schaerer
swiss coffee competence

SKYE

Operating Instructions



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1 Legal information

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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.



NOTE

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.

Icon	Type of danger	Icon	Type of danger
	Warning of hot fluids		Warning of hot surface
	Warning of hot steam		Warning of dangerous electrical voltage
	Warning of poisonous substances		Warning of hand injuries

2.1.3 Instruction signs used

Icon	Meaning	Icon	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 descaling system is not used and defects occur even though the local water hardness necessitates the use of a descaling system.
- 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 at **Schaerer Coffee Link**.

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 **www.schaerer.com**.

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

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E-Mail: info@schaerer.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 Intended 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 in self-service locations and be operated without supervision.

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 use the optional steam wand to foam milk.
- ☞ Never modify safety equipment of the machine.
- ☞ Only use the machine when it is functioning perfectly and is not damaged.
- ☞ 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.

If your country does not have such an institution, contact the following office:

Swiss Toxicological Information Center	
Calls from abroad	+4144 251 51 51

Swiss Toxicological Information Center	
Calls from Switzerland	145
Internet	www.toxinfo.ch

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 operating unit 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 operating unit 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

NOTE

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 descaling system. 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 it could be exposed to water jets.
- Do not use caramelized coffee.
- Fill the hoppers only with the intended products.
- 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 Beverage types 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. 120 cups
Coffee 120 ml	Approx. 120 cups

Recommended daily output	
Espresso 50 – 60 ml	Approx. 180 cups
Coffee 120 ml	Approx. 180 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
White americano[**, **, AC, AW]		x
Latte (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
Cold milk*		x
Cold milk foam[*, **]		-
Pure Foam™ milk foam (hot)[*]		x
Hot water/External hot water		x
Steam		x
Powder beverages/Instant beverages		
Liquor/Coffee		-

Recommended machine equipment:

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

4.2 Machine data

Boiler nominal power*	Steam boiler	Hot water boiler
	2000 W	2000 W

* See type plate for special equipment. The specified values correspond to the standard equipment.

Operating temperature	Steam boiler	Hot water boiler
Minimum operating temperature (T min.)	10 °C (50 °F)	10 °C (50 °F)
Operating temperature	127 °C (261 °F)	95 °C (203 °F)

Overpressure	Steam boiler	Hot water boiler
Working pressure	0.25 MPa (36.26 psi)	0.8 MPa (116.03 psi)
Permissible operating overpressure (p max.)	0.5 MPa (72.52 psi)	1.2 MPa (174.04 psi)
Test overpressure	2.4 MPa (348.09 psi)	2.4 MPa (348.09 psi)

Capacities	
Drinking water capacity	Water tank: 4.9 l or mains water supply
Coffee bean hopper capacity	Per 750 g
Grounds container capacity	550 g

External dimensions	
Machine width	330 mm
Width with side cooling unit	582 mm
Height including bean hopper and key	666 mm
Depth	576 mm

Weight	
Empty weight	Approx. 40 kg

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 House side power connection

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

Power supply	Connection values	In-house fuse protection	Connecting cable conductor cross-section
1L, N, PE	220 – 240 V 50/60 Hz 2000 – 2400 W	10 – 13 A*	3 x 1 mm^2
2L, PE	200V 50/60 Hz 1800 W	15 – 20 A*	3 x 1 mm^2
2L, PE	208 – 240 V 60 Hz 1900 – 2400 W	15 – 20 A*	3 x 1 mm^2 3 x 16 AWG

* The house fuse must not be higher than 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 dBm
WCDMA	B1, B5, B8	24 dBm +1/-3 dBm
GSM	B3, B8	33 dBm +/-2 dBm

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.

WLAN is not supported by the machine. A WLAN connection is not possible.

4.5 Water connection values

Pressure and temperature	
Water pressure	Minimum 0.2 MPa (29.07 psi) Maximum 1.0 MPa (145 psi)
Flow rate	Minimum 2 l/min
Water input temperature	Minimum 10 °C (50 °F) Maximum 30 °C (86 °F)

Water quality	
Maximum chlorine content	Observe the local regulations on the maximum permitted chlorine content.
pH value	Minimum 6.5

Water quality	
	Maximum 7
Carbonate hardness (German)	Minimum 4 °dKH
	Maximum 6 °dKH (If the carbonate hardness is higher, a descaling system must be installed upstream.)
Carbonate hardness (French)	Minimum 8 °fKH
	Maximum 12 °fKH
Total hardness	> Carbonate hardness

4.6 Ambient conditions

The following climatic conditions apply to the location:

Ambient temperature	
Minimum	+10 °C (50 °F)
Maximum	+40 °C (104 °F)

Relative humidity	
Maximum	80% RH

Height above sea level	
Maximum	2500 m (8202 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).

4.7 Type plate

Type designation	Model
SKYE	No model variant

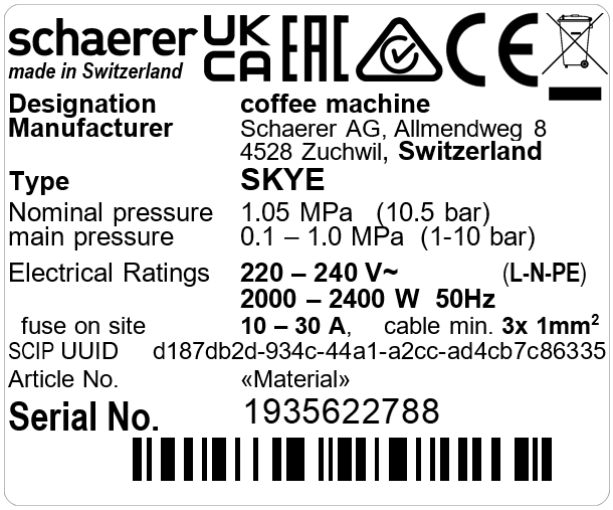


Fig. 1: Type plate

The type plate is located inside on the left side of the recess for the coffee grounds container of the machine.

- To read the data from the type plate:

☞ Pull the grounds drawer out of the machine.

☞ In the event of a fault or warranty claim, report the following data from the type plate:

- Machine or device type
- Nominal power
- Nominal voltage
- Fuse value on site
- Serial number

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
Schaerer AG Niedermattstrasse 3b 4528 Zuchwil Switzerland +41 32 681 62 00 info@schaerer.com www.schaerer.com	Schaerer AG Director of R&D GBU PCM Niedermattstrasse 3b 4528 Zuchwil Switzerland

5.2 Applied standards

The manufacturer declares herewith that this machine or device complies with all relevant stipulations of the specified directives. This declaration loses its validity if changes are made to the devices that have not been arranged with us. The following harmonized standards have been applied. A DNV GL **– Business Assurance** quality management system is used for proper implementation of the requirements and is certified in accordance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018. The manufacturer assumes sole responsibility for issuing this declaration of conformity.

The object of the declaration described above fulfills the provisions of Directive 2011/65/EC of the European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

For CE conformity	
MD 2006/42/EC ▪ EN 60335-1:2020-08 +A11 +AC ▪ EN 60335-2-75:2010-11 +A1 +A11 +A12 +A2 ▪ EN 62233:2008	EMC Directive 2014/30/EU ▪ EN 55014-1:2018-08 +A1 +A2 ▪ EN 55014-2:2016-01 +A1 +A2 +AC ▪ EN 55014-2:2016-01 +A1 +A2 +AC ▪ EN 61000-3-11:2021-03
RoHS Directive 2011/65/EU ▪ EN IEC 63000:2019-05	RED 2014/53/EU ▪ EN 301 489-1 V2.1.1:2017 ▪ EN 301 489-7 V1.3.1:2005 ▪ EN 301 489-24 V1.5.1:2010

An original Declaration of Conformity is included in the packaging. The machine or device has the CE label.

For compliance with European directives and regulations	
WEEE Directive 2012/19/EU	POP Regulation 2019/1021
For the EU Chemicals Regulation	
REACH Regulation 1907/2006/EC	

International (CB)	
Safety	▪ IEC 60335-1:2020-08 ▪ IEC 60335-2-75 ▪ BS EN 62233:2008
EMC	▪ CISPR 14-1 ▪ CISPR 14-2 ▪ IEC 61000-3-2 ▪ IEC 61000-3-11

CB	Scheme > International system of mutual recognition of test reports and certificates
CE	Requirements of harmonization legislation of the European Community
CISPR	International Special Committee on Radio Interference
EC/EU	The European Community is a part of the European Union consisting of EC/CFSP/AFSJ
EMC	Electromagnetic compatibility
IEC	International conformity assessment system for electrotechnical equipment and components
MD	Machinery Directive (European Parliament and Council)
POP	Regulation (EU) on persistent organic pollutants
REACH	EU Chemicals Regulation for the Registration, Evaluation, Authorization and Restriction of Chemicals
RED	European approval directive for radio equipment and receivers (radio communication)
RoHS	Restriction of hazardous substances
WEEE	Waste of Electrical and Electronic Equipment

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

The standard version is equipped with decor elements according to the configuration as well as an 8-inch touch screen.

The machine equipment may differ from the standard version due to customer-specific equipment variants.

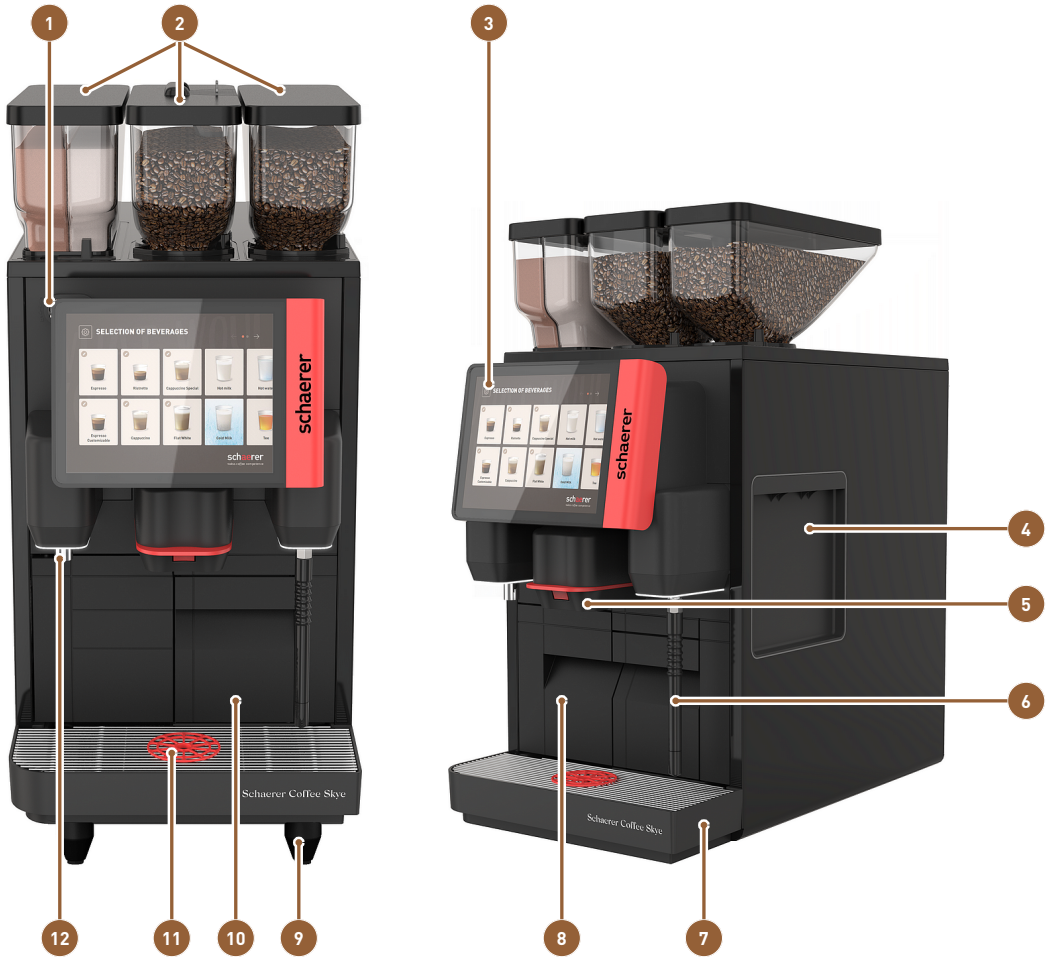


Fig. 2: Machine overview

1	Closing device for the user panel (left behind the user panel)	2	Bean hoppers and powder container
3	User panel with touch screen	4	Side panel opening
5	Manual beverage outlet	6	Steam wand (equipment variant)
7	Drip tray	8	Internal drinking water tank (equipment variant)
9	Machine feet (equipment variant)	10	Grounds container (equipment variant)
11	Cup positioning aid (equipment variant)	12	Hot water outlet (equipment variant)

The bean hoppers and powder container feed coffee beans or coffee machine powder to the machine.

The openings on the two side panels provide access to the machine interior, e.g. to guide the milk hose to the other side.

The manual beverage outlet dispenses the beverage and must be moved up or down manually depending on the selected beverage.

The external steam wand allows for separate heating and foaming of milk.

The drip tray collects the cleaning water and spilled coffee drops.

The internal drinking water tank provides the drinking water for beverage preparation.

The machine feet increase the distance from the standing surface by 40 mm or 70 mm (depending on the version).

The coffee cakes are collected in the grounds container.

The cup positioning aid indicates the correct placement position of the cup.

Hot water can be dispensed manually through the hot water outlet.

See also

Operating elements on the machine [▶ 32]

6.2 Drip tray



Fig. 3: 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 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)

With opening for the waste water outlet: 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.

6.3 Manual beverage outlet

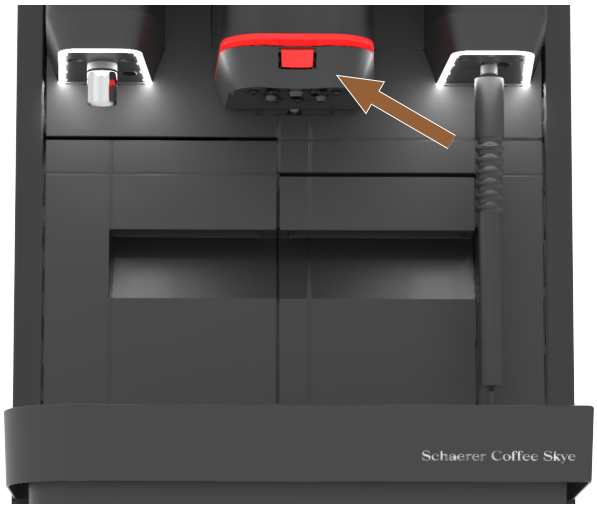


Fig. 4: Manual beverage outlet

The height of the manual beverage outlet can be manually adjusted to the respective beverage and cup size. The beverage outlet is used to dispense the beverages from the machine.

The handle of the beverage outlet is colored red or black.

The beverage outlet must be cleaned regularly.

6.4 Grinders



Fig. 5: View of grinders from above

The machine is equipped with one grinder per bean hopper.

The grinder grinds the coffee beans fresh when preparing beverages and conveys the ground powder into the machine to the beverage outlet.

The grinding level of the grinders can be adjusted electrically as an option.

6.5 Manual inlet

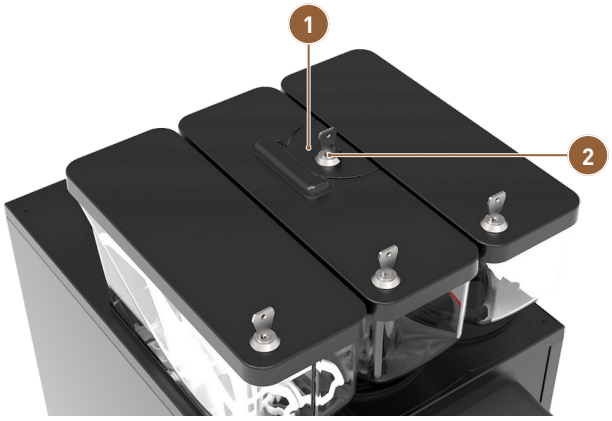


Fig. 6: Manual inlet

1 Manual inlet	2 Closing device (optional)

A manual inlet is integrated in the center bean hopper by default. The manual inlet is available with an optional closing device.

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.

6.6 Functional lighting



Fig. 7: Ambient light with function

The functional lighting provides information about the operating condition of the machine.

The color of the functional lighting can be adjusted.

Color	Meaning
White	The machine is ready for use.
Yellow	Action is required soon (refill, clean).
Red	A machine error (grinder blocked, water flow error) has occurred.

6.7 Grounds container

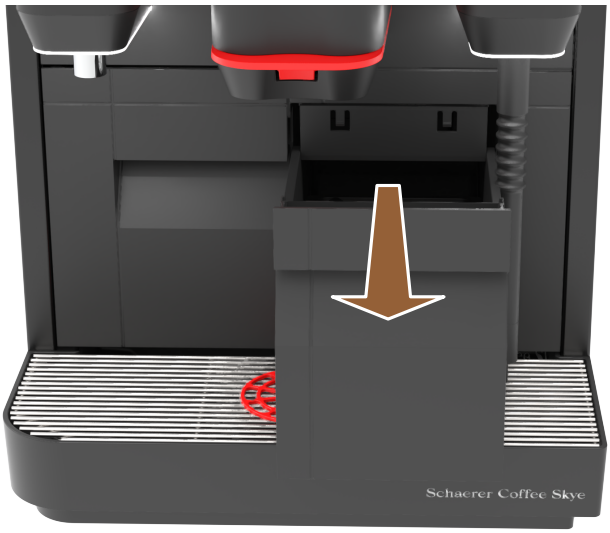


Fig. 8: Removing grounds container

The coffee cakes are collected in the grounds container.

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

To remove the grounds container, the manual beverage outlet must be moved up as far as it will go.

6.8 Connections and interfaces



Fig. 9: Connections and interfaces of the machine

1	Electrical connection	**2**	Universal connection
3	Communication interface	**4**	USB port, behind the cover at the bottom of the user panel
5	Drinking water connection	**6**	Waste water outlet

The electrical connection is located inside the machine in the rear area and supplies the machine with power.

A hose can be attached to the waste water outlet and the waste water can be discharged from the machine.

The connection for the communication interface is located inside the machine at the bottom of the right outer wall. The grounds container must be removed to gain access to the communication interface connection. The machine is connected to the optional accessories via the communication interface.

There is a type A USB port inside the user panel. To access the USB port, open the cover at the bottom of the user panel by turning the lock 90°.

The drinking water connection supplies the machine with drinking water. This can be provided by a mains water supply or an external water tank (depending on the machine configuration). The machine is equipped with an internal water tank by default that does not require a fresh water connection.

The universal connection can be equipped with the following interfaces:

- None
- Ethernet
- MDB
- RS-232

6.9 Operating elements

This chapter provides an overview of the functions of the operating elements and the user interface. Knowledge of the operating elements is required for daily operation of the machine.

6.9.1 Operating elements on the machine

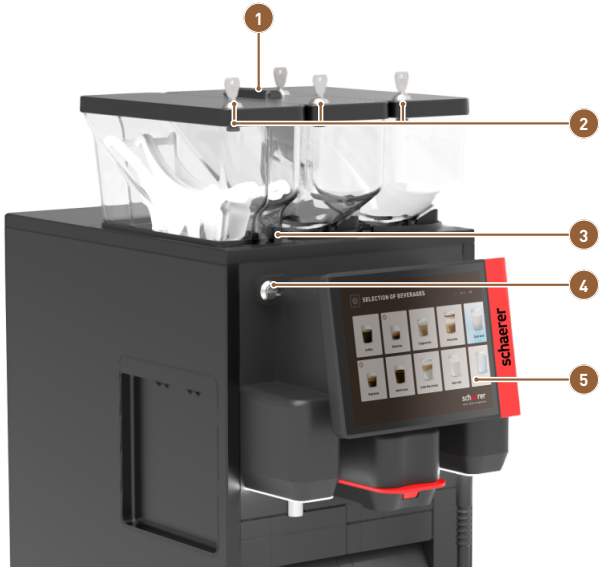


Fig. 10: Overview of external operating elements

1 Manual inlet with closing device	**2** Closing devices of bean hoppers and powder containers
3 Locking mechanisms of bean hoppers and powder containers	**4** Closing device of user panel
5 User panel with 8-inch touch screen	

The user panel is equipped with a touch-sensitive touch screen. The machine is operated with the touch screen.

The user panel can be locked when closed to prevent access by unauthorized persons.

- Key to the left: Open
- Key to the right: Close

The bean hopper and powder containers are equipped with optional closing devices to prevent access by unauthorized persons.

The manual inlet is intended for ground coffee or cleaning tablets. As an option, the manual inlet can be fitted with a closing device.

6.9.2 Operating elements behind the user panel

The user panel must be open to access the operating elements behind the user panel.

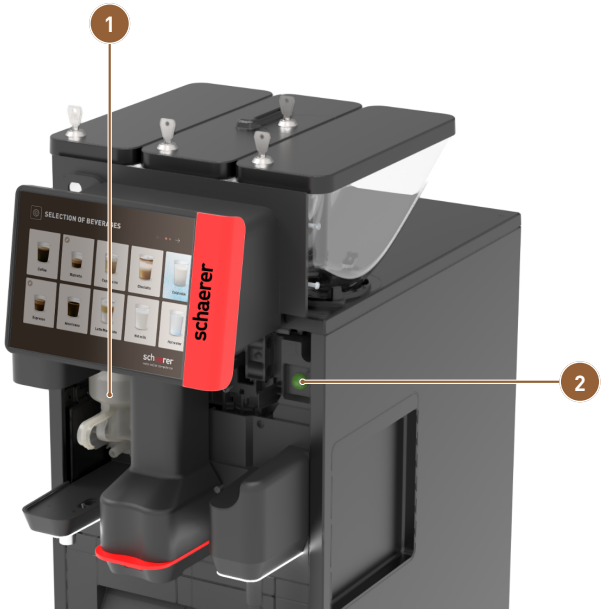


Fig. 11: Operating elements behind the user panel

1 Mixing cup for choco or topping powder system (option)	2 On/Off switch (press and hold for 4 s to switch off)

The mixing cup is present if the machine is equipped with an optional powder system (choco or topping powder system). The mixing cup is located behind the user panel and mixes a defined amount of the coffee machine powder with hot water before dispensing the beverage.

See also

Opening and closing the operating unit [▶ 56]

6.9.3 User interface

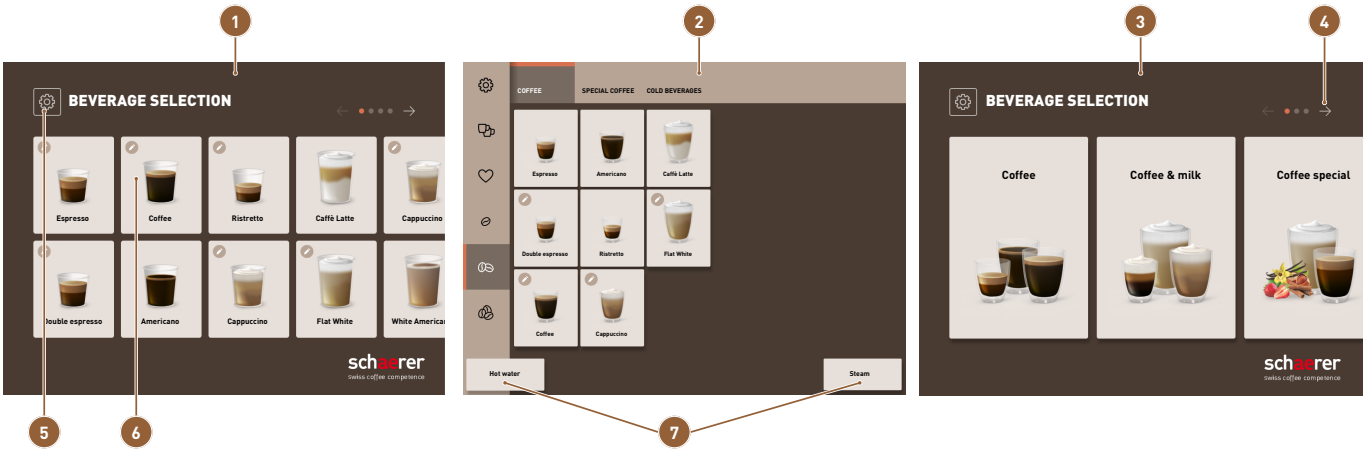


Fig. 12: Overview: user interface

1 User interface for beverage selection in Guest mode	2 User interface in Staff mode
3 User interface in Guest mode with selection via beverage groups	4 Navigation to the next or previous screen
5 Access to Service menu	6 Beverage button with symbol or text only
7 Dispensing of hot water or steam	

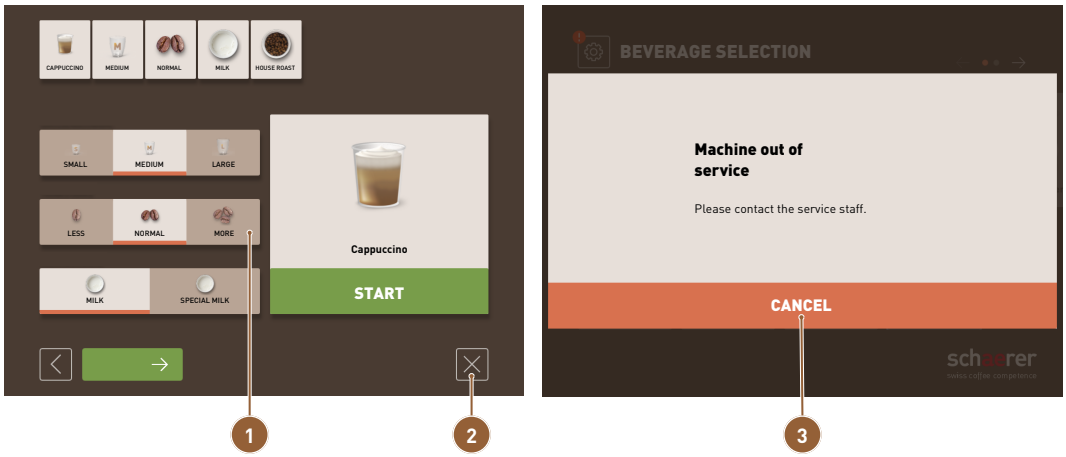


Fig. 13: Overview: operating functions on the interface

1 Selection of beverage options	2 Button [X]: Back or cancel
3 Error messages or instructions for action	

6.10 Equipment variants installed at the factory

The following equipment variants are available ex works. They cannot be retrofitted at a later date.

6.10.1 Pure Foam™ fresh milk system



The **Pure Foam™** function allows for integrated automatic milk heating and barista-style milk foaming.

Cold milk can be dispensed.

A cooling unit is mandatory with the **Pure Foam™** function.

6.10.2 Best Foam™ fresh milk system



The **Best Foam™** function allows for integrated automatic milk heating and barista-style milk foaming.

Cold milk and cold milk foam can be dispensed.

A cooling unit is mandatory with the **Best Foam™** function.

6.10.3 Steam wand



Fig. 14: Steam wand

The machine can optionally be equipped with a steam wand. The position is equipped with functional lighting.

The steam wand is mounted to the right of the beverage outlet.

The steam wand function allows for separate manual milk heating and barista-style milk foaming. The following steam wand versions are possible:

Powersteam

The steam output is started and stopped manually.

Supersteam

The steam output is started manually and stopped automatically by a temperature sensor when a programmable target temperature is reached. In addition to the steam, air is blown in through an air pump.

6.10.4 Internal drinking water tank

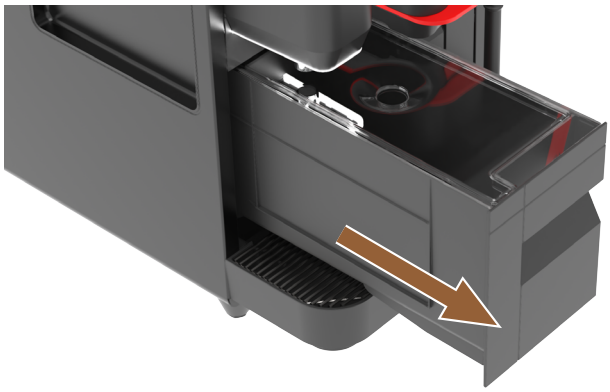


Fig. 15: Internal drinking water tank

The machine is equipped with an internal drinking water tank by default. The requirement for mobile use of the machine is fulfilled by an internal drinking water tank.

Other variants for providing drinking water are the optional external drinking water tank and the optional mains water supply.

6.10.5 Bean hoppers and powder container

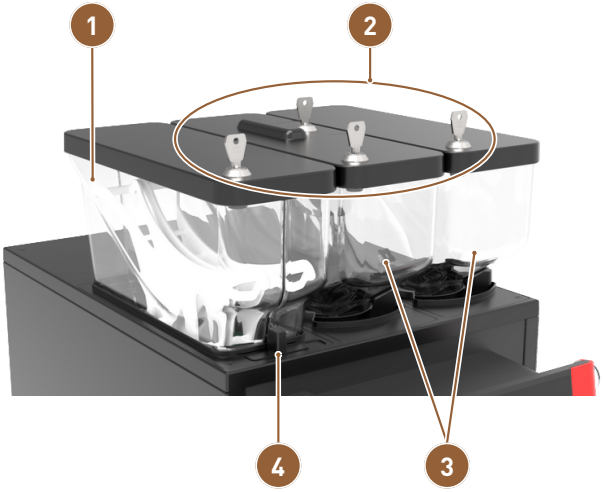


Fig. 16: Bean hoppers and powder container

1 Powder container	**2** Closing devices (optional) for bean hoppers and powder container and for manual inlet
3 Bean hoppers	**4** Locking mechanism

The bean hoppers and powder containers are located on the top of the machine. Only the center bean hopper is present by default.

The bean hoppers can be removed from the machine. The locking mechanisms must be released to do so.

As an equipment option, a second grinder with bean hopper can be fitted to the right of the standard central grinder. The second grinder makes espresso beans or decaffeinated coffee beans available.

As an equipment option, a powder system with powder container can be mounted to the left of the center standard grinder. The powder system can be used with choco and/or topping powder. If a powder system is installed in the machine, it has a mixing cup in which coffee machine powder and water are mixed before the beverage is dispensed.

The powder system can optionally be designed as a Twin powder system, which means that the container is divided into two halves.

The containers can be locked as an option.

6.10.6 Hot water outlet



Fig. 17: 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.

The position is equipped with functional lighting.

Hot water can also be dispensed via the **central beverage outlet** as an option. There is no separate hot water outlet in this case.

6.10.7 Additional water for preparing americanos

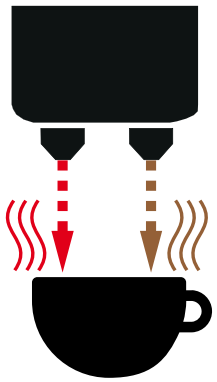


Fig. 18: Beverage dispensing: Hot additional water (red), coffee beverage (brown)

During beverage dispensing, hot additional water can be dispensed into the cup through the beverage outlet in addition to the beverage.

Hot additional water can be dispensed to prepare **americanos**.

The sequence of coffee and additional water is defined in the beverage configuration.

6.10.8 Cooling unit

If the machine is equipped with the **Pure Foam™** option, a cooling unit must be used as an optional accessory. The following cooling units are available for the machine:

- side cooling unit
- Under-counter cooling unit (UC)

6.10.8.1 Side cooling unit

The machine can also be operated with a side cooling unit as an optional accessory.



Fig. 19: With right side cooling unit

The side cooling unit can be placed on the left, on the right, between two machines (Centre Milk) and as an under-counter cooling unit.

The machine is supplied with a left machine connection by default.

The left side cooling unit does not require additional adjustments.

Placing the side cooling unit on the right requires additional adjustment of the milk hose guide in the machine.

NOTE

Conversion of the machine

Placing the cooling unit anywhere other than to the left of the machine requires conversion work.

The description of the conversion work and the necessary components are enclosed with the side cooling unit.



Fig. 20: Overview of the side cooling unit

1 Standby / Increase operating temperature button	**2** Set button

3 Defrost / Reduce operating temperature button

4 Toggle switch for switching on/off

6.10.8.2 Under-counter cooling unit (UC)

The under-counter cooling unit is placed under the machine in a counter.

The under-counter cooling unit with Centre Milk equipment provides a milk source for two machines.

Conversion of the machine

Placing the cooling unit anywhere other than to the left of the machine requires conversion work.

The description of the conversion work and the necessary components are enclosed with the side cooling unit.

6.10.9 Cup & Cool

The machine can optionally be operated with the Cup & Cool optional accessory.



Fig. 21: Cup & Cool

The Cup & Cool optional accessory is a combination of a cup warmer and a cooling unit.

Cup & Cool is available in narrow and wide variants and is placed to the left of the machine.

The wide variant is available with the Centre Milk option and is placed between two machines in this version.

Conversion of machine

Placement of the cooling unit between two machines requires machine conversion.

The description of the conversion work and the necessary components are enclosed with the side cooling unit.



Fig. 22: Cup & Cool front side with open cooling unit

1 Heatable bases	**2** Closing device
3 Cup warmer On/Off button	**4** Cooling unit On/Off button
5 Milk hose adapter connection	

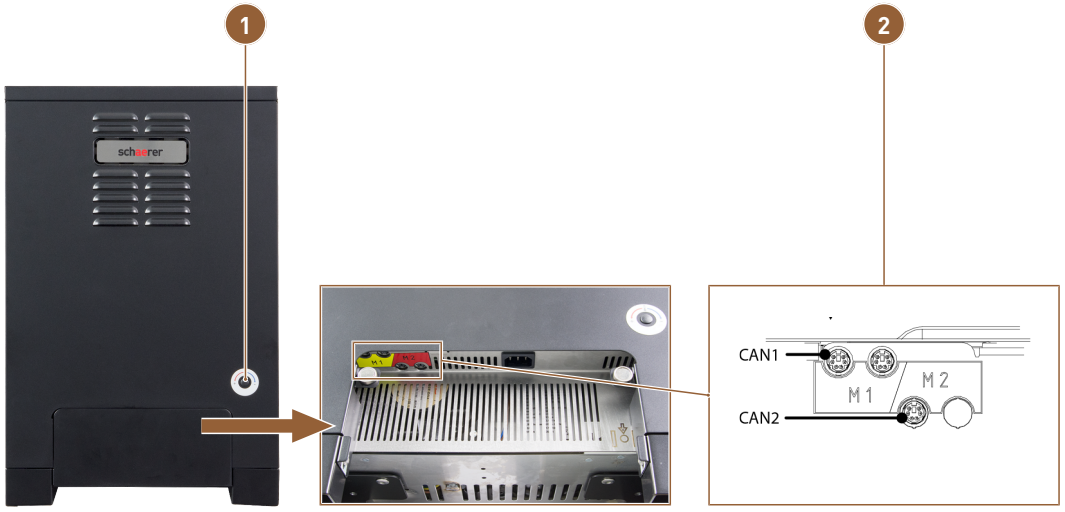


Fig. 23: Back [Cup & Cool]

1 Thermostat	**2** CAN connection 1 and CAN connection 2 (Centre Milk)

6.11 Retrofitable equipment variants

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

6.11.1 External waste and drinking water tank monitored

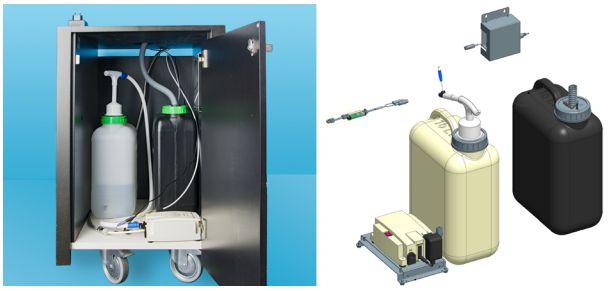


Fig. 24: External waste water and drinking water tank

The machine can also be used in mobile applications thanks to the optional device with the external waste and drinking water tanks.

