SOUL C, 2step version

Operating Instructions

	WARNING RISK OF FIRE OR ELECTRIC SHOCK DO NOT OPEN	
	WARNING TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER-SERVICEABLE PARTS INSIDE, REPAIR SHOULD BE DONE BY AUTHORIZED SERVICE PERSONEL ONLY. FOR CONTINUED PROTECTION AGAINST FIRE AND ELECTRIC SHOCK, REPLACE WITH THE SAME TYPE AND RATING OF FUSE.	
	CAUTION DISCONNECT FROM POWER SUPPLY BEFORE SERVICING.	
	ATTENTION RISQUE D'INCENDIE OU D'ÉLECTROCUTION NE PAS OUVRIR.	
	POUR RÉDUIRE LE RISQUE D'ÉLECTROCUTION, PRIÈRE DE NE PAS RETIRER LE COUVERCLE OU LA PARTIE ARRIÈRE. AUCUNE PIÈCE ACCESSIBLE AU CLIENT NE SE TROUVE À L'INTÉRIEUR. LES RÉPARATIONS DOIVENT ÊTRE EFFECTUÉES EXCLUSIVEMENT PAR LE RÉPARATEUR AGRÉÉ. POUR UNE PROTECTION CONTINUE CONTRE LE FEU ET LE CHOC ÉLECTRIQUE, REMPLACER PAR UN FUSIBLE DE MÊME TYPE ET DE MÊME CALIBRE.	
	ATTENTION DÉBRANCHER L'ALIMENTATION ÉLECTRIQUE AVANT DE RÉPARER	

Legal information

Publisher

Schaerer AG, Postfach 336, Niedermattstrasse 3b, CH-4528 Zuchwil, Switzerland

Concept and editing

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Table of contents

1   General information

1.1   Information about these operating instructions

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

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

1.2   Symbols and abbreviations used

1.2.1   Safety notes

	DANGER
	Immediately dangerous situation that could result in death or serious injury.
	The measures described for preventing this danger must be strictly observed.

	WARNING
	Generally dangerous situation that could result in serious injury.
	The measures described for preventing this danger must be strictly observed.

	CAUTION
	Generally dangerous situation that could result in minor injury.
	The measures described for preventing this danger must be strictly observed.

	NOTE
	There is a situation that could result in damage to the machine.
	The measures described for preventing this danger must be strictly observed.

1.2.2   Warning signs used

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

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

Character	Type of danger	Character	Type of danger
	Warning of poisonous substances		Warning of hand injuries

1.2.3 Instruction signs used

Character	Meaning	Character	Meaning
	Read documentation!		Wear safety gloves!
	Wear safety goggles!		Wash hands!
	Pull out power plug!		

1.2.4 List of abbreviations

Abbreviation	Meaning
GBU	Global Business Unit
DNV GL	Certification body
HACCP	Hazard Analysis Critical Control Point The HACCP cleaning concept aims to ensure the safety of food and protect consumers from health risks.
ADA	Americans with Disabilities Act The ADA operating unit makes it possible for persons with disabilities to operate the machine.

1.3 Liability

The manufacturer accepts no liability for damage caused by:

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

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

1.4   Warranty provisions

If the information in these operating instructions is not observed, warranty claims can become invalid.

No liability is accepted:

- For parts which are subject to natural wear. This includes the milk container, the milk-carrying parts, seals and the surfaces of the stainless steel bases.
- For defects as a result of climatic influences, chemical, physical, electrochemical or electrical influences.
- For defects caused by non-compliance with the regulations on transport, installation and commissioning, operation, cleaning and maintenance of the device (e.g. operating instructions and maintenance instructions).
- For defects caused by the use of non-Schaerer spare parts or by faulty or negligent assembly or handling by the operator or third parties.
- For defects caused by improper modifications or repair work carried out by the operator or third parties without the consent of Schaerer.
- For defects arising from inappropriate or improper use.

1.5   Spare parts and customer service

	Information on accessories and spare parts can be found in the spare parts catalog in the Schaerer **Coffee Link** web portal.
	For service requests and technical support, please contact the Schaerer partner in your country. You can find a list of all responsible service partners worldwide at www.schaerer.com.

2 Safety

2.1 Proper use

The machine is designed to dispense coffee beverages, hot water and steam into cups, mugs or glasses.

The bean hoppers may only be filled with coffee beans.

The machine is intended for commercial use in hotels, restaurants or similar places. The machine may be installed in self-service locations and be operated without supervision. The machine may be used in stores, offices or similar working environments, hotels, motels and bed and breakfasts and may be operated by non-professionals or customers.

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

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

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

2.2 Foreseeable misuse

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

▶ Read the operating instructions carefully before use.
▶ Only allow qualified service staff access to the service area of the machine and optional accessories.
▶ Only have cleaning and user maintenance done by persons who have the knowledge and practical experience with the machine, particularly with regard to safety and hygiene.
▶ Have trained persons supervise the machine in self-service mode and in regular operation so that they are available to answer questions from the user and ensure compliance with the cleaning and maintenance measures.
▶ Only use the steam wand to foam milk.
▶ Never modify safety equipment of the machine.
▶ Only use the machine when it is functioning perfectly and is not damaged.
▶ Only fill the bean hoppers with coffee beans.

2.3 Obligations of the operator

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

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

The operator is responsible for complying with the maintenance instructions.

2.4   Staff requirements

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

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

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

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

Instructed person

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

Specialist staff

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

Service staff

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

Electrician

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

2.5   Residual risks

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

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

2.5.1 Risk of electrocution!

DANGER

Danger to life from electrocution!

Improper handling of electrical devices can result in electrocution. There is danger to life.

▶ Only have work on electrical equipment carried out by a qualified electrician.

▶ Connect the device to a fused circuit.

▶ Observe the relevant guidelines on low voltage and/or the national or local safety regulations and directives.

▶ Earth the connection in accordance with regulations and secure it against electric shock.

▶ Make sure that the supply voltage matches the specifications on the serial plate of the device.

▶ Never touch live parts.

▶ Always switch off the main switch or disconnect the device from the power supply before carrying out maintenance work.

▶ Make sure that the device can be disconnected from the power supply with all poles. Disconnected connections must be visible at all times from the location of the device and the disconnection must be secured by a locking mechanism.

▶ Only have connection cables replaced by qualified service staff.

2.5.2 Danger due to cleaning products

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

WARNING

Risk of poisoning from cleaning products!

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

▶ Only use cleaning products recommended by Schaerer.

▶ Read the information on the packaging and the safety data sheet carefully before using the cleaning product. If no safety data sheet is available, request one from the distributor.

▶ Keep cleaning products away from children and unauthorized persons.

▶ Do not touch the cleaning products with your bare hands and do not ingest them.

▶ Never mix cleaning products with other chemicals.

▶ Only use cleaning and descaling products for their intended purpose (see label).

▶ Do not eat or drink while using cleaning products.

▶ Ensure good ventilation when using cleaning products.

▶ Wear protective gloves and protective goggles when using cleaning products.

▶ Wash your hands thoroughly immediately after using cleaning products.

Emergency information

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

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

Swiss Toxicological Information Center	
Calls from abroad	+4144 251 51 51
Calls from Switzerland	145
Internet	www.toxi.ch

2.5.3   Danger due to allergies

⚠️ **CAUTION**

Health risk due to additives!

Beverages with additives or residues can trigger allergies.
▶ In self-service mode: Observe the information plate attached to the machine. The information plate contains information about any additives that cause allergies.
▶ In user mode: Inform staff that any additives used may cause allergies.

2.5.4   Danger due to bacteria

⚠️ **CAUTION**

Health problems due to contaminated water!

Improper handling of water can lead to health problems.
▶ Make sure that the water is free of dirt and bacteria.
▶ Do not connect the machine to pure osmosis or other aggressive types of water.
▶ Make sure that the carbonate hardness is between 4 and 6 °dKH or 8 and 12 °fKH.
▶ Make sure that the total hardness is higher than the carbonate hardness.
▶ Do not exceed the maximum chlorine content of 50 mg per liter.
▶ Make sure that the pH value is between 6.5 and 7 (pH neutral).

⚠️ **CAUTION**

Health problems due to contaminated coffee!

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

⚠ **CAUTION**

Health problems due to contaminated/incorrect milk!

Improper handling of milk can lead to health problems.
▶ Do not use raw milk.
▶ Only use pasteurized milk or milk that has been heated using a UHT process.
▶ Only use homogenized milk.
▶ Used pre-cooled milk with a temperature between 3 °C (37,4 °F) and 5 °C (41 °F).
▶ Use milk straight from the original package.
▶ Check the packaging for damage before opening.
▶ Use the oldest products first ("first in – first out").
▶ Wear protective gloves when working with milk.
▶ Always close opened packages tightly so that the contents remain fresh and are protected from contamination.
▶ Use milk before the expiration date is exceeded.
▶ Store milk in a dry and dark location with a maximum temperature of 7 °C (44.6 °F).
▶ Store milk separately from cleaning products.

For machines with internal milk system and cooling unit:
▶ Do not fill with more milk than is needed in one day.
▶ Never refill milk. Always clean the container thoroughly before filling.
▶ Close the milk container cover and cooling unit (internal and external) immediately after filling.

2.5.5 Danger due to heat

⚠ **CAUTION**

Risk of scalding due to hot fluid!

There is a risk of scalding in the dispensing area for beverages, hot water and steam.
▶ Never reach under the dispensing points during dispensing or cleaning.

⚠ **CAUTION**

Hot surface!

The dispensing points and the brewing unit can get hot.
▶ Never touch hot machine parts.
▶ Only touch the beverage outlet using the provided handles.
▶ Only clean the brewing unit when the machine has cooled down.

2.5.6 Danger due to mechanics

⚠ **CAUTION**

Risk of crushing due to moving components!

The beverage outlet and user panel can be moved manually. The grinding mechanism and the brewing unit move during operation. There is a risk of crushing when handling moving components.
▶ Only touch the beverage outlet using the provided handles.
▶ Always push the user panel up or down with both hands.
▶ Never reach into the bean hopper or the opening of the brewing unit when the machine is switched on.

2.6 Danger of property damage

NOTE

Property damage due to improper handling of the machine!

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

▶ If the water has a carbonate hardness of more than 6 °dKH, install a limescale filter. Damage may otherwise occur due to limescale.

▶ Do not operate the machine if the water supply is blocked. Otherwise the boilers will not be re-filled and the pump will run dry.

▶ Schaerer AG recommends routing the water connection with a water stop valve on the manufacturer side to prevent water damage in the event of hose breakage.

▶ After a longer standstill period (e.g. company vacations), clean the machine before using it again.

▶ Protect the machine from the effects of the weather (frost, moisture, etc.).

▶ In the event of faults, see the table in the **Troubleshooting** chapter and call in a qualified service technician if necessary.

▶ Only use original spare parts from Schaerer AG.

▶ Immediately report externally visible damage and leaks to the service partner and have the affected parts replaced or repaired.

▶ Do not spray the machine with water or clean it with a steam cleaner.

▶ Do not place the machine on a surface where water jets could be used.

▶ When using caramelized coffee (flavored coffee), clean the brewing unit twice a day.

▶ Only fill the bean hopper with coffee beans, the powder containers only with automatic coffee machine powder, the milk container only with milk and the manual inlet only with ground coffee (or cleaning tablet during cleaning).

▶ Never use freeze-dried coffee. This will clog the brewing unit.

▶ If the machine and/or additional devices are transported at temperatures below 10 °C, store the machine and/or additional devices at room temperature for three hours before connecting the machine and/or additional devices to the power supply and switching them on. Otherwise there is a risk of short circuits or damage to electrical components due to condensation.

▶ Always use the new hose set supplied with the machine (drinking/waste water hose). Never use old hose sets.

3   Technical data

3.1   Types of beverages and output

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

Max. beverage output per hour	
Espresso 50–60 ml	Approx. 180 cups

Recommended daily output	
Espresso 50–60 ml	Approx. 250 cups

Available beverages	Standard
Espresso	x
Americano AW	x
Coffee	x
Hot water	x
Steam	x

Recommended machine equipment:

AW   Additional water

3.2   Machine data

Boiler nominal power[1]	Steam boiler	Hot water boiler
	5000 W	5000 W

1   See serial plate for special equipment. The specified values correspond to the standard equipment.

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

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

Capacities	
Drinking water capacity	Mains water supply
Coffee bean hopper capacity	Approx. 2000 g each
Grounds container capacity	Approx. 60 coffee cakes

External dimensions	
Machine width	330 mm (12.99")
Height including machine feet and bean hoppers	820 mm (32.28")
Depth	600 mm (23.62")

Weight	
Empty weight	Approx. 55 kg (121 lbs)

Control unit	
Touch screen	10 inches (standard)
	12 inches (optional)

Ground clearance	
Machine feet	100 mm

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

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

3.3   Power supply connection at the building

Power supply	Connection values			Fuse protection at the building	Connection cable Conductor cross-section
2L, PE	208/240 V AC	60 Hz	2700–3500 W[1]	20 A	3 x 1.5 mm² 3 x 15 AWG
2L, PE	208/240 V AC	60 Hz	4360–5750 W[2]	25 A	3 x 2.5 mm² 3 x 13 AWG

Power supply	Connection values			Fuse protection at the building	Connection cable Conductor cross-section
2L, PE	208/240 V AC	60 Hz	5300–6500 W[3]	30 A	3 x 4.0 mm² 3 x 11 AWG

1)   Equipment 1 or 2 boiler with 3 kW (serial)

2)   Equipment 1 or 2 boiler with 5 kW (serial)

3)   Equipment 2 boiler with 3 kW (serial)

3.4   Water connection values

Water pressure	Minimum: Maximum:	0.1 MPa (14.50 psi) 1.0 MPa (145.04 psi)
Water input 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

3.5   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)

3.6   Serial plate

Type	Version
SOUL C	2step
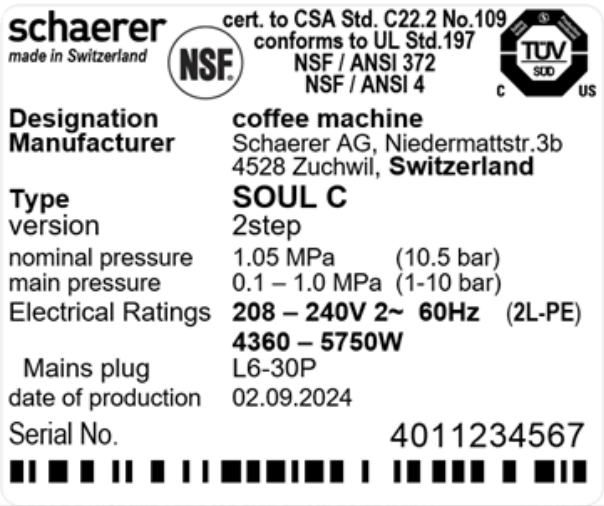
Figure: Serial plate

The serial plate is located on the front of the machine behind the user panel.

To read the data from the serial plate:

1. Unlock the user panel.
2. Push the user panel firmly upwards.

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

• Machine type
• Nominal power > e.g. 2700 ... 3600 W or 4360 ... 5750 W
• Nominal voltage > e.g. 208 ... 240 V
• Fuse value on site> e.g. 20 A (above NEMA L6-20 plug) or 30 A (above NEMA L6-30 plug)
• Serial number > [YYCW XXXXXX] > e.g. 1935 XXXXXX

An additional serial plate is located on the rear behind the lower cover plate.

