schaerer
swiss coffee competence

SKYE

Operating instructions

Original operating instructions

11.2024 en Doc. no.: 3370020488

Legal notice

Published by
Schaerer AG, P.O. Box 336, Niedermattstrasse 3b, CH-4528 Zuchwil

Edition
11.2024

Concept and editorial department
Schaerer AG, P.O. Box 336, Niedermattstrasse 3b, CH-4528 Zuchwil

Table of Contents

1 Safety

1.1 Signs and symbols

1.1.1 Safety notes

DANGER

An imminently dangerous situation that may result in death or serious injury.

The measures described for preventing this danger must be adhered to without fail.

WARNING

A generally dangerous situation that may result in serious injury.

The measures described for preventing this danger must be adhered to without fail.

CAUTION

A generally dangerous situation that may result in minor injury.

The measures described for preventing this danger must be adhered to without fail.

ADVICE

There is a situation that may result in damage to the machine.

The measures described for preventing this danger must be adhered to without fail.

1.2 Intended use

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

The bean hoppers 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.

This machine is intended for commercial use in hotels, restaurants and similar establishments. The machine can be installed at self-service locations and operated without supervision. The machine can be used in businesses, offices and other similar work environments, hotels, motels and bed and breakfast establishments and can be operated by non-experts and customers.

Use for these purposes is subject to these operating instructions. In legal terms, any other use is not an intended use. The manufacturer accepts no liability for damage resulting from unintended use.

The machine can be used by children aged 8 and up and by persons with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge, provided they are supervised or have been instructed about the safe use of the machine and understand the potential hazards resulting from said use. Children must not play with the machine. Children must also not be allowed to perform cleaning procedures or user maintenance without supervision. Only have cleaning and user maintenance done by persons who have knowledge of and practical experience with the device, particularly when it comes to service and hygiene.

Use is subject to the **General Terms and Conditions** of Schaerer AG and these operating instructions. In legal terms, any other use is not an intended use. The manufacturer accepts no liability for damage resulting from unintended use.

1.3 Foreseeable misuse

Any use of the machine beyond its intended use or in a different manner is considered misuse and can lead to dangerous 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 knowledge of and practical experience with the machine, particularly when it comes to service and hygiene.
- Have the machine supervised by trained staff in Self-service mode and in operation by staff so that they are available to the user for questions and to ensure compliance with the cleaning and maintenance measures.
- Use only insufficiently cooled milk.
- Only use the optional steam wand to foam milk.
- Never modify the safety devices of the machine.
- Only use the machine if it is working properly and is not damaged.
- Only pour coffee beans into the bean hoppers.
- Only pour coffee machine powder into the powder container.
- Only pour milk into the milk container.
- Only pour ground coffee into the manual inlet or insert a cleaning tablet during cleaning.

1.4 Operator responsibilities

The operating company must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a Schaerer AG service partner, a representative thereof, or other authorised persons. Schaerer AG must be notified in writing of any defects within 30 days! For hidden defects, this period is extended to 12 months from the date of installation (work report, handover report), but no later than 18 months after the product leaves the factory in Zuchwil.

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

The operator is responsible for compliance with the maintenance regulations.

1.5 Staff requirements

WARNING

Risk of injury due to insufficient qualification!

Improper handling can lead to personal injury and property damage.
All work may only be carried out by qualified staff.

Only people who can be expected to carry out their work reliably are authorised to work as staff. Persons whose ability to react is impaired, e.g. by drugs, alcohol or medication, are not authorised to work as staff.

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 tasks assigned to him/her and the possible dangers in the event of improper behaviour.

Specialist staff

Is considered to be someone who is able to do the work given to him/her and independently identify and prevent possible dangers as a result of his/her specialist training, knowledge and experience, as well as his/her knowledge of the relevant stipulations.

Service staff

Is a qualified person who has been specially trained by the manufacturer or operator for service tasks.

Qualified electrician

Is considered to be someone who is able to do work on electrical system and independently identify and prevent possible dangers as a result of his/her specialist training, knowledge and experience, as well as his/her knowledge of the relevant standards and stipulations. The qualified electrician is trained for the specific location where he/she is working and knows the relevant standards and regulations.

1.6 Residual risks

Maximum safety is one of the most important features of Schaerer AG products. The effectiveness of the safety devices can only be ensured if the chapter containing precautions to avoid injury and danger to health are adhered to.

These safety notes can be requested from Schaerer AG or downloaded directly from the Media Pool on the website (schaerer.com/member).

1.6.1 Risk of electrocution

DANGER

Risk of death due to electrocution!

Improper handling of electrical equipment can result in electrocution. There is a risk of death.

- Only have work on electrical systems performed by qualified electricians.
- Connect the device to a secured circuit.
- Route the connection via a residual current circuit breaker.
- Observe the relevant guidelines on low voltage and country-specific and local safety regulations and laws.
- Earth the connection in line with the regulations and secure it against electric shock.
- Make sure that the mains voltage corresponds to the specifications on the serial plate of the device.
- Never touch energised parts.
- Before carrying out service work, always switch off the main switch and disconnect the machine from the mains power supply.
- Make sure that all poles of the device can be disconnected from the mains power supply. Disconnected connections must be visible from the site of the device at all times, and a locking device must be used to ensure they stay disconnected.
- Only have the connection cable replaced by qualified service staff.

1.6.2 Danger from cleaning products

Before using cleaning products, read the information on the cleaning product packaging carefully. If it is missing, the safety data sheet can be requested from the sales company (see cleaning product packaging).

WARNING

Danger of poisoning from cleaning products!

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

- Keep the cleaning products out of reach of children and unauthorised persons.
- Do not ingest cleaning products.
- Never mix cleaning products with other chemicals.
- Only use the cleaning and descaling products for the intended purpose (see label).
- Do not eat or drink while using the cleaning products.
- While using the cleaning products, make sure that there is good ventilation and air circulation around you.
- Wear safety gloves when handling cleaning products.
- Wash your hands thoroughly after handling cleaning products.

Emergency information: Contact the cleaning product manufacturer (see cleaning product label) for the telephone number of the emergency information centre (Toxicological Information Centre). If your country does not have this type of institution, contact the following organisation:

Swiss Toxicological Information Centre	
International calls	+4144 251 51 51
Calls from Switzerland	145
Internet	www.toxi.ch

1.6.3 Danger from allergies

CAUTION

Health hazard due to additives!

Beverages containing additives or traces of additives may trigger allergies. There is a risk to health.

- In self-service operation: Observe the information sign attached to the machine. The information sign contains information about any additives used which could trigger an allergic reaction.
- When operated by staff: Inform the staff that any additional products may cause allergies.

1.6.4 Danger from batteries

CAUTION

Health problems due to contaminated water!

Improper handling of water can cause health problems.

- Make sure that the water is free of dirt and bacteria.
- Do not connect the machine to pure reverse osmosis water 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 litre.
- Make sure that the pH value is between 6.5 and 7 (pH-neutral).

CAUTION

Health problems due to contaminated coffee!

Improper handling of coffee can cause health problems.

- Check the packaging for damage before opening.
- Do not add more coffee beans than will be needed for one day.
- Close the bean hopper lid immediately after filling.
- Store coffee in a cool, dry, dark place.
- Store coffee separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use coffee before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

CAUTION

Health problems due to contaminated/incorrect milk!

Improper handling of milk can cause health problems.

- Do not use raw milk.
- Only use pasteurised or UHT milk.
- Use only homogenised milk.
- Use pre-cooled milk with a temperature sensor between 3 °C (37,4 °F) and 5 °C (41 °F).
- When working with milk, wear protective gloves.
- Use milk directly from the original packaging.
- Never refill milk. Always clean the container thoroughly before filling.
- Check the packaging for damage before opening.
- Do not add more milk than will be needed for one day.
- Close the milk container cover and cooling unit (internal and external) immediately after filling.
- Store milk in a dry and dark place at a maximum temperature of 7 °C (44,6 °F).
- Store milk separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use milk before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

CAUTION

Health problems due to coffee machine powder!

Improper use of coffee machine powder can be hazardous to health.

- Check the packaging for damage before opening.
- Do not add more coffee machine powder than will be needed for one day.
- Close the powder container lid immediately after filling.
- Store coffee machine powder in a cool, dry, dark place.
- Store coffee machine powder separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use coffee machine powder before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

1.6.5 Danger from heat

CAUTION

Scalding danger due to hot fluids!

There is a risk of scalding in the area where beverages, hot water and steam are dispensed.

- ▶ Never reach under the dispensing points while the machine is dispensing or during cleaning.

CAUTION

Hot surface!

The dispensing points and the brewing unit may be hot.

- ▶ Never touch hot machine parts.
- ▶ Do not touch any part of the beverage outlet except the grips provided for this purpose.
- ▶ Only clean the brewing unit when the machine has cooled down.

1.6.6 Danger from mechanics

CAUTION

Danger of crushing caused by moving components!

The beverage outlet and the user panel can be moved manually. During operation, the grinders and the brewing unit move. When working with moving components, there is a risk of fingers or hands becoming trapped.

- ▶ Do not touch any part of the beverage outlet except the grips provided for this purpose.
- ▶ Always push the user panel up or down using both hands.
- ▶ While the machine is switched on, never reach into the bean hoppers or into the opening of the brewing unit.

ADVICE

Material damage due to improper handling of the machine!

Improper handling of the machine can lead to property damage or contamination.

- For water with a carbonate hardness above 6 °dKH, install a limescale filter. Otherwise damage may occur due to calcification.
- Do not operate the machine if the water supply is blocked. Otherwise, the boilers will not be refilled and the pump will run dry.
- Schaerer AG recommends installing a water stop valve on the manufacturer side in the water connection to prevent water damage in case of hose breakage.
- After extended downtime (for instance company holidays), the machine must be cleaned before it is put back into operation.
- Protect the machine from weather elements (frost, moisture, etc.).
- In the event of malfunctions, observe the information in the **Troubleshooting** chapter and call in a qualified service technician if necessary.
- Only use original Schaerer AG spare parts.
- Report any noticeable damage or leaks immediately to an authorised service partner and have any affected parts replaced or repaired.
- Never spray the machine with water or clean it with a steam cleaner.
- Do not install the machine on a surface where a water jet might be used.
- When using caramelised coffee (flavoured coffee), clean the brewing unit twice daily.
- Only fill the bean hoppers with coffee beans, the powder containers with coffee machine powder, the milk containers with milk and the manual inlet with ground coffee (or cleaning tabs during cleaning).
- Never use freeze-dried coffee. This causes the brewing unit to stick.
- If the machine and/or auxiliary equipment is transported at temperatures below 10°C, store the machine and/or auxiliary equipment at room temperature for three hours before connecting the machine and/or auxiliary equipment to the power supply and switching them on. Otherwise condensation may cause short circuits or damage electrical components.
- Always use the new hose set supplied with the machine (drinking water/waste water hose). Never use old hose sets.

2 Technical data

2.1 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)	x	
Pot (500 ml)	x	
Americano[AC,]		x
White americano[**, **, AC,]		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

Available beverages	Standard	Option
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

2.2 Machine data

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

* For special equipment, see serial plate. The values specified here apply to the standard equipment.

Operating temperature	Steam boiler	Hot water boiler
Minimum operating temperature (T min.)	10°C	10°C
Maximum operating temperature (T max.)	192 °C	192 °C
Operating temperature	127 °C	95 °C

Overpressure	Steam boiler	Hot water boiler
Working pressure	0.25 MPa	Approx. 0.8 MPa
Permissible operating overpressure (p max.)	0.5 MPa	1.2 MPa
Test overpressure	2.4 MPa	2.4 MPa

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

External dimensions	
Width of machine	330 mm

External dimensions	
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 pressure	
Continuous noise pressure level	< 70 dB(A)*

* The A-weighted noise pressure level (slow) and Lpa (pulses) at the operating staff workstation is below 70 dB (A) in every operating mode.

2.3 On-site mains connection

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

Mains	Connection values			On-site fuse	Connection cable Wire cross-section
1L, N, PE	220 – 240 V AC	50/60 Hz	2000 – 2400 W	10 – 13 A*	3 x 1 mm²
2L, PE	200 V	50/60 Hz	1800 W	15 – 20 A*	3 x 1 mm²
2L, PE	208 – 240 V	60 Hz	1900 – 2400 W	15 – 20 A*	3 x 1 mm² 3 x 16 AWG

* The house fuse must not be higher than 32 A.

2.4 Water connection values

Water pressure	Minimum: Maximum:	0.1 MPa (14.50 psi) 1.0 MPa (145.04 psi)
Water inlet temperature	Minimum: Maximum:	10 °C (50 °F) 30 °C (86 °F)

Water quality

Chlorine content	Maximum:	Please observe the local regulations on the maximum permitted chlorine content.

pH value	Minimum: Maximum:	6.5 7
Carbonate hardness (German)	Minimum: Maximum:	4 °dKH 6 °dKH
Carbonate hardness (French)	Minimum: Maximum:	8 °fKH 12 °fKH
Total hardness		> Carbonate hardness

2.5 Ambient conditions

Ambient temperature	Minimum: Maximum:	+10 °C (50 °F) +40 °C (104 °F)
Relative humidity	Maximum:	80% RH
Height above sea level	Maximum:	2500 m (8202 ft)

2.6 Serial plate

Type designation	Model
SKYE	No model versions

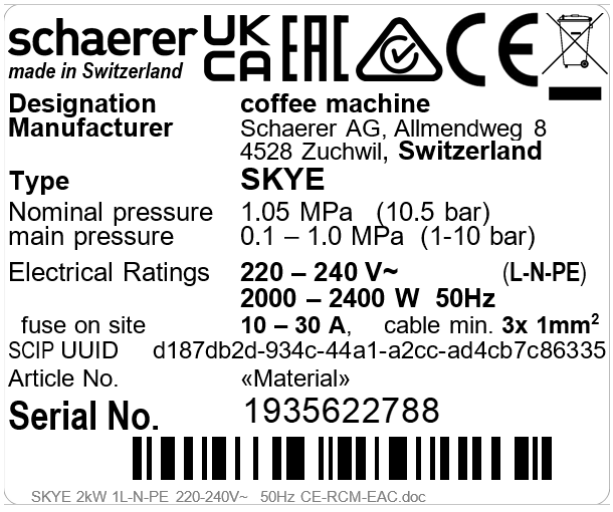


Figure: Serial plate

The serial 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 serial plate:

▶ Pull the grounds drawer out of the machine.

In the event of a fault or warranty claim, please provide the following information from the serial plate:

- Machine type
- Nominal power > e.g. 2000 ... 2400 W
- Nominal voltage > e.g. 220 ... 240 V
- Fuse value on site > e.g. 30 A
- Serial number > [YYCW XXXXXX] > e.g. 1935 XXXXXX

3 Compliance information

3.1 Manufacturer's address

Manufacturer	Documentation specialist
Schaerer AG P.O. Box 336 Niedermattstrasse 3b CH-4528 Zuchwil T +41 32 681 62 00 F +41 32 681 64 04 info@schaerer.com www.schaerer.com	Schaerer AG Director of R&D GBU PCM P.O. Box 336 Niedermattstrasse 3b CH-4528 Zuchwil

3.2 Applied standards

Schaerer AG declares herewith that this machine complies with all relevant stipulations of the specified directives. In case of any modifications of the devices that have not been approved by Schaerer, this declaration is rendered invalid. The following harmonised standards have been applied. A **DNV GL – Business Assurance** quality management system certified in accordance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 is used to ensure proper adherence to the requirements. Schaerer AG assumes sole responsibility for issuing this declaration of conformity.

The object of the declaration described above fulfils the requirements of directive 2011/65/EC of the European Parliament and Council from June 8, 2011 for limiting the use of certain hazardous substances in electric and electronic devices.

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

For compliance with European directives and ordinances	
WEEE Directive 2012/19/EU	POP Ordinance 2019/1021

For the EU Chemicals Regulation
REACH Ordinance 1907/2006/EC

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

CB	Scheme > International system for mutual recognition of test reports and certificates
CE	Requirements of harmonisation legislation of the European Community
CISPR	Special International Committee on Radio Interference
EC/EU	The European Community is part of the European Union consisting of EG/CFSP/PJCCM
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 "Registration, Evaluation, Authorisation and Restriction of Chemicals"
RED	European approval guidelines for radio equipment and receivers (radio communication)
RoHS	Restriction of hazardous materials
WEEE	Waste of Electrical and Electronic Equipment

4 Product description

4.1 Overview

The standard version is equipped with décor elements according to the configuration and an 8-inch touch screen.

Various options can be selected while ordering the machine.

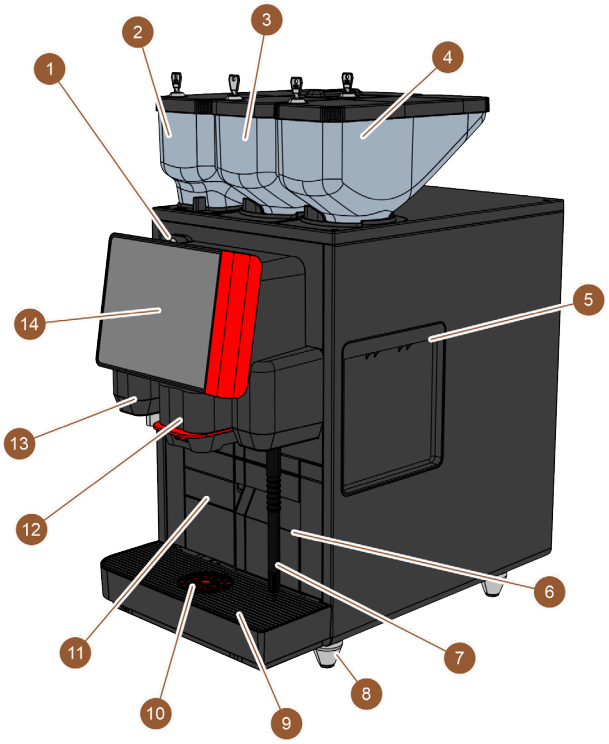


Figure: Machine overview

No.	Name	Explanation
1	Closing device of user panel	*See 4.3.4 "Closing device of user panel"*
2 – 4	Bean hoppers and powder container	The bean hoppers and powder container feed coffee beans or automatic machine powder to the machine.
5	Side panel opening	The openings on the two side panels provide access to the machine interior, e.g. to guide the milk hose to the other side.
6	Grounds container	The coffee cakes are collected in the grounds container.
7	Steam wand	The external steam wand allows for separate heating and foaming of milk.
8	Machine feet (optional)	The machine feet increase the distance from the standing surface by 40 mm or 70 mm (depending on the version).
9	Drip tray	The drip tray collects the water from cleaning and spilled coffee drops.

No.	Name	Explanation
10	Cup positioning aid (optional)	The cup positioning aid indicates the correct placement position of the cup.
11	Internal drinking water tank (variant)	The internal water tank provides the drinking water for beverage preparation.
12	Manual beverage outlet	The manual beverage outlet dispenses the beverage and must be moved up or down manually depending on the selected beverage.
13	Hot water outlet	Hot water can be dispensed manually through the hot water outlet.
14	User panel with touch screen	*See 4.3.2 "User panel with touch screen"*

4.1.1 Bean hoppers and powder container

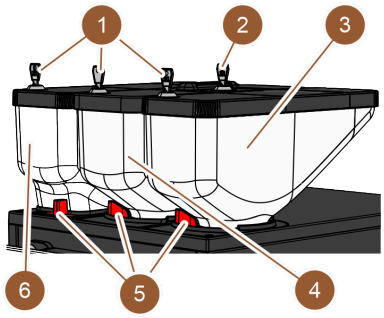


Figure: Bean hoppers and powder container

The bean hoppers and powder containers **(3, 4, 6)** are located on the top of the machine. Only the centre bean hopper **(4)** is available by default.

The hoppers and container can be removed from the machine; to do this, the locking mechanisms **(5)** must be released.

Closing devices: The hoppers and container can optionally be locked **(1)**. The manual inlet can also be optionally equipped with a lock **(2)**.

Second grinder with bean hopper: As an option, a second grinder with bean hopper **(3)** can be fitted to the right of the standard central grinder.

The second grinder makes espresso beans or decaffeinated coffee beans available.

The **second grinder** option cannot be retrofitted.

Powder system: As an option, a powder system with powder container **(6)** can be mounted to the left of the centre standard grinder.

The powder system makes choco and/or topping powder available.

If a powder system is installed in the machine, it has a mixing cup in which automatic machine powder and water are mixed before the beverage is dispensed.

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

The **powder system** option cannot be retrofitted.

4.1.2 Grounds container

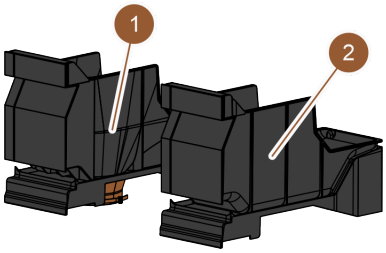


Figure: Grounds container

The grounds container is available in two versions:

- Standard grounds container **(2)**
- UC grounds disposal **(1)**

Standard grounds container: The coffee cakes are collected in the standard grounds container **(2)**.

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.

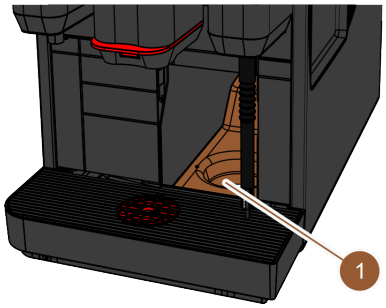


Figure: UC grounds disposal

UC grounds disposal: The grounds container and machine base can optionally be equipped with an opening at the bottom **(1)** so that coffee cakes can fall directly from the machine into a container under the counter (not included in the scope of delivery). The counter must also have an opening for this purpose.

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

The **UC grounds disposal** option can be retrofitted.

4.1.3 Machine feet

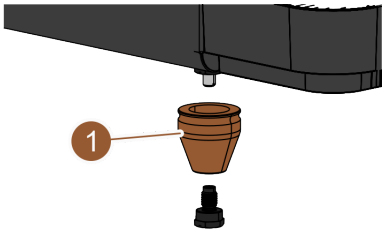


Figure: Machine foot – 40 mm

If under-counter optional accessories are used, machine feet **(1)** must be attached.

The **machine feet** option can be retrofitted. No screws are included with delivery.

4.1.4 Drip tray with cup positioning aid

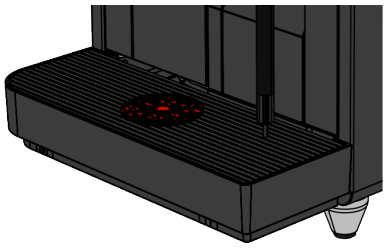


Figure: Drip tray

The drip tray collects spilled beverages, drops and cleaning water. The drip tray is equipped with a sensor that signals when the drip tray needs to be emptied. The drip tray is available in the following versions:

- Without opening for the waste water outlet
- With opening for the waste water outlet

With opening for the waste water outlet: The drip tray must be connected to a waste water hose during installation that is either led into an external waste water tank or connected directly to the waste water connection.

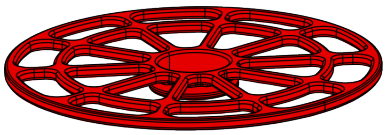


Figure: Cup positioning aid

Cup positioning aid: A cup positioning aid can optionally be inserted into the cup platform of the drip tray. This is a 1-cup positioning aid for dispensing single beverages.

4.1.5 Internal drinking water tank

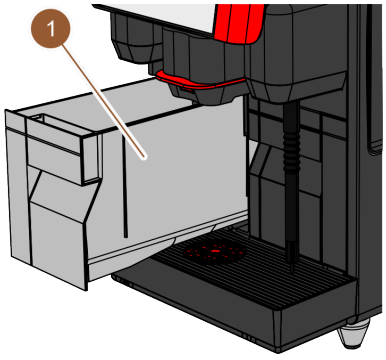


Figure: Internal drinking water tank

The machine is equipped with an internal drinking water tank **(1)** by default. The requirement for mobile use of the machine is fulfilled by an internal drinking water tank. The internal water tank cannot be retrofitted.

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

4.1.6 Manual beverage outlet

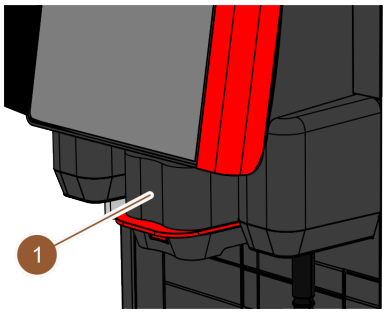


Figure: Manual beverage outlet

The height of the manual beverage outlet **(1)** 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 coloured red or black.

The beverage outlet must be cleaned regularly.

4.1.7 Hot water outlet

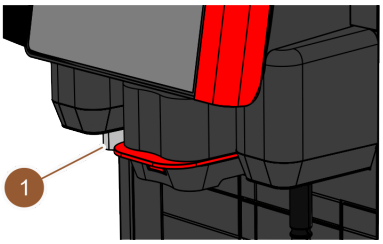


Figure: Hot water outlet

The machine is equipped with a separate hot water outlet **(1)** 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.

The **hot water via central beverage outlet** option cannot be retrofitted.

4.1.8 Grinder

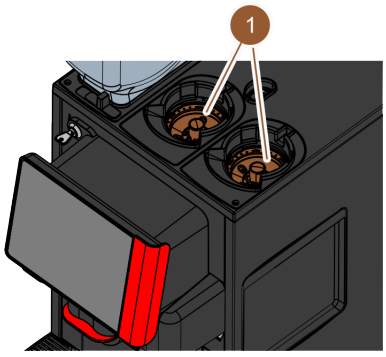


Figure: Grinder

The machine is equipped with one grinder **(1)** per bean hopper.

The grinder grinds the beans fresh during beverage preparation and conveys the ground powder into the machine to the beverage outlet.

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

4.1.9 Ambient light with function

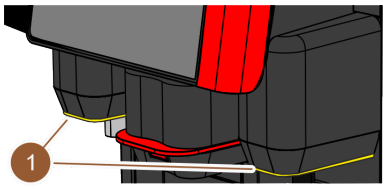


Figure: Functional lighting

The machine is equipped with functional lighting **(1)**. The functional lighting on the left and right of the beverage outlet is colour-coordinated and also provides information about the operating condition of the machine.

- **White**: The machine is ready for use.
- **Orange**: Action due soon (refilling, cleaning, etc.)
- **Red**: Machine error (milk empty, grinder blocked, water flow error, etc.)

4.1.10 Décor elements

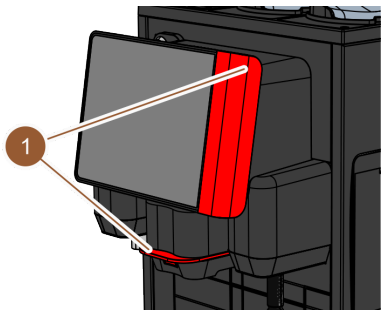


Figure: Décor elements

The machine is provided with décor elements **(1)** (black or red).

The décor elements can match the machine to the surroundings.

The **décor elements** option can be retrofitted or the colours changed.