The fill level of both tanks is monitored.

If the machine is equipped with a mains water supply, the equipment variant can be retrofitted from software version v2.0.

If the external drinking and waste water tank is to be used, the drip tray must be equipped with an opening.

6.11.2 Brewing accelerator



The **brewing accelerator** allows for more efficient dispensing of large beverages (e.g. americanos) with improved beverage quality. Additional hot water is fed into the coffee outlet after the brewing unit.

6.11.3 Under-counter grounds disposal

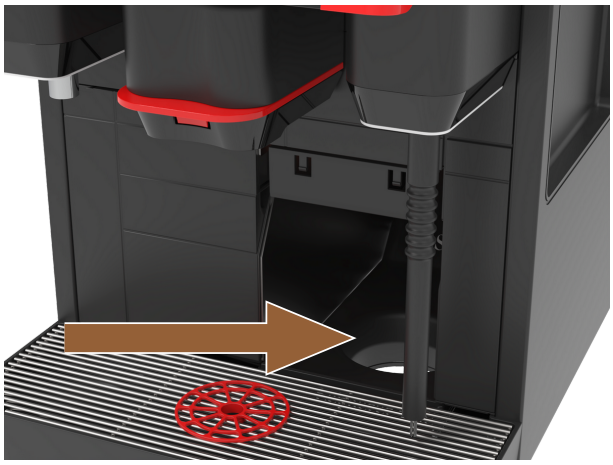


Fig. 25: Under-counter grounds disposal

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.

6.11.4 Machine feet



Fig. 26: Machine foot 40 mm

If under-counter optional accessories are used, four machine feet with a height of 40 mm must be screwed onto the machine base.

When retrofitting with machine feet, the delivery does not include screws.

6.11.5 Cup positioning aid

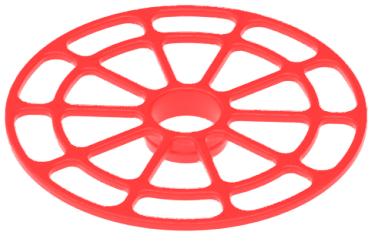


Fig. 27: Cup positioning aid

A cup positioning aid can be inserted into the cup platform of the drip tray as an option. This is a simple positioning aid for dispensing beverages into a single cup.

6.11.6 Decor elements



Fig. 28: Decor elements

The machine is provided with decor elements (black or red).

Decor elements can be used to adapt the machine to its surroundings.

6.11.7 Schaerer Coffee Link (data exchange)

The **Schaerer Coffee Link** digital solution provides comprehensive information for quality assurance as well as for monitoring and optimizing individual business processes.

Various types of data can be read from the machine via the Schaerer **Coffee Link** web portal.

6.11.8 Cup warmer

The machine can also be operated with a cup warmer as an optional accessory.



Fig. 29: cup warmer

The cup warmer can be placed to the left or right of the machine and is available in narrow and wide versions.

The narrow cup warmer offers space for up to 264 coffee cups. The wide cup warmer offers space for up to 320 coffee cups.

The stainless steel bases of the cup warmer have a coating to reduce fingerprints and contamination on the surface.



Fig. 30: Overview of cup warmer

1	Front side of the cup warmer	2	Heatable bases
3	Back of the cup warmer	4	On/Off button
5	Activate/Deactivate lighting button		

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

Accessories for machine

Quantity	Designation
1	Drip tray

Instructions

Quantity	Designation
1	Machine operating instructions
1*	Optional accessory operating instructions (cup warmer + Cup & Cool)
1*	Cooling unit operating instructions

Connection cable for version 2 kW**

Quantity	Designation
1*	Connection cable 230 V, 10 A, CH-C13W 2 m
	Connection cable 250 V, 10 A, Schuko EU - C13W 2 m
	Connection cable 250 V, 10 A, UK - C13W 2.5 m

Connection cable for version 3 kW**

Quantity	Designation
1*	Connection cable 250 V, 16 A, CH 23G - C19W 2 m
	Connection cable 250 V, 16 A, Schuko EU - C19W 2 m
	Connection cable 250 V, 16 A, without power plug - C19W 2 m

Scope of delivery of additional parts

Quantity	Designation
1	Coffee measuring spoon, brown
1	Brake chamber single

Scope of delivery for cleaning/maintenance

Quantity	Designation
1	Brush 75-40 (brewing chamber)
1	Brush (beverage outlet)

Quantity	Coffee system cleaning
1	Delivery set of **Coffeepure** tabs for 100 cleanings

Scope of delivery for milk system*

Quantity	Designation
1	Cleaning container 1 l with cover blue
1	Delivery set of **Milkpure** powder for 100 cleanings
1	Special milk cleaning liquid, 3345340000

Additional parts for drip tray with wastewater outlet*

Quantity	Designation
1	Hose clip 29 open
1	Spiral hose 20 PVC gray

Machine feet*

Quantity	Designation
4	Screw foot M10 x 15 rubberized
4	Foot 40 x 40

Additional parts for internal drinking water tank*

Quantity	Designation
1	Replaceable cartridge 200
1	Replaceable cartridge 200 adapter
1	Milk Smart cleaning container 4 l

Additional parts for mains water supply

Quantity	Designation
1	Reinforced hose DN8 X 1500 ÜM 3/8 - ÜM 3/4 90°

Additional parts for grounds disposal*

Quantity	Designation
1	Cable tie 4.8 x 368 PA black

* Optional, depending on machine version

** Only one of the articles

*** Language-dependent article number

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.



NOTE

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.



NOTE

Property damage due to non-compliance with sanitary regulations!

Improper sanitary installation of the machine may result in property damage.

- Install the machine so that the installation complies with applicable federal, state, or local sanitary regulations.
- Ensure that sufficient backflow preventers are installed.

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 following accessory parts are delivered:

- Operating instructions (short instructions) and declaration of conformity supplementary sheet
- Cleaning product (according to machine equipment)
- Spoon for ground coffee (for manual inlet)
- Brush for cleaning inside of grounds container
- Small brush

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.
- The water filter must be installed correctly.

See also

Ambient conditions [▶ 22]

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 40 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

Setup [▶ 48]

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.

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.



NOTE

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.

8.5.1 Internal drinking water tank variant

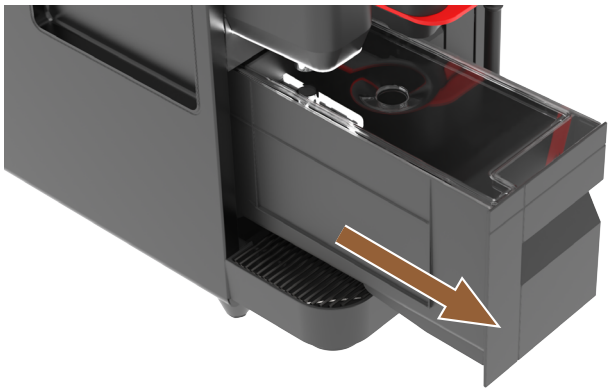


Fig. 31: Internal drinking water tank

If the internal drinking water tank is integrated in the machine, it is not necessary to connect the drinking water.

8.5.2 Variant with external drinking and waste water tank

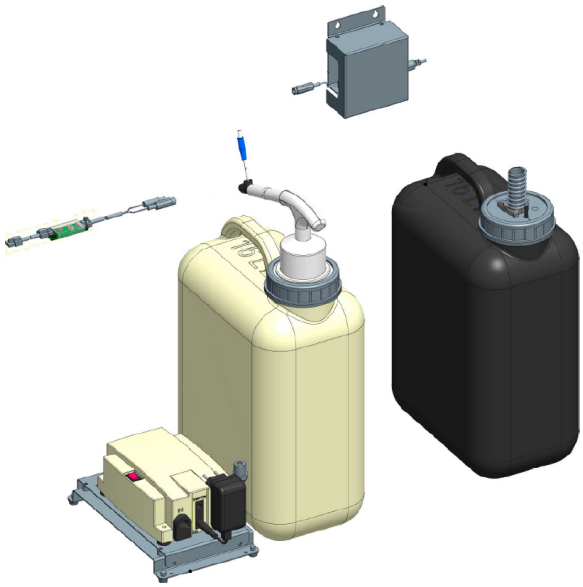


Fig. 32: External drinking and waste water tank

The machine can optionally be operated with a monitored external drinking and waste water tank.

☞ Connect the drinking and waste water connections of the machine directly to the water tanks.

The conversion instructions for the **monitored drinking and waste water tank** contain information on setting up and connecting the external drinking and waste water tanks. The retrofit instructions can be requested from the manufacturer or downloaded directly from the download portal.

8.5.3 Drip tray variant without opening

If the waste water outlet of the drip tray is closed, a dirty water hose cannot be connected. The level of the drip tray is monitored and must be emptied regularly.

8.6 Connecting milk system

Optional accessories can be placed to the left and right of the machine or under the counter (UC). On delivery, the milk hose including adapter is inserted into the milk module inside the machine and rolled up.

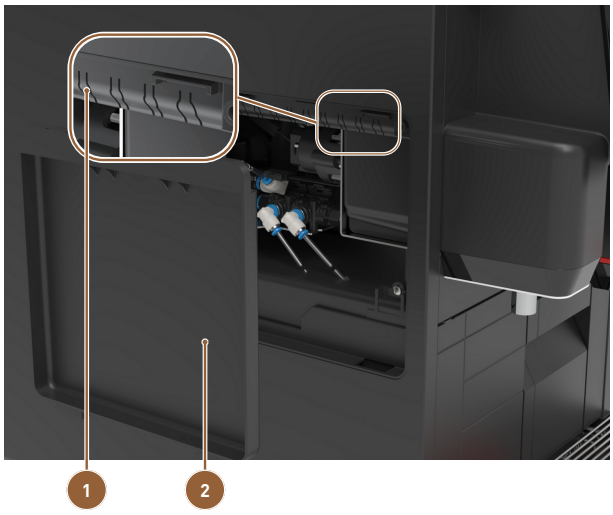


Fig. 33: Cover on the left side panel

1 Plastic parts at the opening in the left side panel	**2** Cover on the left side panel

The adapter at the end of the milk hose has been removed.

☞ Remove the cover to the left side panel. To do this, use a screwdriver to push the catch on the top cover upwards in the center.

☞ Unroll the milk hose located inside the machine.

☞ Break out one of the plastic pieces at the opening in the left side panel at the pre-punched point.

☞ Push the milk hose through the broken-out hole.

☞ Push the milk hose through the opening in the cover.

☞ Attach the cover to the left side panel.

☞ Shorten the milk hose.

✓ The side cooling unit can be positioned to the left of the machine.

8.7 Installing optional accessories

All optional accessories with an integrated cooling unit or with feed pumps require a communication connection (CAN bus) to the machine. The connections are always serial.

8.7.1 Connecting optional accessories to power supply

All optional accessories require a 230 V / 50 Hz power connection. The power connection is made via a pre-assembled and tested connection cable that is supplied with the optional accessories.

8.7.2 Establishing communication connection (CAN bus)

All optional accessories with an integrated cooling unit or with feed pumps require a communication connection (CAN bus) to the machine. The connections are always serial.

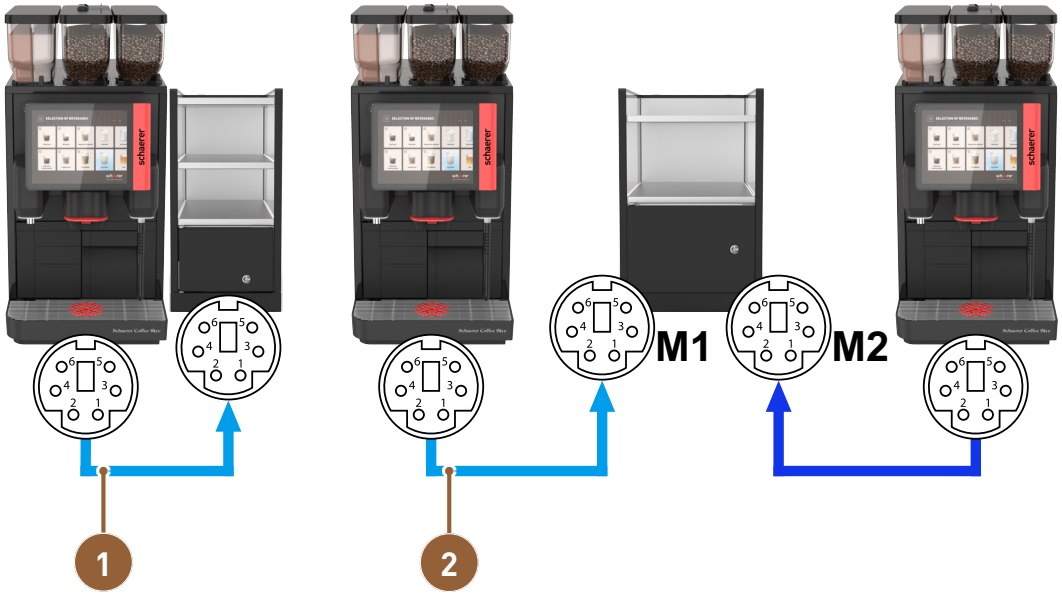


Fig. 34: CAN bus connections from the machine to optional accessories (example displays)

1 Example of CAN bus connection: Machine with Cup & Cool (narrow)	2 Example of CAN bus connection: 2 machines with Cup & Cool (Centre Milk)

- ☞ Establish the CAN bus connection using a control cable with a 6-pin DIN plug. To do this, connect the control cable to the communication interface of the machine.
- ☞ Connect the other end of the control cable to the desired optional accessory.
- ☞ If necessary, use another control cable with a 6-pole DIN plug to establish the connection from one optional accessory to another optional accessory.

The position of the CAN bus connection on the Cup & Cool can be found in the product description.

See also

Cup & Cool [▶ 39]

8.7.3 Connecting milk hose to optional accessory

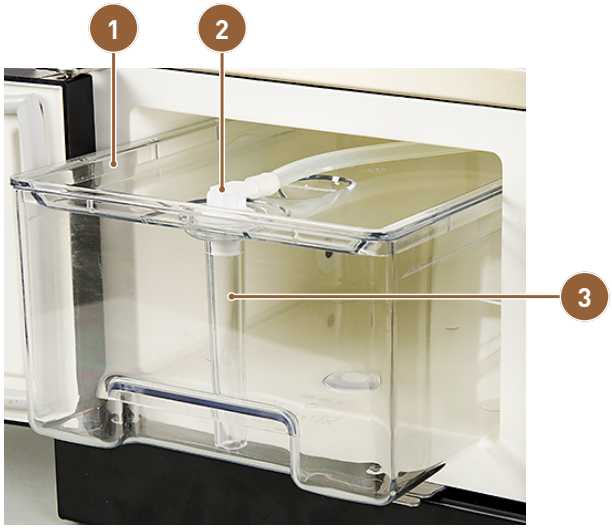


Fig. 35: Milk container

1	Milk container	2	Adapter
3	Riser pipe		

There is a communication link between the coffee machine and the optional accessory.

☞ Guide the milk hose from the coffee machine into the cooling unit from the outside. Open the front door.

☞ Insert the milk hose onto the adapter in the cover of the milk container.
Please note that the hose length must be 28 cm from the inside edge of the cooling unit.

☞ Connect the adapter of the milk hose to the riser pipe.

☞ Insert the riser pipe into the milk container of the cooling unit.

✓ The milk hose is inserted into the milk container of the cooling unit. The machine and cooling unit are connected to each other.

8.8 Screen-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.

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 product containers and an optional 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 [▶ 12]

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 Opening and closing the operating unit



⚠ CAUTION

Danger of crushing by falling operating unit!

The operating unit can fall down under its own weight.

- Hold the operating unit firmly and move it up or down in a controlled manner until it clicks into place.

The machine is only ready for use when the operating unit is closed.

Opening operating unit

☞ Move the key in the closing device to the horizontal position.

✓ The lock is open.

☞ Unlock the operating unit at the top by pulling firmly.

✓ The operating unit is unlocked.

☞ Push the operating unit upwards from below with both hands as far as it will go.

✓ The operating unit is automatically held in the upper position.

✓ All operating elements behind the operating unit are now accessible.



Fig. 36: Operating unit open and closed

Close operating unit

The closing device of the operating unit also locks the bean hoppers and powder containers. Make sure that all bean and powder containers are inserted before you close the operating unit.

☞ Using both hands, gently push the open operating unit down as far as it will go.

☞ Gently press in the upper edge of the operating unit.

✓ The operating unit is closed.

☞ Lock the closing device with the key.

✓ The lock is closed in the vertical position.

✓ The bean hoppers and powder containers are now locked.

✓ The operating unit is locked.

9.1.2 Filling bean hoppers



⚠ 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.



NOTE

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.



Fig. 37: Bean hoppers and powder containers with maximum fill level

- ☞ Refill the hopper as soon as possible.
- ☞ For lockable bean hoppers: Open the lock of the bean hopper with the multi tool.
- ☞ Remove the lid of the bean hopper.
- ☞ If necessary, clean the bean hoppers and lids 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 lid.
- ☞ 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 multi tool.
- ✓ The bean hopper is refilled.

9.1.3 Filling powder container



⚠ CAUTION

Risk of crushing due to rotating dosing screws!

The dosing screws inside the powder container rotate. There is a risk of crushing when reaching in.

- ☝ Switch the machine off before reaching into the powder container.



NOTE

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. 38: Bean hoppers and powder containers with maximum fill level

- ☞ Variant with powder container locking mechanism: Open the powder container lock with the key.
- ☞ Remove the cover of the powder container.
- ☞ Fill the powder container with choco or topping powder.
- ☞ Only add so much that the contents do not touch the container cover.
- ☞ Close the powder container with the cover. Lock the powder container (if lockable).
- ✓ The powder container is filled and locked.
- ✓ The powder does not touch the cover.

9.1.4 Removing bean hoppers and powder containers



⚠ 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.



⚠ 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.

Bean hoppers or powder containers can be removed from the machine. The locking switch on the top left of the machine above the user panel unlocks all bean hoppers and powder containers together.

The closing device of the user panel also locks the bean hoppers and powder containers. Make sure that all bean hoppers and powder containers are inserted before you close the user panel.



Fig. 39: Locking mechanisms of bean hoppers and powder containers

- ☞ Push the locking switch to the left.
- ✓ The bean hoppers and powder containers are now unlocked and can be removed.

9.1.5 Refilling water

NOTE

Property damage due to closed water line!

The machine can be damaged if the water pump runs dry.

- Before switching on the machine, make sure that the main water valve (tap) of the water supply line is open.

Variant with mains water supply

- Open the shut-off valve on the main water valve before switching on the machine.
- Close the main water valve at the end of the day.

Variant with external drinking water tank



Fig. 40: External drinking water tank

- Unscrew the cover of the external drinking water tank.
- Rinse the external drinking water tank thoroughly with fresh water every day.
- Clean the cover of the drinking water tank with fresh water.
- Fill the drinking water tank with fresh drinking water, making sure not to exceed the maximum fill level.
- Close the external drinking water tank with the cover.
- Reinsert the drinking water tank.

Variant with internal drinking water tank

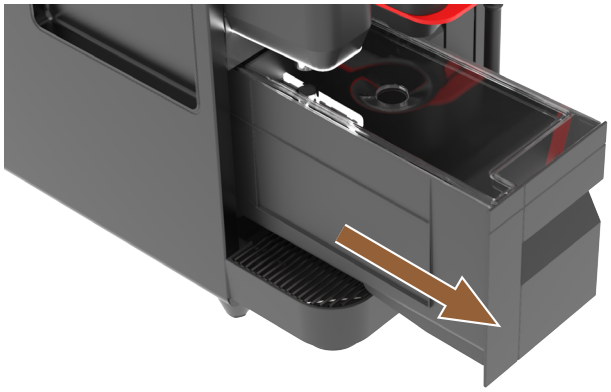


Fig. 41: Internal drinking water tank

- Pull the internal drinking water tank out of the machine.
- Make sure that the internal drinking water tank is clean.

- ☞ Fill the drinking water tank with fresh drinking water, making sure not to exceed the maximum fill level.
- ☞ Reinsert the internal drinking water tank into the machine.
- ☞ Close the flap at the front of the machine.

9.1.6 Filling PureFoam™ milk system

⚠ CAUTION

Risk of infection from contamination in the milk pump!

Contamination in the milk pump can lead to infections. Infections can trigger health problems.

- ☝ Always carry out cleaning after installation, commissioning or after recommissioning.
- ☝ Run the display-guided cleaning program before the first beverage dispensing process.

NOTE

Property damage due to milk that is not pre-cooled!

The cooling unit only maintains the temperature of pre-cooled milk.

- ☝ Only use milk that has already cooled down to at least 5 °C (41 °F) for refilling.

Maximum fill level of milk container

- Side cooling unit: Max. 10 l
- Cup & Cool: Max. 4 l
- Under-counter cooling unit (UC-CU): Max. 9.5 l

Filling milk system

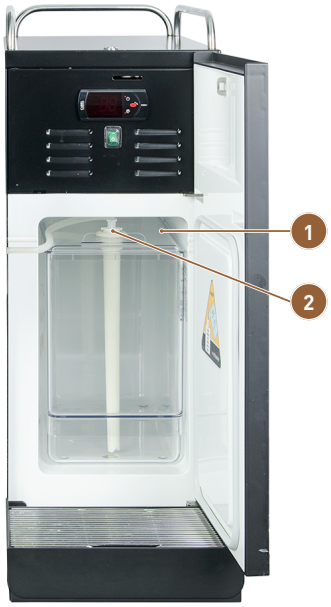


Fig. 42: Filling side cooling unit

1 Side cooling unit milk container	2 Side cooling unit milk hose adapter

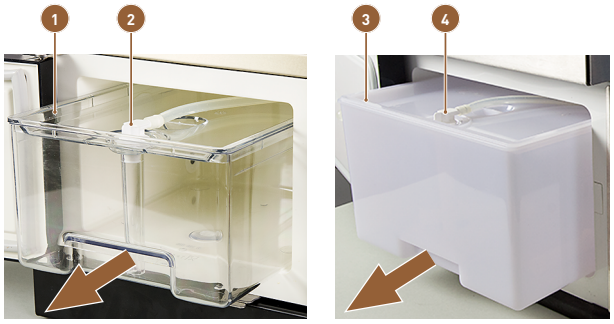


Fig. 43: Filling Cup & Cool / UM-CU / UC-CU

1	Cup & Cool milk container 4 l	**2**	Cup & Cool milk hose adapter
3	Milk container UC-CU 9.5 l	**4**	Milk hose adapter UC-CU

- ☞ Open the door of the cooling unit.
- ☞ Remove the milk hose adapter from the milk container cover.
- ☞ Pull out the milk container.
- ☞ Lift off the milk container cover.
- ☞ Rinse the milk container, riser tube and cover with fresh water.
- ☞ Fill with milk and observe the maximum fill quantity.
  The milk must not touch the milk container cover.
- ☞ Close the milk container with the milk container cover.
- ☞ Insert the milk container into the cooling unit.
- ☞ Insert the milk hose adapter into the milk container cover.
- ☞ Close the door of the cooling unit.
- ☞ Regularly check if the cooling temperature is between 3 – 5 °C (37.4 – 41 °F).

See also

Display-guided cleaning [▷ 109]

9.1.7 Filling BestFoam™ milk system

⚠ CAUTION

Risk of infection from contamination in the milk pump!

Contamination in the milk pump can lead to infections. Infections can trigger health problems.

- ☝ Always carry out cleaning after installation, commissioning or after recommissioning.
- ☝ Run the display-guided cleaning program before the first beverage dispensing process.

NOTE

Property damage due to milk that is not pre-cooled!

The cooling unit only maintains the temperature of pre-cooled milk.

- ☝ Only use milk that has already cooled down to at least 5 °C (41 °F) for refilling.

Maximum fill level of milk container

- Side cooling unit: Max. 10 l
- Cup & Cool: Max. 4 l
- Under-counter cooling unit (UC-CU): Max. 9.5 l
- Under-machine cooling unit (UM-CU): Max. 9.5 l

Refill milk system

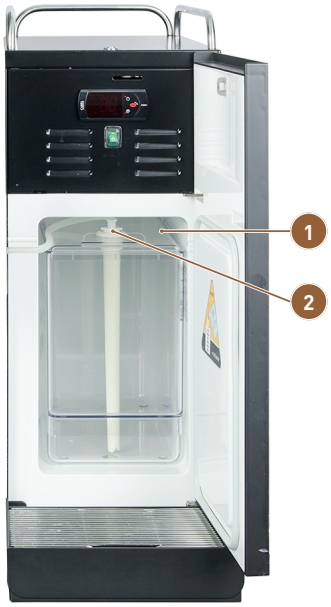


Fig. 44: Filling side cooling unit

1 Side cooling unit milk container	2 Side cooling unit milk hose adapter

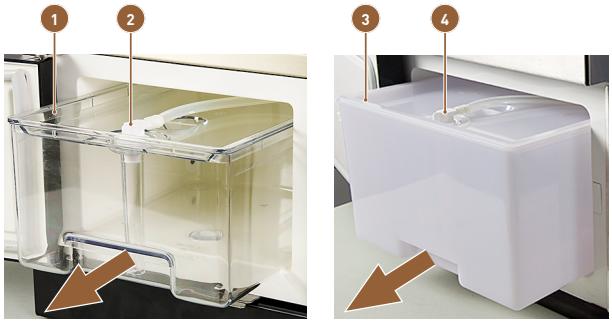


Fig. 45: Filling Cup & Cool / UM-CU / UC-CU

1 Cup & Cool milk container 4 l	2 Cup & Cool milk hose adapter
3 Milk container UM-CU / UC-CU 9.5 l	4 Milk hose adapter UM-CU / UC-CU

- ☞ Open the door of the cooling unit.
- ☞ Remove the milk hose adapter from the milk container cover.
- ☞ Pull out the milk container.
- ☞ Lift off the milk container cover.
- ☞ Rinse the milk container, riser tube and cover with fresh water.
- ☞ Fill with milk and observe the maximum fill quantity.
  The milk must not touch the milk container cover.
- ☞ Close the milk container with the milk container cover.
- ☞ Insert the milk container into the cooling unit.
- ☞ Insert the milk hose adapter into the milk container cover.
- ☞ Close the door of the cooling unit.
- ☞ Regularly check if the cooling temperature is between 3 – 5 °C (37.4 – 41 °F).

See also

Display-guided cleaning [▶ 109]

9.2 Enable

This chapter contains information on how to switch on the machine and any optional accessories (if available) safely and correctly.

9.2.1 Check before switching on

NOTE

Property damage due to closed water line!

The machine can be damaged if the water pump runs dry.

- Before switching on the machine, make sure that the main water valve (tap) of the water supply line is open.

- For mains water supply: Make sure that the main water valve is open.
- For drinking water tank: Make sure that the drinking water tank is filled with fresh water.
- With standard waste water outlet: Make sure that the waste water hose is laid correctly.
- For external waste water tank: Make sure that the external waste water tank is connected and empty.
- Make sure that the bean hoppers are filled.
- Make sure that the grounds container is empty and correctly inserted.
- Make sure the machine is correctly connected to the manufacturer-side power supply in accordance with national or local safety regulations.

9.2.2 Switching on machine

⚠ CAUTION

Risk of infection from contamination in the milk pump!

Contamination in the milk pump can lead to infections. Infections can trigger health problems.

- Always carry out cleaning after installation, commissioning or after recommissioning.
- Run the display-guided cleaning program before the first beverage dispensing process.

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. 46: Switching on machine

- ☞ Check the power connection of the machine.
- ☞ Open the user panel.
- ☞ Briefly press the On/Off button.
  - ✓ The machine starts.
  - ✓ The user interface appears on the touch screen.
  - ✓ Machine heating begins.
  - ✓ The machine is ready for use as soon as the required temperature is reached.
- ☞ Close the user panel.
- ✓ The machine is switched on.

See also

Opening and closing the operating unit [▶ 56]

9.2.3 Switching on optional accessories

Optional accessories are equipment variants.

Detailed information on the optional accessories can be found in the separate description with the **operating instructions for the under-machine cooling unit, cup warmer and Cup & Cool**.

Switching on side cooling unit

- ☞ Open the door of the cooling unit.
- ☞ Switch toggle switch to position **I**.
- ☞ Hold button ⏻ down for approx. 3 s.
- ✓ The device is switched on.
- ✓ The current interior temperature of the cooling unit is shown on the display.

Switching on under-counter cooling unit

- ☞ Open the door of the cooling unit.
- ☞ Switch toggle switch to position **I**.
- ☞ Set the thermostat on the back to the center position.
- ✓ The under-counter cooling unit is switched on.

Cup & Cool: Switching on cooling unit

- ☞ Press the On/Off button in the top right on the rear casing.
- ☞ The On/Off button lights up green.
- ✓ The cooling unit reaches the operating temperature after about 60 min.

Switching on cup warmer

The instructions also apply to the cup warmer unit in the Cup & Cool device.

- ☞ Check the power connection of the device.
- ☞ Press the On/Off button in the top left on the rear casing.
- ✓ The On/Off button lights up green.
- ✓ The cup warmer heats up after approx. 60 min.

Activating cup warmer lighting

- The cup warmer is switched on.
- ☞ Use a pin with a diameter of approx. 2-3 mm to press the button for the top lighting on the rear casing for approx. 2 s.
  - ✓ The lighting is activated in a random color.
- ☞ Changing color: Briefly press the button again.
  - ✓ The color changes to another random color one time.
- ☞ Activating interval lighting: Press the button briefly several times until the lighting is switched off.
  - ✓ After 5-10 s, the interval lighting is activated and the color changes at intervals.
- ☞ Activating specific color: When the desired color lights up during the interval lighting: Press the button again.
  - ✓ The lighting is activated and the selected color lights up permanently.

See also

Setting cooling unit temperature [▶ 66]

9.2.4 Setting cooling unit temperature

side cooling unit

- ☞ Hold button △ down for approx. 3 s.
- ☞ Set the temperature 3 – 5 °C (37.4 – 41 °F) higher with button △ or lower with button ▽.
- ☞ Confirm the setting with the Set button.
- ✓ The cooling unit switches to the operating mode.
- ✓ The current interior temperature of the cooling unit is shown on the display.

Cooling unit with thermostat on the back of the device

- ☞ To reduce the operating temperature, turn the thermostat on the back of the device to the right into the blue area.
- ☞ To increase the operating temperature, turn the thermostat on the back of the device to the left into the red area.

9.3 Operating modes

The user interface of the machine can be set to one of the following operating modes by service technicians:

- Guest mode
- Staff mode
- Frequent user mode

9.3.1 Guest mode

The preconfigured **Guest mode** user interface supports operation of the machine by guests without any knowledge of the machine.

Guest mode is the operating mode with the smallest range of functions. Service technicians can also make individual settings.

Display of beverages

The available beverages are displayed horizontally next to each other. If beverage groups are configured, they are displayed.

Menu navigation

The beverage options are selected step by step on successive screens. 1 beverage option can be selected per screen. The coffee strength cannot be modified.

In Guest mode, the pre-selection options before beverage supply (double beverage, decaffeinated coffee, coffee strength), steam dispensing and the direct selection buttons are not available.

Maximum configurable number of groups and beverages

- 10 beverage groups
- 24 beverages per beverage group
- 240 beverages

Functions in Guest mode

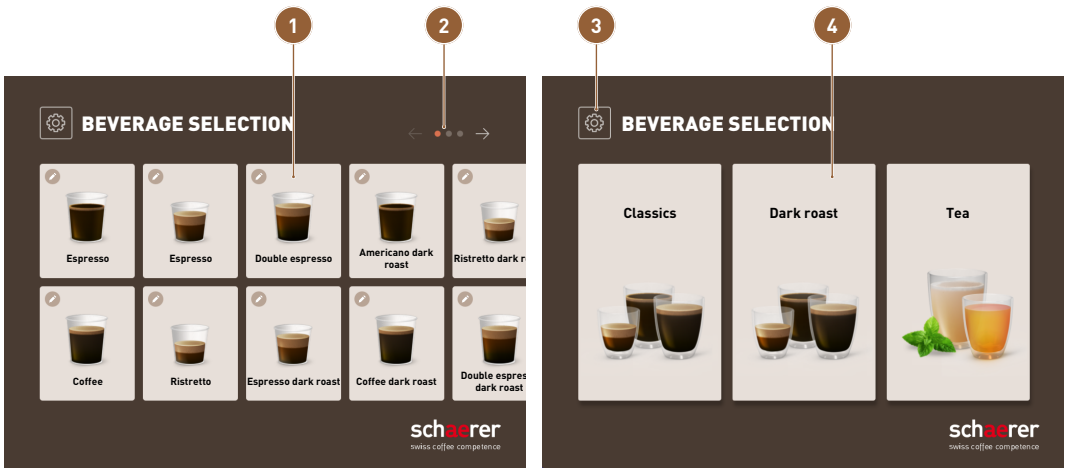


Fig. 47: Functions in Guest mode

1	Display of a maximum of 240 beverages (10 groups with a maximum of 24 beverages each)	2	Navigation through beverage groups (arrow)
3	Access to Service menu	4	Beverage selection via beverage groups

Steps up to beverage dispensing

- Select desired beverage
- Define cup/mug size
- Select coffee roast (optional)
- Confirm selection

- Payment (with payment system, option)
- Instruction to position cup/mug
- Start dispensing
- Fill ground coffee (with separate manual inlet)
- Confirm manual inlet
- Beverage is dispensed
- Display of progress of beverage dispensing
- Beverage complete display

Configurable options

Service technicians can extend or reduce the standard configuration with the following additional functions:

- Screensaver on/off
- Service menu button visible/not visible
- Beverage groups visible/not visible
- Instruction for positioning cup/mug on/off
- Display/Do not display Beverage complete information

9.3.2 Staff mode

The preconfigured **Staff mode** user interface supports operation of the machine by operating staff with machine knowledge. Beverages are selected exclusively by qualified staff.

Staff mode is the operating mode with the widest range of functions. Service technicians can make individual settings.

Display of beverages

The available beverage groups are displayed as horizontal tabs. The available beverages are displayed on each beverage group.

It is possible to pre-select beverages (double beverages, decaffeinated coffee, coffee strength/barista function) in Staff mode. The pre-selection options are displayed in a vertical menu on the left.

Up to 5 buttons can be configured at the bottom edge for direct selection of a beverage with autostart or for steam dispensing.

Menu navigation

The modification of the beverages is displayed and performed in full on the Dispense beverages screen. Autostart can be configured for predefined beverages using direct selection buttons.

Maximum configurable number of groups and beverages

- 10 beverage groups
- 24 beverages per beverage group
- 240 beverages

Functions in Staff mode



Fig. 48: Functions in Staff mode

1	Selection of beverage groups using tabs	2	Swipe function (finger) for scrolling through the available beverages
3	Screen for selection of beverage options	4	Direct selection buttons in the right-hand side menu
5	Display of a maximum of 240 beverages (10 groups with a maximum of 24 beverages each)	6	Direct selection buttons on the left on the lower edge of the screen
7	Barista pre-selection (coffee strength)	8	Decaffeinated coffee pre-selection
9	Double beverage pre-selection	10	Access to Service menu

Steps up to beverage dispensing

- Preselection (e.g. DECAF or double beverage)
- Preselection of coffee strength (barista)
- Select desired beverage
- Define beverage options
- Payment (with payment system, option)
- Start dispensing
- Fill ground coffee (with separate manual inlet)
- Confirm manual inlet
- Beverage is dispensed
- Display of progress of beverage dispensing

Configurable options

Service technicians can extend or reduce the standard configuration with the following additional functions:

- Button for double beverage on/off
- Button for decaffeinated coffee (DECAF) on/off
- Button for coffee strength (barista function) on/off
- Beverage pre-selection (multiple dispensing) on/off
- Display of number of pre-selected beverages on/off
- Service menu button visible/not visible
- Instruction for positioning cup/mug on/off
- Display/Do not display progress information
- Display/Do not display Beverage complete information

9.3.3 Frequent user mode

The preconfigured **Frequent user mode** user interface allows for operation of the machine by advanced operators (e.g. in office areas).