4 Compliance information

4.1 Manufacturer address

Manufacturer	Documentation manager
Schaerer AG Postfach 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 Postfach 336 Niedermattstrasse 3b CH-4528 Zuchwil

4.2 Applied standards

Schaerer AG declares that this machine complies with all relevant provisions of the named directives. This decla-
ration loses its validity if changes are made to the devices that have not been arranged with us. The following har-
monized standards have been applied. A **DNV GL – Business Assurance** quality management system is used for
proper implementation of the requirements and is certified in accordance with ISO 9001:2015, ISO 14001:2015 and
ISO 45001:2018. Schaerer AG bears sole responsibility for issuing this declaration of conformity.

International (CB)	
Safety	**Sanitation**
• UL197 • CSA C22.2 No.109	• NSF / ANSI 372 • NSF / ANSI 4

CB	Scheme > International system of mutual recognition of test reports and certificates
NSF	National Sanitary Foundation: Product testing, inspection and certification organization
UL	Underwriters Laboratories: Product safety standards for the US market
CSA	Canadian Standards Association
ANSI	American National Standards Institute

5   Product description

5.1   Overview

5.1.1   Machine overview

Figure: Machine overview

1	User panel with touch screen		7	Drip tray
2	Bean hoppers		8	Machine feet
3	Closing device for user panel		9	Grounds container
4	Ambient light with function		10	Front door for ProCare unit
5	Lever for steam wand		11	Beverage outlet
6	Steam wand			

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

- Turn the key to the left to open the closing device.
- Turn the key to the right to close the closing device.

The machine feet increase the distance to the standing surface.

ProCare overview and details on cleaning process: See 9.5 "ProCare cleaning system"

5.2   Bean hoppers

Figure: Bean hoppers

The machine is equipped with two bean hoppers.

The bean hoppers can be filled with different coffee beans.

The bean hoppers can also be removed from the machine when full.

5.3   Grounds container

Figure: Grounds container

The coffee cakes are collected in the grounds container.

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

5.4   Grinders

Figure: View of grinders from above

The machine is equipped with one grinder per bean hopper.

The grinder grinds the beans fresh when preparing coffee and conveys the ground powder into the brewing unit. The freshly brewed coffee is dispensed via the beverage outlet.

The grinding level of the grinder is adjusted automatically.

5.5   Machine feet
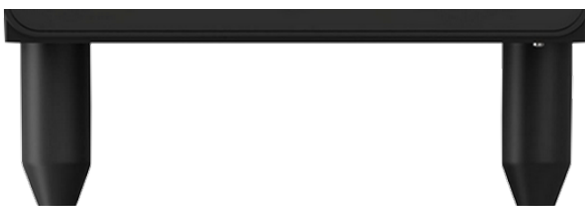
Figure: Machine feet

The machine is supplied with machine feet of 100 mm (4") length as standard.

5.6 Beverage outlet

Figure: Beverage outlet
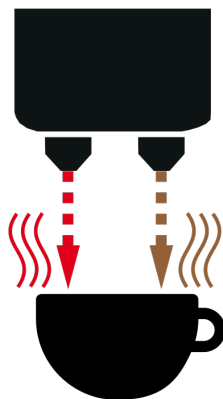
Figure: Hot water outlet

The beverage outlet is used to dispense coffee as well as hot water. Hot water is dispensed via the hot water outlet of the beverage outlet.

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

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

The beverage outlet must be cleaned regularly. The cleaning steps are shown on the display during regular display-guided cleaning.

See 9 "Cleaning"

5.7   Steam wand

Figure: Steam wand

1   Lever for rotating to the front and the rear   **3**   Steam probe

2   Steam wand

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 has the **Supersteam** design.

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

5.8   Ambient light with function

Figure: Ambient light with function

The functional ambient light provides information about the operating status of the machine.

The color of the ambient light can be adjusted.

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

5.9 Schaerer Coffee Link (data exchange)

Figure: Schaerer Coffee Link

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

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

5.10 ProCare cleaning system overview
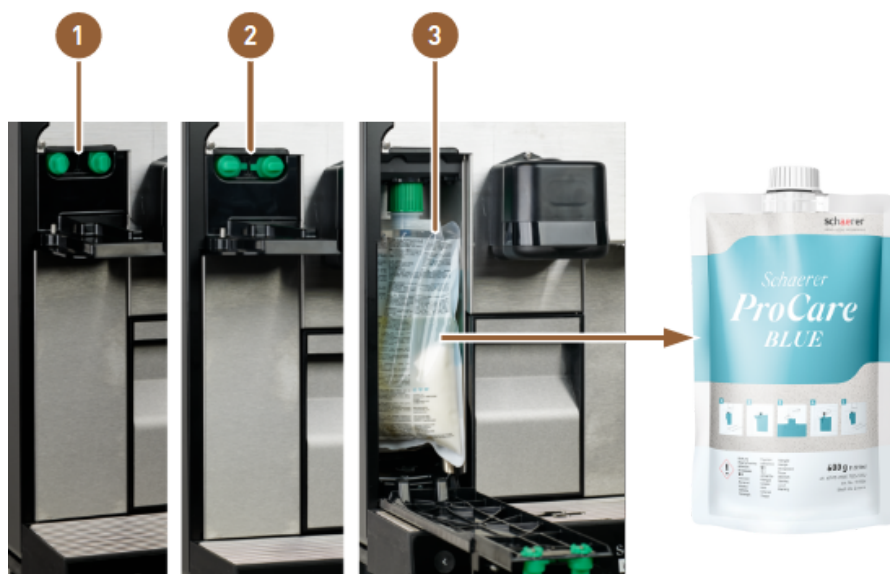
Figure: ProCare overview

No.	Name	Explanation
1	Lock (vertical position)	Access cover is locked in this position.
2	Lock (horizontal position)	Access cover is unlocked in this position and can be opened.
3	ProCare cleaning bag (blue)	Use the basic cleaning solution (ProCare blue) to clean.

The cleaning bags must be replaced after approx. 300 to 365 days.

5.11   Connections and interfaces
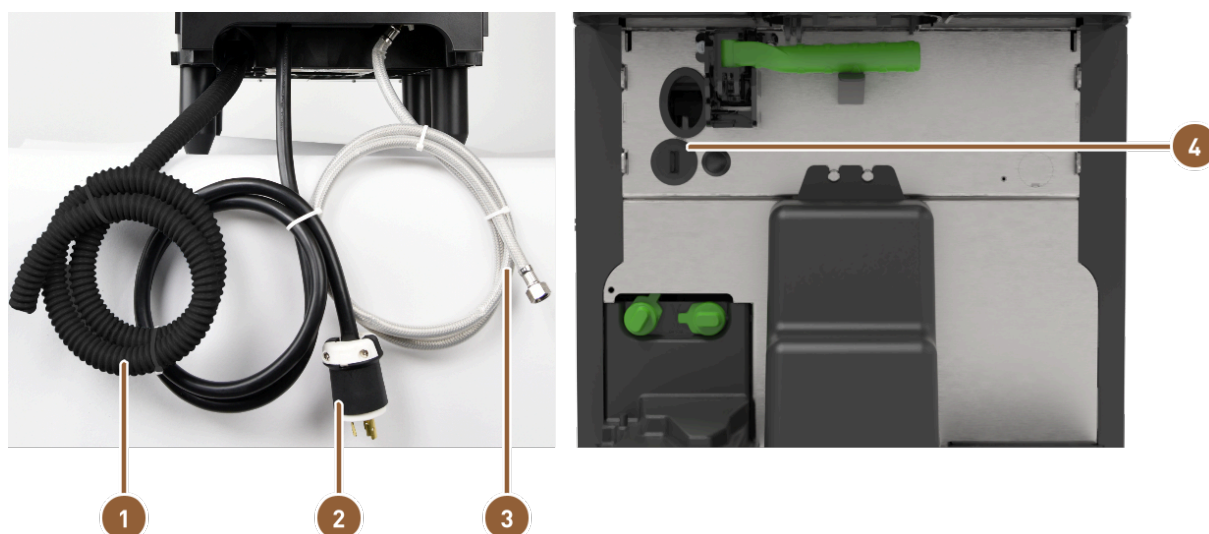
Figure: Connections and interfaces

1   Waste water outlet hose; the hose may vary de-pending on the country.

2   Power cable with plug or fixed connection with main switch; the hose may vary depending on the country.

The serial plate provides information on the max-imum fuse protection and the required minimum conductor cross-section.

3   Connection to the water supply

4   Type A USB connection and communication inter-face behind the user panel for data transfer and saving settings

See 3.3 "Power supply connection at the building"
See 7.3 "Installation"

5.12   Operating elements

5.12.1   Operating elements on the machine

Figure: Overview of operating elements on the machine

1   Closing device for user panel   **3**   Steam wand with lever

2   User panel with display

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

The touch screen is used for operation.

The steam wand function allows for separate manual milk heating and barista-style milk foaming. The steam wand can be moved to the front and the rear using the lever.

5.12.2   Operating elements in the machine
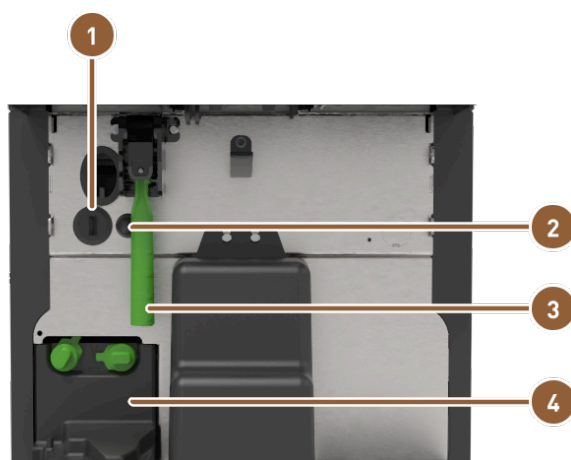
Figure: Operating elements in the machine

1	Type A USB port	**3**	Unlocking lever for bean hopper
2	On/Off button	**4**	Front door for ProCare

The On/Off button is located behind the user panel. Briefly pressing the button starts the machine. Pressing the button for longer than 4 s switches the machine off.

The type A USB port serves as an interface for data exchange. Data such as configuration files can be exported using this port. This makes it possible to transfer settings or other information to a USB data carrier. This allows the machine to be adapted to individual requirements.

The unlocking lever for the bean hoppers locks or unlocks all bean hoppers simultaneously.

The cleaning product (basic) is behind the ProCare front door. The ProCare cleaning system cleans the coffee path from the brewing unit to the beverage outlet.

5.12.3 User interface
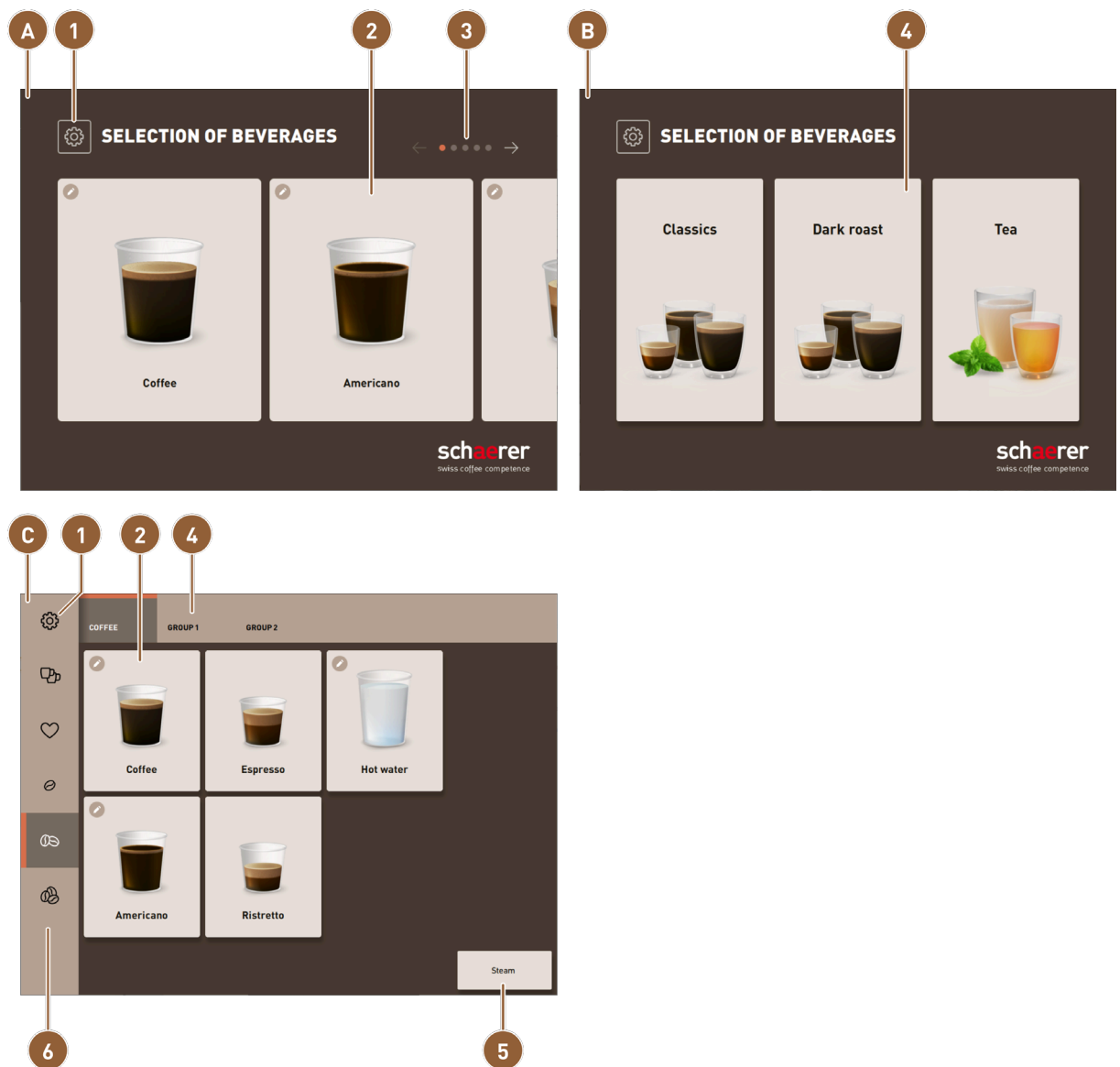
Figure: User interface: Overview

A	User interface with beverages in Guest and Frequent user mode	**3**	Navigation to the next or previous screen
B	User interface with beverage groups in Guest and Frequent user mode	**4**	Buttons for beverage selection via beverage groups
C	User interface in Staff mode	**5**	Button for steam dispensing
1	Button for access to Service menu	**6**	Buttons for pre-selection
2	Button for beverage selection		

5.13   Retrofittable equipment variants

5.13.1   Under-counter grounds disposal

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

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

6 Transport

6.1 Scope of delivery of accessories

Quantity	Name
1	Operating Instructions
1	Sticker, proposition 65 warning
1	Schaerer service number sticker
1	Coffee measuring spoon
1	Brush 75-40 (brewing chamber)
1	Cleaning brush (beverage outlet)
1	Cleaning bag ProCare Blue 600g
1	Carbonate hardness test strips
1	Hose clip 29 open
1	Plug-in connection Dd
1	O-ring 43.82x5.33 MVQ 70 Sh type
1	O-ring 47.22x3.53 MVQ 70 Sh type
4	Foot 40x100
4	Screw foot M10×15 rubberized

6.2 Conditions for transport

WARNING

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.
The following activities may only be carried out by specialist staff.