4.2 Connections and interfaces

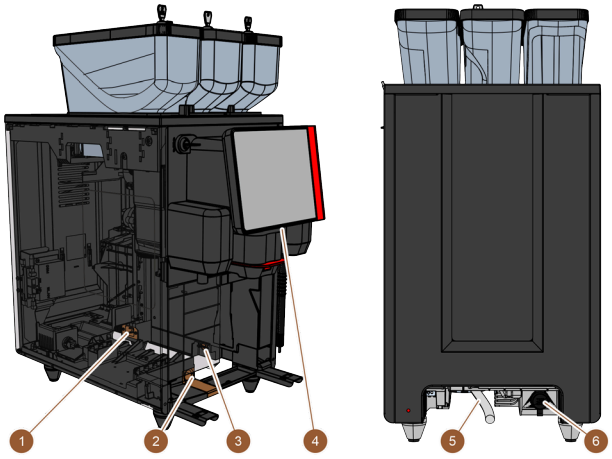


Figure: Connections and interfaces of machine

No.	Name	Explanation
1	Electrical connection	The electrical connection is located inside the machine in the rear area and supplies the machine with power.
2	Waste water connection	A hose can be attached to the waste water connection and the waste water can be discharged from the machine.
3	Communication interface	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.
4	USB port	A type A USB port is located in the lower area of the user panel. A cover must be opened to gain access to the USB port.
5	Fresh water connection	The fresh 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.
6	Universal connection	The universal connection can be equipped with the following interfaces: • None • Ethernet • MDB • RS-232

4.3 Operating elements

4.3.1 Machine operating elements

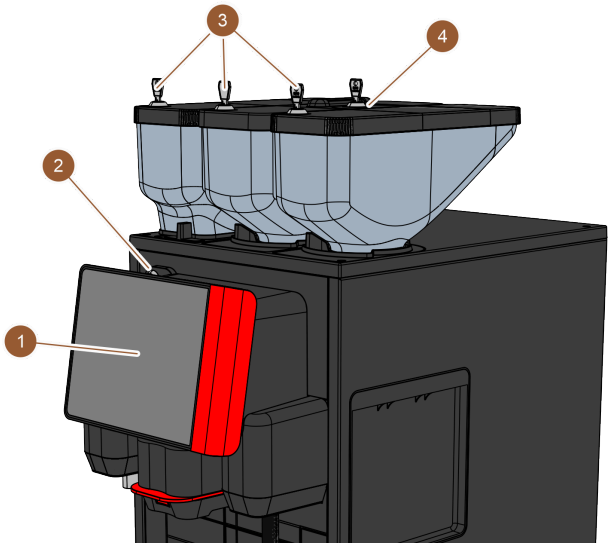


Figure: Overview of external operating elements

1. User panel with touch screen
2. Closing device of user panel
3. Closing devices of bean hoppers and powder containers
4. Manual inlet

The 8-inch touch screen **(1)** is used for operation of the machine.

The user panel can be locked when closed **(2)** to prevent access for unauthorised persons.

The bean hoppers and powder containers are optionally equipped with closing devices **(3)** to prevent access by unauthorized persons.

The manual inlet **(4)** is intended for ground coffee or cleaning tabs. The manual inlet can be equipped with a closing device as an option.

4.3.2 User panel with touch screen

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

See 7 "Operation"
See 10 "Programming"

4.3.3 Operating elements behind the user panel

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

See 7.1.5 "Opening and closing user panel"

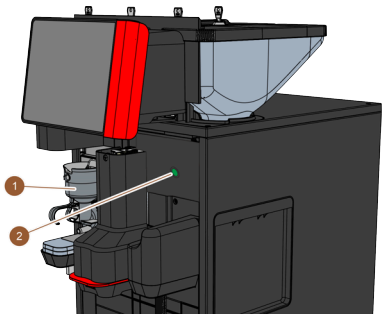


Figure: Overview of the operating elements – operating elements behind the user panel

The following operating elements are available behind the user panel:

1 Mixing cup for choco or topping powder system (option)

2 On/Off button

4.3.4 Closing device of user panel

The closing device ensures that the user panel is kept in the closed position and secured against unauthorised opening.

- Key to the left: Opens the closing device.
- Key to the right: Closes the closing device.

4.3.5 Manual inlet

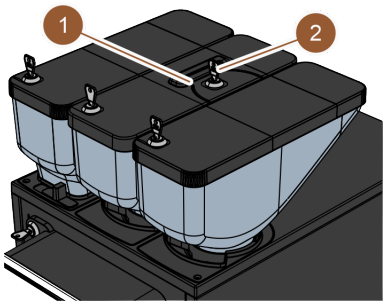


Figure: Manual inlet

A manual inlet **(1)** is integrated in the centre bean hopper by default. The manual inlet is used to add ground coffee (e.g. decaffeinated coffee). 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 the cleaning tablet (Coffee pure tab).

The manual inlet is optionally available with a closing device **(2)**.

4.3.6 Closing device of bean hoppers and powder container (option)

The bean hoppers and powder container can be optionally equipped with closing devices to allow only authorised groups of people to fill them.

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

4.3.7 Mixing cup

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 automatic machine powder with hot water before dispensing the beverage.

4.3.8 Machine on/off button

The on/off button is located behind the user panel. Briefly pressing the on/off button starts the machine. Pressing it for four seconds switches the machine off.

4.4 Equipment variants

4.4.1 Steam wand

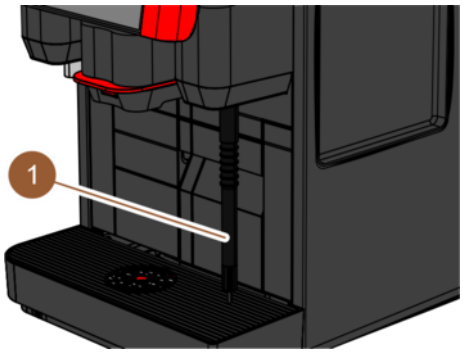


Figure: Steam wand

The machine can optionally be equipped with a steam wand **(1)**.

The steam wand function allows for separate manual milk heating and barista-style milk foaming.

The steam wand is mounted to the right of the beverage outlet and the position is equipped with functional lighting.

The steam wand is available in the **Powersteam** and **Supersteam** version.

The **steam wand** option cannot be retrofitted.

4.4.2 External drinking and waste water tank

Figure: External drinking and waste water tank

The requirement for mobile use of the machine is met by the optional device with the **external drinking and waste water tank**. If an external drinking and waste water tank is to be used, the machine must be equipped with a mains water supply (not with the internal drinking water tank).

If the external drinking and waste water tank is to be used, the drip tray must be equipped with an opening. The level of the tank is monitored and the tank can be retrofitted.

4.4.3 Schaerer Coffee Link data exchange

Figure: Data exchange

The **Schaerer Coffee Link** digital solution provides comprehensive information for quality assurance as well as for monitoring and optimising individual business processes. Various types of data can be read from the machine via the Schaerer "Coffee Link" web portal.

The "Schaerer Coffee Link" option can be retrofitted.

4.4.4 Pure Foam™ fresh milk system

Figure: Pure Foam™ fresh milk system

The **Pure Foam™** option makes it possible to automatically heat and foam milk in an integrated manner just like a barista does.

Cold milk can be dispensed.

If the **Pure Foam™** option is used, a cooling unit must be present.

The **Pure Foam™** option cannot be retrofitted.

4.4.5 Additional water for preparing americanos

Figure: Additional water

In addition to dispensing coffee, hot water (additional water) can be dispensed into the cup through the beverage outlet.

This option suited to preparing **americanos**.

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

The **additional water** option cannot be retrofitted.

4.4.6 Brewing accelerator

Figure: Brewing accelerator

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

The **brewing accelerator** option cannot be retrofitted.

4.4.7 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)

4.4.7.1 SKYE with side cooling unit

Figure: 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 delivered with a milk connection at the left by default.

Placement on the right side of the machine requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the side cooling unit.

4.4.8 Cup & Cool

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

Figure: Cup & Cool

The **Cup & Cool** optional accessory is available in the *narrow* and *wide* variants.

The narrow variant is placed to the *left* of the machine.

The *wide* variant can also be placed between two machines in the Centre Milk version.

ADVICE

Conversion of machine

Placing the **Cup & Cool** anywhere other than to the left of the machine requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the side cooling unit.

5 Transport

5.1 Scope of delivery and accessories

Quantity	Designation
Documentation	
1	Operating instructions (OI)
1 *	Supplementary instructions of optional accessories (cup warmer + Cup & Cool)
1 *	Cooling unit operating instructions
Machine scope of delivery	
1	SKYE drip tray
Connection cable for SKYE, 2 kW version	
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 SKYE, 3 kW version	
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 mains plug - C19W 2 m
General scope of delivery	
1	Coffee measuring spoon brown
1	Single brewing chamber
Cleaning/Maintenance scope of delivery	
1	Brush 75-40 (brewing chamber)
1	Cleaning brush (beverage outlet)
Milk system *	
1	Cleaning container 1 l bl
1	Cover of cleaning container 1 l bl
1 * , **	Milkpure powder & Coffeepure tabs delivery set
	Cleaning tabs 100 pcs. Coffeepure tabs (equipment without milk)
Drip tray with drain *	
1	Hose clamp 29 open

Quantity	Designation
1	Spiral hose 20 PVC green
Machine feet *	
4	Screw foot M10 x 15 rubberised
4	Foot 40 x 40
Internal drinking water tank *	
1	Replacement cartridge 200
1	Adapter for replacement cartridge 200
1	Cleaning container 4 l Milk Smart
Mains water supply	
1	Armoured hose DN8 X 1500 ÜM 3/8 - ÜM 3/4 90°
Grounds disposal *	
1	Cable tie 4.8 x 368 PA bl

* Optional, depending on machine model

** Only one of the articles

*** Language-specific article number

5.2 Transport conditions

CAUTION

Risk of injury during transport!

Improper transport of the machine can lead to injuries.

▶ Observe the general regulations for health and safety in accordance with the local provisions.

ADVICE

Material 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.

▶ Disconnect the following before relocating the machine:
- Drinking water supply
- Power supply
- Waste water outlet

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

6 Installation and commissioning

6.1 Unpacking

CAUTION

Cutting and eye injury due to packaging material!

Packaging materials with sharp edges can cause injuries. Cutting straps can cause eye injuries.

▶ Wear gloves and safety goggles when unpacking.

6.1.1 Unpacking machine

1. Unpack the machine.
2. Remove the supplied accessories from the accessory box.
3. Check the remaining contents of the packaging for supplied accessories.
4. Check the delivery for completeness.
5. Keep the original packaging for possible return.

6.1.2 Unpacking accessories

The following accessories are delivered:

- Operating 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 cleaning brush

6.2 Setup

6.2.1 Installation conditions

The location where the machine is set up must meet the following conditions:

- The installation surface must be stable, horizontal and level so that it does not become deformed under the weight of the machine.
- The machine must not be set up on hot surfaces or near heat sources.
- 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 plans.
- 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.

6.2.2 Climatic conditions

The following climatic conditions apply to the location of the machine:

- Ambient temperature of +10 °C to +40 °C (+50 °F to +104 °F)
- Relative humidity of max. 80 % RH
- Maximum height above sea level of 2500 m (8202 ft)
- The machine is designed exclusively for indoor use. It must not be used outdoors and must never be exposed to weather conditions (rain, snow, frost).

6.3 Installation

The machine must be installed in accordance with the applicable national and local electrical and plumbing regulations. This includes an adequate non-return mechanism.

See 6.2.1 "Installation conditions"
See 6.3.1 "Connecting power supply"

The following connections are required at the installation site:

- Socket for mains plug
  - The serial plate provides information about the maximum required fuse.
  - The serial plate provides information about the minimum required fuse.
- Mains water supply 3/8" or connection to the external drinking water tank
- Siphon or external waste water tank for waste water hose Ø 20 mm
- Optional interface for communication of the machine with the optional accessories

All machine-side connections are ready for use at the time of delivery.

1. For better accessibility, position the rear of the machine approx. 5 cm (2") above the support plate.
2. Prepare the connections on the installation side.

6.3.1 Connecting power supply

DANGER

Risk of death due to 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 all poles of the device can be disconnected from the mains power supply.
- ▶ 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 ground fault circuit interrupters ensure response even with smooth DC residual currents. This ensures a high level of safety.
- ▶ Never operate a device with a defective connection cable. Have a defective connection cable or plug replaced immediately by a qualified service technician.
- ▶ Schaerer AG does not recommend using an extension cord. If an extension cord is used in spite of this (minimum cross-section: 1.5 mm²), observe the manufacturer data for the cable (operating instructions) and comply with the locally applicable regulations.
- ▶ Route the connection cable in such a way that it does not pose a tripping hazard. Do not pull the cables over corners or sharp edges, pinch them between objects or allow them to hang loosely in a room. 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 by its connection cable.
- ▶ Never touch the cable or plug with wet hands. Never insert a wet plug into a power socket.

DANGER

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

Use of a faulty connection cable or one that is not the original cable results in the risk of electric shock and fire.

- ▶ Only use original connection cables. The original connection cable for your country can be obtained from your service partner.
- ▶ Connection cables that are plugged in on both sides can be replaced by the customer.
- ▶ Have connection cables with a fixed connection replaced by a service technician.

The equipment must be connected in accordance with the regulations of the country in which it is installed. The voltage specified on the serial plate must match the mains voltage at the installation location. The mains socket and mains switch must be accessible to the operator at the installation site.

- ▶ Establish the mains connection.

See 4 "Product description"
See 2 "Technical data"

6.3.2 Connecting water supply

The following variants are available for the drinking water connection:

- Mains water supply
- External drinking water tank
- Internal drinking water tank

The following variants are available for the waste water connection:

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

External drinking and waste water tank variant

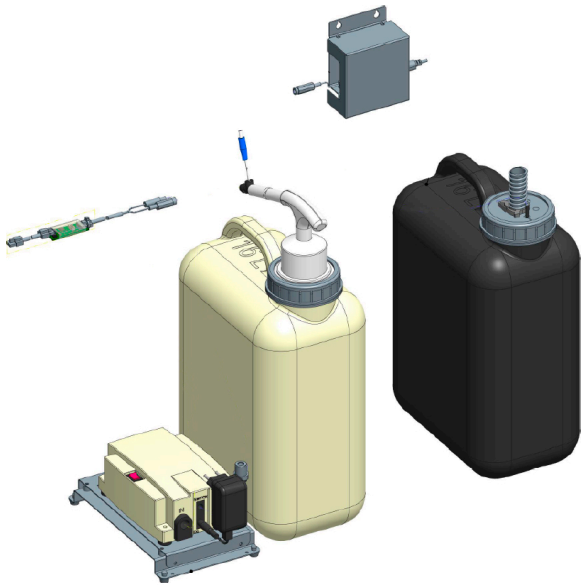


Figure: External drinking and waste water tank

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 for the SKYE** contain information on setting up and connecting the external drinking and waste water tanks. The conversion instructions can be requested from Schaerer AG or downloaded directly from the **Media Pool** on the website (www.schaerer.com/member).

Internal drinking water tank variant

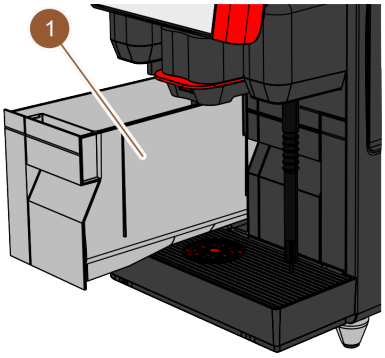


Figure: Internal drinking water tank

If the internal water tank **(1)** is integrated in the machine, it is not necessary to connect the drinking water.

Drip tray variant without opening

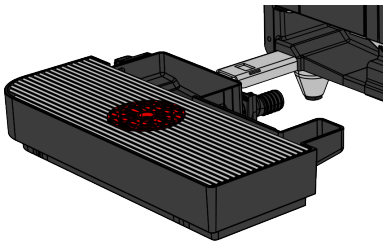


Figure: Drip tray without opening

If the drain of the drip tray is closed, no waste water hose can be connected. The level of the drip tray is monitored and must be emptied regularly.

6.3.3 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.

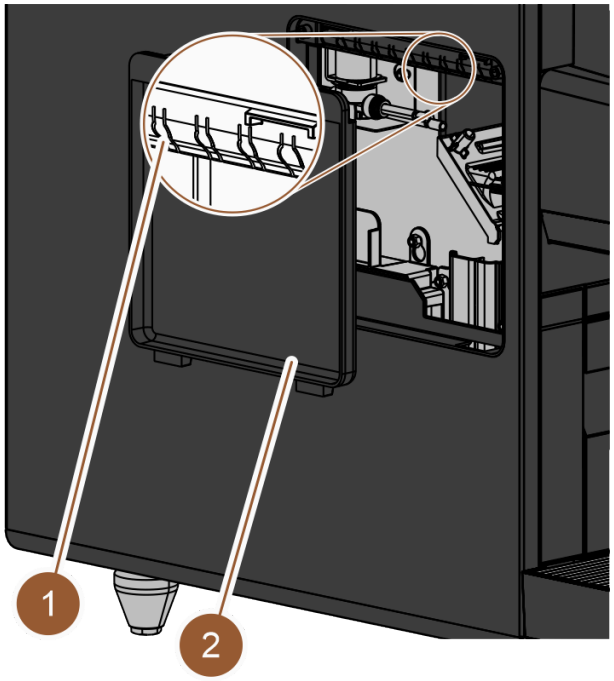


Figure: Cover on the left side housing

1. Make sure that the adapter at the end of the milk hose has been removed.
2. Remove the cover **(2)** to the left side housing. To do this, use a screwdriver to push the catch on the top cover upwards in the centre.
3. Unroll the milk hose located inside the machine.
4. Break out one of the plastic pieces **(1)** at the opening in the left side housing at the pre-punched point.
5. Push the milk hose through the broken-out hole.
6. Push the milk hose through the opening in the cover.
7. Attach the cover **(2)** to the left side housing.
8. Shorten the milk hose.

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

Changing milk hose to the right

As standard, the milk hose for the cooling unit from the machine is routed out to the left. If the optional accessory is to be placed to the right of the machine, the milk hose must be converted.

Separate conversion instructions with the possible milk hose versions are included with the optional accessory.

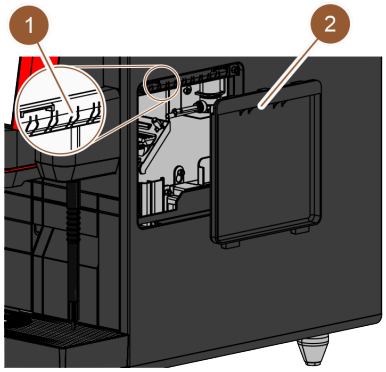


Figure: Cover on the right side panel

1. Make sure that the adapter at the end of the milk hose has been removed.
2. Remove the covers **(2)** on both side panels of the machine. To do this, use a screwdriver to push the catch on the top cover upwards in the centre.
3. Unroll the milk hose located inside the machine.
4. Guide the milk hose through the inside of the machine and lead it out of the machine on the right side.
5. Break out one of the plastic pieces **(1)** at the opening in the right side housing at the pre-punched point.
6. Push the milk hose through the broken hole.
7. Push the milk hose through the opening in the cover.
8. Attach the covers **(2)** on both side panels.
   ✓ The side cooling unit can be positioned to the right of the machine.

6.4 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.

6.4.1 Connecting optional accessories to power supply

All optional accessories require a mains connection 230 V / 50 Hz. The mains connection is established via an assembled and tested connection cable that is supplied with the optional accessories.

6.4.2 Establishing communication connection (CAN bus)

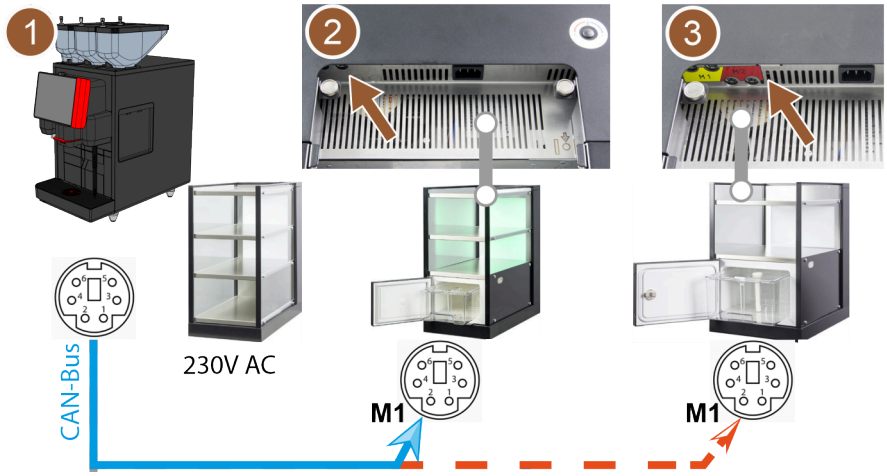


Figure: CAN bus connections from the machine to optional accessories

1. Milk to ...[**2**] or [**3**]
2. Cup & Cool narrow/wide
3. Cup & Cool thin/wide Centre Milk

The following optional variants are possible:

- Machine **(1)** to Cup & Cool narrow/wide **(2)**
- Machine **(1)** to Cup & Cool wide Centre Milk **(3)**

1. Establish the CAN bus connection using a control cable with a 6-pole DIN plug. To do this, connect the control cable to the communication interface of the machine.
2. Connect the other end of the control cable to the desired optional accessory.

Connecting milk hose to the optional accessory

Figure: Milk container (example)

1. Establish a communication connection.
2. Place the adapter **(1)** on the milk hose of the machine.
3. Connect the adapter of the milk hose **(1)** to the riser pipe **(2)**.
4. Insert the riser pipe **(2)** into the milk container **(3)** 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.

6.5 Display-guided commissioning

The commissioning programme automatically starts the first time the machine is switched on. It explains all aspects of installation. Service technicians can start the commissioning programme manually at any time.

See 7.2 "Switching on“

7 Operation

7.1 Recurring additional tasks

7.1.1 Filling bean hoppers

CAUTION

Danger of injury due to rotating grinding discs!

There is a risk of cuts due to rotating grinding discs in the grinder.
- ▶ Never reach into the bean hopper when the machine is switched on.
- ▶ Wear gloves when cleaning.

ADVICE

Material damage due to clogging/blocking!

Filling the hopper with foreign objects can lead to clogging, blocking or destruction of the grinder.
- ▶ Never fill the bean hopper with anything other than coffee beans.

When refilling, select the maximum fill level so that the contents do not touch the container cover.

Figure: Bean hopper with max. filling quantity

1. Variant with bean hopper locking mechanism: Open the bean hopper lock with the key.
2. Remove the bean hopper cover.
3. Fill the bean hopper.
   ADVICE Note the maximum fill level.
4. Close the bean hopper with the cover.
5. Variant with bean hopper locking mechanism: Lock the bean hopper lock with the key.
   ✓ The bean hopper is filled and locked.

7.1.2 Filling powder container

WARNING

Danger of crushing by the rotating dosing screws!

The dosing screws inside the powder containers rotate. There is a risk of crushing when reaching in.
- ▶ Never reach into the powder container when the device is switched on.

ADVICE

Material damage due to blockage!

There is a danger of blockage if prohibited coffee machine powder is filled into the machine.
▶ Never fill the powder container with anything other than powder for automatic operation.

Figure: Maximum fill level

1. Variant with powder container locking mechanism: Open the powder container lock with the key.
2. Remove the cover of the powder container.
3. Fill the powder container with choco or topping powder.
4. Fill only so high that the contents do not touch the container cover.
5. 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.

7.1.3 Refilling water

Variant with mains water supply

ADVICE

Material damage due to closed water supply line!

The machine can suffer damage 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.

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

Variant with external drinking water tank

Figure: External drinking water tank

1. Unscrew the cover of the external drinking water tank.
2. Rinse the external drinking water tank thoroughly with fresh water every day.
3. Clean the cover of the drinking water tank with fresh water.

4. Fill the drinking water tank with fresh drinking water, making sure not to exceed the maximum filling quantity.
5. Close the external drinking water tank with the cover.
6. Reinsert the drinking water tank.

Variant with internal drinking water tank

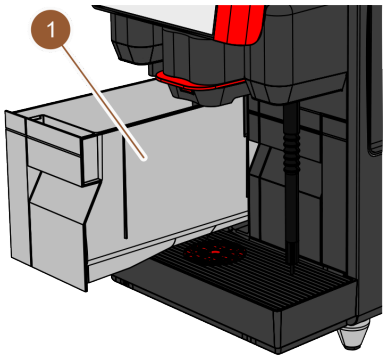


Figure: Internal drinking water tank

1. Pull the internal drinking water tank **(1)** out of the machine.
2. Make sure that the internal drinking water tank is clean.
3. Fill the drinking water tank with fresh drinking water, making sure not to exceed the maximum filling quantity.
4. Reinsert the internal drinking water tank into the machine.
5. Close the flap at the front of the machine.

7.1.4 Filling PureFoam™ milk system

CAUTION

Risk of infection due to contaminated milk!

Contamination in the milk pump can lead to health problems.

- ▶ Always carry out cleaning after installation, commissioning or recommissioning.
- ▶ Carry out the display-guided cleaning programme before dispensing a beverage for the first time.

Side cooling unit

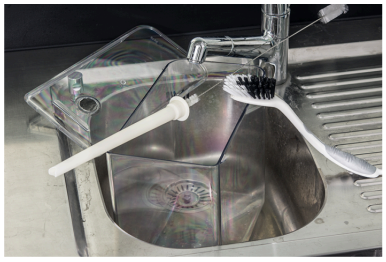


Figure: Cleaning milk container

1. Open the door of the cooling unit.
2. Remove the milk hose from the milk container cover.
3. Pull out the milk container and remove the cover.
4. Rinse out the milk container, riser pipe and cover with fresh water.
5. Fill milk container. Observe the maximum fill volume of 10 l.
6. Close the milk container with the cover and slide it back into the cooling unit.

7. Attach the milk hose to the milk container cover.
8. Close the door of the cooling unit.

Cup & Cool, under-counter cooling unit

ADVICE

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.

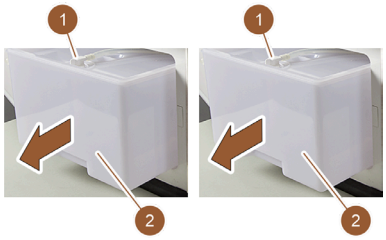


Figure: Refill milk tank (left: Cup & Cool, right: Under-counter cooling unit)

1. Open the door of the cooling unit.
2. Remove the milk hose **(1)** from the milk container cover.
3. Pull out the milk container **(2)** and remove the cover.
4. Rinse out the milk container, cover and riser pipe with fresh water.
5. Fill milk container. Observe the maximum fill volume:
   ▶ Cup & Cool = max. 4 l
   ▶ Under-counter cooling unit = max. 9.5 l
6. Close the milk container with the cover and slide it back into the cooling unit.
7. Attach the milk hose to the milk container cover.
8. Close the door of the cooling unit.

