight	24-28 kg (depending on the machine configuration)

Noise level	
Continuous sound pressure level	< 70 dB(A)*

* The A-weighted sound pressure level (slow) and Lpa (pulses) at the workplace of the operator is below 70 dB(A) in every operating mode.

4.3 Power supply connection at the building

The machine can be operated both on a 50 Hz power supply and on a 60 Hz power supply.

Connection values	
Power supply	1L, N, PE
Mains voltage	220 – 240 V
Power frequency	50/60 Hz
Power	1900 – 2300 W
Fuse protection at the building	10 – 13 A[*]
Connecting cable, conductor cross-section	$3 \times 1 \ mm^2$

* The house fuse must not exceed 32 A.

4.4 Modem data

The machine can be equipped with a modem for WLAN and WWAN.

Radio standard	Frequency bands	Max. transmitting power
LTE FDD	B1, B3, B5, B7, B8, B20	23 dBm +/-2 dB
WCDMA	B1, B5, B8	24 dBm +1/-3 dB
GSM	B3, B8	33 dBm +/-2 dB

WWAN (mobile communications) is switched on when the machine is delivered.

Radio standard	Frequency bands	Max. transmitting power
WLAN	2.4 GHz	20 dBm

WLAN is switched off when the machine is delivered.

The power status of both WLAN and WWAN can be changed by service technicians with advanced permissions in the service menu.

4.5 Water connection values

The machine is supplied with a water tank as standard. However, it can optionally be equipped with a fixed water connection. In this case, the following connection values apply:

Pressure and temperature	
Water pressure	Minimum 0.2 MPa (29.01 psi)
	Maximum 0.6 MPa (87.02 psi)
Water input temperature	Maximum 35 °C (95 °F)

Water quality	
Maximum chlorine content	Observe the local regulations on the maximum permitted chlorine content.
Carbonate hardness (German)	Minimum 4 °dKH
	Maximum 5 °dKH (If the carbonate hardness is higher, a water filter must be installed upstream.)
Total hardness	> Carbonate hardness

4.6 Ambient conditions

The following climatic conditions apply to the location:

Conditions at the site	
Ambient temperature	Minimum +5 °C (41 °F)
	Maximum +35 °C (95 °F)
Relative humidity	Maximum 80 %rF
Height above sea level	Maximum < 2000 m (6562 ft)

The machine or device is designed exclusively for indoor use. The machine or device must not be used outdoors and must never be exposed to weather conditions (rain, snow, frost).

5 Compliance information

This chapter contains information on the conformity of the electrical device with applicable standards, directives and regulations.

5.1 Manufacturer address

Manufacturer	Documentation manager
WMF GmbH	WMF GmbH
WMF-Platz 1	Director of R&D GBU PCM
73312 Geislingen/Steige	WMF-Platz 1
Germany	73312 Geislingen/Steige
+49 7331 257 257	Germany
info@wmf-professional.com	
wmf-coffeemachines.com	

5.2 Compliance with laws and directives

The machine or device fulfill the requirements of the Foods, Consumer Goods and Feedstuffs Code (LFGB), the Consumer Goods Ordinance (BedGgstV), Regulation (EU) No.10/2011 as well as Regulation (EU) No.1935/2004 in their most current versions.

The materials and resources used comply with the Consumer Goods Ordinance (BedGgstV) as well as Regulation (EU) No.10/2011.

The relevant national requirements for countries outside of the EU apply.

If used for its intended purpose, the machine or device does not pose a risk to health or other unacceptable risks.

We ensure and guarantee compliance with the traceability requirements set out in Regulation (EC) No. 1935/2004 as well as manufacture according to good manufacturing practice as set out in Regulation (EC) No. 2023/2006.

Applied standards

The underlying standards applied can be found in the declaration of conformity supplied with the machine.

6 Product description

This chapter provides an overview of the most important components, features, functions and equipment variants. Knowledge of the product functionality is essential for safe and optimal operation.

6.1 Machine overview
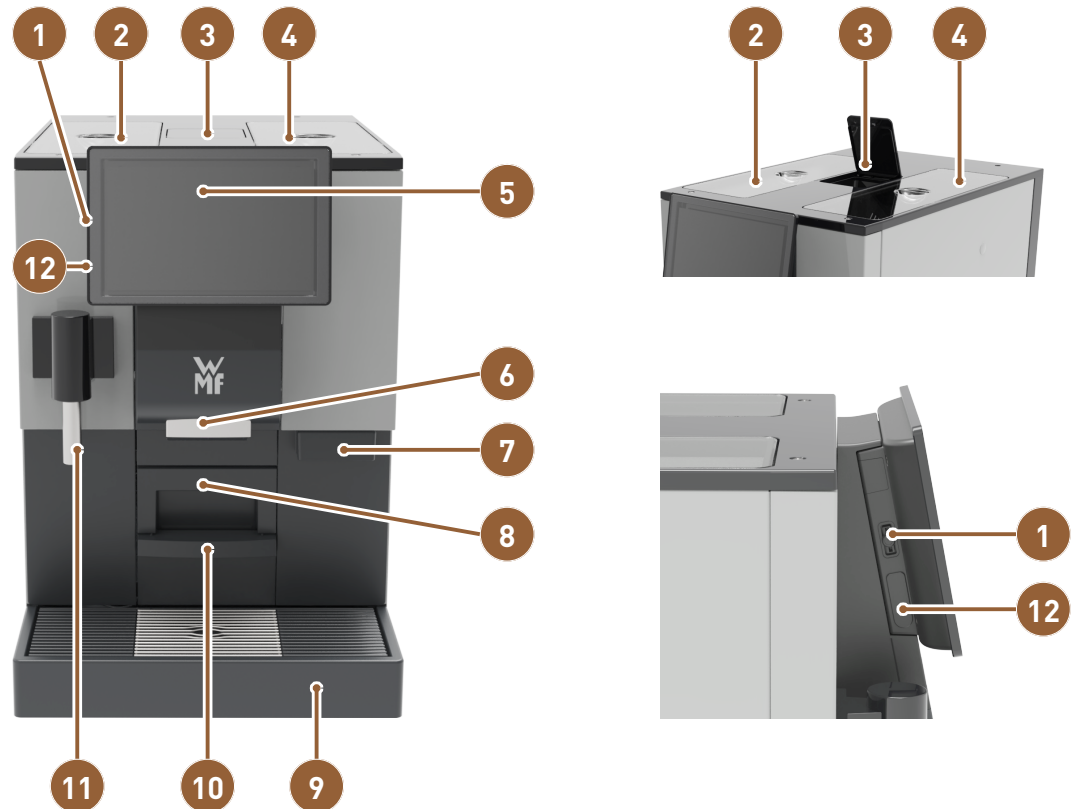
Fig. 1: Peak 50 machine overview

1	On/Off press switch	**2**	Bean hoppers
3	Manual inlet/Tablet inlet	**4**	Second bean hopper or powder container (for example, choco, topping or optional double powder container)
5	Touch display for beverage selection and settings	**6**	Beverage outlet (coffee, milk and choco)
7	Water tank	**8**	Fold-out cup grid
9	Removable drip tray with drip grid	**10**	Pull-out grounds container
11	Hot water outlet	**12**	USB port

Display overview
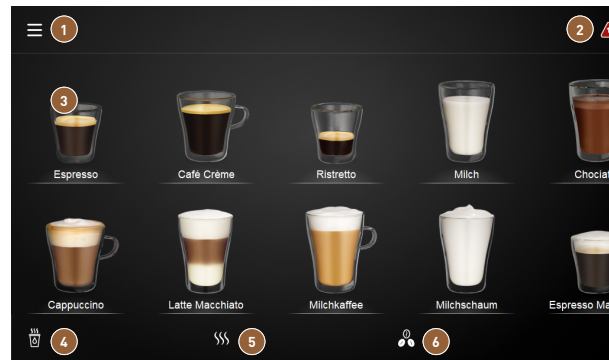
Fig. 2: Peak 50 display overview

1	Menu button (opens the main menu)	**2**	Symbol and button for notifications
3	Beverage button	**4**	Button for hot water dispensing
5	Button for warm rinsing	**6**	Barista button

6.2 Bean hopper and powder container
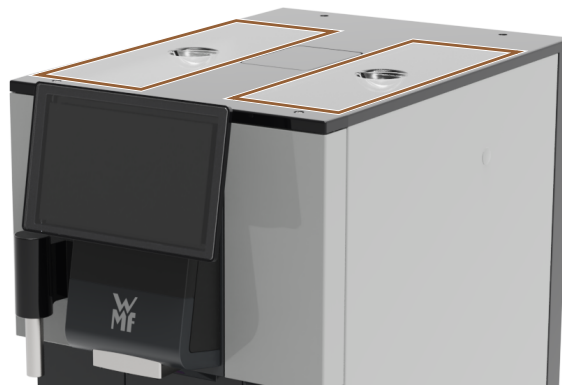
Fig. 3: Bean hopper and powder container

The bean hopper is located inside on the left side of the machine. The powder container is located on the right side of the machine. Both containers can be opened from above.

The containers can be removed from the machine from above.

Choco and/or topping powder can be used with a powder system. The machine has a mixing cup in which coffee machine powder and water are mixed before beverage dispensing.

The powder system can be designed as a double powder system as an option.

6.3 Manual inlet

The manual inlet is located in the center of the top of the machine.

Fig. 4: Manual inlet open

Ground coffee (e.g. decaffeinated coffee) can be added through the manual inlet. The ground coffee is processed directly by the machine. It does not go into the bean hopper; it goes directly into the machine through a separate opening.

The manual inlet is also used to insert cleaning tablets.

6.4 Hot water outlet

Fig. 5: Hot water outlet

The machine is equipped with a separate hot water outlet by default.

The hot water outlet is mounted to the left of the beverage outlet.

6.5 Cup grid
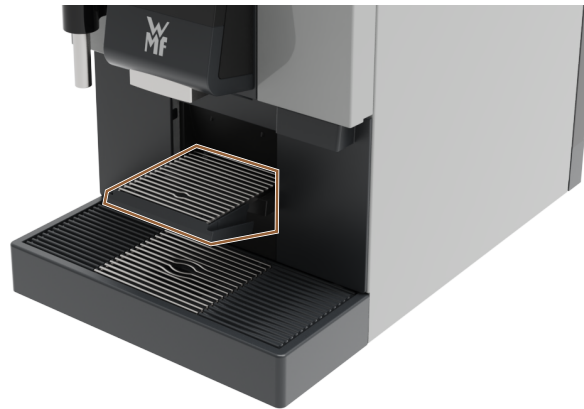
Fig. 6: Cup grid folded out

The machine has a fold-out cup grid. This makes it possible to reduce the distance to the beverage outlet for small cups.

The clearance height with the cup grid extended is a maximum of 99 mm (3.90").

The clearance height with the cup grid retracted is a maximum of 174 mm (6.85").

6.6 Drip tray
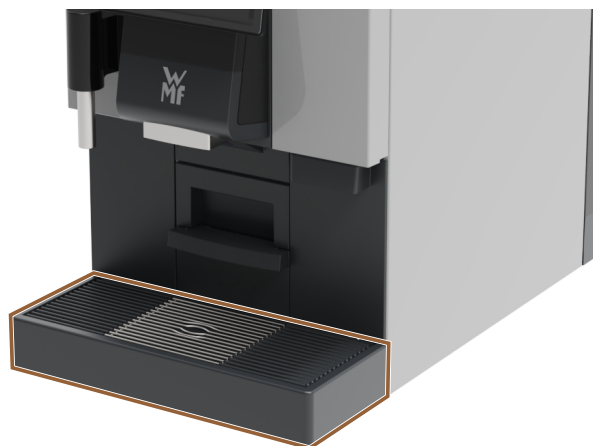
Fig. 7: Drip tray

The drip tray collects spilled beverages, drips and cleaning water. The drip tray is equipped with a sensor that signals when the drip tray needs to be emptied. The drip tray sensor also detects whether the drip tray is inserted.

The drip tray sensor is located on the right under the drip tray.

The drip tray is available in the following versions:

▪   Without opening for the waste water outlet

▪   With opening for the waste water outlet (equipment variants that can be retrofitted)

During installation, the drip tray must be connected to a waste water hose, which is either fed into an external waste water tank or connected directly to the waste water connection.**With opening for the waste water outlet**:

6.7 Grounds container

Fig. 8: Grounds container open

The coffee cakes are collected in the grounds container.

The grounds container can be removed from the front of the machine and emptied.

6.8 On/Off press switch

Fig. 9: Switch position

The on/off press switch is on the left side of the display.

To switch on, briefly press the on/off press switch. To switch off, briefly press the on/off press switch again.

6.9 Retrofittable equipment variants

All equipment variants that can be retrofitted to the machine are described below.

6.9.1 Under-counter grounds disposal

The coffee machine can be equipped with an under-counter grounds disposal.

The grounds container and the machine base have an opening that continues into the counter. The coffee grounds are collected in a large container under the counter.

An **under-counter grounds disposal** unit increases the capacity for the ejected coffee cakes.

6.9.2 Mains water supply

With a retrofitting set, the machine can be connected to a mains water supply for drinking water and waste water.

> **NOTICE**
>
> With a mains water supply, the water tank must only be removed if the coffee machine is switched off.

7 Transport

This chapter contains information on safe and correct transport, e.g. when moving or for service work.

7.1 Scope of delivery of accessories

Coffee outlet, milk outlet, choco outlet, milk lance

Count	Article no.	Designation	Product variant
1 piece	33.4055.0000	Coffee outlet lid	All
1 piece	33.4054.8000	Double cup coffee outlet	All
1 piece	33.4054.0000	Choco mixer outlet (hose)	Powder container
1 piece	33.2914.9000	Milk lance	Basic Milk
1 piece	33.4136.8000	Brush for cleaning milk lance	Basic Milk

Coffee grounds container

Count	Article no.	Designation	Product variant
1 piece	33.2915.2000	Grounds container	All
1 piece	33.2916.2000	Grounds container (grounds through counter)	Counter grounds disposal
1 piece	33.2633.9000	Grounds container slider part	Counter grounds disposal

Mains water supply, drain

Count	Article no.	Designation	Product variant
1 piece	03.1398.6001	Fixed water set	Fixed water
2 meters (6 ft)	33.0048.6200	Drain hose	Fixed water

Accessories, tools

Count	Article no.	Designation	Product variant
1 meters	33.0048.4100	Milk hose	Basic Milk
1 piece	33.4089.5000	Milk connector	Basic Milk
1 piece	33.4073.5000	Click & Clean hose adapter	Basic Milk
1 piece	33.4089.7100	Suction chamber green	Basic Milk
1 piece	33.4089.7000	Suction chamber orange	Basic Milk
1 piece	33.4054.1000	Foamer	Basic Milk
1 piece	33.7006.5190	O-ring (friction piston) 16 g	16 g brewing unit
1 piece	33.7010.1509	O-ring (friction piston) 24 g	24 g brewing unit
1 piece	33.7007.1261	Multi-tool	All

Bean hopper, product container

Count	Article no.	Designation	Product variant
1 piece	33.4051.0000	Lid for bean hopper	All
1 piece	33.4051.0000	Lid for powder container	Choco
1 piece	33.2916.5000	Powder container without lid	All

Brewing unit

Count	Article no.	Designation	Product variant
1 piece	33.2893.0399	Brewing unit 16 g	16 g brewing unit
1 piece		Brewing unit 24 g	24 g brewing unit
1 piece	33.0394.4100	O-ring (water inlet)	All
1 piece	33.0398.4000	O-ring (coffee outlet)	All

Drip tray

Count	Article no.	Designation	Product variant
1 piece	33.4051.1200	Drip tray	All

Water tank

Count	Article no.	Designation	Product variant
1 piece	33.4057.9000	Water tank	All
1 piece	33.4059.1000	Cover for water tank	All
1 piece	33.0396.1000	O-ring (water tank)	All

Limescale filter, water filter

Count	Article no.	Designation	Product variant
1 piece	03.9333.0001	Water filter (complete construction kit)	Fixed water
1 piece	33.2426.5000	Spare cartridge for water filter	Fixed water
1 piece	33.2327.1000	Adapter for replaceable cartridge 200	Water tank
1 pack	33.2332.2000	Replacement cartridge, filter 200 (pack of 4)	Water tank

Documentation, instructions

Count	Article no.	Designation	Product variant
1 piece		Operating Instructions WMF Peak 50	All

Care program

Count	Article no.	Designation	Product variant
1 bottle	33.4102.5000	Special cleaner for milk foamer	All
2 bottles	33.7006.2869	Liquid decalcifier	All
1 pack	33.4102.4000	Special cleaning tablets (10 blister packs)	All

Count	Article no.	Designation	Product variant
1 container	33.4550.0000	Special cleaning tablets	All
1 piece	33.0350.0000	Pipe cleaning brush	All
1 piece	33.2408.0000	Cleaning brush	All
1 tube	33.2179.9000	Molykote grease for sealing rings	All
1 piece	33.2593.6000	Cleaning container	All

More information   For individual article numbers, see the spare parts catalog for the machine

7.2 Conditions for transport

⚠ **WARNING**

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.