Frequent user mode is the operating mode with a middle range of functions. Service technicians can also make individual settings.

Display of beverages

The available beverages are displayed horizontally next to each other. If beverage groups are configured, they are displayed.

Up to 3 buttons can be configured at the bottom edge for direct selection of a beverage with autostart.

In Frequent user mode, the pre-selection options before beverage supply (double beverage, decaffeinated coffee, coffee strength) and steam dispensing are not available.

Menu navigation

The modification of the beverages is displayed and performed in full on the Dispense beverages screen. In Frequent user mode, the coffee strength can be modified. Autostart can be configured for predefined beverages using direct selection buttons.

Maximum configurable number of groups and beverages

- 10 beverage groups
- 24 beverages per beverage group
- 240 beverages

Functions in Frequent user mode

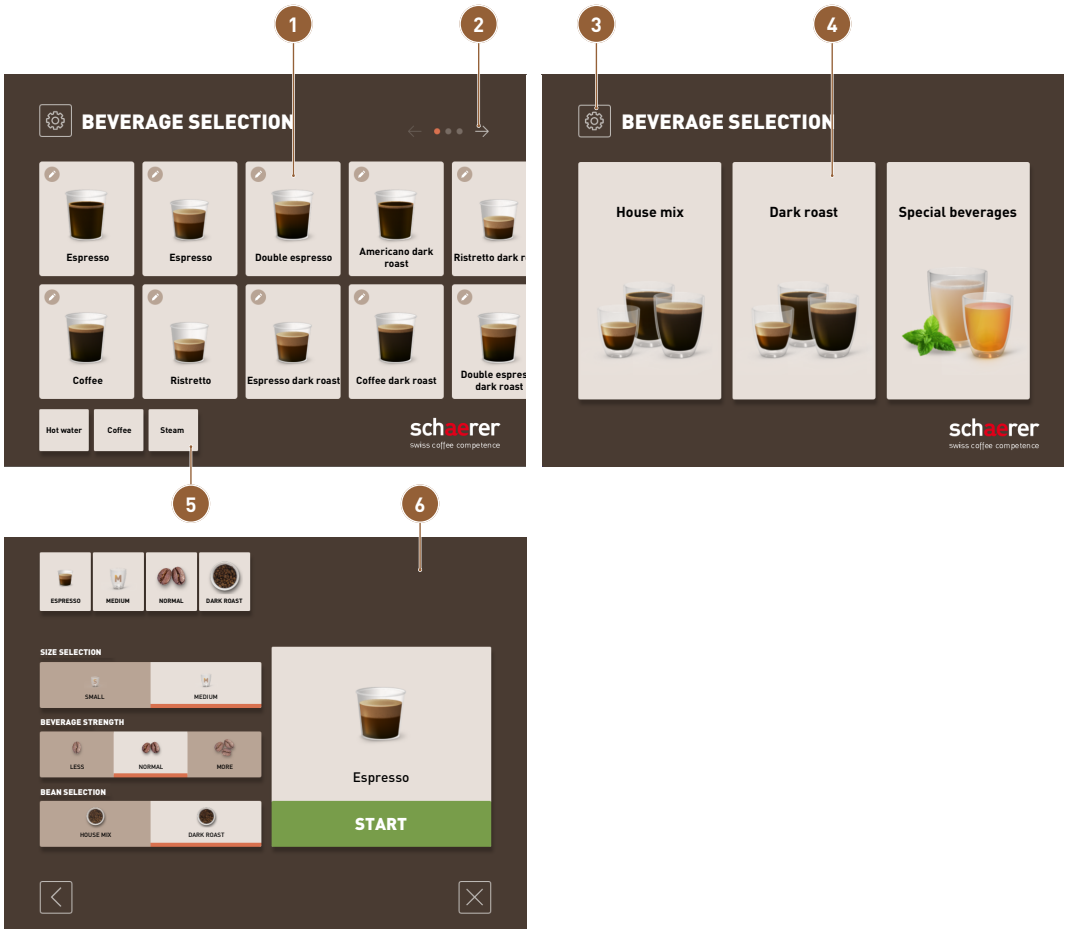


Fig. 49: Functions in Frequent user mode

1 Display of a maximum of 240 beverages (10 groups with a maximum of 24 beverages each)	**2** Navigation through beverage groups (arrow)
3 Access to Service menu	**4** Beverage selection via beverage groups
5 Maximum of 3 additional beverage buttons for direct selection	**6** Screen for selection of beverage options

Steps up to beverage dispensing

- Select desired beverage
- Define cup/mug size
- Select coffee roast (optional)
- Confirm selection
- Payment (with payment system, option)
- Instruction to position cup/mug
- Start dispensing
- Fill ground coffee (with separate manual inlet)
- Confirm manual inlet
- Beverage dispensing is performed.

Configurable options

Service technicians can extend or reduce the standard configuration with the following additional functions:

- Buttons for coffee strength on/off
- Screensaver on/off
- Service menu button visible/not visible
- Beverage groups visible/not visible
- Instruction for positioning cup/mug on/off
- Display/Do not display Beverage complete information

9.4 Beverage supply

Limited beverage selection

Machines with an external drinking water tank are limited in their beverage selection. It is not possible to dispense cooled beverages with an external drinking water tank.

Powder beverages are always dispensed hot with an external drinking water tank, regardless of the set temperature.

Cancellation of beverage selection after inactivity

Beverage selection can be automatically canceled after 5 – 40 s of inactivity. In this case, the user interface is displayed for a new beverage selection process.

The time period can be adjusted by service technicians in the **Configuration** > **Operating mode** > **Reset selection time-out** settings.

9.4.1 Selecting beverage



Fig. 50: Guest and Frequent user mode: Scrolling to beverage

Guest and Frequent user mode: Navigating to beverage

The machine is ready for use.

☞ Use the arrow buttons to scroll through the beverage displays.

✓ The desired beverage button appears.



Fig. 51: Staff mode: Direction selection of beverage group

Staff mode: Navigating to beverage

- The machine is ready for use.
- ☞ Open the desired beverage group directly via the corresponding tab.
- ✓ The saved beverage buttons appear.

Staff mode: Pre-selecting beverage options

Possible pre-selections in the menu:

- Double beverage dispensing
- Decaffeinated coffee
- Coffee strength (barista)

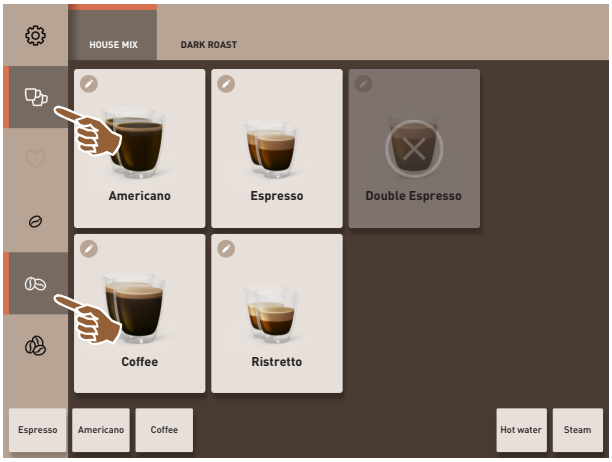


Fig. 52: Beverage preselection in the left menu

- The user interface is in Staff mode.
- ☞ Select a beverage option via a preselection in the left menu, e.g. coffee strength.
- ✓ All beverages with the corresponding option appear.



Fig. 53: Beverage types

Staff mode: Selecting beverage type

The tab with the beverage group or the pre-selection contains configured beverages.

☞ Tap on the desired beverage button.

✓ A screen with more beverage options opens.

9.4.2 Modifying beverage

Possible beverage options:

- Beverage type (e.g. coffee, espresso, cappuccino)
- Beverage size (S, M, L)
- Coffee type (2-3 grinds)
- Milk type (Twin Milk)
- Chocolate (with powder system)
- Aroma (with Flavour Point syrup system)

The pre-selection of ingredients and beverage size can be set and activated by service technicians in the beverage configuration.

The beverage is modified differently depending on the operating mode:

- Sequential beverage modification (Guest mode): Each beverage option is displayed on a separate screen.
- Direct beverage modification (Staff mode and Frequent user mode): All beverage options are displayed together on one screen.

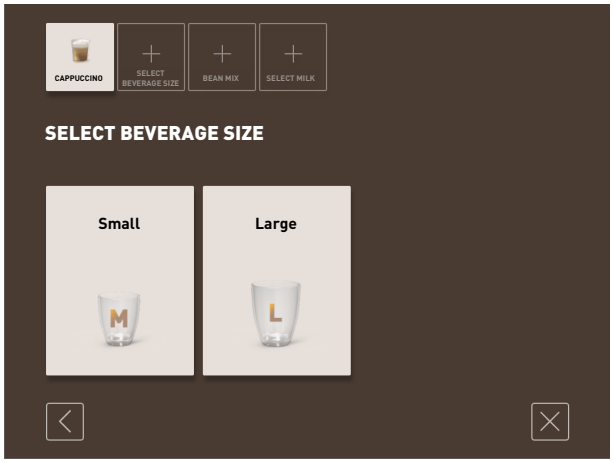


Fig. 54: Guest mode: Determining beverage modification sequentially

The selected beverage is marked as modifiable with the pencil icon .

☞ Tap on the button with the desired modification.

✓ The desired modification appears.

✓ Additional modifications are displayed for selection.

☞ Select the additional modifications.

Sequential beverage modification

Sequential beverage modification is active in Guest mode and cannot be deactivated.

Sequential beverage modification asks for a pre-selection of beverage options step by step. The options are each offered for selection in a separate display.

Progress display for sequential beverage modification

Prerequisite:

- The beverage is configured for dispensing with different ingredients.
- The **Beverage selection progress** type of display is available in Guest mode.

The progress display provides information about the beverage options already selected and those still to be selected.

Each selected ingredient is displayed by a icon.

Each step still to be selected is shown with an empty display field.

The **Beverage selection progress** display cannot be deactivated.



Fig. 55: Selection of beverage

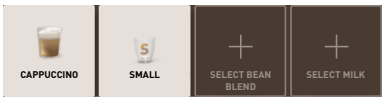


Fig. 56: Selection of beverage size

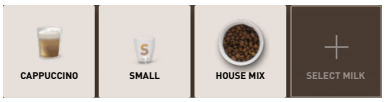


Fig. 57: Selection of coffee type



Fig. 58: Selection of ingredients

Direct beverage modification

Direct beverage modification is active in Staff mode and in Frequent user mode and cannot be deactivated.

With this function, the selection of beverage options is offered directly in the same display.



Fig. 59: Direct beverage modification in Staff mode

1 Buttons for beverage modification	**2** Button for multiple dispensing

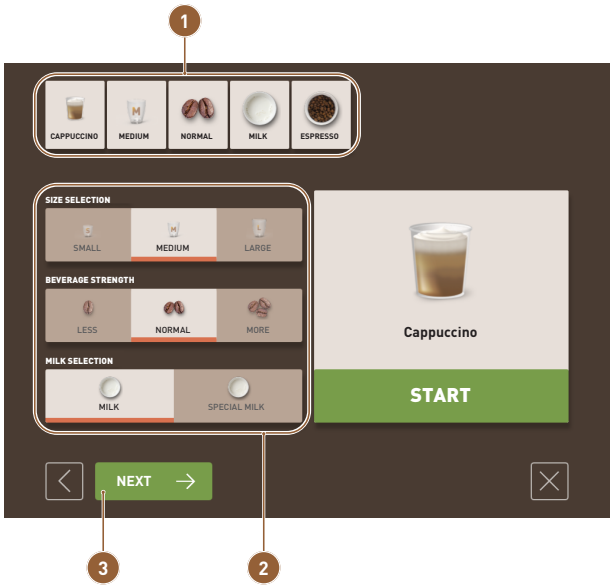


Fig. 60: Direct beverage modification in Frequent user mode

1 Display: Summary of beverage modification	**2** Buttons for beverage modification
3 Variant: Button for navigating to additional beverage modifications	

☞ Tap on the button with the desired modification.

☞ If necessary, set multiple dispensing (1 to 9 beverages).

✓ The selected modifications are active.

☞ Tap on the button with the desired modification.

✓ The selected modifications are summarized in the upper area.

9.4.3 Double beverage pre-selection

Double beverages can be dispensed in Staff mode. This allows two cups to be filled at the same time, with the respective quantity per cup being dispensed once on the left-hand side and once on the right-hand side of the beverage outlet.

The preselection option for double beverages can be set by service technicians in the beverage configuration.



Display of button

Starting preselection

Prerequisite:

- The double button visible function is activated in Staff mode.
- Beverages with double dispensing have been configured.

☞ Tap on the Double beverage dispensing button.

✓ All beverages that are configured for double beverage dispensing are actively displayed for selection in the user interface.

9.4.4 Dispensing pre-selected beverages multiple times

Preselection for multiple beverages is only available in Staff mode.

The function is available if the parameter is activated in the **Configuration** > **Operating mode** > **Activate preselection via touch screen** setting.



Fig. 61: Beverage modification screen

1	Buttons for beverage modification	2	Button for multiple dispensing

The pre-selection is activated in operating mode (maximum 1 – 9 beverages).

☞ Select a beverage.

☞ Select the desired ingredients.

☞ Set the number of beverages using the arrow buttons < 1 – 9 >.

✓ The beverage dispensing process is repeated a maximum of nine times.

✓ The progress of all dispensing processes is displayed.

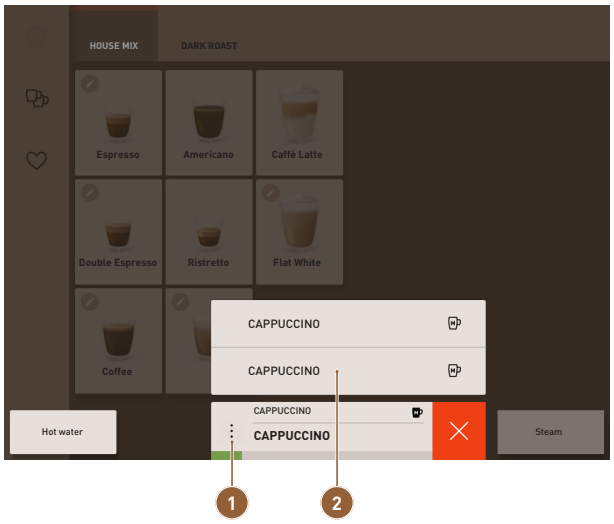


Fig. 62: Screen showing list of preselected beverages [Staff mode with milk]

1 Three-dot menu	**2** List with pre-selected beverages

☞ Tap on the three-dot menu.

✓ A list with the pre-selected beverages appears.

✓ When beverage dispensing is complete, this is displayed in green.

☞ Remove the cup or mug from the beverage outlet.

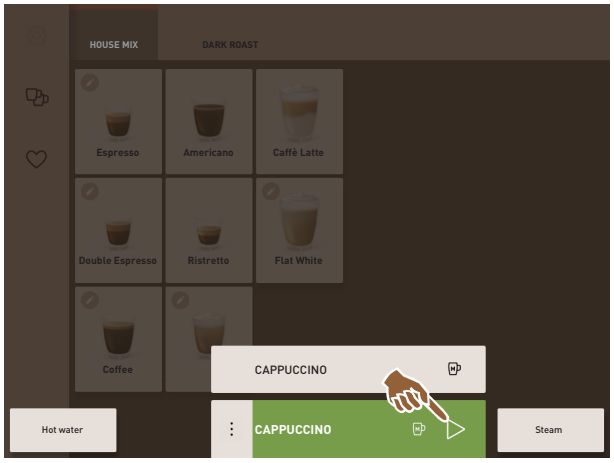


Fig. 63: Dispensing additional beverage

☞ Tap on the Play button.

✓ The first beverage is confirmed.

✓ Dispensing of the next beverage from the list starts.

☞ Repeat the previous step for additional beverages.

9.4.5 Decaffeinated coffee pre-selection

In Staff mode, decaffeinated coffee can be pre-selected directly. This means that only beverages for which a variant with decaffeinated coffee is available are displayed as active.

The **Decaffeinated coffee** pre-selection can be set by service technicians in the beverage configuration.



Display of button

Starting preselection

Prerequisite:

- The **DECAF** button visible function is activated in Staff mode.
- The machine is equipped with two bean hoppers, one of which is filled with decaffeinated beans.
- Alternatively, the machine can be filled with decaffeinated ground coffee through the manual inlet.

Variant with second grinder

☞ Tap on the Without caffeine button.

✓ Only the beverages that have been configured with decaffeinated coffee beans are available for selection.

Variant with ground coffee and manual inlet

☞ Tap on the Without caffeine button.

✓ Only the beverages that have been configured as a source with DECAF are available for selection.

✓ During dispensing, you will be instructed to add the decaffeinated ground coffee.

9.4.6 Barista preselection

In Staff mode, the strength of the beverage to be dispensed can be influenced once using the **Barista** function.

Three settings are available: **Mild**, **medium** and **strong**.

After the beverage has been dispensed, the barista field returns to the standard setting of **medium**.

The Barista preselection can be activated in Staff mode by service technicians.



Display of button

Starting preselection

Prerequisite:

- The **Barista** function is available for activation in Staff mode.
- The beverage has been configured with the **Barista** function.

☞ Tap on the button with the desired coffee strength.

✓ Only those beverages whose strength can be adjusted are available for selection.

9.4.7 Positioning cup/mug

During beverage dispensing, an instruction to position the cup or mug appears.

The **Position cup** instruction can be activated in the operating mode by service technicians.



Fig. 64: Positioning cup/mug animation is shown in the display.

- The **Position cup** function is activated in the operating mode.
- ☞ Place the cup or mug under the beverage outlet.
- ☞ For manual beverage outlet: Pull the beverage outlet down onto the cup or mug.

9.4.8 Paying for beverage

Prerequisite: A payment system is activated and the beverage contains a beverage price.

If a payment system is activated, an instruction for payment appears first.

The selected beverage options are confirmed with the **PAY** button. The payment process is then started.

Once the payment process has been completed, the **PAY** button changes to the **START** button.

The **START** button starts the beverage dispensing process.

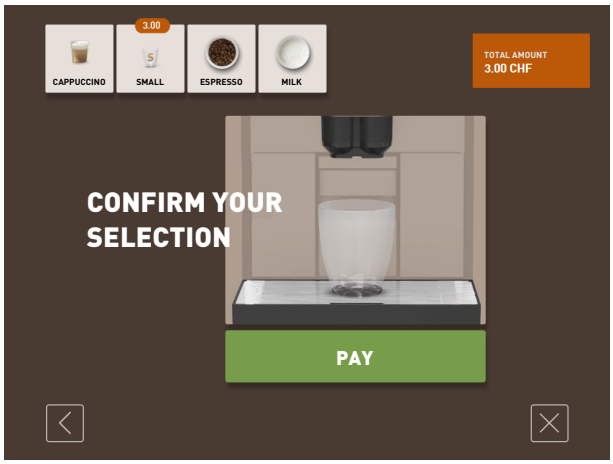


Fig. 65: Button for payment

☞ Tap on the **Pay** button.

✓ The screen with the payment methods offered appears.

✓ If coin change systems are used, they display if it is no longer possible to change coins.

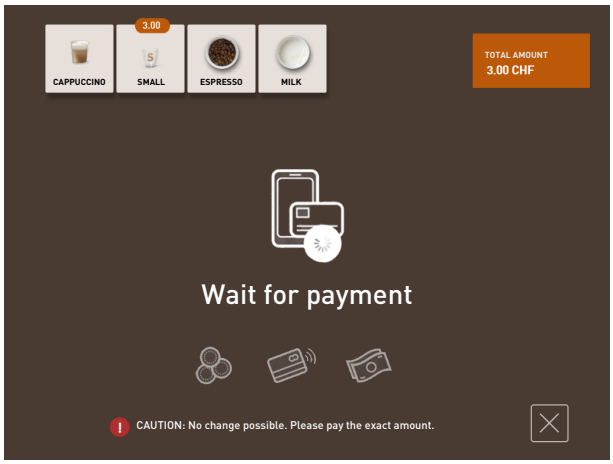


Fig. 66: Instruction for payment

- ☞ Select an available payment method.
- ☞ Confirm the payment process and complete the payment process.
- ✓ Beverage dispensing starts.

9.4.9 Dispensing beverage

Variant: Dispensing without payment system

Once beverage pre-selection is complete, the **START** button appears.

The **START** button confirms the selected beverage options and starts the beverage dispensing process.

The **Position cup** instruction can be activated or deactivated by service technicians in the configuration for the respective operating mode.

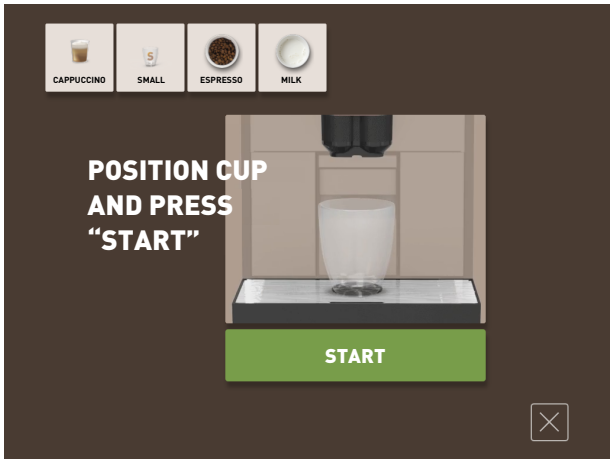


Fig. 67: Beverage ready for dispensing

- The beverage has been modified and is ready for dispensing.
- ☞ Tap on the **START** button.
  - ✓ The **Position cup** instruction appears.
- ☞ Tap on the **START** button again.
- ✓ The beverage is dispensed.

9.4.10 Progress display for beverage dispensing

Prerequisite for all variants: Beverage dispensing starts.

Variant: Guest/Frequent user mode

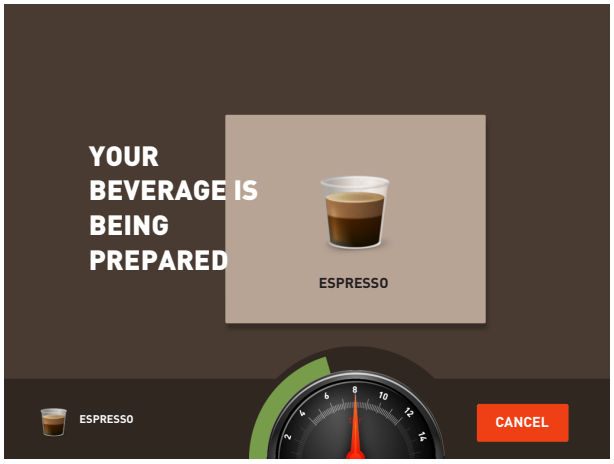


Fig. 68: Guest and Frequent user mode: Canceling beverage dispensing

Guest and Frequent user mode: Progress screen

- The progress is displayed as a green bar in a semicircle. The dynamic green bar runs around the digital manometer in a semicircle from left to right.
- The digital manometer provides information about the current water pressure during a coffee brewing cycle.
- The progress display provides information about the remaining dispensing time during beverage dispensing.
- The progress display can be activated in the operating mode.

Variant: Staff mode

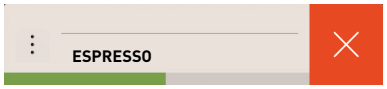


Fig. 69: Progress (Staff mode)

Staff mode: Progress screen

- The progress is displayed as a green bar.
- The dynamic green bar runs horizontally from left to right.
- The progress display with bar can be activated in the operating mode.

9.4.11 Completion of beverage

The display informs you when dispensing is complete.

The information appears if the parameter is activated in the **Configuration** > **Operating mode** setting.

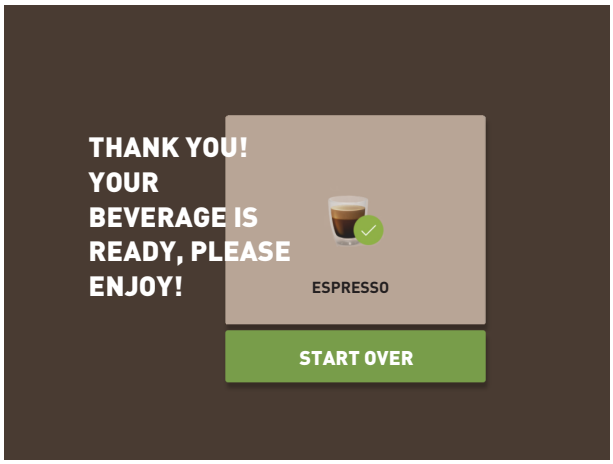


Fig. 70: Display of Beverage dispensing completed

☞ Remove the cup or mug from the drip tray.

✓ The Remove cup/mug animation is shown in the display.

9.4.12 Canceling beverage dispensing

Cancelling before beverage dispensing

The button cancels the pending beverage dispensing process and takes you back to the beverage selection screen.

The button appears while beverage options are being selected. The current selection and any pre-selected beverage options are then canceled before the beverage is dispensed.

Cancelling during beverage dispensing

The **CANCEL** button appears during beverage dispensing.

The **CANCEL** button cancels the beverage dispensing process. Pre-selected beverages are also deleted.

Guest mode and Frequent user mode: cancel beverage dispensing

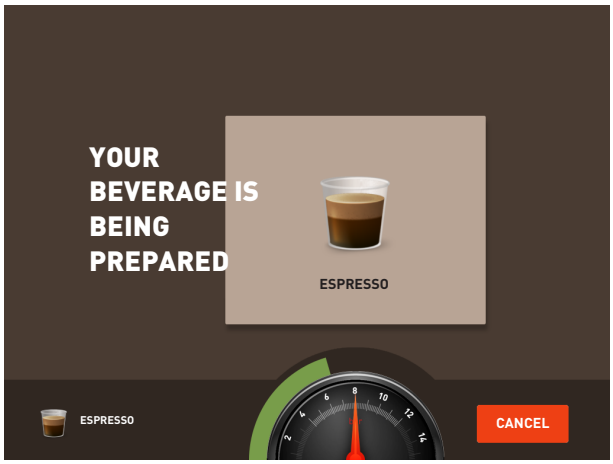


Fig. 71: Guest mode and Frequent user mode: canceling beverage dispensing

☞ Tap on the **CANCEL** button.

✓ Beverage dispensing is canceled.

Staff mode: cancel beverage dispensing

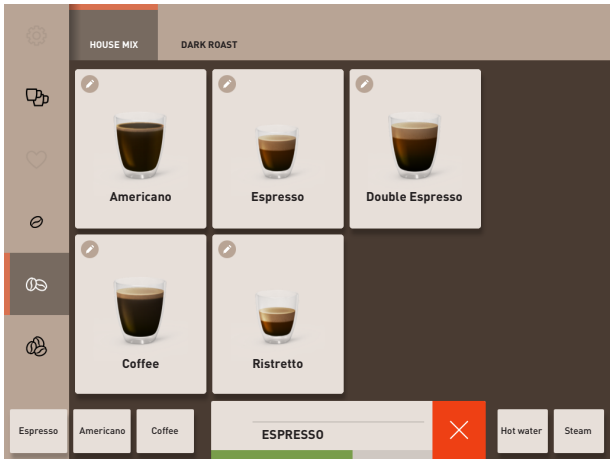


Fig. 72: Staff mode: canceling beverage dispensing

- ☞ Tap on the **X** button.
- ✓ Beverage dispensing is canceled.

9.5 Dispensing steam



⚠ WARNING

Risk of infection from contamination of the steam wand!

Contamination can lead to infections. Infections can trigger health problems.

- ☝ Wipe the steam wand with a clean, damp cloth after each use.
- ☝ Wear protective gloves while cleaning.

- ☞ Pull the steam wand a bit to the front.
- ☞ Place a small mug on the drip grid under the steam wand.
- ☞ Make sure that the tip of the steam wand is completely immersed in the beverage.
- ☞ Press the **Steam** button on the screen.
  - ✓ Steam is dispensed into the beverage.
  - ✓ With the **Autosteam** or **Supersteam** option: Steam dispensing stops automatically.
- ☞ With the **Powersteam** option: Press the Steam button on the screen to stop.
- ☞ Make sure that steam dispensing has ended.
- ☞ Pull the steam wand a bit to the front using the lever and remove the mug at the same time.
- ☞ Point the steam wand downwards towards the drip grid with the lever.
- ☞ Press the **Steam** button and allow steam to escape for approx. 2 s.
  - ✓ Milk residues in the steam wand are removed.
- ☞ Wipe off the milk residue on the steam wand with a clean, damp cloth.
- ☞ Clean the steam wand regularly.

9.6 Using manual inlet

NOTE

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.

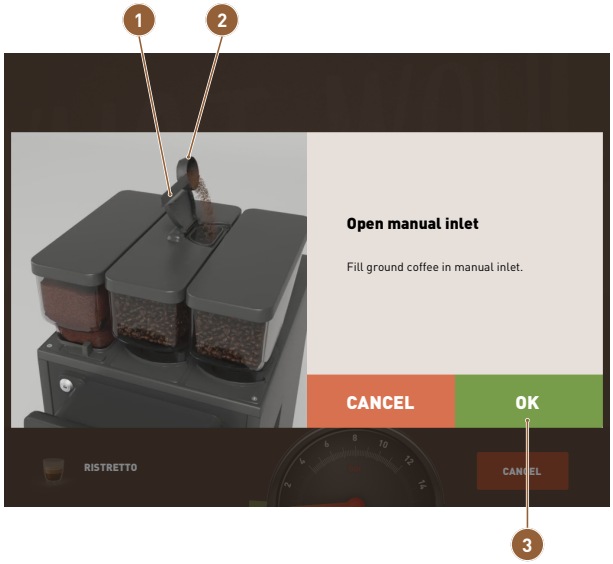


Fig. 73: Instruction for filling ground coffee

1	Manual inlet cover	2	Measuring spoon
3	Button for confirmation		

- Select a beverage group with beverage options on the user interface.
- Select a beverage with the option for pre-ground coffee, e.g. decaf.
- If necessary, select the other dispensing options, such as small, medium or large.
- Start the dispensing process.
  - ✓ An animation instructing you to insert ground coffee appears.
- Open the cover of the manual inlet.
- Pour a portion of ground coffee into the opening of the manual inlet using the measuring spoon provided.
- Confirm this with **OK**.
- ✓ Beverage dispensing starts.

9.7 Generic functions of the user interface

This chapter contains information about general functions of the user interface. Knowledge of the functions is essential for daily operation of the machine.

9.7.1 Navigation in the interface

Guest and Frequent user mode

In **Guest mode** and **Frequent user mode**, you can navigate by **swiping** left or right across the screen. You can also use the arrow buttons to **scroll** through all beverage groups.



Fig. 74: Navigation in Guest mode with arrow buttons

- The arrow < button navigates to the left to the previous beverage group.
- The arrow > button navigates to the right to the next beverage group.

The number of dots corresponds to the number of beverage groups available.

Staff mode

In **Staff mode**, you navigate by **swiping** across the beverage groups at the top of the screen.

- Tapping on a tab directly selects a beverage group.
- Swiping to the left or right on the tabs navigates to the previous or next beverage group.

If the number of tabs (beverage groups) is not fully visible:

Back button



Next button



The  button takes you back to the previous screen. The  button takes you to the next screen.

9.7.2 Display of beverages

Type of display

The type of display for the beverages on the user interface depends on the operating mode.

The beverage buttons can be individually named and assigned via media packages at the request of the customer.

The configuration of the display is carried out by service technicians.

Each beverage button can be individually assigned a beverage. The beverage button starts the corresponding beverage dispensing process or pre-selection for additional ingredients and beverage options.

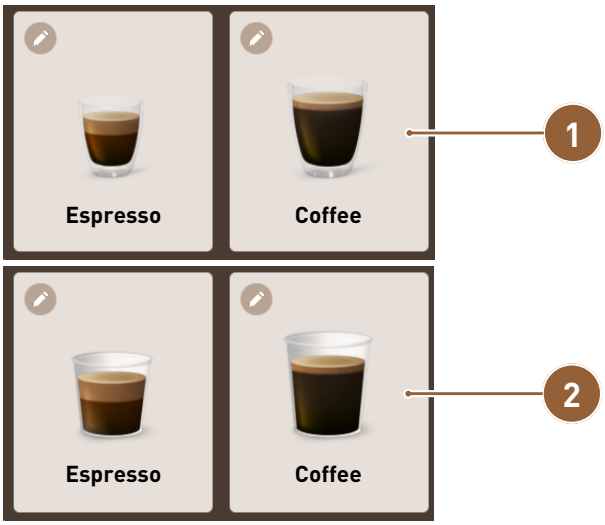


Fig. 75: Types of display of the beverage buttons

1 Display with glass (standard)	2 Display with cup (optional)

Size of display

The display size of the beverages is defined in the Menu card configuration.

Available display sizes:

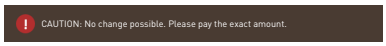
- Small
- Medium
- Large
- Extra large
- Dynamic



Fig. 76: Small and extra large beverage display

9.7.3 Pending error message or instruction for action





Error messages are displayed at the top or bottom of the user interface. If an error message is active, intervention by the user or a service technician is required.

☞ Tap on the error message display.

✓ The Service menu appears.

☞ Select the pending error message with the (**>**) button in the Service menu.

☞ The **Smart info** window with additional information appears.

9.7.4 Error messages (simple)

Error messages or instructions are shown differently on the display depending on the set operating mode.

In Guest mode, the default setting for error messages is **simple**.

Service technicians can change the setting to **specific error messages**.

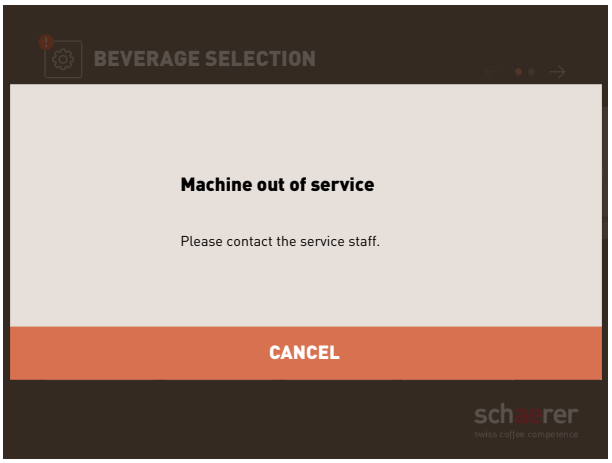


Fig. 77: Simple error message

Simple error messages show the following information:

- The machine is no longer ready for use.
- The **Inform service staff** instruction is displayed.

9.7.5 Error messages (specific)

Error messages or instructions are shown differently on the display depending on the set operating mode.

In Staff or Frequent user mode, the default setting for error messages is **specific**.

Specific error messages show the following information:

- Instructions for action or errors are displayed immediately.
- The machine can be independently restored to the ready for use condition if necessary.

Service technicians can change the setting to a **simple error message**.



Fig. 78: Screen for specific error message

9.8 Service menu

This chapter describes the functions and options of the machine Service menu.

9.8.1 Service menu button

The **Service menu** button may be displayed differently depending on the operating mode.


Service menu button in Guest mode


Service menu button in Staff mode and Frequent user mode

The Service menu button has two functions:

- Control function: The Service menu is opened with the Service menu button.
- Report function: Additional information with color marking

Control function for opening the Service menu:

☞ Tap on the **Service menu** ⚙ button.

✓ The Service menu opens.