7.1.5 Opening and closing user panel

CAUTION

Risk of crushing due to falling user panel!

The user panel can fall under its own weight.
▶ Hold the user panel firmly and move it up or down in a controlled manner until it clicks into place.

Opening user panel

When the user panel is unlocked, the powder container locking mechanism is also unlocked.

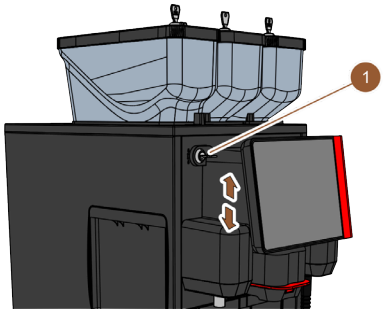


Figure: Control panel

1. Open the closing device with the key **(1)**.
   ✓ The lock is open when horizontal.
2. Unlock the user panel by pulling firmly.
   ✓ The user panel is unlocked.
3. Push the user panel from below using both hands until it snaps into place.
   ✓ The user panel is automatically held in the upper position.
   ✓ All operating elements behind the user panel are accessible.

Closing user panel

The machine is only ready for use when the user panel is closed.

Prerequisite:

- The closing device of the user panel can only be closed when the locking mechanisms of the bean hoppers and powder containers are closed.

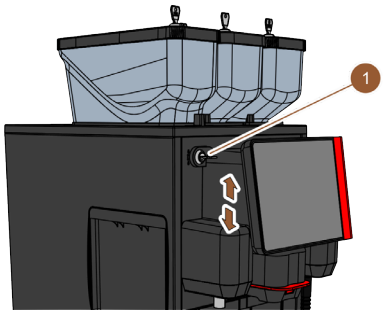


Figure: Control panel

1. Push the user panel down slightly with both hands as far as it will go.
2. Gently press in the upper edge of the user panel.
   ✓ The user panel is closed.
3. Make sure that the locking mechanisms on the bean hoppers and powder containers are closed.
4. Close the closing device with the key **(1)**.
   ✓ The lock is closed when in the vertical position.
   ✓ The user panel is locked.

7.1.6 Removing bean hoppers and powder container

The bean hoppers or powder container can be removed from the machine. The central locking mechanism unlocks the bean hoppers and powder container.

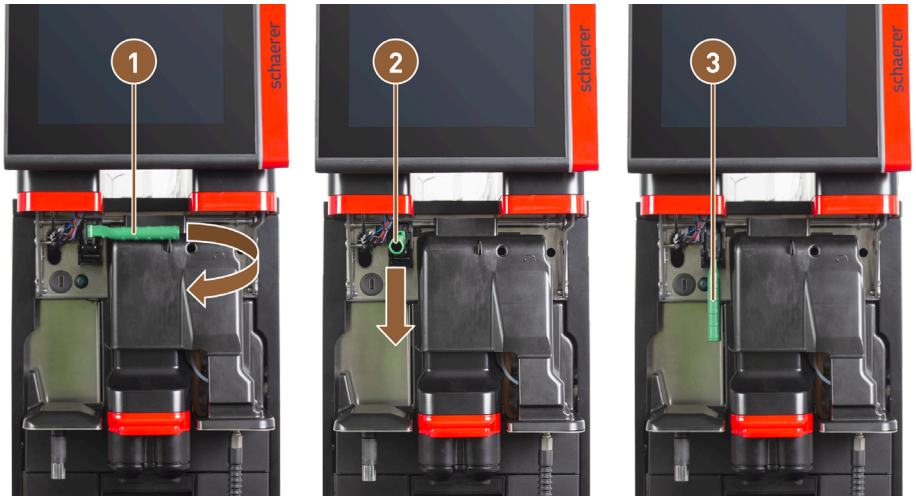


Figure: Bean hopper and powder container release (option)

1 Horizontal position: Bean hopper locked

2 Position to the front

3 Position to the rear: Bean hopper unlocked

1. Open the user panel.
2. Swivel the green handle of the central locking mechanism forward from the horizontally folded position **(1)** to position **(2)**.
3. Fold the green handle of the central locking mechanism **(2)** downwards.
   ✓ The bean hoppers and powder containers are now unlocked. The green handle of the central locking mechanism is in position **(3)**.

See 7.1.5 "Opening and closing user panel"

7.2 Switching on

7.2.1 Check before switching on

ADVICE

Material damage due to closed water supply line!

The machine can suffer damage 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.

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

CAUTION

Risk of infection due to contaminated milk!

Contamination in the milk pump can lead to health problems.

- ▶ Always carry out cleaning after installation, commissioning or recommissioning.
- ▶ Carry out the display-guided cleaning programme before dispensing a beverage for the first time.

See 8.6 ""Cleaning" – "Daily machine cleaning" – "Display-guided cleaning programme"".

When the machine is switched on for the first time, display-guided setting of the machine configuration and hardware calibration follow automatically.

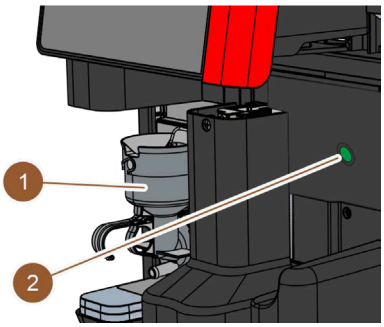


Figure: On/Off button

1. Check the mains connection of the machine.
2. Open the user panel.
3. Briefly press the machine on/off button **(2)**.
   - ✓ The machine starts up.
   - ✓ The user interface appears in the touch screen, the machine begins to heat up.

   The machine is ready for use as soon as the required temperature is reached.
4. Close the user panel.
   - ✓ The machine is switched on.

7.2.2 Switching on side cooling unit (optional)

Figure: Switching on side cooling unit

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

Switching cooling unit to standby

▶ Hold the button **(B)** down for approx. 3 s.
   - ✓ The cooling unit switches to Standby mode.

Setting temperature

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

For optional accessories, also see the detailed information in the separate description for optional accessories.

7.2.3 Switching on under-counter cooling unit

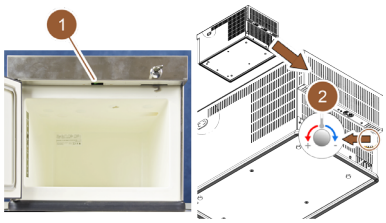


Figure: Switching on and adjusting under-counter cooling unit

1. Open the door.
2. Switch toggle switch **(1)** to position "I".
3. Set the thermostat on the rear to the centre position **(2)**.
   ✓ The under-counter cooling unit is switched on.

See also the detailed information in the enclosed separate description "SKYE optional accessories" for this optional accessory.

7.2.4 Switching on the Cup&Cool cup warmer

CAUTION

Risk of burning due to hot surfaces!

The cup storage gets hot and can cause burns.
▶ Shut down cup storage before cleaning and wait until the surfaces are cooled.

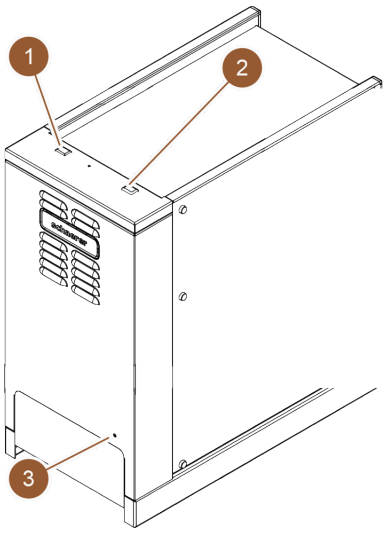


Figure: Switching on and setting Cup & Cool

▶ Switch toggle switch **(1)** to position "I".
▶ Adjust the thermostat on the rear **(3)** if needed.
   ✓ Cooling unit is switched on.

▶ Switch toggle switch **(2)** to position "I".
✓ The cup storage is switched on.

See also the detailed information in the enclosed separate description "SKYE optional accessories" for this optional accessory.

7.3 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

7.3.1 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.

In Guest mode, pre-selection of beverages (double beverages, decaffeinated coffee, barista) is not possible.

Available beverages are displayed in groups.

Prerequisite:

The **Display group selection** function is activated in this operating mode.

Navigation through the menu for beverage dispensing is done step-by-step.

Quantity structure of groups and beverages:

- 10 tabs (groups)
- 24 beverages per tab (group)
- A maximum of 240 beverages are available.

Possible functions in Guest mode:

Figure: **Guest mode** standard user interface

Figure: Beverage groups in Guest mode and Frequent user mode

(A) Display of a maximum of 240 beverages (10 groups with a maximum of 24 beverages each)

(B) Navigation through beverage groups (arrow)

(C) Access to service menu

(D) Selection via beverage groups

Steps to beverage dispensing:

- Select desired beverage
- Choose cup/mug size
- Select coffee roast (option)
- Confirm selection
- Payment (with payment system, option)
- Place cup/mug request
- Start dispensing
- Fill ground coffee (with separate manual inlet)
- Confirm manual inlet
- Beverage is dispensed.
- Display of beverage dispensing progress
- **Beverage complete** display

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

- Screensaver image *ON*
- **Service menu (C)** button visible *ON*
- Group selection **(D)** (maximum 10 groups with horizontal navigation **(B)** possible) *OFF*
- Sequential beverage modification *ON*-fixed
- **Position cup/mug** instruction *ON*
- Display **Progress** information *ON*-fixed
- Display **Beverage complete** information *ON*

7.3.2 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 largest range of functions.

In Staff mode, pre-selection of beverages (double beverages, decaffeinated coffee, barista) is possible. The **Select group** screen is not available.

Instead, the groups are displayed on tabs at the top. A vertical menu is also available on the left. The beverage groups and tabs can be named and assigned as needed by service technicians.

Figure: Tabs in Staff mode

Modification of beverages is displayed and carried out in its entirety on the **Dispense beverage** screen. An autostart can be activated for predefined beverages.

Quantity structure of groups and beverages:

- 10 tabs (groups)
- 24 beverages per tab (group)
- A maximum of 240 beverages are available.

Figure: **Staff mode** standard user interface

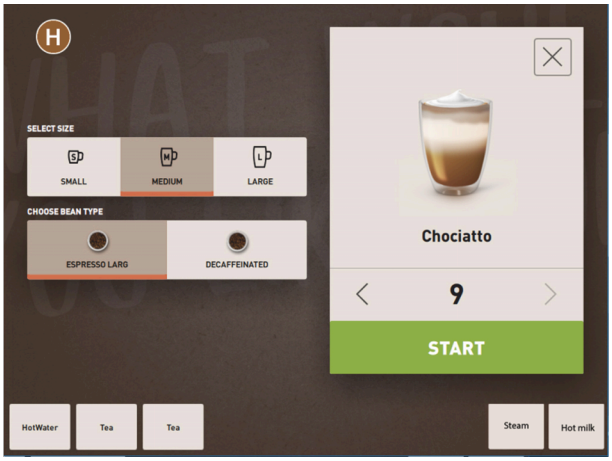


Figure: Selection of beverage options in Staff mode

Possible functions in Staff mode:

(A) Display of a maximum of 24 beverage fields per group (10 possible groups)

(B) Horizontal wiping scroll function (finger)

(C) Beverage filter (DECAF, double beverage)

(D) Access to Service menu

(E) Barista preselection (coffee strength) *OFF*

(F) Maximum 3 separate additional beverages (left)

(G) Maximum 2 separate additional beverages (right)

(H) Screen for selection of beverage options

Steps 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 beverage dispensing progress

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

- **(C)** button for double beverage dispensing *ON*
- **(C)** button for decaffeinated coffee (DECAF) *ON*
- **(E)** button for coffee strength (barista) *OFF*
- Beverage preselection possible (multiple dispensing) *ON*
- Display of number of preselected beverages *OFF*
- **Service menu button (D)** visible *ON*
- Display of **Position cup/mug** information *OFF*
- Display of **Progress** information *OFF*
- Display **Beverage complete** information *OFF*

7.3.3 Frequent user mode

The preconfigured **Frequent user mode** user interface allows for operation of the machine by advanced operators (office area). The service technician can also make individual settings.

In Frequent user mode, pre-selection of beverages (double beverages, decaffeinated coffee, barista) is not possible. The tabs at the top and the vertical menu on the left are not available.

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

Modification of beverages is displayed and carried out in its entirety on the **Dispense beverage** screen.

Available beverages are displayed in groups.

Prerequisite:

The **Display group selection** function is activated in this operating mode.

Navigation through the menu for beverage dispensing is done step-by-step.

Quantity structure of groups and beverages:

- 10 tabs (groups)
- 24 beverages per tab (group)
- A maximum of 240 beverages are available.

Figure: **Frequent user mode** interface

Figure: Selection of beverage options in Frequent user mode

Figure: Beverage groups in Guest mode and Frequent user mode

Possible functions in Frequent user mode:

(A) Display of a maximum of 240 beverages (10 groups with a maximum of 24 beverages)

(B) Navigation through beverage groups (arrow)

(C) Access to service menu

(D) Maximum 3 separate additional beverages (left)

(E) Screen for selection of beverage options

(F) Selection via beverage groups

Steps to beverage dispensing:

- Select desired beverage
- Choose cup/mug size
- Select coffee roast (option)
- Confirm selection
- Payment (with payment system, option)
- Place cup/mug request
- Start dispensing
- Fill ground coffee (with separate manual inlet)
- Confirm manual inlet
- Beverage is dispensed.

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

- **(E)** button for coffee strength (barista) *ON*
- Screensaver image *ON*
- **Service menu (C)** button visible *ON*
- Group selection **(F)** (maximum 10 groups with horizontal navigation **(B)** possible) *OFF*
- **Position cup/mug** instruction *ON*
- Display **Beverage complete** information *OFF*

7.4 Beverage supply

Limited beverage selection

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

Powdered 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 cancelled after a period of inactivity of 5 – 40 s.

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.

7.4.1 Selecting beverage

Navigating to beverage

Prerequisite: The machine is ready for use.

Figure: Guest mode and Frequent user mode: Scrolling to beverage

▶ Use the arrow buttons **(1)** to scroll through the beverage displays.

✓ The desired beverage button appears.

Figure: Staff mode: Direction selection of beverage group

▶ Open the desired beverage group **(1)** directly via the corresponding tab.

✓ The saved beverage buttons appear.

Staff mode: Preselecting beverage options

Prerequisite: The user interface is in **Staff mode**.

Possible preselections in the menu:

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

Figure: Beverage preselection in the left menu

▶ Select a beverage option via a preselection in the left menu, e.g. coffee strength.

✓ All beverages with the corresponding option appear.

Staff mode: Selecting beverage type

Prerequisite: The tab with the beverage group or the preselection contains configured beverages.

Figure: Beverage types

▶ Tap on the desired beverage button.

✓ A screen with more beverage options opens.

7.4.2 Modifying beverage

Possible beverage options:

- Beverage type (e.g. coffee, espresso, cappuccino)
- Beverage size (S, M, L)

- Coffee type (2-3 grinders)
- Milk type (Twin Milk)
- Chocolate (with powder system)
- Aroma (with Flavour Point syrup system)

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

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

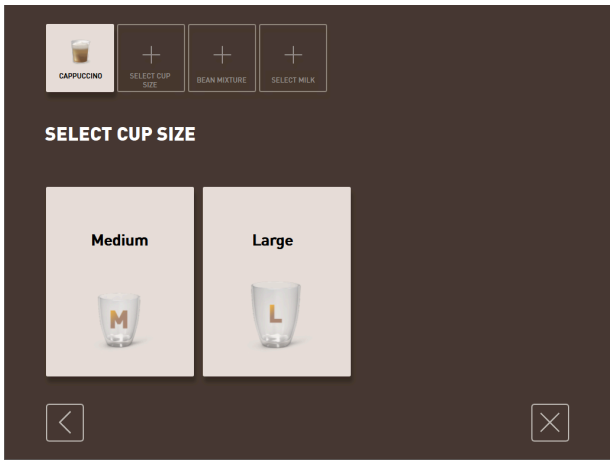


Figure: Guest mode: Determining beverage modification sequentially

1. Tap on the button with the desired modification.
   ✓ The desired modification appears.
   ✓ Other modifications are displayed for selection.
2. 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 preselection 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 symbol.

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

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

Figure: Selection of beverage

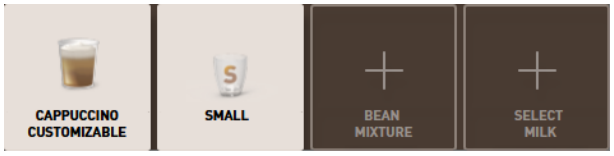


Figure: Selection of beverage size

Figure: Selection of coffee type

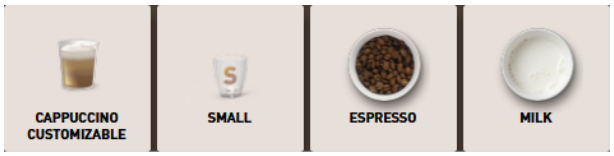


Figure: Selection of ingredients

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.

Figure: Staff mode: Directly choosing beverage modification

1. Tap on the button with the desired modification **(1)**.
2. If necessary, set multiple dispensing **(2)** (1 to 9 beverages).
   ✓ The selected modifications are active.

Figure: Frequent user mode: Directly choosing beverage modification

▶ Tap on the button with the desired modification **(1)**.

✓ The selected modifications are displayed summarised in the upper area **(2)**.

7.4.3 Preselecting double beverage

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.

Prerequisite:

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

Figure: Double beverage preselection

To activate double beverage dispensing:

▶ Tap on the **Double beverage dispensing** button.

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

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

7.4.4 Dispensing preselected beverages multiple times

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

Multiple dispensing (Staff mode)

Prerequisite: The preselection is activated in operating mode (maximum 1 – 9 beverages).

Preselection for several beverages is only available in **Staff mode**.

Figure: Display of beverages

1. Select a beverage.
2. Select the desired ingredients.
3. 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 shown.

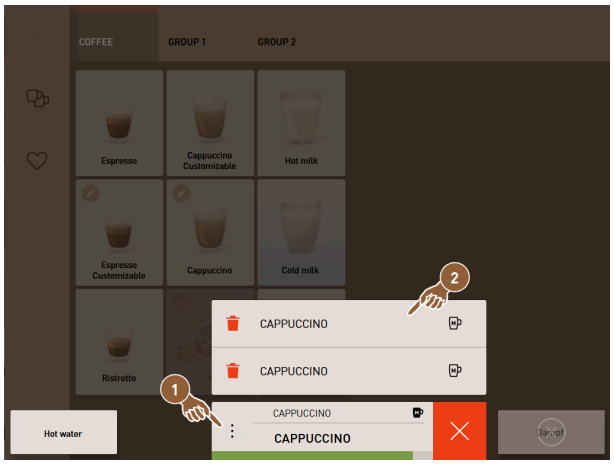


Figure: List with preselected beverages

4. Tap on the three-dot menu **(1)**.
   - ✓ A list with the preselected beverages **(2)** appears.
   - ✓ When beverage dispensing is complete, this is displayed in green.
5. Remove the cup or mug from the beverage outlet.

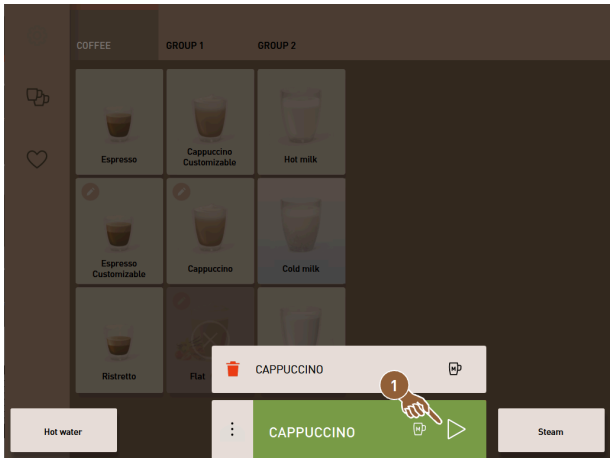


Figure: Dispensing additional beverage

6. Tap on the **Play (1)** button.
   ✓ The first beverage dispensing is confirmed.
   ✓ Dispensing for the next beverage in the list starts.
7. Repeat step 3 for the other beverages.

7.4.5 Preselecting decaffeinated coffee

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

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.

Figure: Decaffeinated coffee preselection

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.
   ✓ When dispensing, a request for filling the decaffeinated ground coffee appears.

See 7.5 "Using manual inlet"

The **decaffeinated coffee** preselection can be set by service technicians in the beverage configuration.

7.4.6 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**.

Prerequisite:

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

Figure: Barista preselection

To change the beverage strength:

▶ Tap on the button with the desired coffee strength.

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

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

7.4.7 Positioning cup/mug

Prerequisite: The **Position cup** function is activated in the operating mode.

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

Figure: The **Position cup/mug** animation is shown in the display.

1. Place the cup or mug under the beverage outlet.
2. For manual beverage outlet: Pull the beverage outlet down onto the cup or mug.

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

7.4.8 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.

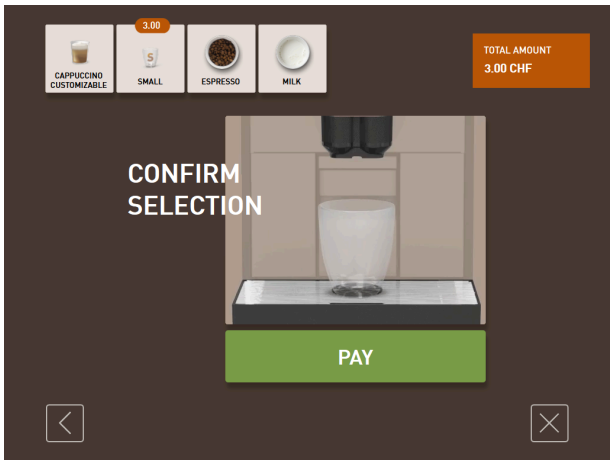


Figure: Button for payment

1. Tap on the **Pay** button.

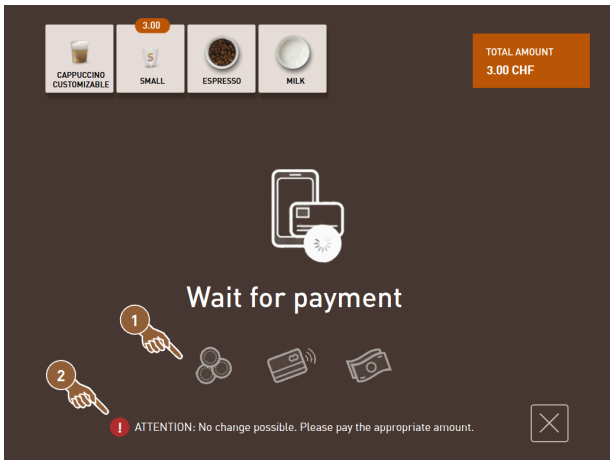


Figure: Instruction for payment

   ✓ The screen with the payment methods offered **(1)** appears.
   ✓ In the case of coin change systems, **(2)** is displayed if it is no longer possible to change coins.
2. Select an available payment method.
3. Confirm the payment process and complete the payment process.
   ✓ Beverage dispensing starts.

7.4.9 Dispensing beverage

Variant: Dispensing without payment system

Prerequisite: Beverage modification is complete and the beverage is ready for dispensing.

The **START** button appears once beverage preselection has been completed.

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

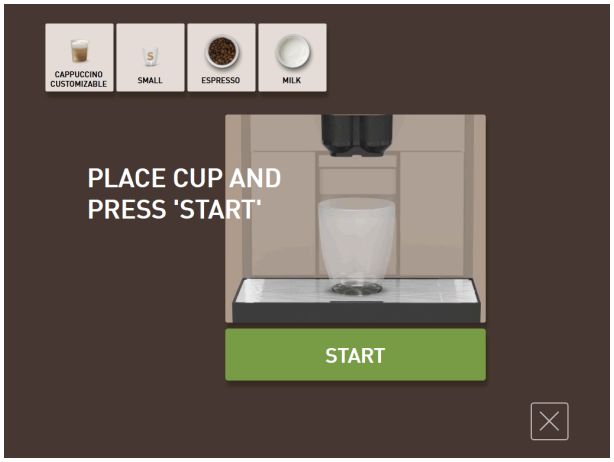


Figure: Beverage ready for dispensing

1. Tap on the **START** button.
   ✓ The **Position cup** instruction appears.
2. Tap on the **START** button again.
   ✓ The beverage is dispensed.

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

7.4.10 Progress display for beverage dispensing

Prerequisite: Beverage dispensing starts.

Variant: Guest mode/Frequent user mode

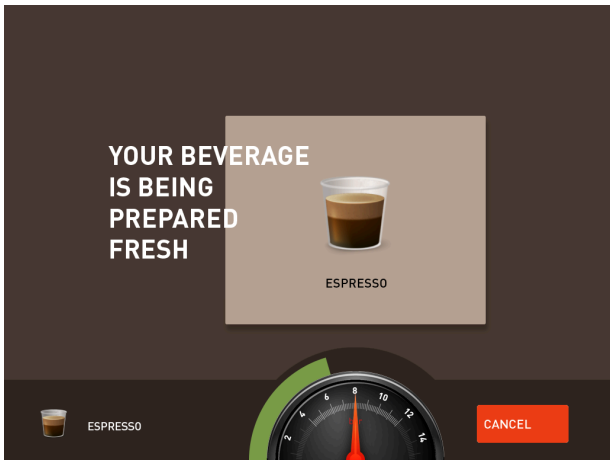


Figure: Progress (Guest and Frequent user mode)

Guest mode and Frequent user mode: Displaying progress

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

Variant: Staff mode

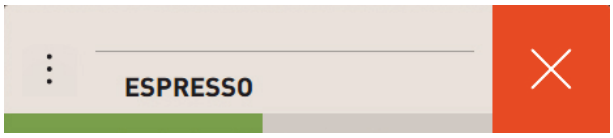


Figure: Progress (Staff mode)

Staff mode: Displaying progress

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

7.4.11 Completion of beverage

If dispensing is complete, the display indicates this.

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

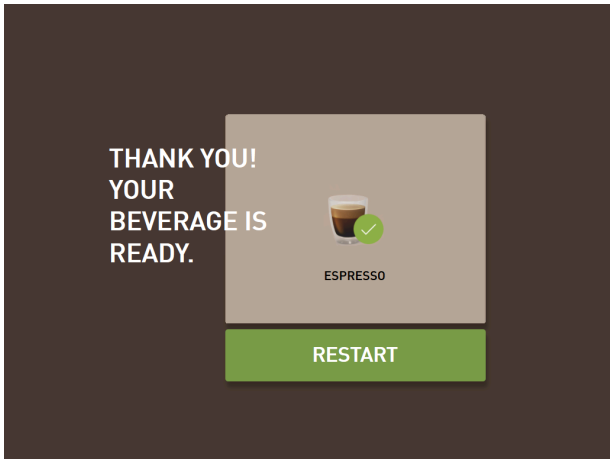


Figure: Display of **Beverage dispensing completed**

▶ Remove the cup or mug from the drip tray.
✓ The **Remove cup/mug** animation is shown in the display.