The following activities may only be carried out by specialist staff.

⚠ **WARNING**

Health problems caused by heavy machine!

The weight of the machine exceeds the permissible load that a single person is allowed to lift or carry alone. The load of the machine may cause health problems when lifted or carried by a single person.

- Do not lift or carry the machine alone.
- Only lift or carry the machine with two people.

⚠ **CAUTION**

Risk of injury during transport!

Improper transport can lead to injuries.

- Observe the general health and safety regulations in accordance with local regulations.

⚠ **CAUTION**

Risk of injury due to machine tipping over!

Improper lifting of the machine can cause it to tip. A tipping or falling machine can cause injury.

- Do not lift the machine alone.
- Only lift the machine with two people.

❗ **NOTICE**

Property damage due to improper transport!

Improper transport during relocation of the machine can damage it.

- Use a trolley to transport the machine.
- Secure the machine on the trolley and pull the trolley.

☞ Before moving the machine, separate the connections for the drinking water supply, the power supply and the waste water outlet.

☞   Make sure that the new location has no obstacles or uneven spots.

8 Installation and commissioning

> ⚠ **WARNING**
>
> **Risk of injury due to insufficient qualification!**
>
> Improper handling can lead to considerable personal injury and property damage.
>
> The following activities may only be carried out by service staff.

> ⚠ **WARNING**
>
> **Health problems caused by heavy machine!**
>
> The weight of the machine exceeds the permissible load that a single person is allowed to lift or carry alone. The load of the machine may cause health problems when lifted or carried by a single person.
>
> ☞ Do not lift or carry the machine alone.
>
> ☞ Only lift or carry the machine with two people.

> ⚠ **CAUTION**
>
> **Risk of injury due to machine tipping over!**
>
> Improper lifting of the machine can cause it to tip. A tipping or falling machine can cause injury.
>
> ☞ Do not lift the machine alone.
>
> ☞ Only lift the machine with two people.

The machine operator must commission the preliminary work for the connections (electricity, water, waste water) on the manufacturer side. Preliminary work must be carried out by licensed installers observing all general, national as well as locally applicable regulations.

Installation of the mains water supply to the drinking water and waste water supply must be carried out by specialist staff or the service department of the manufacturer.

Service technicians of the manufacturer or its service partner may only connect the machine to the prepared connections. They are neither authorized to carry out installation work on the manufacturer side, nor are they responsible for its execution.

8.1 Unpacking

> ⚠ **CAUTION**
>
> **Cuts and eye injuries from packaging material!**
>
> Sharp-edged packaging material can cause injuries. Cutting tensioning straps can cause eye injuries.
>
> ☞ Wear gloves and safety goggles when unpacking.

8.1.1 Unpacking machine

☞ Unpack the machine.

☞ Remove the supplied accessories from the accessory box.

☞ Check the remaining contents of the packaging for supplied accessories.

☞ Check the delivery for completeness and intactness.

☞ If in doubt, do not operate the machine and contact your service partner.

☞ Keep the original packaging for possible return.

8.1.2 Unpacking accessories

The packaging material in the box contains accessories.

☞ Do not throw it away.

The water tank and the grounds container contain spare parts.

☞ Remove any spare parts before commissioning.

☞ Rinse the grounds container and tank thoroughly before filling.

The optional double powder container is sent in separate packaging. If the machine is equipped with this option, the double powder container must be mounted before commissioning the machine. Operating without the container mounted is not permitted.

See also

📄 Technical data [▶ 17]

📄 Warranty claims [▶ 8]

📄 Scope of delivery of accessories [▶ 28]

8.2 Setup

The following conditions apply to the location of the machine:

▪ The machine must not be used outdoors.

▪ The installation surface must be stable, horizontal and level so that it cannot become deformed under the weight of the machine.

▪ The installation surface must be water-resistant and heat-resistant.

▪ The machine must not be set up on hot surfaces or near heat sources.

▪ The machine must not be installed on a surface which is sprayed or cleaned with a water hose, a steam jet device, a steam cleaner or similar.

▪ The machine must be set up so that it is protected from spray water.

▪ The machine must be set up in such a way that it can be supervised by trained staff at all times.

▪ The required supply connections must be led up to 100 cm (39.4") to the machine location in accordance with the manufacturer-side installation diagrams.

▪ The locally applicable kitchen regulations must be observed.

▪ Clearances for maintenance work and operation must be maintained:

– Enough space must be left at the top for filling the coffee beans or powder; 20 cm (7.87") is recommended.

– A distance of at least 5 cm (1.97") must be left from the rear of the machine to the wall to allow for sufficient air circulation.

– If the machine connections are to run downward through the counter, the space requirements of the lines that can restrict usable space in the structure underneath must be observed.

– When installing a water filter, see the operating instructions for the water filter.

8.3 Installation requirements

The machine must be installed in accordance with the applicable national and local electrical and plumbing regulations. This also includes adequate backflow protection.

All connections on the machine side are ready for use on delivery.

The following connections are required on the installation side:

Electrical system

- Socket for power plug
  - The serial plate provides information on the maximum required fuse protection.
  - The serial plate provides information on the minimum required conductor cross-section.

Water

- Mains water supply 3/8″ or connection to the external drinking water tank
- Siphon or external waste water tank for dirty water hose Ø 20 mm

Optional accessories

- Optional interface for communication between the machine and the optional accessories
- ☞ For better accessibility, position the rear of the machine approx. 5 cm (2″) above the support plate.
- ☞ Prepare the connections on the installation side.

See also

8.4 Connecting power

	⚠ DANGER

Danger to life from electrocution!

There is a risk to life due to electrocution when connecting the machine.

- Make sure that the phase is fused with the ampere value specified on the serial plate.
- Make sure that the device can be disconnected from the power supply with all poles.
- Make sure that the manufacturer-side electrical system is designed in accordance with the regulations of the respective country.
- Route the connection through a ground fault circuit interrupter.
- Never operate a device with a defective connection cable. Have a defective connection cable or plug replaced immediately by a qualified service technician.
- The manufacturer advises against the use of an extension cord. If an extension cord is used in spite of this advice (minimum cross-section: 1.5 mm² / 14 AWG), observe the manufacturer data for the cable (operating instructions) and comply with the locally applicable regulations.
- Attach the connection cable in such a way that nobody can trip over it. Do not pull the cables over corners and sharp edges, do not pinch them and do not let them hang freely in space. Do not place cables on hot objects and protect them from oil and aggressive cleaning products.
- Never lift or pull the device by the connection cable. Never pull the plug out of the socket using the connection cable.
- Never touch the cable or plug with wet hands. Never insert wet plugs into the socket under any circumstances.

	⚠ DANGER

Danger to life due to defective or non-original connection cable!

If the connection cable is defective or not original, there is a risk of electrocution and fire.

- Only use original connection cables. The country-specific original connection cable is available from the service partner.
- Connection cables that can be plugged in at both ends can be replaced by the customer.
- Have permanently connected connection cables replaced by a service technician.

 WARNING

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.

The following activities may only be carried out by a qualified electrician.

The electrical connection must be made in accordance with the regulations of the respective country. The voltage specified on the serial plate must match the supply voltage at the installation site. The power socket and power switch must be accessible to the operator at the installation site.

☞ Establish the power connection.

Make sure that the manufacturer-side electrical system is designed in accordance with IEC 364 (DIN VDE 0100). To increase safety, a ground fault circuit interrupter with a nominal residual current of 30 mA (EN 61008) should be connected upstream of the device. Type B residual current circuit breakers ensure response even with smooth DC residual currents. This ensures a high level of safety.

See also

▤ Product description [▶ 22]

▤ Technical data [▶ 17]

8.5 Connecting water

 CAUTION

Health problems due to contaminated water!

Improper handling of water can lead to health problems.

◌ Make sure that the water is free of dirt and bacteria.

◌ Do not connect the machine to pure osmosis or other aggressive types of water.

◌ Make sure that the carbonate hardness is between 4 and 6 °dKH or 8 and 12 °fKH.

◌ Make sure that the total hardness is higher than the carbonate hardness.

◌ Do not exceed the maximum chlorine content of 50 mg per liter.

◌ Make sure that the pH value is between 6.5 and 7 (pH neutral).

◌ Machines with drinking water tank (internal and external): Fill the drinking water tank with fresh water every day and rinse it thoroughly before filling.

 NOTICE

Property damage due to poor water quality!

The machine can be damaged if contaminated water or water with incorrect water values are used.

◌ Check the recommended water quality and optimize it if necessary.

◌ The water must be free of dirt and the chlorine content must not exceed the local regulations on the maximum permitted chlorine content.

◌ Do not connect the machine to pure osmosis or other aggressive types of water.

◌ The carbonate hardness must not exceed 4 – 6 °dKH (German carbonate hardness) or 8 – 12 °fKH (French carbonate hardness) and the value of the total hardness must always be higher than the carbonate hardness.

◌ The minimum carbonate hardness is 4 °dKH or 8 °fKH.

◌ The pH value must be between 6.5 and 7.

◌ Always use the new hose set supplied with the machine (fresh/waste water hose).

Connection variants

The following variants are possible for the drinking water connection:

- Internal drinking water tank (standard)
- Mains water supply
- External drinking water tank

The following variants are possible for the waste water connection:

- Standard waste water outlet
- External waste water tank
- Closed drip tray without connection

The **Supplementary Instructions for Water Quality** contain information on recording water values and the use of filter techniques. The supplementary instructions can be requested from the manufacturer or downloaded directly from the download portal.

8.6 Connecting milk

The milk storage temperature must be adapted to the milk temperature and the matching steam nozzle.

The matching steam nozzle must be installed on the milk foamer.

Fig. 10: Steam nozzles green and orange

Color	Milk temperature
Green (standard)	Uncooled milk (16 to max. 22 °C)
Orange (accessories)	Cooled milk (up to 10 °C)

8.7 Display-guided commissioning

The machine is commissioned by the service technician on site at the premises of the operator. The commissioning program starts automatically when the machine is switched on for the first time. After display-guided commissioning, no beverages can be dispensed as no beverage recipes have been configured. A service technician configures and calibrates the beverage recipes together with the operator.

Service technicians can start the commissioning program manually at any time.

8.7.1 Commissioning program

The commissioning program proceeds step-by-step through the additional commissioning process using the display. The set values can be changed after commissioning.

Fig. 11: Switching on machine

☞ Switch the machine on using the on/off press switch.

   ✓ The coffee machine switches on.

   ✓ The commissioning program starts.

☞ Follow all instructions on the display and carry them out.

✓ Once the commissioning process has been run in its entirety and all necessary settings have been made, the coffee machine restarts. Calibration is fully automatic.

⚠ **CAUTION**

Risk of scalding due to hot fluid!

There is a risk of scalding in the dispensing area for beverages, hot water and steam.

   ⚕ Never reach under the dispensing points during dispensing or cleaning.

   ⚕ Always lock the control unit before cleaning to prevent accidental input.

⚠ **CAUTION**

Risk of burning due to hot surfaces!

The outlets and adjacent surfaces become hot when dispensing beverages and during cleaning and descaling.

   ⚕ Only touch the beverage outlet at the designated places.

   ⚕ Do not touch the dispensing points immediately after dispensing.

   ⚕ Wait five to ten minutes until the machine has cooled down.

Inserting the water filter for the water tank (optional)

This point is a step taken during the commissioning program.

If the drinking water has a carbonate hardness of more than 5 °dKH, a water filter must be installed upstream since the machine may otherwise be damaged by limescale. No water filter is required at a water hardness of 0 to under 5 °dKH.

Determining the water hardness

☞ Ask your water supplier about the hardness of your drinking water or measure it using the carbonate hardness test (with instructions).

The carbonate hardness test is included in the accessories supplied.

Water filter capacity

The water filter supplied for the water tank (200 l) has a capacity of 200 liters of water at 10 °dkH. The actual capacity depends on the drinking water hardness and can be found in the following table.

The **German carbonate hardness unit (°dKH)** is the decisive factor.

Water hardness	Capacity in liters	Water hardness	Capacity in liters
< 5	No filter necessary	15	135
5	400	16	125
6	335	17	120
7	285	18	110
8	250	19	105
9	220	20	100
10	200	21	95
11	180	22	90
12	165	23	85
13	155	24	80
14	145	25	70

See also

📄 Technical data [▶ 17]

9 Operation

This chapter contains information on the various beverage preparation functions for daily operation of the machine.

> **⚠ CAUTION**
>
> **Risk of injury due to slipping!**
>
> Leaking liquid can lead to a wet floor around the machine. This can lead to injuries from slipping and falling.
>
> - Dry any spilled liquids on the floor immediately after spills occur.
> - Indicate large quantities of leaked liquid on the floor with a mobile warning sign.

> **⚠ CAUTION**
>
> **Risk of scalding due to hot fluid!**
>
> There is a risk of scalding in the dispensing area for beverages, hot water and steam.
>
> - Never reach under the dispensing points during dispensing or cleaning.
> - Always lock the control unit before cleaning to prevent accidental input.

> **⚠ CAUTION**
>
> **Health hazard due to unsuitable products**
>
> The bean hopper, powder container and manual inlet may only be filled with products that are intended for this purpose.
>
> - Only make products which are suitable for consumption and the use of the machine.

See also

📄 Safety [▸ 10]

9.1 Recurring additional tasks

This chapter contains information on operating steps on the machine that are required regularly during daily operation.

9.1.1 Filling bean hopper/powder container

> **⚠ WARNING**
>
> **Risk of crushing and cutting injuries from rotating grinding discs!**
>
> There is danger of crushing and cutting injuries due to rotating grinding discs in the grinder.
>
> - Never reach into the bean hopper when the machine is switched on.
> - Switch off the machine and disconnect the power plug before performing any work on the grinder.

> **NOTICE**
>
> **Property damage due to foreign objects in bean hopper!**
>
> Filling with foreign objects can cause the grinder to clog or block and destroy the grinder. These damages are excluded from the warranty.
>
> ☝ Never fill the bean hopper with anything other than coffee beans.

> **NOTICE**
>
> **Property damage due to clogging!**
>
> Filling the machine with unsuitable coffee machine powder can cause the powder container or powder system to become clogged.
>
> ☝ Only fill the machine with powder that is suitable for use in automatic machines.
>
> ☝ Do not overfill the powder container.
>
> ☝ Do not press on the powder or compress it.
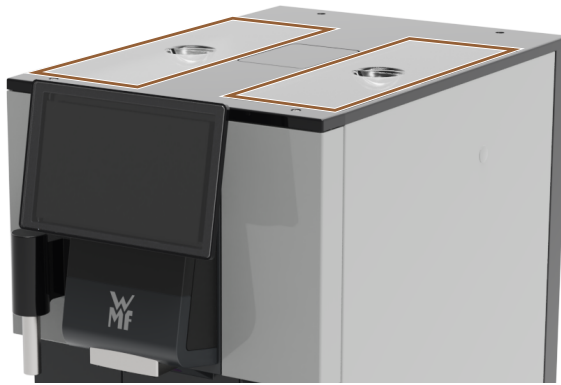
Fig. 12: Bean hopper and powder container

☞ Refill the hopper as soon as possible.

☞ For lockable bean hoppers: Open the lock of the bean hopper with the key.

☞ Remove the cover of the bean hopper.

☞ If necessary, clean the bean hoppers and covers to remove coffee residue before filling.

☞ Fill the bean hopper with the intended type of coffee.

☞ Fill the hopper with no more than is needed for a day to ensure that the products remain fresh.

☞ Only add enough so that the contents do not touch the container cover.

☞ Always fill the container from front to back.

☞ Close the bean hopper with the lid.

☞ For lockable bean hoppers: Lock the bean hopper with the key.

✓ The bean hopper is refilled.

> **NOTICE**
>
> **Double powder option**
>
> The optional double powder container is sent in separate packaging. If the machine is equipped with the **Double powder** option, the double powder container must be assembled before commissioning the machine.
>
> ☝ Do not operate the machine without the container in place. This is not permitted.