CAUTION

Risk of injury during transport!

Improper transport of the machine can lead to injuries.
▶ Observe the general health and safety regulations in accordance with local regulations.

⚠	**CAUTION**

Risk of injury due to machine tipping over!

Improper lifting of the machine can cause it to tip. A tipping or falling machine can cause injury.
- ▶ Do not lift the machine alone.
- ▶ Only lift the machine with two people.

ℹ	**NOTE**

Property damage due to improper transport!

Improper transport during relocation of the machine can damage it.
- ▶ Use a trolley to transport the machine.
- ▶ Secure the machine on the trolley and pull the trolley.

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

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

7 Installation and commissioning

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

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

7.1 Unpacking

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

7.1.1 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.

7.1.2 Unpacking accessories

The following accessory parts are delivered:

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

7.2 Setup

7.2.1 Setup conditions

The following conditions apply to the location of the machine:

- The installation surface must be stable, horizontal and level so that it cannot 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.

7.2.2 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).

7.3 Installation

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

See 7.2.1 "Setup conditions"
See 7.3.1 "Connecting power"

The following connections are required on the installation side:

- Socket for power plug or fixed connection with main switch
  - The serial plate provides information on the maximum required fuse protection.
  - The serial plate provides information on the minimum required conductor cross-section.

- Mains water supply 3/8"
- Siphon for the Ø20 mm waste water hose

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

7.3.1   Connecting power

	DANGER

Danger to life from electrocution!

There is a risk to life due to electrocution when connecting the machine.
▶ Make sure that the phase is fused with the ampere value specified on the serial plate.
▶ Make sure that the device can be disconnected from the power supply with all poles.
▶ Make sure that the manufacturer-side electrical system is designed in accordance with IEC 364 (DIN VDE 0100).
▶ 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 advises against the use of an extension cord. If an extension cord is used in spite of this advice (minimum cross-section: 14 AWG), observe the manufacturer data for the cable (operating instructions) and comply with the locally applicable regulations.
▶ Attach the connection cable in such a way that nobody can trip over it. Do not pull the cables over corners and sharp edges, do not pinch them and do not let them hang freely in space. Do not place cables on hot objects and protect them from oil and aggressive cleaning products.
▶ Never lift or pull the device by the connection cable. Never pull the plug out of the socket using the connection cable.
▶ Never touch the cable or plug with wet hands. Never insert wet plugs into the socket under any circumstances.

	DANGER

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

If the connection cable is defective or not original, there is a risk of electrocution and fire.
▶ Only use original connection cables. The country-specific original connection cable is available from the service partner.
▶ Connection cables that can be plugged in at both ends can be replaced by the customer.
▶ Have permanently connected connection cables replaced by a service technician.

	WARNING

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.
The following activities may only be carried out by a qualified electrician.

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

▶ Establish the power connection.

See 5 "Product description"
See 3 "Technical data"

7.3.2   Connecting water

> ⚠ **CAUTION**
>
> **Health problems due to improper handling of water!**
>
> Improper handling of water can lead to health problems.
> The following points must be observed:
>
> ▶ The water must be free of dirt and bacteria.
> ▶ Do not connect the machine to pure osmosis or other aggressive types of water.
> ▶ The carbonate hardness must not exceed 4 – 6 °dKH (German carbonate hardness) or 8 – 12 °fKH (French carbonate hardness).
> ▶ The total hardness must always be higher than the carbonate hardness.
> ▶ The minimum carbonate hardness is 4 °dKH or 8 °fKH.
> ▶ The maximum chlorine content must not exceed the local regulations on the maximum permitted chlorine content.
> ▶ The pH value must be between 6.5 and 7 (pH neutral).

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

> ℹ **NOTE**
>
> **Property damage due to poor water quality!**
>
> The machine can be damaged if poor materials and incorrect water values are used.
> Check the recommended water quality and optimize it if necessary.
>
> The measures described for preventing this danger must be strictly observed:
>
> ▶ The water must be free of dirt and the chlorine content must not exceed the local regulations on the maximum permitted chlorine content.
> ▶ Do not connect the machine to pure osmosis or other aggressive types of water.
> ▶ The carbonate hardness must not exceed 4 – 6 °dKH (German carbonate hardness) or 8 – 12 °fKH (French carbonate hardness) and the value of the total hardness must always be higher than the carbonate hardness.
> ▶ The minimum carbonate hardness is 4 °dKH or 8 °fKH.
> ▶ The pH value must be between 6.5 and 7.
> ▶ Always use the new hose set supplied with the machine (fresh/waste water hose).

Drinking water connection

The drinking water connection is come from a mains water supply.

The water connection must be made in accordance with the applicable regulations and the regulations of the respective country. If the machine is connected to a newly installed water line, the line and the inlet hose must be thoroughly rinsed to prevent dirt from entering the machine.

The machine must be connected to an installed drinking water line with a shut-off valve. Installation is done using the assembled pressure hose and the G 3/8" screw connection to the pressure reducer attached to the tap. The pressure reducer must be set to 0.3 MPa (43.5 psi).

Waste water connection

The machine requires a waste water outlet. The supplied temperature-stable waste water hose is connected to a siphon on the installation side. The waste water hose should slope to the connection in order to prevent the siphon effect.

The **Supplementary Instructions for Water Quality** contain information on recording water values and the use of filter techniques. The supplementary instructions can be requested from Schaerer AG or downloaded directly from the website (www.schaerer.com/member) from the Media Pool.

7.4 Display-guided commissioning

The machine is commissioned by the service technician on site at the premises of the operator. The commissioning program starts automatically when the machine is switched on for the first time. See 8.2 "Switching on"

After display-guided commissioning, no beverages can be dispensed as no beverage recipes have been configured. The service technician configures and calibrates the beverage recipes together with the operator.

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

8 Operation

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

8.1 Recurring additional tasks

8.1.1 Filling bean hopper

> ⚠ **WARNING**
>
> **Cutting injury!**
>
> Risk of injury due to rotating grinding disks in the grinder.
> - ▶ Never reach into the bean hopper when the coffee machine is switched on.

> ℹ **NOTE**
>
> **Property damage due to clogging/blockage!**
>
> Filling with foreign objects can cause the grinder to clog or block and destroy the grinding mechanism.
> - ▶ Never fill the bean hopper with anything other than coffee beans.

Figure: Maximum fill level of the bean hoppers

1. Remove the cover of the bean hopper.
2. If necessary, clean the bean hoppers and covers to remove coffee residue.
3. Fill the bean hopper with the intended type of coffee.
4. Only add enough so that the contents do not touch the container cover.
5. Close the bean hopper with the cover.
   - ✓ The bean hopper is refilled.
   - ✓ The coffee beans do not touch the cover.

8.1.2   Opening and closing user panel

⚠	CAUTION

Risk of crushing due to falling user panel!

The user panel can fall down 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

Figure: Opening user panel

①	Lock locked	③	Top side of user panel unlocked
②	Lock unlocked	④	User panel pushed upwards

1. Move the key in the closing device to the horizontal position.
   ✓ The lock is unlocked.
2. Unlock the user panel at the top by pulling firmly.
   ✓ The user panel is unlocked.
3. Push the user panel upwards from below with both hands as far as it will go.
   ✓ The user panel is automatically held in the upper position.
   ✓ All operating elements behind the user panel are now accessible.

Figure: User panel open and closed

8.1.3   Removing bean hoppers

Bean hoppers can be removed from the machine. The central locking mechanism unlocks the bean hoppers.
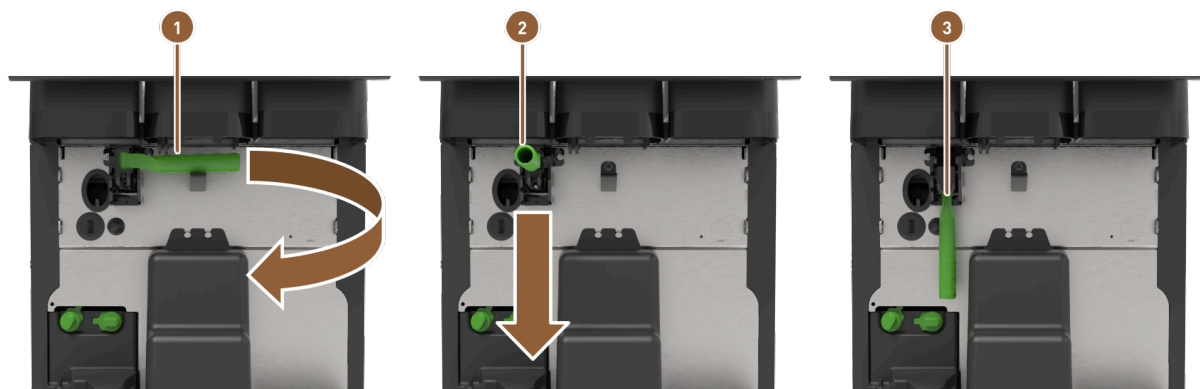

Figure: Central locking mechanism (green handle) for bean hoppers

| **1** | Horizontal position: Bean hopper locked | **3** | Position to the rear: Bean hopper unlocked |

| **2** | Position to the front | | |

1. Open the user panel.
2. Swivel the green handle of the central locking mechanism forward from the horizontal folded position.
3. Fold the green handle of the central locking mechanism downwards.
   - ✓ The bean hoppers are now unlocked. The green handle of the central locking mechanism points downwards.

See 8.1.2 "Opening and closing user panel"

8.1.4 Emptying grounds container

NOTE

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

The under-counter grounds container is not monitored. There is a risk of overfilling. During emptying, it is possible to select a beverage without the under-counter grounds container.
▶ Check the under-counter grounds container according to machine usage.
▶ Make sure that no beverages can be dispensed while the under-counter grounds container is being emptied.

Standard grounds container: The standard grounds container holds approx. 25 – 35 coffee cakes. After this number has been reached, the instruction for emptying the grounds container appears in the user interface.

Figure: Removing grounds container

1. Pull the grounds container out of the machine to the front.
   ✓ The **Grounds container removed** message appears on the display.
2. Empty and clean the grounds container.
3. Dry the grounds container and push it back into the machine as far as it will go.
   ✓ The machine is ready for use.

8.2 Switching on

8.2.1 Check before switching on

> **(i)** **NOTE**
>
> **Property damage due to closed water line!**
>
> The machine can be damaged if the water pump runs dry.
> ▶ Before switching on the machine, make sure that the main water valve (tap) of the water supply line is open.

1. Make sure that the main water valve is open.
2. Make sure that the waste water hose is laid correctly.
3. Make sure that the bean hoppers are filled.
4. Make sure that the grounds container is empty and correctly inserted.
5. Make sure the machine is correctly connected to the manufacturer-side power supply in accordance with national or local safety regulations.
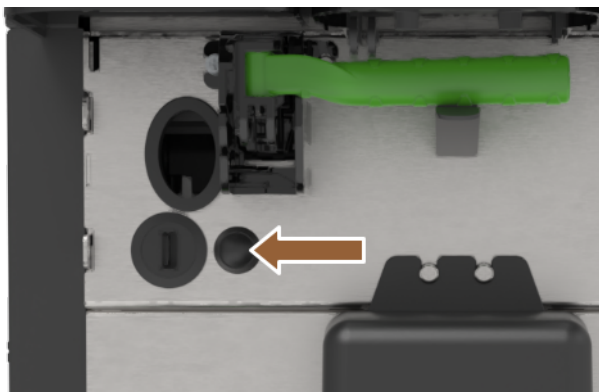
8.2.2 Switching on machine

Figure: On/Off button

> **⚠ CAUTION**
>
> **Risk of infection from contamination!**
>
> Contamination can lead to health problems.
> ▶ Always carry out cleaning after installation, commissioning or after recommissioning.
> ▶ Run the display-guided cleaning program before the first beverage dispensing process.

1. Check the power connection of the machine.
2. Open the user panel.

   See "Opening and closing user panel"

3. Briefly press the On/Off button.
   - ✓ The machine starts.
   - ✓ The user interface appears on the touch screen.
   - ✓ Machine heating begins.
   - ✓ The machine is ready for use as soon as the required temperature is reached.
4. Close the user panel.

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

8.3 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

8.3.1 Functions of the operating modes

The user interfaces in the various operating modes **(Guest mode**, **Staff mode** and **Frequent user mode**) have different functions and fault messages.

The following table provides an overview of the active functions and displays in the default setting.

Operating mode	Guest mode	Staff mode	Frequent user mode
Display of notification mode	Simple	Specific	Specific
Double button visible	0	ON	0
DECAF button visible	0	ON	0
Barista button visible	0	0	ON
Cup size button visible	0	0	0
Beverage icons visible	ON	ON	ON
Icon set	Paper cups	Default	Paper cups
Screensaver	ON	0	ON
Beverage groups	Customized	Customized	Customized
Activate beverage preselection	0	ON	0
Activate preselection via touch screen	0	ON	0
Number of positions in the preselection	0	0 – 8 (8)	0
Activate preselection via external buttons	0	0	0
Beverage preselection section left	0	ON	0
Beverage preselection section right	0	ON	0
Warm-up rinsing button visible	0	0	0
Service button visible	ON	ON	ON
Display group selection	0	0	0

Operating mode	Guest mode	Staff mode	Frequent user mode
Sequential beverage modification	ON	0	0
Display **position cup**	0	0	ON
Display **progress**	ON	0	ON
Display **beverage complete**	ON	0	0
Display **beverage complete** interruption	0.5 – 60 s (3 s)	0.5 – 60 s (3 s)	0.5 – 60 s (3 s)
Access to Service menu	PIN	PIN	PIN

0 (red)	Inactive by default; activation is not possible.
0 (yellow)	Inactive by default; activation is possible.
ON (green)	Active by default; deactivation is possible.
ON (white)	Active by default; deactivation is not possible.