7.4.12 Cancelling beverage dispensing

Cancelling before beverage dispensing

Figure: **Cancel** button

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 preselected beverage options are then cancelled 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.

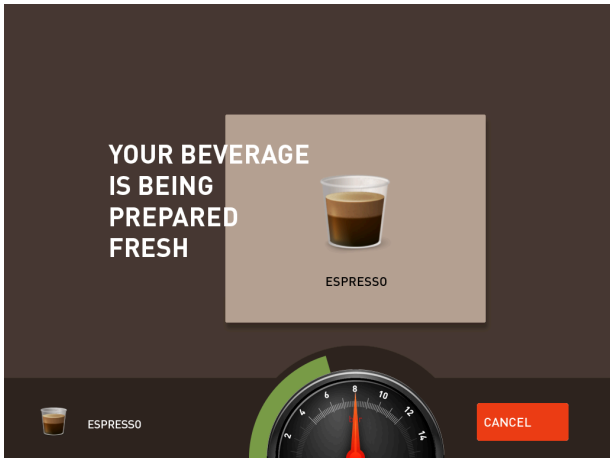


Figure: Guest mode and Frequent user mode: Cancelling beverage dispensing

Guest mode and Frequent user mode: Cancelling beverage dispensing

1. Tap on the **CANCEL** button.
   ✓ Dispensing of a beverage is stopped.

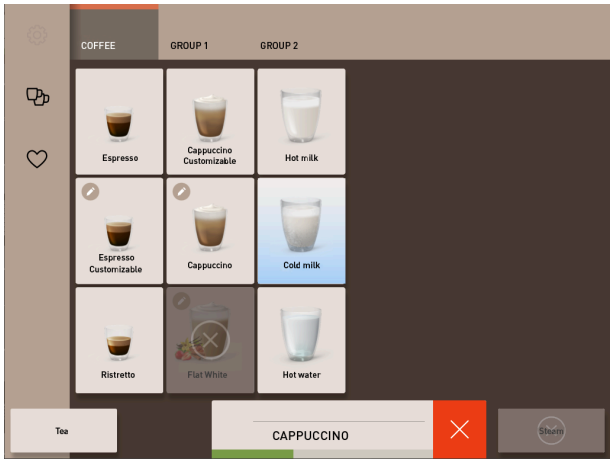


Figure: Staff mode: Cancelling beverage dispensing

Staff mode: Cancelling beverage dispensing

1. Tap on the **(X)** button.
   ✓ Dispensing of a beverage is stopped.

7.5 Using manual inlet

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.

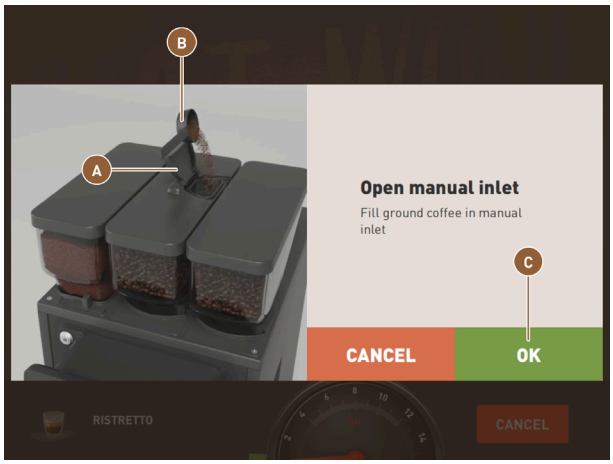


Figure: Instruction to fill ground coffee

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

7.6 Generic functions of the user interface

7.6.1 Navigation in the interface

In **Guest mode** or **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.

Figure: 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.

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

Figure: Tabs in Staff mode

- 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.

The number of tabs (beverage groups) is not fully visible.

Figure: **Back** button

Figure: **Next** button

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

7.6.2 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.

Figure: Types of display of the beverage buttons

Ⓐ Default (display with glass) Ⓑ Cup (display with cup)

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

Size of display

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

Figure: Small and extra large beverage display

Available display sizes:

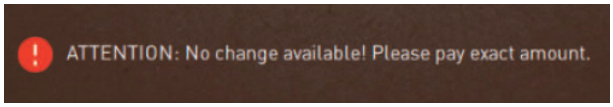
- Small
- Medium
- Large
- Extra large
- Dynamic

7.6.3 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.

Figure: Service button with error display

1. Tap on the error message display.



   ✓ The Service menu is displayed.
2. Select the pending error message with the **(>)** button in the Service menu.
   ✓ The **Smart info** window with additional information appears.

7.7 Service menu

7.7.1 Service menu button

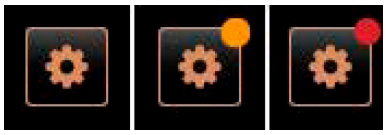


Figure: **Service menu** button with messages

The **Service menu** is opened with the Service menu button.

The **Service menu** button also indicates pending information or error messages:

- **Without colour code:** There are no messages in the Service menu.
- **Orange:** There is information in the Service menu.
- **Red:** There are error messages or action requests in the Service menu.

7.7.2 Service menu overview

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

Functions in the Service menu

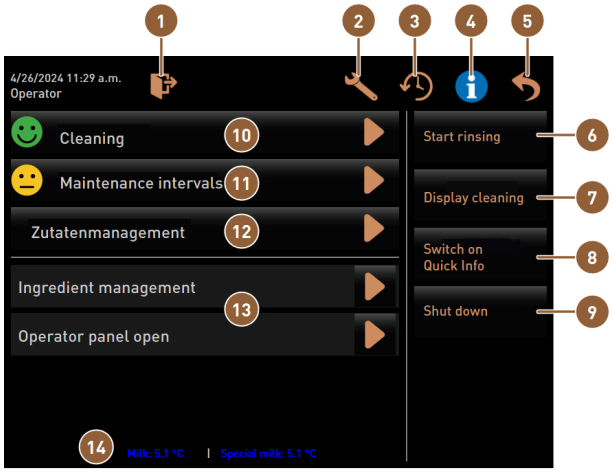


Figure: Functions in the Service menu

1. Logs out the currently registered profile or opens the log-in dialogue for logging in with different profiles.
2. Opens the screen with the machine settings.
3. Shows the dialogue with the beverage dispensing history and the list of dispensed beverages.
4. Shows the dialogue 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 dialogue with the respective instruction for action and its acknowledgement.
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.

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

7.7.3 Log-in/Log-out

The currently logged in user remains active even if the service menu is closed. A log-out or restart logs the logged-in user out.

Figure: **Log in** button

The **Log-in** button opens the **Profile** dialogue. As soon as a user is logged in, the button changes to **Log-out**.

All **Profile** dialogue shows the available profiles. The service technician can adjust the selection.

Profiles marked with a lock are PIN-protected.

Figure: **Profiles** dialogue

The following profiles can be provided by the service technician:

- Service technician
- Caretaker
- Facilities manager
- Quality manager
- Machine operator

Figure: **Log out** button

The **Log-out** button logs out the logged-in user. As soon as a user is logged out, the button changes to **Log-in**.

Figure: **Not logged in** display

Any previously available authorisations will no longer apply and **Not logged in** will appear in the Service menu.

7.7.4 Settings

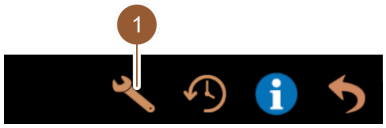


Figure: Field settings

The **Settings(1)** button is used to set the machine parameters.

See also chapter See 10 ""Programming"" for a detailed description.

This function is PIN protected.

7.7.5 Beverage dispensing history

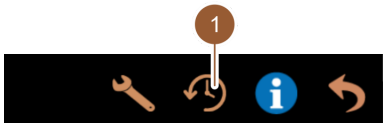


Figure: [Beverage dispensing history] field

Tapping on the **Beverage dispensing history** button **(1)** opens a list showing all the beverages already dispensed.

The corresponding dispensing time and the pure dispensing time (coffee) are displayed for each dispensing.

Dispensing times of the beverages:

- Individual beverages: 10 – 15 s
- Double beverages: 20 – 25 s

The values given for the dispensing times are typical values. The values may vary due to factors such as grind quantity, grinding level, water temperature and coffee type.

7.7.6 System information

Figure: System information field

Tapping on the **System information (1)** button displays the system information with a QR code.

7.7.7 Back

Figure: Back field

Tap on the **Back (1)** field to return to the user interface. The registered profile is logged out in the process.

7.7.8 Cleaning

Figure: **Cleaning** button

Tapping on the **Cleaning** button shows the cleaning status of the machine with a smiley:

- **Green smiley:** The machine does not have to be cleaned.
- **Red smiley:** The machine has to be cleaned.

This function is PIN protected (caretaker, machine operator, service technician).

7.7.9 Maintenance intervals

Figure: Maintenance intervals button

Tapping on the **Maintenance intervals** button shows the maintenance status of the machine with a smiley:

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

This function is PIN protected (caretaker, machine operator, service technician).

7.7.10 Ingredient management

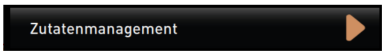


Figure: Ingredient management field

Tapping on the **Ingredient management** button calls up the ingredient management. Available ingredients, e.g. milk system, can be enabled and disabled in ingredient management.

Figure: Ingredient management page

Enabling and disabling ingredient

▶ Tap on the **Ingredient management** button.
  ✓ The **Ingredient management** page opens.
▶ Touch the **On/Off** button **(1)** under **Action** in the row of the desired ingredient.
  ✓ The ingredient is enabled or disabled.
▶ Tap the field to get back to the Service menu.

7.7.11 Error messages area

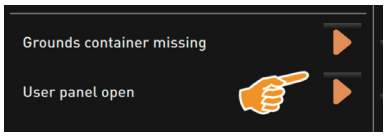


Figure: Error messages area

Pending machine errors are reported in the error messages area. The ▶ field can be used to start troubleshooting directly.

The service technician has an overview of error messages in the **Info** area. See 10.3.5 ""Info" settings"

7.7.12 Direct selection area

Figure: Direct selection area

The [**Start rinsing**] field **(1)** starts the machine rinsing process.

See chapter See 8 ""Cleaning" – "Rinsing intervals"".

The [**Touch screen cleaning**] field **(2)** locks the touch screen for 30 seconds.

The touch screen is not sensitive during this time and can be cleaned.

The [**Switch quick info on/off**] field **(3)** switches the "Quick info" window in the user interface on or off.

The "Quick info" window is displayed at the top left when it is switched on.

The [**Shut down**] field **(4)** switches the machine off. The field can be used as an alternative to the on/off switch of the machine (behind the user panel).

The machine is shutting down and the display is inactive. The machine is not powered off.

7.7.13 Quick info

Figure: "Quick info" display

The "Quick info" display provides information on the boiler temperatures, coffee hot water **(C)**, tea hot water **(T)** and the memory used **(M)**.

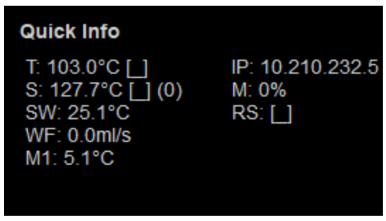


Figure: Quick info

- "**T**" provides information about the hot water temperature for tea.
- "**S**" provides information about the steam temperature.
- "**SW**" provides information about the waste water tank temperature.
- "**M**" provides information about the memory used.

The "Quick info" window contains an additional text window that displays current status messages such as connection control when telemetry is active.

7.8 Emptying

7.8.1 Emptying grounds container

Standard grounds container: The grounds container can hold about 60 – 70 coffee cakes. After this number has been reached, the instruction for emptying the grounds container appears in the user interface.

ADVICE

Material 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, beverage selection is possible even without the under-counter grounds container.

▶ Check the under-counter grounds container according to machine usage.

▶ Make sure that no beverages are dispensed while the under-counter ground container is being drained.

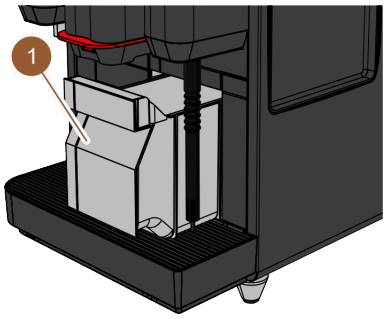


Figure: Grounds container

1. Push the beverage outlet upwards as far as it will go.
   ▶ **Standard grounds container**: Pull the grounds container out of the machine towards the front **(1)**.
   ▶ **Under-counter grounds container**: Pull half the grounds container out of the machine.
   ✓ This prevents accidental beverage dispensing.

✓ The “Grounds container removed” message appears in the display.

2. Empty and clean the grounds container.
3. Dry the grounds container and reinstall it, pushing it in until it snaps into place.

✓ The machine is ready for use.

7.8.2 Emptying external waste water tank

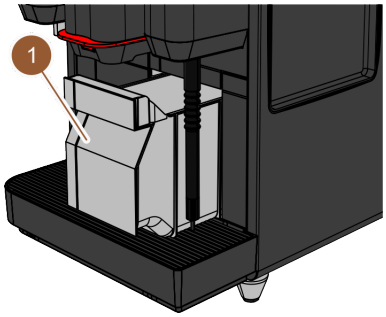


Figure: Pulling grounds container forwards

Before the waste water tank is removed, make sure that no beverages can be dispensed.

1. Push the beverage outlet upwards as far as it will go.
2. Pull the grounds container **(1)** out of the machine towards the front and empty it.

✓ The “Grounds container removed” message appears in the display.

3. Remove the cover with waste water hose from the external waste water tank.
4. Drain the waste water tank.
5. Clean the waste water tank thoroughly with household cleaner and rinse with fresh water.

Figure: External waste water tank

6. Check the function of the level monitoring floater.
7. Insert the cover with waste water hose back into the waste water tank.
8. Insert the grounds container into the machine.

✓ The machine is ready to dispense beverages.

7.9 Switch-off

Switching machine to standby

DANGER

Risk of death due to electrocution!

The machine is still energised in Standby mode.

- ▶ Do not remove any machine housings.
- ▶ Always unplug the machine from the mains before doing repair work.

Recommendation: Close the main water valve at the end of the day.

Figure: Direct selection area

Cleaning before shutdown

- ▶ In the Service menu, tap on the **Start rinsing (1)** button if it has not already been done.
  - ✓ Cleaning is started.
- ▶ Shut down the machine in the cleaning programme.
- ▶ Carry out additional cleaning operations as required.
  See See 8 "Cleaning“ for more detailed information
- ▶ Option: Empty and clean the drinking water tank.

Shutting down using the touch screen

- ▶ Tap on the **Switch-off (4)** button in the Service menu.
  - ✓ The machine is shut down.
  - ✓ The display does not show anything.
  - ✓ The machine is in Standby mode.

Shutting down using machine on/off button

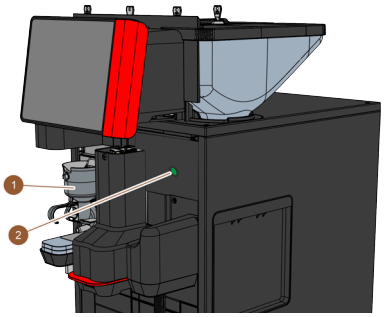


Figure: On/Off button

1. Open the user panel.
   See 7.1.5 "Operation – Open user panel"
2. Press the machine on/off button (**2**) for 4 s.
   ✓ The machine is shut down.
   ✓ The display does not show anything.
   ✓ The machine is in Standby mode.
3. Close the user panel.
   See 7.1.5 "Operation – Close user panel"

7.9.1 Lengthy downtimes (more than 1 week)

If the machine is not used for a longer period of time, take the coffee machine and the optional accessories out of operation.

ADVICE

Material damage due to frozen water!

The boilers can be damaged by freezing water as it expands.
- ▶ If the machine is exposed to below-freezing temperatures, empty the boiler(s) beforehand.
- ▶ Contact your service partner.

- ▶ Switch the machine to standby.
- ▶ Disconnect the mains connection. To do this, pull out the mains plug or switch off the main switch mounted on the installation side.
  ✓ The machine is powered off.

7.9.2 Switching off optional accessories

CAUTION

Damage to property and health problems due to pollution!

If the optional accessories are not cleaned, they may cause technical malfunctions and health problems when they are switched on again.

- ▶ Clean the machine before optional accessories that come into contact with milk are switched off.
- ▶ Disconnect the machine from the mains if the optional accessories are to remain switched off for a longer period of time.
- ▶ Accessory parts such as milk container, cover and adapter must be stored in a clean and dry place.

- ▶ Drain the milk container in optional accessories which transport milk.
- ▶ Perform the daily cleaning routine of the machine.
- ▶ Clean accessory parts such as milk container, cover and adapter in a washing machine or rinse them thoroughly with fresh, clean water.
- ▶ Shut down optional accessory via the device main switch.
- ▶ Keep the accessory parts in a clean and dry place.
- ▶ Disconnect the mains connection by pulling out the mains plug.
  - ✓ The optional accessory is powered off.
  - ✓ The optional accessory can be stored over a long period of time.

8 Cleaning

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

8.1 Cleaning requirements and conditions

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

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

When installation, maintenance, care and cleaning are performed properly, Schaerer AG machines and devices satisfy the HACCP requirements.

All cleaning products are perfectly matched to the cleaning programmes.

WARNING

Risk of infection from bacteria!

If the coffee machine is not cared for and cleaned properly, the dispensing of beverages will become a health hazard in terms of food hygiene.

- Wear protective gloves when cleaning.
- Wash your hands thoroughly before and after handling cleaning products.
- Clean the machine daily.
- Clean the milk container every time before filling and after you have finished dispensing for the day.
- Never add cleaning products to the milk container; always use the blue cleaning container.
- Never pour cleaning products into the drinking water tank (internal/external).
- Never mix cleaning products.
- Store cleaning products separately from coffee, milk and coffee machine powder.
- Do not use any abrasive products, brushes or cleaning tools made of metal.
- 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.

8.2 Cleaning products

DANGER

Danger of poisoning from cleaning products!

Cleaning products can lead to poisoning if not used properly.

- Only use cleaning products recommended by Schaerer.
- Keep cleaning products away from children.
- Do not touch the cleaning products with your bare hands and do not ingest them.
- Never add cleaning products to the milk container; always use the blue cleaning container.
- Before using a cleaning product, read the information on the packaging and the safety data sheet carefully. If a safety data sheet is not available, please request it from your sales partner.

ADVICE

Property damage due to incorrect cleaning products!

Use of incorrect cleaning products may damage the machine.

▶ Use only cleaning products for daily and weekly cleaning that are recommended by Schaerer AG.

Cleaning tabs for coffee system

Name	Coffeepure tabs
Application	Coffee system cleaning
Purpose of cleaning	Removal of grease residue in the coffee system
Application interval	Once a day
Application	Instruction to add a tab during display-guided cleaning

Cleaning powder for milk system

Name	Milkpure powder
Application	Milk system cleaning
Purpose of cleaning	Removal of milk fat and bacteria from the milk system
Application interval	Once a day Allocation 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

Cleaning product reorder

Name	Reordering set
Application	Coffee and milk system cleaning
Article number	075350
Contents	• One package of cleaning tabs for the **Coffeepure tabs** coffee system • Two packages of cleaning powder for the **Milkpure powder** milk system
Quantity	Cleaning products for 100 daily cleaning operations: • 100x cleaning tabs • 80x **Cleaner 1** cleaning powder (green) • 20x **Cleaner 2** cleaning powder (red)

8.3 Cleaning levels

The following cleaning levels are possible:

- None
- Instruction
- Mandatory

ADVICE

Adjustment of the cleaning level

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

Variant: None

- Information is not provided about pending cleaning.
- The **Service menu** button does not indicate pending cleaning operations with coloured marking.
- The **Cleaning** button in the Service menu does not indicate any pending cleaning with a red smiley.
- The cleaning operations are started manually in the Service menu.

Variant: Instruction

- Information is provided about pending cleaning.
- An orange coloured marking is displayed on the **Service menu** button when a cleaning is pending.
- The duration until the next cleaning is due is displayed in the Service menu in hours.
- The **Cleaning** button in the Service menu shows a red smiley when cleaning is due.

Variant: Mandatory

When mandatory cleaning is active, a pending cleaning operation cannot be put off. The pending cleaning operation does not allow further 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 cleaning.
- An red coloured marking is displayed on the **Service menu** button when a cleaning is pending.
- The duration until the next cleaning is due is displayed in the Service menu in hours.
- The **Cleaning** button in the Service menu shows a red smiley when cleaning is due.

Cleaning time window

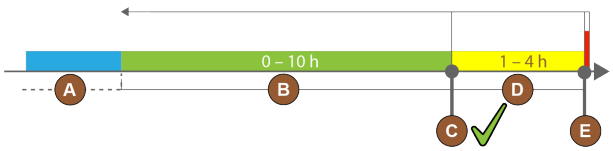


Figure: Time window for cleaning

Item	Time window	Explanation
A	Cleaning operations performed during this time window will be ignored.	The cleaning instructions remain unchanged after a cleaning operation.
B	Cleaning operations performed during this time window are too early. Nevertheless, these cleaning operations are recognised as having been carried out.	The cleaning instructions are reset after a cleaning operation. The next cleaning operation pending in the cleaning schedule is displayed in **h** in the Service menu.
C	Time for the optimal start of a cleaning (according to schedule).	The remaining time until the optimum start time is displayed in the Service menu.
D	Time window for optimum cleaning on schedule.	The cleaning instructions are reset after a cleaning operation.
E	Time window for mandatory cleaning Overdue cleaning operations cannot be delayed any longer from this time.	The display shows that dispensing is no longer possible. The machine is no longer ready for use. Cleaning is mandatory.

8.4 Cleaning intervals

The following sections describe the cleaning intervals required for optimal and trouble-free operation. If increased contamination is detected during regular checks, shortening the required cleaning intervals according to the actual contamination symptoms is essential.

ADVICE

Cleaning with high beverage volume

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

Automatic cleaning	
Every time the device is switched on and off	Automatic switch on/off rinsing

Automatic cleaning	
Every 1 - 240 min (depending on configuration)	Configured automatic rinsing processes

Display-guided cleaning programmes[1]	
Depending on the cleaning schedule set	Cleaning milk system
	Cleaning coffee system
	Cleaning powder system

Manual cleaning tasks	
Daily	Emptying grounds container and cleaning
	Cleaning brewing chamber
	Cleaning drip tray and drip grid
	Cleaning milk container
	Cleaning optional accessories
	Cleaning touch screen
	Cleaning external drinking water tank
	Cleaning internal drinking water tank
	Cleaning external waste water tank
Weekly	Cleaning bean hoppers
As needed	Rinsing powder container
	Cleaning the outer surfaces of the machine
	Triggering manual rinsing

Legend of cleaning intervals	
Daily	At least once a day, or more often if necessary
Weekly	At least once a week, or more often if necessary
As needed	If there is any contamination

[1] Display-guided cleaning programmes are run according to the set cleaning schedule. In addition, they can be carried out manually at any time using the Additional cleaning function.

8.5 Machine rinsing

CAUTION

Scalding danger due to hot water!

While the machine is being rinsed, hot water runs out of the beverage outlet. An automatic machine rinse is announced by a message on the display. The functional lighting turns red.

- ▶ Do not reach under a beverage outlet while a machine is being rinsed.
- ▶ Align the optional steam wand in the drip tray.
- ▶ Configured rinsing processes are automatically restarted. That is why you have to make sure that the beverage outlet is always free.

8.5.1 Automatic switch on/off rinsing

The automatic switch on/off rinsing process is the standard setting and cannot be disabled.

The following systems are automatically rinsed after switching on or before shutting down (if present):

- Coffee system
- Milk system
- Powder system
- Hot & cold system (option)

8.5.2 Configured rinsing processes

The configured rinsing processes are activated once an hour in the standard setting.

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

- Outlet rinsing (set interval: 1 – 240 min)
- External milk hose (set interval: 1 – 240 min)
- Internal milk system (set interval: 1 – 240 min)

8.5.3 Manual rinsing processes (service menu)

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

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

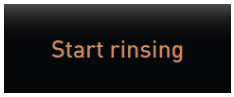


Figure: **Start rinsing** button

- ▶ Tap on the **Start rinsing** button.
  - ✓ A system rinsing is executed in the same sequence as the automatic switch on/off rinsing.

See 8.5.1 "Automatic switch on/off rinsing"

8.6 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.

WARNING

Danger to health from contamination!

Contamination of cleaned machine components by cleaning products can lead to health problems.

▶ Wear protective gloves during the cleaning programme.

CAUTION

Scalding danger due to hot fluids!

Hot fluid will be dispensed during the cleaning programme.

▶ Remove the drip grid before starting cleaning.

▶ Do not reach under the beverage outlet, steam outlet and external hot water dispensing point during cleaning.

ADVICE

Material damage due to overflowing drip tray!

A plugged waste water outlet causes the drip tray to overflow.

▶ Check the waste water outlet in the drip tray before starting the cleaning programme.

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. • 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 adjust the cleaning schedule (e.g. change the cleaning level).	• Additional display-guided cleaning processes can be started manually at any time in the Service menu. • 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.

8.6.1 "Cleaning" screen

This function is PIN protected (caretaker, machine operator, service technician).

Calling up “Cleaning” page

1. Tap on the **Service menu** button.
   ✓ The Service menu is displayed.
2. Tap on the **Cleaning** button in the Service menu.
   ✓ The **Cleaning** page appears.

Figure: **Cleaning** button

Tapping on the **Cleaning** button shows the cleaning status with a smiley:

- Green smiley: The machine does not have to be cleaned.
- Red smiley: The machine has to be cleaned.

Figure: **Cleaning** page

No.	Function	Explanation
1	**Back** button	The display returns to the Service menu.
2	Scheduled cleaning	The ▶ button starts the scheduled cleaning for the current day. Cleaning of the following systems is possible: • Coffee system • Milk system • Powder system A scheduled cleaning is displayed if the **Instruction** or **Forced** cleaning level has been selected in the cleaning schedule (can be customised by the service technician in the Service menu).
3	Additional cleaning	The ▶ button starts an additional cleaning independent of the cleaning schedule. The additional cleaning always performs a cleaning of all possible systems.

In addition to the cleaning of the systems, cleaning of the following components is carried out on the display:

- Grounds container
- Machine interior
- Cover of the beverage outlet

Cleaning of the steam boiler (if activated by the service technician) is always carried out in the background.

8.6.2 "Cleaning programme" dialogue

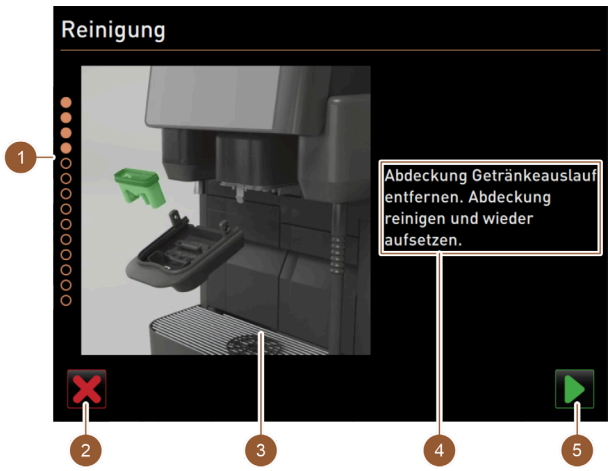


Figure: "Cleaning programme" page

No.	Name	Explanation
1	Progress screen	This area shows the progress of the cleaning programme. Filled circles indicate that the steps have already been carried out. Unfilled circles mean that the steps still need to be carried out.
2	**Cancel** button	Cleaning is aborted. The cleaning programme can be aborted at any time. *After cleaning is aborted, the coffee machine is not ready for use.*
3	Image or animation for current action	This area displays an image (or animation) that supports the action requests and information (4).
4	Action request/information area	In this area, action requests and information on the respective cleaning step are given in text form.
5	**Next** button	Leads to the next step.