9.1.2 Using milk
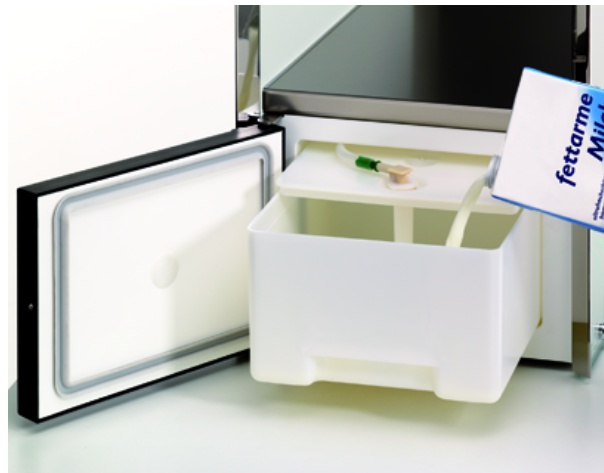
With milk cooler

Fig. 13: Milk container

▣ The appropriate steam nozzle for cooled milk (orange) must be installed on the milk foamer.

☞ Remove the milk container from the cooler.

☞ Push the lid of the milk container back.

☞ Fill milk into the milk container.

☞ Replace the lid on the container.

☞ Insert the adapter on the milk hose into the milk container lid connection.

☞ Carefully slide the milk container back into place.

With milk lance (optional)

Fig. 14: Milk lance

▣ The appropriate steam nozzle for uncooled milk (green) must be installed on the milk foamer.

☞ Place the milk carton to the left of the coffee machine.

☞ Open the lid of the milk lance.

☞ Connect the Plug&Clean adapter to the milk lance.

☞ Insert the milk lance into the milk carton.

✓ The milk lance reaches the base of the milk carton.

> **NOTICE**
>
> 🖐 Clean the milk lance daily.
>
> 🖐 Make sure that the milk hose is not kinked.

9.1.3 Emptying drip tray

> **⚠ CAUTION**
>
> **Risk of scalding due to hot fluid!**
>
> Hot fluids could be in the drip tray.
>
> 🖐 Carefully move the drip tray.
>
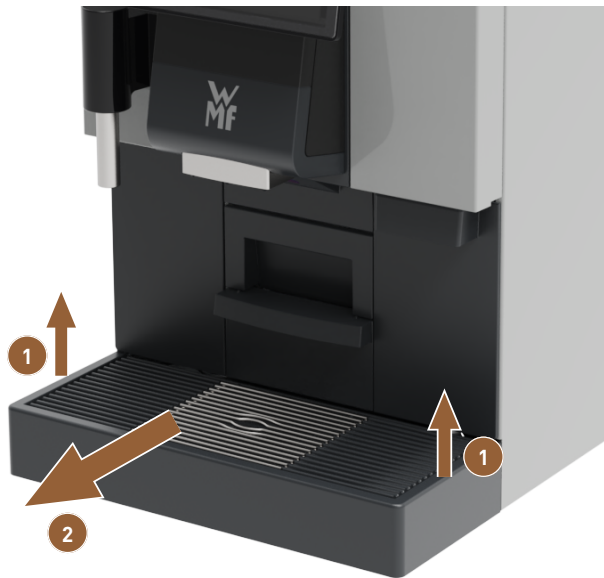> 🖐 Carefully replace the drip tray to prevent accidental spillage.

Fig. 15: Removing drip tray

1 Lift drip tray	**2** Pull out drip tray

A notification appears on the display if the fill level is at the maximum amount.

☞ Slightly lift the drip tray at the front and pull it out of the machine.

☞ Carefully remove the drip tray, empty it and put it back in the machine.

☞ Make sure that the underside of the drip tray and the drip tray sensor area are dry before insertion.

✓ If this area remains damp, the **Empty drip tray** notification appears again.

This sticker marks the area which should be kept dry.

The drip tray can also be removed for cleaning on machines with a drain connection.

See also

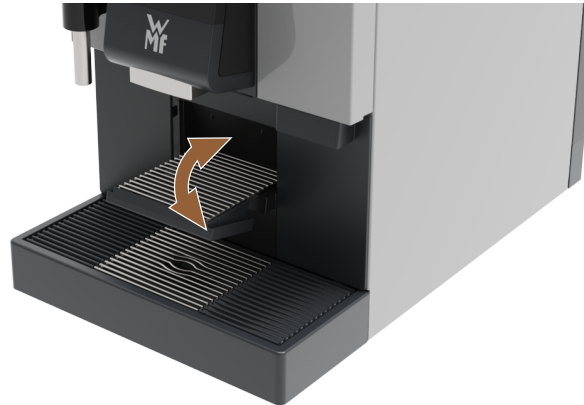🗎 Safety [▶ 10]

9.1.4   Folding out cup grid

Fig. 16: Cup grid folded out

To fold out the cup grid:

☞   Grab the handle of the cup grid.

☞   Pivot the cup grid completely downwards.

✓   The cup grid is folded out.

9.1.5   Emptying grounds container

The grounds container collects the used ground coffee. The grounds container holds coffee grounds from approx. 30 brewings. A notification appears on the display when the grounds container needs to be emptied. Beverage dispensing is blocked if the grounds container is not in place.

Fig. 17: Pulling out grounds container

☞   Fold up the cup grid.

☞   Pull the grounds container out of the machine.

☞   Empty and clean the grounds container.

▤   The cup grid rests on the grounds container.

☞   Always hold the cup grid tightly when emptying it.

☞   Push the cleaned grounds container into the machine.

☞   Confirm that the process on the display.

> **NOTICE**
>
> If the grounds container is inserted without being completely emptied, the grounds container will overflow. This will contaminate the machine. This can cause consequential damages.
>
> ⓓ Make sure that the grounds container is always completely emptied before inserting it.
>
> ⓓ If the grounds container cannot be inserted, check the shaft for coffee residue and remove it.

9.2 Switching on machine

> ⚠ **CAUTION**
>
> **Risk of infection from contamination!**
>
> Contamination can lead to infections. Infection can lead to health problems.
>
> ⓓ Always carry out cleaning after installation, commissioning or after recommissioning.
>
> ⓓ Carry out all cleaning processes before and after breaks in operation of several days.
>
> ⓓ Run the display-guided cleaning program before the first beverage dispensing process.
>
> ⓓ Rinse the machine before switching it off.

When the machine is switched on for the first time, a display-guided commissioning process is performed automatically. Commissioning must be carried out by a service technician. The service technician configures the machine and performs a hardware calibration.

Fig. 18: Switching on machine

☞ Check the power connection of the machine.

☞ Briefly press the on/off button.

    ✓ A signal tone sounds.

    ✓ The machine starts.

    ✓ Machine heating begins.

    ✓ Automatic warm rinsing starts.

    ✓ The machine is ready for use as soon as the required temperature is reached.

    ✓ The desired user interface appears on the touch screen.

✓ The machine is switched on.

9.3 Beverage supply

The preset beverages are dispensed by simply tapping on the button for the desired beverage.

Fig. 19: Buttons for beverage selection

Lit button   =   Ready for dispensing

Unilluminated button or red triangle in the   =   Not ready for dispensing or button locked
header

☞ Set a beverage container of a suitable size below the outlet.

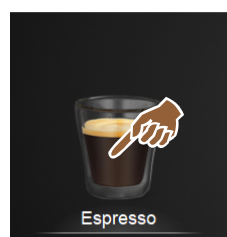☞ Tap on the desired beverage button.

9.4 Canceling beverage dispensing

Fig. 20: Beverage cancellation

☞ Tap on the beverage button again.

✓ Beverage dispensing is canceled.

9.5 Optional beverage modifications

Fig. 21: Example: additional Barista button

Additional buttons are available in the function bar on the display as an option. These buttons appear on the display after beverage selection.
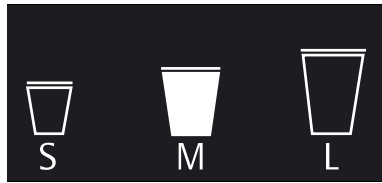
Special buttons (optional)

Fig. 22: Example: S-M-L button

Special buttons are optional and can be activated individually in the settings. For example, preselection of the S-M-L filling quantities is a special button. These S-M-L filling quantities must be set for the beverages to make them available. You can then select the **S** or **L** filling quantity before beverage selection. This activates only those beverage buttons that are intended for the selected size.

M = Set beverage size, no preselection

S = Approx. 25% less than M

L = Approx. 25% more than M

Cup size adjustment
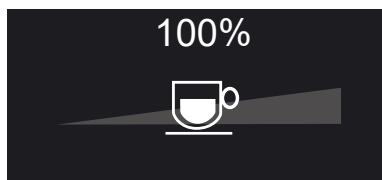
Fig. 23: Cup size slider

You have the option of selecting the fill quantities as you choose.

9.6 Milk or milk foam dispensing

☞ Set a beverage container of a suitable size below the outlet.

☞ Tap the beverage button labeled with milk or milk foam.

✓ Dispensing is done in line with the setting in the recipe (dosing type, foam quality, etc.).
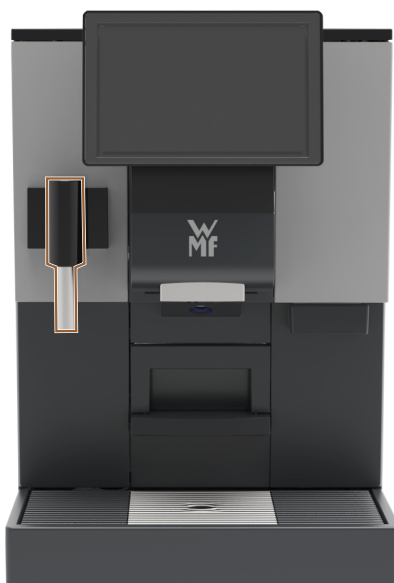
9.7 Dispensing hot water

Fig. 24: Hot water outlet

☞ Make sure that a cup or mug is positioned under the hot water outlet.

☞ Tap on the **Hot water** button.

✓ The hot water is dispensed.

✓ The hot water dispensing function stops automatically once the configured amount of water has been reached.

9.8 Using manual inlet

> **❗ NOTICE**
>
> **Property damage due to unsuitable ground coffee!**
>
> Using unsuitable ground coffee in the manual inlet may damage the machine.
>
> ⬡ Only use ground coffee for the manual inlet.
>
> ⬡ Do not use water-soluble coffee powder.
>
> ⬡ Do not use ground coffee that is ground too fine.

Ground coffee is available for preparing a beverage using the manual inlet.

The configuration for coffee beverages with ground coffee is available in the beverage settings. Configuration can be carried out by service technicians.

Preparation with ground coffee using the manual inlet

Fig. 25: Opening manual inlet

☞ Push on the top on the manual inlet flap to open it.

☞ Pour a portion of ground coffee into the opening of the manual inlet using the measuring spoon provided (maximum 15 g).

☞ Close the manual inlet flap.

☞ Tap on the desired beverage button.

✓ Beverage dispensing starts.

9.9 Switching off machine

⚠ **CAUTION**

Risk of infection from contamination!

Contamination can lead to infections. Infection can lead to health problems.

- ⚙ Always carry out cleaning after installation, commissioning or after recommissioning.
- ⚙ Carry out all cleaning processes before and after breaks in operation of several days.
- ⚙ Run the display-guided cleaning program before the first beverage dispensing process.
- ⚙ Rinse the machine before switching it off.

⚠ **CAUTION**

Risk of scalding from machine rinsing!

During machine rinsing, hot water runs out of the beverage outlet.

- ⚙ Do not reach under the beverage outlet during a machine rinse.

NOTICE

No warranty in the event of non-compliance with instructions!

In the event of non-compliance with the safety notes and handling information, no warranty will be accepted in the event of property damage.

- ⚙ To avoid damage to the machine, follow the safety notes and handling information in the operating instructions.

Fig. 26: Switching off machine

The on/off press switch is on the left side of the display.

- ☞ Briefly press the on/off button. (approx. 1 second).
    - ✓ The machine switches off.
- ☞ Pull the power plug out of the socket.
- ☞ For machines with a mains water supply, close the main tap of the water supply.

☞ The machine is switched off.

10 Cleaning

Cleaning is a prerequisite for safe and trouble-free operation. That means it is of the utmost importance and must be carried out in accordance with the described regulations.

Canceled cleaning

The machine can only be ready for use again if the cleaning process has been correctly completed.

A cleaning process that has not been fully and correctly completed (e.g. due to a power supply failure) must be repeated.

⚠ **WARNING**

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.

The following activities may only be carried out by persons who have been instructed by the operator.

⚠ **CAUTION**

Risk of injury due to slipping!

Leaking liquid can lead to a wet floor around the machine. This can lead to injuries from slipping and falling.

- Dry any spilled liquids on the floor immediately after spills occur.
- Indicate large quantities of leaked liquid on the floor with a mobile warning sign.

⚠ **CAUTION**

Risk of scalding due to hot fluid!

There is a risk of scalding in the dispensing area for beverages, hot water and steam.

- Never reach under the dispensing points during dispensing or cleaning.
- Always lock the control unit before cleaning to prevent accidental input.

⚠ **CAUTION**

Risk of infection from contamination!

Contamination can lead to infections. Infection can lead to health problems.

- Always carry out cleaning after installation, commissioning or after recommissioning.
- Carry out all cleaning processes before and after breaks in operation of several days.
- Run the display-guided cleaning program before the first beverage dispensing process.
- Rinse the machine before switching it off.

10.1 Overview of cleaning intervals

Cleaning programs

Daily	Weekly	Regularly	Automatic	Notifica-tion	
	X				System cleaning
X					Mixer rinsing
X					Milk system rinsing
	X				CIP milk system cleaning

Descaling

Daily	Weekly	Regularly	Automatic	Notifica-tion	
				X	Descaling

Manual cleaning

Daily	Weekly	Regularly	Automatic	Notifica-tion	
X					Clean control panel (CleanLock)
X					Manual grounds container
		X			Cleaning collecting tray
	X				Cleaning water tank
X					Cleaning drip tray
X					Clean housing
		X			Clean outlet by hand
				X	Brewer care
		X			Cleaning brewing unit
		X			Cleaning milk system by hand
(X)	X				Clean mixer*
		X			Cleaning bean hoppers
		X			Clean powder container*

Daily:	At least once daily and as needed
Weekly:	Weekly cleaning
Regularly:	Regularly as needed
Automatic:	Automatic process
(X)	Daily if there are high levels of contamination
*	Optional (depending on machine configuration)

10.2 Dishwasher-safe machine parts

The parts listed here can be safely cleaned in a dishwasher. All parts not listed here cannot be put in a dishwasher.

- Grounds container
- Drip tray
- Drip grid

- Container extension without lid
- Powder container without lid

10.3 Cleaning regulations and conditions

⚠ **WARNING**

Risk of infection due to bacteria!

Improper care and cleaning can make the dispensing of beverages hazardous in terms of food hygiene.

- Wear protective gloves while cleaning.
- Wash your hand thoroughly before and after cleaning.
- Clean the machine daily.
- For machines with milk system: Clean the milk container before each refill and after the end of dispensing.
- When cleaning the milk system with cleaning powder: Never add cleaning products to the milk container; always use the blue cleaning container.
- Never add cleaning products to the drinking water tank (internal/external).
- Never mix cleaning products.
- Store cleaning products separately from coffee, milk and automatic coffee machine powder (if available).
- Do not use abrasive cleaners, brushes or metal cleaning instruments.
- Do not touch any parts that come into contact with beverages after cleaning.
- Observe the dosing and safety notes on the cleaning product and follow them.

HACCP cleaning concept

You are legally obligated to ensure that you do not expose your guests to any health hazards when consuming the provided food or beverage. (Regulation on the hygiene of foodstuffs from 1997-08-05.)

A HACCP cleaning concept is required to identify and assess health hazards.

HACCP cleaning concept: **HACCP** stands for **Hazard Analysis Critical Control Point**.

The HACCP cleaning concept is intended to ensure that food is safe. Hazards related to the processing of food or emanating from finished products are considered and the risks are assessed. The risks are mitigated by taking appropriate measures.

With proper installation, maintenance, care and cleaning, our machines and devices fulfill the HACCP requirements. All recommended cleaning products are perfectly coordinated with the cleaning programs.

Use our HACCP cleaning concept to monitoring the regular cleaning process.