8.3.2   Guest mode

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

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

Display of beverages

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

Menu navigation

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

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

Maximum configurable number of groups and beverages

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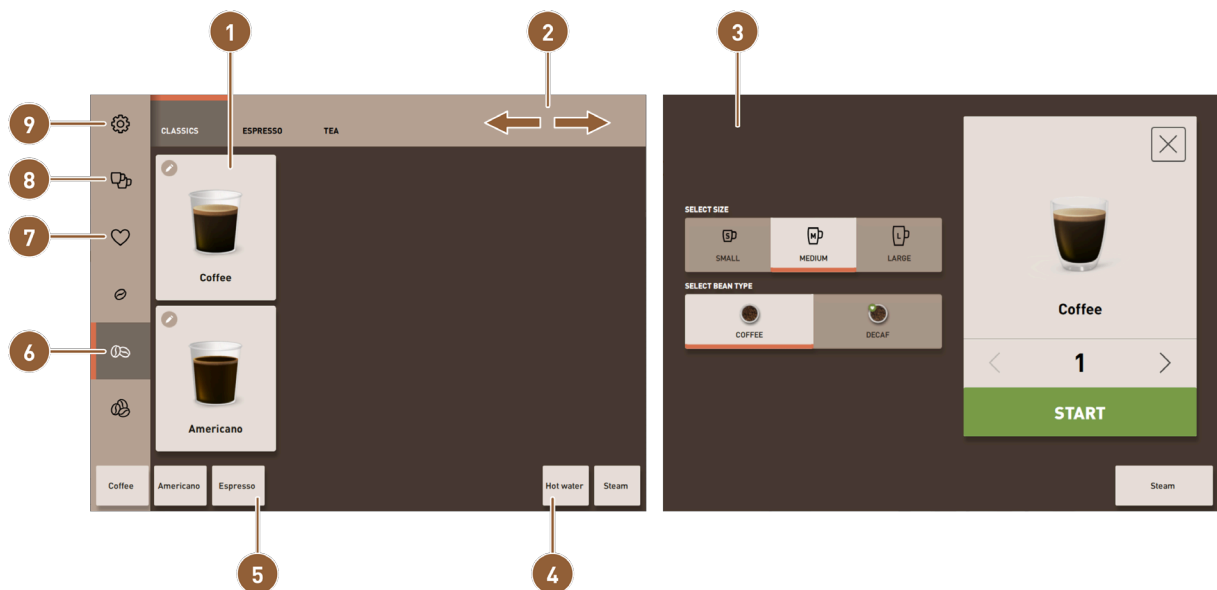• 240 beverages

Functions in Guest mode

Figure: Functions in Guest mode

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

3 Access to Service menu

2 Navigation through beverage groups (arrow)

4 Beverage selection via beverage groups

Steps up to beverage dispensing

- Select beverage group (optional)
- Select beverage
- Define cup/mug size
- Select coffee roast (optional)
- Instruction to position cup/mug
- Start dispensing
- Beverage is dispensed
- Display of progress of beverage dispensing
- **Beverage complete** display

Configurable options

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

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

8.3.3   Staff mode

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

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

Display of beverages

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

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

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

Menu navigation

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

Maximum configurable number of groups and beverages

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

Functions in Staff mode

Figure: Functions in Staff mode

1	Display of a maximum of 240 beverages (10 groups with a maximum of 24 beverages each)	6	Barista pre-selection (coffee strength)
2	Swipe function (finger) for scrolling through the available beverages	7	Decaffeinated coffee pre-selection
3	Screen for selection of beverage options	8	Double beverage pre-selection
4	Maximum of 2 additional beverage buttons (right) for direct selection	9	Access to Service menu
5	Maximum of 3 additional beverage buttons (left) for direct selection		

Steps up to beverage dispensing

- Pre-selection (optional): Decaffeinated coffee, double beverage, coffee strength (barista function)
- Select beverage group (optional)
- Select beverage
- Select cup/mug size
- Select coffee roast (optional)
- Start dispensing
- Beverage is dispensed
- Display of progress of beverage dispensing

Configurable options

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

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

8.3.4   Frequent user mode

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

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

Display of beverages

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

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

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

Menu navigation

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

Maximum configurable number of groups and beverages

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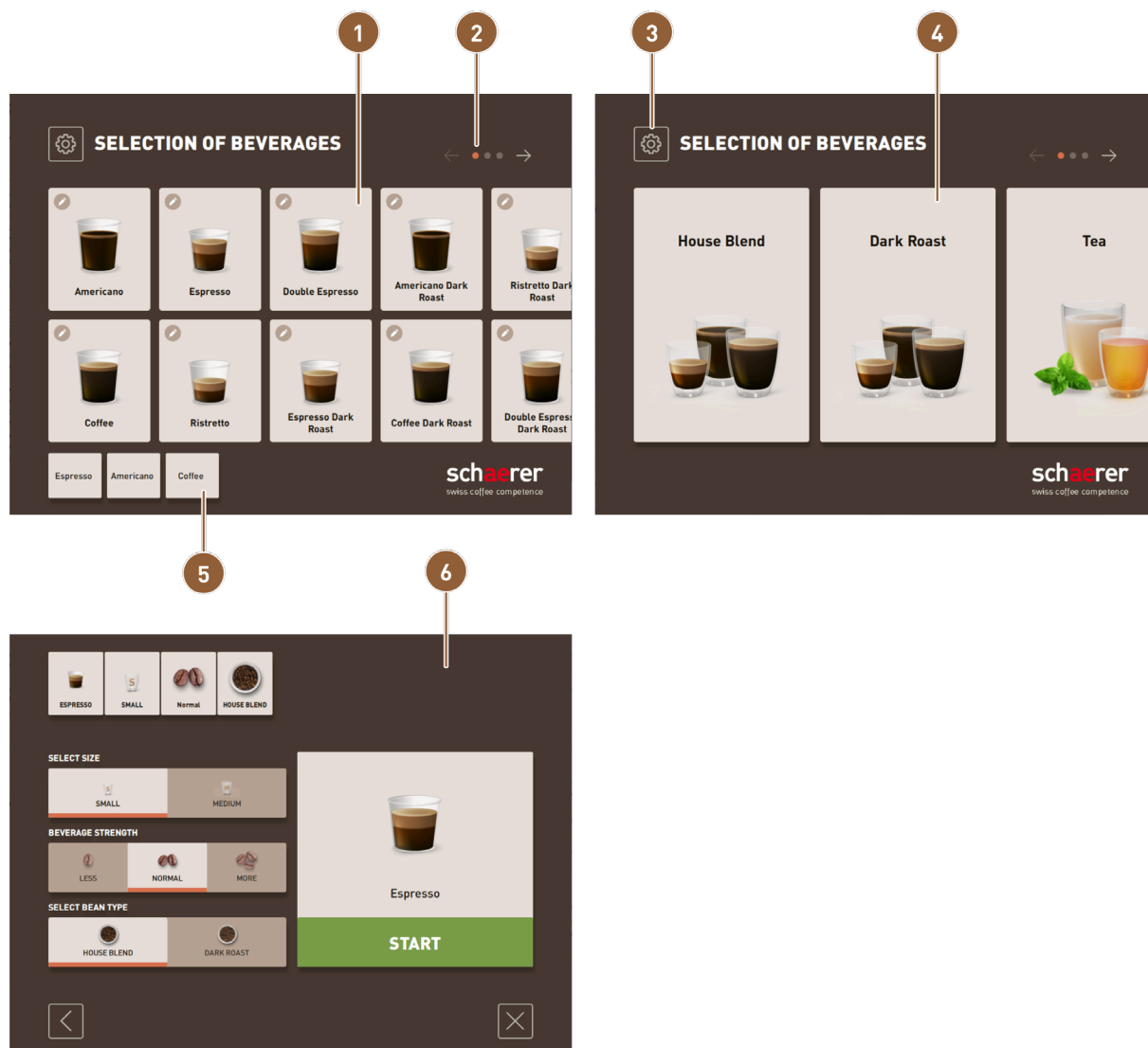- 24 beverages per beverage group
- 240 beverages

Figure: Functions in Frequent user mode

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

4	Beverage selection via beverage groups
5	Maximum of 3 additional beverage buttons for direct selection
6	Screen for selection of beverage options

Steps up to beverage dispensing:

- Select beverage group (optional)
- Select beverage
- Define cup/mug size
- Select coffee strength
- Select coffee roast (optional)
- Instruction to position cup/mug
- Start dispensing
- Beverage is dispensed
- Display of progress of beverage dispensing

Configurable options

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

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

8.4   Beverage supply

Cancellation of beverage selection after inactivity

Beverage selection can be automatically canceled after 5 – 40 s of inactivity.

In this case, the user interface is displayed for a new beverage selection process.

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

8.4.1   Selecting beverage

Navigating to beverage

Prerequisite: The machine is ready for use.

Figure: Guest and Frequent user mode: Scrolling to beverage

Guest and Frequent user mode:

1. Use the arrow buttons to scroll through the beverage displays.
   - ✓ The desired beverage button appears.

Figure: Staff mode: Direction selection of beverage group

Staff mode:

2. Open the desired beverage group directly via the corresponding tab.
    ✓ The saved beverage buttons appear.

Staff mode: Pre-selecting beverage options

Possible pre-selections in the menu:

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

Figure: Beverage pre-selection in the left menu

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

1. Select a beverage option via a pre-selection in the left menu, e.g. coffee strength.
    ✓ All beverages with the corresponding option appear.

Staff mode: Selecting beverage type

Figure: Beverage types

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

▶ Tap on the desired beverage button.
   ✓ A screen with more beverage options opens.

8.4.2 Modifying beverage

Possible beverage options:

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

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

The beverage is dispensed differently depending on the operating mode:

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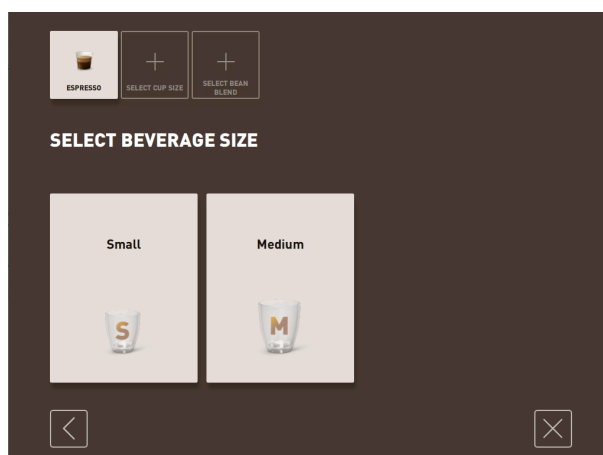
Figure: Guest mode: Determining beverage modification sequentially

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

1. Tap on the button with the desired modification.
   ✓ The desired modification appears.

✓   Additional 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 pre-selection of beverage options step by step. The options are each offered for selection in a separate display.

Progress display for sequential beverage modification

Prerequisite:

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

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

Each selected ingredient is displayed by a icon.

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

The **Beverage selection progress** display cannot be deactivated.
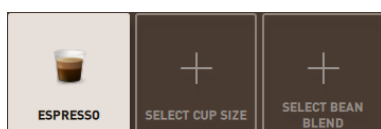
Figure: Sequential beverage modification

Figure: Selection of beverage size
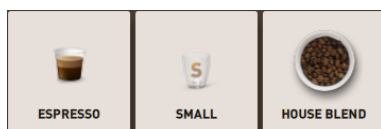
Figure: Selection of coffee type

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: Direct beverage modification in Staff mode

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

1. Tap on the button with the desired modification.
2. If necessary, set multiple dispensing (1 to 9 beverages).
   - ✓ The selected modifications are active.
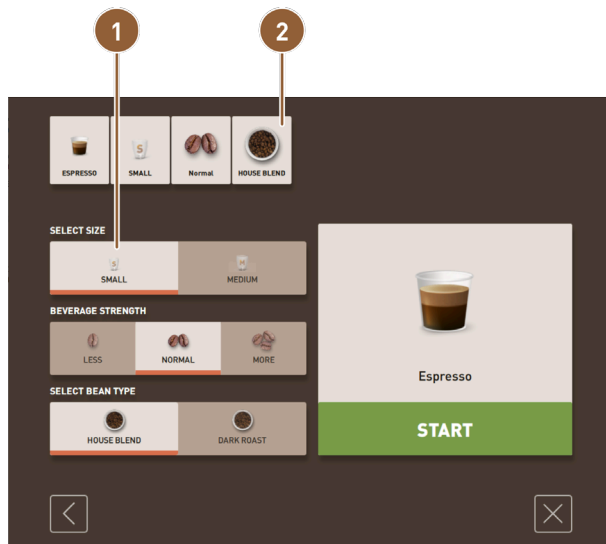
Figure: Direct beverage modification in Frequent user mode

1	Buttons for beverage modification	**2**	Display: Summary of beverage modification

▶ Tap on the button with the desired modification.
   - ✓ The selected modifications are summarized in the upper area.

8.4.3 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 that 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.

8.4.4   Dispensing pre-selected beverages multiple times

Pre-selection for multiple beverages is only available in **Staff mode**.

The function is available if the parameter is activated in the **Configuration > Operating mode > Activate pre-selection via touch screen** setting.
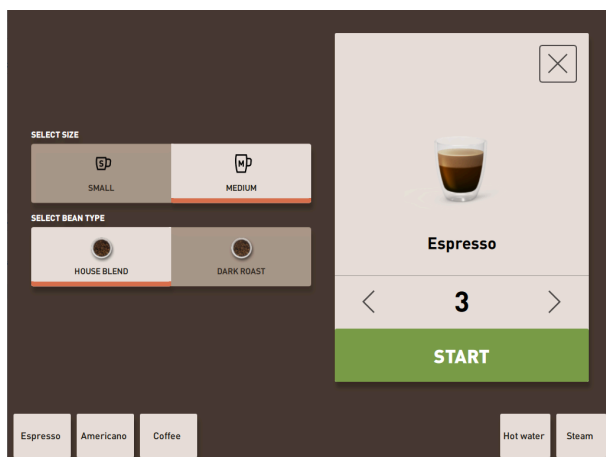
Figure: Display of beverages

Prerequisite: The pre-selection is activated in operating mode (maximum 1 – 9 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 displayed.
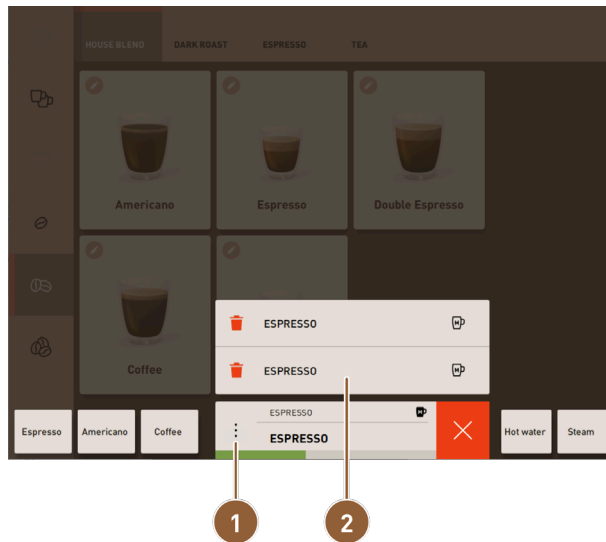
Figure: List with pre-selected beverages

1 Three-dot menu

2 List with pre-selected beverages

4. Tap on the three-dot menu.
   - ✓ A list with the pre-selected beverages appears.
   - ✓ When beverage dispensing is complete, this is displayed in green.
5. Remove the cup or mug from the beverage outlet.
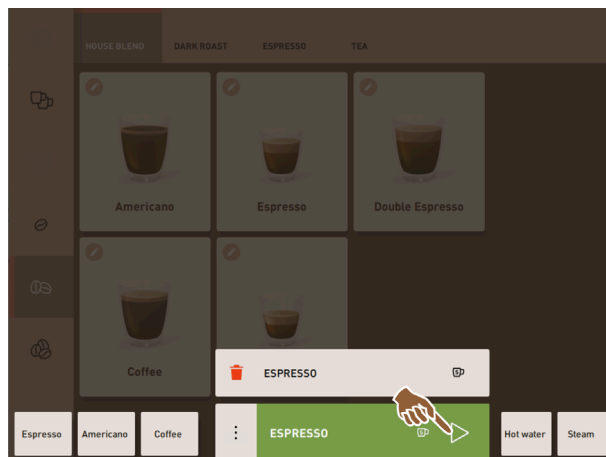
Figure: Dispensing additional beverage

6. Tap on the **Play** button.
   - ✓ The first beverage is confirmed.
   - ✓ Dispensing of the next beverage from the list starts.
7. Repeat step 3 for the other beverages.