8.6.3 Required tools

The following utensils are required during the display-guided cleaning programme:

- 1x **Coffeepure tab** cleaning tab
- 1x **Milkpure powder** cleaning powder[2]
- Blue cleaning container
- Commercial detergent
- Clean commercial cleaning cloths
- Key for locking the user panel

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

- For machines with closed drip tray: Collecting vessel for remaining milk
- For machines with closed drip tray: Collecting vessel for remaining choco or topping powder

8.6.4 Starting scheduled cleaning

CAUTION

Scalding danger due to hot steam!

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

▶ Guide the steam wand outlet into the drip tray.

▶ Do not reach under the steam wand during the cleaning and descaling process.

First, instructions are given on the cleaning of the grounds container, the machine interior and the lower part of the beverage outlet. This is followed by cleaning of the systems (coffee, milk, powder system) according to the setting in the cleaning schedule; see the following three sections or chapters.

The cleaning programme is started in the Service menu. Guidance is provided for all necessary actions on the touch screen.

Prerequisite: A pending cleaning operation is displayed in the **Service menu** button with coloured marking.

▶ Tap on the **Service menu** button.

✓ The Service menu opens.

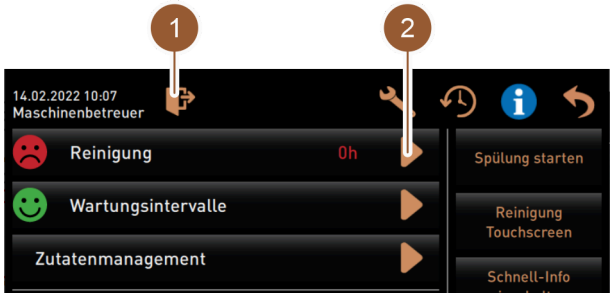


Figure: Service menu

Opening cleaning

▶ Tap on the **Cleaning** button.

✓ The **Cleaning** screen appears.

Figure: Cleaning

Starting scheduled cleaning

1. Tap on the **Scheduled cleaning (1)** button.

✓ The **Scheduled cleaning** dialogue appears.

Figure: Scheduled cleaning

✓ The systems that currently have to be cleaned according to the cleaning schedule are highlighted with light font. The systems that are not being cleaned are dark.

2. Tap on the button.

✓ The cleaning programme for the systems defined in the cleaning schedule starts.

Cleaning programme start dialogue with external drinking and waste water tank (option)

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

- Drain the waste water tank **(A)**
- Fill the drinking water tank **(B)**

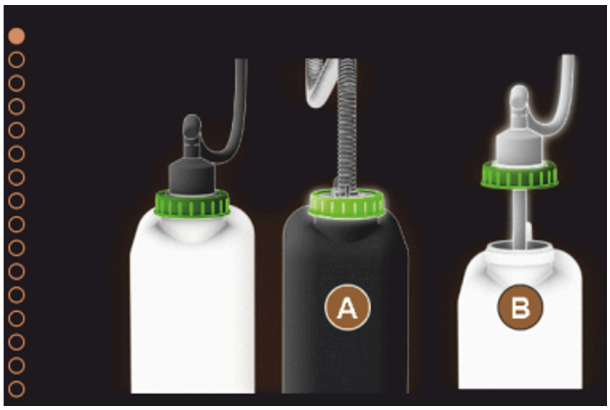


Figure: Start dialogue for cleaning programme with external drinking and waste water tank

1. Drain the waste water tank and rinse it.
2. Confirm drainage with the button.
3. Fill the drinking water tank with drinking water.
4. Confirm filling with the button.

✓ The **Empty grounds container** instruction appears.

8.6.5 Additional cleaning

Additional cleaning can be carried out at any time.

- Coffee system
- Milk system

- Powder system
- Boiler system

Starting additional cleaning

1. Tap on the **Additional cleaning** button.
   ✓ The screen with the available systems for cleaning appears.

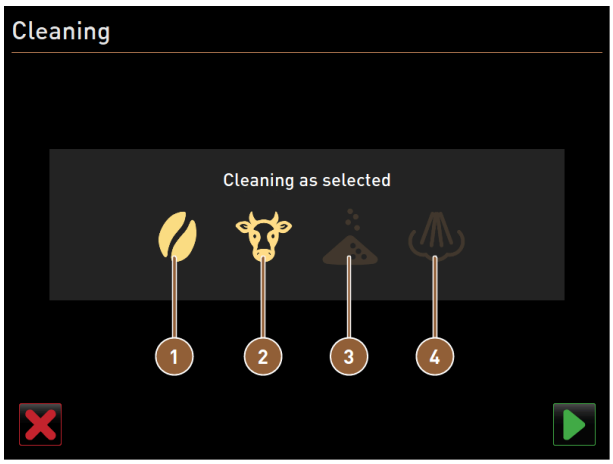


Figure: Dialogue for additional cleaning without ProCare

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

2. Select the desired systems to be cleaned.
3. Confirm the selection with .
4. Follow the instructions on the machine screen.
   ✓ The selected systems are cleaned.

8.6.6 Cleaning coffee system

▶ Start display-guided cleaning.

Figure: Inserting cleaning tab

Prerequisite: The coffee icon is highlighted (light) on the **Scheduled cleaning** page.

1. For machines with closed drip tray: Set the collecting vessel under the beverage outlet.
2. If present, open the closing device of the manual inlet (centre bean hopper).
3. Open manual inlet cover.
4. Insert the "Coffeepure tab" cleaning tablet into the opening of the manual inlet (1).
5. Confirm insertion of the cleaning tablet with the field.

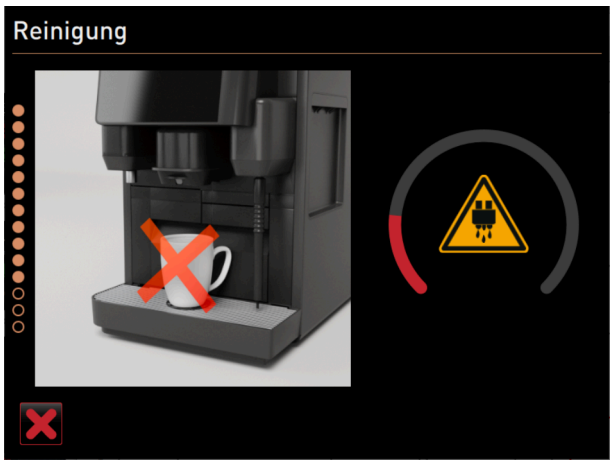


Figure: Cleaning progress

- ✓ A note is displayed indicating that beverage dispensing is currently not available.
- ✓ A progress display is shown.
- ✓ A **hot fluid** warning symbol is displayed.

▶ For machines with closed drip tray: Remove, empty and clean the collecting vessel.

8.6.7 Cleaning milk system

WARNING

Danger to health from cleaning products!

Cleaning product residues are hazardous to health. There is a risk of poisoning.

▶ After completing cleaning, wash your hands with commercial soap.

▶ Start display-guided cleaning.

Prerequisite: On the **Scheduled cleaning** page, the cow icon is highlighted (light).

Figure: Removing milk container

1. Remove the milk container.
2. Fill excess milk from the milk container into a collecting vessel.
3. Clean the milk container, cover and immersion pipe.
4. Confirm cleaning with the button.
5. **For machines with closed drip tray**: Place the collecting vessel under the beverage outlet.

Figure: Adding cleaning powder

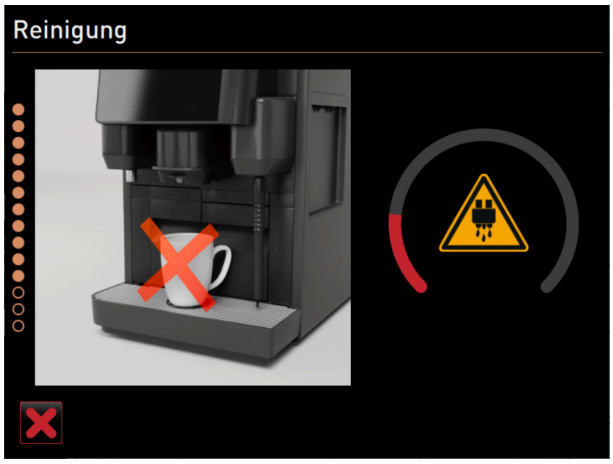


Figure: Cleaning progress

6. Shake the contents of a “Milkpure powder” bag (alkaline or acid) into the blue cleaning container.

7. Confirm addition of cleaning powder with the button.
   Warning Danger to health from cleaning products!
8. Wash your hands thoroughly with commercial soap.
9. Reinsert the blue cleaning container into the cooling unit.
10. Insert the milk hose adapter into the cover of the cleaning container.
11. 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.
12. 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**".

Figure: Removing cleaning container

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

Figure: Milk system activation

16. Check the **Yes** checkbox in the "**Milk system activation**" query.
17. Confirm the selection with the button.

Figure: Inserting milk container

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

Figure: Rinsing milk system

- ✓ The milk system is rinsed.
- ✓ A note is displayed indicating that beverage dispensing is currently not available.
- ✓ A progress display is shown.
- ✓ A **hot fluid** warning symbol is displayed.

8.6.8 Cleaning powder system

▶ Start display-guided cleaning.

Figure: Removing mixing cups

Prerequisite: On the **Scheduled cleaning** page, the powder icon is highlighted (light).

1. Slide the manual beverage outlet upwards and remove the grounds container.
2. Open the user panel.

See 7.1.5 "Opening and closing user panel"

3. Pull out the mixing cup out to the front.
4. Confirm removal of the mixing cup with the button.

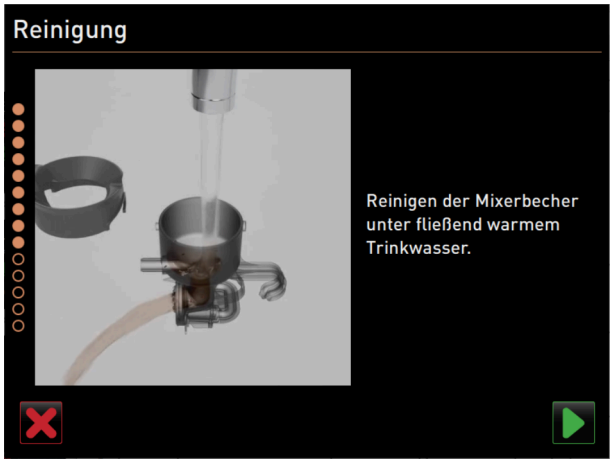


Figure: Cleaning mixing cup

5. Disassemble the mixing cup.
6. Clean the mixing cup under warm running water and dry it.
7. Reassemble the mixing cup.
8. Confirm cleaning with the button.

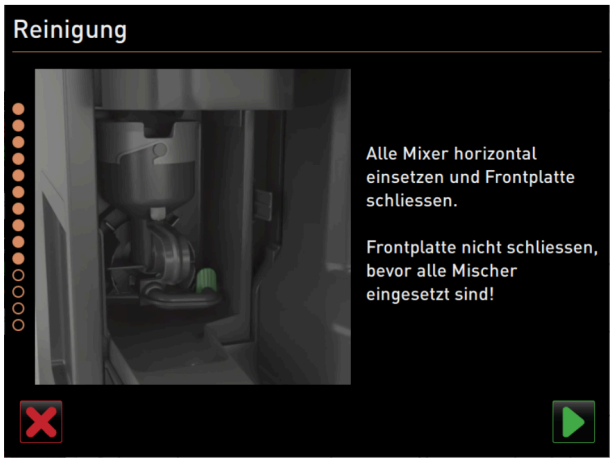


Figure: Inserting mixing cup

9. Insert the mixing cup straight into the machine.
10. Close the user panel.

See 7.1.5 "Opening and closing user panel".

8.7 Manual cleaning

Various components have to be cleaned manually.

8.7.1 Cleaning grounds container

CAUTION

Health hazard due to mould growth in the grounds container!

Coffee grounds in the grounds container can quickly lead to mould formation. The spread of mould spores in the machine results in danger to health and to contamination of the coffee.

▶ Clean the grounds container daily.

ADVICE

Property damage due to high temperatures!

High temperatures may lead to damage.

▶ Never clean the grounds container in the dishwasher.

Cleaning interval: Daily

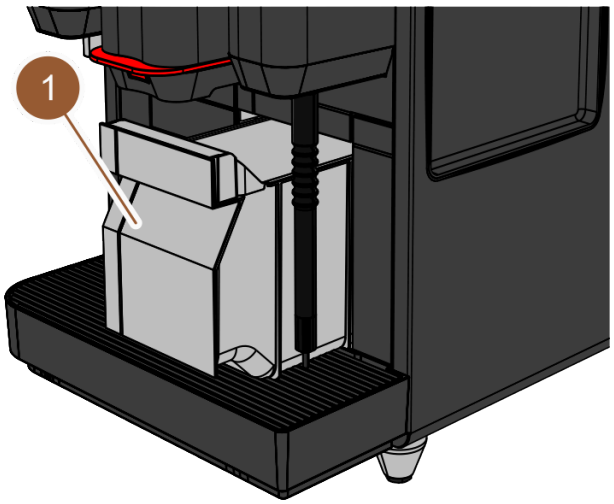


Figure: Grounds container

1. Slide the beverage outlet upwards.
2. Pull the grounds container **(1)** out of the machine.
3. Empty the grounds container.
4. Clean the grounds container thoroughly with water and detergent.
5. Rinse out the grounds container with clean water.
6. Dry the grounds container with a clean cloth.
7. Reinsert the grounds container into the cooling unit.
   ✓ The grounds container is empty and clean.

8.7.2 Cleaning brewing chamber

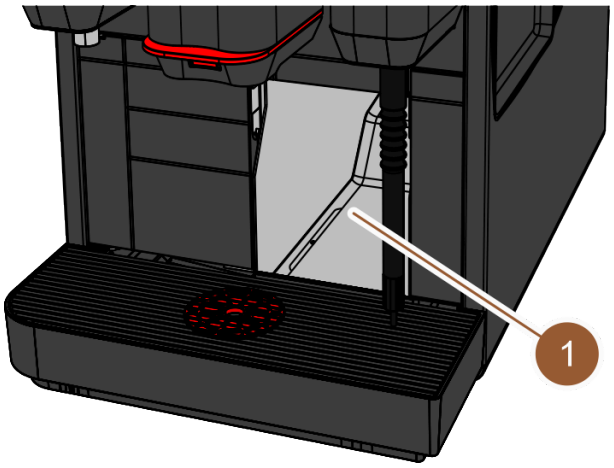


Figure: Cleaning brewing chamber

Cleaning interval: Daily

1. Slide the beverage outlet upwards (with manual beverage outlet).
2. Pull the grounds container out of the machine.
3. Remove ground coffee from the machine brewing chamber (**1**) using the supplied cleaning brush.
4. Wipe the brewing chamber dry with a clean, damp cloth.
5. Reinsert the grounds container.
   ✓ The brewing chamber is cleaned.

8.7.3 Cleaning drip tray and drip grid

CAUTION

Danger of scalding!

Automatic rinsing flushes hot water out of the beverage outlet.

- ▶ When cleaning is done outside of the display-guided cleaning programme: Shut down the machine before the drip grid is removed for cleaning.
- ▶ When cleaning is done outside of the display-guided cleaning programme: Shut down the machine before cleaning the drip tray.

ADVICE

Risk of flooding!

A plugged waste water outlet causes the drip tray to overflow.

- ▶ Before the descaling process is done, check whether fluid is flowing freely through the waste water outlet.

Cleaning interval: Daily

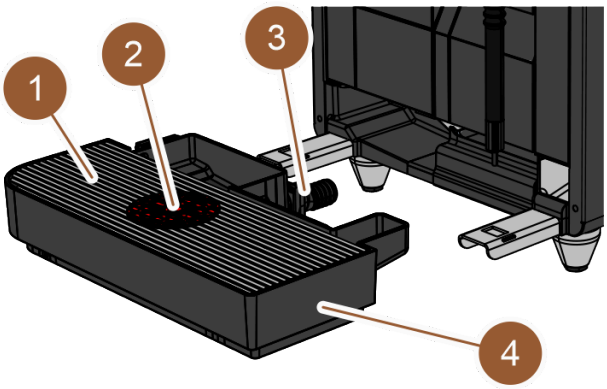


Figure: Removing drip tray

1. Switch off the machine.
2. Remove the drip grid **(1)** with the positioning aid **(2)** from the drip tray **(4)**.
3. Rinse out the drip tray with clean water.
4. Thoroughly clean the drip grid with positioning aid with a brush under running water and with detergent.
5. Check if waste water outlet **(3)** is plugged.
6. Place the drip grid back into the drip tray and check that it is correctly positioned.
7. Check that the positioning aid is in the correct position.
8. Assemble the drip tray.
   - ✓ Drip tray and drip grid are cleaned.

8.7.4 Cleaning milk container

WARNING

Risk of infection!

There is a risk of infection due to contamination, milk deposits and bacteria.

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

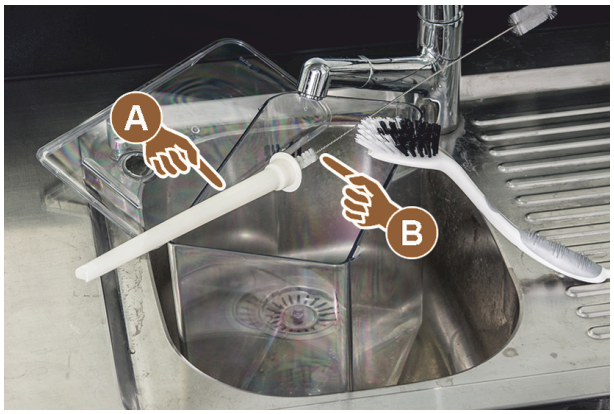


Figure: Cleaning milk container

Cleaning interval: Daily

1. Remove the milk container from the cooling unit.
2. Dispose of the remaining milk from the milk container.
   Observe the detailed cleaning instructions in the separate operating instructions for the **optional accessories**.
3. Clean the milk container with fresh water, detergent and a clean, unused cloth.
4. Clean the riser pipe **(A)** with the supplied brush **(B)**.
5. Reinsert the milk container into the cooling unit.
   ✓ The milk container is cleaned.

8.7.5 Cleaning optional accessories

Care and cleaning of the optional accessories are described in the separate operating instructions 020888.

8.7.6 Cleaning touch screen

CAUTION

Danger of scalding!

Unsupervised beverage dispensing can cause scalding during cleaning.

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

ADVICE

Damage to the touch screen during cleaning process

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

- ▶ Do not use scouring agents.
- ▶ Never use force, strong pressure or sharp objects when pressing on the display.

Cleaning interval: Daily

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

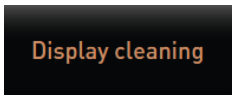


Figure: **Touch screen cleaning** button

1. Tap on the **Touch screen cleaning** button.
   - ✓ The touch screen is deactivated for 30 s and no longer reacts to touch.
   - ✓ A countdown is displayed.
2. During the available 30 s, clean the touch screen with a paper towel and a commercial glass cleaner.
   - ✓ After the countdown ends, the touch screen is reactivated.
   - ✓ The touch screen is cleaned.

8.7.7 Cleaning internal drinking water tank

DANGER

Danger of poisoning from cleaning products!

Cleaning product residues in the drinking water tank can lead to poisoning.

- ▶ Never pour cleaning products into the drinking water tank.

WARNING

Risk of infection from bacteria!

There is a risk of infection due to contamination, deposits and bacteria in the internal drinking water tank.

- ▶ Wear protective gloves when cleaning.

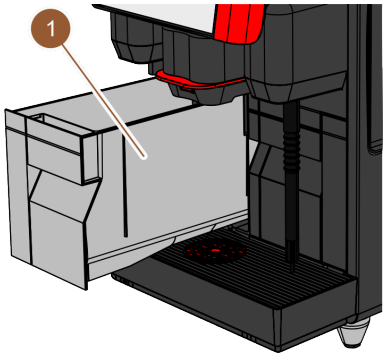


Figure: Internal drinking water tank

Interval: Daily

- ▶ Pull the internal drinking water tank (1) out of the machine.

- ▶ Rinse the internal drinking water tank (1) thoroughly several times with fresh water; do not use any cleaning products.
- ▶ Dry the internal drinking water tank (1) with a clean cloth.
- ▶ Fill the internal drinking water tank (1) with fresh water.
- ▶ Insert the internal drinking water tank (1).
  - ✓ The internal drinking water tank is cleaned.

8.7.8 Cleaning external drinking water tank

DANGER

Danger of poisoning from cleaning products!

Cleaning product residues in the drinking water tank can lead to poisoning.

- ▶ Never pour cleaning products into the drinking water tank.

WARNING

Risk of infection from bacteria!

There is a risk of infection due to contamination, deposits and bacteria. Contamination can lead to health problems.

- ▶ Wear protective gloves when cleaning.

Figure: External drinking water tank

Cleaning interval: Daily

1. Unscrew the cover of the external drinking water tank.
2. Pull the drinking water hose of the machine out of the external drinking water tank and the cover.
3. Lay the end of the drinking water hose on a clean cloth.
4. Rinse the external drinking water tank thoroughly with fresh water multiple times. Do not use cleaning products.
5. Clean the cover of the external drinking water tank with fresh water and dry it with a clean cloth.
6. Fill the external drinking water tank with fresh water.
7. Check if the floater can move freely (fill level monitoring).
8. Lead the water hose back through the cover and into the external drinking water tank.
9. Close the external drinking water tank with the cover.
   - ✓ The external drinking water tank is cleaned.

8.7.9 Cleaning external waste water tank

WARNING

Risk of infection from bacteria!

There is a risk of infection due to contamination, deposits and bacteria. Contamination can lead to health problems.

▶ Wear protective gloves when cleaning.

Figure: External waste water tank

Cleaning interval: Daily

1. Unscrew the cover of the waste water tank.
2. Pull the waste water hose of the machine out of the waste water tank and the cover.
3. Lay the end of the waste water hose on a clean cloth.
4. Rinse the external waste water tank thoroughly multiple times with fresh water. Do not use cleaning products.
5. Clean the cover of the waste water tank thoroughly with fresh water.
6. Dry the cover of the waste water tank with a clean cloth.
7. Check if the floater can move freely (fill level monitoring).
8. Guide the waste water hose back into the waste water tank through the cover.
9. Close the waste water tank with the cover.

✓ The external waste water tank is cleaned.

8.7.10 Cleaning bean hoppers

CAUTION

Danger of injury due to rotating grinding discs!

There is a risk of cuts due to rotating grinding discs in the grinder.

▶ Never reach into the bean hopper when the machine is switched on.

▶ Wear gloves when cleaning.

ADVICE

Damage to the machine surface!

The machine surface can be scratched by abrasive cleaners.

▶ Do not use scouring agents for cleaning.

Cleaning interval: Weekly

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

Figure: **Switch-off** button

1. Tap on the **Switch-off** button.
   ✓ The machine is in Standby mode.

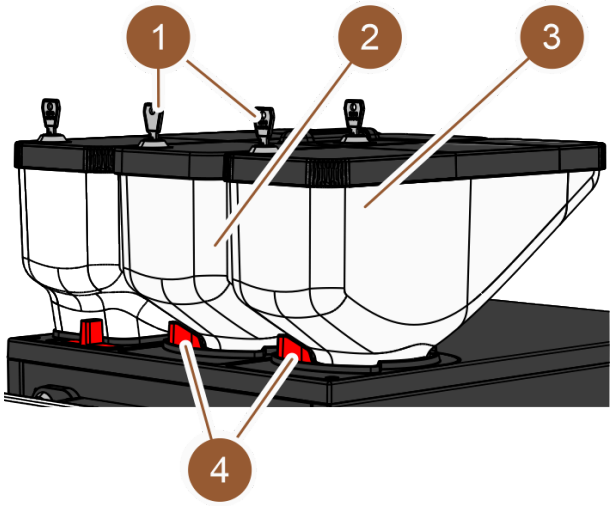


Figure: Cleaning bean hoppers

2. Open the locking mechanism **(4)** of the bean hoppers **(2)** or **(3)**.
3. Lift the bean hoppers **(2)** or **(3)** out of the machine.
4. Remove the covers by opening the closing device for the cover **(1)**, if present.
5. Remove the remaining coffee beans from the machine and the bean hoppers.
6. Rinse the bean hoppers thoroughly under running water.
7. Wipe the bean hoppers and cover dry with a clean cloth.
8. Put the bean hoppers back into the machine.
9. Close the locking mechanism of the bean hoppers **(4)**.
10. Fill the bean hoppers and put on the covers, close the closing device for the cover **(1)** if present.
11. Fill the bean hoppers and put on the covers, close the closing device for the cover if present.
    ✓ The bean hoppers are clean.

8.7.11 Cleaning powder container

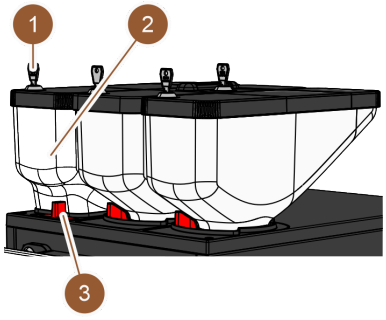


Figure: Cleaning powder container

Interval: As needed

- ▶ Switch off the machine.
  See 7.9.1 ""
- ▶ Open the locking mechanism (3) of the powder container (2).
- ▶ Lift the powder container (2) out of the machine.
- ▶ Remove the cover by opening the closing device (1), if present.
- ▶ Remove any remaining powder.

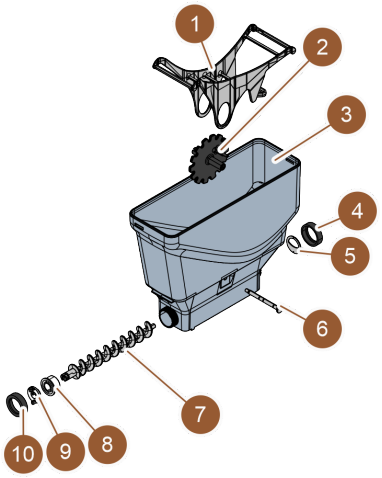


Figure: Standard powder container

Variant: Disassembling standard powder container

Prerequisite: The standard powder container is installed.

- ▶ Loosen the cap nuts (4, 10).
- ▶ Remove the dosing plate (5).
- ▶ Remove the drive coupling (9).
- ▶ Pull out the axis (6).
- ▶ Remove the rocker (1) and the toothed wheel (2).
- ▶ Pull the dosing screw (7) and the drive element (8) out.