You should perform a risk analysis in your operations. The goal is to detect and eliminate hazardous areas. To do so, monitoring processes and, if necessary, test procedures must be defined and enforced. When installed, maintained, cared for and cleaned properly, our coffee machines fulfill the regulations named above. If the coffee machine is not cared for and cleaned properly, the dispensing of milk beverages can present a food hygiene risk.

Observe the following points to comply with the HACCP cleaning concept:

Sterilizing the milk system daily

☞ Follow the cleaning specifications for the milk system in the Cleaning milk system chapter.

☞ Only use the cleaning products approved of by the manufacturer of the machine.

✓ This ensures that your system has a very low microbiological content at the time of starting operation.

NOTICE

You can call up the logs of the last cleanings using the **Info** button.

You can export a HACCP log using the **USB** button.

Always start operation with a freshly opened, pre-cooled milk carton

UHT milk in its original packaging is typically free of hazardous bacteria.

☞ Always open a new, pre-cooled milk carton when starting operation.

Bacteria can be transmitted to milk when opening if hands or tools are not clean.

☞ Ensure absolute cleanness when opening the milk carton!

☞ Recommendation: Use UHT milk with 1.5% fat content.

☞ Keep the milk cool!

☞ Always keep a new, pre-cooled milk carton ready.

If cooling is not done during operation, the milk must be used very quickly.

☞ Cool the milk in between if necessary.

If not much milk is used, the pre-cooled milk must be cooled during operation.

The milk should have a temperature of about 6–8 °C when starting operation. Depending on the setting, a liter of milk makes about 20 cappuccinos.

The manufacturer offers various cooling options (e.g. side cooling unit or milk cooler).

HACCP cleaning schedule

Month _____   Year _____

Only use chilled UHT milk, to prevent health risks due to bacteria.
For powder beverages, use only products that have not exceeded their expiration date.
Cleaning steps:

Daily
1. Switch-off rinsing
   ▷ Starts automatically when the machine is switched off.
   Milk system rinsing and mixer rinsing are included in the switch-off rinsing cycle.
2. Clean the operating panel, grounds container, drip tray, and housing
   ▷ User Manual, Care chapter

Weekly
3. System cleaning
4. Clean the mixer and milk system manually
   Clean the water tank
Regularly
5. Clean the product hoppers (beans/powder)
   Clean the dispensing spouts and the brewing unit
   ▷ User Manual, Care chapter

Date	Cleaning steps Time 1	2	3	4	5	Signature
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						

Date	Cleaning steps Time 1	2	3	4	5	Signature
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						
31.						

Fig. 27: HACCP cleaning schedule

10.4 Cleaning programs

10.4.1 System cleaning program

System cleaning is an automatic cleaning program that cleans the coffee system of the coffee machine with special cleaning tablets.

Milk system cleaning with subsequent milk system rinsing and mixer rinsing are part of the system cleaning process.

The special cleaner for milk foamer is used to clean the milk system.

If the **Cold Americano** recipe is offered, the cold water path is cleaned at the same time during system cleaning.

System cleaning takes between 10 and 15 minutes. The duration depends on whether only the coffee system is cleaned or whether the milk system is also cleaned after milk has been dispensed.

A system cleaning notification appears automatically after 200 brewings, at the latest after six days. Beverage dispensing is blocked after 250 brews, or after seven days at the latest. The machine can only be used again after the system has been cleaned.

⚠ WARNING

Risk of poisoning from cleaning products!

There is a risk of poisoning if cleaning products are ingested.

- Only use cleaning products recommended by the manufacturer.
- Read the information on the packaging and the safety data sheet carefully before using the cleaning product. If no safety data sheet is available, request one from the sales partner.
- Keep cleaning products away from children and unauthorized persons.
- Do not touch the cleaning products with your bare hands and do not ingest them.
- Never mix cleaning products with other chemicals.
- Only use cleaning and descaling products for their intended purpose (see label).
- Do not eat or drink while using cleaning products.
- Ensure good ventilation when using cleaning products.
- Wear protective gloves and protective goggles when using cleaning products.
- Wash your hands thoroughly immediately after using cleaning products.

⚠ CAUTION

Risk of scalding and health problems from hot fluids!

Hot cleaning fluid and hot water are dispensed during the cleaning program. Cleaning fluids can cause health problems. Hot fluids can cause scalding.

- Remove the drip grid before starting cleaning.
- Do not reach under the beverage outlet and the hot water dispensing point during cleaning.
- Do not place any beverage containers under the beverage outlet or hot water dispensing point during cleaning.

Starting system cleaning

- Before every cleaning, a collecting container with capacity of at least 3 liters is placed under the outlet.
- Clean the outlet from the outside with a damp cloth before cleaning the system.
- The outlet openings are cleaned with the appropriate brushes.
- ☞ Call up the **Care** menu.

☞ Tap on **System cleaning**.

✓ The **Switch off after cleaning?**dialog opens.

✓ If confirmed with **Yes**, the coffee machine switches off after cleaning.

✓ If confirmed with **No**, the coffee machine restarts after cleaning.

☞ Select **Yes** or **No**.

✓ The cleaning program proceeds step-by-step through the system cleaning process using the display.

☞ Follow the instructions on the display.

Fig. 28: Inserting cleaning tablet

During cleaning, a small amount of rinse water could get into the grounds container. This is not an error.

10.4.2 Mixer rinsing cleaning program

⚠ CAUTION

Risk of scalding from machine rinsing!

During machine rinsing, hot water runs out of the beverage outlet.

⌀ Do not reach under the beverage outlet during a machine rinse.

! NOTICE

Before starting operation and after the end of the business day, a rinse must be done.

Starting mixer rinsing

Mixer rinsing can be started independently.

☞ Call up the **Care** menu.

☞ Tap on **Mixer rinsing**.

✓ The program proceeds step-by-step through the mixer rinsing process using the display.

☞ Follow the instructions on the display.

10.4.3   Milk system rinsing cleaning program

The milk system rinsing process rinses out the milk hose and the milk foamer.

⚠ CAUTION

Risk of scalding from machine rinsing!

During machine rinsing, hot water runs out of the beverage outlet.

⚘   Do not reach under the beverage outlet during a machine rinse.

Starting milk system rinsing

Milk system rinsing can be started independently. This is useful if long breaks are taken between dispensing of milk beverages.

☞   Call up the **Care** menu.

☞   Tap on **Milk system rinsing**.

    ✓ The program proceeds step-by-step through the milk system rinsing process using the display.

☞   Follow the instructions on the display.

10.5   Manual cleaning

Various components have to be cleaned manually.

10.5.1   Cleaning touch screen (CleanLock)

⚠ CAUTION

Risk of scalding from accidental beverage dispensing!

During cleaning, accidental beverage dispensing may result in scalding.

⚘   Deactivate the touch screen in the Service menu before cleaning or switch off the machine.

---

❶ NOTICE

Damage to the touch screen due to improper cleaning!

Improper cleaning can scratch or otherwise damage the surface of the touch screen.

⚘   Clean the touch screen with a moist cloth.

⚘   Use soft cloths when cleaning.

⚘   Do not use cleaning products or abrasive cleaners for cleaning.

☞   Lock the screen by tapping on **CleanLock**.

    ✓ A 15-second countdown starts.

☞   Clean the touch screen.

    ✓ The touch screen is reactivated 15 seconds after the last time it is touched.

✓ The touch screen is cleaned.

10.5.2 Cleaning grounds container (grounds chute, optional)

Fig. 29: Pulling out grounds container

☞ Fold up the cup grid.

☞ Pull the grounds container out of the machine.

☞ Empty and clean the grounds container.

▤ The cup grid rests on the grounds container.

☞ Always hold the cup grid tightly when emptying it.

☞ Rinse out the grounds container with clean drinking water.

☞ Clean the grounds container with a damp cloth and dry it.

☞ Push the cleaned grounds container into the machine.

☞ Confirm that the process on the display.

✓ The grounds container is cleaned.

10.5.3 Cleaning brewing unit

⚠ CAUTION

Risk of crushing due to moving parts!

The machine contains moving parts which could injure fingers or hands. There is a risk of crushing when removing the brewing unit.

☝ Always switch off the machine and disconnect it from the power supply before reaching into the coffee grinder or the opening of the brewing unit.

⚠ CAUTION

Hot surface!

The dispensing points and the brewing unit can be hot.

☝ Never touch hot machine parts.

☝ Only touch the beverage outlet at the designated places.

☝ Only remove the brewing unit when the machine has cooled down.

Making brewing unit accessible

▤ The brewing unit is cleaned as needed.

☞ Press the on/off press switch until the machine switches off.

☞ Disconnect the machine from the power supply.

☞ Fold up the cup grid in the grounds container.

☞ Remove the grounds container.

☞ Remove the collecting tray.

☞ Remove the drip tray.

✓ The brewing unit is now accessible.

NOTICE

Property damage caused by sliding brewing unit!

The brewing unit can slide downwards.

✍ Always hold the brewing unit firmly when removing and inserting it.

✍ Never use force, as this may cause breakage.
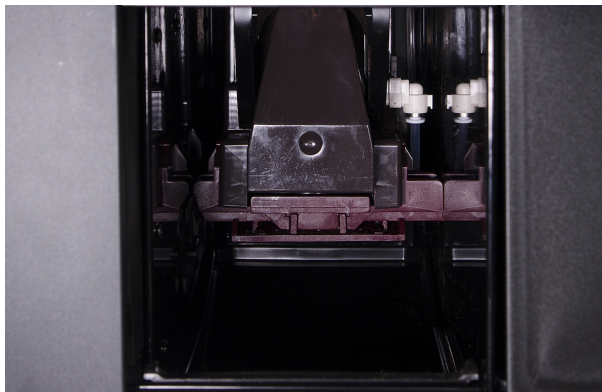
Fig. 30: Brewing unit ready for removal

Removing brewing unit

☞ Reach under the brewing unit into the shaft with one hand.

☞ Release and hold the lock.

☞ Slowly lower the brewing unit all the way down.

☞ Tilt the brewing unit and pull it forward.

☞ Remove the brewing unit, holding it firmly.

Dismantling and cleaning brewing unit
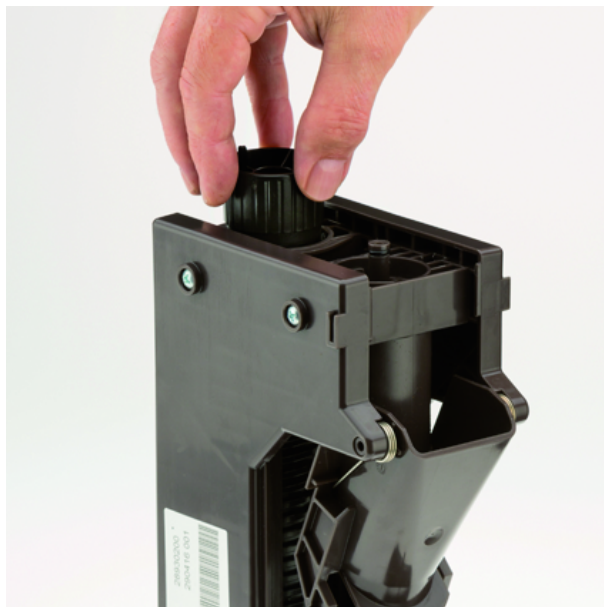
Fig. 31: Loosening brewing unit thread

- 📖 Use the multi-tool from the accessories.
- ☞ Turn the thread on the head of the brewing unit anticlockwise until the scraper is located in the front position.
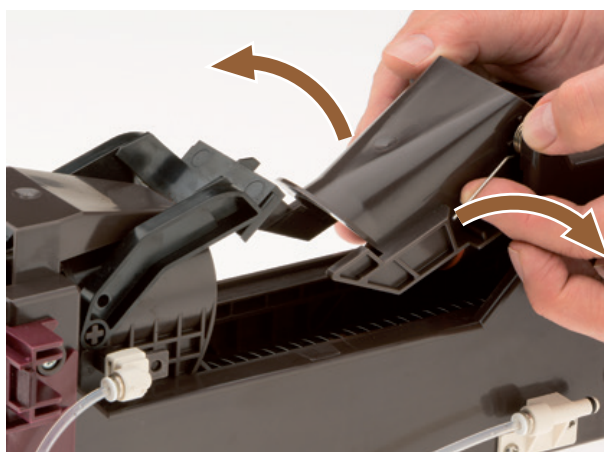
Fig. 32: Insertion chute: bending springs away

- ☞ Pull the springs outwards and press them down.
  - ✓ This unlocks the insertion chute.
- ☞ Fold the insertion chute upwards.
- ☞ Clean the brewing sieve under running water or with a cloth.
- ☞ Remove ground coffee residues with a brush.
- ☞ Rinse the brewing unit under running water.

! NOTICE

Damage to the brewing unit due to improper cleaning!

The brewing unit can get damaged by cleaning products or in the dishwasher.

- ⚭ Use only water to clean the brewing unit.
- ⚭ Never clean the brewing unit in the dishwasher.

☞ Dry the brewing unit with a cloth. Make sure that the brewing unit is completely dry before installing it in the machine.

☞ Remove any ground coffee from the shaft.

☞ Wipe the ground coffee out towards the front or vacuum it up with a vacuum cleaner.

Assembling brewing unit
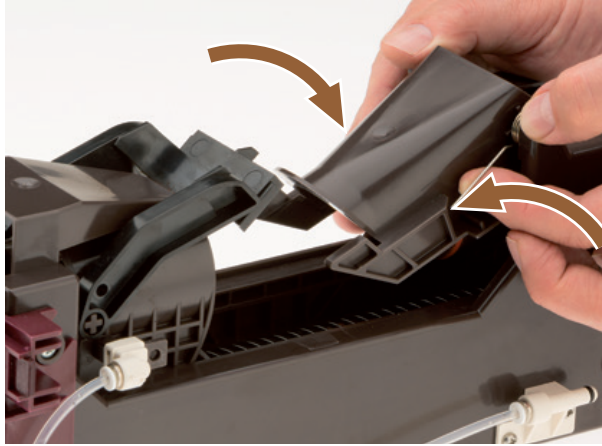
Fig. 33: Insertion chute: attaching springs

☞ Attach the springs into the insertion chute.

☞ Pay attention to the guides while doing so.

☞ Reinstall the dried brewing unit.

☞ Turn the thread on the head of the brewing unit clockwise until the scraper is completely folded back in.

Fig. 34: Brewing sieve

☞ Press and hold down the lock and place the brewing unit into the shaft all the way to the back on the rear casing.

☞ Push the brewing unit upwards vertically until the lock engages.

☞ Insert the grounds container.

☞ Insert the drip tray.

If the brewing unit cannot be inserted without resistance:

☞ Turn the thread on the head of the brewing unit a bit to the left or right with the multi-tool until the brewing unit slides into the guides.

10.5.4 Cleaning collecting tray

The collecting tray is located under the grounds container.

The collecting tray should be removed and cleaned weekly. The collecting tray must be cleaned as needed.

A small amount of water in the collecting tray does not mean there are leaks; this is caused by the system design.
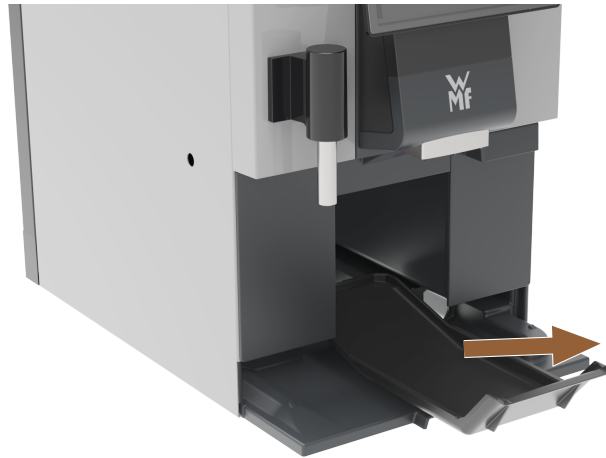
Fig. 35: Removing collecting tray

☞ Remove the grounds container.

☞ Remove the collecting tray and clean it thoroughly with clean drinking water.

☞ Dry the collecting tray and put it back into the machine.

☞ Insert the grounds container.

✓ The collecting tray is cleaned.