8.4.5 Pre-selecting decaffeinated coffee

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

Prerequisite:
- The **DECAF button visible** function is activated in Staff mode.
- A bean hopper is filled with decaffeinated beans.

Figure: Decaffeinated coffee preselection

▶ Tap on the **Without caffeine** button.

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

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

8.4.6 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.

8.4.7 Positioning cup/mug

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

The **Position cup** instruction can be activated in the operating mode by service technicians.
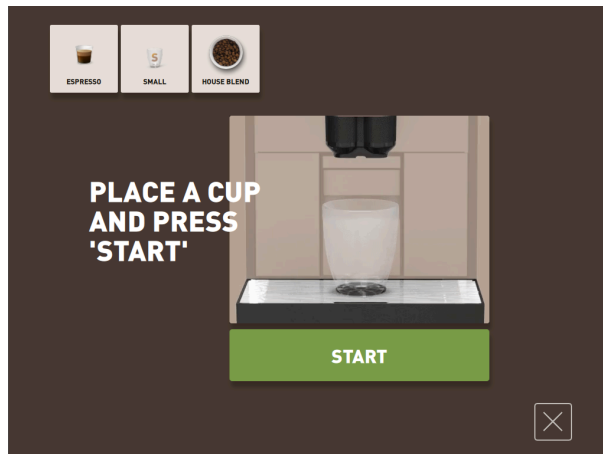
Figure: **Position cup/mug** animation, beverage ready for dispensing.

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

1. Place the cup or mug under the beverage outlet.

8.4.8   Dispensing beverage

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

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

The **Position cup** instruction can be activated or deactivated by service technicians in the configuration for the respective operating mode.
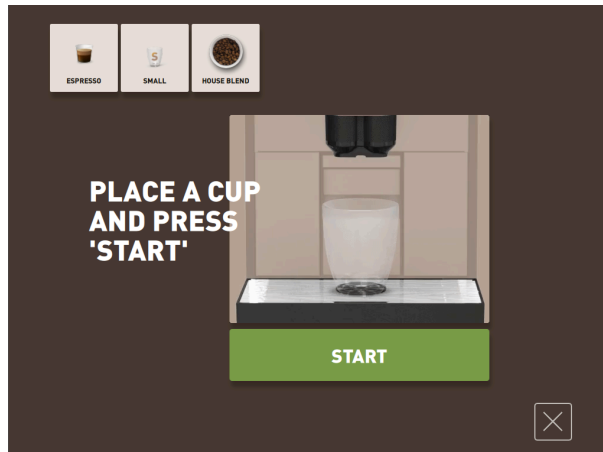
Figure: **Position cup/mug** animation, beverage ready for dispensing.

Prerequisite: The beverage has been modified and is 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.

8.4.9   Progress display for beverage dispensing

Prerequisite: Beverage dispensing starts.

Variant: Guest/Frequent user mode
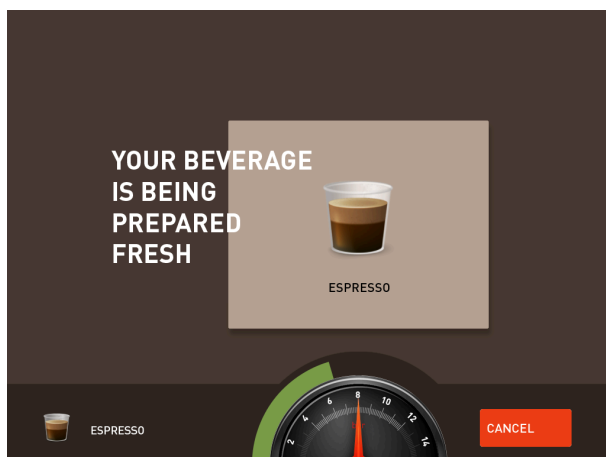
Figure: Progress (Guest and Frequent user mode)

Guest and Frequent user mode: Displaying progress

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

Variant: Staff mode
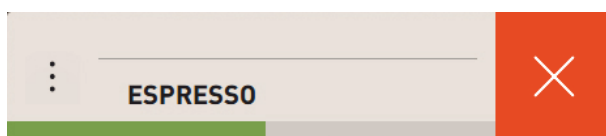
Figure: Progress (Staff mode)

Staff mode: Displaying progress

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

8.4.10   Completion of beverage

The display informs you when dispensing is complete.

Prerequisite: The information appears if the parameter is activated in the **Configuration > Operating mode** setting.
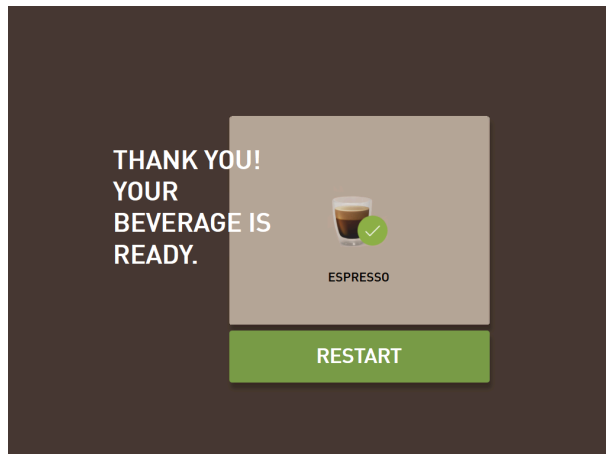
Figure: Display of **Beverage dispensing completed**

▶ Remove the cup or mug from the drip tray.

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

8.4.11 Canceling beverage dispensing

Canceling 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 pre-selected beverage options are then canceled before the beverage is dispensed.

Canceling during beverage dispensing

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

The **CANCEL** button cancels the beverage dispensing process. Pre-selected beverages are also deleted.
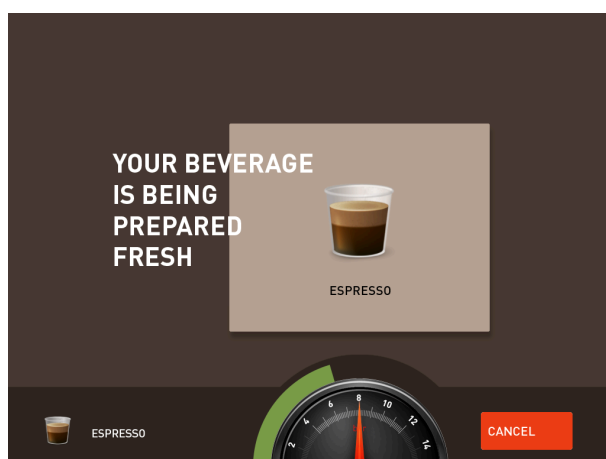
Figure: Guest and Frequent user mode: Canceling beverage dispensing

Guest and Frequent user mode: Canceling beverage dispensing

1. Tap on the **CANCEL** button.

✓ Beverage dispensing is canceled.
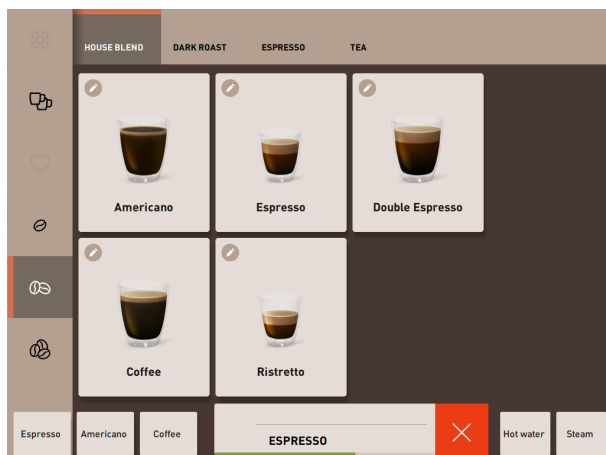
Figure: Staff mode: Canceling beverage dispensing

Staff mode: Canceling beverage dispensing

1. Tap on the **(X)** button.
   - ✓ Beverage dispensing is canceled.

8.5   Dispensing steam

	WARNING
⚠️ 🧤	**Risk of infection!**
	There is a risk of infection due to contamination, deposits and bacteria on the steam wand.
	▶ Wipe the steam wand with a clean, damp cloth after each use.
	▶ Wear protective gloves while cleaning.

	CAUTION
⚠️	**Risk of scalding due to hot fluid!**
	There is a risk of scalding in the dispensing area for beverages, hot water and steam.
	▶ Never reach under the dispensing points during dispensing or cleaning.

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

See 9.7.7 "Cleaning steam wand"

8.6   Generic functions of the user interface

8.6.1   Navigation in the interface

Guest and Frequent user mode

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.
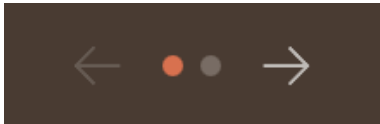

Figure: Navigation in Guest mode with arrow buttons

- 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.

Staff mode

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

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

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

Figure: **Back** button

Figure: **Next** button

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

8.6.2   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.

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

Figure: Beverage types

Size of display

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

Available display sizes:

- Small
- Medium
- Large
- Extra large
- Dynamic

Figure: Small and extra large beverage display

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

8.6.4   Error messages (simple)

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

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

Service technicians can change the setting to **specific error messages**.
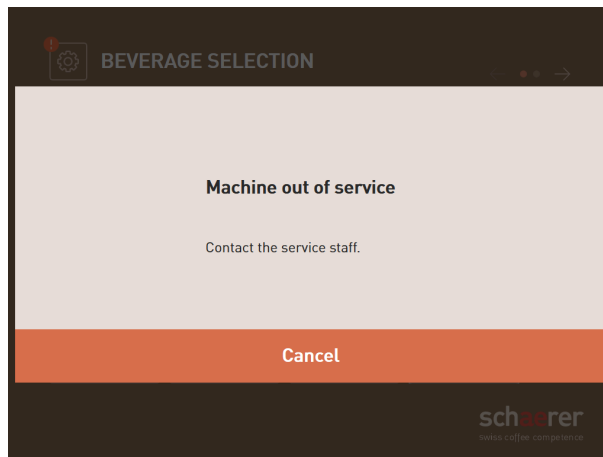
Figure: Simple error message

Simple error messages show the following information:

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

8.6.5   Error messages (specific)

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

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

Specific error messages show the following information:

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

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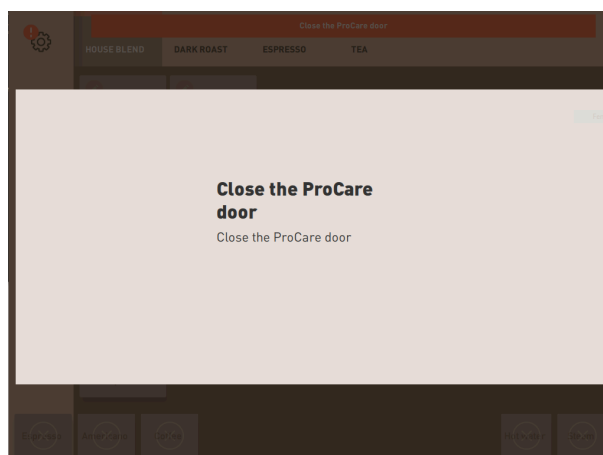
Figure: Specific error message

8.7　Service menu

8.7.1　Service menu button

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

Figure: **Service menu** button in Guest mode

Figure: **Service menu** button in Staff mode and Frequent user mode

The **Service menu** button has two functions.

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

Control function for opening the Service menu:

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

Report function: Additional information with color marking

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

Figure: **Service menu** button with messages

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

8.7.2　Service menu overview

Overview of functions

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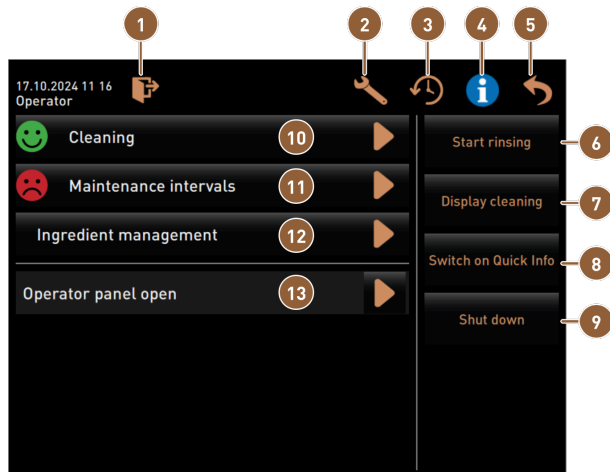
Figure: Functions in the Service menu

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

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.
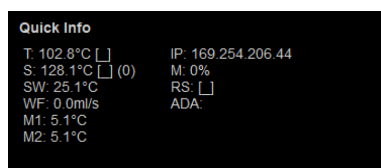
8.7.3   Quick info

Figure: Quick info

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

- **T** displays the hot water boiler temperature in °C.
- **WF** displays the required water quantity in ml/s.
- **CupS** shows the setting for the cup sensor
- **IP** displays the address of the network adapter.
- **M** displays the available storage space in %.
- **RS** informs about the density of beverage supply (Rush hour mode):
  - Rush hour mode is activated if more than 30 beverages are dispensed per hour.
  - When active, rinsing of the beverage outlet is suppressed.
  - The active mode is indicated by **RS[*]**.

- **ADA** shows information on the ADA operating unit

8.7.4 Profiles (log in / log out)

Access rights to functions and parameters depend on the profile.

See 11 "Advanced settings" for a more detailed overview and description of the profiles.

8.7.4.1 Access to the Profiles dialog

When the Service menu is closed, the currently logged in profile remains active.
The active profile is only logged out after logging out using the button or after a restart.
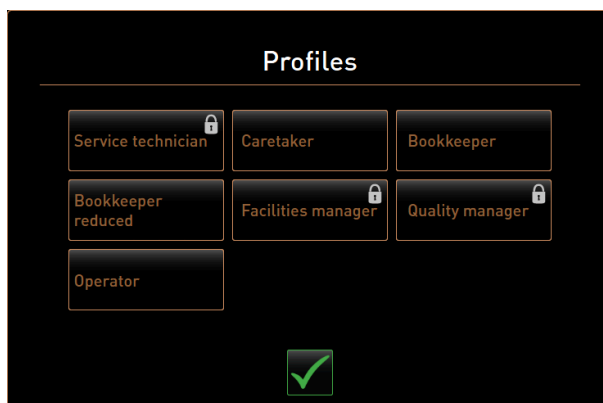
Figure: **Profiles** dialog

▶ Tap on the **Log-in** button in the Service menu.
  ✓ The **Profiles** dialog opens with the profiles configured by service technicians.
  ✓ PIN-protected profiles are marked with a lock icon.