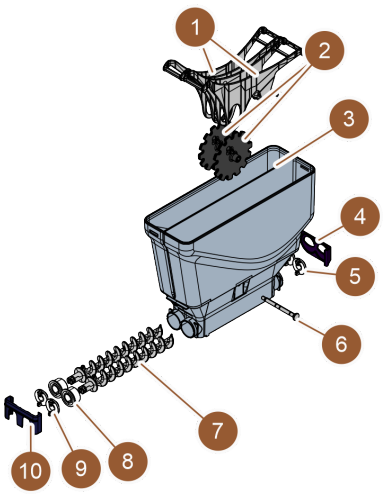


Figure: Twin powder container

Variant: Disassembling Twin powder container

Prerequisite: The Twin powder container is installed.

- ▶ Pull the sliders (4, 10) downwards.
- ▶ Remove the dosing plate (5).
- ▶ Remove the drive coupling (9).
- ▶ Pull out the axis (6).
- ▶ Remove the rocker (1) and the toothed wheel (2).
- ▶ Pull the dosing screw (7) and the drive element (8) out.

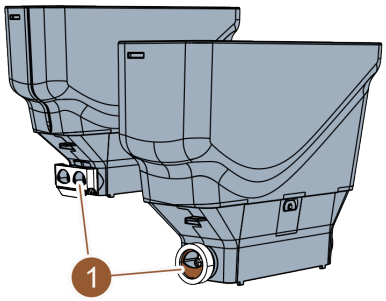


Figure: Alignment of dosing plate

ADVICE

Damage to the powder container

The powder containers could get scratched by scouring agents.

- ▶ Do not use scouring agents for cleaning.

Cleaning powder container

1. Rinse the powder container and individual parts of the dosing mechanism thoroughly under running water.
2. Allow all parts to dry thoroughly before reassembling.
3. Reassemble in reverse order.

8.7.12 Cleaning outer surfaces

ADVICE

Damage to the machine surface!

The machine surface can be scratched by abrasive cleaners.

- ▶ Do not use scouring agents for cleaning.

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

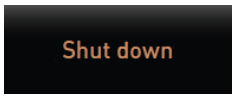


Figure: **Switch-off** button

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

4. Switch the machine back on using the switch-on button.
5. Slightly lift the user panel and slide it back downwards until it engages.
   ✓ The machine is switched on and ready for use.

See 8.7.6 "Cleaning touch screen"

8.7.13 Triggering manual rinsing

Figure: **Direct selection** area in Service menu

Interval: As needed

INFORMATION: The rinsing process can be activated manually in the Service menu at any time.

▶ Tap on the **Service menu** button in the user interface.
   ✓ The Service menu opens.
▶ Tap on the **Start rinsing** button (1).
   ✓ A system rinsing process runs identically to the automatic on/off rinsing process.

See 8.5.1 "Automatic switch on/off rinsing".

9 Maintenance

Maintenance is divided into the following categories:

- **Maintenance work**: Maintenance work must not be carried out by the operator. If maintenance work is due, the service partner must be informed, who will then carry out the maintenance work.
- **Descaling with mains water supply**: Descaling can be carried out by the operator. A decalcification cartridge **079293** is required for descaling.
- **Descaling with internal water tank**: Descaling can be carried out by the operator. 2 bottles of liquid decalcifier **062869** are used for descaling.

9.1 Maintenance work

The machine requires regular maintenance. The maintenance schedule depends on multiple factors, especially the degree to which the machine is used and the service life of the safety valves.

When maintenance is due, the machine indicates this on the display. The machine can continue to be operated normally.

9.1.1 Maintenance intervals

ADVICE

Property damage due non-observance of maintenance intervals!

Putting off maintenance can lead to premature wear.
▶ Have pending maintenance work done by your service partner as quickly as possible.

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 necessary)	(Replace)	Check (only replace if necessary)
Steam boiler	Check (only replace if necessary)	(Replace)	Check (only replace if necessary)
Safety valve 12 bar	(Replace)	(Replace)	(Replace)
Safety valve 5 bar	(Replace)	(Replace)	(Replace)

Requirements for maintenance:

1. If maintenance is due, contact the service partner.
2. Perform all descaling intervals in line with the instructions displayed by the machine.
3. Perform a descaling procedure a day before maintenance work.

See 9.2 "Descaling"

9.1.2 Having maintenance work done 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.

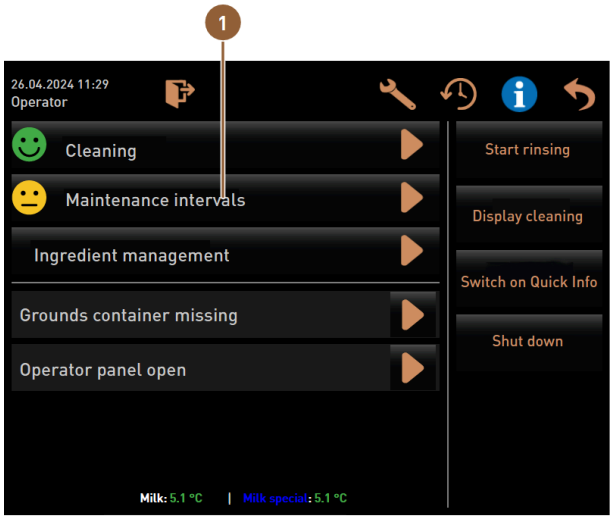


Figure: Calling up maintenance intervals

The **Maintenance intervals (1)** 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.

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

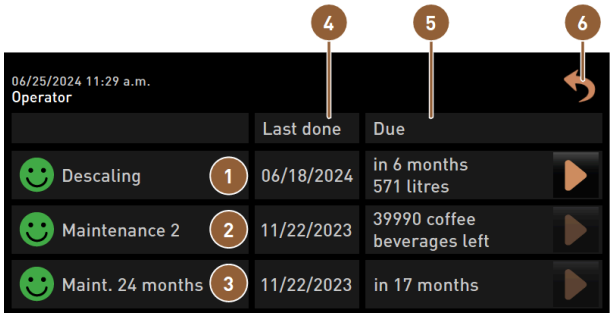


Figure: **Maintenance intervals** screen

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

The button is used to start the pending **descaling (1)** process.

The button displays a query for **maintenance 2 (2)** and **24-month maintenance (3)**. 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 (4)** column, the date on which the corresponding maintenance work was last carried out is displayed.

The **Due (5)** column shows the time after how many months, beverages or litres the next maintenance work has to be carried out.

The **Back (6)** button takes you back to the Service menu.

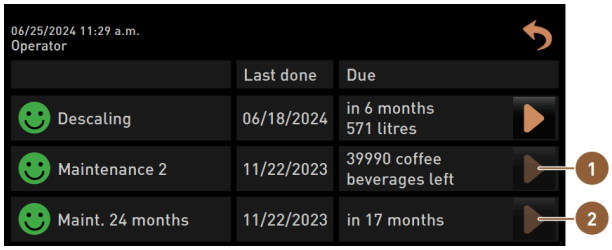


Figure: Confirming maintenance

Performing and confirming maintenance

2. Have the pending maintenance work carried out by a service technician.
3. Then tap on the displayed maintenance task **(1)** or **(2)** to confirm it.
   ✓ The dialogue for the corresponding maintenance tasks opens.

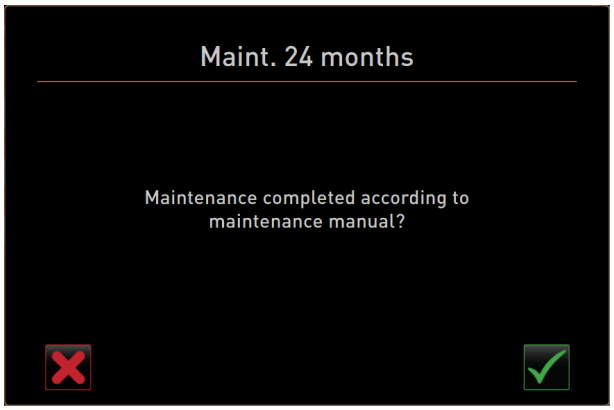


Figure: Confirmation dialogue for completed maintenance work (example)

4. Make sure that maintenance has been carried out and completed in accordance with the maintenance concept and maintenance checklist.
5. 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.

9.2 Descaling

WARNING

Danger of acid burns!

Acid escapes during the descaling process. Danger of skin irritation and serious eye irritation

- ▶ Do not touch the descaling product with bare hands and read the enclosed safety data sheet.
- ▶ Do not remove the decalcification cartridge during the descaling process. Wait for the instruction on the display.

CAUTION

Scalding danger due to hot water!

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

- ▶ Pull the beverage outlet to the lowest dispensing position.
- ▶ Do not reach under the hot water outlet during the descaling process.

CAUTION

Scalding danger due to hot steam!

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

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

Descaling duration

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.

Aborted descaling

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

That is why repeating a descaling process that has not been fully and correctly completed is essential.

9.2.1 Required descaling material

The following material is needed during the descaling process with **mains water supply**:

- 1 l water
- Clock with second display
- 1x Schaerer **Uptime!** decalcification cartridge (**079293**)
- 1x Schaerer cleaning container 1 l blue (option)
- 1x Schaerer cleaning container cover (option)
- Gloves
- Protective goggles

The following material is needed during the descaling process with **internal water tank**:

- 1 l water
- Clock with second display
- 2x Schaerer liquid decalcifier (**062869**)
- 1x Schaerer cleaning container 1 l blue (option)
- 1x Schaerer cleaning container cover (option)
- Gloves
- Protective goggles

9.2.2 Uptime! decalcification cartridge

ADVICE

Property damage due to incorrect decalcification cartridge!

Use of decalcification cartridges other than those recommended by Schaerer AG may damage the coffee machine.

- ▶ Use only decalcification cartridges recommended by Schaerer AG.
- ▶ Only use cartridges taken directly out of the packaging.
- ▶ Before descaling, read the information on the packaging and the safety data sheet carefully. If a safety data sheet is not available, please request it from your sales partner.

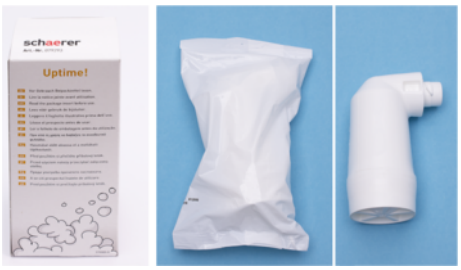


Figure: **Uptime!** decalcification cartridge

Purpose:	Descaling of coffee machine with mains water supply
Scope of descaling:	Descaling the boiler including the hot water/steam system
Application interval:	As per request

Liquid decalcifier

ADVICE

Property damage due to incorrect liquid decalcifier!

Use of liquid decalcifiers other than those recommended by Schaerer AG may damage the machine.

- ▶ Use only liquid decalcifiers recommended by Schaerer AG.
- ▶ Only use descaling products taken directly out of the packaging.
- ▶ Before descaling, read the information on the packaging and the safety data sheet carefully. If a safety data sheet is not available, request it from your sales partner.

Name	Schaerer liquid decalcifier **Calcpure**
Application	Descaling of machine with internal water tank
Descaling	Descaling the boiler including the hot water/ steam system
Application interval	As per request

9.2.3 "Descaling" screen

The following information is displayed on the screen during descaling:

Figure: **Descaling** screen

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

The **progress display (1)** 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 programme can be cancelled at any time using the **Cancel (2)** button. After descaling is aborted, the machine is not ready for use.

Images or animations **(3)** provide visual support for the information and instructions **(4)**.

In this area **(4)**, information and instructions for the respective descaling step are given in text form.

The **Next (5)** button confirms instructions for action and takes you to the next step.

9.2.4 Carrying out descaling for the machine with mains water supply

The descaling process can be aborted/stopped at any time. You will be asked whether you really want to stop the descaling process.

Opening Service menu

Prerequisite: The pending descaling process is displayed in the Service menu with a red smiley.

▶ Tap on the **Service menu** button in the user interface.
✓ The **Service menu** page opens.

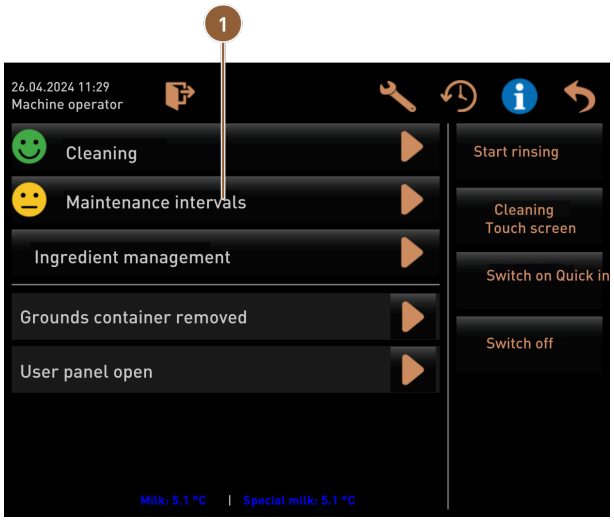


Figure: Calling up maintenance intervals

Opening “Maintenance interval” page

▶ Tap on the ▶ button (1).
✓ The **Maintenance intervals** page appears.
✓ All executed and pending maintenance processes are displayed.

Figure: “Maintenance intervals” page

Starting descaling

1. Tap on the ▶ button (1).
✓ The descaling programme starts.

2. **With waste water tank**: Completely remove waste water tank.
3. **With external drinking water tank**: Completely fill external drinking water tank.

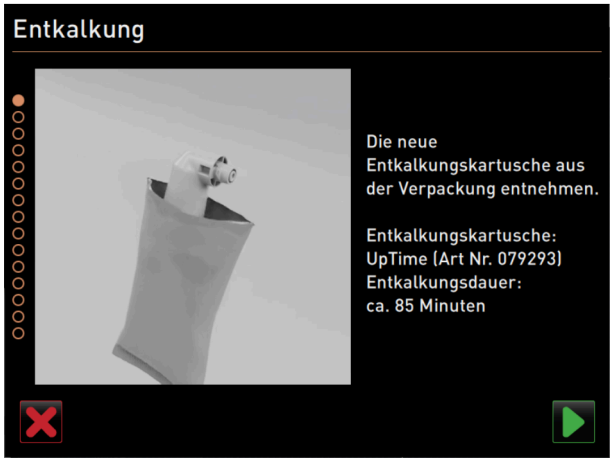


Figure: Unpacking decalcification cartridge

Unpacking decalcification cartridge

1. Take the Schaerer **Uptime!** decalcification cartridge out of the packaging.
2. Confirm unpacking with the button.

Reorder the decalcification cartridge with the article number for the next descaling process from the service partner.

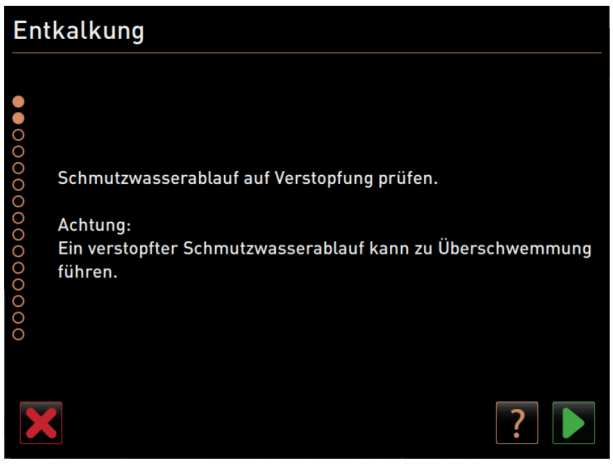


Figure: Cleaning drip tray

Variant: With waste water connection

1. Completely drain waste water tank (if present).
   ADVICE Material damage due to overflowing water caused by blocked dirty waste water outlet!
   INFORMATION: The field in the display leads to the step-by-step description.
2. Remove the drip grid from the drip tray.
3. Pour 1 l of water into the drip tray and start the timer at the same time.
   ✓ The water drains.
4. Wait until the water has drained completely. Read the time from the timer.

If more than 30 s have passed, the waste water outlet is blocked.

5. Have a blocked waste water outlet repaired by a service technician.
6. Confirm inspection of the waste water outlet with the button.

Figure: Draining drip tray

Variant: Without waste water connection

1. Remove drip tray.
2. Drain drip tray.
3. Reinsert drip tray.
4. Confirm drainage of the drip tray with the button.

Figure: Removing grounds container

Removing the grounds container

1. Push the beverage outlet all the way up.
2. Remove the grounds container from the machine and empty it.

Figure: Inserting decalcification cartridge

Insert decalcification cartridge

1. Open the left front cover.
2. Remove the green end cap by turning it to the left.
3. Position the unpacked decalcification cartridge and insert it by turning it to the right.
   ✓ The decalcification cartridge is inserted.

Figure: Inserting grounds container

Insert grounds container

▶ Insert the grounds container into the machine.

Figure: Removing milk container

Option: Removing milk container

1. Open the door of the cooling unit.
2. Remove the milk container from the cooling unit, then empty and clean it if necessary.
   Warning Risk of infection due to warm/contaminated milk!
3. Keep milk cool during descaling.
4. Confirm drainage of the milk container with the button.

Figure: Removing cleaning container

Option: Inserting cleaning container

1. Place the empty cleaning container in the cooling unit.
2. Attach the milk hose to the cover of the cleaning container.
3. Close the door of the cooling unit.
4. Confirm drainage of the cleaning container with the button.

Figure: Positioning beverage outlet and steam wand

Positioning beverage outlet and steam wand

1. Move the beverage outlet to the lowest position.
2. Align the steam wand in the drip tray.
3. Confirm correct positioning with the button.

Figure: Starting descaling process

Starting descaling process

Caution Danger of scalding from hot fluid and hot steam!

1. Wear protective goggles and safety gloves.
2. Start the descaling process with the button.

Figure: Progress screen with descaling process

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

- ✓ Coffee machine cooling starts (blue).
- ✓ Descaling is active (yellow).
- ✓ Rinsing is active (green).

The descaling process can be interrupted with the ⏸ button and continued with the ▶ button. Descaling can no longer be aborted.

Figure: Removing decalcification cartridge

Removing decalcification cartridge

Warning Wait for the instruction to remove the decalcification cartridge on the display.

Prerequisite: The descaling process is complete.

▶ Remove the decalcification cartridge from the machine by turning it anti-clockwise.

Figure: Replacing safety cap

Replacing safety cap

1. Replace the green end cap by turning it clockwise.
2. Close the left front cover.
3. Confirm closure of the cover with the button.

Figure: Removing cleaning container

Option: Removing cleaning container

1. Pull the milk hose out of the cover of the cleaning container.
2. Remove cleaning container from the cooling unit.
3. Empty and rinse out the cleaning container.
4. Confirm removal of the cleaning container with the button.

Figure: Inserting milk container

Option: Putting milk container in cooling unit

1. Fill the milk container with cooled milk and put it in the cooling unit.
2. Attach the milk hose to the cover of the milk container.
3. Confirm connection of the milk container with the button.

Figure: Ordering decalcification cartridge

Reordering decalcification cartridge

Prerequisite: The article number appears in the user interface.

▶ Reorder a decalcification cartridge from your service partner for the next descaling process.

▶ Confirm connection of the milk container with the button.

✓ The descaling programme closes.

✓ The machine is restarted.

✓ The machine is ready for operation and the user interface is displayed.

✓ The last executed descaling process is shown in the Service menu under **Maintenance intervals**.

9.2.5 Variant: Starting descaling with internal water tank

The descaling process can be aborted/stopped at any time. You will be asked whether you really want to stop the descaling process.

Figure: [Service menu] field

Opening Service menu

Prerequisite: The pending descaling process is displayed in the Service menu with a red smiley.

▶ Tap on the [**Service menu**] field in the user interface.
✓ The "Service menu" page opens.

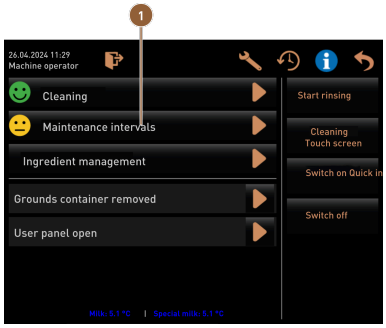


Figure: Service menu

Opening "Maintenance interval" page

▶ Tap on the ▶ field (**1**).
✓ The "Maintenance interval" page appears.
✓ All executed and pending maintenance processes are displayed.

Starting descaling

1. Tap on the ▶ field (**1**).
   ✓ The descaling programme starts.
2. **With waste water tank**: Completely remove waste water tank.

Figure: Cleaning drip tray

Variant: With waste water connection

1. Completely drain waste water tank (if present).
   ADVICE Material damage due to overflowing water caused by blocked dirty waste water outlet!
   INFORMATION: The ▪ field in the display leads to the step-by-step description.
2. Remove the drip grid from the drip tray.
3. Pour 1 l of water into the drip tray and start the timer at the same time.
   ✓ The water drains.
4. Wait until the water has drained completely. Read the time from the timer.

If more than 30 s have passed, the waste water outlet is blocked.

5. Have a blocked waste water outlet repaired by a service technician.
6. Confirm inspection of the waste water outlet with the ▶ field.

Figure: Draining drip tray

Variant: Without waste water connection

1. Remove drip tray.
2. Drain drip tray.
3. Reinsert drip tray.
4. Confirm drainage of the drip tray with the ▶ field.

Figure: Draining internal water tank

Removing internal water tank

1. Remove the internal water tank from the machine.
2. Open the cover and drain the internal water tank.
3. Confirm drainage of the internal water tank with the ▶ field.

Figure: Filling liquid decalcifier

Filling liquid decalcifier

1. Fill a bottle of descaling agent (062869) into the internal water tank.
2. Fill the empty bottle with water and pour the water into the water tank.
3. Close the cover and insert the internal water tank into the machine.
4. Confirm filling of liquid decalcifier in the internal water tank with the ▶ field.

Figure: Removing grounds container

Removing grounds container

1. Push the beverage outlet all the way up.
2. Remove the grounds container from the machine and empty it.

Figure: Inserting grounds container

Insert grounds container

▶ Insert the grounds container into the machine.

Figure: Placing container under outlet

Placing container under outlet

1. Position a container with a capacity of at least 5 l under the beverage outlet.
2. Ensure that the container cannot tip over.
3. Confirm the container is securely positioned with the field.

Figure: Removing milk container

Option: Removing milk container

1. Open the door of the cooling unit.
2. Remove the milk container from the cooling unit, then empty and clean it if necessary.
   Warning Risk of infection due to warm/contaminated milk!
3. Keep milk cool during descaling.
4. Confirm removal of the milk container with the ▶ field.

Figure: Removing cleaning container

Option: Inserting cleaning container

1. Place the empty cleaning container in the cooling unit.
2. Attach the milk hose to the cover of the cleaning container.
3. Close the door of the cooling unit.
4. Confirm insertion of the cleaning container with the ▶ field.

Figure: Positioning beverage outlet and steam wand

Positioning beverage outlet and steam wand

1. Move the beverage outlet to the lowest position.
2. Align the steam wand in the drip tray.
3. Confirm correct positioning in the ▶ field.

Figure: Starting descaling process

Starting descaling process

Caution Danger of scalding from hot fluid and hot steam!

1. Wear protective goggles and safety gloves.
2. Start the descaling process with the ▶ field.

Figure: Progress screen with descaling process

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

- ✓ Coffee machine cooling starts (blue).
- ✓ Descaling is active (yellow).
- ✓ Rinsing is active (green).

The descaling process can be interrupted with the ⏸ field and continued with the ▶ field. Descaling can no longer be aborted.

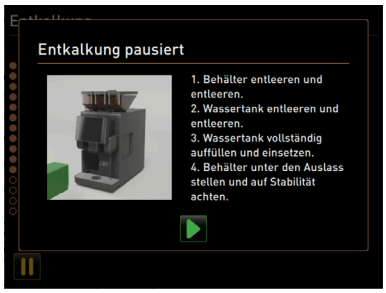


Figure: Descaling paused

The "Descaling paused" window appears on the display.

1. Remove and drain container.
2. Remove the internal water tank from the machine.
3. Fill the internal water tank completely with fresh drinking water.
4. Insert the internal water tank into the machine.
5. Place a container under the beverage outlet.
6. Ensure that the container cannot tip over.
7. Confirm the steps have been completed with the ▶ field.
   - ✓ The descaling process is continued.

Figure: Descaling paused

The "Descaling paused" window appears on the display.

1. Remove and drain container.
2. Remove the internal water tank from the machine.
3. Fill the internal water tank completely with fresh drinking water.

4. Insert the internal water tank into the machine.
5. Place a container under the beverage outlet.
6. Ensure that the container cannot tip over.
7. Confirm the steps have been completed with the field.
   ✓ The descaling process is continued.

Figure: Removing container

1. Remove, drain and clean container.
2. Remove the internal water tank from the machine.
3. Fill the internal water tank with fresh drinking water.
4. Insert the internal water tank into the machine.
5. Confirm the steps have been completed with the field.

Figure: Removing cleaning container

Option: Removing cleaning container

1. Pull the milk hose out of the cover of the cleaning container.
2. Remove cleaning container from the cooling unit.
3. Empty and rinse out the cleaning container.
4. Confirm removal of the cleaning container with the field.

Figure: Inserting milk container

Option: Putting milk container in cooling unit

1. Fill the milk container with cooled milk and put it in the cooling unit.
2. Attach the milk hose to the cover of the milk container.
3. Confirm closure of the milk container with the field.

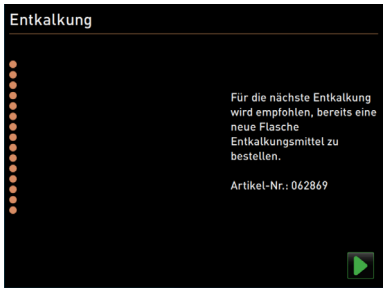


Figure: Ordering liquid decalcifier

Reordering liquid decalcifier

Prerequisite: The article number appears in the user interface.

▶ Reorder a liquid decalcifier from your service partner for the next descaling process.

Completing descaling programme

▶ Confirm and complete descaling with the field.

✓ The descaling programme closes.

✓ The machine is restarted.

✓ The machine is ready for operation and the user interface is displayed.

✓ The last executed descaling process is shown in the Service menu under “Maintenance intervals”.

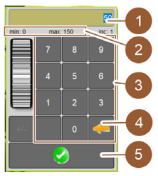
9.2.6 Disposing of decalcification cartridge

The decalcification cartridge is made of plastic and must be completely drained and rinsed with water after descaling.