10.5.5 Cleaning water tank
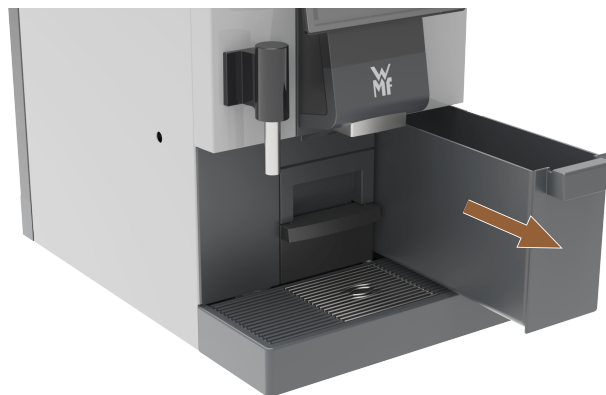
Fig. 36: Removing water tank

☞ Thoroughly rinse out the water tank with clean water once a week.

10.5.6 Cleaning drip tray

⚠ **CAUTION**

Risk of scalding due to hot fluid!

Hot fluids could be in the drip tray.

✍ Carefully move the drip tray.

✍ Carefully replace the drip tray to prevent accidental spillage.

> **!** **NOTICE**
>
> **Property damage due to flooding risk!**
>
> A plugged waste water outlet in the drip tray causes overflowing of the drip tray.
>
> Before cleaning and descaling:
>
> ⟡ Check that the waste water outlet is flowing freely.
>
> ⟡ Check the drainage speed of the waste water outlet.
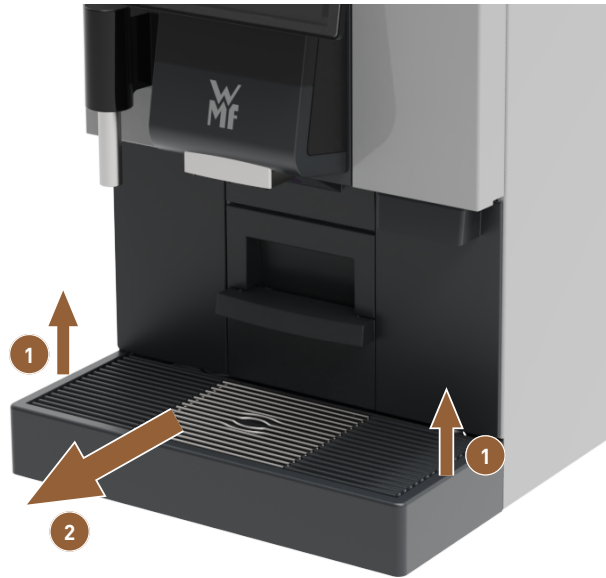
Fig. 37: Removing drip tray

| **1** Lift drip tray | **2** Pull out drip tray |

☞ Slightly lift the drip tray at the front and pull it out of the machine.

☞ Remove the drip grid and clean it with the cleaning brush.

☞ Clean the drip tray thoroughly.

☞ Rinse the drip tray and drip grid with clean drinking water.

☞ Dry the drip tray and drip grid.

☞ Put the drip grid and drip tray back together and reinsert them into the machine.

✓ The drip tray is cleaned.

> **i** **NOTICE**
>
> The underside of the drip tray and the area of the drip tray sensor must be dry before insertion. The sensor is located on the right under the drip tray. If this area remains damp, the **Empty drip tray** notification appears again.

10.5.7 Clean outer surfaces

> ⚠ **CAUTION**
>
> **Cutting injuries from sharp edges on the housing base!**
>
> When cleaning the underside of the machine or the counter beneath the machine (if the machine feet are high), sharp edges on the housing base may cause cutting injuries.
>
> ⟡ Wear gloves when cleaning the underside of the machine and the counter beneath the machine.

> **NOTICE**
>
> **Damage to the machine surface due to improper cleaning!**
>
> Improper cleaning can scratch or otherwise damage the surface of the machine.
>
> - Use soft cloths when cleaning.
> - Only use mild cleaning products.
> - Do not use strongly alkaline, alcohol-based or degreasing or abrasive cleaners.

There are compatibility issues with alkaline cleaning products, solvents such as acetone, carbon, carbon tetrachloride, paint thinners, or alcohol compounds > 5%. Ammonia, benzene, glycerin, xylene, abrasive cleaners, degreasing detergents and strong spray cleaners for glass panes are also not suitable.

☞ Switch the machine on using the on/off press switch.

☞ Allow the machine to cool down.

☞ Wipe the outer surfaces of the machine with a clean, damp cloth.

☞ Rub the surfaces dry with a fine wool cloth.

✓ The machine housing is now clean.

10.5.8 Cleaning beverage outlet by hand

☰ The beverage outlet should be cleaned regularly.

☞ Clean the beverage outlet from the outside with a moist cloth.

☞ Clean the outlet openings with suitable brushes.

✓ The beverage outlet is cleaned.

10.5.9 Cleaning milk system by hand

> **⚠ WARNING**
>
> **Risk of chemical burns from milk system cleaner!**
>
> The milk system cleaner can cause serious eye injuries if it comes into contact with eyes.
>
> - Do not touch the cleaner with bare hands and read the enclosed safety data sheet.
> - Make sure that the milk system cleaner never comes into contact with eyes.
> - Wear protective gloves and goggles when cleaning.
> - When descaling with a descaling agent with an internal water tank: Do not remove the water tank with cleaning product and the vessel for collecting the cleaning liquid during the descaling process. Wait for the instruction on the display.

> **⚠ CAUTION**
>
> **Risk of scalding from accidental beverage dispensing!**
>
> During cleaning, accidental beverage dispensing may result in scalding.
>
> - Disconnect the machine from the power supply before cleaning.

> **⚠ CAUTION**
>
> **Risk of scalding from steam nozzle without milk foamer!**
>
> The steam nozzle without milk foamer can blow off hot steam.
>
> - Never install the steam nozzle without the milk foamer.

Manually cleaning milk system

After system cleaning, manual cleaning of the milk foamer and the steam nozzle can be performed **as needed**.
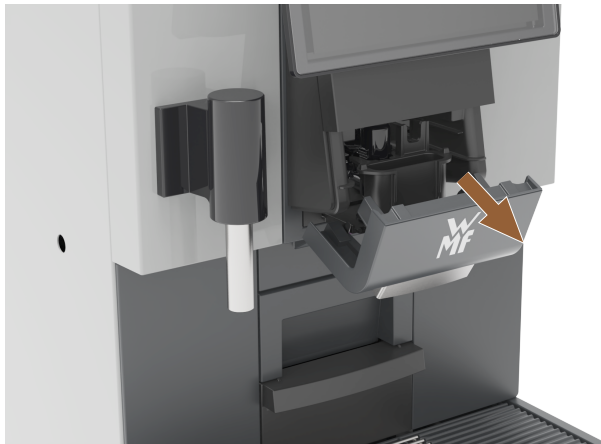

Fig. 38: Removing cover

☞ Remove the cover from the outlets.

Fig. 39: Removing milk foamer with steam nozzle

☞ Remove milk foamer with the steam nozzle.

☞ Disassemble the individual parts and clean them thoroughly under warm running water.

☞ Clean the guide in the outlet with a moist cloth.

☞ Clean the channels and the connections with the supplied cleaning brush.

☞ Mix 5 ml of special cleaner with 0.5 liters of warm drinking water.

☞ Place all individual parts and the cleaning brush in the prepared cleaning liquid so that all parts are completely covered with the cleaning liquid.

☞ After 5 hours, clean all parts thoroughly with a brush.

☞ Very thoroughly clean all parts with clean drinking water.

Assembling milk foamer

☞ Moisten the parts that will be joined. Do not grease them.

Fig. 40: Assembling milk foamer

☞ Assemble the parts and press them together firmly.

☞ Reinsert the milk foamer into the outlet.

Cleaning milk hose

☞ Dip one end of the milk hose into the cleaning fluid.

☞ Dip the rest of the milk hose lengthwise into the cleaning fluid.

   ✓ This process prevents air bubbles from getting trapped in the milk hose.

☞ Make sure that all parts are completely covered with the cleaning fluid.

10.5.10 Cleaning powder mixer

Cleaning may be required more often depending on the powder used.

☞ Perform mixer rinsing.

Fig. 41: Display on the left, door open

☞ Push the display to the left.

☞ Open the door on the right side of the machine.

Fig. 42: Mixing cup

☞ Pull the mixing cup forward by the handle.

☞ Lift the mixing cup slightly so that any residual water drains out.

☞ Pull the mixing hose from the mixing cup to the outlet and remove it from the guide.

   ✓ The mixer propeller is now visible.

☞ Clean the propeller with a moist cloth.

☞ Disassemble the two-part mixing cup.

☞ Clean both mixing cup parts and the mixer hose under warm running drinking water.

☞ Let the parts dry fully.

Assembling mixing cup

At the time of reassembly, all openings must point in the same direction.

Fig. 43: Mixing cup assembly

☞ Reinsert the mixer house through the guide into the outlet.

☞ Reinsert the mixing cup until it engages.

☞ Attach the mixing tube to the mixing cup. Make sure it is securely attached.

10.5.11 Cleaning bean hoppers

The permanently installed bean hoppers can be cleaned at regular intervals and as needed.

Recommendation: Monthly

⚠ CAUTION

Risk of injury from hair being drawn in

Very long hair could get stuck in the grinder head and get pulled into the machine.

☝ Always wear a hair net when exposing the grinder head.

⚠ CAUTION

Risk of crushing due to moving parts!

The machine contains moving parts which could injure fingers or hands. There is a risk of crushing when removing the brewing unit.

☝ Always switch off the machine and disconnect it from the power supply before reaching into the coffee grinder or the opening of the brewing unit.

☞ Briefly press on the on/off press switch (approx. 1 second).

    ✓ The machine switches off.

☞ Pull out the power plug.

If more than one bean hopper is installed, the following steps must be performed for each bean hopper.

☞ Remove the lid of the bean hopper and empty the bean hopper.

☞ Clean the bean hopper with a moist cloth.

☞ Clean the lock elements in the bean hopper with the supplied brushes.

☞ Allow the bean hopper to dry completely.

☞ Refill the bean hopper and close it with the lid.

✓ The bean hopper is cleaned.

Bean hopper extension (optional)

☞ Unlock the extension.

☞ Remove the extension upwards.

☞ Wipe the extension thoroughly with a damp cloth and let it dry.

☞ Replace the extension and lock it.

✓ The container extension is clean.

10.5.12 Cleaning powder container

The powder container can be cleaned at regular intervals and as needed.

Recommendation: Monthly.

Cleaning may be required more often depending on the powder used.

☞ Briefly press on the on/off press switch (approx. 1 second).

    ✓ The machine switches off.

☞ Pull out the power plug.

Fig. 44: Remove powder container

1 Pull the retaining bracket forward	**2** Lift out powder container

☞ Release the powder container by pulling the retaining bracket forward.

☞ Lift the powder container upwards out of the machine.

☞ Remove the lid from the powder container and empty the powder container.

☞ Clean the powder container with a moist cloth.

Dismantling powder container

Fig. 45: Powder container with individual parts, dosing screw

☞ Unscrew the cap nut at the front and rear.

☞ Pull out the dosing screw and remove the discharge cap.

☞ Wipe the powder container thoroughly with a damp cloth.

Cleaning individual parts

☞ Clean the individual parts of the dosing screw thoroughly with the provided cleaning brush.

☞ Let the powder container and individual parts dry completely.

Assembling and inserting individual parts

☞ Reassemble the dosing screw.

☞ Insert the dosing screw into the powder container.

☞ Screw on the cap nuts.

☞ Make sure that the discharge cap is positioned correctly.

☞ Fill the powder container and put the lid on.

☞ Close the lock.

✓ The powder container is cleaned.

Powder container extension (optional)

☞ Unlock the extension.

☞ Remove the extension upwards.

☞ Wipe the extension thoroughly with a damp cloth and let it dry.

☞ Replace the extension and lock it.

✓ The container extension is clean.

11 Maintenance

⚠	⚠ **WARNING**

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.

Maintenance and safety-related activities may only be carried out by service staff.

⚠	⚠ **WARNING**

Health problems caused by heavy machine!

The weight of the machine exceeds the permissible load that a single person is allowed to lift or carry alone. The load of the machine may cause health problems when lifted or carried by a single person.

- Do not lift or carry the machine alone.
- Only lift or carry the machine with two people.

⚠	⚠ **CAUTION**

Risk of injury due to machine tipping over!

Improper lifting of the machine can cause it to tip. A tipping or falling machine can cause injury.

- Do not lift the machine alone.
- Only lift the machine with two people.

⚠	⚠ **CAUTION**

Risk of injury due to slipping!

Leaking liquid can lead to a wet floor around the machine. This can lead to injuries from slipping and falling.

- Dry any spilled liquids on the floor immediately after spills occur.
- Indicate large quantities of leaked liquid on the floor with a mobile warning sign.

The machine requires regular maintenance. This also includes safety-related activities.

With a few exceptions, the operator is not permitted to carry out maintenance and safety-related activities alone. For this type of maintenance or safety-related work, the service partner authorized by the manufacturer must be commissioned immediately. The service partner carries out all necessary work on the machine.

As soon as the time for maintenance or safety-related work is reached, the machine indicates this on the display. The machine can continue to operate normally.

The time of maintenance depends on various factors, but mostly on the utilization of the machine and the service life of the safety valves.

The safety valves must be replaced every two years.

11.1 Maintenance levels

The following maintenance levels exist:

1. **Descaling:** This can be done by the operator.
2. **Maintenance after notification on the display:** This must only be carried out by trained staff or the service partner because safety tests have to be performed.

For other maintenance work and repairs, contact the responsible service partner. The telephone number can be found on the address label on the machine and on the delivery slip.

See also

📄 Spare parts and customer service [▶ 9]

12 Descaling

> **⚠ WARNING**
>
> **Risk of acid burns!**
>
> Acid escapes during the descaling process. This results in risk of skin irritation and severe eye irritation.
>
> - Familiarize yourself with the product information on the packaging of the descaling agent.
> - Do not touch the descaling product with bare hands and read the enclosed safety data sheet.
> - Wear protective gloves and goggles when descaling.
> - Make sure that no one drinks the decalcifying solution.
> - When descaling with a descaling agent with an internal water tank: Do not remove the water tank with cleaning product and the vessel for collecting the cleaning liquid during the descaling process. Wait for the instruction on the display.

> **⚠ CAUTION**
>
> **Risk of scalding from decalcifying solution!**
>
> During descaling, hot decalcifying solution flows out of the outlets. This creates a risk of scalding.
>
> - Only start descaling when the machine is completely assembled.
> - For movable beverage outlet: Move the beverage outlet to the lowest dispensing position.
> - Do not reach under the outlets during the descaling process.

> **⚠ CAUTION**
>
> **Risk of burning due to hot surfaces!**
>
> The outlets and adjacent surfaces become hot when dispensing beverages and during cleaning and descaling.
>
> - Only touch the beverage outlet at the designated places.
> - Do not touch the dispensing points immediately after dispensing.
> - Wait five to ten minutes until the machine has cooled down.

> **! NOTICE**
>
> **Property damage due to incorrect descaling product!**
>
> The machine may be damaged if descaling products other than those recommended by the machine manufacturer are used. Liability cannot be accepted for damages resulting from the use of other descaling products, warranty claims become invalid.
>
> - Only use descaling products recommended by the machine manufacturer.
> - Only use descaling products that have been removed directly from the packaging.
> - Read the information on the packaging and the safety data sheet carefully before descaling. If no safety data sheet is available, request one from the sales partner.

The exact time for descaling is determined by the water hardness, water throughput and whether or not a water filter is used. This time specification is calculated and displayed by the machine.

The descaling process consists of four stages.

- Cooling routine (if machine is heated up)
- Preparation

- Descaling
- Rinsing

Total duration of descaling

Descaling takes approx. 80 minutes in total. Do not stop the procedure at any point before it is completed.

Required utensils

The following is needed during the descaling process:

- 2 bottles of liquid decalcifier (0.75 liters each)
- 1 bottle of water (0.75 liters)
- 3 liter collecting container

Carrying out descaling

The instructions on the screen lead through the program step-by-step. When started, a sequence begins which must be followed.

☞ Call up the Care menu.

☞ Tap on **Descaling**.

☞ Follow the instructions on the screen.

✓ The descaling process is performed.

13 Software settings

When setting beverages and other software settings, the same safety notes apply as for the operation of the machine.

☞ Observe all safety notes that apply to operation.