The following profiles can be configured by service technicians:

- Caretaker
- Bookkeeper
- Bookkeeper reduced
- Chef de service
- Quality manager
- Machine operator

8.7.4.2   Access variant to the Service menu without PIN entry

07.06.2017 13:28
Not logged in

Figure: No profile is logged in.

▶ Tap on the **Service menu** ⚙ button in the user interface.
   ✓ The Service menu opens with the last activated user profile or without an active profile (not logged in).

8.7.4.3   Variant: Access to the Service menu with PIN entry

ℹ Each profile has specific authorizations. Logging in with a profile can be protected by a PIN.
Service technicians can activate and deactivate profiles, define a PIN and assign it to a profile.

Prerequisite: Access to the Service menu is protected by a PIN.

1. Tap on the **Service menu** ⚙ button in the user interface.
   ✓ The numeric keypad for entering the PIN appears.
2. Enter the configured PIN and confirm.
   ✓ The screen with the Service menu opens without an active user profile.
   ✓ All direct dial functions with the exception of **Free vending** are available for selection.
   ✓ **Info – Show versions** is available in the settings.

8.7.4.4   Variant for activating unprotected profile

▶ Select the desired unprotected profile, e.g. **Caretaker**.
   ✓ The Service menu is displayed with the active **Caretaker** profile.
   ✓ The functions available in the Service menu correspond to the selected profile.

📖 See 11.3 "Profiles and authorizations" for detailed information on the functions of the individual pro-
files.

8.7.4.5   Variant for activating protected profile

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

1. Select the desired protected profile, e.g. **Service technician**.
   ✓ The numeric keypad for entering the PIN opens.
2. Enter the configured PIN and confirm with ✅.
   ✓ The Service menu is displayed with the selected profile.

📖 See 11.3 "Profiles and authorizations" for detailed information on the specific functions.

8.7.4.6   Profile log out

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

   ✓ The active profile is logged out.
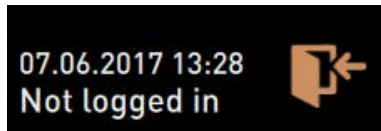
   ✓ Any authorizations become void.

Figure: No profile is logged in.

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

8.7.5   Functions in the Service menu

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

8.7.5.1   Cleaning

Figure: **Cleaning** button

Cleaning

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

▶ Tap on the **Cleaning** button.

   ✓ Display-guided cleaning starts.

   ✓ It is possible to cancel using the button.

   ✓ The last cleaning performed is displayed.
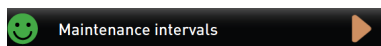
8.7.5.2   Maintenance intervals

Figure: **Maintenance intervals** button

Performing maintenance work

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

1. Execute the displayed maintenance work.

2. Tap on the **Maintenance** button.

   ✓ It is possible to cancel using the button.

3. Acknowledge the maintenance work.

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

8.7.5.3   Error messages in the Service menu
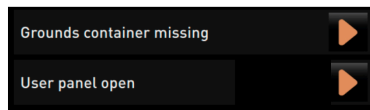

Figure: Error messages button

Remedying error

1. Press ▶ to open the pending message.
   ✓ The pending message appears in a separate window.
2. Correct the pending error or carry out the required action.
   ✓ The error message or instruction for action is automatically deleted from the list.
   ✓ Service technicians can see an overview of events in the **Info > Error statistics** main menu.

8.7.5.4   Back to user interface

Figure: Back to user interface button

The button takes you back to the user interface.

8.7.5.5   System information

Figure: System information button

Calling up system information

▶ Tap on the **System information** button.
   ✓ The system information is displayed in a separate window.
   ✓ A QR code with system information also appears.

8.7.5.6   Process of beverage dispensing

Figure: Beverage dispensing history button

Displaying beverage dispensing history

▶ Tap on the **Beverage dispensing history** button.
   ✓ The **Beverage dispensing history** dialog opens and all beverages already dispensed are shown in a list.
   ✓ The corresponding beverage dispensing duration is also displayed for each dispensed beverage.
   ✓ The pure beverage dispensing time (coffee) is shown on the right side of the list.

The values given for the dispensing times are typical values. The specified values may vary depending on the grind quantity, grinding level, water temperature and coffee type.

8.7.5.7   Settings

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

Figure: Settings

Displaying settings

▶ Tap on the **Settings** button.
    ✓ The settings appear.
    ✓ Parameter settings are available.

See 11 "Advanced settings" for a detailed description.
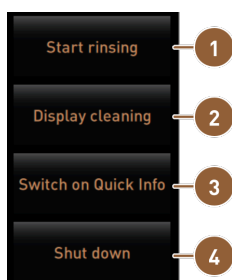
8.7.5.8   Direct selection

Figure: Direct selection buttons

1	Start rinsing	3	Switch quick info on/off
2	Touch screen cleaning	4	Shut down

Starting rinsing

▶ Tap on the **Start rinsing** button.
    ✓ A hot rinse is carried out for all systems (coffee system, milk system and powder system).
    ✓ The rinsing process cannot be canceled.

See 9 "Cleaning"

Touch screen cleaning

▶ Tap on the **Touch screen cleaning** button.
    ✓ The display remains inactive for a period of 30 s and can be cleaned.

Switching on quick info

▶ Tap on the **Switch on quick info** button.
    ✓ The Quick info window with the operating statuses appears floating in the foreground.

To switch off quick info:

▶ Tap on the **Switch off quick info** button.
  ✓ The Quick info window closes.

Shutting down

▶ Tap on the **Switch-off** button.
  ✓ The machine is powered down.
  ✓ The machine is powered down, but not de-energized.
  ✓ The display is blank and inactive.

8.8   Switching off

8.8.1   Switching machine to standby

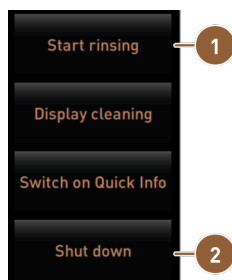|	DANGER
	Danger to life from electrocution!
	The machine is still powered in Standby mode.
	▶ Remove the machine housings.
	▶ Always disconnect the machine from the power supply before repair work.

Figure: Switching off using touch screen

①	Start rinsing	②	Shut down

1. Start rinsing in the Service menu.
   ✓ The machine is rinsed.
2. Carry out daily and weekly cleaning as required.
3. If present, empty and clean the external drinking water tank.

See 9 "Cleaning"

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

Variant: Switching off using touch screen

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

Variant: Switching off with button

⚡	DANGER

Danger to life from electrocution!

Even when the machine is switched off, components inside the machine are live.
▶ Do not remove any machine housings.
▶ Always disconnect the machine from the power supply before repair work.

The machine can also be switched off using the switch-on button behind the user panel.

> ℹ In the event of non-compliance with the safety instructions and information, no warranty will be accepted in the event of damage.

8.8.2 Longer downtimes (from 1 week)

ℹ	NOTE

Property damage due to frozen water!

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

> ℹ During longer downtimes, for instance company vacations, take the machine and other associated devices out of operation.
> When restarting the machine, first perform a daily cleaning.

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

9   Cleaning

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

⚠	WARNING
	Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.
The following activities may only be carried out by persons who have been instructed by the operator.

⚠	CAUTION
	Risk of injury due to slipping!

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

9.1   Cleaning regulations and conditions

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

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

With proper installation, maintenance, care and cleaning, Schaerer AG machines and device fulfill the HACCP requirements.

All cleaning products are perfectly coordinated with the cleaning programs.

9.2   Cleaning stages

The following cleaning stages are possible:
- Instruction = The coffee machine is still ready for use.
- Forced = The coffee machine is blocked.

It is possible to start cleaning in the following ways:
- Automatic = Cleaning starts automatically without operator intervention.
- Manual = Cleaning only starts with operator intervention.

ⓘ	NOTE
	Adjustment of cleaning stage

The cleaning stages of a cleaning process can only be adjusted by a service technician.

Variant: Instruction

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

Variant: Forced

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

Only execution of the cleaning program makes the machine ready for use again.

A service technician can define the mandatory cleaning and the duration until it is triggered in the cleaning schedule.

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

Cleaning time window
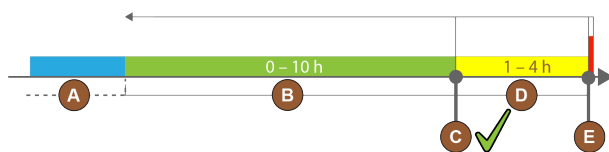
Figure: Time window for cleaning

Pos.	Time window	Explanation
A	Cleanings performed in this time window are ignored.	The cleaning instruction remains unchanged after a cleaning.
B	Cleanings performed in this time window are too early. These cleanings are still recognized as completed.	The cleaning instruction is reset after a cleaning. The next cleaning due in the cleaning schedule is displayed in **h** in the Service menu.
C	Time for the optimum start of a cleaning (according to the schedule).	The time remaining until the optimum start time is displayed in the Service menu.
D	Time window for optimum cleaning in the schedule.	The cleaning instruction is reset after a cleaning.
E	Time for mandatory cleaning Cleaning that has not been performed can no longer be delayed from this point onwards.	The display shows that further dispensing is no longer possible. The machine is not ready for use. Cleaning is absolutely essential.

9.3 Cleaning intervals

9.3.1 Cleaning intervals

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

NOTE

Cleaning with high beverage volume

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

Daily: At least once a day, more if necessary

Automatic cleanings:

- Automatic rinsing (if programmed)
- Hot rinsing

Cleaning programs:

- Automatic coffee system rinsing (if programmed)

Manual cleaning work:

- Clean steam wand
- Empty and clean grounds container
- Clean brewing chamber
- Clean drip tray and drip grid
- Clean touch screen

Weekly: At least once a week, more if necessary

Manual cleaning work:

- Clean bean hoppers

As needed: When the machine is dirty

Automatic cleanings:

- Hot rinsing

Cleaning programs:

- Coffee system cleaning

Manual cleaning work:

- Clean steam wand
- Clean bean hoppers
- Lower beverage outlet part
- Clean outer surfaces

9.4 Machine rinsing

> ⚠️ **CAUTION**
>
> **Risk of scalding due to hot water!**
>
> During machine rinsing, hot water runs out of the beverage outlet. An automatic machine rinse is indicated by a message on the display. The functional light turns red.
> ▶ Do not reach under the beverage outlet during a machine rinse.
> ▶ Point the optional steam wand into the drip tray.
> ▶ Configured rinses are started automatically. That is why you have to make sure that the beverage outlet is always free.

9.4.1 Automatic switch-on/switch-off rinsing

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

The coffee system is flushed automatically after switching on and before switching off.

9.4.2 Configured rinsing processes

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

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

* Rinsing > beverage outlet (outlet rinsing interval) (1 – 180 min)
* Rinsing > reverse flow cooler (heat exchanger rinsing interval) (1 – 180 min)

9.4.3 Manual rinsing (Service menu)

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

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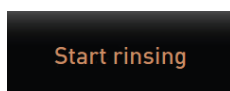
Start rinsing

Figure: **Start rinsing** button

▶ Tap on the **Start rinsing** button.
  ✓ System rinsing is carried out in the same sequence as the automatic switch-on/switch-off rinsing.

9.5   ProCare cleaning system

	WARNING
	Risk of poisoning from cleaning products!

Cleaning products could cause poisoning if not used property.
It is crucial that you follow these instructions for handling ProCare cleaning products:

▶ Do not remove the ProCare cleaning bags during the cleaning process.

▶ Always wait for the instruction on the display.

▶ Keep ProCare cleaning products away from children.

▶ Do not touch the cleaning products with bare hands and read the enclosed safety data sheet.

▶ Read the information on the packaging and the safety data sheet carefully before using the cleaning product. If no safety data sheet is available, request one from the distributor.

	NOTE
	Property damage due to incorrect cleaning products!

The machine can be damaged if the wrong cleaning products are used.
▶ Only use cleaning products recommended by Schaerer AG for daily and weekly cleaning.

9.5.1   Inserting ProCare cleaning bag

Figure: Inserting ProCare cleaning bag
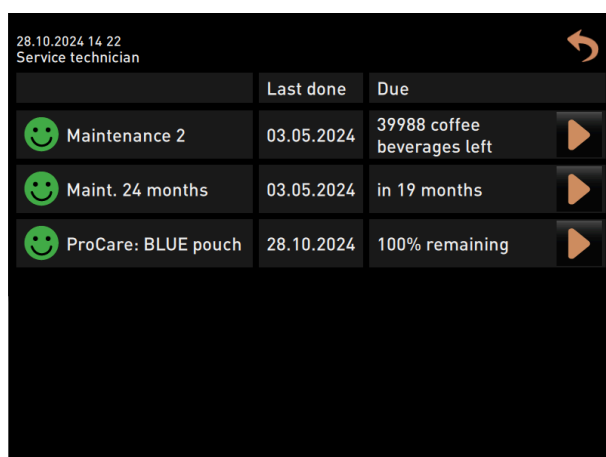
| 1 | Cap nut | | 3 | Sealing cap |
| 2 | Empty cleaning bag | | | |

1. Open the user panel.
2. Switch the machine back on using the Switch on/off button.
3. Turn both green locks 90° to the horizontal position in the direction of the other lock.
4. Open the flap of the ProCare unit to the front by approx. 1-2 cm and guide the flap to the left around the beverage outlet.
5. Remove the flap of the ProCare unit.
6. Loosen the cap nuts from the cleaning bag.
7. Remove the empty cleaning bag.
8. Screw the sealing cap onto the empty cleaning bag and dispose of the cleaning bag.
9. Remove the sealing cap and the protective film from the new ProCare cleaning bag.
10. Place the new ProCare cleaning bag on the free coupling nozzles and tighten the caps of the cleaning bag with the cap nuts.
11. Place the sealing cap of the new cleaning bag in position in the ProCare unit.
12. Place the flap of the ProCare unit back on the machine.
13. Turn both green locks 90° back to the initial vertical position.
14. Switch the machine back on using the Switch on/off button.
15. Close the user panel.
    ✓ The new ProCare cleaning bag is inserted.
16. To put the cleaning bag into operation: See 9.5.2 "Putting ProCare cleaning bag into operation"

9.5.2 Putting ProCare cleaning bag into operation

Putting cleaning bag into operation using the Service menu

1. Make sure that the new cleaning bag was correctly inserted.
2. Open the **Service menu** with ⚙.
3. Tap on the **Maintenance intervals** button.

28.10.2024 14 22 Service technician		Last done	Due	
🙂	Maintenance 2	03.05.2024	39988 coffee beverages left	▶
🙂	Maint. 24 months	03.05.2024	in 19 months	▶
🙂	ProCare: BLUE pouch	28.10.2024	100% remaining	▶

Figure: Maintenance intervals

4. In the **Maintenance intervals** screen, tap on the ▶ button for the **ProCare** menu item: **BLUE bag**.
    ✓ The screen for conditioning the inserted cleaning bag opens.
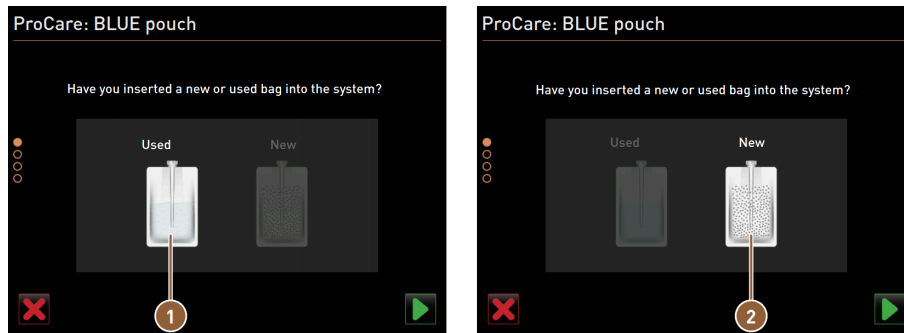
Figure: BLUE ProCare example: Changing cleaning bag

(1) Used cleaning bag: Air is extracted.   (2) New cleaning bag: Is filled with water, then the air is extracted.