Report function: Additional information with color marking

In the user interface, the Service menu button provides information about pending information or error messages.



Fig. 79: Service menu button with messages

- **Without color code**: No messages are pending in the Service menu.
- **Orange**: Information is available in the Service menu.
- **Red**: Error messages or instructions for action are pending in the Service menu.

9.8.2 Service menu overview

Overview of functions

Access to the Service menu in the **Machine operator** profile can be protected by a service technician with a PIN as an option.

If an error occurs during a restart, the screen with the Service menu is displayed immediately.

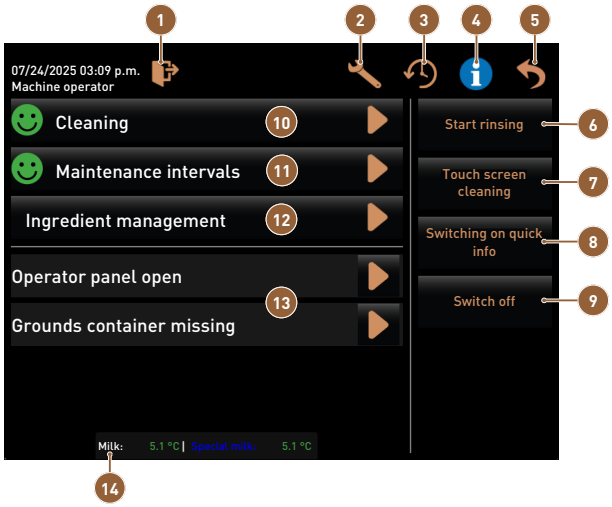


Fig. 80: Screen for functions in the Service menu

1	Logs out the currently registered profile or opens the log-in dialog for logging in with different profiles.	2	Opens the screen with the machine settings.
3	Shows the dialog with the beverage dispensing history and the list of dispensed beverages.	4	Shows the dialog with system information including QR code.
5	Closes the screen with the Service menu and takes you back to the user interface.	6	Direct selection: Starts rinsing process.
7	Direct selection: Locks the screen for 30 s for screen cleaning.	8	Direct selection: Displays a quick info message.
9	Direct selection: Switches the machine off.	10	Displays the cleaning status and opens the screen for performing cleaning.
11	Displays the maintenance status and opens the screen for carrying out maintenance.	12	Opens the screen for ingredient management.
13	Displays pending messages and opens the dialog with the respective instruction for action and its acknowledgment.	14	Optional: Displays the milk temperature.

General buttons in the Service menu

- Use the **Confirm** button to start pending actions or confirm displayed instructions for action.
- The **Next** button takes you step to step through the display-guided action steps for cleaning, descaling or grinder service.

9.8.3 Quick info

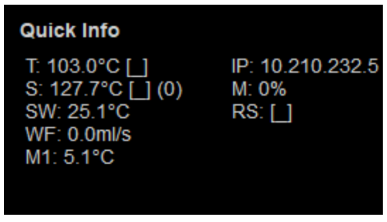


Fig. 81: Quick info

The quick info appears on the Service menu screen and provides information on the following parameter values:

- **T** displays the hot water boiler temperature in °C.
- **S** displays the steam boiler temperature in °C.

- **SW** displays the steam wand temperature in °C.
- **WF** displays the required water quantity in ml/s.
- **M1** displays the current milk temperature.
- **IP** displays the address of the network adapter.
- **M** displays the available storage space in %.
- **RS** informs about the density of beverage supply (Rush hour mode).
  Rush hour mode is activated if more than 30 beverages are dispensed per hour. When this mode is active, rinsing of the beverage outlet is suppressed. The active mode is indicated by **RS[*]**.

9.8.4 Logging into a profile

Access rights to functions and parameters depend on the profile.

Variant: access to the Service menu without PIN entry

☞ Tap on the **Service menu** ⚙ button in the user interface.

✓ The Service menu opens with the last activated user profile or without an active profile (not logged in).

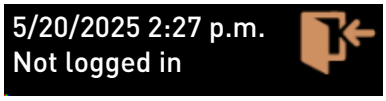


Fig. 82: Not logged in button

Variant: access to the Service menu with PIN entry

Each profile has specific authorizations. Logging in with a profile can be protected by a PIN.

Service technicians can activate and deactivate profiles, define a PIN and assign it to a profile.

Access to the Service menu is protected by a PIN.

☞ Tap on the **Service menu** ⚙ button in the user interface.

✓ The numeric keypad for entering the PIN appears.

☞ Enter the configured PIN and confirm.

✓ The screen with the Service menu opens without an active user profile.

✓ All direct dial functions with the exception of **Free sales** are available for selection.

✓ **Info** – **Show versions** is available in the settings.

Access to the Profiles dialog

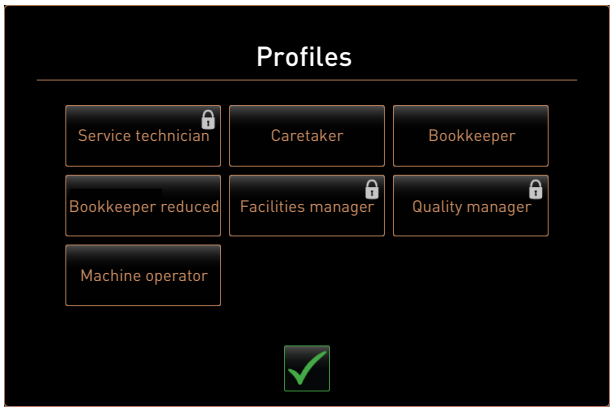


Fig. 83: Profiles dialog

☞ Tap on the **Log-in** button in the Service menu.

✓ The **Profiles** dialog opens with the profiles configured by service technicians.

✓ PIN-protected profiles are marked with a lock icon.

When the Service menu is closed, the currently logged in profile remains active.

The active profile is only logged out after logging out using the button or after a restart.

The following profiles can be enabled by service technicians:

- Caretaker
- Bookkeeper
- Bookkeeper reduced
- Head of service
- Quality manager
- Machine operator

Variant for activating unprotected profile

☞ Select the desired unprotected profile, e.g. **Caretaker**.

✓ The Service menu is displayed with the active **Caretaker** profile.

✓ The functions available in the Service menu correspond to the selected profile.

Variant for activating protected profile

The profile is protected by a PIN and labeled with a lock icon.

☞ Select the desired protected profile, e.g. **Service technician**.

✓ The numeric keypad for entering the PIN opens.

☞ Enter the configured PIN and confirm with ✓.

✓ The Service menu is displayed with the selected profile.

Profile log out

☞ Tap on the **Log-out** button in the Service menu.

✓ The active profile is logged out.

✓ Any authorizations become void.

✓ **Not logged in** is displayed in the Service menu.

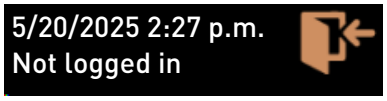


Fig. 84: Not logged in button

See also

- Advanced settings [▶ 165]
- Profiles and authorizations [▶ 167]

9.8.5 Functions in the Service menu

In general, a green smiley indicates that cleaning or maintenance is complete. A red smiley indicates that cleaning or maintenance is pending.

See also

- Advanced settings [▶ 165]
- Logging into a profile [▶ 91]
- Cleaning [▶ 103]

9.8.5.1 Starting cleaning



Fig. 85: Cleaning button

PIN-protected function (caretaker, operator, service technician)

☞ Tap on the **Cleaning** button.

✓ Display-guided cleaning starts.

✓ It is possible to cancel using the ✕ button.

✓ The last cleaning performed is displayed.

9.8.5.2 Performing maintenance work



Fig. 86: Maintenance overdue

PIN-protected function (caretaker, operator, service technician)

☞ Execute the displayed maintenance work.

☞ Tap on the **Maintenance** button.

✓ It is possible to cancel using the ✕ button.

☞ Acknowledge the maintenance work.

✓ The acknowledged maintenance work is displayed with the date and a green smiley.

9.8.5.3 Ingredient management



Fig. 87: Ingredient management button

The **Ingredient management** button calls up the ingredient management. Available ingredients, e.g. the milk system, can be activated and deactivated here.

Activating ingredient

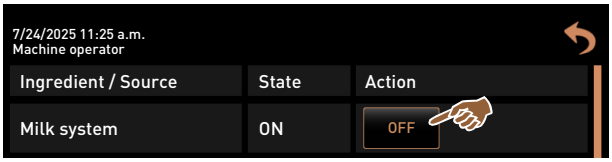


Fig. 88: Activate milk system

☞ Tap on the **Ingredient management** button.

✓ The screen with the active ingredients opens.

☞ Tap on the **ON** button in the **Action** column.

✓ The ingredient is activated.

☞ Tap on ↩ to return to the Service menu.

9.8.5.4 Error messages in the Service menu

Pending machine errors are displayed in the **Error messages** area.

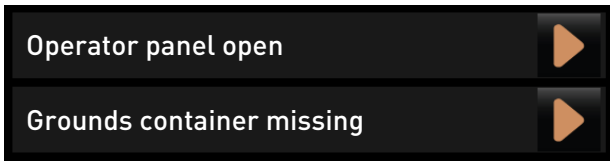


Fig. 89: Error message buttons

Remedying error

☞ Open the pending message with .

✓ The pending message appears in a separate window.

☞ Correct the pending error or carry out the required action.

✓ The error message or the action request is automatically deleted from the list.

✓ Service technicians can see an overview of events in the **Info** > **Error statistics** main menu.

9.8.5.5 Back to user interface

The button takes you back to the user interface.

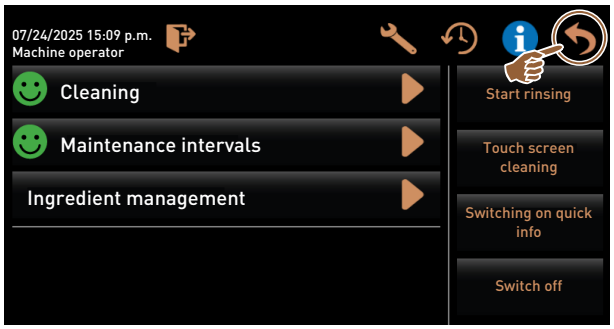


Fig. 90: Back to user interface

☞ Tap on .

✓ The desired user interface appears.

✓ The logged-in profile is logged out.

9.8.5.6 Displaying system information

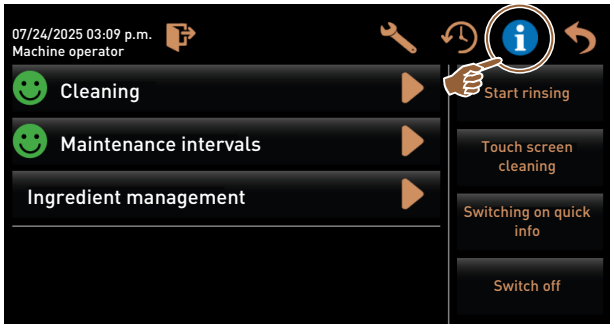


Fig. 91: Calling up system information

☞ Tap on .

✓ The system information is displayed in a separate window.

✓ A QR code with system information also appears.

9.8.5.7 Displaying beverage dispensing history

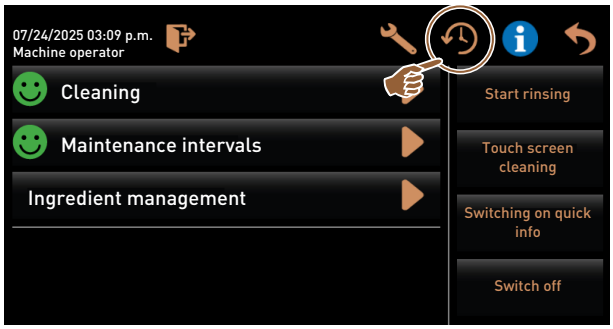


Fig. 92: Calling up beverage dispensing history

☞ Tap on .

✓ The **Beverage dispensing history** dialogue opens and all beverages already dispensed are shown in a list.

✓ The corresponding beverage dispensing duration is also displayed for each dispensed beverage.

✓ The pure beverage dispensing time (coffee) is shown on the right side of the list.



Fig. 93: Beverage dispensing history dialog

The pure dispensing time for single coffee beverages should be between 10 and15 s and 20 to 25 s for double beverages. However, this is only a reference value and can vary due to the grind quantity, grinding level, water quantity, water temperature and coffee type.

9.8.5.8 Opening settings

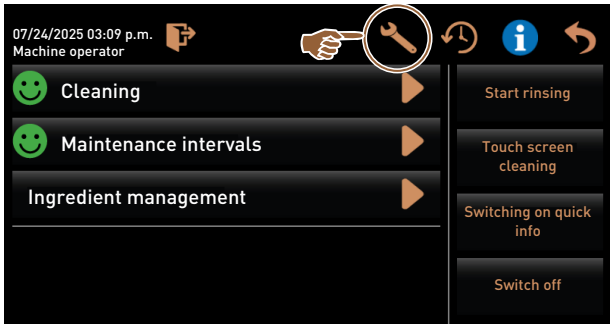


Fig. 94: Calling up settings

☞ Tap on .

✓ The settings appear.

✓ Parameter settings are available.

The access authorization for parameter settings depends on which profile is logged in.

9.8.5.9 Direct selection

The following actions are triggered with the direct selection buttons.

“Start rinsing” direct selection

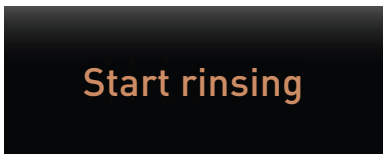


Fig. 95: Start rinsing button

☞ Tap on the **Start rinsing** button.

✓ A hot rinse is carried out for all existing systems.

✓ The rinsing process cannot be cancelled.

Touch screen cleaning direct selection

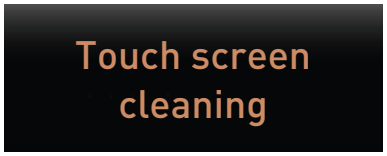


Fig. 96: Touch screen cleaning button

☞ Tap on the **Touch screen cleaning** button.

✓ The display remains insensitive for a period of 30 s and can be cleaned.

“Switch on quick info” direct selection



Fig. 97: Switch on quick info button

☞ Tap on the **Switch on quick info** button.

✓ The Quick info window with the operating statuses appears floating in the foreground.

Switch off Quick Info

☞ Tap on the **Switch off quick info** button.

✓ The Quick info window closes.

“Activate free vending” direct selection (with payment system)



Fig. 98: Activate Free vending mode button

☞ Tap on the **Activate free vending** button.

✓ Beverages usually available for a change are available for free vending.

✓ The **Activate free vending** button is accessible to service technicians, bookkeepers and caretakers.

“Switch-off” direct selection



Fig. 99: Switch-off button

☞ Tap on the **Switch-off** button.

✓ The machine is powered down.

✓ The machine is powered down, but not de-energized.

✓ The display is blank and inactive.

See also

Cleaning [▷ 103]

9.9 Emptying

Containers with used residues must be emptied periodically.

9.9.1 Emptying grounds container

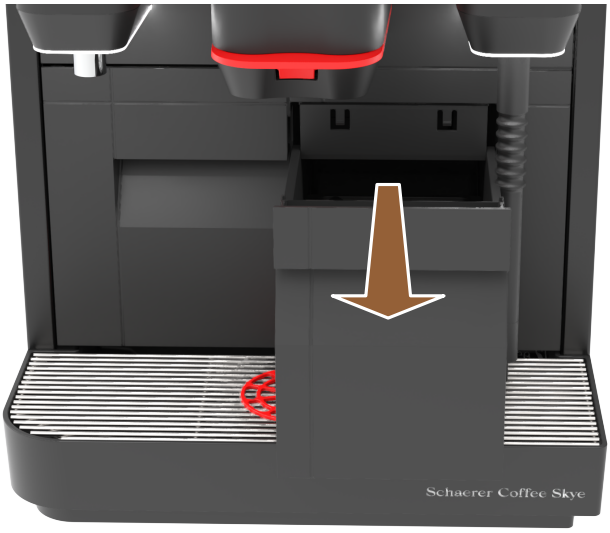


Fig. 100: Removing grounds container

Emptying standard grounds container

The standard grounds container holds approx. 60 – 70 coffee cakes. After this number has been reached, the instruction for emptying the grounds container appears in the user interface.

- ☞ For machines with manual beverage outlet: Slide the beverage outlet upwards as far as it will go.
- ☞ Pull the grounds container out of the machine to the front.
  - ✓ The Grounds container removed message appears on the display.
- ☞ Empty and clean the grounds container.
- ☞ Dry the grounds container and push it back into the machine as far as it will go.
- ✓ The machine is ready for use.

Emptying under-counter grounds container

- ☞ For machines with manual beverage outlet: Slide the beverage outlet upwards as far as it will go.
- ☞ Pull the integrated grounds container out halfway.
  - ✓ Accidental beverage dispensing is prevented.
- ☞ Empty and clean the under-counter grounds container.
- ☞ Place the under-counter grounds container back under the grounds chute of the machine.
- ☞ Push the integrated grounds container back in as far as it will go.
- ✓ The machine is ready for use.

NOTE

Property damage due to possible overfilling of the under-counter grounds container!

The under-counter grounds container is not monitored. There is a risk of overfilling. During emptying, it is possible to select a beverage without the under-counter grounds container.

- Check the under-counter grounds container according to machine usage.
- Make sure that no beverages can be dispensed while the under-counter grounds container is being emptied.

9.9.2 Emptying external waste water tank



Fig. 101: External waste water tank

- Ensure that no beverages can be dispensed before the waste water tank is removed.
- Slide the manual beverage outlet upwards as far as it will go.
- Pull the grounds container out of the machine to the front.
  - ✓ The **Grounds container removed** message appears on the display.
- Remove the cover with the waste water hose from the external waste water tank.
- Empty the waste water tank.
- Clean the waste water tank thoroughly with household cleaner and rinse it out with fresh water.
- Check that the level monitoring floater is working.
- Insert the cover with the waste water hose back into the tank.
- Reinsert the grounds container into the machine.
- ✓ The machine is ready for beverage dispensing.

9.10 Switching off

The machine and its optional accessories can be switched off in various ways, as described below.

9.10.1 Switching machine to standby

DANGER

Danger to life from electrocution!

The machine is still powered in Standby mode.

- Remove the machine casings.
- Always disconnect the machine from the power supply before repair work.



⚠ CAUTION

Risk of scalding from machine rinsing!

Before switching off, the machine may perform an automatic machine rinsing process. During machine rinsing, hot water runs out of the beverage outlet. An automatic machine rinse is indicated by a message on the display. The functional light turns red.

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



NOTE

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.



NOTE

Save energy!

If the machine is not going to be used for several hours, it should be switched off to save energy.

Rinsing before switching off



Fig. 102: Start rinsing button

☞ In the Service menu, tap on the **Start rinsing** button if it has not already been performed.
  ✓ Rinsing is performed.
☞ Carry out daily and weekly cleaning as required.
☞ If present, empty and clean the external drinking water tank.

After automatic cleaning, the machine can be switched off directly from the cleaning program.

Switching off using the touch screen



Fig. 103: Switch-off button

☞ Tap on the **Switch-off** button in the Service menu.
  ✓ The machine is switched off.
  ✓ The display is not displaying.
  ✓ The machine is in Standby mode.

Switching off using machine On/Off button



Fig. 104: Switching off machine

- ☞ Open the user panel.
- ☞ Press the machine On/off button for 4 s.
  - ✓ The machine is switched off.
  - ✓ The display is not displaying.
  - ✓ The machine is in Standby mode.
- ☞ Close the user panel.
- ☞ Recommendation: Close the main water valve at the end of the day.

9.10.2 Longer downtimes (from 1 week)

NOTE

Property damage due to frozen water!

The boilers can be damaged by freezing water as it expands.

- ☝ If the machine may be exposed to below-freezing temperatures, drain the entire water system as far as possible beforehand.
- ☝ Contact your service partner.

During longer downtimes, for instance company vacations, take the machine and other associated devices out of operation.

When restarting the machine, first perform a daily cleaning.

Taking machine out of operation

- ☞ Switch the machine to Standby mode.
- ☞ Disconnect the power connection by pulling out the power plug or switching off a main switch installed on site.
- ✓ The machine is de-energized.

9.10.3 Switching off optional accessories



⚠ CAUTION

Damage to property and health problems due to pollution!

Switched off optional accessories that have not been cleaned can cause health problems and technical faults due to contamination and moisture in the interior when they are switched back on.

- Carry out daily machine cleaning before switching off the milk-carrying accessories.
- Accessory parts such as milk container, cover and adapter must be stored in a clean and dry place.
- Disconnect the machine from the power supply if the optional accessories are to remain switched off for a long period of time.
- **Before long breaks in operation:**:
  Disconnect the devices from the power supply.
  Clean the interior of the cooling unit.
  Lean the door of the cooling unit against the wall and do not close it completely.

Switching off optional accessories

- ☞ Drain the milk container in optional accessories that come into contact with milk.
- ☞ Clean the machine daily.
- ☞ Clean accessories such as the milk container, cover and adapter in a dishwasher or rinse them thoroughly by hand in clean water.
- ☞ Switch off the optional accessory using the main device switch.
- ☞ Keep accessories clean and dry.
- ☞ Disconnect the power connection by pulling out the power plug.
- ✓ The optional accessory is de-energized.
- ✓ The optional accessory can be stored for a long period of time.

Deactivating cup warmer lighting

- The lighting is activated and a selected color lights up permanently.
- ☞ Use a pin with a diameter of approx. 2-3 mm to press the button for the top lighting on the rear casing for approx. 2 s.
- ✓ The lighting is disabled.

Switching off cup warmer

The instructions also apply to the cup warmer unit in the Cup & Cool device.

- ☞ Press the On/Off button in the top left on the rear casing.
- ☞ For long breaks in operation: Pull out the power plug.
- ✓ The On/Off button no longer lights up.
- ✓ The cup warmer 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 Cleaning regulations and conditions

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

The HACCP cleaning concept is intended to ensure that food is safe. Hazards associated with the processing of food or those emanating from finished products are considered and the risks 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.



⚠ 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.

10.2 Cleaning products



⚠ 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.

NOTE

Property damage due to incorrect cleaning products!

The machine can be damaged if the wrong cleaning products are used.

- Only use cleaning products recommended by the machine manufacturer for daily and weekly cleaning.

Cleaning tablets for the coffee system



Name	Coffeepure tabs
Intended use	Cleaning the coffee system
Cleaning purpose	Removing grease residues in the coffee system
Application interval	Once a day
Application	Instruction to insert a tablet during display-guided cleaning

Cleaning powder for the milk system



Name	Milkpure powder
Intended use	Milk system cleaning
Cleaning purpose	Removal of milk fat and bacteria in milk system
Application interval	Once a day Division of cleaning bags: ▪ 4x alkaline = green = Cleaner 1 ▪ 1x acid = red = Cleaner 2 For daily cleaning, perform four intervals with Cleaner 1 and the fifth interval with Cleaner 2.
Application	Instruction to add cleaning powder during display-guided cleaning

Reordering cleaning product



Name	Reordering set
Intended use	Coffee and milk system cleaning
Contents	▪ A package of cleaning tablets for the coffee system: **Coffeepure tabs** ▪ Two packages of cleaning powder for the milk system: **Milkpure powder**
Quantity	Cleaning products for 100 daily cleanings: ▪ 100x cleaning tablets ▪ 80x Cleaner 1 cleaning powder (green) ▪ 20x Cleaner 2 cleaning powder (red)

10.3 Cleaning stages

The following cleaning stages are possible:

- **Request** = The coffee machine is still ready for use.
- **Forced** = The coffee machine is locked.

The cleaning level of a cleaning operation can only be adjusted by service technicians.

Variant: request



- Information is provided about pending cleanings.
- An orange colored marking is displayed on the Service menu button when cleaning is pending.
- The time until the next cleaning is due is displayed in hours in the Service menu.
- The Cleaning button in the Service menu uses a red smiley to show when cleaning is needed.

Variant: forced



A pending cleaning with an active mandatory cleaning status cannot be postponed. The pending cleaning program does not allow for any more beverage dispensing.

Not until the cleaning programme is run is the machine ready for use again.

Mandatory cleaning and the period that elapses before it is enforced can be defined in the cleaning schedule by a service technician.

- Information is provided about pending cleanings.
- An red colored marking is displayed on the Service menu button when cleaning is pending.
- The time until the next cleaning is due is displayed in hours in the Service menu.
- The Cleaning button in the Service menu uses a red smiley to show when cleaning is needed.

Cleaning time window

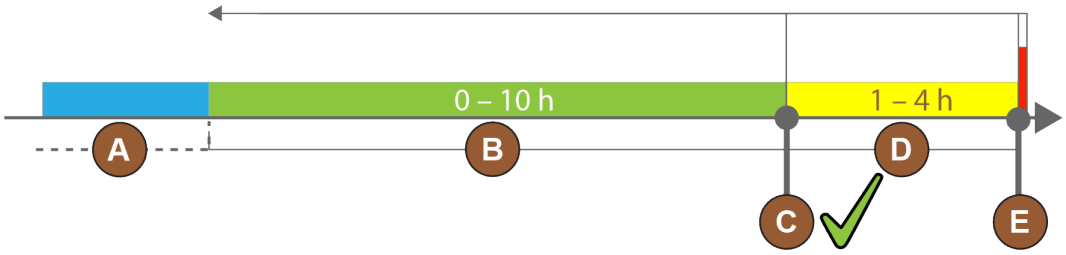


Fig. 105: Time window for cleaning

Pos.	Time window	Explanation
A	Cleanings performed in this time window are ignored.	The cleaning instruction remains unchanged after a cleaning.
B	Cleanings performed in this time window are too early. These cleanings are still recognized as completed.	The cleaning instruction is reset after a cleaning. The next cleaning due in the cleaning schedule is displayed in h in the Service menu.

Pos.	Time window	Explanation
C	Displays the time for the optimum start of cleaning (according to the schedule).	The time remaining until the optimum start time is displayed in the Service menu.
D	Displays the time window for optimum cleaning in the schedule.	The cleaning instruction is reset after a cleaning.
E	Displays the time for mandatory cleaning. Cleaning that has not been performed can no longer be delayed from this point onwards.	The display shows that further dispensing is no longer possible. The machine is no longer ready for use. Cleaning is absolutely essential.

10.4 Cleaning intervals

The following sections describe the cleaning intervals required for optimum and trouble-free operation. If regular checks show increased contamination, shortening the required cleaning intervals in accordance with the actual signs of contamination is essential.

Cleaning with high beverage volume

If the daily volume of beverages exceeds the reference value of 200-250 beverages, two daily cleanings are recommended.

D	W	N	R	O	Automatic rinsing*
x					Automatic hot rinsing during startup and shutdown: internal milk system and beverage outlet rinsing
x		x			Programmed hot rinsing of coffee system and milk system every 1 – 180 min, depending on configuration
x		x		x	Programmed rinsing of the external milk hose

* Rinsing can be run manually at any time using the **Start rinsing** function.

D	W	N	R	O	Screen-guided cleaning program**
x		x	x		Coffee system cleaning, according to configured cleaning schedule
x		x	x	x	Milk system cleaning, according to configured cleaning schedule
		x		x	Rinse mixing cup with request for manual step, according to configured cleaning schedule
	x			x	Steam boiler rinsing, according to configured cleaning schedule

** Screen-guided cleaning programs are run according to the set cleaning schedule. They can also be run manually at any time using the **Additional cleaning** function.

D	W	N	R	O	Manual cleaning
x					Grounds container
x					Brewing chamber
x					Drip tray and drip grid
	x	x			Bean hoppers
x					Touch screen
		x			Lower beverage outlet part
		x			Outer machine surfaces
x				x	Rinse milk container
	x	x		x	Steam wand
x				x	Clean cooling unit interior

D	W	N	R	O	Manual cleaning
		x		x	Defrost cooling unit
x				x	Optional accessories
x				x	Rinse internal drinking water tank
x				x	Rinse external drinking water tank
x				x	External drinking water tank
		x		x	Rinse powder container
		x		x	Cooling unit outer surfaces

Legend for cleaning intervals	
D	At least once a day, more if necessary
W	At least once a week, more if necessary
N	As needed, when the machine is dirty
O	Optional equipment or feature

10.5 Machine rinsing



⚠ CAUTION

Risk of scalding due to hot water!

During machine rinsing, hot water runs out of the beverage outlet. An automatic machine rinse is indicated by a message on the display. The functional light turns red.

- Do not reach under the beverage outlet during a machine rinse.
- Point the optional steam wand into the drip tray.
- Configured rinses are started automatically. That is why you have to make sure that the beverage outlet is always free.

10.5.1 Automatic switch-on/switch-off rinsing

Automatic switch-on or switch-off rinsing is standard and cannot be deactivated.

The following systems are flushed automatically after switching on and before switching off (if available):

- Coffee system
- Milk system
- Powder system

10.5.2 Configured rinsings

In addition to the switch-on/switch-off rinsing function, service technicians can set rinsing processes for the following systems in the Service menu:

- Outlet rinsing (adjustable interval: 1 – 240 min)
- external milk hose (adjustable interval: 1 – 240 min)
- internal milk system (adjustable interval: 1 – 240 min)

In the standard setting, configured rinsing processes are triggered every hour.

10.5.3 Manual rinsing (Service menu)

Additional rinsing processes can be triggered manually at any time in the Service menu.

☞ Tap on the **Service menu** ⚙ button.

✓ The Service menu opens.



Fig. 106: Start rinsing button

☞ Tap on the Start rinsing button.

✓ System rinsing is carried out in the same sequence as the automatic switch-on/switch-off rinsing.

10.6 Display-guided cleaning

With display-guided cleaning, all pending activities are shown on the screen using animations and instructions are displayed in text form.

The completed action steps must be confirmed on the screen in order to proceed to the next step.

10.6.1 Display-guided cleaning types



⚠ WARNING

Risk of poisoning from cleaning product residues!

Cleaning product residues on cleaned machine components can cause health problems.

☝ Rinse the cleaned machine components with fresh water.



⚠ CAUTION

Risk of scalding and health problems from hot fluid!

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, the steam outlet or the hot water dispensing point during cleaning.

☝ Do not place any beverage containers (cups/mugs) under the beverage outlet, hot water dispensing point or steam wand during cleaning.



NOTE

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.

The display-guided cleaning programs can be divided into **scheduled cleaning** and **additional cleaning**.

Scheduled cleaning	Additional cleaning
▪ The programmes are stored in the PC board of the coffee machine.	▪ Additional display-guided cleaning processes can be started manually at any time in the Service menu.

Scheduled cleaning	Additional cleaning
▪ The type and frequency of the cleaning programmes to be carried out is set in the Service menu via a cleaning schedule. ▪ Service technicians can configure the cleaning schedule (e.g. change the cleaning stage).	▪ The type and scope of cleaning can be activated or deactivated individually. ▪ The processes for the activated cleaning type are carried out in the same way as for scheduled cleaning.

10.6.2 Required utensils

The following utensils are required during the display-guided cleaning program without ProCare:

- A **Coffeepure tab** cleaning tablet for the coffee system
- A **Milkpure powder** cleaning powder pouch for the milk system*
- A blue cleaning container for the milk system
- Commercial dishwashing detergent
- Clean commercial cleaning rags
- For machines with closed drip tray: Collecting container for remaining milk
- For machines with closed drip tray: Collecting container for remaining choco or topping powder
- The powder system equipment requires access behind the operating unit. Have the key for the optional lockable operating unit ready or open the lock beforehand.

* Perform four intervals with Cleaner 1 and the fifth interval with Cleaner 2.

10.6.3 Calling up cleaning variants

☞ Tap on the **Service menu** ⚙ button.

✓ The Service menu opens.



Fig. 107: Cleaning button

☞ Tap on the Cleaning button.

✓ The Cleaning screen opens.

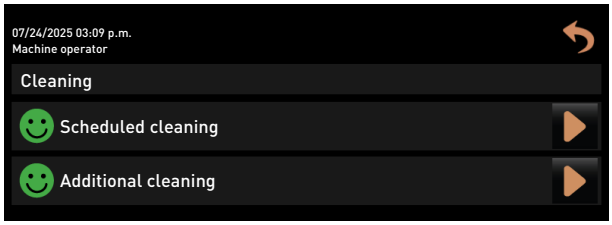


Fig. 108: Screen with selection of cleaning types

The following cleaning types are possible:

- Scheduled cleaning
- Additional cleaning

10.6.4 Starting scheduled cleaning



⚠ CAUTION

Risk of scalding from hot steam!

The steam wand emits hot steam during cleaning and descaling. There is a risk of scalding.

- Direct the outlet of the steam wand into the drip tray.
- Do not reach under the steam wand during the cleaning and descaling process.

The cleaning program is started in the Service menu. All actions required by the user are shown on the touch screen.

A pending cleaning is displayed on the Service menu button.

☞ Tap on the **Service menu** ⚙ button.

✓ The Service menu opens.

Opening cleaning

☞ If the cleaning program is PIN-protected, enter the PIN configured for this purpose.

✓ Authorization is granted.

✓ The **Cleaning** button is now active.

☞ Tap on the **Cleaning** button.

✓ The **Cleaning** screen appears.

✓ The **Cleaning** screen opens with the menu items for the various cleaning types.

☞ Tap on the **Scheduled cleaning** button.

✓ The Cleaning according to schedule dialog opens.

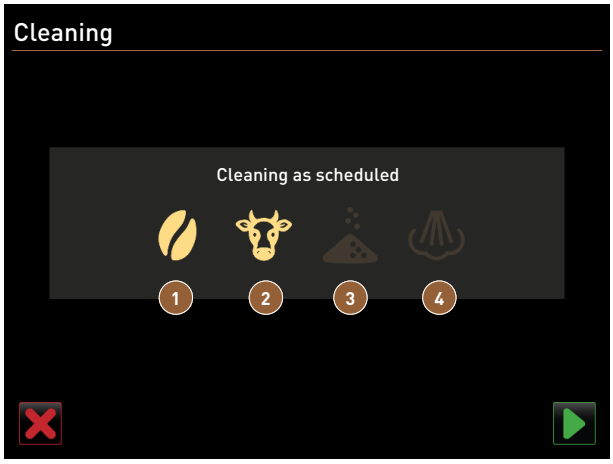


Fig. 109: Dialog for cleaning according to cleaning schedule

1	Cleaning of coffee system	2	Cleaning of milk system
3	Cleaning of powder system	4	Cleaning of boiler system

☞ Start the scheduled cleaning with .

✓ Cleaning is started according to the set cleaning schedule.

✓ The systems to be cleaned are highlighted in the dialog with their icon.

☞ Follow the instructions on the screen.

☞ After completing the activities shown on the screen, tap on to go to the next cleaning step.

Cleaning program start dialog with external drinking and waste water tank (optional)

Machines with external drinking/waste water tank require the following preparation steps:

- Empty the waste water tank.
- Fill the drinking water tank.

☞ Empty the waste water tank and rinse it.

☞ Confirm emptying process with the button.

☞ Fill the drinking water tank with drinking water.

☞ Confirm filling process with the button.

✓ The Empty grounds container instruction is displayed.

See also

- Cleaning coffee system [▶ 112]
- Cleaning milk system [▶ 113]
- Cleaning powder system [▶ 116]

10.6.4.1 Cleaning coffee system



⚠ WARNING

Risk of poisoning from cleaning product residues!

Cleaning product residues on hands can cause health problems.

☝ After cleaning is complete, wash your hands thoroughly with commercially available soap.

The coffee bean icon is highlighted (light) on the **Scheduled cleaning** screen.

☞ Start display-guided cleaning.

Follow the instructions on the screen and carry out the following steps:

☞ Remove the grounds container.

☞ Empty and clean the grounds container.

☞ Clean the brewing chamber.

☞ Reinsert the grounds container.

☞ Remove the beverage outlet.

☞ Clean the beverage outlet.