13.1 Software overview
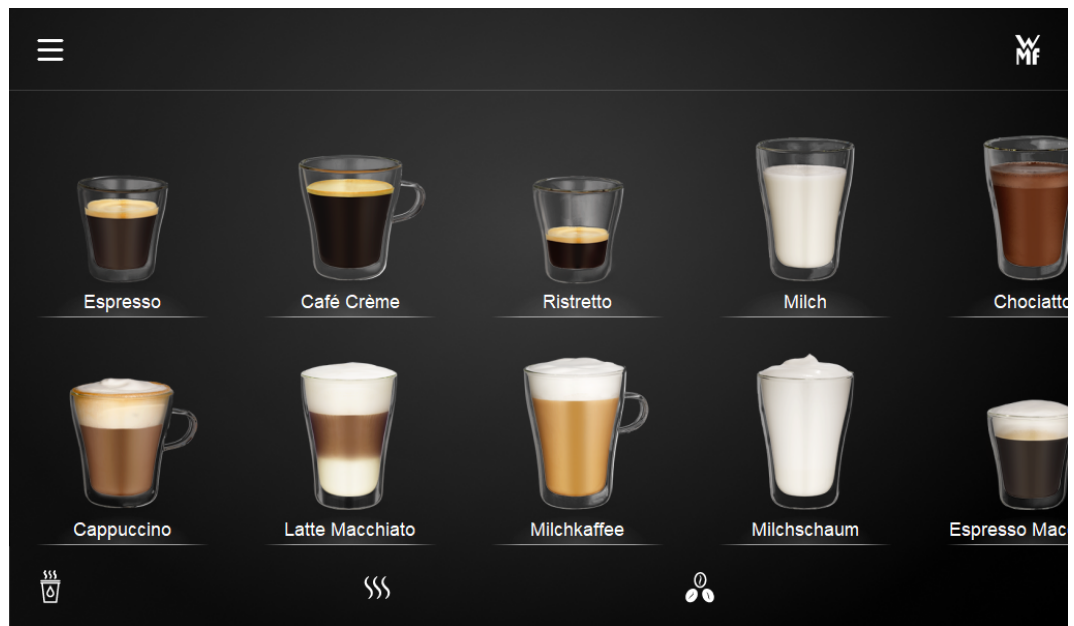
Fig. 46: Ready for use display

The buttons and symbols on the display are available depending on the setting and machine version.

Functions in Ready for use display

	Eco mode (active)		Warm rinsing
	Special button for S-M-L		Barista (coffee strength)
	Cup size adjustment		Decaf button
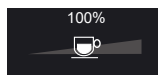
Main menu functions

	Care		Info
	Beverage		System

	Accounting		Operating options
	Timer		Language
	USB		PIN rights
	Eco mode		PIN access

Menu control functions

	To the main menu, to the previous menu		Confirm value/setting
	PIN entry		Delete value/setting
	Next, previous, start		Test preparation
	Loading settings		Back
	Saving settings		Calling up keyboard

Notifications on the display

	Error message		Milk temperature display (optional)

13.2 Ready for use screen

The operating elements displayed shown when the machine is ready for use depend on the options of the machine and individual settings.

All dispensing-ready beverage buttons are illuminated.

Fig. 47: Example: Cappuccino button

Swiping the display horizontally shows the other beverages available for dispensing. Beverage dispensing starts after tapping on the desired beverage button.

Warm rinsing button

Fig. 48: Warm rinsing button

☞ Tap on the **Warm rinsing** button.

✓ A process of rinsing the coffee lines with warm water starts.

The water warms up the brewing system and ensures that the brewed coffee is at an optimum temperature.

Warm rinsing is recommended after a long break in brewing, especially before dispensing a cup of espresso.
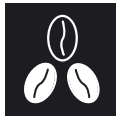
Barista button

Fig. 49: Barista button

The coffee strength can be changed using the **Barista** button. The coffee strength is changed one time for the next brew.

	Display	Coffee strength
Standard	2 beans	Normal, as set
Tap 1x	3 beans	15% stronger than set*
Tap 2x	1 bean	15% weaker than set*

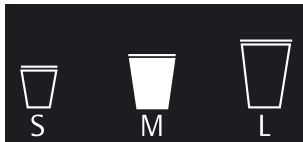* Maximum coffee ground quantity 15 g per brew

S-M-L

Fig. 50: S-M-L function

The S-M-L operating element is used to preselect beverage sizes. The beverages must be set accordingly beforehand.
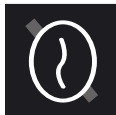
Second coffee type (DECAF)

Fig. 51: DECAF button

☞ Assign a coffee grinder with **Decaf** in the machine data.

☞ Select **Decaf** under Operating options.

✓ A crossed-out bean symbol is displayed in the function bar.

☞ Tap on the **DECAF** button before beverage selection.

✓ The following beverage is prepared with the beans in the coffee grinder for decaf coffee.
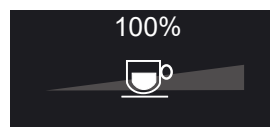
Cup size adjustment

Fig. 52: Cup size slider

The slider is used to select the beverage size for the next beverage.

13.3 Care screen

> ⚠ **CAUTION**
>
> **Risk of scalding from machine rinsing!**
>
> During machine rinsing, hot water runs out of the beverage outlet.
>
> ⌀ Do not reach under the beverage outlet during a machine rinse.
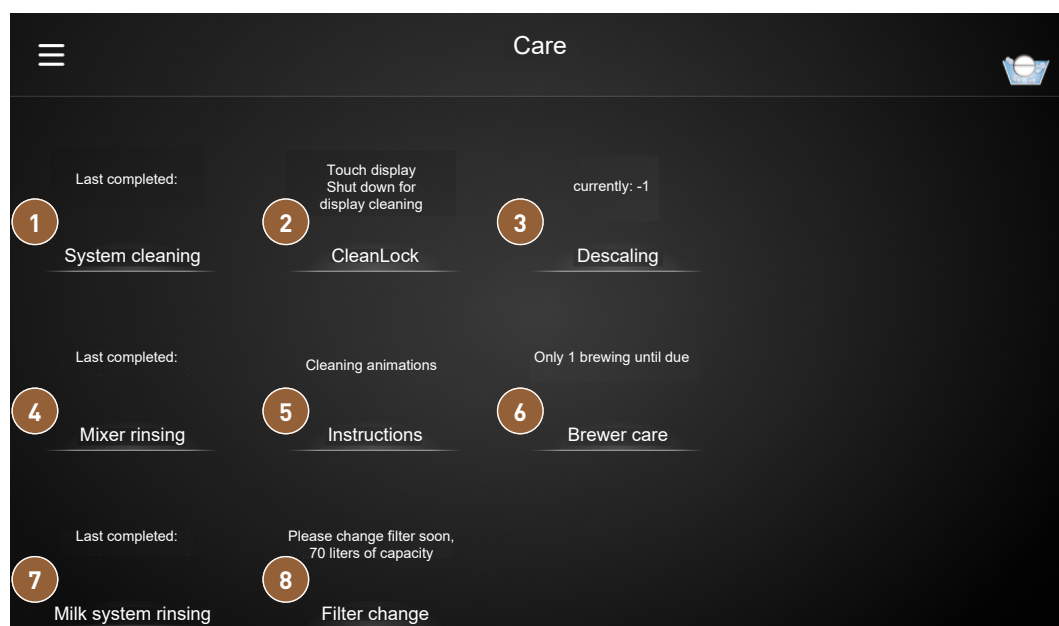

Fig. 53: Sandwich menu guidance -> Care

Fig. 54: Care screen with brewing unit maintenance

1 **System cleaning** can be performed with or without switching off the machine afterwards.

A system cleaning notification appears automatically after six days or 200 brewings. After seven days or 250 brewings, beverage dispensing is locked. The machine can only be used again after cleaning.

2 The **CleanLock** function locks the screen for 15 seconds after the last touch. This allows the screen to be cleaned. The screen is reactivated 15 seconds after the last time it is touched.

3 The water hardness, water flow rate and whether a water filter is used determine the number of liters remaining until

4 **Mixer rinsing** refers to intermediate cleaning of the powder mixer.

descaling is necessary. This liter specification is calculated and displayed by the machine.

5 **Instructions** in the form of screen animations for the available cleaning programs and for installation and disassembly of the coffee outlet, milk foamer, milk hose, mixer system and water filter exchange can be called up here.

6 After 15,000 brewing cycles, the O-ring on the **brewing unit** must be changed. When the end of the service life is reached, a daily notification appears as a reminder that a change is overdue. The change must then be confirmed.

This is explained in detail with animations in the main menu under **Care -> Care of the brewing unit**.

7 The **milk system rinsing** process rinses the milk hose with the milk nozzles and the milk foamer.

8 A **filter change** is necessary to avoid machine damage.

From 25% remaining filter capacity, the remaining filter capacity is displayed each time the machine is switched on.

If the remaining filter capacity is 0%, a message is displayed every three hours that the water filter must be changed.

After the filter has been changed, a program sequence for rinsing and bleeding the water filter and the water system is performed. While doing so, hot water flows out of the hot water outlet.

The change must then be confirmed.

13.4 Beverage settings

Fig. 55: Sandwich menu guidance -> Beverages

The beverage settings define which beverage types are offered on the operating screen. This refers to recipes, quantities, assignment of beverage buttons and visual display.

13.4.1 Assigning beverage recipes

Recipes can be assigned to individual beverage buttons.

Test dispensing

Fig. 56: Test preparation button

For many beverage settings, is it possible to start test dispensing with the new settings before the recipe is saved.

Fig. 57: Example: Cappuccino button

☞ Change the settings as desired.

☞ Tap on the **Test dispensing** button.

✓ The beverage is dispensed with the new values.

Saving recipes

Fig. 58: Save recipes button

☞ When the beverage is as desired, tap on the **Save** button.

✓ The changed recipe is saved.

Loading recipes

Fig. 59: Load recipes button

This button can be used to assign a saved recipe to a beverage button.

☞ Tap on the desired beverage button.

☞ Tap on the **Load recipes** button.

   ✓ A submenu opens.

☞ Select the desired recipe.

☞ Tap on the **Save recipes** button.

✓ The beverage button is assigned with the new recipe.

13.4.2 Fill level, cup grid animation, multiple brewings & dosing type

Filling quantity

Fig. 60: Filling quantity button

☞ Select the desired filling quantity.

✓ The recipe is adjusted appropriately.

100% corresponds to the previously saved value.

Cup grid animation

The **Cup grid** animation is displayed after beverage selection if it was previously activated under **Filling quantity** per beverage. The **Cup grid animation** checkbox must be selected for this purpose.

▤ Procedure for beverage dispensing:

☞ Tap on the desired beverage button.

   ✓ The animation is shown on the display.

☞ Confirm with ✅.

✓ The beverage is dispensed.

S-M-L function

The S-M-L function is activated in the **System** menu. A deviation from the standard filling quantity can also be changed for all beverages under **System**.

The S-M-L quantities must be changed under **Filling quantity (beverage settings)** for deviating individual beverages.

Every size can be individually activated or deactivated. Deactivated means that the size cannot be selected for this beverage in this case. The setting must then be confirmed.

S-M-L filling quantity

The setting for the filling quantity is only available if the S-M-L function is activated under **System**. The recipes are generated for the sizes S and L. M is as set (medium).

Fig. 61: S-M-L setting

Standard values:

- S = 25% less than M
- L = 25% more than M

Multiple brewings

The beverage is brewed several times as set. Up to twelve times the set quantity can be dispensed for a beverage at the push of a button.

Multiple brewing is available for mixed coffee and milk beverages as well as for hot water with the **Portion control** dosing type.

Dosing type

The dosing type can be determined for hot water, milk foam, milk and steam. All other beverages are already dispensed with portion control.

Dosing type	Description
Start-stop	Dispensing is carried out until the set quantity has been reached. Dispensing can be stopped earlier by pressing the button again.
Freeflow	The beverage is dispensed as long as the button remains pressed.
Start-stop freeflow	Briefly pressing the button starts the start-stop dispensing process.
	Pressing the button for longer than 1 second starts the freeflow dispensing process.
Portion control	The set quantity is dispensed. The dosing type is available for milk, foam and hot water.

13.4.3 Changing recipes

Fig. 62: Recipes button

This button is used to access the settings for changing recipes.

Fig. 63: Screen for changing recipes

Current recipe structure

The ingredients contained in the current recipe are shown here.

The preparation sequence is from left to right. Ingredients listed under one another are prepared at the same time.

The software reports if the desired options are technically impossible.

Supply of factory extras

The ingredients which can be used for the recipes are shown here.

☞ Tap on the desired ingredient and drag it into the current recipe structure.

Deleting ingredient

 Deletes a marked ingredient from the current recipe structure.

Changing ingredient

 Changes a marked ingredient from the current recipe structure.

☞ Mark the ingredient and tap on the **Change ingredient** button.

   ✓ The **Change ingredient** menu opens.

☞ The setting options for the desired ingredient are displayed.

✓ The saved and the current data is displayed.

 Current values

 The values saved by Service

Factory values

Ground coffee quantity

Given in grams (g)

Water/Milk volume

Given in milliliters (ml)

Coffee quality

> **NOTICE**
>
> If very fine ground coffee is used with a very small amount of brewing water, a high quality level can lead to brewing water errors.

The quality levels influence the brewing of the coffee. The higher the quality level, the more intensive is the release of the coffee's flavoring agents.

Quality levels	
1	After pressing, the ground coffee is given room to expand.
2	After pressing, the beverage is brewed right away.
3	After pressing, the beverage is pre-infused right away.
4	After pressing and pre-infusion, the ground coffee is pressed while wet.
5	Like quality 4, but more forceful wet pressing
6	Like quality 5, but longer and more forceful wet pressing
7	Like quality 6, but longer and more forceful wet pressing

Selecting coffee grinder (optional)

On machines with two coffee grinders, you can select which coffee grinder to use for each coffee recipe. The value 1 is assigned to the desired coffee grinder.

Grinder 1	Grinder 2	ground coffee
1	0	The ground coffee from grinder 1 is used.
0	1	The ground coffee from grinder 2 is used.
1	1	Half of the ground coffee is taken from grinder 1 and half from grinder 2.

13.4.4 Text and image

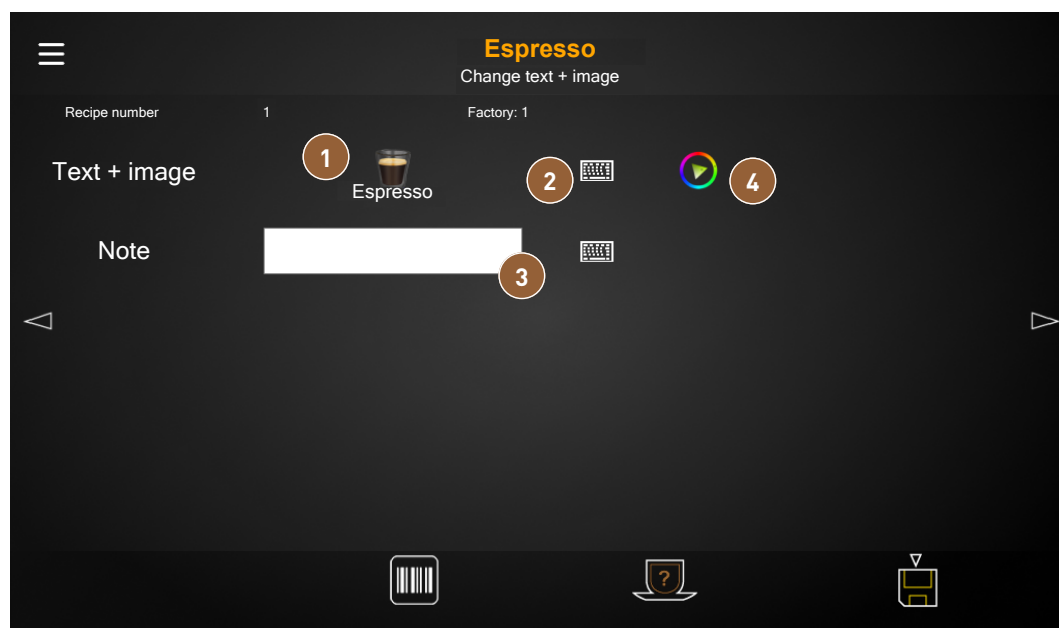On this screen, you can customize the beverage name and the image of a beverage button.

Fig. 64: Text and image screen

1	Displays the image currently displayed for a beverage.	**2**	**Keyboard** button to call up the screen keyboard
3	**Note** input field for a note about the beverage	**4**	Button to open the settings screen for color and font

☞ To make text adjustments, activate the keyboard using the **Keyboard** button.