5. Tap on **Used** if you have inserted a used cleaning bag or on **New** if you have inserted a new cleaning bag.

6. Confirm your selection with ▶.

    ✓ The air is now extracted from a used cleaning bag. A new cleaning bag is filled with water and the air is then extracted.

    ✓ The ProCare cleaning bag has been put into operation.

    ✓ ProCare is ready for cleaning processes.

9.5.3   Performing ProCare cleaning

The ProCare cleaning process only takes a few minutes. The machine is not ready for use during this time.

> The ProCare cleaning process must be fully and correctly completed. Repeating the ProCare cleaning process is mandatory if cleaning is incomplete or was completed incorrectly.
>
> The machine is not ready for use until the cleaning process has been completed correctly.

1. Make sure that the cleaning bag has been correctly inserted and put into operation.

2. Make sure that the waste water outlet is clear.

    See 10.2 "Checking waste water drainage"

3. Open the **Service menu** with ⚙.

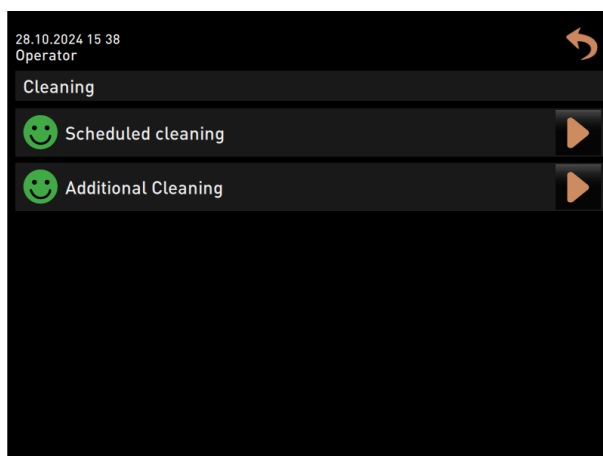4. Tap on the **Cleaning** button.

Figure: Cleaning

5. In the **Cleaning** screen, tap on the ▶ button for the desired option.

The following two options are available:

- **Scheduled cleaning**

- **Additional cleaning**

Scheduled cleaning

The scheduled cleaning is pre-programmed by the service technician in the presence of the machine operator. The planned cleaning starts automatically.

Additional cleaning

The additional cleaning process can be called up and carried out by the machine operator at any time.

Starting additional cleaning

6. In the **Cleaning** screen, tap on the ▶ button for the **Additional cleaning** option.
   - ✓ The following cleaning options are available:
   - ▪ 🗹 **Coffee system cleaning**
   - ▪ 🗒 **Manual cleaning work**

7. Tap on the desired cleaning option.

8. Confirm your selection by pressing the ▶ button.
   When **Coffee system cleaning** is selected:

   - ✓ The coffee system is cleaned automatically by ProCare.
   - ✓ Additional cleaning is now complete.

   When **Manual cleaning work** is selected:

   - ✓ The manual cleaning steps are shown on the display.

9. Carry out manual cleaning work.
   - ✓ Additional cleaning is now complete.

9.6   Cleaning schedule

	NOTE
ℹ️	**Compliance with HCCP cleaning concept**

Manual adjustments by the service technician that deviate from the cleaning schedule should meet the requirements for the HACCP cleaning concept.
- If no cleaning schedule is configured or cleaning is configured with an instruction, the operator is responsible for carrying out the necessary cleaning.

See 9.1 "Cleaning regulations and conditions"

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

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

9.6.1   Calling up cleaning schedule

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

1. Tap on the **Service menu** ⚙ button.
   - ✓ The Service menu opens.
2. Tap on the **Log-out** 🔳 button and back on **Log-in** 🔳.
3. Log in as a service technician with the corresponding PIN.
4. Tap on the **Settings** 🔧 button.
   - ✓ The **Settings** screen opens directly with the system settings.
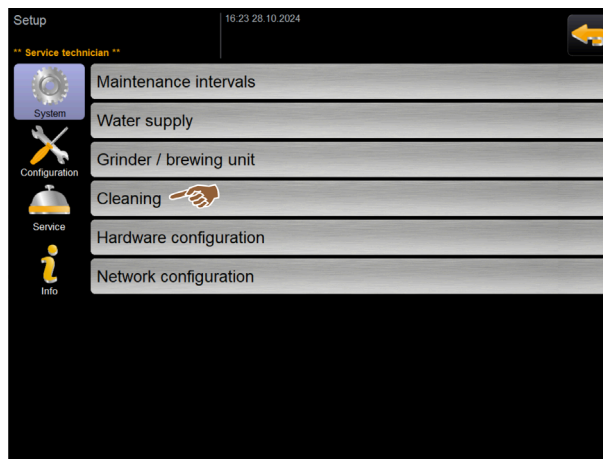

Figure: System setting

5. Click on the **Cleaning** button.
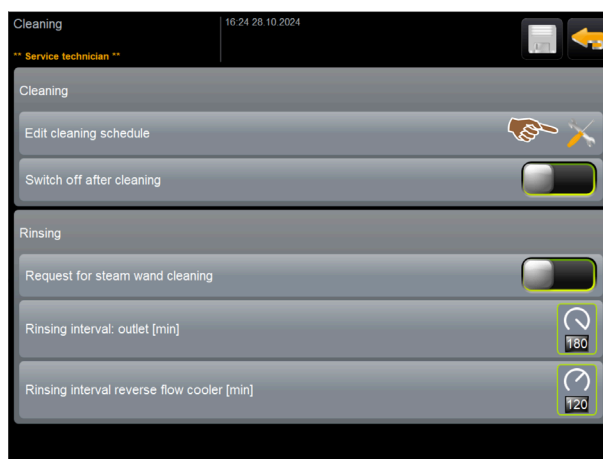   - ✓ The screen with the cleaning settings appears.

Figure: Cleaning settings

6. Click on the **Edit cleaning schedule** button.
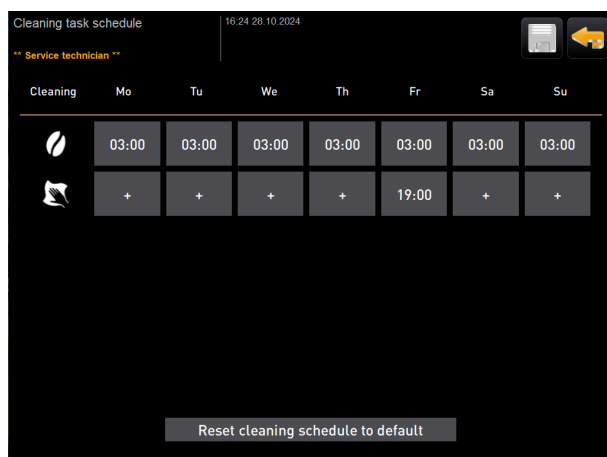   - ✓ The schedule for the cleaning tasks appears.

Figure: Cleaning schedule

9.6.2   Setting cleaning times

Standard times are predefined for the cleaning task schedule. If a customized cleaning schedule has been created, it can be reset to standard at any time. If an individually configured cleaning schedule has been reset to **Standard**, this cannot be undone.

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

The following systems can be cleaned:

- Coffee system
- Components with manual cleaning (e.g. grounds container)

To add a cleaning task:

1. In the table with the cleaning tasks, tap on the plus sign in the desired empty field.
   - ✓ The dialog for adding a cleaning task opens.
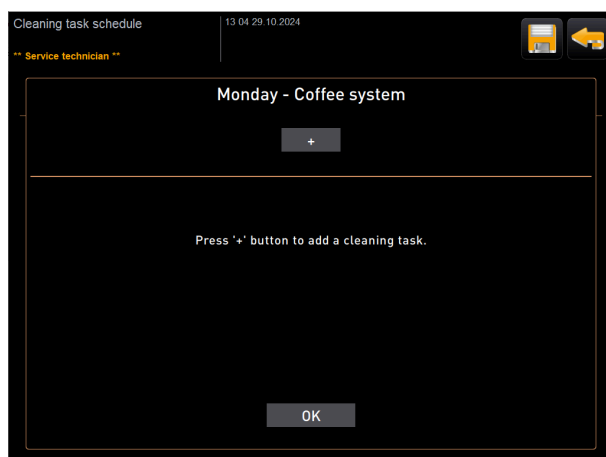

Figure: Creating cleaning task

2. Tap on the plus sign.
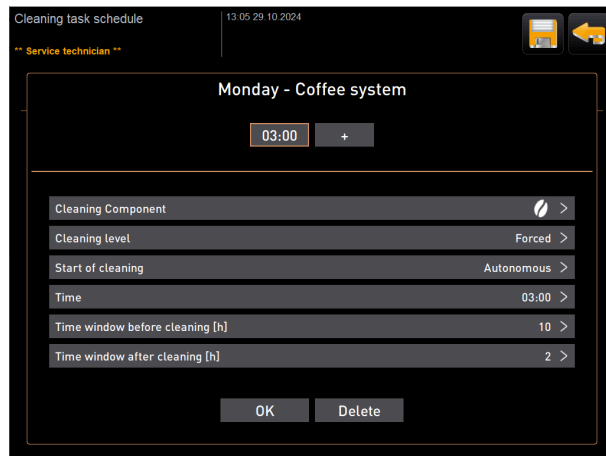   - ✓ The dialog with the settings appears.

Figure: Selecting settings for cleaning task

3. Select the following settings.

Setting cleaning stage

1. Tap on the **Cleaning stage** line.

    Two cleaning stages are possible:

    •   **Instruction** = The coffee machine is still ready for use.

    •   **Forced** = The coffee machine is blocked.

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

    ✓   The cleaning stage is saved.

Defining start of cleaning

1. Tap on the **Start of cleaning** line.

    There are two different ways of starting a cleaning process:

    •   **Automatic** = Cleaning starts automatically without operator intervention.

    •   **Manual** = Cleaning only starts with operator intervention.

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

    ✓   The start of cleaning is defined.

Setting time

You can define up to four times.

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

2. Tap on the **Time** line.
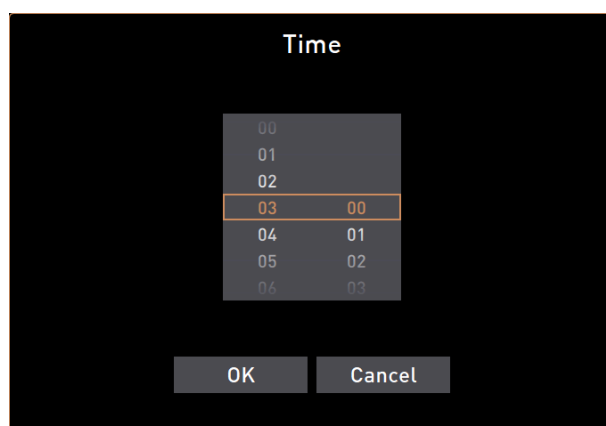
    ✓   The dialog with the settings appears.

Figure: Selecting time for cleaning

3. Scroll to select the time.

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

   ✓ The selected time appears in the dialog.

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

   ✓ The time is saved.

Defining a time window before and after cleaning

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

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

1. Tap on the **Time window before cleaning [h]** or **Time window after cleaning [h]** line.

   ✓ The dialog for selecting the hours, similar to that for the time, is displayed.

2. Scroll to set the time window.

3. Proceed as when setting the time.

   ✓ The hours for the respective time window are displayed in the dialog.

> The **Time window before cleaning (h)** and **Time window after cleaning (h)** can be used to postpone a scheduled cleaning cycle.
>
> **Example:** A large number of customers are expected at the time of the planned cleaning. This can be avoided with the time window before and after cleaning.

Editing existing cleaning task

1. On the **Cleaning schedule for cleaning tasks** screen, select a system and the days of the week on which cleaning is to be carried out and tap on the desired time.

   ✓ The dialog with the settings appears.

2. Edit the desired settings.

9.7 Manual cleaning

Various components have to be cleaned manually.

9.7.1 Manual grounds container

⚠ **CAUTION**

Health hazard due to mold growth in the grounds container!

Coffee grounds in the grounds container can quickly lead to mold growth. If the mold spores spread into the machine, there is a health risk and a risk of contamination of the coffee.
▶ Clean the grounds container daily.

ⓘ **NOTE**

Property damage due to high temperatures!

High temperatures can lead to damage.
▶ Do not clean the grounds container in the dishwasher.

Cleaning interval: Daily

Figure: Removing grounds container

1. Pull the grounds container out of the machine.
2. Empty the grounds container.
3. Clean the grounds container thoroughly with water and detergent.
4. Rinse out the grounds container with clean water.
5. Dry the grounds container with a clean cloth.
6. Reinsert the grounds container into the machine.
   - ✓ The grounds container is emptied and cleaned.

9.7.2 Cleaning brewing chamber

Figure: Cleaning brewing chamber

Cleaning interval: Daily

1. Pull the grounds container out of the machine.
2. Remove the ground coffee residue in the brewing chamber from the machine using the supplied cleaning brush.
3. Wipe the brewing chamber dry with a clean, moist cloth.
4. Reinsert the grounds container.
   - ✓ The brewing chamber is cleaned.

9.7.3 Cleaning drip tray and drip grid

⚠	CAUTION

Risk of scalding!

Automatic rinsing guides hot water out of the beverage outlet.
If cleaning is carried out without the display-guided cleaning program:

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

ℹ	NOTE

Danger of flooding!

A plugged waste water outlet in the drip tray causes overflowing of the drip tray.
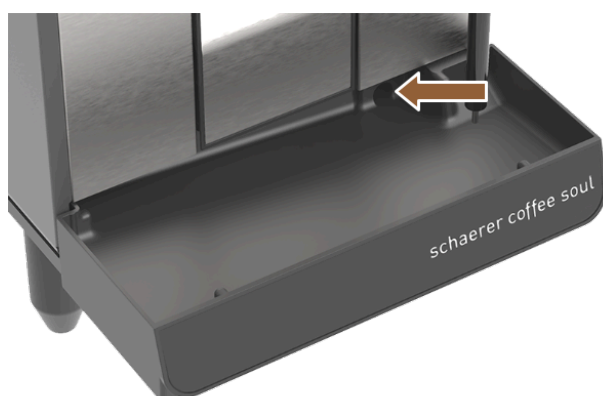▶ Be sure to check the drainage speed before the cleaning process.