☞ Reinsert the beverage outlet.

✓ The **Insert cleaning tablet** instruction appears.



Fig. 110: Inserting cleaning tablet

- ☞ For machines with closed drip tray: Place a collecting container under the beverage outlet.
- ☞ Open the closing device (optional) of the manual inlet in the center bean hopper.
- ☞ Open the cover of the manual inlet.
- ☞ Insert a **Coffeepure tab** cleaning tablet into the opening of the manual inlet.
- ☞ Close the cover of the manual inlet.
- ☞ Close the closing device (optional) of the manual inlet.
- ☞ Confirm that the cleaning tablet is inserted with the button.
  - ✓ Cleaning starts.
  - ✓ The cleaning progress is displayed.



Fig. 111: Cleaning progress

  - ✓ Once cleaning is complete, the machine will restart.
- ☞ For machines with closed drip tray: Remove, empty and clean the collecting vessel.
- ✓ Coffee system cleaning is complete.

10.6.4.2 Cleaning milk system



⚠ WARNING

Risk of poisoning from cleaning product residues!

Cleaning product residues on hands can cause health problems.

- ☝ After cleaning is complete, wash your hands thoroughly with commercially available soap.

- The cow icon is highlighted (light) on the Scheduled cleaning screen.

☞ Start display-guided cleaning.

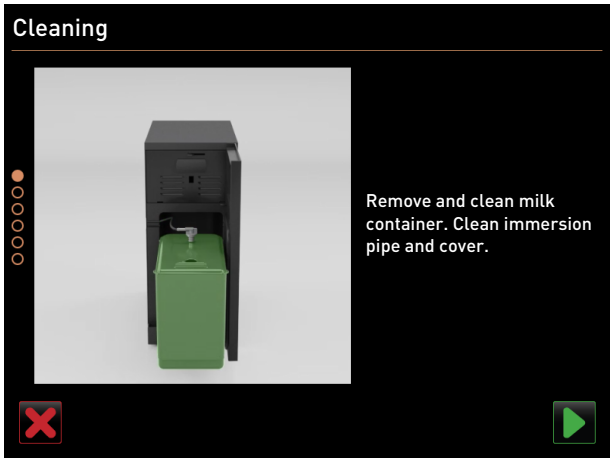


Fig. 112: Removing milk container

☞ Remove the milk container.

☞ Fill excess milk from the milk container into a collecting vessel.

☞ Clean the milk container, cover and immersion pipe.

☞ Confirm cleaning with the button.

☞ For machines with closed drip tray: Place the collecting container under the beverage outlet.



Fig. 113: Adding cleaning powder

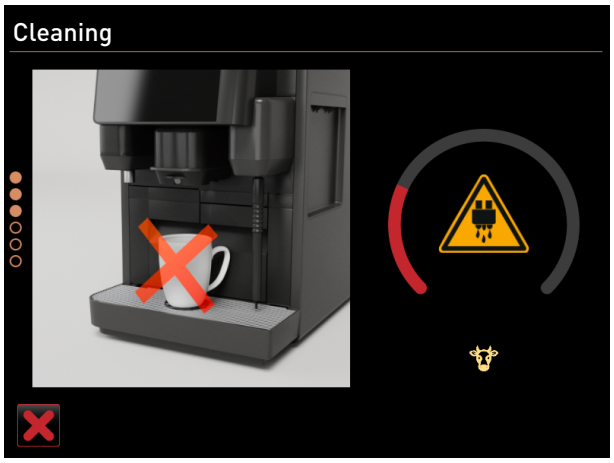


Fig. 114: Cleaning progress

☞ Shake the contents of a **Milkpure powder** pouch (alkaline or acid) into the blue cleaning container.

- ☞ Confirm addition of cleaning powder with the button.
- ☞ Wash your hands thoroughly with commercial soap.
- ☞ Insert the blue cleaning container into the cooling unit.
- ☞ Insert the milk hose adapter into the cover of the cleaning container.
- ☞ Confirm the inserted cleaning container and added **Milkpure powder** cleaning powder with the button.
  - ✓ A note is displayed indicating that beverage dispensing is currently not available.
  - ✓ A progress screen is displayed.
  - ✓ A **hot fluid** warning symbol appears.
- ☞ For machines with closed drip tray: Remove, empty and clean the collecting vessel.
- ☞ Perform four intervals with **Cleaner 1** and the fifth interval with **Cleaner 2**.

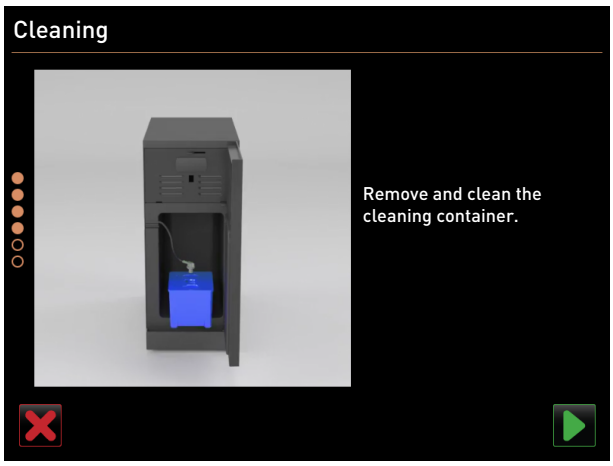


Fig. 115: Removing cleaning container

- ☞ Remove blue cleaning container from the cooling unit, rinse and clean it.
- ☞ Pull the adapter of the milk hose out of the cover of the cleaning container and wipe the adapter with a damp cloth.
- ☞ Confirm removal of the cleaning container with the button.



Fig. 116: Activate milk system

- ☞ Check the **Yes** checkbox in the **Milk system activation** query.
- ☞ Confirm selection with the button.



Fig. 117: Inserting milk container

- ☞ Insert the clean milk container into the cooling unit.
- ☞ Insert the milk hose adapter into the cover of the milk container.
- ☞ Fill with fresh and pre-cooled milk (3 – 5 °C).
- ☞ Confirm connection of the milk container with the button.



Fig. 118: Switch on milk system

- ☞ The milk system is rinsed.
- ☞ A note is displayed indicating that beverage dispensing is currently not available.
- ☞ A progress screen is displayed.
- ☞ The **hot fluid** warning symbol appears.

10.6.4.3 Cleaning powder system

- The powder icon is highlighted (light) on the Scheduled cleaning screen.
- ☞ Start display-guided cleaning.

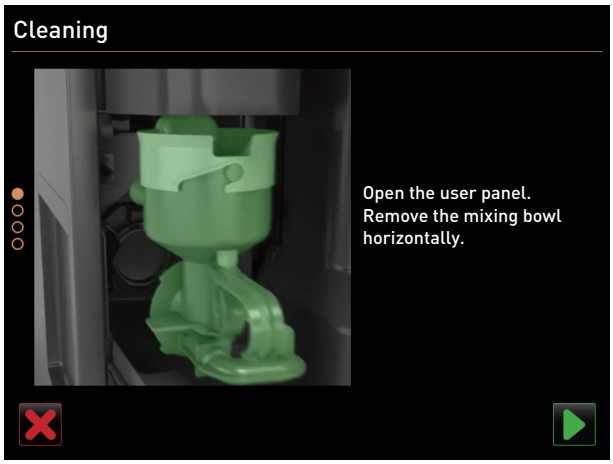


Fig. 119: Removing mixing cup

- ☞ Slide the manual beverage outlet upwards and remove the grounds container.
- ☞ Open the operating panel.
- ☞ Pull out the mixing cup out to the front.
- ☞ Confirm removal of the mixing cup with the button.



Fig. 120: Cleaning mixing cup

- ☞ Disassemble the mixing cup.
- ☞ Clean the mixing cup under warm running water and dry it.
- ☞ Reassemble the mixing cup.
- ☞ Confirm cleaning with the button.

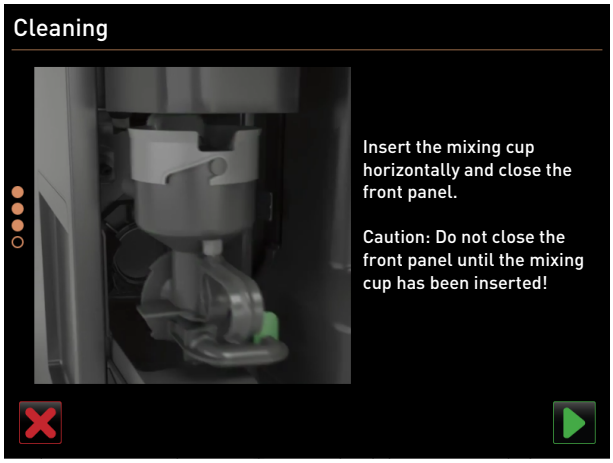


Fig. 121: Inserting mixing cup

☞ Insert the mixing cup straight into the machine.

☞ Close the operating panel.

See also

Opening and closing the operating unit [▷ 56]

10.6.5 Additional cleaning

Additional cleaning can be carried out at any time.

- Coffee system
- Milk system
- Powder system
- Boiler system

Starting additional cleaning



Fig. 122: Additional cleaning button

☞ Tap on the **Additional cleaning** button.

✓ The screen with the available cleaning systems opens.

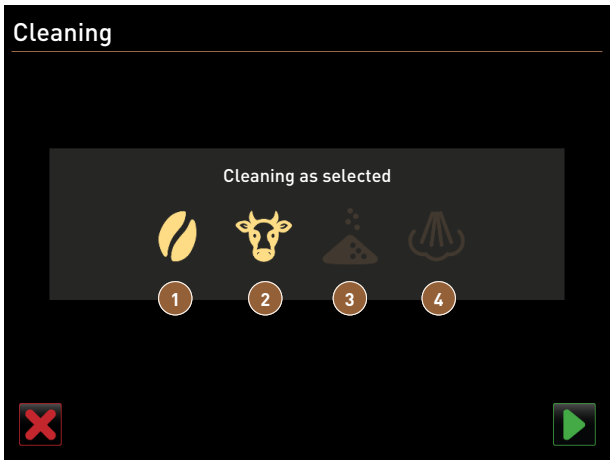


Fig. 123: Dialog for additional cleaning without ProCare

1 Cleaning of coffee system	2 Cleaning of milk system
3 Cleaning of powder system	4 Cleaning of boiler system

☞ Select the desired systems to be cleaned.

☞ Confirm your selection with .

☞ Follow the instructions on the machine screen.

✓ The selected systems are cleaned.

10.7 Cleaning schedule

Compliance with HCCP cleaning concept

Manual adjustments by the service technician that deviate from the cleaning schedule should meet the requirements for the HACCP cleaning concept.

If no cleaning schedule is configured or cleaning is configured with an instruction, the operator is responsible for carrying out the necessary cleaning.

The service technician can make the following settings in the **Cleaning schedule**:

- System to be cleaned
- Configuration of cleaning day
- Setting of the cleaning level and the start of cleaning
- Starting time of a cleaning
- Setting of the time window before/after cleaning

See also

Cleaning regulations and conditions [▶ 104]

10.7.1 Calling up cleaning schedule

A standard cleaning schedule is stored in the machine. The cleaning schedule can also be customised by service technicians.

☞ Tap on the **Service menu** button.

✓ The Service menu opens.

☞ Tap on the **Log-out** button and back on **Log-in**.

☞ Log in as a service technician with the corresponding PIN.

☞ Tap on the **Settings** button.

✓ The **Settings** opens right away with the system settings.

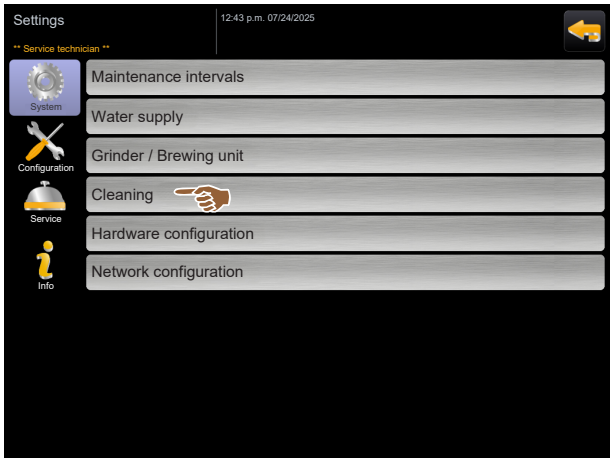


Fig. 124: Call up of cleaning settings

☞ Click on the **Cleaning** button.

✓ The screen with the cleaning settings appears.

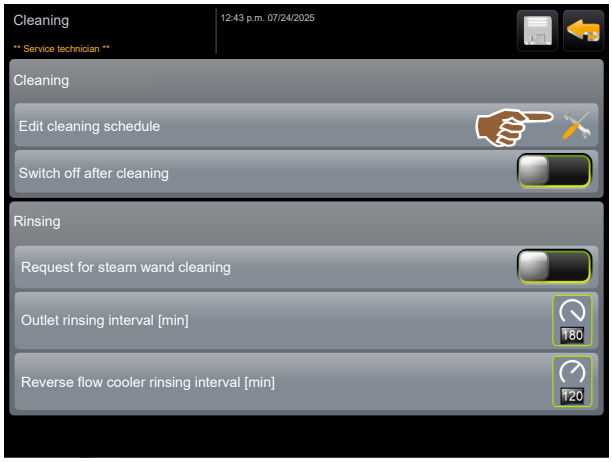


Fig. 125: Screen with the cleaning settings

☞ Click on the **Edit cleaning schedule** button.

✓ The schedule for the cleaning tasks appears.

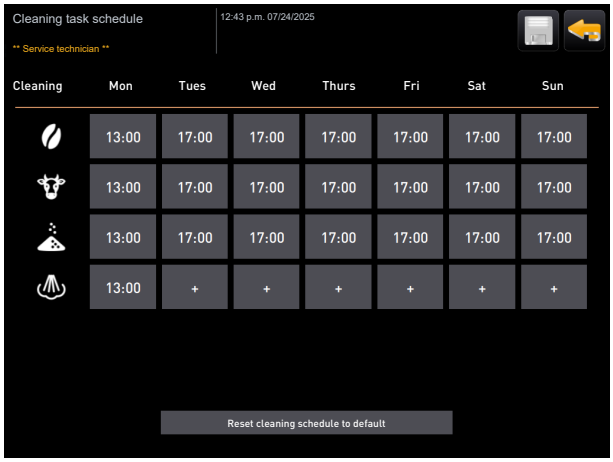


Fig. 126: Cleaning task schedule

10.7.2 Setting cleaning times

Default times are predefined for the cleaning work schedule. If a customized cleaning schedule has been created, it can be reset to the default schedule at any time. If a customised cleaning schedule has been reset to **Default**, this cannot be undone.

Cleaning schedules are set for different systems on the **Cleaning schedule for cleaning tasks** screen (global settings). Cleaning schedules can be set to daily or on different days of the week at different time intervals.

The following systems can be cleaned:

- Coffee system
- Milk system
- Powder system
- Boiler system

Adding cleaning task

☞ In the table with the cleaning tasks, tap on the plus sign in the desired empty field.

☞ The dialog for adding a cleaning task opens.

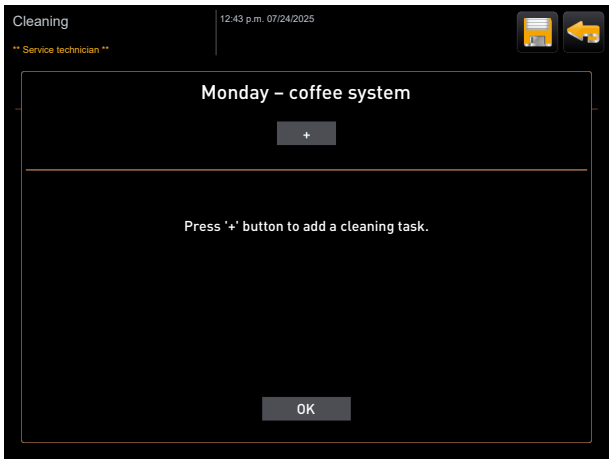


Fig. 127: Creating cleaning task

☞ Tap on the plus sign.

☞ The dialog with the settings appears.

☞ Configure the cleaning task an shown in the following description.

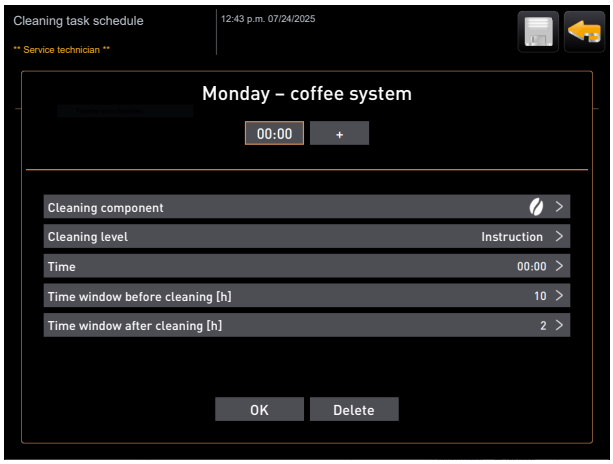


Fig. 128: Configuring cleaning task

Setting cleaning stage

Two cleaning stages are possible:

- **Instruction** = The coffee machine is still ready for use.
- **Forced** = The coffee machine is blocked.

☞ Tap on the **Cleaning stage** line.

☞ Confirm the selection with the **OK** button.

☞ The cleaning stage is saved.

Setting time

You can define up to four times.

☞ To do this, tap on the plus sign next to the time.

☞ Tap on the **Time** line.

☞ The dialog with the settings appears.



Fig. 129: Selecting time for cleaning

☞ Scroll to select the time.

☞ Confirm the selection with the **OK** button.

☞ The selected time appears in the dialog.

☞ Confirm the selection with the **OK** button.

☞ The time is saved.

Defining a time window before and after cleaning

The **Time window before cleaning [h]** defines the time before a planned cleaning in which you can push forward this planned cleaning.

The **Time window after cleaning [h]** defines the time after a planned cleaning in which you can make up a cleaning before the machine is blocked (grace period).

The **Time window before cleaning [h]** and **Time window after cleaning [h]** can be used to postpone a scheduled cleaning cycle.

Example: A large number of customers are expected at the time of the planned cleaning. This can be avoided with the time window before and after cleaning.

- ☞ Tap on the **Time window before cleaning [h]** or **Time window after cleaning [h]** line.
- ☞ The dialog for selecting the hours, similar to that for the time, is displayed.
- ☞ Scroll to set the time window.
- ☞ Proceed as when setting the time.
- ☞ The hours for the respective time window are displayed in the dialog.

Editing existing cleaning task

- ☞ On the **Cleaning schedule for cleaning tasks** screen, select a system and the days of the week on which cleaning is to be carried out and tap on the desired time.
- ☞ The dialog with the settings appears.
- ☞ Edit the desired settings.

10.8 Manual cleaning

Various components have to be cleaned manually.

10.8.1 Cleaning grounds container



⚠ CAUTION

Health problem due to mold growth in the grounds container!

Coffee grounds in the grounds container can quickly lead to mold growth. If the mold spores spread into the machine, there is a risk of contamination of the coffee. Contaminated coffee can cause health problems.

- ☝ Clean the grounds container daily.



NOTE

Property damage to the grounds container due to high temperatures!

Cleaning at high temperatures can cause damage.

- ☝ Do not clean the grounds container in the dishwasher.

Cleaning interval: Daily

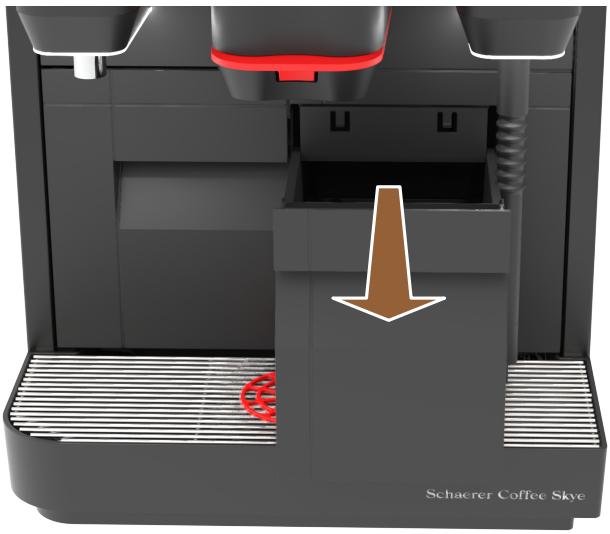


Fig. 130: Removing grounds container

- ☞ Push the beverage outlet upwards.
- ☞ Pull the grounds container out of the machine.
- ☞ Empty the grounds container.
- ☞ Clean the grounds container thoroughly with water and detergent.
- ☞ Rinse out the grounds container with clean water.
- ☞ Dry the grounds container with a clean cloth.
- ☞ Reinsert the grounds container into the machine.
- ✓ The grounds container is empty and clean.

10.8.2 Cleaning brewing chamber

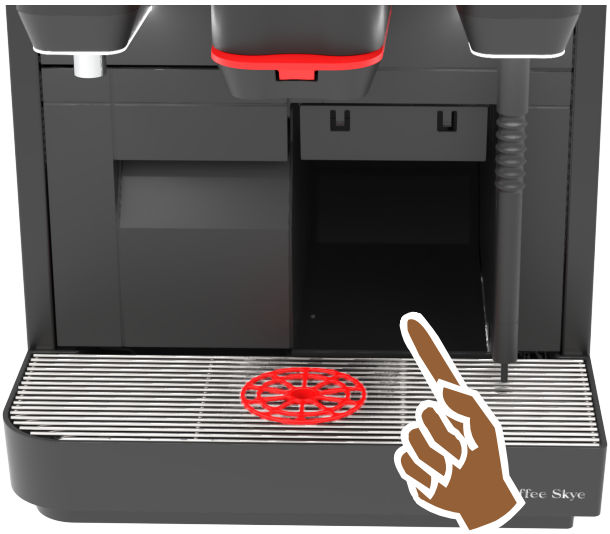


Fig. 131: Cleaning brewing chamber

- ☞ Push the beverage outlet upwards (with manual beverage outlet).
- ☞ Pull the grounds container out of the machine.
- ☞ Remove ground coffee in the machine brewing chamber using the supplied brush.
- ☞ Wipe the brewing chamber dry with a clean, moist cloth.
- ☞ Reinsert the grounds container.
- ✓ The brewing chamber is cleaned.

10.8.3 Cleaning drip tray and drip grid



⚠ CAUTION

Risk of scalding due to hot water!

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

If cleaning is carried out without the display-guided cleaning program:

- Switch off the machine before cleaning the drip grid, the drip tray or the lower part of the beverage outlet.



NOTE

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.

Cleaning interval: Daily

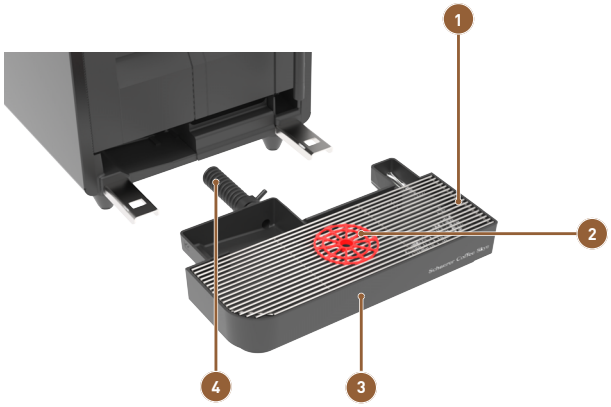


Fig. 132: Removing drip tray

1	Drip grid	2	Positioning aid
3	Drip tray	4	Waste water outlet

- Switch the machine off.
- Remove the drip grid with positioning aid from the drip tray.
- Rinse out the drip tray with clean water.
- Clean the drip grid with the positioning aid thoroughly under running water using dishwashing detergent.
- Check that the waste water outlet is flowing freely.
- Place the drip grid back into the drip tray and check that it is seated correctly.
- Check that the positioning aid is in the correct position.
- Assemble the drip tray.
- ✓ The drip tray and drip grid are clean.

10.8.4 Cleaning milk container

⚠ WARNING

Risk of infection from contamination!

Contamination and milk residues in the milk container can lead to infections. Infections can trigger health problems.

- Clean the milk container and cover before each filling.
- Wear protective gloves while cleaning.



Fig. 133: Cleaning milk container

1 Riser pipe	2 Brush for riser pipe

Cleaning interval: Daily

- Remove the milk container from the cooling unit.
- Dispose of the remaining milk from the milk container.
- Observe the detailed cleaning instructions in the separate operating instructions for the optional accessories.
- Clean the milk container with fresh water, detergent and a clean, unused cloth.
- Clean the riser pipe with the supplied brush.
- Reinsert the milk container into the cooling unit.
- ✓ The milk container is cleaned.

10.8.5 Cleaning cooling unit



Fig. 134: Cleaning cooling unit

Cleaning interval: Daily

- ☞ Remove the milk container from the cooling unit.
- ☞ Wipe the inside of the cooling unit with fresh water and a fresh, unused cloth.
- ☞ Reinsert the milk container into the cooling unit.
- ✓ The cooling unit is cleaned.

10.8.6 Defrosting cooling unit

NOTE

Property damage and health problems due ice formation

Ice formation inside the cooling unit causes technical faults and high energy loss.

- ☝ As soon as there is a layer of ice in the interior, defrost the cooling unit.

NOTE

Property damage due to sharp objects!

The surface of the interior of the refrigerator can be damaged.

- ☝ Never use pointed or sharp objects to remove layers of ice.
- ☝ Always allow layers of ice to defrost.



Fig. 135: Defrosting cooling unit

Cleaning interval: As needed

- ☞ Switch the cooling unit off.
- ☞ Pull out the power plug.
- ☞ Open the front door and leave it open.
- ☞ Allow layers of ice to defrost.
- ☞ Wipe up any condensation with an absorbent cloth.
- ☞ Wait until the layer of ice has completely defrosted.
- ☞ Close the front door and switch the device back on or reconnect the power plug.
- ✓ The cooling unit is defrosted.

10.8.7 Clean touch screen



⚠ 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.



NOTE

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.

Cleaning interval: Daily

- Tap on the **Service menu** ⚙ button.
  - ✓ The Service menu opens.

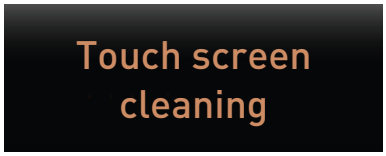


Fig. 136: Touch screen cleaning button

- Tap on the Touch screen cleaning button.
  - ✓ The touch screen is deactivated for 30 s and no longer reacts to touch.
  - ✓ A countdown appears.
- Clean the touch screen with a paper towel and commercially available glass cleaner during the available 30 s.
- ✓ After the countdown has elapsed, the touch screen becomes active again.
- ✓ The touch screen is cleaned.

10.8.8 Cleaning internal drinking water tank



⚠ WARNING

Risk of poisoning from cleaning products!

Residues of cleaning products in the drinking water tank can cause poisoning.

- Never add cleaning products to the drinking water tank.



⚠ WARNING

Risk of infection from contamination!

Contamination in the internal water tank can lead to infections. Infections can trigger health problems.

- Wear protective gloves while cleaning.

Cleaning interval: Daily

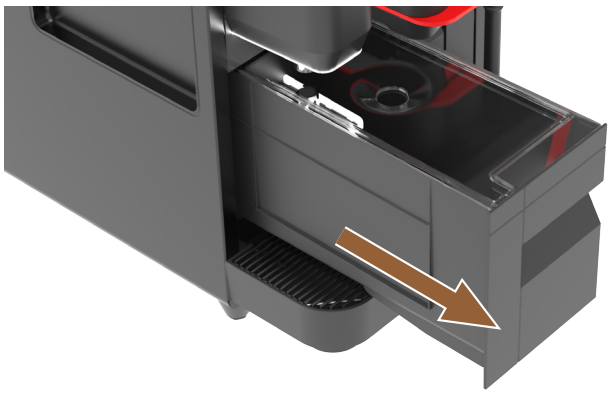


Fig. 137: Internal drinking water tank

- ☞ Pull the internal drinking water tank out of the machine.
- ☞ Rinse the internal drinking water tank thoroughly several times with fresh water; do not use any cleaning products.
- ☞ Dry the internal drinking water tank with a clean cloth.
- ☞ Fill the internal drinking water tank with fresh water.
- ☞ Insert the internal drinking water tank.
- ✓ The internal drinking water tank is cleaned.

10.8.9 Cleaning external drinking water tank



⚠ WARNING

Risk of poisoning from cleaning products!

Residues of cleaning products in the drinking water tank can cause poisoning.

- ☝ Never add cleaning products to the drinking water tank.



⚠ WARNING

Risk of infection from contamination!

Contamination can lead to infections. Infections can trigger health problems.

- ☝ Wear protective gloves while cleaning.



Fig. 138: External drinking water tank

Cleaning interval: Daily

- ☞ Unscrew the cover of the external drinking water tank.
- ☞ Pull the machine drinking water hose out of the external drinking water tank and the cover.
- ☞ Place the end of the drinking water hose on a clean cloth.
- ☞ Rinse the external drinking water tank thoroughly with fresh water multiple times. Do not use cleaning products.
- ☞ Clean the cover of the external drinking water tank with fresh water and dry it with a clean cloth.
- ☞ Fill the external drinking water tank with fresh water.
- ☞ Check that the floater moves freely (fill level monitoring).
- ☞ Lead the water hose back through the cover and into the external drinking water tank.
- ☞ Close the external drinking water tank with the cover.
- ✓ The external drinking water tank is cleaned.

10.8.10 Cleaning external waste water tank



⚠ WARNING

Risk of infection from contamination!

Contamination can lead to infections. Infections can trigger health problems.

- ☝ Wear protective gloves while cleaning.



Fig. 139: External waste water tank

Cleaning interval: Daily

- ☞ Unscrew the cover of the waste water tank.
- ☞ Pull the machine waste water hose out of the waste water tank and the cover.
- ☞ Place the end of the waste water hose on a clean cloth.
- ☞ Rinse the external waste water tank thoroughly multiple times with fresh water. Do not use cleaning products.
- ☞ Clean the cover of the waste water tank thoroughly with fresh water.
- ☞ Dry the cover of the waste water tank with a clean cloth.
- ☞ Check that the floater moves freely (fill level monitoring).
- ☞ Guide the waste water hose back into the waste water tank through the cover.
- ☞ Close the waste water tank with the cover.
- ✓ The external waste water tank is cleaned.

10.8.11 Cleaning additional devices



Care and cleaning of the optional accessories is described in the separate operating instructions for the **under-machine cooling unit**, **cup warmer** and **Cup &Cool** optional accessories.

10.8.12 Cleaning bean hoppers





⚠ 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.



⚠ 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.

NOTE

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.

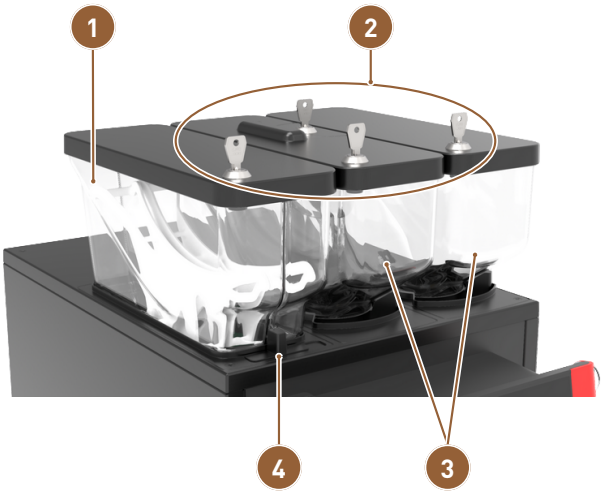


Fig. 140: Bean hopper and powder container

1 Powder container	2 Closing devices (optional) for bean hoppers and powder container and for manual inlet
3 Bean hoppers	4 Locking mechanism

Cleaning interval: Weekly

- Tap on the **Service menu** ⚙ button.
  - ✓ The Service menu opens.



Fig. 141: Switch-off button

- Tap on the **Switch-off** button.
  - ✓ The machine is in Standby mode.
- Open the locking mechanism of the bean hoppers.
- Lift the bean hoppers out of the machine.
- Remove the covers by opening the closing device for the cover, if present.
- Remove the remaining coffee beans from the machine and the bean hoppers.
- Clean the bean hoppers with a mild detergent and rinse them thoroughly under running water.

- ☞ Wipe the bean hoppers and cover dry with a clean cloth.
- ☞ Put the bean hoppers back into the machine.
- ☞ Close the locking mechanisms of the bean hoppers.
- ☞ Fill the bean hoppers and put on the covers, close the closing device for the cover if present.
- ☞ Start the machine with the On/Off button.
- ✓ The bean hoppers are clean.

10.8.13 Cleaning powder container



⚠ CAUTION

Risk of crushing due to rotating dosing screws!

The dosing screws inside the powder container rotate. There is a risk of crushing when reaching in.

- ☝ Switch the machine off before reaching into the powder container.



NOTE

Damage to the powder container due to improper cleaning!

Improper cleaning can scratch or otherwise damage the surface of the powder container.

- ☝ Do not use abrasive cleaners when cleaning.

The powder system can be equipped with a standard powder container for one powder or with a Twin powder container for two powders.

The design of the powder containers differs. The assembly and disassembly steps differ slightly.

Cleaning interval: As needed

Preparation

- ☞ Switch the machine off.
- ☞ Lock the powder container with the locking switch.
- ☞ Lift the powder container out of the machine.
- ☞ Remove the cover by opening the closing device if present.
- ☞ Remove any remaining powder.
- ☞ Dismantle the powder container according to the following instructions (following chapters).
- ☞ Rinse the powder container and individual parts of the dosing mechanism thoroughly under running water.
- ☞ Allow all parts to dry thoroughly before reassembling.

See also

- Switching off [▶ 99]
- Removing bean hoppers and powder containers [▶ 59]

10.8.13.1 Dismantling standard powder container

Overview

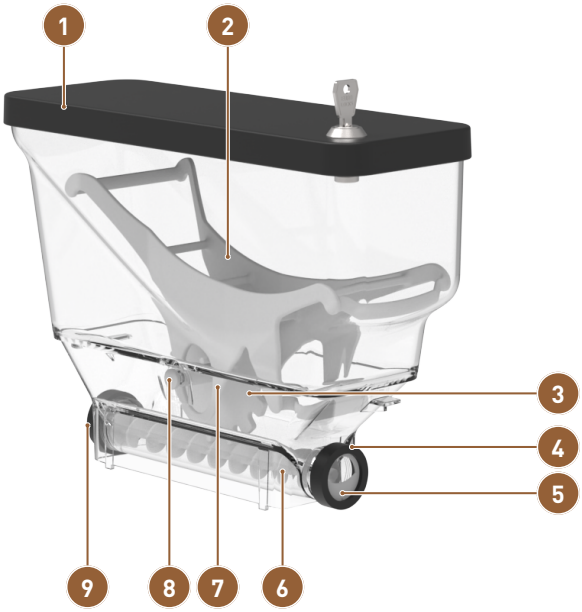


Fig. 142: Overview: standard powder container

1	Cover	2	Powder scoop
3	Toothed wheel	4	Cap nut for outlet restrictor
5	Outlet restrictor	6	Feed unit, consisting of dosing screw, drive flange and driver
7	Powder scoop eyelets	8	Locking pin for toothed wheel
9	Cap nut for feed unit		

Steps: dismantling powder container



Fig. 143: Removing cover

☞ Remove the cover of the powder container.



Fig. 144: Removing locking pin

☞ Pull out the locking pin on the right.

✓ The toothed wheel with the powder scoop are free.