☞ To adjust the image, tap on the currently displayed image.

☞ If necessary, add a note about the beverage in the **Note** input field.

☞ Tap on the Color wheel button if needed.

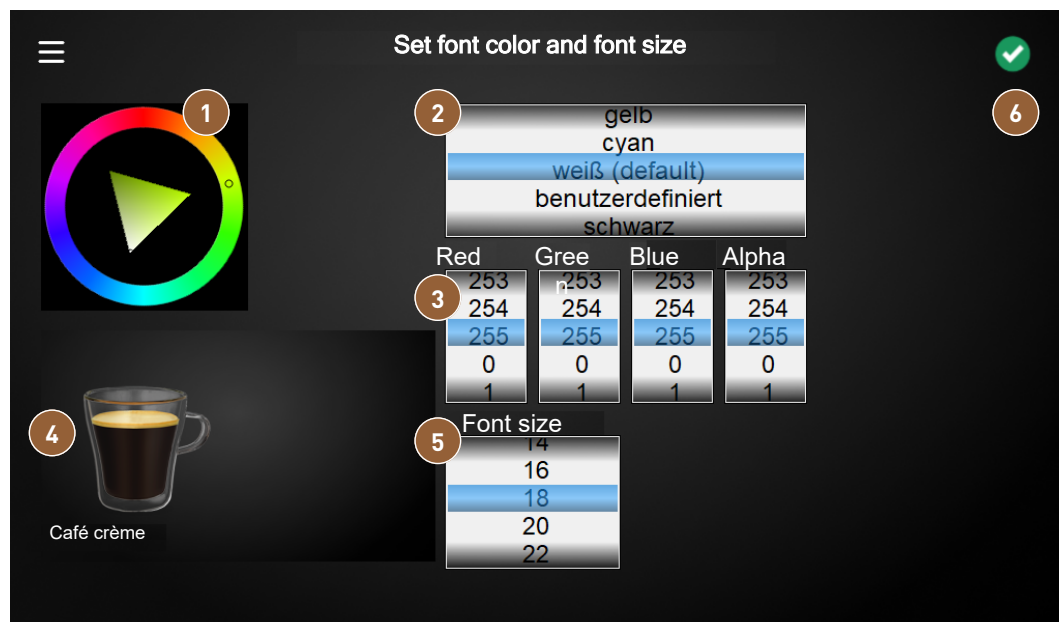✓ The settings screen for the background and font will open.

Fig. 65: Beverage background screen

1	Color wheel for setting the background color	**2**	Setting dial for predefined font color
3	Setting dials for individual RGBA values for the font	**4**	Preview of the beverage button
5	Setting dial for font size	**6**	Button for confirmation

☞ Adjust the background and font properties.

☞ Confirm with ✅.

✓ The values are applied.

13.5 Configuring operating elements

Fig. 66: Sandwich menu guidance -> Operating options

SS mode (self-service)

Some functions can be switched deactivated for self-service mode. These functions and their operating elements are not shown when they are inactive.

Options	Standard value
Active, inactive	Inactive

Self-service mode means the that following settings are switched at the same time:

Operating element	Status
Barista button	Inactive
Warm rinsing button	Inactive
Menu button	Delayed
Error indication	Icon
Cup size adjustment	Inactive
Language preselection	Inactive
Cup grid animation	Active

Barista button

Options	Standard value
Active, inactive	Active

If active: The button is displayed at the bottom with the three-step coffee strength setting when the machine is ready for use.

Warm rinsing button

Options	Standard value
Active, inactive	Active

If active: The button appears at the very bottom when the machine is ready for use. This is recommended for longer breaks or espresso.

Menu button

Options	Standard value
Immediately, delayed	Immediately

If immediately: The button responds immediately when tapped.

Error indication

The fault is reported with different colors in the display header.

Options	Standard value
Text, symbol	Text

Cup size adjustment

The free filling quantity selection can be activated in the Operating options. That means the filling quantity can be adapted to the cup size used before beverage selection.
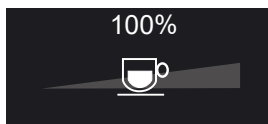

Fig. 67: Slider for cup size

If the cup is pushed to the right on the controller, the filling quantity increases, while pushing to the left lowers the filling quantity. The filling quantity is given in percent.

- Controller in the center as set: 100 %
- Controller all the way to the left: 50 % less
- Controller all the way to the right: 50 more

Options	Standard value
Active, inactive	Inactive

Language preselection

Whether the preselection of languages and flags is possible when the machine is ready for use is set here.

The language preselection can be activated here individually for up to five language buttons.

The second option under **Operating options** is the selection of the **SS+flags** button layout.

Options	Standard value
Active, inactive	Inactive

Cup grid animation

Here you can set whether the **Cup grid** animation is enabled in the beverage settings. The animation can be activated or deactivated here for all recipes defined in the beverage settings.

Options	Standard value
Active, inactive	Active

Button layout

Various standard layouts for beverage menus are stored here and can be selected.

PostSelection

Options	Standard value
Active, inactive	Inactive

If active: The selection of the coffee type and the beverage size are queried after the beverage has been selected. The names of the coffee types and the sizes can be changed. (Coffee type and S-M-L).

- Size 1
- Size 2
- Size 3

- Portioner 1
- Portioner 2

Some functions could be switched to be inactive for self-service mode. The functions and their fields are not shown when they are inactive.

Display mode

Options	Standard value
One-sided, multi-sided	One-sided

Decaf

Options	Standard value
Active, inactive	Inactive

If active: Percentage of the ground coffee quantity of the standard recipe

Decaf factor

The value for the decaf factor is set here. The ground coffee quantity for decaf (decaffeinated coffee) is determined in percent of the ground coffee quantity set in the recipe.

This setting applies for all coffee beverages with the **Decaf** preselection.

At a 15% decaf factor, café crème, for example, is brewed with 15% more ground coffee than in the standard recipe when preparing with the decaf function.

Options	Standard value
Active, inactive	Inactive

Beverage preselection

Options	Standard value
Active, inactive	Inactive

If active: Previously selected beverages are dispensed without the button being pushed again. Beverage cancellation is not possible.

Beverage cancellation

Options	Standard value
Active, inactive	Active

If active: Beverage dispensing can be interrupted by pressing the beverage button again.

13.6 Info menu

Fig. 68: Sandwich menu guidance -> Info

The Info menu offers the following selection options:

Last brewing

Shows information on the last brewing.

Timer

The timer weekly overview is called up. All switch-on and switch-off times are shown in this overview.

Service

Displays the contact details for service and the serial number of the machine.

Care

Shows the last cleanings and care measures which run via coffee machine programs.

Water filter and descaling

Shows information on the remaining capacity of the water filter and the time of the next descaling process.

Log

Shows a log of events and errors for operation and cleaning of the machine.

13.7 Accounting

Fig. 69: Sandwich menu guidance -> Accounting system

Counters

The counters of the dispensed individual beverages and the sum of the beverages are shown here.
A log can be read out using the USB output.

Fig. 70: Screen for accounting system

Standard setting	
Counter 1	Daily counter
Counter 2	Weekly counter
Counter 3	Monthly counter
Counter 4	Yearly counter

The individual counters can be assigned individually and reset independently of each other.

13.7.1 Free settings

The free settings are available together with optional accounting system units.

Options	Standard value
Active, inactive	Active

Everything free

Options	Standard value
Active, inactive	Inactive

Beverage free

Options	Standard value
Active, inactive	Inactive

Indication in display

If the **Everything free** setting is activated, a text can be stored here. (e.g. *free*). The text entered will be displayed in the header.

Display on beverage buttons

If the **Everything free** setting is activated, a text for the beverage button can be stored here.

13.8 PIN rights

Fig. 71: Sandwich menu guidance -> PIN rights

A PIN can be assigned for each of the areas listed below.

- Cleaning
- Settings
- Accounting

The PINs are hierarchically structured.

Example   The setting PIN simultaneously releases all rights for the cleaning PIN, but not all the rights for the accounting PIN.

If no PIN is assigned, the area is accessible without a PIN. If a PIN is assigned to an area, no access is granted without that PIN.

Cleaning PIN

After entering the valid PIN, access to the following areas is available:

 Care

Setting PIN

After entering the valid PIN, access to the following areas is available:

 Care   Timer

 Beverage   System

 Operating options   Language

 Accounting system (without **deletion**)   USB

Accounting PIN

After entering the valid PIN, access to the following areas is available:

	Care		Timer
	Beverage		System
	Operating options		Language
	Accounting system (with **deletion**)		USB
	PIN		
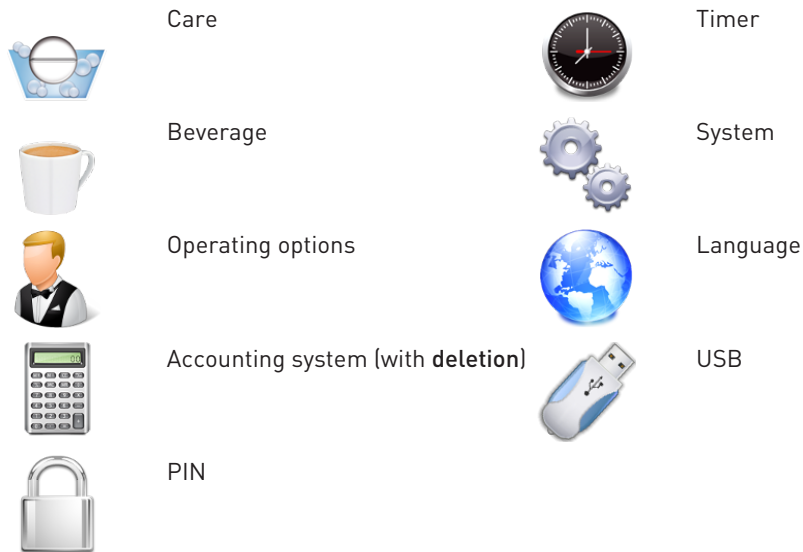
Assign new PIN

As soon a PIN has been assigned for access authorization, the PIN must be entered here to assign a new PIN:

PIN

13.9 Menu timer

Fig. 72: Sandwich menu guidance -> Timer

Time/Date

The current time and date are set here.

Daylight savings time

This is where you set the automatic time change to daylight savings or standard time. The menu item is available if no telemetry module is installed.

Options	Standard value
Active, inactive	Inactive

Time zone

The time zone is set in the **Time zone** menu item.

Status of beverage menu layouts

Options	Standard value
Active, inactive	Inactive

If active: Beverage menu layouts can be assigned automatically using the timer.

Example   From 9:00 p.m. to 6:00 a.m., beverage menus are only available in self-service mode.
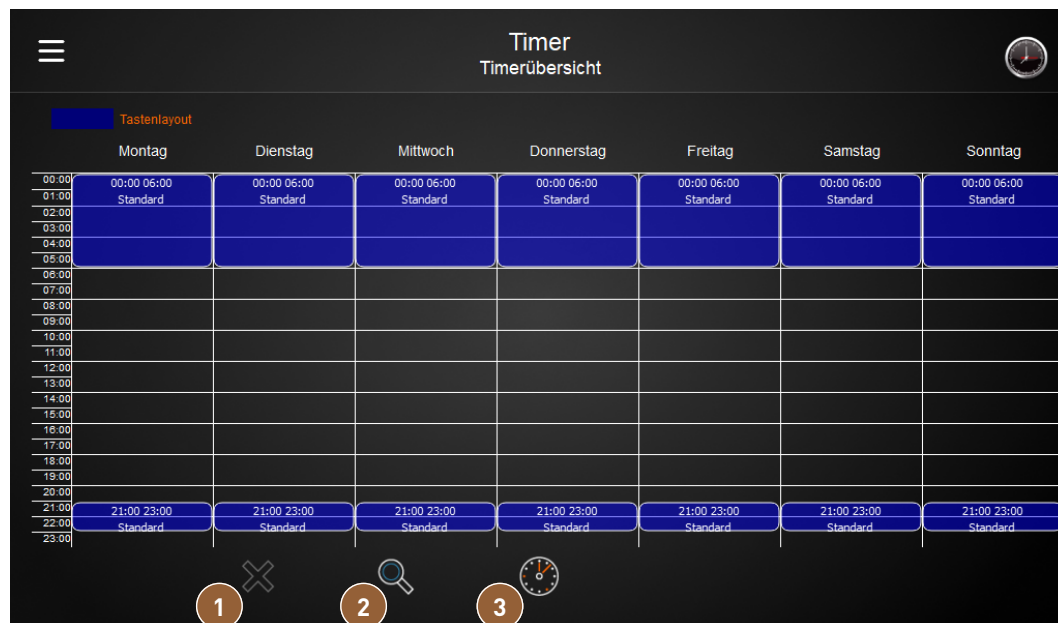
Overview of beverage menus

Fig. 73: Timer overview screen

1 Deletes previously marked switching times.	**2** Switches between daily and weekly overview.
3 Sets the timer switching times.	

The weekly overview is displayed for all switching times for the beverage menu layouts.

The settings can be changed directly in the overview.

The minimum time for displaying a beverage menu layout is 30 minutes.

The beverage menu layout can be switched using the timer:

☞ Select the timer function.

☞ Select a single day or several days.

☞ Set the timer switching times.

13.10 System setting

Fig. 74: Sandwich menu guidance -> System

13.10.1 Milk and foam

The central, generally-applicable values for milk and milk foam are set here. These values apply for all available recipes.

If special values for milk and milk foam are set in the recipes, they remain valid and are not changed.

Milk storage temperature

Options	
>16 °C	Green milk nozzle (standard)
<10 °C	Orange milk nozzle (accessories)

> **i** **NOTICE**
>
> **Recommendation for using the milk nozzle**
>
> The green nozzle should be used from 10 °C. We recommended a milk storage temperature of 16-22 °C for optimal results when using uncooled milk. The blue nozzle for a constant temperature of less than 5 °C must be ordered and activated by a technician if needed.

Empty message

Prerequisite: A cooler with an empty message function is required.

Here you can set whether a milk empty message is output.

The empty message can be linked to a beverage lock. This is particularly important in self-service operation to ensure that beverages that have already been paid for are dispensed in full.

Temperature sensor

Prerequisite: A cooler with an temperature sensor is required.

The milk temperature is measured.

13.10.2 Progress screen

Options	Standard value
Line, circle, off	Circle

13.10.3 Display and lighting

This system menu contains parameters for the display, such as brightness and lighting at the outlet.

The lighting concept consists of two parameters:

Lighting at the outlet

Options	Standard value
Active, inactive	Active

If active: While the machine is ready for use, a small light is constantly illuminated directly behind the beverage outlet.

Event (notification) display

Options	Standard value
Active, inactive	Inactive

If active: The lighting during a notification is activated.

Screen saver

The start time and frequency can be activated and set for a screen saver. The screen saver must be loaded onto the machine beforehand.

Dispensing animation

The display duration for an animation during beverage dispensing can be set. The image must be loaded onto the machine beforehand.

Display brightness

The display brightness can be configured in 5 percent steps.

Automatically decreasing brightness

Options	Standard value
Active, inactive	Active

If active: The display brightness is automatically decreased 5 minutes after the last beverage dispensing process (break in operation). If the display brightness has been decreased, the display goes back to the selected brightness when the display is tapped for the first time. Tapping on the beverage button for the second time dispenses the corresponding beverage.

Touch calibration

The touch display can be recalibrated here.

Display background

The color design for the touch display can be set here.

- Background for the **main page**
- Background for **more pages**

Beverage button background

Here you can activate whether the background color can be changed in the beverage settings.

Options	Standard value
Active, inactive	Inactive

Beverage: font + color

Here you can define whether it is possible to change the font size and color for the beverages.

Options	Standard value
Active, inactive	Inactive

13.10.4 Water filter

Provides information on water hardness and water filter capacity.

Options	Standard value
Active, inactive	Inactive

If active: A water filter is present. Measured water hardness and water filter capacity are requested.

> **i** NOTICE
>
> **Water filter recommendation**
>
> We generally recommend using a water filter. Your service partner will be happy to advise you on selecting the right water filter.

Measured carbonate hardness

The measured water hardness in °dKH is entered here.

- ☞ Ask your water supplier about the hardness of your drinking water or measure it using the carbonate hardness test.

The carbonate hardness test with instructions is included in the supplied accessories.

Measured total hardness

> **❗ NOTICE**
>
> **Limescale due to incorrectly set water hardness**
>
> If the machine is operated with incorrectly set water hardness, this can lead to a high level of limescale, resulting in leaky valves.
>
> No liability is assumed for damages resulting from this.