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

10 Programming

10.1 Navigation elements

Symbol	Designation	Description
	Open/Close structure tree	The [**+**] field opens the structure tree in the statistics. The [**–**] field closes the structure tree in the statistics.
	On/Off controller	The [**On/Off**] controller activates or disables a function. Green = on Grey = off
 	Parameter value	The [**Parameter value**] field switches the value of a parameter back on. **Variant: Setting with control dial** ▶ Tap on parameter value. ✓ The control dial opens. ▶ Set the desired value by turning the control dial up and down. ▶ Confirm set value with the field. **Variant: Setting with keyboard** ▶ Touch the field containing the current setting (**1**). ✓ The keyboard entry opens. ✓ Min. and max. values of the possible settings are displayed (**2**). ▶ Remove current setting with the field (**4**). ✓ The numeric keypad is activated. ▶ Enter the new value on the keyboard (**3**). ▶ Confirm the value with the field (**5**).
	Activation/ Confirmation	The [**Activation/Confirmation**] field confirms the selection of an assigned coffee type or temperature setting, for example.
	Remove	The [**Remove**] field removes the following functions: • Reset counter • Cancel beverage dispensing • Close window/page
	Next	The [**Next**] field opens a selection list or leads back to the next programme step.
	Back	The [**Back**] field takes you back to the previous page/window.

Symbol	Designation	Description
	Save	The [**Save**] field saves any parameter settings made.
	Restart	The [**Restart**] field activates a machine restart. A restart is required after the machine configurations have been run.

10.2 Profiles and authorisations

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

The following profiles are available for the coffee machine:

- Caretaker
- Facilities manager
- Quality manager
- Machine operator

A different number of parameters can be adjusted depending on the selected profile.

In addition to the listed profiles, there is the Service technician profile, which is reserved for the service partner and protected with a PIN. The service technician has full programming access. Details can be found in the separate programming manual.

10.2.1 Caretaker profile

The caretaker is the first person to contact in the event of technical problems. 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

10.2.2 Facilities manager profile

The facilities manager is a department or restaurant manager and his or her duties also include 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 facilities manager 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 **Facilities 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 **Facilities manager** profile:

- Configuration
- Info

10.2.3 Quality manager profile

The quality manager is responsible for the quality of the beverages from the machine. Monitoring cleaning times is particularly important to ensure quality.

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

10.2.4 Machine operator profile

The machine operator is the normal operator of the machine and therefore only a few service functions are available in this profile. Apart from setting the language, the machine operator can view the machine version in order to pass on the information to a service technician when errors occur.

Functions in the Service menu

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

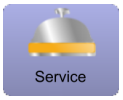
- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Switch-off
- Cleaning
- Maintenance intervals
- Ingredient management

Settings

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

- Configuration
- Info

10.2.5 Overview of profile authorisations

Settings	Parameter	Caretaker	Facilities manager	Quality manager	Machine operator
	Grinder / brewing unit	x	-	-	-
	Milk system	x	-	-	-
	Time / date / timer mode	x	-	-	-
	Grinder service	x	-	-	-
	Backup database	x	-	-	-
	Reset cleaning	x	-	-	-
	Reset descaling counters	x	-	-	-
	Reset descaling	x	-	-	-
	Show versions	x	x	x	x
	Machine counter	x	x	-	-
	Beverage statistics	x	x	-	-
	Cleaning statistics	x	x	x	-
	Maintenance statistics	x	-	-	-
	Dispensing statistics	x	x	-	-
	Water hardness statistics	x	-	-	-

10.3 Machine configuration

The machine configurations are divided into the following areas:

- System
- Configuration
- Service
- Info

10.3.1 “Settings” screen

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

▶ Tap on the **Settings** button.
✓ The **Settings** screen opens.

The parameters displayed in the settings depend on the authorisations of the selected profile.

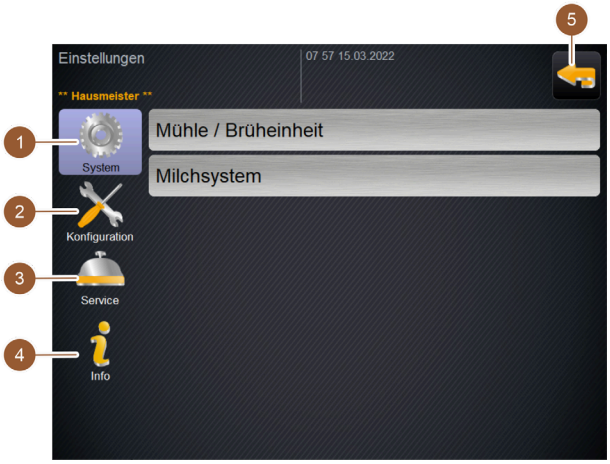


Figure: **Settings** screen

1. Displays the existing parameters for the **System** settings on the right.
2. Displays the existing parameters for the **Configuration** settings on the right.
3. Displays the existing parameters for the **Service** settings on the right.
4. Displays the existing parameters for the **Info** settings on the right.
5. The display returns to the Service menu.

10.3.2 "System" settings

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

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

▶ Tap on the **System** . button.

✓ The **System** setting screen opens.

Grinder/Brewing unit system setting

The **Grinder / Brewing unit** setting opens the following menu points for system settings and displays:

- Grounds container: Capacity
- Grounds container: Emptying time [s]
- Grounds container: Current counter
- Centre grinder calibration value (10 s) [g]
- Right grinder calibration value (10 s) [g] (option)
- Left grinder calibration value (10 s) [g] (option)

Authorised profiles

- Service technician
- Caretaker

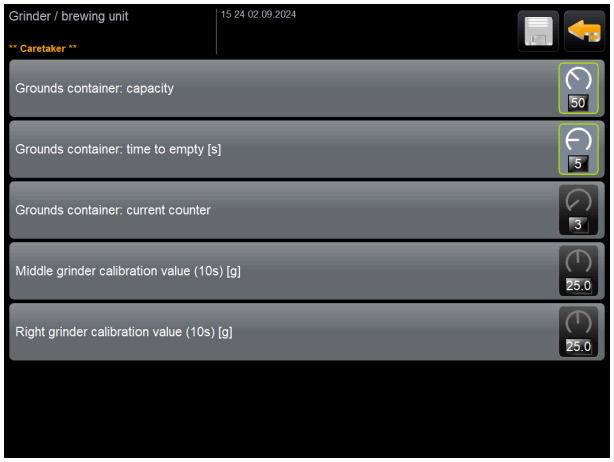


Figure: Screen with settings for grinder/brewing unit

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

1. 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 is emptied.
2. With grounds disposal (option): Set the value to *0* coffee cakes.
   ✓ The number of cycles (coffee cakes) is ignored.

Grounds container: Emptying time [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*

1. Set the value to *5 s*.
2. Empty the grounds container when the corresponding instruction is shown in the display. If the grounds container is only briefly pulled out and immediately pushed back in, the counter value is retained and it is not reset.
3. 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.

Centre grinder calibration value (10 s) [g]

The calibration value in grams is recorded with this setting for the centre grinder during grinder calibration.

Service technicians can change the value.

Setting range	Standard
1.0 – 50.0 g (only to be set by service technicians)	Calibration executed accordingly

1. Start calibration in the **Service** – **Grinder service** setting.
2. Execute calibration using the assistant.
3. Enter the calculated value in this input field (only in the **Service technician** profile).
   ✓ Grinder calibration for the centre grinder is complete.
   ✓ The output grind quantity corresponds to the grind quantity set in the coffee recipe.

ADVICE Service technicians can change the calibration value in grams displayed in this parameter for a blanket adjustment of the coffee beverages from the centre grinder without calibrating the grinder.
Adjusting the calibration value influences all coffee recipes which were assigned to the centre grinder.

Right grinder calibration value (10 s) [g] (option)

The process is the same as for the centre grinder.

Milk system setting

The **Milk system** setting opens the following menu points for system settings and displays:

- Milk container
- Milk 1 hose length from squeeze valve -> cooling cell [cm]
- Milk 2 hose length from squeeze valve -> cooling cell [cm]
- Milk level monitoring

Authorised profiles

- Service technician
- Caretaker

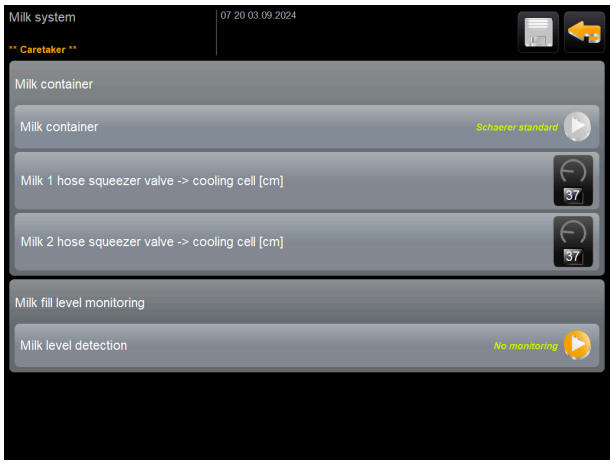


Figure: Screen with settings for milk system

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 a service technician)	**Schaerer standard**

Custom

1. Select the **Custom** option (only in the **Service technician** profile).
   ✓ The milk hose is not automatically detected.
2. 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 from 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

1. Measure the milk hose length from squeeze valve in the machine up to the milk container in the cooling device.
2. 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:

- Left cooling unit 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 from 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 monitoring

This setting defines the fill level monitoring behaviour for the milk container.

Setting range	Standard
No monitoring Warning Disable beverage dispensing	No monitoring

No monitoring option

- Milk monitoring is configured but is not in use.

Warning option

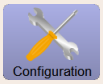
- If a low milk level is detected, a message appears on the display. Other milk beverages can be dispensed.

Disable beverage dispensing option

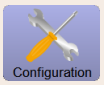
- If a low milk level is detected, a message appears on the display. Dispensing of milk beverages is blocked.

10.3.3 "Configuration" settings

Authorised profiles: Caretaker, facilities manager, bookkeeper, bookkeeper reduced, machine operator and quality manager

	**Setting > Configuration – General**
Main language  Figure: Display language	Changes the display language. Setting range: All provided languages Standard: Free selection 1. Open the language setting with the ▶ button. ✓ The selection menu appears. 2. Select the desired language. ✓ All display messages and parameter names appear in the activated language. See 10.3.6 "Saving changes and loading them into the machine".

Authorised profiles: Caretaker



Setting > Configuration – Time/Date/Timer operation

Date
Time
Time zone

Shows information about the preset time zone with date and time.

Setting range: No setting possible

Default: Country-specific/User-specific

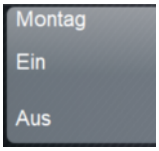
The time zone is selected while the commissioning programme is running. When the time zone is set, the time and date from the selected time zone are applied.

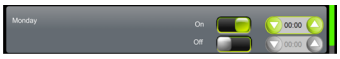
Available time zones:

- Asia
- Africa
- Australia
- Europe
- North America
- South America

Each time zone contains further subdivisions, e.g. *Central European Time (CET/MEZ)*.

Monday On/Off to
Sunday On/Off





Shows information about the automatic switch-on/switch-off times.

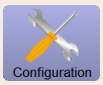
Setting range: Day/Switch-on time/Switch-off time/Time

Standard: User-specific

1. Activate the switch-on time for the desired day of the week using the switch.
   ✓ The settings for the time become active.
2. Set the time using the . buttons, e.g. 07:00 (07:00 a.m.).
3. Activate the switch-off time for the desired day of the week using the switch.
   ✓ The settings for the time become active.
4. Set the time using the buttons, e.g. 22:30 (10:30 p.m).

Depending on the selected time zone, the respective time format (24 h or 12 h AM/PM) is automatically selected.

Authorised profiles: Bookkeeper, facilities manager



Setting > Configuration – Beverage price adjustment by the bookkeeper (standard operating mode)

Figure: Beverages in menu card

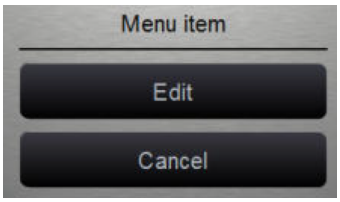


Figure: Menu item

Figure: Beverage price menu item

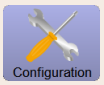
Beverage price setting with or without payment system

Prerequisite: The **Configuration – Operating mode – Menu card** setting contains the **Standard** setting.

1. Open the Service menu.
2. Log in with the **Bookkeeper** or **Service technician** profile.
3. Open the settings with .
4. Select the **Configuration – menu card** setting.
   ✓ The **Standard** menu card opens.
5. Select the desired beverage.
   ✓ The **Menu item** context menu opens.
6. Tap on the **Edit** button.
   ✓ The **Menu card entry** window opens.
   ✓ The individual beverage sizes are listed separately according to the beverage configuration.
7. Tap on the **Edit** button for the desired beverage size.
8. Enter the required beverage prices in the **(0)**, **(1)**, **(2)**, and/or **(3)** price lists in the input field.

See below under **Price setting using the setting dial**.

Authorised profiles: Bookkeeper, facilities manager



Setting > Configuration – Beverage price adjustment by the bookkeeper (custom operating mode)

Figure: Beverages in menu card

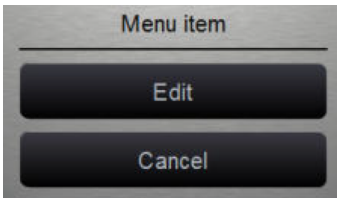


Figure: Menu item

Figure: Beverage price menu item

Beverage price setting with or without payment system

Prerequisite: The **Configuration – Operating mode – Menu card** setting contains the **Custom** setting.

1. Open the Service menu.
2. Log in with the **Bookkeeper** or **Service technician** profile.
3. Open the settings with .
4. Select the **Configuration – menu card** setting.
   ✓ The **Custom** menu card opens.
5. Open the desired menu card from the list.
   ✓ The menu card opens.
6. Tap on the **Edit** button.
   ✓ The **Menu card entry** window opens.
   ✓ The individual beverage sizes are listed separately according to the beverage configuration.
7. Tap on the **Edit** button for the desired beverage size.
   ✓ The **Edit menu card entry** screen opens.
8. Enter the required beverage prices in the **(0)**, **(1)**, **(2)**, and/or **(3)** price lists in the input field.

Figure: Beverage price input field with control dial

Setting price using control dial

1. Tap on the input field.
   ✓ The dialogue with the setting dial opens.
2. Enter the required value using the setting dial or the keyboard.
3. Save the setting with and navigate back to the menu card or user interface with .
   ✓ The beverage is now displayed in the user interface with the set price.
   ✓ The beverage price changes when the beverage selection, cup or mug size is changed.

During beverage selection, the beverage price is always updated according to the options selected later.

Beverage selection can be cancelled at any time before payment with the **[X]** button. If the beverage has already been paid for, it is no longer possible to cancel the order.

10.3.4 "Service" settings

Grinder service setting (manual grinding level adjustment)

The **Grinder service** setting (for manual grinding level adjustment) starts the following display-guided service functions on the grinder after confirmation:

- Grinding disc replacement
- Grinder adjustment
- Grinder calibration

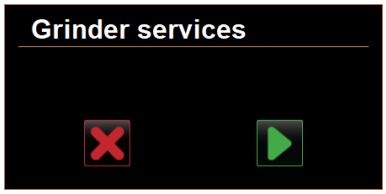


Figure: Starting grinder service

Prerequisite: The machine is equipped with manual grinder adjustment.

1. Tap on the **Service –> Grinder service** setting.
   ✓ The confirmation dialogue opens.
2. Confirm with .
   ✓ The service functions for the grinders are available.
3. Open the tab for the desired grinder (left, right, centre).

Figure: Screen for grinder service

Grinding disc replacement

WARNING

Cutting injuries!

Danger of injury from the rotating grinding discs in the grinder.
▶ Never reach into the bean hopper when the coffee machine is switched on.

To replace the grinding discs, the following steps are required:

1. Tap on the **Change grinding discs** button.
   ✓ The instruction prompting you to replace the grinding disc appears.
2. Switch off the machine and disconnect it from the mains.
3. Remove the manual grinding level adjustment and install new grinding discs.
4. Close the empty grinder by hand until resistance can be felt (grinding disc against grinding disc).
5. Open the grinder 45° anticlockwise.
6. Reassemble the manual grinding level adjustment.
7. Switch the machine back on and navigate to the **Grinder service** screen.
8. Confirm the **Change grinding discs** installation steps with the button.
   ✓ The preparation steps for **Preparing grind level adjustment** appear.

Grinder adjustment

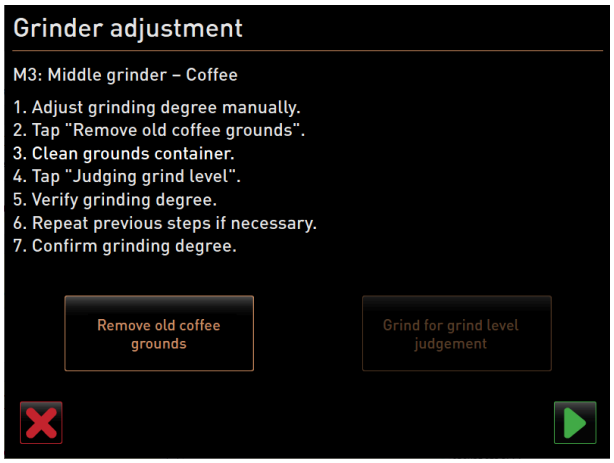


Figure: Adjusting grinder: Removing old ground coffee

Steps: Grinder adjustment

1. Continue the settings steps after **Grinding disc replacement** or tap directly on the **Adjust grinder** button.
   ✓ The preparation steps for **Preparing grind level adjustment** appear.
2. Empty and clean the grounds container and reinsert it.
3. Confirm that the grounds container is inserted with the button.
4. Set the grinding level manually.
5. Tap on the **Remove old ground coffee** button.
   ✓ The old ground coffee is removed.

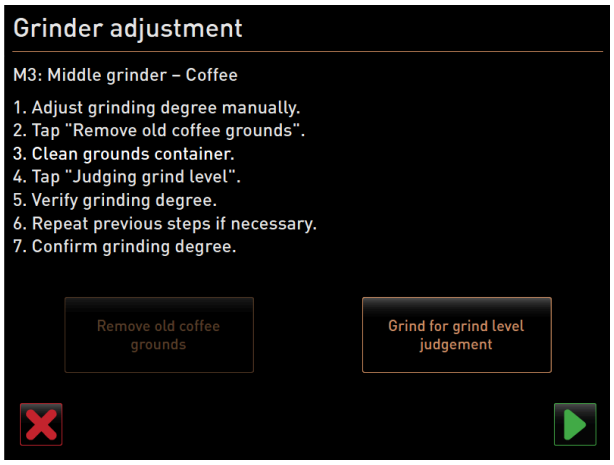


Figure: Grinder adjustment: Grind for grind level evaluation

   ✓ The **Grind for grind level evaluation** button becomes active.
6. Clean the grounds container again.
7. Tap on the **Grind for grind level evaluation** button.
   ✓ Grinding is carried out.
8. Check the grinding level and repeat the steps for setting the grinding level if necessary or confirm the set grinding level with the button.
   ✓ The preparation steps for calibrating the grinder are displayed.

Grinder calibration

Prerequisite: Calibration is required in the following cases:

- The machine is new.
- The operating time is more than one year.
- The grinding level has been changed.
- The grinder is open.
- The grinding discs have been replaced.
- The coffee type has been changed.

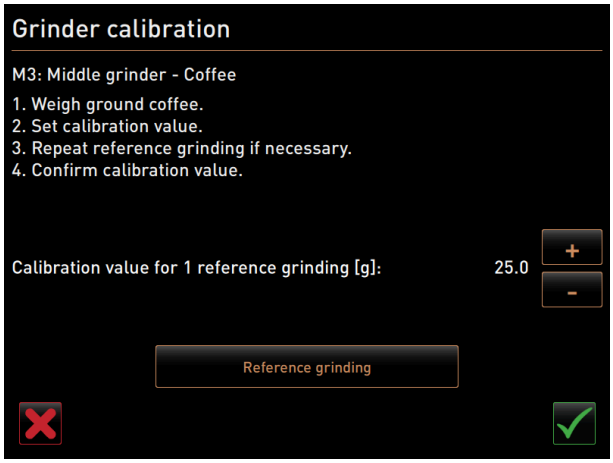


Figure: Grinder calibration

Steps: Grinder calibration

1. Continue the settings steps after **Grinder adjustment** or tap directly on the **Calibrate grinder** button.
   ✓ The preparation steps for calibration are displayed.
2. Empty and clean the grounds container and reinsert it.
3. Confirm that the grounds container is inserted with the button.
   ✓ Reference grinding starts.
4. If needed, start additional reference grinding with the **Reference grinding** button.
5. 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 the grinding operations triggered and calculates the correct grind quantity from this.
6. Weigh the ground coffee of the reference grind.
7. Set the calibration value (determined weight of ground coffee) using the **Plus** or **Minus** button.
8. Confirm calibration of the grinder with the button.
   ✓ The **Grinder service** screen opens.
   ✓ The set grinder is ready for use.

Grinder service setting (automatic grinding level adjustment)

The **Grinder service** setting (for automatic grinding level adjustment) starts the following display-guided service functions on the grinder after confirmation:

- Grinding disc replacement
- Grinder adjustment
- Grinder initialisation
- Grinder calibration

The grinder services for automatic grinder adjustment also require grinder initialisation as well as grinder adaptation via the grind level motors.

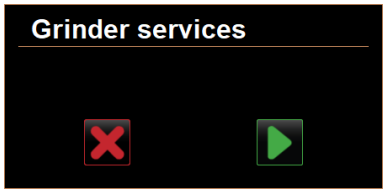


Figure: Starting grinder service

Prerequisite: The machine is equipped with an automatic grinder adjustment.

1. Tap on the **Service –> Grinder service** setting.
   ✓ The confirmation dialogue opens.
2. Confirm with .
   ✓ The service functions for the grinders are available.
3. Open the tab for the desired grinder (left, right, centre).

Figure: Screen for grinder service

Grinding disc replacement

WARNING

Cutting injuries!

Danger of injury from the rotating grinding discs in the grinder.
▶ Never reach into the bean hopper when the coffee machine is switched on.

To replace the grinding discs, the following steps are required:

1. Tap on the **Change grinding discs** button.
   ✓ The instruction prompting you to replace the grinding disc appears.
2. Switch off the machine and disconnect it from the mains.
3. Remove the grinder level motor and install new grinding discs.
4. Close the empty grinder by hand until resistance can be felt (grinding disc against grinding disc).
5. Open the grinder 45° anticlockwise.
6. Reassemble the grinding level motor.
7. Switch the machine back on and navigate to the **Grinder service** screen.
8. Confirm the **Change grinding discs** and **Grinder initialisation** installation steps with the button.
   ✓ The preparation steps for **Preparing grind level adjustment** appear.

Grinder adjustment

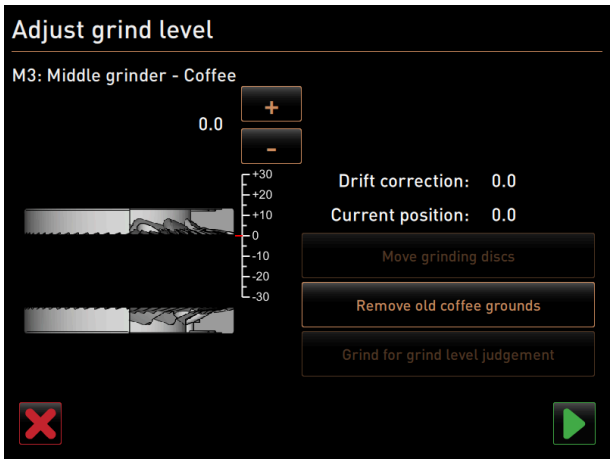


Figure: Adjusting grinder: Removing old ground coffee

Steps: Grinder adjustment

1. Continue the settings steps after **Grinding disc replacement** or tap directly on the **Adjust grinder** button.
   ✓ The preparation steps for **Preparing grind level adjustment** appear.
2. Empty and clean the grounds container and reinsert it.
3. Confirm that the grounds container is inserted with the button.
4. Tap on the **Remove old ground coffee** button.
   ✓ The old ground coffee is removed.

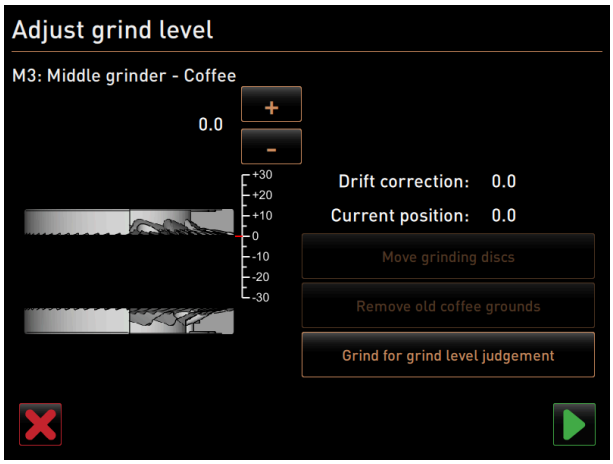


Figure: Grinder adjustment: Grind for grind level evaluation

   ✓ The **Grind for grind level evaluation** button becomes active.
5. Clean the grounds container again.
6. Tap on the **Grind for grind level evaluation** button.
   ✓ Grinding is carried out.

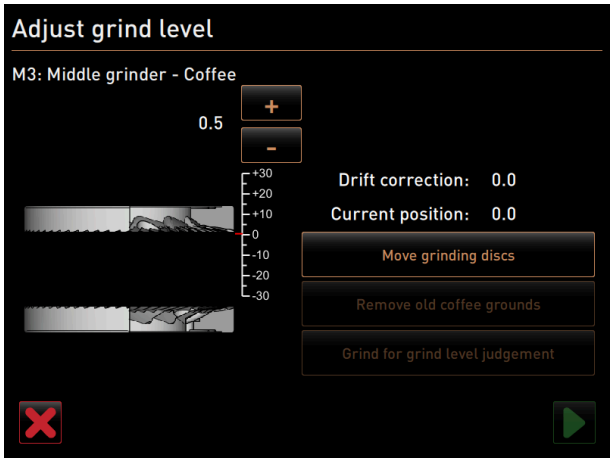


Figure: Grinder adjustment: Moving grinding discs

7. Adjust the grinding level result with the **Plus** = coarser or **Minus** = finer button.
8. Make grinding level adjustments in small steps *±1*.
9. Use the **Move grinding disc** button to set the blade to the previously set position.
10. Check the grinding level and repeat the steps for setting the grinding level if necessary or confirm the set grinding level with the ▶ button.
    ✓ The preparation steps for calibrating the grinder are displayed.

Grinder calibration

Prerequisite: Calibration is required in the following cases:

- The machine is new.
- The operating time is more than one year.
- The grinding level has been changed.
- The grinder is open.
- The grinding discs have been replaced.
- The coffee type has been changed.

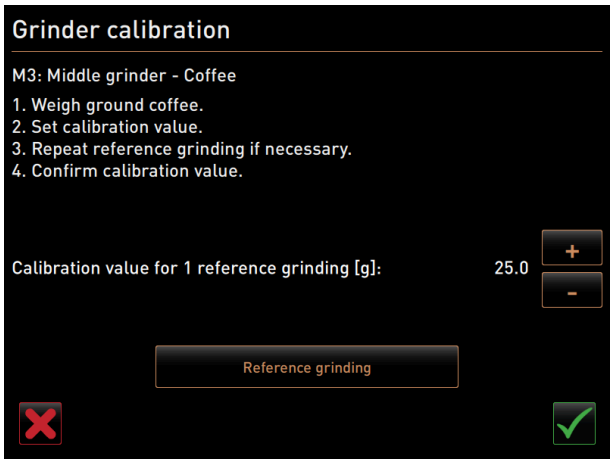


Figure: Grinder calibration

Steps: Grinder calibration

1. Continue the settings steps after **Grinder adjustment** or tap directly on the **Calibrate grinder** button.
   ✓ The preparation steps for calibration are displayed.
2. Empty and clean the grounds container and reinsert it.
3. Confirm that the grounds container is inserted with the ▶ button.