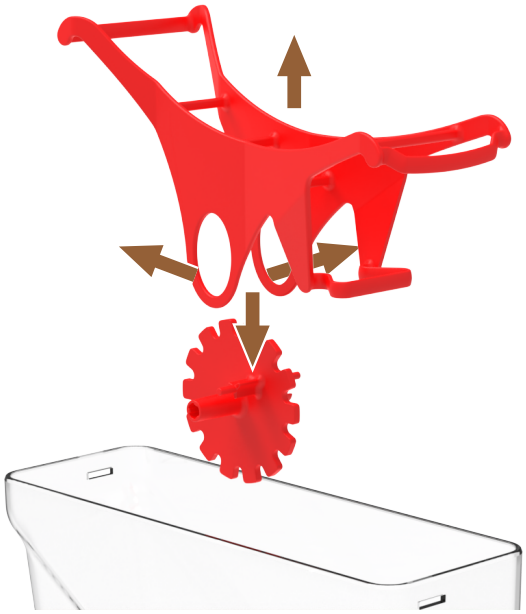


Fig. 145: Removing powder scoop and toothed wheel

☞ Lift the powder scoop and the toothed wheel out of the powder container.

☞ Pull the eyelets of the powder scoop apart slightly and remove the toothed wheel from the powder scoop.

✓ Toothed wheel and powder scoop are separated.

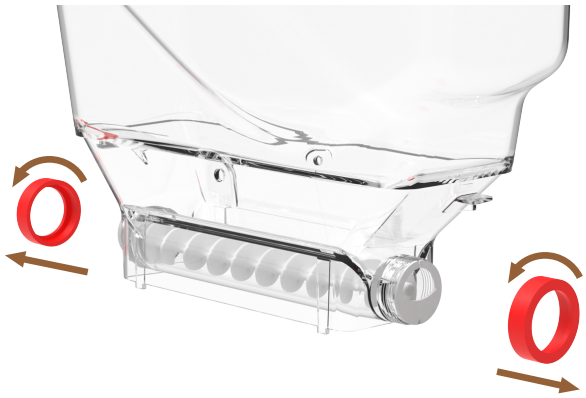


Fig. 146: Removing cap nuts

☞ Loosen the cap nuts on both sides of the powder container by turning them counterclockwise and remove the cap nuts.



Fig. 147: Removing outlet orifice

☞ Remove the outlet orifice from the powder container.
NOTICE! When reassembling, make sure that the outlet orifice is correctly aligned and seated correctly in the lugs on the dispensing side.

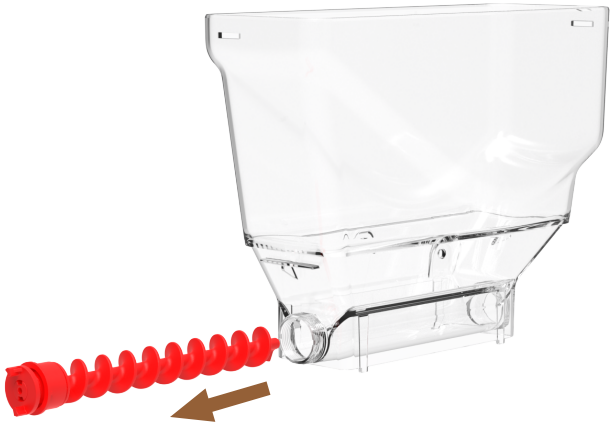


Fig. 148: Feed unit removed

☞ Pull the feed unit out of the powder container.
✓ The powder container housing is empty.

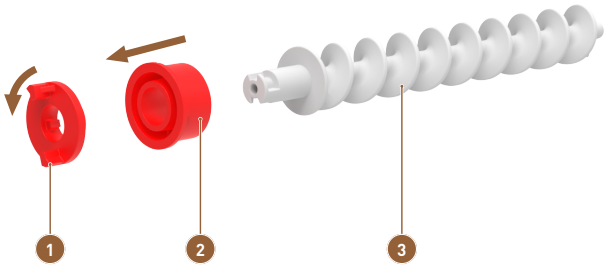


Fig. 149: Removing driver and drive flange

1	Driver	2	Drive flange
3	Dosing screw		

☞ Turn the driver 90° to the left and pull it off the drive flange.

☞ Pull the drive flange off the dosing screw.

✓ The entire powder container is disassembled and can be cleaned.

10.8.13.2 Dismantling Twin powder container

Overview

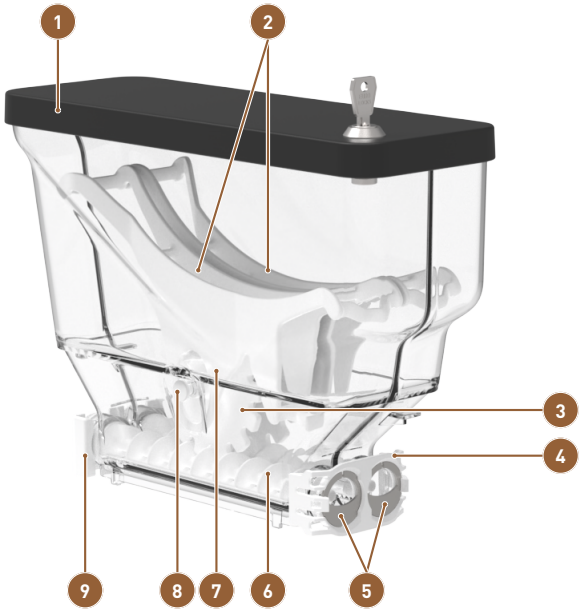


Fig. 150: Overview: Twin powder container

1	Cover	2	Powder scoops
3	Toothed wheels	4	Holder for outlet orifices
5	Outlet orifices	6	Feed units, consisting of dosing screw, drive flange and driver
7	Powder scoop eyelets	8	Locking pin for toothed wheel
9	Holder for feed units		

Steps: Dismantling powder container



Fig. 151: Removing cover

☞ Remove the cover of the powder container.

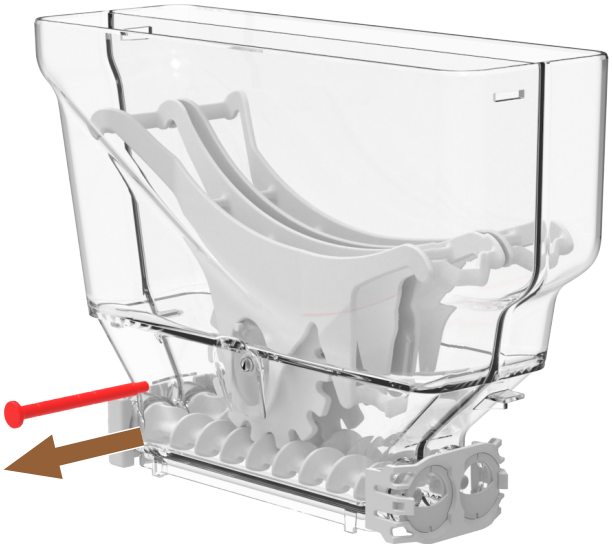


Fig. 152: Removing locking pin

☞ Pull out the locking pin on the right.

✓ The toothed wheels with the powder scoops are free.

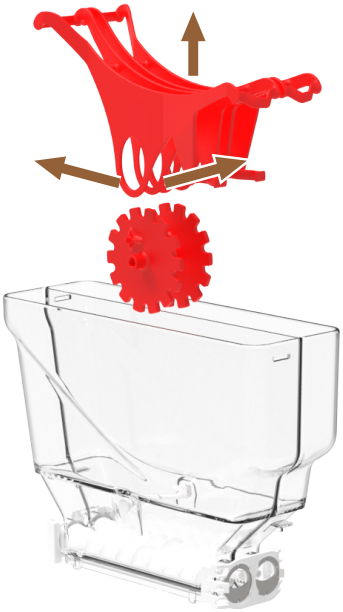


Fig. 153: Removing powder scoops and toothed wheels

- ☞ Lift the powder scoops and the toothed wheels out of the powder container.
- ☞ Pull the eyelets of the powder scoops apart slightly and remove the toothed wheels from the powder scoops.
  - ✓ Toothed wheels and powder scoops are separated.



Fig. 154: Removing holder for outlet orifices

- ☞ Remove the holder for the outlet orifices.

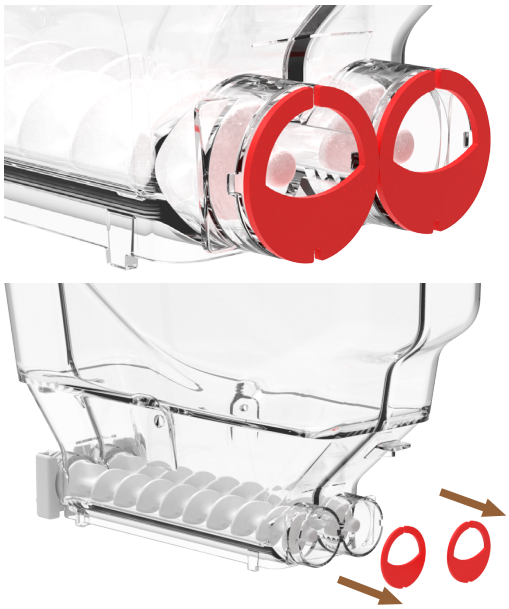


Fig. 155: Removing outlet orifice

☞ Remove the outlet orifices from the powder container.
NOTICE! When reassembling, make sure that the outlet orifices are correctly aligned and seated correctly in the lugs on the dispensing side.



Fig. 156: Removing driver

☞ Turn the drivers 90° to the left and pull them off the drive flange.



Fig. 157: Removing holder for feed unit

☞ Remove the holder for the feed unit by pulling it downwards.



Fig. 158: Removing drive flange

☞ Pull the drive flange off the dosing screw.

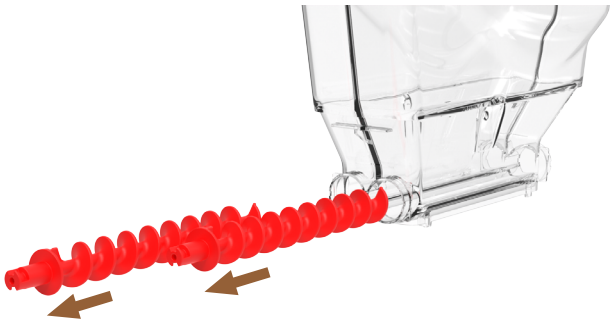


Fig. 159: Removing dosing screws

☞ Pull the dosing screw out of the powder container.

✓ The powder container housing is empty.

✓ The entire powder container is disassembled and can be cleaned.

10.8.13.3 Assembling powder hopper

☞ Reassemble the powder hopper in reverse order.

☞ Put the powder container in the machine.

☞ Replace the cover and close the closing device if present.

☞ Unlock the powder container with the locking switch.

✓ The powder container is cleaned and reinserted into the machine.

10.8.14 Cleaning lower part of beverage outlet



⚠ CAUTION

Risk of scalding due to hot water!

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

If cleaning is carried out without the display-guided cleaning program:

☝ Switch off the machine before cleaning the drip grid, the drip tray or the lower part of the beverage outlet.

If you carry out this cleaning step outside of the display-guided cleaning program:

☞ Tap on the **Service menu** ⚙ button.

✓ The Service menu opens.



Fig. 160: Switch-off button

- ☞ Tap on the Switch-off button.
  - ✓ The machine is in Standby mode.
- ☞ Remove the cover of the beverage outlet at the front by releasing it (push and pull downwards).
- ☞ Clean the beverage outlet with water and a brush.
- ☞ Clean the lower beverage outlet under running water with a brush.
- ☞ Mount the cover to the beverage outlet by inserting it into the rear and clipping it into place at the front.
- ✓ The lower part of the beverage outlet is cleaned.

These steps only apply to cleaning outside of the display-guided cleaning programme:

- ☞ Unlock the user panel and slide it upwards.
- ☞ Switch the machine on.
- ☞ Close the user panel by lifting it slightly until it disengages and pressing it down until it engages.

10.8.15 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.



NOTE

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.

- ☞ Tap on the **Service menu** ⚙ button.
  - ✓ The Service menu opens.



Fig. 161: Switch-off button

- ☞ Tap on the **Switch-off** button.
  - ✓ The machine is in Standby mode.
- ☞ Wear the outer surfaces of the machine and the optional accessories with a clean, damp cloth.
- ☞ Unlock the user panel and slide it upwards until it engages.
- ☞ Switch the machine back on using the switch-on button.

☞ Slightly lift the user panel and slide it back downwards until it engages.

✓ The machine is switched on and ready for use.

See also

Clean touch screen [▷ 127]

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 if present.

The safety valves must be replaced every two years if present.

11.1 Maintenance intervals

NOTE

Property damage due to maintenance intervals not upheld!

Postponed maintenance can lead to premature wear.

- Have pending maintenance work carried out by service partners as soon as possible.

The maintenance intervals are defined in the separate maintenance regulations.

Safety-relevant components	24 months	48 months	72 months
Hot water boiler	Check (only replace if needed)	Replace	Check (only replace if needed)
Steam boiler	Check (only replace if needed)	Replace	Check (only replace if needed)
Safety valve 12 bar	Replace	Replace	Replace
Safety valve 5 bar	Replace	Replace	Replace

Prerequisites for maintenance:

- If maintenance is due, contact the service partner.
- Carry out all descaling intervals according to the instructions displayed by the machine.
- Carry out descaling one day before maintenance work.

See also

Descaling [▶ 147]

11.2 Performing maintenance and resetting counter

The **Maintenance interval** function is PIN protected (caretaker, machine operator, service technician).

- Tap on the **Service menu** button.
  - ✓ The Service menu opens.

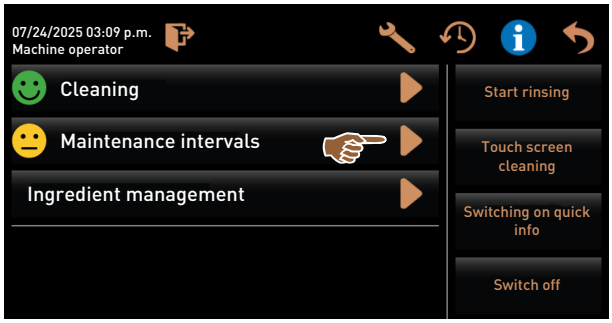


Fig. 162: Calling up maintenance intervals

The **Maintenance intervals** button shows the maintenance status of the machine with a smiley.

- Green smiley: The machine does not have to undergo maintenance.
- Yellow smiley: The machine has to undergo maintenance soon.
- Red smiley: The machine has to undergo maintenance.

- Tap on the **Maintenance intervals** button in the Service menu.
  - ✓ The Maintenance intervals screen opens.

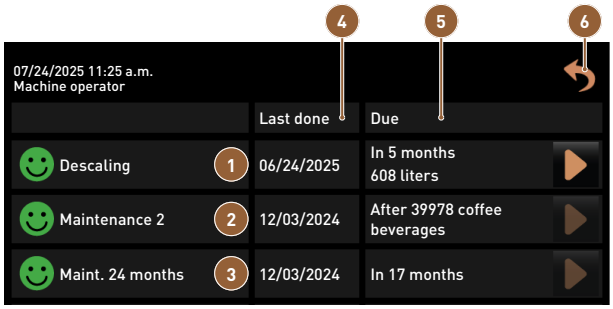


Fig. 163: **Maintenance intervals** screen

1 Descaling	**2** Maintenance 2 by service technician
3 24-month maintenance by service technician	**4** Last maintenance performed
5 Maintenance due	**6** **Back** button

The  button is used to start the pending **descaling** process.

The  button displays a query for **maintenance 2** and **24-month maintenance**. The machine must undergo maintenance by a service partner in accordance with the separate maintenance regulations. Once maintenance has been completed, the query can be confirmed. The counter is reset.

In the **Last** column, the date on which the corresponding maintenance work was last carried out is displayed.

The **Due** column shows the time after how many months, beverages or liters the next maintenance work has to be carried out.

The **Back** button takes you back to the Service menu.

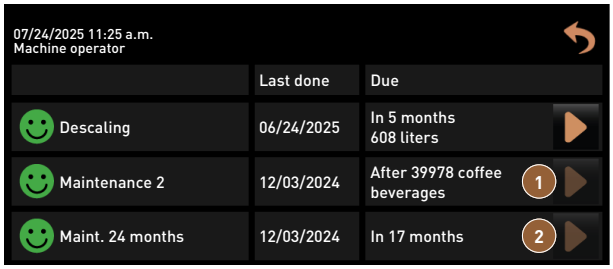


Fig. 164: Confirming maintenance

Performing and confirming maintenance

☞ Have the pending maintenance work carried out by a service technician.

☞ Then tap on the displayed maintenance task **(1)** or **(2)** to confirm it.

✓ The dialogue for the corresponding maintenance tasks opens.



Fig. 165: Confirmation dialogue for completed maintenance work (example)

- ☞ Make sure that maintenance has been carried out and completed in accordance with the maintenance concept and maintenance checklist.
- ☞ Confirm the query with ✔.
- ✓ The maintenance work is displayed as completed on the **Maintenance intervals** screen (green smiley).
- ✓ The date in the **Last** column changes to the current date.
- ✓ The date in the **Due** column updates based on the set intervals.

12 Descaling

Descaling can be carried out independently by the operator.



⚠ WARNING

Risk of acid burns!

Acid escapes during the descaling process. Risk of skin irritation and severe eye irritation.

- Do not touch the descaling product with bare hands and read the enclosed safety data sheet.
- Wear protective gloves and goggles when descaling.
- For descaling with ProCare and milk system: Do not remove the milk hoses from the Plug & Clean connections during the descaling process. Wait for the instruction on the display.
- When descaling with a descaling cartridge: Do not remove the decalcification cartridge during the descaling process. Wait for the instruction on the display.
- 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 due to hot water!

Hot water flows out of the hot water outlet and beverage outlet during descaling. This creates a risk of scalding.

- Slide a movable beverage outlet to the lowest dispensing position.
- Do not reach under the hot water outlet during the descaling process.



⚠ CAUTION

Risk of scalding from hot steam!

The steam wand emits hot steam during cleaning and descaling. There is a risk of scalding.

- Direct the outlet of the steam wand into the drip tray.
- Do not reach under the steam wand during the cleaning and descaling process.

Duration of descaling

A descaling process takes at least **85 minutes**. The machine is not ready for use during this time.

- Inform others in good time that the machine will not be ready for use.

Canceled descaling

The machine can only be ready for operation if the descaling process has been completed correctly.

A descaling process that has not been fully and correctly completed must be repeated.

12.1 Required descaling material

The following material is required for descaling with a **mains water supply**:

- 1 l water
- Clock with second hand
- 1x Schaerer **Uptime!** decalcification cartridge
- 1x Schaerer cleaning container 1 l blue (optional)
- 1x Schaerer cleaning container cover (optional)
- Gloves
- Protective goggles

The following material is required for descaling with an **internal water tank**:

- 1 l water
- Clock with second hand
- 2x Schaerer liquid decalcifier
- 1x Schaerer cleaning container 1 l blue (optional)
- 1x Schaerer cleaning container cover (optional)
- Gloves
- Protective goggles

12.1.1 Uptime! descaling cartridge



NOTE

Property damage due to incorrect descaling cartridge!

The coffee machine may be damaged if descaling cartridges other than those recommended by the machine manufacturer are used. Liability cannot be accepted for damages resulting from the use of other descaling agents, warranty claims become invalid.

- Only use descaling cartridges recommended by the machine manufacturer.
- Only use cartridges taken directly out of 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.

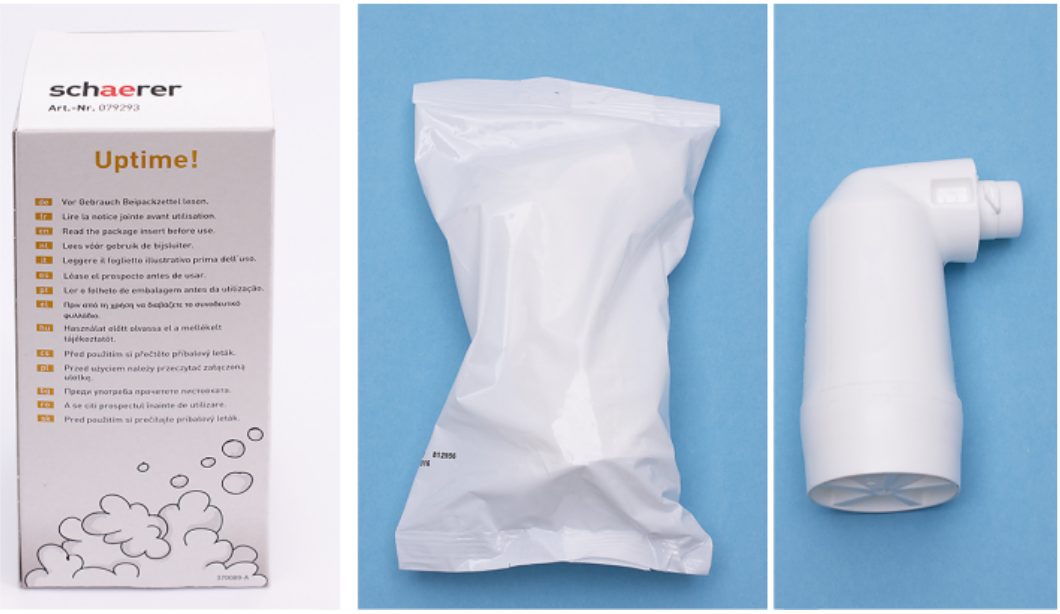


Fig. 166: Uptime! decalcification cartridge

- Intended use: Descaling of coffee machine with mains water supply
- Scope of descaling: Descaling of boiler including hot water / steam system
- Application interval: Upon instruction

12.1.2 Liquid descaler

NOTE

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.



- Name: Schaerer Calcpure liquid descaler
- Intended use: Descaling of machine with internal water tank
- Descaling: Descaling of boiler including hot water / steam system
- Application interval: Upon instruction

12.2 Checking waste water drainage

NOTE

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.

The following utensils are required to check the waste water outlet:

- 1 l water
- Clock with second hand

Checking waste water outlet drainage speed

- Remove the drip grid from the drip tray.
- Fill 1 l of water into the drip tray and check the timer at the same time.
- ✓ If the waste water outlet is clear, 1 l of water will drain completely within 30 s.

If 1 l of water does not flow out in the required time of 30 s, the waste water outlet is blocked. Descaling must not be carried out. The waste water outlet must first be repaired by a service technician.

12.3 “Descaling” screen

The following information is displayed on the screen during descaling:

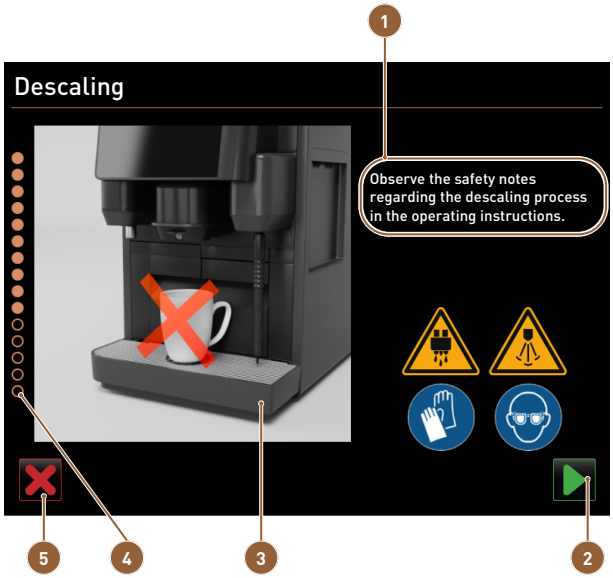


Fig. 167: Descaling screen

1	Area with information or instructions for action	2	**Next** button
3	Image or animation of the current action	4	Progress screen
5	**Cancel** button		

The **progress display** shows the progress of the descaling program. Filled circles show steps that have already been completed. Unfilled circles show steps that have not yet been completed.

The descaling program can be canceled at any time using the **Cancel** button. After descaling is aborted, the machine is not ready for use.

Images or animations for the current animation provide visual support for the information and instructions.

Information and instructions are provided in text form for each descaling step.

The **Next** button confirms instructions and takes you to the next step.

12.4 Perform descaling for machine with mains water supply

A pending descaling process is indicated by a yellow smiley in the Service menu.

☞ Tap on the **Service menu** button.

✓ The Service menu opens.

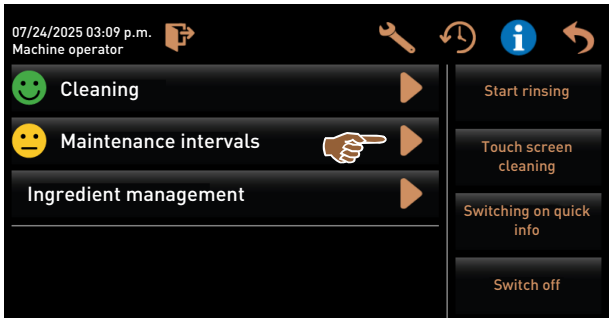


Fig. 168: Selecting maintenance intervals

Displaying maintenance intervals

☞ Tap on the **Maintenance intervals** button.

✓ All performed and pending maintenance work appears.



Fig. 169: Maintenance intervals: Selecting pending descaling

Carrying out descaling

☞ Tap on the **Descaling** button.

✓ The descaling program screen opens.

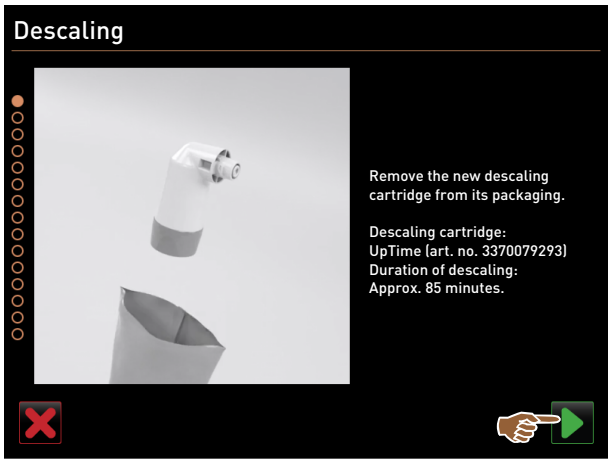


Fig. 170: Unpacking descaling cartridge

☞ Remove the Schaerer **Uptime!** descaling cartridge from the packaging.

☞ Tap on the button for the next step.

☞ **External drinking water tank option**: Fill the external drinking water tank completely.

- **External waste water tank option**: The instruction for checking the waste water outlet is displayed.
- Check if the waste water outlet in the drip tray is clear.
  The ? button on the display leads to the step-by-step description for a waste water outlet test.
- **Option without waste water outlet**: Remove and empty the drip tray and reinsert it.
- Tap on the button for the next step.
  - ✓ The **Remove grounds container** instruction is displayed.

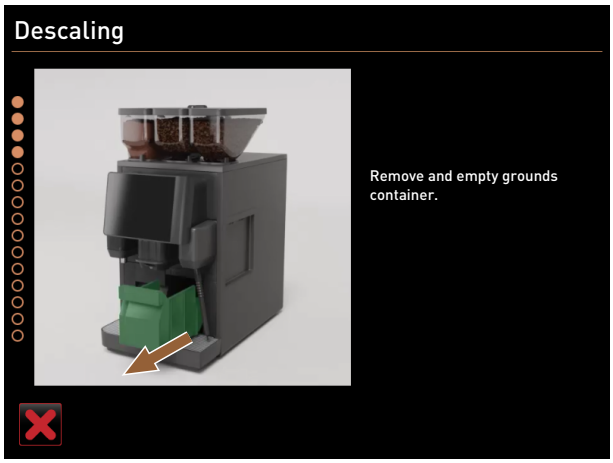


Fig. 171: Removing grounds container

- Slide the beverage outlet all the way to the top.
- Pull the grounds container out of the machine. Empty and clean the grounds container.
  - ✓ The **Insert cartridge** instruction is displayed.



Fig. 172: Insert descaling cartridge

- Follow the steps shown in the animation:
- Open the cover on the front left.
- Remove the green sealing cap by turning it to the left.
- Fit the freshly unpacked descaling cartridge and turn the descaling cartridge to the right.
  - ✓ The descaling cartridge is inserted.
  - ✓ The **Insert grounds container** instruction is displayed.



Fig. 173: Insert grounds container

☞ Push the cleaned grounds container into the machine.

✓ The **Remove milk container** (optional) instruction appears.



Fig. 174: Removing milk container

☞ Remove the milk container from the cooling unit.

☞ If necessary, empty and clean the milk container.
CAUTION! Health problems due to uncooled milk! Store the milk container with milk in a cool place during descaling.

☞ Tap on the ▶ button for the next step.

✓ The **Place cleaning container in cooling unit** instruction is displayed.



Fig. 175: Inserting cleaning container

☞ Place the empty cleaning container in the cooling unit.

☞ Insert the milk hose into the cover of the cleaning container.

☞ Close the door of the cooling unit.

☞ Tap on the button for the next step.

✓ The **Position beverage outlet and steam wand** (optional) instruction appears.



Fig. 176: Positioning steam wand

☞ Move the manual beverage outlet to the lowest position.

☞ Point the steam wand (optional) downward vertically into the drip tray.

☞ Tap on the button for the next step.

✓ The **Read safety notes in the operating instructions** instruction appears.



Fig. 177: Starting descaling

☞ Start the descaling process with the button.

✓ The descaling progress is shown in % and takes about 85 min.



Fig. 178: Progress display for descaling

Progress display status:

- Blue progress display: Machine cooling starts.
- Yellow progress display: Descaling is active.
- Green progress display: Rinsing is active.

You can pause the descaling process with the button and continue it with the button.

Completing descaling process

The descaling process is complete when the instruction for removing the descaling cartridge appears.

Wait for the instruction on the display before removing the descaling cartridge.



Fig. 179: Removing descaling cartridge

☞ Remove the descaling cartridge from the machine.

✓ The **Reattach protective cap** instruction appears.

☞ Replace the green protective cap.

☞ Close the cover on the front left.

☞ Tap on the button for the next step.

✓ The **Remove cleaning container** instruction is displayed.



Fig. 180: Removing cleaning container

- ☞ Pull the milk hose out of the cover of the cleaning container.
- ☞ For cooling units with Twin Milk: Pull out both milk hoses.
- ☞ Remove the cleaning container from the cooling unit.
- ☞ Empty the cleaning container.
- ☞ Tap on the button for the next step.
  - ✓ The **Insert milk container** instruction is displayed.



Fig. 181: Inserting milk container

- ☞ Place the milk container with chilled milk in the cooling unit.
- ☞ Tap on the button for the next step.
  - ✓ The **Reorder descaling cartridge** instruction is displayed.
  - ✓ The article number is displayed in the user interface.
- ☞ Order a cartridge from your service partner for the next descaling process.
- ☞ Tap on the button for the next step.
- ✓ The descaling program closes.
- ✓ The machine is restarted.
- ✓ Ready for use status and the user interface are displayed.
- ✓ The last descaling carried out is displayed in the Service menu under **Maintenance intervals**.

See also

- Checking waste water drainage [▷ 150]
- Descaling [▷ 147]

12.5 Variant: Descaling with internal water tank

A pending descaling process is indicated by a yellow smiley in the Service menu.

☞ Tap on the **Service menu** button.

✓ The Service menu opens.

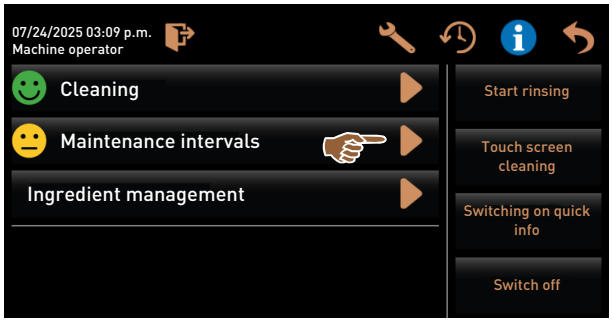


Fig. 182: Selecting maintenance intervals

Displaying maintenance intervals

☞ Tap on the **Maintenance intervals** button.

✓ All performed and pending maintenance work appears.

Carrying out descaling

☞ Tap on the **Descaling** button.

✓ The descaling program screen opens.

☞ **Waste water tank option**: Empty the waste water tank completely.

✓ The instruction for checking the waste water outlet appears.

☞ Check if the waste water outlet in the drip tray is clear.
The ? button on the display leads to the step-by-step description for a waste water outlet test.



Fig. 183: Removing drip tray

☞ **Option without waste water outlet**: Remove and empty the drip tray.

☞ Clean the drip tray.

☞ Reinsert the drip tray.

☞ Tap on the button for the next step.



Fig. 184: Removing and emptying internal water tank

- ☞ Remove the internal water tank from the machine.
- ☞ Open the cover and empty the internal water tank.
- ☞ Tap on the button for the next step.

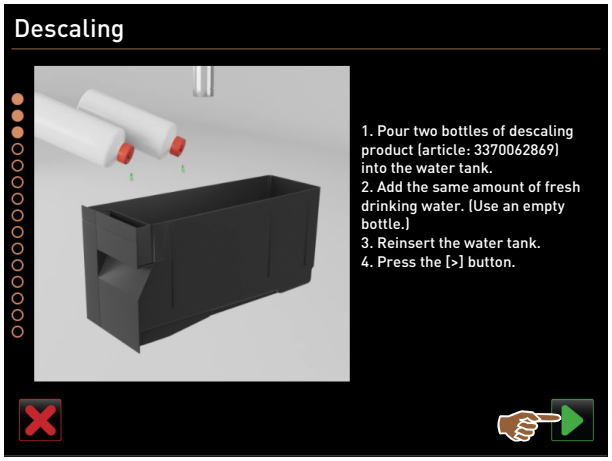


Fig. 185: Filling cleaning product into water tank

- ☞ Fill a bottle with descaling product and pour it into the internal water tank.
- ☞ Fill the empty bottle with water and pour the water into the water tank.
- ☞ Close the cover and insert the internal water tank into the machine.
- ☞ Tap on the button for the next step.



Fig. 186: Removing grounds container

- ☞ Slide the beverage outlet all the way to the top.

☞ Pull the grounds container out of the machine.

☞ Empty and clean the grounds container.

✓ The **Insert grounds container** instruction is displayed.



Fig. 187: Insert grounds container

☞ Push the cleaned grounds container into the machine.

✓ The **Place container under beverage outlet** instruction appears.



Fig. 188: Positioning container under beverage outlet

☞ Place a container with a minimum capacity of 5 l under the beverage outlet.

☞ Make sure that the container cannot tip over.

☞ Tap on the button for the next step.

✓ The **Remove milk container** (optional) instruction appears.



Fig. 189: Removing milk container

- ☞ Remove the milk container from the cooling unit.
- ☞ If necessary, empty and clean the milk container.
  CAUTION! Health problems due to uncooled milk! Store the milk container with milk in a cool place during descaling.
- ☞ Tap on the ▶ button for the next step.
  - ✓ The **Place cleaning container in cooling unit** instruction is displayed.



Fig. 190: Inserting cleaning container

- ☞ Place the empty cleaning container in the cooling unit.
- ☞ Insert the milk hose into the cover of the cleaning container.
- ☞ Close the door of the cooling unit.
- ☞ Tap on the ▶ button for the next step.
  - ✓ The **Position beverage outlet and steam wand** (optional) instruction appears.



Fig. 191: Positioning steam wand

- ☞ Move the manual beverage outlet to the lowest position.
- ☞ Point the steam wand (optional) downward vertically into the drip tray.
- ☞ Tap on the button for the next step.
  - ✓ The **Read safety notes in the operating instructions** instruction appears.



Fig. 192: Starting descaling

- ☞ Start the descaling process with the button.
- ✓ The descaling progress is shown in % and takes about 85 min.



Fig. 193: Progress display for descaling

Progress display status:

- Blue progress display: Machine cooling starts.
- Yellow progress display: Descaling is active.
- Green progress display: Rinsing is active.