Water filter capacity

The water filter capacity in liters is entered here if there is an active water filter.

Example: With a measured carbonate hardness of 10 °dHK, the water filter capacity to be set is 200 liters.

13.10.5 Activating Eco mode

Eco mode can be activated here.

Options	Standard value
Active, inactive	Inactive

Time until switch-off

The switch-off time can be set if Eco mode is activated. This sets the time between the last beverage dispensed and the machine switching off.

The setting can be adjusted in increments of 30 minutes.

Options	Standard value
Never	Never
30 min	
60 min	
90 min	
120 min	
150 min	
180 min	

Eco mode can also be activated and deactivated for a limited period of time using a timer.

13.10.6 Water boiler capacity

The boiler water temperature (coffee brewing water temperature) is set here.

13.10.7 Switch-off rinsing

Options	Standard value
Active, inactive	Active

If active: When switching off of the machine, the switch-off rinsing must be performed if milk beverages have been dispensed since the last cleaning.

13.10.8 Automatic milk system rinsing

Options	Standard value
Every 120 min, 52 hours	Every 52 hours

13.10.9 Beans empty message calibration

The beans empty message is recalibrated here. The container must be refilled as soon as the **Refill beans** notification appears even though there are still beans in the container.

13.10.10 Frost protection/Preparation for transport

This starts the routine for partial emptying of the water system.

If the machine will be shipped by a logistics service provider, it must be partially emptied before transport to prevent damage, especially in winter months.

13.10.11 Drip tray sensor

The drip tray sensor monitors the filling level of the drip tray. It prevents overfilling of the drip tray.

Options	Standard value
Active, inactive	Active

> ❗ **NOTICE**
>
> **Overfilled drip tray when sensor is deactivated**
>
> If the sensor is deactivated, the drip tray can overflow. This can cause property damage.
>
> ☝ Leave the sensor active.

13.10.12 Portioner

Here you can store names and images of the beans and powder used, which are displayed as a selection in the **Multi-page** PostSelection mode if the machine is equipped with more than one grinder or a double powder container.

See also

▤ Configuring operating elements [▶ 84]

13.10.13 S-M-L function
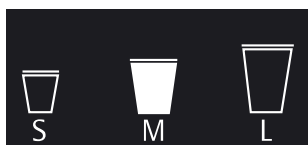
Fig. 75: S-M-L function

The S-M-L function is activated here.

Symbols and texts can be changed.

Beverage sizes can be changed based on the standard size (M).

Options	Standard value
Active, inactive	Inactive

Small

Standard change factor of the beverage size for S recipes which are newly activated.

Standard value: 75 %

Large

Standard change factor of the beverage size for L recipes which are newly activated.

Standard value: 125 %

13.10.14 Digital solutions

Data can be distributed using digital solutions.

Remote actions

Non-installed media packages that are sent using **WMF CoffeeConnect** and were not installed directly can be executed here later.

Smart Remote

The Service department can activate **Smart Remote**. This function can then be activated here.

Other options for remote access are possible with **WMF CoffeeConnect**.

13.11 USB port

Fig. 76: Sandwich menu guidance -> USB

The USB port is on the left side of the display.
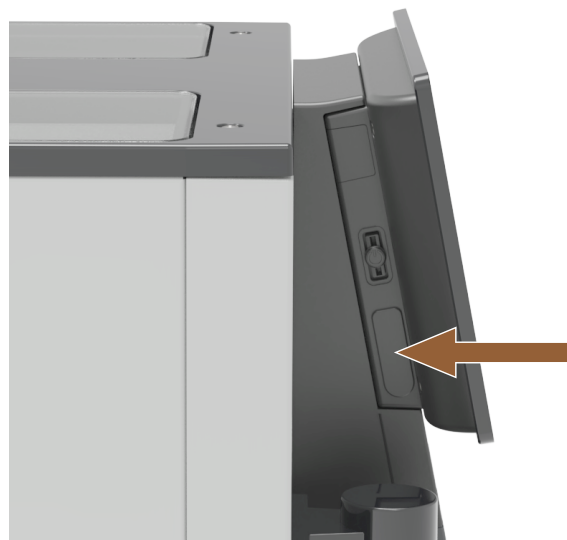
Fig. 77: USB port position

Data exchange is possible using the USB port. As soon as the USB stick is inserted, the functions become active.

Loading recipes

Recipes saved on the USB stick are loaded to the machine here.

Loading beverage symbols

Photos or beverage symbols saved on the USB stick are loaded to the machine here.

Saving recipes

The current recipes from the machine are exported onto the USB stick here.

Saving recipes as PDF

The active recipes, all customer recipes or all factory recipes can be exported as a PDF file.

Exporting counter

The current counter levels from the machine are exported onto the USB stick here.

HACCP export

The performed cleanings are logged and are exported here to the USB stick for the HACCP certificate.

Data backup

Set data such as machine data, beverage data, etc. is saved on the USB stick here.

Loading data

Saved data such as machine data, beverage data, etc. is loaded to the machine from the USB stick here (can be protected with a PIN).

Loading language

If available, an additional display language can be loaded to the machine from the USB stick here.

Firmware update

The Service department can load new software versions from the USB stick onto the machine here.

Restoration

After the firmware update, the previous version can be restored within 30 days.

13.12 Eco mode settings

Fig. 78: Sandwich menu guidance -> Eco mode

When Eco mode is activated [▶ 94], the steam boiler temperature is lowered 10 minutes after the last beverage is dispensed. The beverage buttons remain illuminated.

If a beverage containing milk will be dispensed at a lower temperature, the machine requires approx. 15 seconds to heat up. Beverage preparation only starts after heating.

Eco mode display

The Eco mode symbol is shown in the header of the Ready for operation display.

There are two states for Eco mode:

Display	Description
	Active: The coffee machine is currently in the reduction phase.

Display	Description
	Ready: Eco mode is wait time-controlled and is activated ten minutes after the last beverage is dispensed.

Immediate start

With the **Eco mode active** setting, the **Eco mode** button is displayed on the Ready for use display.

When the button is tapped, Eco mode is activated immediately. The button changes to **Eco mode** active.

13.13 Screen language

Fig. 79: Sandwich menu guidance -> Language

The display language is set here. The names of the available languages are displayed in English.

14 grind level adjustment

⚠ WARNING
Risk of crushing and cutting injuries from rotating grinding discs!
There is danger of crushing and cutting injuries due to rotating grinding discs in the grinder.

- Never reach into the bean hopper when the machine is switched on.
- Switch off the machine and disconnect the power plug before performing any work on the grinder.

Tool and adjustment opening

Fig. 80: Multi-tool

A multi-tool is included in the scope of delivery for the grinding degree setting function.

Fig. 81: Opening for grinding degree setting

The opening for the grinding degree setting is located on the left side of the machine.

Direction of setting

Direction of rota-tion	Effect
↻	Grinding level finer
↺	Grinding level coarser

Set grinding level finer

!	NOTICE

Grinding level too fine

Making a big change to a finer grinding level can block the coffee grinder.

☞ Use the multi-tool to adjust the grinding level by turning it one turn to the right at a time.

☞ Then make a coffee beverage using the finer grind setting.

☞ Repeat this step until the desired grinding level is set.

Set grinding level coarser

A change to a coarser grinding level can only be set once.

☞ Dispense a coffee beverage and wait until the grinder starts up.

☞ Adjust the grinding level as required using the multi-tool while the grinder is running.

15 Notifications and notes

This chapter contains information about notifications and how to resolve problems and malfunctions with the machine.

15.1 Notifications during operation

Refilling beans

☞ Refill the bean hopper with coffee beans (as indicated).

☞ Check whether the coffee beans slide.

☞ Stir with a large spoon and confirm with ✅.

☞ Run **beans empty message calibration**.

See also

Opening stopcock

☞ Open the water stopcock and confirm.

Emptying grounds container

☞ Empty the grounds container.

Grounds container missing

☞ Reinsert the grounds container correctly.

Changing water filter

☞ Follow the operating instructions for the water filter.

☞ Replace the water filter.

☞ Contact your service partner if necessary.

Calling the manufacturer Service department

☞ Enter the displayed error number.

Service notification

Service maintenance is required after notification on the display. Service notifications are notes. It is usually still possible to operate the machine.

☞ Contact the service partner.

15.2 Error messages and faults

Basic procedure when error messages or faults are displayed:

☞ Switch the coffee machine off and, after several seconds, switch it back on.

☞ Repeat the process that caused the fault.

✓ In many cases the fault is then eliminated and you can continue.

If this does not work:

☞ Search for the displayed error text or error number in the error list shown below and proceed as instructed.

If this is not successful or the displayed error is not listed:

☞ Call the service partner.

Locked functions

Some notifications cause individual functions to be disabled. You can identify this situation by the lights on the relevant beverage buttons going out. The beverages of the beverage buttons that remain lit can continue to be dispensed.

The machine is equipped with a diagnostic program. Any occurring errors appear on the display.

The listed error messages could also be caused by a power failure.

In the event of a current error or a note for the operator, the ⚠ button is displayed.

☞ Tap on ⚠.

✓ The error message and the error number are displayed.

> **ℹ NOTICE**
>
> **On/Off press switch**
>
> The on/off press switch reacts after approximately 1 second and the machine switches off. When troubleshooting, for example if the software freezes, the PC board can be switched off by pressing and holding the on/off press switch.

Error no.	Error name	Instruction
6	Brewing unit stalling current / Brewing unit sluggish	☞ Switch the machine off. ☞ Clean the brewing unit. ▪ See Cleaning brewing unit [▶ 57]
88	Boiler: excess temperature	☞ Switch off the machine, allow it to cool down, and switch it back on. ▤ If the error is not fixed: ☞ Switch the machine off. ☞ Call the service partner.
89	Boiler: heating time error	☞ Switch the machine off and back on. ▤ If the error is not fixed: ☞ Call the service partner.
161	Water error: brewing water	▤ The machine must be switched off and on again after every one of the following steps. If the error is not fixed, the next step must be performed. ☞ Clean the brewing unit. ☞ Set the grinding level coarser. ☞ Lower the quality setting. ▤ If the error is not fixed: ☞ Call the service partner. ▪ See Cleaning brewing unit [▶ 57] ▪ See grind level adjustment [▶ 99] ▪ See Changing recipes [▶ 80]
162	Water error: During cleaning	▤ The machine must be switched off and on again after every one of the following steps. If the error is not fixed, the next step must be performed. ☞ Clean the brewing unit. ▤ If the error is not fixed: ☞ Call the service partner. ▪ See Cleaning brewing unit [▶ 57]
163	Water error: warm rinsing	▤ The machine must be switched off and on again after every one of the following steps. If the error is not fixed, the next step must be performed.

Error no.	Error name	Instruction
		☞ Clean the brewing unit.
		🗐 If the error is not fixed:
		☞ Call the service partner.
		▪ See Cleaning brewing unit [▶ 57]
186	Steam boiler: level	🗐 Dispensing is temporarily disabled.
		☞ Check whether the water tank is full.
		☞ Switch the machine off and back on.
188	Heating error; steam boiler excess temperature	☞ Switch the machine off.
		☞ Pull out the power plug.
		☞ Call the service partner.
189	Steam boiler: heating time error	☞ Switch the machine off and back on.
		🗐 If the error is not fixed:
		☞ Call the service partner.
		▪ See Cleaning milk system by hand [▶ 63]
9083	Cooler temperature is in the frost range.	☞ Check whether the cooler temperature is set too low.
9516	Right grinder blocked.	☞ Switch the machine off.
9517	Left grinder blocked.	☞ Pull out the power plug.
		☞ Remove the bean hopper lids.
		☞ Empty the bean hoppers.

☞ Turn the grinding disc clockwise using only the multi-tool for the container. (Two pins must be inserted into the corresponding recesses on the grinder, see figure.)

☞ Fill the bean hoppers.

☞ Put the bean hopper lids back on.

☞ Switch the machine on.

🗐 If this happens frequently:

☞ Set the grinding level one level coarser.

▪ See Cleaning bean hoppers [▶ 67]

▪ See grind level adjustment [▶ 99]

15.3 Error without error message

Error description	Instruction
No hot water dispensing, but water in grounds container	☞ Clean the hot water outlet.
	☞ Call the service partner.
	✓ It is still possible to dispense coffee.
No choco dispensing, but water in grounds container	☞ Do not use the choco dispensing function anymore.
	☞ Call the service partner.
	✓ It is still possible to dispense coffee.
Choco portioner blocked, choco is only dispensed with water.	☞ Clean the portioner.
	☞ Empty the powder out of the powder container.
	☞ Turn the screw by hand until all the powder has been removed.
	☞ Rinse with water if necessary.
	☞ Let the parts dry fully.
	▪ See Cleaning powder container [▶ 67]
Dispensing of coffee differs on the left/ right	☞ Clean the coffee outlet.
	▪ See Cleaning milk system by hand [▶ 63]
Milk foam / No milk is being dispensed although there is milk in the container	☞ Check whether the milk hose is kinked or crushed.
	☞ Check whether the correct steam nozzle is used.
	☞ Route the milk hose properly.
	☞ Clean the milk outlet.
	☞ Fill up the milk.
	☞ Check whether the milk cooler is frozen over.
Milk foam is not correct	When using the standard steam nozzle, green for uncooled milk (16 to max. 22 °C)
	When using the steam nozzle, orange from accessories for cooled milk (up to 10 °C)
	▤ If the error is not fixed:
	☞ Use another steam nozzle from the accessories.
Milk foam dispenses in spurts, milk too hot	☞ Check whether the milk system has been cleaned.
	☞ Clean the milk system.
	☞ Check whether the milk used is cool enough.
	▪ See Cleaning milk system by hand [▶ 63]
No powder-based beverage dispensing	☞ Clean the mixing cup.
	☞ Check whether the hose is kinked.
	☞ Clean and rinse more frequently, daily if necessary.
	☞ Set less powder.
	☞ Set more water.
	▪ See Overview of cleaning intervals [▶ 51]
	▪ See Cleaning milk system by hand [▶ 63]
Pump runs permanently, water in the grounds container.	☞ Switch the machine off and back on.
	▤ If the error is not fixed:
	☞ Call the service partner.

Error description	Instruction
The **Empty drip tray** notification is displayed even though the drip tray has already been emptied.	☞ Make sure that the underside of the drip tray and the area of the drip tray sensor are dry before insertion.
	▪ See Cleaning drip tray [▶ 61]

16 Prevention of property damage to the machine

> **NOTICE**
>
> **No warranty in the event of non-compliance with instructions!**
>
> In the event of non-compliance with the safety notes and handling information, no warranty will be accepted in the event of property damage.
>
> ⬦ To avoid damage to the machine, follow the safety notes and handling information in the operating instructions.

See also

Warranty claims [▶ 8]

Please comply with the following instructions in order to prevent technical problems or damage to the machine:

For insurance-related reasons, always ensure the following after the business has closed for the day. The main valve of the water supply is closed and the electrical main switch is switched off or the power plug is disconnected.

We recommend taking measures for damage prevention, such as:

▪ Installation of a suitable water detector in the water supply
▪ Installation of smoke detectors

Installation location

See also

Installation requirements [▶ 33]

Setup [▶ 33]

Damage to the coffee grinder

> **NOTICE**
>
> **Property damage due to foreign objects in bean hopper!**
>
> Filling with foreign objects can cause the grinder to clog or block and destroy the grinder. These damages are excluded from the warranty.
>
> ⬦ Never fill the bean hopper with anything other than coffee beans.

Cleaning after break in operation

After a break in operation, we recommend running the cleaning program at least twice before recommissioning.

See also

Connecting water [▶ 35]

System cleaning program [▶ 54]

17 Disposal

The device is subject to the Regulation on Electrical and Electronic Waste WEEE 2012/19/EU and must not be disposed of with household waste.

We ensure and guarantee compliance with the traceability requirements set out in Regulation (EC) No. 1935/2004 as well as manufacture according to good manufacturing practice as set out in Regulation (EC) No. 2023/2006.

The machine must be disposed of properly in accordance with local and legal regulations.

☞ Contact your service partner for this purpose.

If no return or disposal agreement has been made, disassembled components must be recycled.

☞ Scrap the metal.

☞ Recycle the plastic elements.

☞ Dispose of the remaining components sorted according to material properties.

☞ Dispose of operating materials and cleaning products in line with local regulations and the respective manufacturer instructions.

List of figures