✓ Reference grinding starts.

4. If needed, start additional reference grinding with the **Reference grinding** button.
5. 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 the grinding operations triggered and calculates the correct grind quantity from this.
6. Weigh the ground coffee of the reference grind.
7. Set the calibration value (determined weight of ground coffee) using the **Plus** or **Minus** button.
8. Confirm calibration of the grinder with the ✔ button.
   ✓ The **Grinder service** screen opens.
   ✓ The set grinder is ready for use.

Grinder initialisation

Prerequisite: The grinder must be initialised in the following cases:

- After a malfunction
- After the grinding discs have been replaced, the automatic grind level adjustment must be initialised.

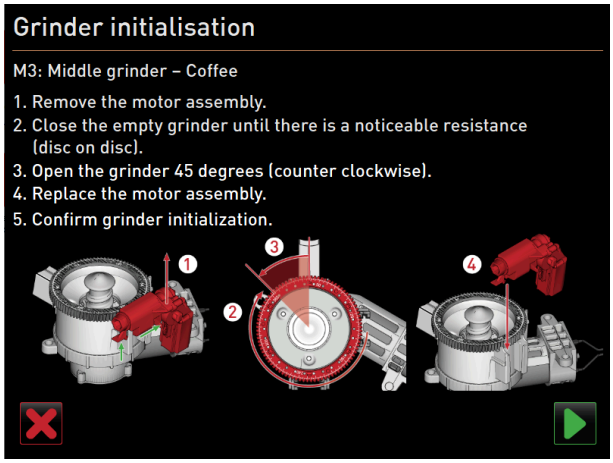


Figure: Grinder initialisation

Steps: Grinder initialisation

1. Follow the displayed instructions.
2. Remove the grinder level motor and install new grinding discs.
3. Close the empty grinder by hand until resistance can be felt (grinding disc against grinding disc).
4. Open the grinder 45° anticlockwise.
5. Reassemble the grinding level motor.
6. Confirm the **Grinder initialisation** installation steps with the ▶ button.

10.3.5 "Info" settings

This information must be passed on to the service technician when reporting an error.

Info	**Setting > Info – Show versions**
Authorised profiles:	Caretaker Facilities manager, quality manager Machine operator Bookkeeper Bookkeeper reduced
Function:	Shows information about the installed versions of the machine software.
Setting range:	No setting possible
Standard:	–

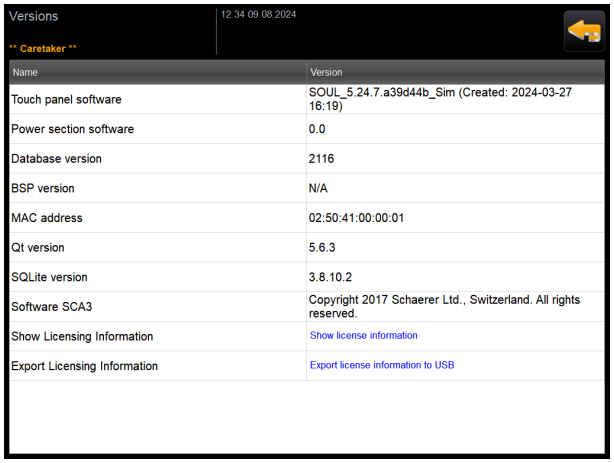


Figure: Versions

The following information can be obtained:

- Touch panel software version
- Power section software version
- Database version
- BSP accounting system version
- Mac address version
- Qt (source code) version
- Qt licence version
- SQLite version
- Copyright SCS software

Info	**Setting > Info – Machine counter**
Authorised profiles:	Caretaker Facilities manager
Function:	Shows an overview of beverage counters according to the ingredient they contain.

Info	**Setting > Info – Machine counter**
Setting range:	No setting possible
Standard:	–

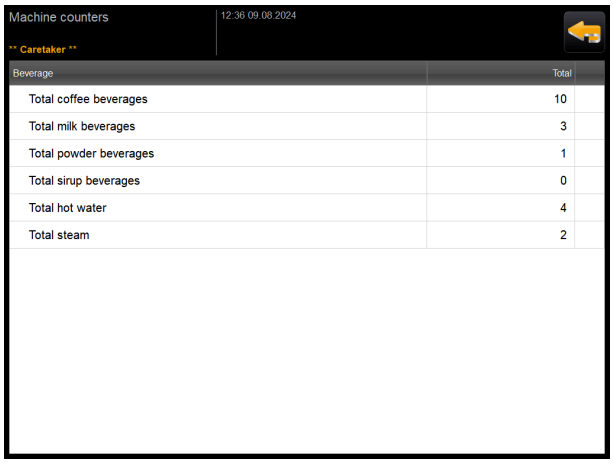


Figure: Machine counter

Example of ingredients with a chociatto beverage:

- 1. Ingredient = coffee
- 2. Ingredient = fresh milk with topping
- 3. Ingredient = choco

The following information can be obtained:

- Total coffee beverages
- Total milk beverages
- Total powder beverages
- Total hot water
- Total steam

All beverages added on the menu cards are listed.

Info	**Setting > Info – Beverage statistics**
Authorised profiles:	Caretaker Facilities manager Bookkeeper Bookkeeper reduced
Function:	Shows information about the dispensed beverages.
Setting range:	Reset of single or total counter readings
Standard:	Custom

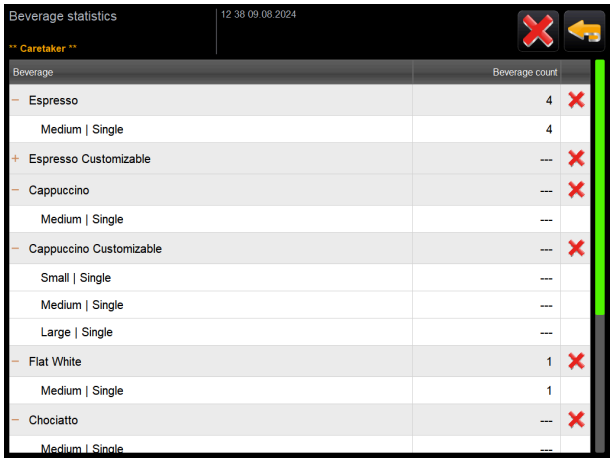


Figure: Beverage counter

Resetting single 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

Authorised profiles:	Caretaker Facilities manager Quality manager
Function:	Shows information about performed cleaning work.
Setting range:	No setting possible
Standard:	–

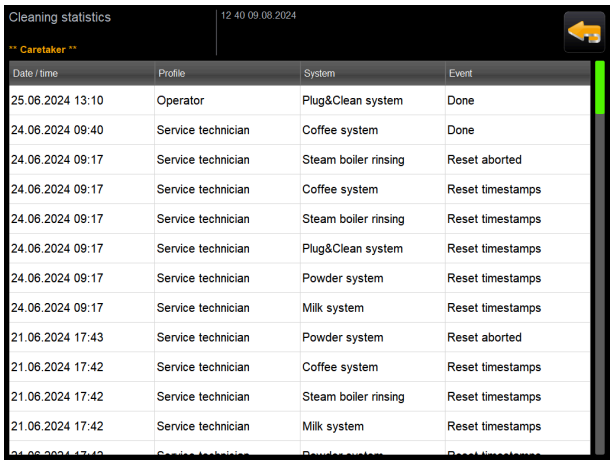


Figure: Cleaning statistics

The following information can be obtained:

- Date and time
- Profile
- System
- Event

Performed, cancelled and reset cleaning operations are displayed in the **Event** column.

	**Setting > Info – Maintenance statistics**
Authorised profiles:	Caretaker
Function:	Shows information about performed maintenance (descaling).
Setting range:	No setting possible
Standard:	–

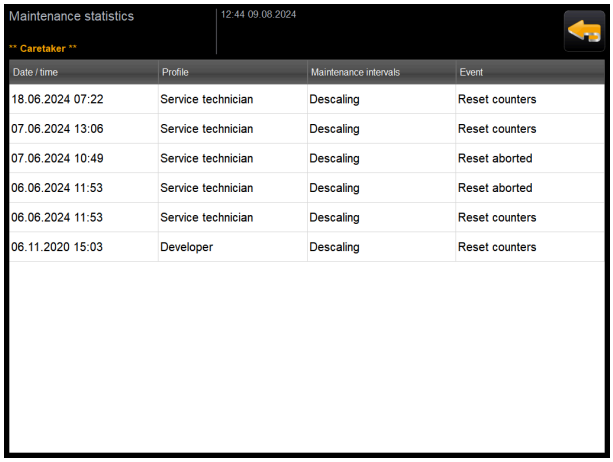


Figure: Maintenance statistics

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**
Authorised profiles:	Caretaker Facilities manager Bookkeeper Bookkeeper reduced
Function:	Shows information on all beverage dispensed with the contained beverage data.

Info	**Setting > Info – Beverage dispensing statistics**
Setting range:	The button deletes all counter levels.
Standard:	–

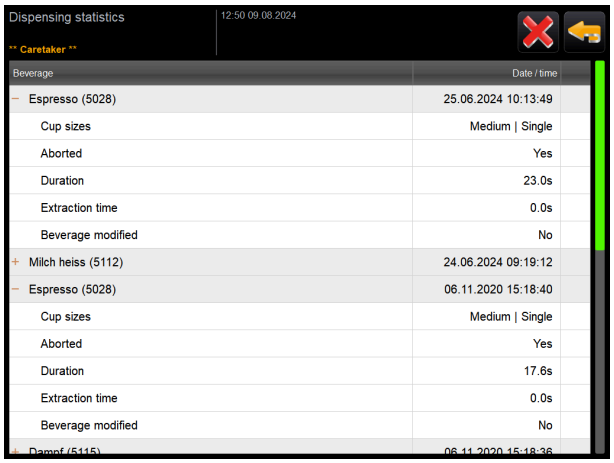


Figure: Dispensing statistics

The following information can be read for each type of beverage:

- Cup sizes
- Cancelled dispensing
- Dispensing duration
- 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 beverage options dispensed are also listed.

Info	**Setting > Info – Water hardness statistics**
Authorised profiles:	Caretaker
Function:	Shows information about the water hardness settings made to date.
Setting range:	No setting possible
Standard:	–

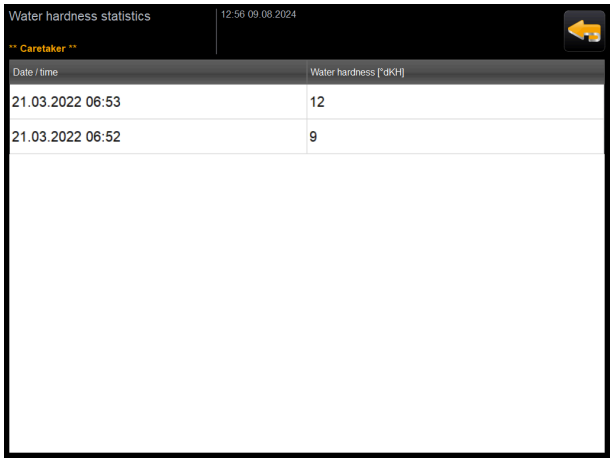


Figure: Water hardness statistics

The following information can be obtained:

- Date and time
- Water hardness

The list includes a new entry for each adjustment made to the water hardness.

	**Settings > Info – Machine accounting statistics**
Authorised profiles:	Caretaker 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:	–

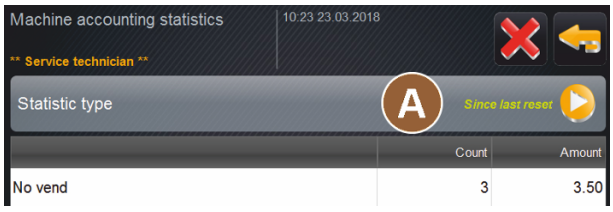


Figure: Machine accounting statistics

Since last reset

The **Since last reset** statistics can be deleted. This makes it possible to allow counters to run for a specific time.

1. Confirm that the selection list **(A)** with the ▶ button.
2. Select the **Since last reset** statistics.
3. Tap on ✖.
   ✓ An instruction prompting you to confirm appears.
4. Confirm with ▶.
   ✓ The **Since last reset** statistics are deleted.

Since initialisation

The statistics with the **Since initialisation** setting cannot be deleted. **Initialisation** means **since commissioning**.

	**Settings > Info – Beverage accounting statistics**
Authorised 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:	–

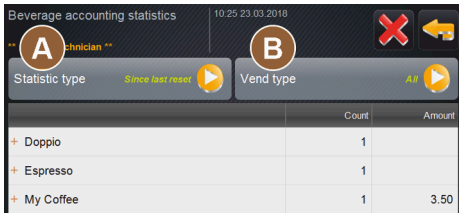


Figure: Beverage accounting statistics

The following sales types are available:

- All
- No vend (all beverages are listed without payment)

Since last reset

The **Since last reset** statistics can be deleted. This makes it possible to allow counters to run for a specific time.

1. Confirm that the selection list **(A)** with the button.
2. Select the desired statistic and the sales type.
3. Select the **Since last reset** statistics.
   ✓ The selected statistic with sales type appears.
4. Tap on .
   ✓ An instruction prompting you to confirm appears.
5. Confirm with .
   ✓ The **Since last reset** statistics are deleted.

Since initialisation

The statistics with the **Since initialisation** setting cannot be deleted. **Initialisation** means **since commissioning**.

10.3.6 Saving changes and loading them into the machine

To save and load changes to the settings:

1. Save the selection with  .
2. Exit the parameter and the setting with  .
3. Load the changes to the setting/parameter into the machine with  .
   ✓ The machine restarts.

11 Troubleshooting

A distinction can be made between the following error messages:

- Display via the functional lighting
- Messages in display

11.1.1 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 colour strips on the machine.

The different colours have the following meanings:

- **White**: The machine is ready for use.
- **Orange**: Immediate action is required (e.g. refilling, cleaning).
- **Red**: Machine error (e.g. milk empty, grinding mechanism blocked, water flow error)

11.1 Messages in display

A distinction can be made between the following messages in the display:

▶ Simple error message

▶ Specific error message

▶ Error message in the Service menu

11.1.1 Error messages (simple)

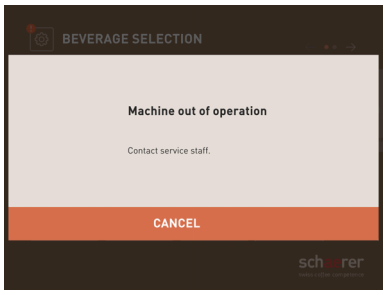


Figure: Simple error message

Prerequisite:

- **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 service staff.

11.1.2 Specific error message

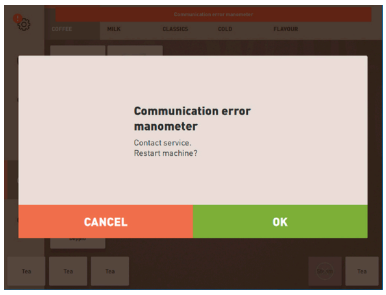


Figure: Specific error message

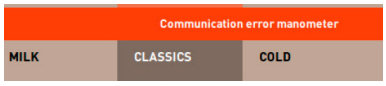


Figure: Specific error message

Prerequisite: **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.
✓ The **Restart** or **Inform service technician** instruction is displayed.
✓ Error messages can be partially acknowledged.

1. Depending on the type of error, perform one of the following actions:
2. a) Follow the action request and acknowledge the error message.
3. b) Touch the [**OK**] field for a restart.
   ✓ The pending error is acknowledged or the machine restarts.
   ✓ The machine is ready for use again.
4. If the error message cannot be acknowledged, inform the service technician.

11.1.3 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

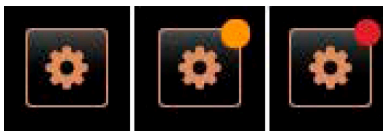


Figure: **Service menu** button with messages

The **Service menu** is opened with the Service menu button.

The **Service menu** button in the user interface provides information about pending information or error messages:

- **Without colour code**: There are no messages in the Service menu.
- **Orange**: There is information in the Service menu.
- **Red**: There are error messages or action requests in the Service menu.

Service menu page

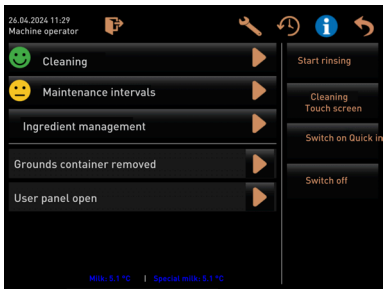


Figure: **Service menu** screen with error message

1. Tap on the **Service menu** button.
   ✓ The Service menu opens and all pending error messages are listed.
2. Open error message using the ▶ button.
3. Execute displayed action request and possibly acknowledge error with [**OK**].
4. If the error message cannot be acknowledged, inform the service technician.

11.2 Malfunctions

If there is a red pending fault/error message, beverage dispensing is disabled until the required action is taken.

▶ Tap on any other pending error messages in the Service menu and correct them as described below.

If an error message remains, there may be an error.

▶ Contact your service partner (see).

11.3 Faults with display messages

For faults with a display message, a distinction is made according to the following categories:

- Malfunction
- Error
- Instruction
- Note

11.3.1 “Malfunction” display message

The following display messages have a red background in the PC board.

Display message	Cause	What to do
Centre grinder (standard), right grinder (option) overloaded	An excessive 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 leftover coffee grounds in the waste water.	1. Switch off the machine. 2. Check the grinder for blockages and remove any foreign objects. 3. Restart the machine.
Centre grinder (standard), right grinder (optional) blocked.	If the grinder (centre or right) is overloaded and a beverage is requested again in this state, this message appears. Beverage dispensing is disabled.	1. Switch off the machine. 2. Check the grinder for blockages and remove any foreign objects. 3. Restart the machine. 4. Contact your service partner if the malfunction persists.
Tea or coffee hot water boiler excess temperature	The water supply has been interrupted.	▶ Check the level of the external/internal drinking water tank (option) or the condition of the mains water supply.
	The machine has overheated.	▶ Disconnect machine from the mains and let it cool off.
	The SSR is defective.	▶ Contact your service partner if the malfunction persists.
	The Klixon has triggered.	
Steam boiler excess temperature	The water supply has been interrupted.	▶ Check the level of the external/internal drinking water tank (option) or the condition of the mains water supply.
	The steam system is clogged.	▶ Check and clean the beverage outlet and the steam system.
	The machine has overheated.	▶ Disconnect machine from the mains and let it cool off.
	The SSR is defective.	▶ Contact your service partner if the malfunction persists.
	The Klixon has triggered.	
HW boiler heating time-out, steam boiler heating time-out	Although the heater is switched on, the set temperature was not reached within 5 min.	▶ Contact your service partner if the malfunction persists.
NTC hot water boiler short-circuited, NTC steam boiler short-circuited	The main board does not detect resistance. A maximum temperature (approx. 150 °C or 302 °F) is measured. Beverage dispensing is disabled.	▶ Contact your service partner if the malfunction persists.
NTC hot water boiler interrupted, NTC steam boiler interrupted	The temperature sensor has been interrupted. A minimum temperature is measured.	▶ Contact your service partner if the malfunction persists.
Brewing unit overcurrent	An overcurrent was detected on the brewing unit motor.	▶ Contact your service partner if the malfunction persists.

Display message	Cause	What to do
Brewing unit standby current	Even when the brewing unit is not in operation, it must consume a minimal amount of current. If it does not, there is an error. This may be due to the brewing unit, the power board or the wiring.	1. Check the brewing unit for blockages. 2. Contact your service partner if the malfunction persists.
Brewing unit time-out	The brewing unit does not have a press switch for the home position. 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.	▶ Contact your service partner if the malfunction persists.
Water flow error	While a coffee product is being dispensed, the flow meter performs fewer than the defined number of minimum rotations. A blockage or partial blockage somewhere in the entire water system is likely.	1. Check the level of the drinking water tank or the condition of the mains water supply. 2. Check the internal or external drinking water tank. (Saturation of the filter reduces the water flow.) 3. Check whether the upper plunger is blocked or partially congested. 4. Check the grinding level. If the grinding setting is too fine, this can inhibit or completely block the water flow. 5. Contact your service partner if the malfunction persists.
Steam supply error	The level sensor detected a low level in the steam boiler. An attempt was made to fill the boiler. However, no water was detected by the level probe within 60 s. Filling is aborted. The dispensing of beverages that require steam is disabled.	▶ Contact your service partner if the malfunction persists.
Modbus BP processing error	There is a communication error between the power unit and the touch screen.	▶ Contact your service partner if the malfunction persists.
Modbus MV processing error	Communication error between manometer and touch screen	▶ Contact your service partner if the malfunction persists.
Modbus MR processing error	Communication error between cooling unit and touch screen	1. Check the wiring of the cooling unit and machine. 2. Contact your service partner if the malfunction persists.

Display message	Cause	What to do
Machine out of service	Setting in Self-service mode if no beverages can be dispensed for various reasons	1. Check products such as coffee beans, milk, choco powder or milk powder. 2. Check the temperature sensor in the cooling unit. 3. Carry out a pending cleaning or descaling. 4. Contact your service partner if the malfunction persists.
Communication error (various types)	Communication error between software and various modules, such as the HCU power section, Flavour Point, brewing unit, manometer, etc.	1. Restart the machine. 2. Contact your service partner if the malfunction persists.

11.3.2 "Fault" display message

The following display messages have a yellow background in the PC board.

Display message	Cause	What to do
Brewing unit encoder error	The brewing unit motor encoder was not detected during machine initialisation.	1. Restart the machine. 2. Contact your service partner if the error persists.
Error during automatic grinding level correction in the centre, left or right	The motor of the automatic grinding level adjustment function is running incorrectly.	1. Cancel the grinding level setting. 2. Restart the machine. 3. Contact your service partner if the error persists.
Machine configuration error	There is a discrepancy between the software and machine hardware.	1. Restart the hardware detection. 2. Restart the machine. 3. Contact your service partner if the error persists.
Steam wand temperature sensor interruption	The temperature sensor of the steam wand is not closed.	1. Restart the machine. 2. Contact your service partner if the error persists.
Steam wand temperature sensor short circuit	The temperature sensor of the steam wand is defective.	1. Restart the machine. 2. Contact your service partner if the error persists.
Resetting cleaning/descaling	A cleaning/descaling operation was aborted/not completed.	1. Carry out cleaning/descaling in the Service menu. 2. Acknowledge cleaning/descaling in the Service menu.
Milk empty	The fill level in the milk container is too low.	1. Remove the milk container. 2. Clean the milk container thoroughly. 3. Fill the milk container with fresh pre-cooled milk (3 – 5 °C or 37.4 – 41 °F) and put it back into the machine.

Display message	Cause	What to do
Grounds container full	The capacity of the grounds container has been reached.	1. Empty the grounds container. 2. Rinse out the grounds container and dry it. 3. Reinsert the grounds container.

11.3.3 "Instruction" display message

The following display messages are stored in white in the control system.

Display message	Cause	What to do
Insert grounds container	The grounds container is missing or was not completely inserted into the machine.	▶ Correctly reinsert the grounds container into the cooling unit.
Close user panel	The user panel is open or was not completely closed.	▶ Push the user panel downwards until it snaps into place.
Refill external drinking water tank (option)	The fill level of the external drinking water tank is too low.	1. Remove the fill level monitoring unit from the external drinking water tank. 2. Rinse out the external drinking water tank with fresh water and fill it. 3. Reinsert the fill level monitoring unit.
Empty waste water tank (option)	The filling quantity of the external waste water tank has been reached.	1. Remove the fill level monitoring unit from the external waste water tank. 2. Rinse out the external waste water tank with fresh water and fill it. 3. Reinsert the fill level monitoring unit.
Top up beans (centre grinder empty)	The centre bean hopper is empty.	▶ Fill the bean hopper.
Top up beans (right grinder empty)	The right bean hopper is empty.	▶ Fill the bean hopper.
Fill ground coffee in manual inlet	Do not insert ground coffee into the manual inlet.	1. Open the manual inlet in the centre bean hopper. 2. Refill ground coffee. 3. Close the manual inlet.
Fill choco or milk powder in the 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 agent from the decalcification cartridge.	1. Insert the decalcification cartridge. 2. Remove the decalcification cartridge after descaling and when an instruction appears on the display.

11.3.4 "Note" display message

The following display messages have a blue background in the PC board.

Display message	Cause	What to do
Caution: A blocked waste water outlet can cause flooding.	There are left-over coffee grounds 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 overdue.	1. Restart the telemetry. 2. Contact your service partner if the malfunction persists.
Milk level low	The fill level in the milk container is low.	▶ Fill up the milk.
Grounds container full soon	The set capacity of the grounds container will soon be reached.	▶ Empty the grounds container.
External drinking water nearly empty (option)	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 the heating process.	1. Disconnect the machine from the mains. 2. Reconnect the machine to the mains and switch it on.
Machine out of service	Setting in Self-service mode if no beverages are to be dispensed.	1. Set the **Configuration – Timer operation** parameter setting accordingly. 2. Contact your service partner if the malfunction persists.

11.4 Malfunctions without display messages

Malfunction	Cause	What to do
The display is dark.	The machine is not connected to the mains.	1. Connect the machine to the mains. 2. Contact your service partner if the malfunction persists.
	The machine is not switched on.	1. Switch on the machine. 2. Contact your service partner if the malfunction persists.
No beverages with milk are available.	The milk container is empty.	1. Fill the milk container. 2. Contact your service partner if the malfunction persists.
	The milk system is clogged.	1. Perform daily cleaning. 2. Contact your service partner if the malfunction persists.
	The milk system was disabled by mistake.	1. Check the cable connection from the machine control cable to the cooling unit. 2. Activate the milk system. 3. Contact your service partner if the malfunction persists.

Malfunction	Cause	What to do
No beverages with milk foam are available.	The milk container is empty.	1. Fill the milk container. 2. Contact your service partner if the malfunction persists.
	The milk system is clogged.	1. Perform daily cleaning. 2. Contact your service partner if the malfunction persists.
	The milk system was disabled by mistake.	1. Check the cable connection from the machine control cable to the cooling unit. 2. Activate milk system. 3. Perform daily cleaning. 4. Contact your service partner if the malfunction persists.

12 Disassembly

After end of service life

After the machine has reached the end of its service life:

1. Disassemble the machine.
2. Dispose of the machine in an environmentally-friendly manner.

13 Disposal

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.

1. Scrap metal parts.
2. Recycle plastic elements.
3. Dispose of the remaining components after sorting them according to material properties.
4. Dispose of operating materials and cleaning products in line with local regulations and the respective manufacturer instructions.