You can pause the descaling process with the button and continue it with the button.

Completing descaling process

The **Empty container** instruction is displayed multiple times.



Fig. 194: Emptying container

- Remove and empty the container.
- Remove the internal water tank.
- Fill the internal water tank completely with fresh water.
- Insert the internal water tank.
- Place the container under the beverage outlet.
- Make sure that the container cannot tip over.
- Continue the descaling process with the button.
  - ✓ The descaling process is complete when the instruction for removing the cleaning container appears.
- Wait for the instruction on the display before removing the cleaning container.



Fig. 195: Removing cleaning container

- Pull the milk hose out of the cover of the cleaning container.
- For cooling units with Twin Milk: Pull out both milk hoses.
- Remove the cleaning container from the cooling unit.

☞ Empty the cleaning container.

☞ Tap on the ▶ button for the next step.

✓ The **Insert milk container** instruction is displayed.



Fig. 196: Inserting milk container

☞ Place the milk container with chilled milk in the cooling unit.

☞ Tap on the ▶ button for the next step.

✓ The **Reorder descaling product** instruction is displayed.

✓ The article number is displayed in the user interface.

☞ Order the descaling product from your service partner for the next descaling process.

☞ Tap on the ▶ button for the next step.

✓ The descaling program closes.

✓ The machine is restarted.

✓ Ready for use status and the user interface are displayed.

✓ The last descaling carried out is displayed in the Service menu under **Maintenance intervals**.

See also

Checking waste water drainage [▶ 150]

Descaling [▶ 147]

12.6 Disposing of descaling cartridge

The descaling cartridge is made of plastic and is completely emptied and rinsed with water after descaling.

- After proper descaling, the descaling cartridge must be disposed of as plastic waste or together with household waste.
- If descaling has been interrupted, the descaling cartridge must be disposed of as hazardous waste in accordance with local regulations.

13 Advanced settings

This chapter contains information about configuring the machine.

⚠ 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.

13.1 User interface elements

The following graphic elements are used for operation in the advanced settings:

Buttons



The **Restart** button restarts the machine.

A restart is required after the machine configurations have been changed.



The **Activate/Confirm** button confirms the selection, e.g. of an assigned coffee type or a temperature setting.



The **Cancel/Delete** button has the following functions:

- Reset counters
- Canceling beverage dispensing
- Close window/page



The **Confirm** button is used to confirm performed instructions for action.



The **Next** button opens a selection list or takes you to the next programme step.



The **Back** button takes you back to the previous window or the previous page.



The **Save** button saves the parameter settings made.



The **Copy** button copies an already configured beverage as a basis for additional beverage configurations.



The **Add** button adds beverages or beverage steps.

The beverages are taken from the list of available beverages. The additional beverage is automatically added to the list of configured beverages.



The **Beverage step configuration** button takes you to the settings for the beverage configuration with the individual beverage steps.



The **On/Off** switch activates or deactivates a function.

- Lit up green = On
- Matt gray = Off

Other operating elements

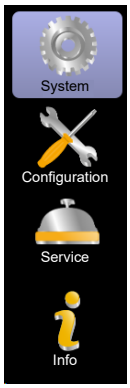


Fig. 197: Machine configuration settings menu

Machine configurations are divided into the following settings:

- System
- Configuration (software)
- Service
- Info

The parameters displayed depend on the authorizations of the selected profile.

All settings and configuration options are listed in the **Service technician** profile.



Fig. 198: Structure tree (statistics)

The **(+)** button expands the structure tree.

The **(-)** collapses the structure tree.



Fig. 199: Input field

A name for a beverage designation, beverage group, ingredient or for the menu cards can be entered in the **input field** using the keyboard that appears.

Tapping the input field opens the keyboard input.

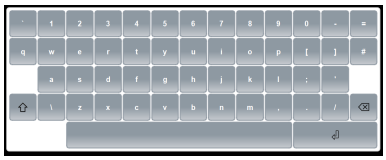


Fig. 200: Virtual keyboard

The virtual keyboard can be used to enter alphanumeric character strings in an input field.



Fig. 201: Entering parameter values

The value of a parameter can be entered in the following ways:

- Setting with setting dial
- Input with keyboard



Fig. 202: Factory setting for date and time

The date and time values are set using the **down arrow** or **up arrow** buttons.

13.2 Profiles and authorizations

Profiles are used to manage different activities with the machine and the authorizations required for them.

13.2.1 Caretaker profile

The caretaker is the first point of contact in the event of technical faults. He or she possesses sound technical knowledge and works regularly with the machine.

Except for the service technician, the caretaker has access to the most service functions.

Functions in the Service menu

In the **Caretaker** profile, the following functions are available for direct selection in the Service menu:

- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Switch-off
- Cleaning
- Maintenance intervals
- Ingredient management

 Settings

The following settings can be changed in the **Caretaker** profile:

- System
- Configuration
- Service
- Info

13.2.2 Bookkeeper profile

The **Bookkeeper** and **Bookkeeper reduced** have limited service functions.

 Functions in the Service menu

In the **Bookkeeper** profile, the following functions are available for direct selection in the Service menu:

- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Switch on Free vending mode if there is a payment system (bookkeeper)
- Switch-off
- Start maintenance (descaling)
- Ingredient management

 Settings

The following settings can be changed in the **Bookkeeper** profile:

- Configuration
- Info

13.2.3 Chef de service profile

The chef de service is a department or restaurant manager and his/her area of responsibility also includes administrative activities.

The facilities manager has access to some statistics of the machine to get an overview of the type and quantity of beverages served.

The chef de service has limited access to the service functions. He or she has more statistics at its disposal than the quality manager and the machine operator.

 Functions in the Service menu

In the **Chef de service** profile, the following functions are available for direct selection in the Service menu:

- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Switch-off
- Maintenance intervals
- Ingredient management

 Settings

The following settings can be changed in the **Chef de service** profile:

- Configuration
- Info

13.2.4 Quality manager profile

The quality manager is responsible for the quality of the beverages from the machine. To ensure quality, it is particularly important to check the cleaning times.

The quality manager has limited access to the service functions. The quality manager has more statistics at its disposal than the machine operator.

 Functions in the Service menu

In the **Quality manager** profile, the following functions are available for direct selection in the Service menu:

- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Switch-off
- Maintenance intervals
- Ingredient management

 Settings

The following settings can be changed in the **Quality manager** profile:

- Configuration
- Info

13.2.5 Machine Operator profile

The machine operator is the normal operator of the machine and therefore only a few service functions are available to him/her. He/She can set the language and view the machine version in order to pass on the information to a service technician if errors occur.

 Functions in the Service menu

In the **Machine operator** profile, the following functions are available for direct selection in the Service menu:

- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Switch-off
- Cleaning
- Maintenance intervals
- Ingredient management

Settings

The following settings can be changed in the **Machine operator** profile:

- Configuration
- Info

13.3 Configuring machine

The following chapter contains information on the configuration options for the machine:

- System configuration, e.g. grounds container capacity
- Software configuration, e.g. date and time
- Service settings, e.g. grinder service
- Information, e.g. beverage statistics

13.3.1 Configuring system

You can make the following settings on the System setting screen:

- **Grinder/Brewing unit** system setting
- **Milk system** system setting
- **Flavour Point** system setting (equipment variant)

☞ Tap on the **System** button.

✓ The **System** setting screen opens.

Grinder/Brewing unit system setting

The grinder/brewing unit setting opens the following menu items for system settings and displays:

- Grounds container: Capacity
- Grounds container: time to empty [s]
- Grounds container: current counter
- Center grinder calibration value (10 s) [g]
- Right grinder calibration value (10 s) [g] (equipment variant)
- Left grinder calibration value (10 s) [g] (equipment variant)

Authorized profiles

- Service technician
- Caretaker

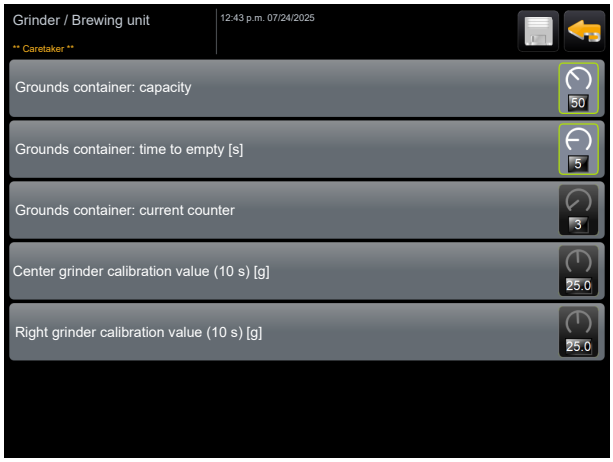


Fig. 203: Settings for the grinder/brewing unit

Configuring grounds container capacity

With this setting, the number of cycles (coffee cakes) until the **Empty grounds container** message appears is defined.

Setting range	Standard
0 – 150 coffee cakes	*50* coffee cakes

- ☞ Standard: Set the value to *50* coffee cakes. Do not exceed this value.
  - ✓ The machine blocks dispensing of coffee beverages after *55* brewing cycles (*+ 5*) until the grounds container has been emptied.
- ☞ With grounds disposal (equipment variant): Set the value to *0* coffee cakes.
  - ✓ The number of cycles (coffee cakes) is ignored.

Grounds container: Setting time for emptying [s]

This setting defines the period of time until the current grounds container counter is reset to *0* after emptying.

Setting range	Standard
0 – 30 s	*5 s*

- ☞ Set the value to *5 s*.
- ☞ Empty the grounds container when the corresponding instruction is shown in the display. If the grounds container is only pulled out briefly and then pushed back in again immediately, the counter is retained and is not reset.
- ☞ Do not reinsert the emptied grounds container for at least *5 s*.
- ✓ The **Current grounds container counter** is reset to *0*.

Grounds container: current counter

The display provides information on the brewing cycles executed since the last time the grounds container was emptied. If the preset value for the capacity of the grounds container is reached, the instruction for emptying the grounds container appears.

This menu item is purely a display in the **Caretaker** profile. Settings are not possible.

Center grinder calibration value (10 s) [g]

The calibration value in grams is recorded with this setting for the center grinder during grinder calibration.

Service technicians can change the value.

Setting range	Standard
1.0 – 50.0 g	In line with the calibration performed

- ☞ Start calibration in the **Service – Grinder service** setting.
- ☞ Execute calibration using the assistant.
- ☞ Enter the calculated value in this input field (only in the **Service technician** profile).
- ✓ Grinder calibration for the center grinder is complete.
- ✓ The grind quantity output corresponds to the grind quantity set in the coffee recipe.

The calibration value in grams displayed in this parameter can be changed by service technicians for general adjustment of the coffee beverages from the center grinder without having performed grinder calibration.

Adjusting the calibration value affects all coffee recipes that have been assigned to the center grinder.

Right grinder calibration value (10 s) [g] (equipment variant)

The process is the same as for the center grinder.

Left grinder calibration value (10 s) [g] (equipment variant)

The process is the same as for the center grinder.

Milk system setting

The Milk system setting opens the following menu items for system settings and displays:

- Milk container
- Milk 1 hose length squeeze valve -> cooling cell [cm]
- Milk 2 hose length squeeze valve -> cooling cell [cm]
- Milk level detection

Authorized profiles

- Service technician
- Caretaker

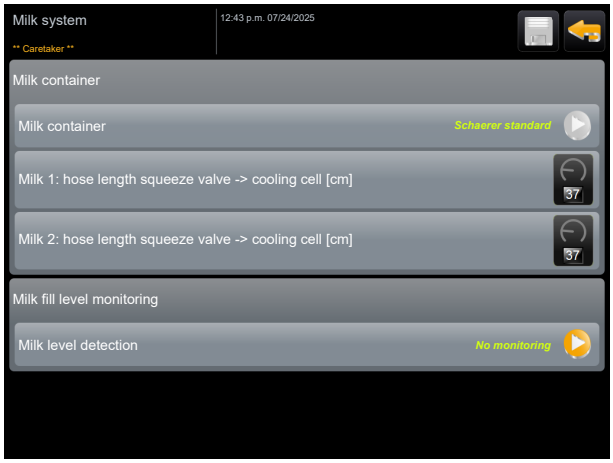


Fig. 204: Settings for the milk system

Milk container

This setting is used to record the milk hose length up to the milk container. The setting refers to the effective milk hose length with or without riser pipe in the milk container.

Service technicians can change the value.

Setting range	Standard
Custom or Schaerer standard (only to be set by service technicians)	Schaerer standard

Custom

☞ Select the **Custom** option (only in the **Service technician** profile).

✓ The milk hose length is not recorded automatically.

☞ Measure the exact milk hose length from the milk container to the squeeze valve in the machine and record the value calculated for **Milk 1 hose length from squeeze valve -> cooling cell [cm]**.

Schaerer standard

☞ Select the **Schaerer standard** option (only in the **Service technician** profile).

✓ The milk hose length is automatically detected.

✓ The standard setting of *37 cm* in the following parameter does not require any additional adaptation.

See below the description for the **Milk 1 hose length from squeeze valve -> cooling cell [cm]** parameter.

Milk 1 hose length squeeze valve -> cooling cell [cm]

This setting is used to record the milk hose dimension from the squeeze valve to the cooling cell for the external milk hose.

Service technicians can change the value.

Setting range	Standard
0 – 200 cm (only to be set by service technicians)	*37 cm* (with the Schaerer standard option)

If the **Custom** option is selected in the previous **Milk container** parameter, the exact milk hose length can be entered in the **Service technician** profile.

For service technicians

☞ Measure the milk hose length from squeeze valve in the machine up to the milk container in the cooling device.

☞ Record the calculated value for the **Milk 1 hose length from squeeze valve -> cooling cell [cm]** parameter.

✓ The system now knows the milk hose length.

✓ The correct milk quantity is periodically exchanged for the **rinsing interval of external milk hose**.

With the standard equipment, the **Schaerer standard** option is selected in the **Milk container** parameter. This setting corresponds to the correct milk hose length of *37 cm*.

The following milk systems require the Custom option:

- Cooling unit left of the coffee machine
- Cooling unit with Twin Milk
- Under-counter cooling unit
- Under-machine cooling unit
- All optional accessories, e.g. Cup & Cool and Centre Milk

Milk 2 hose length squeeze valve -> cooling cell [cm]

This setting is used to record the milk hose dimension from the squeeze valve to the cooling cell for the second milk hose for the **Twin Milk**.

Service technicians can change the value.

Setting range	Standard
0 – 200 cm (only to be set by service technicians)	*37 cm* (with the **Schaerer standard** option)

The process corresponds to that for the **Milk 1 hose length from squeeze valve -> cooling cell [cm]**.

Milk level detection

This setting defines the fill level monitor behavior for the milk container.

Setting range	Standard
No monitoring	No monitoring
Warning	
Disable beverage dispensing	

No monitoring option

Milk monitoring is configured, but is not used.

Warning option

If a low milk level is detected, a message appears on the display. The dispensing of additional milk beverages is possible.

Disable beverage dispensing option

If a low milk level is detected, a message appears on the display. The dispensing of milk beverages is blocked.

Activate milk system

These settings determine how the milk system is activated.

Setting range	Standard
Activate milk system after cleaning: ▪ Ask ▪ Activate automatically	Ask
Activate milk system at machine start: ▪ No action ▪ Ask if deactivated ▪ Activate automatically	No action
Fill up milk system at first milk beverage (only for machines with BestFoam): ▪ Not activated ▪ Enabled	Not activated

13.3.2 Configuring software

Calling up software settings

☞ In the configuration settings on the left, tap on the **Configuration** category.

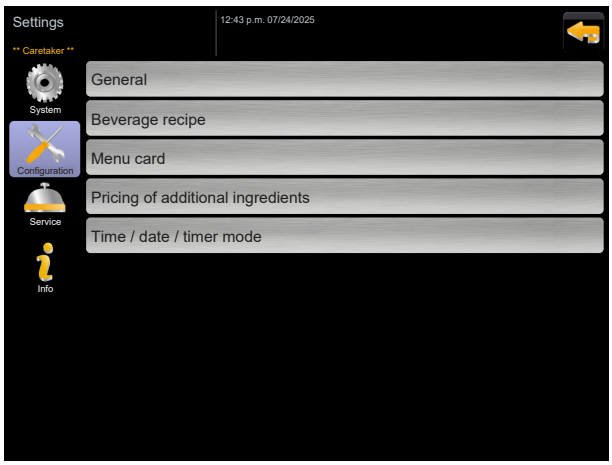


Fig. 205: Configuring software

☞ To select the desired setting:

- **General**: Configuring language
- **Time/Date/Timer mode**: Display date, time and time zone, configure switch-on/off time

Configuring language



Fig. 206: Configuring language

- ☞ Tap on the button next to the set language.
  - ✓ The menu for the language selection appears.
- ☞ Select the desired language.
- ☞ Save the setting and load the new settings into the machine with .
- ☞ Go back with and restart the machine with .
- ✓ All display messages and parameter designations appear in the activated language.

Displaying date, time and time zone

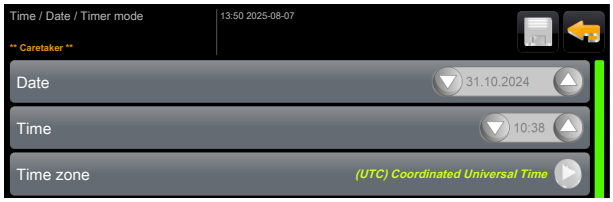


Fig. 207: Displaying date, time and time zone

This menu displays information on the date, time and time zone. The settings could not be configured.

The time zone is selected by the service technician during the commissioning program. When the time zone is set, the time and date are automatically adopted from the selected zone.

Configuring switch-on/switch-off time

- ☞ In the **Time / Date / Timer mode** menu, select the **Schedule for timer mode** button.
- ☞ Activate the switch-on/switch-off time for the desired day of the week using the button.
  - ✓ The dialog for adding a switch-on time or switch-off time appears.

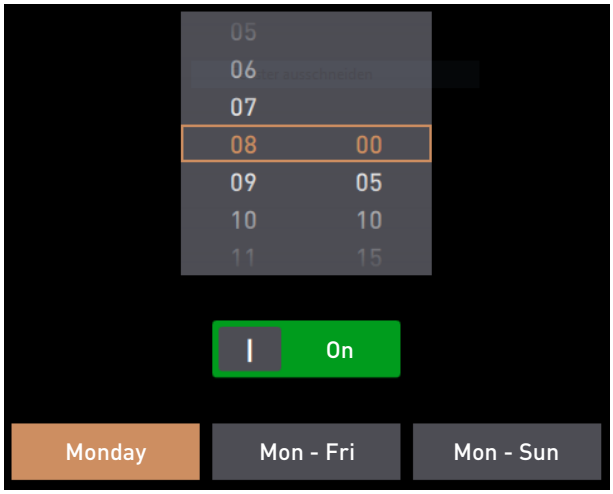


Fig. 208: Dialog for adding a switch-on time or switch-off time

- ☞ Set the time.
- ☞ Activate the switch-on time by sliding the **I** button to the left (On, green) or the switch-off time by sliding the **I** button to the right (Off, red).

☞ Select the weekdays for which the switch-on time or switch-off time should be activated by activating the corresponding button (e.g. Mon – Fri).

The system automatically displays the corresponding time format (24 h or 12 h a.m./p.m.) depending on the selected time zone.

Adjusting beverage prices

Setting of beverage price with or without payment system

☞ Select the **Configuration – Menu card** setting.

✓ The main beverage selection is displayed.

☞ Variant: Use the arrows to navigate to the right to additional beverages.

☞ Select the button to the right of the desired beverage group.

✓ The **menu group** is displayed and the beverages in the menu group are listed.

☞ Select the button to the right of the beverage for which you want to set a beverage price.

✓ The **Menu card item** screen for the desired beverage is displayed with all the cup sizes configured for the beverage.

☞ Select the button next to the desired cup size.

✓ The **Edit menu card item** screen appears.

☞ Select the price button you want to set.

☞ Set the price by turning the setting dial.

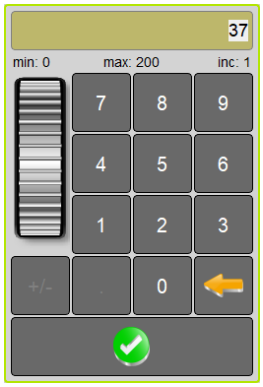


Fig. 209: Beverage price button with setting dial

☞ Save the price with the button.

☞ When all prices have been set, save the settings with the button.

☞ Repeat the steps for all beverages that require a price adjustment.

✓ The beverage prices are set.

See also

Saving changes and loading them into the machine [▶ 193]

13.3.3 Configuring service settings

You can make the following settings on the Service setting screen:

- **Grinder service** setting
- **Back up database** service setting
- **Reset descaling counter** service setting
- **Reset descaling** service setting
- **Reset cleaning** service setting

☞ Tap on the **Service** button.

✓ The **Service** setting screen opens.

13.3.3.1 Grinder service with manual grinding level adjustment

⚠ 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.

The Grinder service setting starts the following display-guided service functions on the grinder after confirmation:

- Changing grinding disks
- Adjusting grinding level
- Calibrate grinder

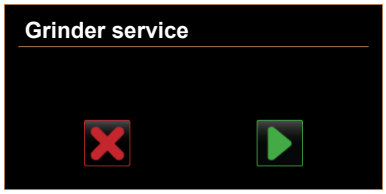


Fig. 210: Starting grinder service

The machine is equipped with manual grinding level adjustment.

☞ Tap on the **Service –> Grinder service** setting.

✓ The confirmation dialog opens.

☞ Confirm with .

✓ The service functions for the grinder are available.

☞ Open the tab for the desired grinder (left, right, center).



Fig. 211: Grinder service screen

Changing grinding disks

⚠ DANGER

Risk of electrocution!

Danger to life due to improper handling of electrical appliances.

☝ Always disconnect the power supply before carrying out maintenance work.



⚠ 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.

The following steps are required to replace the grinding disks:

- Switch off the machine and disconnect it from the power supply.
- Remove the manual grinding level adjustment and install new grinding disks.
- Close the empty grinder by hand until there is noticeable resistance (disk on disk).
- Open the grinder 45° counterclockwise.
- Reassemble the manual grinding level adjustment.
- Switch the machine back on and navigate to the **Grinder service** screen.
- Tap on the **Confirm change of grinding disks** button.
- Confirm the installation steps on the **Confirm change of grinding disks** screen with the ▶ button.

✓ The preparation steps for adjusting the grinding level are displayed.

Adjusting grinding level

- Continue the setting steps after **Changing grinding disks** or tap on the **Adjust grinding level** button directly in the grinder service.
- The preparation steps for adjusting the grinding level are displayed. Empty and clean the grounds container and reinsert it.
- Confirm that the grounds container is inserted with the ▶ button.
- Set the grinding level manually.

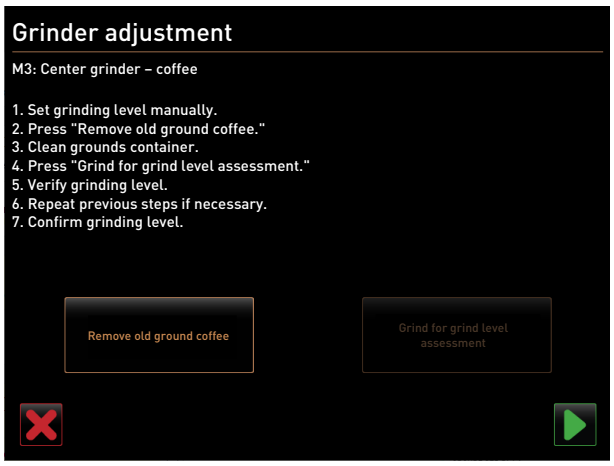


Fig. 212: Grinding level adjustment: Removing old ground coffee

- Tap on the **Remove old ground coffee** button.

✓ The old ground coffee is removed.

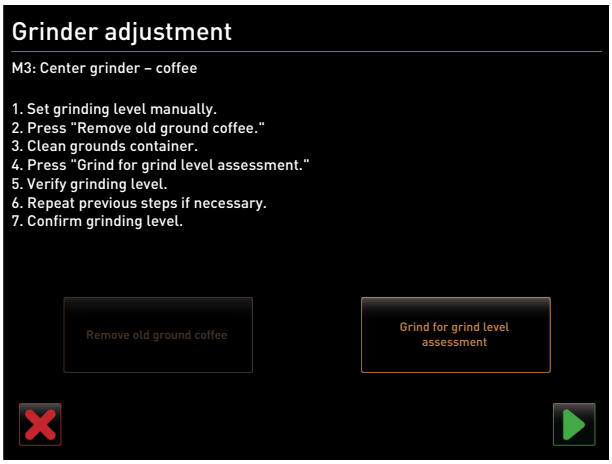


Fig. 213: Adjust grinding level: grind for grind level assessment

✓ The **Grind for grind level assessment** button becomes active.

☞ Clean the grounds container again.

☞ Tap on the **Grind for grind level assessment** button.

✓ A grind is performed.

☞ Check the grinding level and repeat the steps for grinding level adjustment if necessary or confirm the set grinding level with the button.

✓ Preparation for calibrating the grinder appears.

Calibrate grinder

Calibration is required in the following cases:

- The machine is new.
- The operating time has been more than a year.
- The grinding level is changed.
- The grinder is opened.
- The grinding disks are changed.
- The type of coffee has been changed.

☞ Continue the settings steps after **grinding level adjustment** or tap directly on the **Grinder calibration** button in the grinder service.

✓ The preparation steps for calibration are displayed.

☞ Empty and clean the grounds container and reinsert it.

☞ Confirm that the grounds container is inserted with the button.

✓ Reference grinding starts.

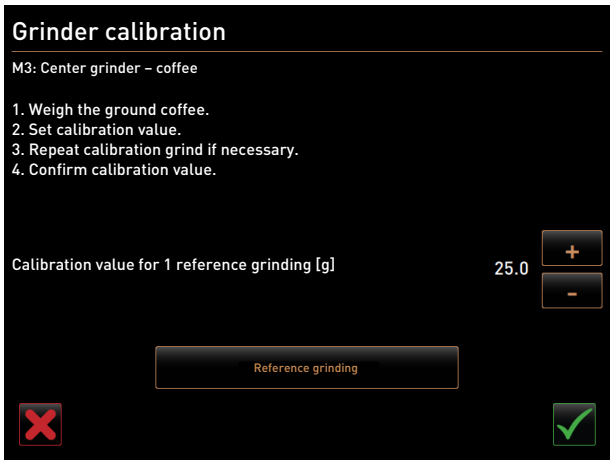


Fig. 214: Calibrate grinder

- ☞ Weigh the ground coffee of the reference grind.
- ☞ Set the calibration value (determined weight of ground coffee) using the **Plus** or **Minus** button.
- ☞ If needed, start additional reference grinding with the **Reference grinding** button.
- ☞ If several reference grinding operations are performed, always weigh the entire resulting quantity of ground coffee and enter the amount as a reference value.
  - ✓ The machine automatically detects all triggered grinds and calculates the correct grind quantity itself.
- ☞ Confirm calibration of the grinder with the ✓ button.
- ✓ The **Grinder service** screen opens.
- ✓ The set grinder is ready for use.

13.3.3.2 Grinder service with electric grinding level adjustment

⚠ 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.

The **Grinder service** setting starts the following display-guided service functions on the grinder after confirmation:

- Changing grinding disks
- Adjusting grinding level
- Grinder initialization
- Calibrate grinder

The grinder service for electric grinding level adjustment also requires grinder initialization as well as grinder adjustment via the grind level motors.

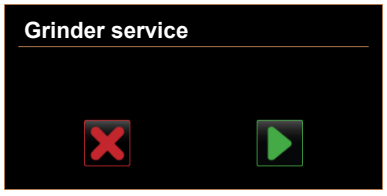


Fig. 215: Starting grinder service

- The machine is equipped with electric grinding level adjustment.
- ☞ Tap on the **Service –> Grinder service** setting.

✓ The confirmation dialog opens.

☞ Confirm with .

✓ The service functions for the grinder are available.

☞ Open the tab for the desired grinder (left, right, center).

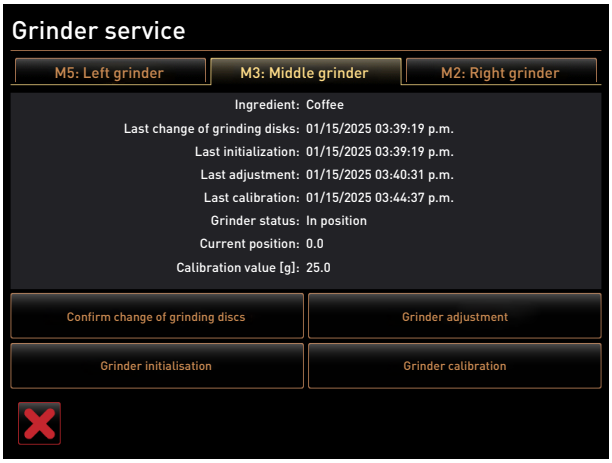


Fig. 216: Grinder service screen

Changing grinding disks



⚠ DANGER

Risk of electrocution!

Danger to life due to improper handling of electrical appliances.

☝ Always disconnect the power supply before carrying out maintenance work.



⚠ 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.

The following steps are required to replace the grinding disks:

☞ Switch off the machine and disconnect it from the power supply.

☞ Remove the grinder level motor and install new grinding disks.

☞ Close the empty grinder by hand until there is noticeable resistance (disk on disk).

☞ Open the grinder 45° counterclockwise.

☞ Reassemble the grinding level motor.

☞ Switch the machine back on and navigate to the Grinder service screen.

☞ Tap on the Confirm change of grinding disks button.

☞ Confirm the installation steps on the Confirm change of grinding disks screen with the button.

✓ The preparation steps for adjusting the grinding level are displayed.

Adjusting grinding level

☞ Continue the setting steps after Changing grinding disks or tap on the Adjust grinding level button directly in the grinder service.

✓ The preparation steps for adjusting the grinding level are displayed.

☞ Empty and clean the grounds container and reinsert it.

☞ Confirm that the grounds container is inserted with the button.

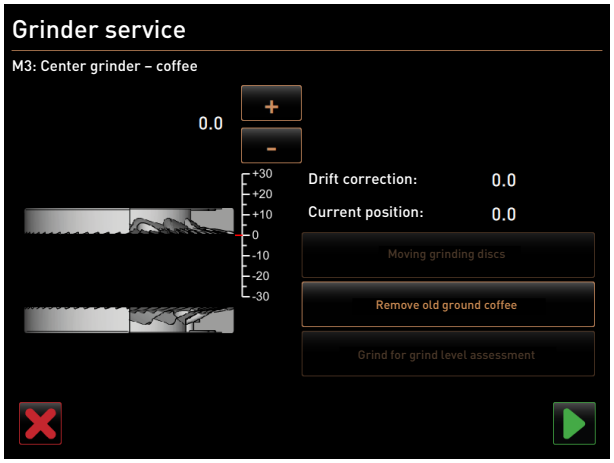


Fig. 217: Grinding level adjustment: Removing old ground coffee

☞ Tap on the Remove old ground coffee button.

✓ The old ground coffee is removed.

✓ The Grind for grind level assessment button becomes active.

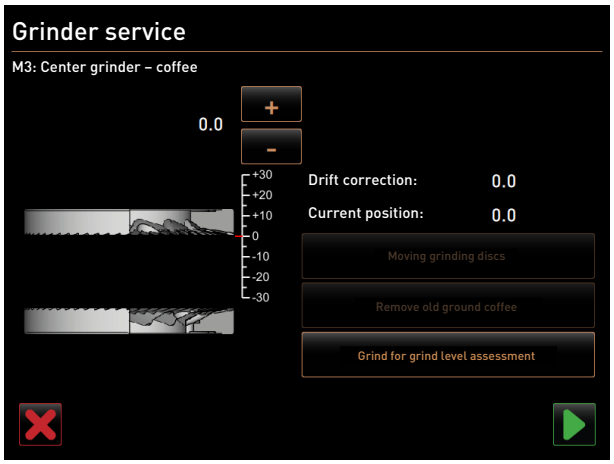


Fig. 218: Adjust grinding level: grind for grind level assessment

☞ Clean the grounds container again.

☞ Tap on the Grind for grind level assessment button.

✓ A grind is performed.

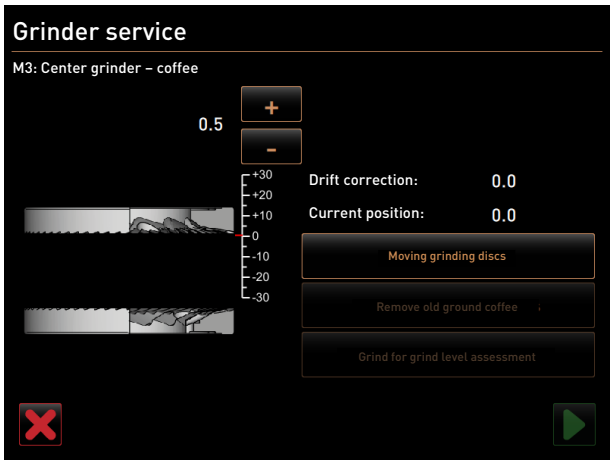


Fig. 219: Adjust grinding level: move grinding discs

- ☞ Adjust the grinding level result with the Plus = coarser or Minus = finer button.
- ☞ Make grinding level adjustments in small ±1 steps.
- ☞ Use the Move grinding disks button to set the grinding disk to the previously set position.
- ☞ Check the grinding level and repeat the steps for grinding level adjustment if necessary or confirm the set grinding level with the button.
- ✓ Preparation for calibrating the grinder appears.

Calibrate grinder

Calibration is required in the following cases:

- The machine is new.
- The operating time has been more than a year.
- The grinding level is changed.
- The grinder is opened.
- The grinding disks are changed.
- The type of coffee has been changed.

Calibrate grinder

Calibration is required in the following cases:

- The machine is new.
- The operating time has been more than a year.
- The grinding level is changed.
- The grinder is opened.
- The grinding disks are changed.
- The type of coffee has been changed.

- ☞ Continue the settings steps after **grinding level adjustment** or tap directly on the **Grinder calibration** button in the grinder service.
  - ✓ The preparation steps for calibration are displayed.
- ☞ Empty and clean the grounds container and reinsert it.
- ☞ Confirm that the grounds container is inserted with the button.
  - ✓ Reference grinding starts.

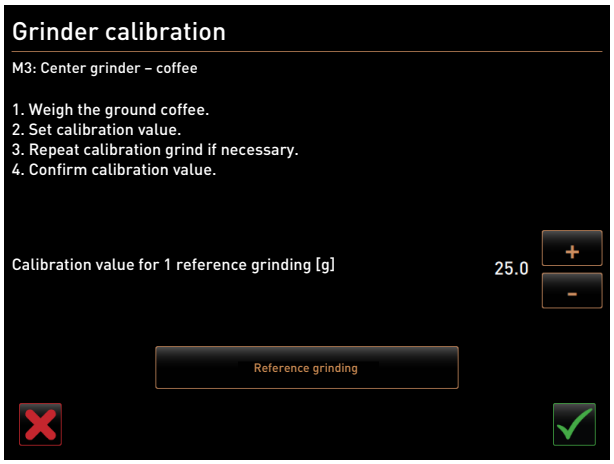


Fig. 220: Calibrate grinder

- ☞ Weigh the ground coffee of the reference grind.
- ☞ Set the calibration value (determined weight of ground coffee) using the **Plus** or **Minus** button.
- ☞ If needed, start additional reference grinding with the **Reference grinding** button.
- ☞ If several reference grinding operations are performed, always weigh the entire resulting quantity of ground coffee and enter the amount as a reference value.
  - ✓ The machine automatically detects all triggered grinds and calculates the correct grind quantity itself.
- ☞ Confirm calibration of the grinder with the ✓ button.
- ✓ The **Grinder service** screen opens.
- ✓ The set grinder is ready for use.

Grinder initialization

The grinder must be initialized in the following cases:

- After a malfunction
- After the grinding disks have been replaced, electric grind level adjustment must be initialized.

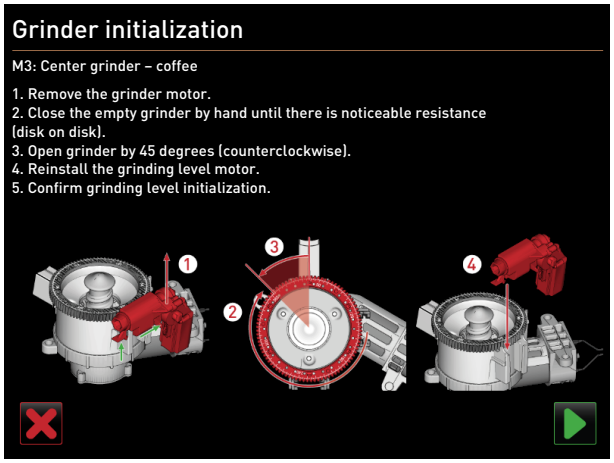


Fig. 221: Grinder initialization

- ☞ Follow the displayed instructions.
- ☞ Remove the grinder level motor and install new grinding disks.
- ☞ Close the empty grinder by hand until there is noticeable resistance (disk on disk).
- ☞ Open the grinder 45° counterclockwise.
- ☞ Reassemble the grinding level motor.
- ☞ Confirm the grinder initialization installation steps with the ▶ button.

13.3.3.3 Backing up database

NOTE

Property damage due to data loss!

The touch screen contains an SD memory card for storing the machine data.

- Back up the database on a USB data carrier before carrying out an update.
- Back up the database on a USB data carrier before replacing the touch screen.
- Insert the previously used SD memory card into the new touch screen. This ensures it is ready for use immediately.

There is a type A USB port inside the user panel. To access the USB port, open the cover at the bottom of the user panel.

Opening user panel cover

- ☞ Turn the lock at the bottom edge of the user panel 90°.
- ☞ Remove the cover from the user panel.
- ✓ The USB port inside the user panel is accessible.

Backing up database

- ☞ Insert the USB data carrier into the USB interface.
- ☞ Tap on the **Service -> Back up database** setting.
  - ✓ The machine database is saved to the USB stick.
  - ✓ The saved database version is compatible with the installed machine software version.
- ☞ Remove the USB data carrier when the **Data backup complete** message appears on the display.
- ✓ The database is backed up.

Closing user panel cover

- ☞ Place the cover on the lower edge of the user panel.
- ☞ Turn the lock at the bottom edge of the user panel 90°.
- ✓ The user panel cover is closed.

The database is saved on the USB data carrier under `Schaerer/SCA3/backup/database/sca3db.db3_<yyyymmdd_hhmmss>`.

The database is automatically saved periodically every 5 minutes to the SD memory card inserted in the touch screen. It is also saved directly in the system at the same time.

With a **downgrade**, the database version saved on the USB data carrier is again compatible with the older machine software.

NOTICE! The manufacturer generally does not recommend software downgrades. These should only be performed in the event of serious problems or safety-related issues, if recommended by a technical information notice.

The following data is stored on the USB data carrier:

- Machine number
- Beverage recipes
- Hardware configuration
- All counter levels

13.3.3.4 Reset descaling counters

NOTE

Property damage due to skipped descaling processes!

Failure to perform descaling can lead to damage and faults.

- Carry out descaling operations which are not performed automatically because the counter has been reset as soon as possible and start them manually.

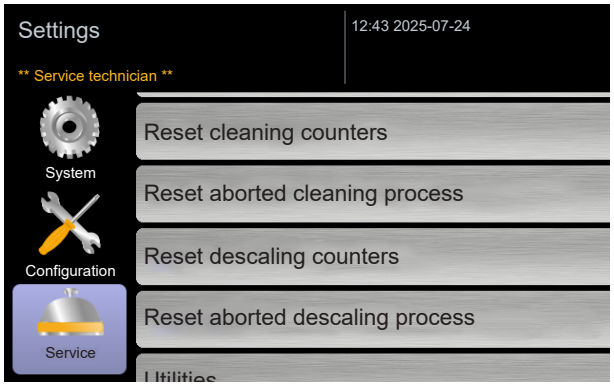


Fig. 222: Buttons for resetting

The parameter deactivates a pending descaling process.

- Tap on the **Service -> Reset descaling counter** setting.
- Confirm that the process with the ✓ button.
- ✓ The descaling counter is reset and any pending descaling process is deleted.
- ✓ The next automatic descaling process takes place according to the configuration in the **System – Maintenance** setting.

13.3.3.5 Reset descaling/cleaning

A cleaning or descaling program can be interrupted using the ✗ button. A power failure also leads to interruption of any cleaning or descaling operation that is in progress.

After a canceled cleaning or descaling process, the status of the machine remains in **Cleaning** or **Descaling** mode. In order to leave the mode, it is necessary to reset the cleaning or descaling flag.

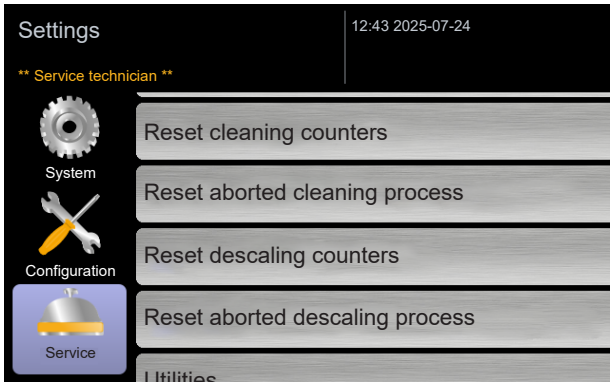


Fig. 223: Buttons for resetting

- Tap on the **Service -> Reset aborted descaling/cleaning process** setting.
- Confirm that the process with the ✓ button.
  - ✓ The cleaning flag an descaling flag is reset.
  - ✓ An interrupted cleaning or descaling process is reset.
  - ✓ Any pending descaling operation is deleted.

✓ The next automatic cleaning or descaling process will only take place according to the configuration in the **System – Cleaning** and **System – Maintenance** settings.

☞ It is absolutely essential to restart cleaning or descaling right away.

13.3.4 Calling up information



Fig. 224: Button for **Info** menu

The **Info** button opens a menu containing various information.

This information must be passed on to a service technician when reporting an error.

Setting > Info – Show versions	
Authorized profiles:	▪ Caretaker ▪ Head of service, Quality manager ▪ Machine operator ▪ Bookkeeper ▪ Bookkeeper reduced
Function:	Shows information about the installed versions of the machine software.
Setting range:	No setting possible
Standard:	–

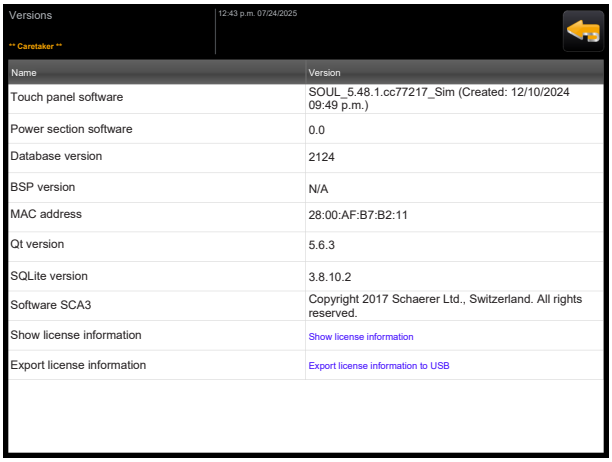


Fig. 225: Versions

The following information can be read off:

- Touch panel software version
- Power unit software version
- Database version
- BSP accounting system version
- Mac address version
- Qt version (source code)
- Qt license version
- SQLite version
- Copyright software SCS

Setting > Info – Machine counter	
Authorized profiles:	▪ Caretaker ▪ Head of service
Function:	Shows an overview of beverage counters according to the ingredient they contain.
Setting range:	No setting possible
Standard:	–

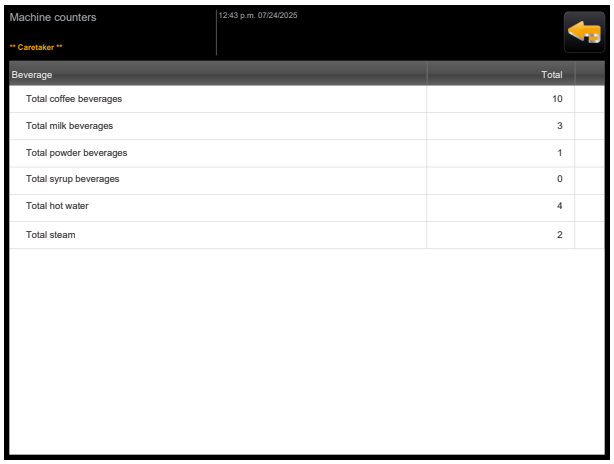


Fig. 226: Machine counters

Example of ingredients with a chociatto beverage:

- 1. ingredient = coffee
- 2. ingredient = fresh milk or topping
- 3. ingredient = choco

The following information can be read off:

- Total coffee beverages
- Total milk beverages
- Total powder beverages
- Total hot water
- Total steam

All beverages added to the menu cards are listed.

Setting > Info – Beverage statistics	
Authorized profiles:	▪ Caretaker ▪ Head of service ▪ Bookkeeper ▪ Bookkeeper reduced
Function:	Shows information about the dispensed beverages.
Setting range:	Resetting the counter levels (individual or total)
Standard:	Custom

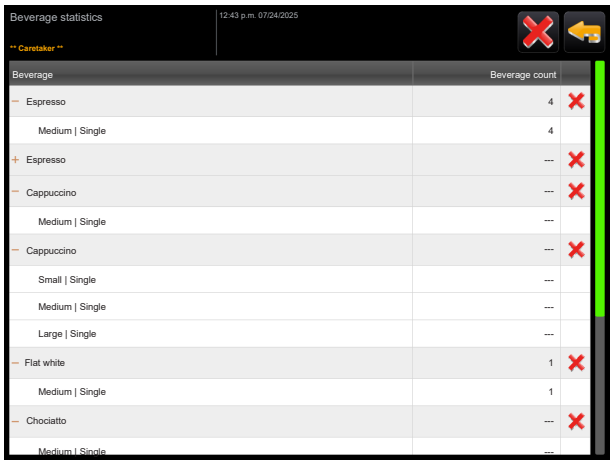


Fig. 227: Beverage statistics

Resetting individual counters

☞ Tap on the ✖ button for the corresponding beverage in the right column.

✓ The beverage counter for the selected beverage is set to zero.

Resetting all counters

☞ Tap on the large ✖ button at the top of the screen.

✓ All listed beverage counters are reset to zero.

Setting > Info – Cleaning statistics	
Authorized profiles:	▪ Caretaker ▪ Head of service ▪ Quality manager
Function:	Shows information about performed cleaning work.
Setting range:	No setting possible
Standard:	–

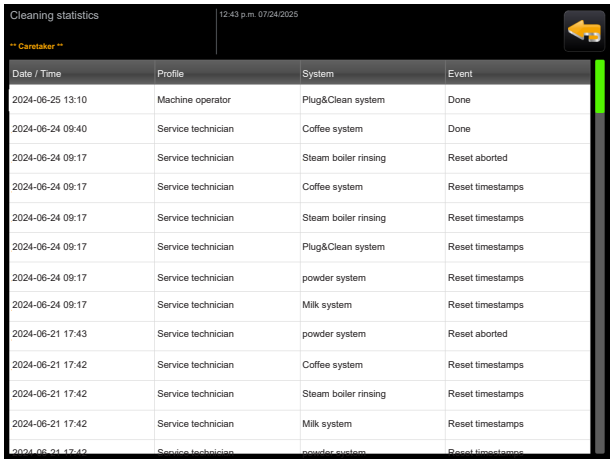


Fig. 228: Cleaning statistics

The following information can be read off:

- Date and time
- Profile
- System

- Event

Performed, cancelled and reset cleaning operations are displayed in the **Event** column.

Setting > Info – Maintenance statistics	
Authorized profiles:	Caretaker
Function:	Shows information about performed maintenance (descaling).
Setting range:	No setting possible
Standard:	–

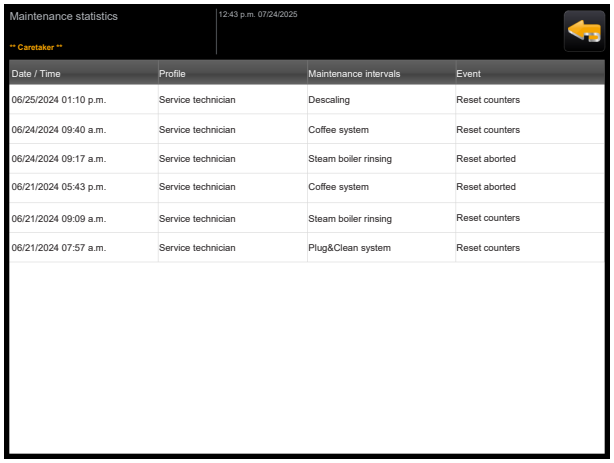


Fig. 229: Maintenance statistics

The following information is listed:

- Date and time
- Profile
- System
- Event

Performed, cancelled and reset descaling processes are displayed in the **Event** column.

Setting > Info – Beverage dispensing statistics	
Authorized profiles:	▪ Caretaker ▪ Head of service ▪ Bookkeeper ▪ Bookkeeper reduced
Function:	Shows information on all beverage dispensed with the contained beverage data.
Setting range:	The button deletes all counter levels.
Standard:	–

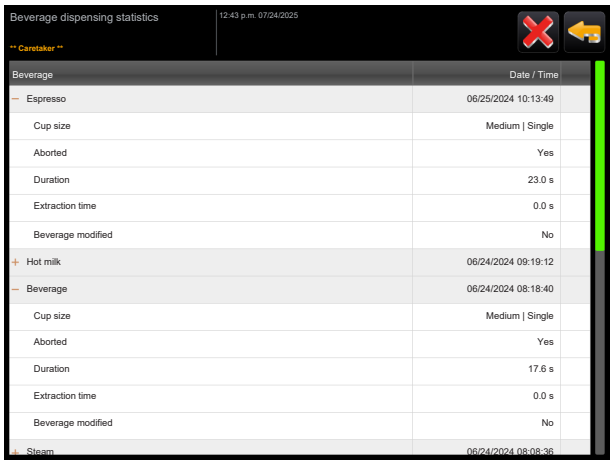


Fig. 230: Beverage dispensing statistics

The following information can be read for each type of beverage:

- Cup sizes
- Canceled dispensing processes
- Output time
- Extraction time
- Beverage modified

In the **Date/Time** column, the date on which the beverage was dispensed is entered, including the time. The values, such the cup size, for the various dispensed beverage options are also listed.

Setting > Info – Water hardness statistics

Authorized profiles:	Caretaker
Function:	Shows information about the water hardness settings made to date.
Setting range:	No setting possible
Standard:	–

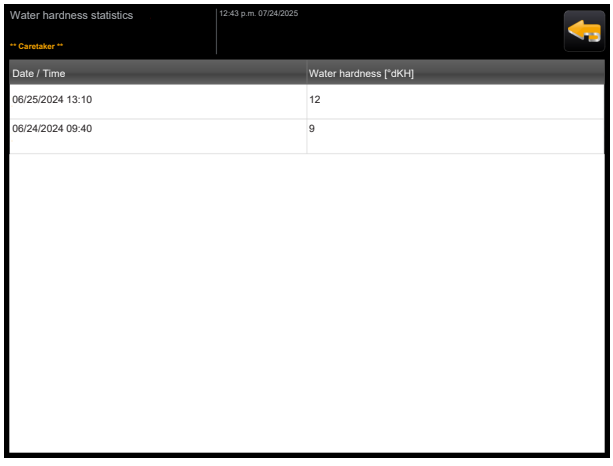


Fig. 231: Water hardness statistics

The following information can be read off:

- Date and time
- Water hardness

Each adjustment to the water hardness is listed in a new entry.

Settings > Info – Machine accounting statistics

Authorized profiles:	▪ Caretaker

Settings > Info – Machine accounting statistics	
	▪ Bookkeeper ▪ Bookkeeper reduced
Function:	Provides information on the number of beverages dispensed with or without a sale and the total of these beverage prices.
Setting range:	Since last reset/Since initialisation
Standard:	–

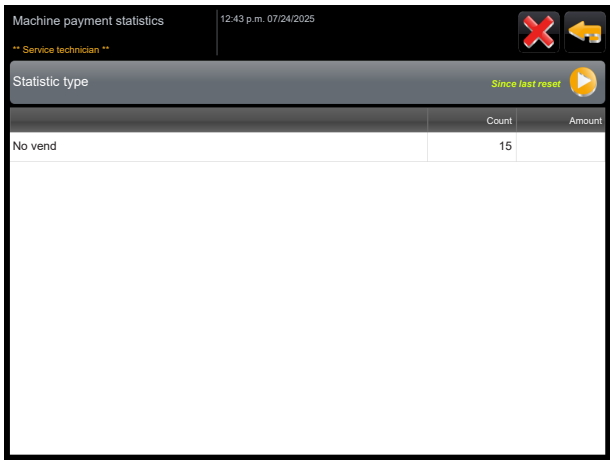


Fig. 232: Machine payment statistics

Since last reset

The **Since last reset** statistics can be deleted. This makes it possible to allow counters to run for a specific time.

☞ Open the dropdown list with the button.

☞ Select the **Since last reset** statistic.

☞ Tap on .

P An instruction for confirmation appears.

☞ Confirm with .

✓ The **Since last reset** statistic is deleted.

Since initialization

The statistics with the **Since initialisation** setting cannot be deleted. **Initialisation** means **since commissioning**.

Settings > Info – Beverage accounting statistics	
Authorized profiles:	▪ Caretaker ▪ Bookkeeper ▪ Bookkeeper reduced
Function:	Provides information about all dispensed beverages, their configuration, the number of beverages and their price. Depending on the default setting, the user statistics show the entries **Since the last reset** or as complete statistics **Since initialisation** (commissioning).
Setting range:	Since last reset/Since initialisation
Standard:	–

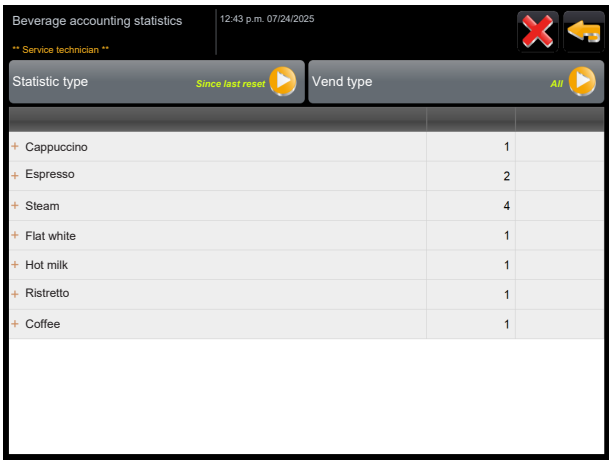


Fig. 233: Beverage accounting statistics

The following sales types are available:

- All
- No sale (all beverage without payment are listed.)

Since last reset

The **Since last reset** statistics can be deleted. This makes it possible to allow counters to run for a specific time.

☞ Open the dropdown list with the button.

☞ Select the desired statistic and the sales type.

☞ Select the **Since last reset** statistic.

✓ The selected statistic with sales type appears.

☞ Tap on .

✓ An instruction for confirmation appears.

☞ Confirm with .

✓ The **Since last reset** statistic is deleted.

Since initialization

The statistics with the **Since initialisation** setting cannot be deleted. **Initialisation** means **since commissioning**.

13.3.5 Saving changes and loading them into the machine

To save and load changes to the settings:

☞ Save the selection with .

☞ Exit the parameter and the setting with .

☞ Load the changes to the setting/parameter into the machine with .

✓ The machine restarts.

14 Troubleshooting

This chapter contains information about remedying problems and faults in the machine.

14.1 Type of fault display

A distinction can be made between the following error messages:

- Display via the functional lighting
- Messages in the display

14.2 Meaning of the functional lighting

The machine is equipped with functional lighting as standard. In addition to messages on the display, error messages are indicated by illuminated LED color strips on the machine.

The different colors have the following meanings:

- **White**: The machine is ready for use.
- **Orange**: Action is required soon (e.g. refilling, cleaning).
- **Red**: Machine error (e.g. grinder blocked, water flow error)

14.3 Notifications on the display

The following messages on the display can be distinguished:

- Simple error message
- Specific error message
- Error message in the Service menu

Simple error message

- **Simple error message** is activated in the user interface for **Display notification mode**.
- In the event of an error message, the machine remains out of operation until the service staff acknowledges the message.
- The **Inform service staff** instruction is displayed.
- The error message cannot be acknowledged.

☞ Inform the service staffs.

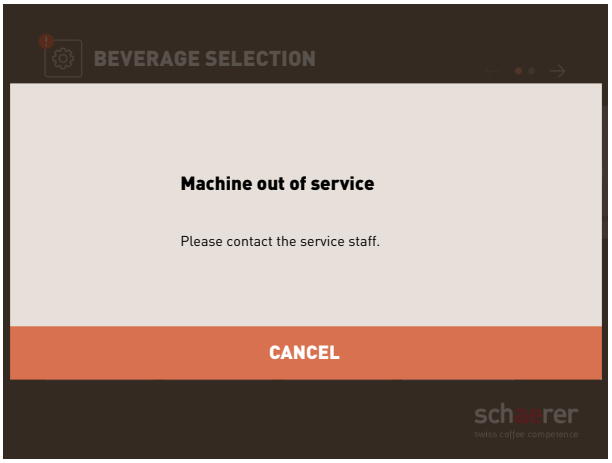


Fig. 234: Simple error message

Specific error message

- **Specific error message** is activated in the user interface for **Display notification mode**.
- In the event of an error message, the machine is briefly out of operation.
- **Restart** or **Inform service technician** instruction appears.
- Error messages can be partially acknowledged.

☞ Depending on error type: Befolgen Sie die Handlungsaufforderung und quittieren Sie die Fehlermeldung oder tippen Sie **OK** für einen Neustart.

✓ The pending error is acknowledged or the machine restarts.

✓ The machine is ready for use again.

☞ If the error message cannot be acknowledged, inform the service technician.

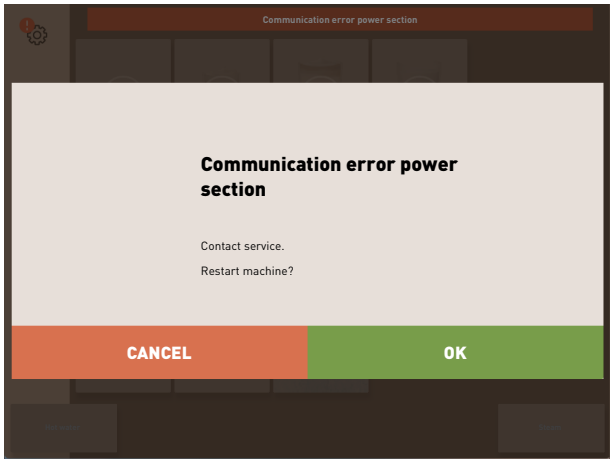


Fig. 235: Screen with error message



Fig. 236: Area with error message

Error message in the Service menu

In addition to the error messages in the user interface, the error messages are displayed in the Service menu.

Service menu button

The **Service menu** is opened with the Service menu button.



Fig. 237: Service menu button with messages

In the user interface, the **Service menu** button provides information about pending information or error messages:

- **Without color code**: No messages are pending in the Service menu.
- **Orange**: Information is pending in the Service menu.
- **Red**: Error messages or instructions for action are pending in the Service menu.

Calling up error message in the Service menu

☞ Tap on the **Service menu** button.

✓ The Service menu opens and all pending error messages are listed.

☞ Open the error message with the button.

☞ Carry out the displayed instruction for action and acknowledge any errors with **OK**.

☞ If the error message cannot be acknowledged, inform the service technician.

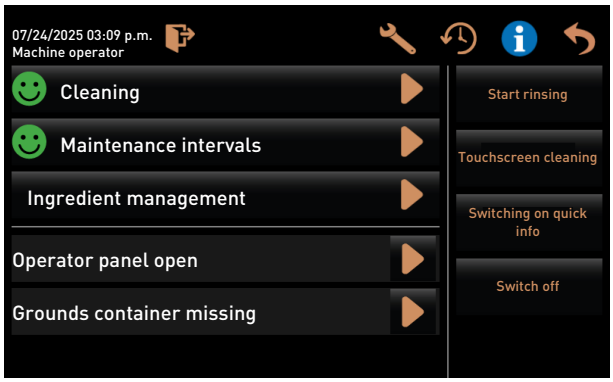


Fig. 238: Service menu with error message

14.4 Faults with display messages

In the case of faults with a display message, a distinction is made between the following categories:

- Fault
- Error
- Instruction
- Note

14.4.1 “Fault” display message

The following display messages are highlighted in red in the control system.



⚠ CAUTION

Risk of crushing due to moving components!

The beverage outlet and operating unit 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 operating unit 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 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.

Display message	Cause	Remedy
Center grinder (standard), right grinder (equipment variant) overloaded	An excessively high current value (>8 A) was measured over a defined period of time. The machine tries to restart grinding five times, then this message appears. There are coffee ground residues in the waste water.	☞ Switch the machine off. ☞ Check the grinder for blockages and remove any foreign objects. ☞ Restart the machine.

Display message	Cause	Remedy
Center grinder (standard), right grinder (equipment variant) blocked.	If the grinder (center or right) is overloaded and a beverage is requested again in this state, this message appears. Beverage dispensing is blocked.	☞ Switch the machine off. ☞ Check the grinder for blockages and remove any foreign objects. ☞ Restart the machine. ☞ If the fault persists, contact your service partner.
Tea hot water boiler or coffee overtemperature	The water supply is interrupted.	☞ Check the level of the external/internal drinking water tank (equipment variant) and the condition of the mains water supply.
	The machine is overheated.	☞ Disconnect the machine from the power supply and let it cool down.
	The SSR is defective.	☞ If the fault persists, contact your service partner.
	The Klixon has triggered.	
Steam boiler excess temperature	The water supply is interrupted.	☞ Check the level of the external/internal drinking water tank (equipment variant) and the condition of the mains water supply.
	The steam system is clogged.	☞ Check and clean the beverage outlet and the steam system.
	The machine is overheated.	☞ Disconnect the machine from the power supply and let it cool down.
	The SSR is defective.	☞ If the fault persists, contact your service partner.
	The Klixon has triggered.	
Hot water boiler heating time-out, steam boiler heating time-out	Although the heating is switched on, the set temperature was not reached within 5 min.	☞ If the fault persists, contact your service partner.
Hot water boiler NTC short-circuited, steam boiler NTC short-circuited	The main board does not detect any resistance. A maximum temperature (approx. 150 °C or 302 °F) is measured. Beverage dispensing is blocked.	☞ If the fault persists, contact your service partner.
Hot water boiler NTC interrupted, steam boiler NTC interrupted	The temperature sensor is interrupted. A minimum temperature sensor is measured.	☞ If the fault persists, contact your service partner.
Brewing unit overcurrent	Overcurrent was detected on the motor of the brewing unit.	☞ If the fault persists, contact your service partner.
Brewing unit closed current	Even if the brewing unit is not in operation, it must be able to draw a minimum current. If this is not the case, there is a fault. This may be caused by the brewing unit, the power board or the wiring.	☞ Check the brewing unit for blockages. ☞ If the fault persists, contact your service partner.
Brewing unit time-out	The brewing unit does not have a home position switch. The position of the brewing cylinder is detected by measuring the current value. The following peak values are detected: Upper and lower position. The following time-out is defined: If no current peak is detected within 10 s of the brewing unit being moved, **Brewing unit time-out** is displayed.	☞ If the fault persists, contact your service partner.
Water flow error	During dispensing of a coffee product, the flow meter performs less than the defined number of minimum	☞ Check the level of the drinking water tank or the condition of the mains water supply.

Display message	Cause	Remedy
	revolutions. A blockage or partial blockage somewhere in the entire water system is likely.	☞ Check the internal or external drinking water tank. (Saturation of the filter reduces the water flow.) ☞ Check whether the upper piston is blocked or partially blocked. ☞ Check the grinding level. If the grinder setting is too fine, this can inhibit or completely block the water flow. ☞ If the fault persists, contact your service partner.
Steam supply error	The level sensor detects a low level in the steam boiler. An attempt is made to fill the boiler. However, no water was detected by the level probe within 60 s. The filling process is canceled. The dispensing of beverages that require steam is blocked.	☞ If the fault persists, contact your service partner.
Modbus processing error BP	There is a communication error between the power unit and the touch screen.	☞ If the fault persists, contact your service partner.
Modbus processing error MV	Communication error between manometer and touch screen	☞ If the fault persists, contact your service partner.
Modbus processing error MR	Communication error between cooling unit and touch screen	☞ Check the wiring of the cooling unit and machine. ☞ If the fault persists, contact your service partner.
Machine out of service	Setting in Self-service mode if no beverages can be dispensed for various reasons	☞ Check products such as coffee beans, milk, choco powder or milk powder. ☞ Check the temperature sensor of the cooling unit. ☞ Carry out a pending cleaning or descaling. ☞ If the fault persists, contact your service partner.
Communication errors (various)	Communication error between software and various modules such as the HCU power unit, Flavour Point, brewing unit, manometer, etc.	☞ Restart the machine. ☞ If the fault persists, contact your service partner.

14.4.2 “Error” display message

The following display messages are stored in yellow in the control system.



⚠ 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.

Display message	Cause	Remedy
Brewing unit encoder error	The brewing unit motor encoder was not detected during machine initialization.	☞ Restart the machine. ☞ Contact your service partner if the error persists.
Error in electric grinding level adjustment for center, left or right	The motor of the electric grinding level adjustment is running incorrectly.	☞ Cancel the grinding level adjustment. ☞ Restart the machine. ☞ Contact your service partner if the error persists.
Machine configuration error	There is a discrepancy between the software and the machine hardware.	☞ Restart hardware detection. ☞ Restart the machine. ☞ Contact your service partner if the error persists.
Steam wand temperature sensor interruption	The steam wand temperature sensor is not closed.	☞ Restart the machine. ☞ Contact your service partner if the error persists.
Steam wand temperature sensor short circuit	The steam wand temperature sensor is defective.	☞ Restart the machine. ☞ Contact your service partner if the error persists.
Reset descaling/cleaning	Cleaning/Descaling was interrupted/ not fully completed.	☞ Carry out cleaning/descaling in the Service menu. ☞ Acknowledge cleaning/descaling in the Service menu.
Milk empty	The fill level in the milk container is too low.	☞ Remove the milk container. ☞ Clean the milk container thoroughly. ☞ Fill the milk container with fresh pre-cooled milk (3 – 5 °C or 37.4 – 41 °F) and put it back into the machine.
Grounds container full	The grounds container capacity has been reached.	☞ Empty the grounds container. ☞ Rinse out the grounds container and dry it. ☞ Reinsert the grounds container.

14.4.3 “Instruction” display message

The following display messages are stored in white in the control system.



⚠ CAUTION

Risk of crushing due to moving components!

The beverage outlet and operating unit 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 operating unit 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.

Display message	Cause	Remedy
Insert grounds container	The grounds container is missing or has not been fully inserted into the machine.	☞ Correctly insert the grounds container into the machine.
Close user panel	The user panel is open or has not been fully closed.	☞ Press the user panel down until it clicks into place.
Fill external drinking water tank (equipment variant)	The fill level of the external drinking water tank is too low.	☞ Remove the fill level monitor from the external drinking water tank. ☞ Rinse out the external drinking water tank with clean water and fill it. ☞ Reinsert the fill level monitor.
Empty waste water tank (equipment variant)	The fill level of the external waste water tank has been reached.	☞ Remove the fill level monitor from the external waste water tank. ☞ Rinse out the external waste water tank with clean water and fill it. ☞ Reinsert the fill level monitor.
Fill with beans (center grinder empty)	The center bean hopper is empty.	☞ Fill the bean hopper.
Fill with beans (right grinder empty)	The right bean hopper is empty.	☞ Fill the bean hopper.
Fill ground coffee in manual inlet	No ground coffee was poured into the manual inlet.	☞ Open the manual inlet in the center bean hopper. ☞ Fill with ground coffee. ☞ Close the manual inlet.
Fill choco or milk powder into 1st container (1st powder container empty)	The 1st powder container is empty.	☞ Refill the first powder container.
Insert decalcification cartridge	The descaling process requires the descaling product from the decalcification cartridge.	☞ Insert the decalcification cartridge. ☞ Remove the decalcification cartridge after descaling and when an instruction appears on the display.

14.4.4 “Note” display message

The following display messages are stored in blue in the control system.



⚠ WARNING

Risk of infection from contamination!

Contamination and milk residues in the milk container can lead to infections. Infections can trigger health problems.

- Clean the milk container and cover before each filling.
- Wear protective gloves while cleaning.

Display message	Cause	Remedy
Caution: A blocked waste water outlet can cause flooding.	There are coffee ground residues in the waste water.	☞ Check the waste water outlet and drip tray for blockages and clean them.
Wait until telemetry connection is established or contact service.	The **Coffee Link** display is pending.	☞ Restart the telemetry system. ☞ If the fault persists, contact your service partner.
Milk level low	The fill level in the milk container is low.	☞ Fill up the milk.
Grounds container full soon	The set grounds container capacity will soon be reached.	☞ Empty the grounds container.
External drinking water tank soon empty (optional)	The fill level of the external drinking water tank is low.	☞ Empty the grounds container.
Hot water temperature too low, steam boiler temperature too low	The machine is in the heating-up phase.	☞ Wait until the machine has heated up.
	An error occurred during heating.	☞ Disconnect the machine from the power supply. ☞ Reconnect the machine to the power supply and switch it on.
Machine out of service	Setting in Self-service mode if no beverages are to be dispensed.	☞ Set the **Configuration – Timer operation** parameter setting accordingly. ☞ If the fault persists, contact your service partner.

14.5 Malfunctions without display messages



⚠ 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 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.

Fault	Cause	Remedy
The display is dark.	The machine is not connected to the power supply.	☞ Connect the machine to the power supply. ☞ If the fault persists, contact your service partner.
	The machine is not switched on.	☞ Switch the machine on. ☞ If the fault persists, contact your service partner.
There are no beverages with milk available.	The milk container is empty.	☞ Refill the milk container. ☞ If the fault persists, contact your service partner.
	The milk system is clogged.	☞ Clean daily. ☞ If the fault persists, contact your service partner.
	The milk system is incorrectly deactivated.	☞ Check the cable connection from the machine control cable to the cooling unit. ☞ Activate the milk system. ☞ If the fault persists, contact your service partner.
There are no beverages with milk foam available.	The milk container is empty.	☞ Refill the milk container. ☞ If the fault persists, contact your service partner.
	The milk system is clogged.	☞ Clean daily. ☞ If the fault persists, contact your service partner.
	The milk system is incorrectly deactivated.	☞ Check the cable connection from the machine control cable to the cooling unit. ☞ Activate the milk system. ☞ Clean daily. ☞ If the fault persists, contact your service partner.

15 Disassembly



⚠ 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 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.

After the period of use

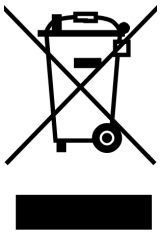
After the machine has reached the end of its service life

- Empty the machine.
- Disassemble the machine.
- Dispose of the machine in an environmentally-friendly manner.

16 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.

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