Figure: Cleaning drip tray

Cleaning interval: Daily

1. Switch the machine off.
2. Remove the drip grid with positioning grid from the machine.
3. Clean the drip grid with the positioning grid thoroughly under running water and with dishwashing detergent.
4. Rinse the machine drip tray with clean water.
5. Check that the waste water outlet is flowing freely.
6. Place the drip grid back into the drip tray and check that the drip tray is seated correctly.
7. Check that the positioning grid is placed correctly opposite the beverage outlet.
   - ✓ The drip tray and drip grid are clean.

9.7.4 Cleaning touch screen

	CAUTION

Risk of scalding!

Unintentional beverage dispensing during cleaning can cause scalding.
▶ Deactivate the touch screen in the Service menu before cleaning or switch off the machine.

	NOTE

Damage to the touch screen during the cleaning process

Improper cleaning can scratch or otherwise damage the surface of the touch screen.
▶ Do not use abrasive cleaners.
▶ Never press on the display with force, strong pressure or sharp objects.

Cleaning interval: Daily

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

Display cleaning

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 appears.
2. Clean the touch screen with a paper towel and commercially available glass cleaner during the available 30 seconds.
   ✓ After the countdown has elapsed, the touch screen becomes active again.
   ✓ The touch screen is cleaned.

9.7.5 Cleaning bean hoppers

	WARNING

Risk of injury due to rotating grinding disks!

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

	NOTE

Damage to the machine surface!

The machine surface can be scratched by abrasive cleaners.
▶ Do not use abrasive cleaners when cleaning.

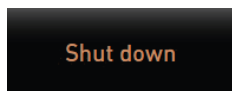Figure: Cleaning bean hoppers

1   Central locking behind the user panel   **2**   Bean hoppers

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.

2. Unlock the bean hoppers with the central locking mechanism behind the user panel.
3. Lift the bean hoppers out of the machine.
4. Remove the cover.
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. Lock the bean hoppers with the central locking mechanism.
10. Fill the bean hoppers and put on the covers.
11. Start the machine with the On/Off button.

   ✓   The bean hoppers are clean.

9.7.6 Cleaning lower beverage outlet part

CAUTION

Risk of scalding!

Automatic rinsing guides hot water out of the beverage outlet.
If cleaning is carried out without the display-guided cleaning program:

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

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

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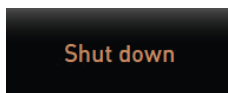 ✓ The Service menu opens.

Shut down

Figure: **Switch-off** button

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

2. Remove the cover of the beverage outlet at the front by releasing it (push and pull downwards).
3. Clean the beverage outlet with water and a brush.
4. Clean the lower beverage outlet under running water with a brush.
5. Mount the cover to the beverage outlet by inserting it into the rear and clipping it into place at the front.
   ✓ The lower part of the beverage outlet is cleaned.

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

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

9.7.7 Cleaning steam wand

WARNING

Risk of infection!

There is a risk of infection due to contamination, deposits and bacteria on the steam wand.
▶ Wipe the steam wand with a clean, damp cloth after each use.
▶ Wear protective gloves while cleaning.

CAUTION

Risk of scalding due to hot fluid!

There is a risk of scalding in the dispensing area for beverages, hot water and steam.
▶ Never reach under the dispensing points during dispensing or cleaning.

After every use

1. Point the steam wand downwards towards the drip grid.
2. Press the **Steam** button and allow steam to escape for approx. 2 s.
   ✓ Milk residues in the steam wand are removed.
3. Wipe off the milk residue on the steam wand with a clean, damp cloth.

The position of the optional button for steam dispensing depends on the selected user interface.

9.7.8   Cleaning outer surfaces

> **(i) NOTE**
>
> **Damage to the machine surface!**
>
> The machine surface can be scratched by abrasive cleaners.
> ▶ Do not use abrasive cleaners when 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 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 9.7.4 ˝Cleaning touch screen˝

10   Maintenance

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

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

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

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

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

The operator must not carry out maintenance work on his/her own. If maintenance work is pending, the service partner must be informed. The service partner carries out all necessary maintenance work on the machine.

10.1   Maintenance intervals

ℹ	**NOTE**
	Property damage due to maintenance intervals not upheld!
	Postponed maintenance can lead to premature wear.
	▶ Have pending maintenance work carried out by service partners as soon as possible.

The maintenance intervals are defined in the separate maintenance regulations.

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

Safety-relevant components	24 months	48 months	72 months
Safety valve 12 bar	Replace	Replace	Replace
Safety valve 5 bar	Replace	Replace	Replace

Prerequisites for maintenance:

1. If maintenance is due, contact the service partner.

10.2 Checking waste water drainage

> **NOTE**
>
> **Danger of flooding!**
>
> A clogged waste water outlet will cause the drip tray to overflow.
> ▶ Before cleaning and descaling, check that the waste water outlet is flowing freely.

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

- 1 l water
- Clock with second hand

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

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

11 Advanced settings

11.1 Navigation elements

Symbol / Illustration and designation	Description
Machine configuration settings	Machine configurations are divided into the following settings: • System • Configuration (software) • Service • Info The parameters displayed depend on the authorizations of the selected profile. See 11.3 "Profiles and authorizations" All settings and configuration options are listed in the Service technician profile. See 11.4.1 "Configuring system" See 11.4.2 "Configuring software" See 11.4.3 "Configuring service settings" See 11.4.4 "Calling up information"
Restart	The **Restart** button activates a restart of the coffee machine. A restart is required after changing the machine configurations.
Activation/ Confirmation	The **Activate/Confirm** button confirms the selection, e.g. of an assigned coffee type or a temperature setting.
Cancel/Delete	The **Cancel/Delete** button has the following functions: • Reset counters • Cancel beverage dispensing • Close window/page
Confirmed instruction action	The **Confirm** button can be used to confirm performed instructions for action.
Next	The **Next** button opens a selection list or takes you to the next program step.
Back	The **Back** button takes you back to the previous window/page.
Save	The **Save** button saves the parameter settings made.
Copy	The **Copy** button copies an already configured beverage as a basis for additional beverage configurations.
Add	The **Add** button adds beverages or beverage steps. The beverages are taken from the list of available beverages. The additional beverage is automatically added to the list of configured beverages.

Symbol / Illustration and designation	Description
Beverage step configuration	The **Beverage step configuration** button takes you to the settings for the beverage configuration with the individual beverage steps.
Open/close structure tree	**(+)** expands the structure tree in the statistics. **(−)** reduces the structure tree in the statistics.
Hot Coffee	A name for a beverage designation, beverage group, ingredient or for the menu cards can be entered in the **input field** using the keyboard that appears. Tapping the input field opens the keyboard input.
	Keyboard for entering text or numbers in the input field
Parameter value	The **Parameter value** input field records the value of a parameter with the following variants: ▶ Setting with setting dial ▶ Setting with keyboard
On/Off function	The **On/Off** switch activates or deactivates a function. Lit up green = On Matt gray = Off
07.08.2015	The date and time values are set using the **down arrow** or **up arrow** buttons.

11.2 USB interface

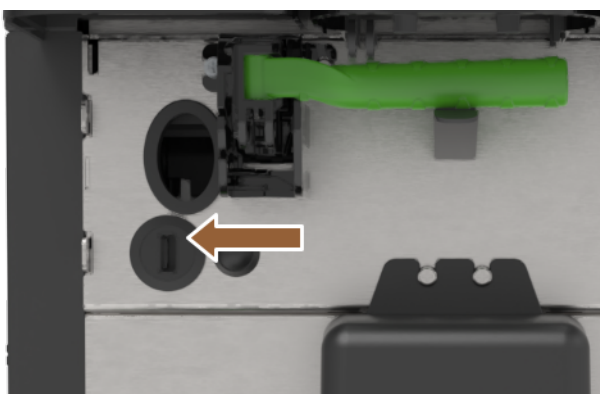A software update, data storage or data exchange is carried out on the machine via a USB stick. The USB port is located behind the user panel.


Figure: Position of the USB interface

▶ Unlock the user panel and slide it upwards until it automatically engages.
   ✓ The USB port is located to the left of the On/Off button.

See "Opening and closing user panel"

11.3 Profiles and authorizations

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

11.3.1 Overview of profile authorizations

Settings	Parameter	Caretaker	Book-keeper	Facilities manager	Quality manager	Machine operator
System	Grinder / Brewing unit • Grounds container capacity [**50**] • Grounds container empty-ing time [**5**] • Current grounds container counter • Center, right grinder cali-bration value	x	-	-	-	-
Configuration	General (language)	x	x	x	x	x
	Time/Date/Timer (Monday to Sunday)	x	-	-	-	-
	Switch-on/off times	x	-	-	-	-
	Menu card (beverage field)	-	x	x	-	-
Service	Grinder service	x	-	-	-	-
	Import data	x	-	-	-	x
	Reset cleaning	x	-	-	-	-
	Back up database	x	-	-	-	-
	Media manager	x	-	-	-	x
Info	Show versions	x	x	x	x	x
	Machine counters	x	-	x	-	-
	Beverage statistics	x	x	x	-	-
	Cleaning statistics	x	-	x	x	-
	Maintenance statistics	x	-	-	-	-
	Dispensing statistics	x	x	x	-	-
	Water hardness statistics	x	-	-	-	-
	Machine accounting statistics	x	x	x	-	-
	Beverage accounting statistics	x	x	-	-	-

11.3.2   Caretaker profile

The caretaker is the first point of contact in the event of technical faults. He/She has basic technical knowledge and is regularly involved 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

11.3.3   Bookkeeper profile

The bookkeeper and bookkeeper reduced have limited service functions.

⚙	Functions in the Service menu

The following functions are available for direct selection in the **Bookkeeper** profile:

- Start rinsing
- Touch screen cleaning
- Switch quick info on/off
- Activate free vending if with payment system (bookkeeper)
- Switch off
- Start maintenance (descaling)
- Ingredient management

	Settings

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

- Configuration
- Info

11.3.4   Chef de service profile

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

The chef de service has access to some of the machine statistics in order to obtain an overview of the type and quantity of beverages dispensed.

The chef de service has limited access to the service functions. He/She has more statistics available to him/her than the quality manager and the machine operator.

	Functions in the Service menu

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

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

	Settings

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

- Configuration
- Info

11.3.5   Quality manager profile

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

The quality manager has limited access to the service functions. The quality manager has access to more statistics 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

11.3.6   Machine operator profile

The machine operator is the normal operator of the machine and therefore only a few service functions are available to him/her. Apart from setting the language, he/she can view the machine version in order to pass on the information to a service technician if errors occur.

| | Functions in the Service menu |

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

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

| | Settings |

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

- Configuration
- Info

11.4   Configuring machine

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

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

11.4.1   Configuring system

Calling up system settings

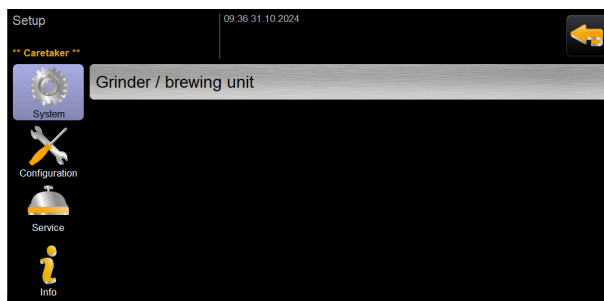1. In the configuration settings on the left, tap on the **System** category.

Figure: Configuring grinder/brewing unit

2. Select **Grinder/Brewing unit**.

Configuring grounds container capacity

Figure: Configuring grounds container capacity

1. Tap on the input field.
2. Enter the maximum number of coffee cakes that can be collected in the grounds container.
   NOTE: The maximum capacity of the grounds container is 60 coffee cakes.

   The default setting is 50 coffee cakes.

   - ✓ Once the set grounds container capacity has been reached, the **Empty grounds container** message appears on the display.
   - ✓ Once the set grounds container capacity has been reached, beverage supply is blocked until the grounds container has been emptied.

Variant: Machine with under-counter grounds disposal

▶ Set the value to 0 coffee cakes.
   - ✓ The number of coffee cakes is ignored.

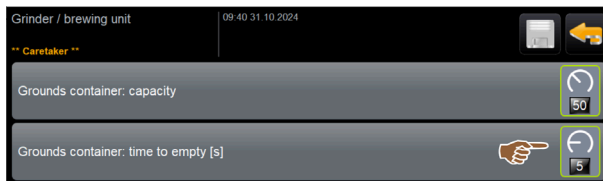**Grounds container: Configuring emptying time**

Figure: Configuring grounds container emptying time

1. Tap on the input field.
2. Enter the time for emptying the grounds container.

   NOTE: If the grounds container is only pulled out briefly and then reinserted right away, the counter for the grounds container capacity is retained and is not reset to 0.

   The default setting is 5 s.

   ✓ The counter for the grounds container capacity is reset to 0 after the set emptying time has been reached.
   ✓ The emptied grounds container cannot be used again until after the set emptying time.

11.4.2   Configuring software

Calling up software settings

1. In the configuration settings on the left, tap on the **Configuration** category.
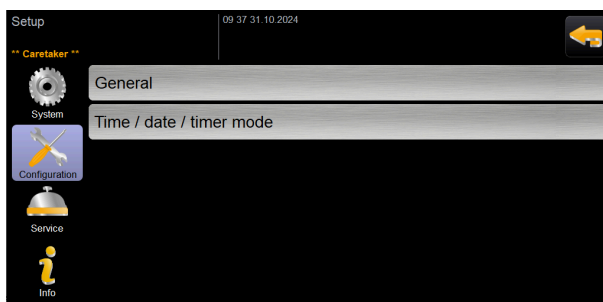
Figure: Configuring software

2. To select the desired setting:
   • **General**: Configuring language
   • **Time/Date/Timer mode**: Display date, time and time zone, configure switch-on/off time

Configuring language
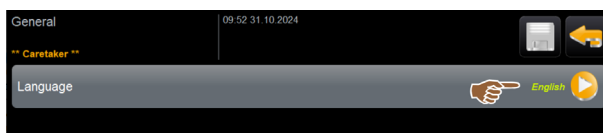
Figure: Configuring language

1. Tap on the ▶ button next to the set language.

   ✓ The menu for the language selection appears.
2. Select the desired language.
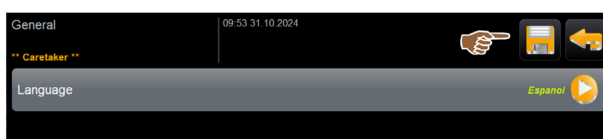
Figure: Saving language

3. Save the setting and load the new settings into the machine.

See 11.4.5 "Saving changes and loading them into the machine¨

✓ All display messages and parameter designations appear in the activated language.

Displaying date, time and time zone

This menu displays information on the date, time and time zone. The settings could not be configured.

The time zone is selected by the service technician during the commissioning program. When the time zone is set, the time and date are automatically adopted from the selected zone.

11.4.3 Configuring service settings

Calling up service settings

1. In the configuration settings on the left, tap on the **Service** category.
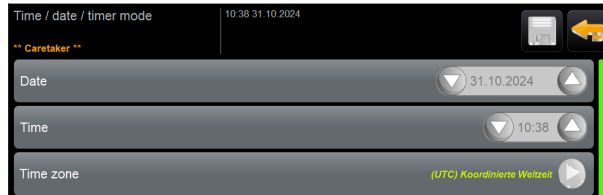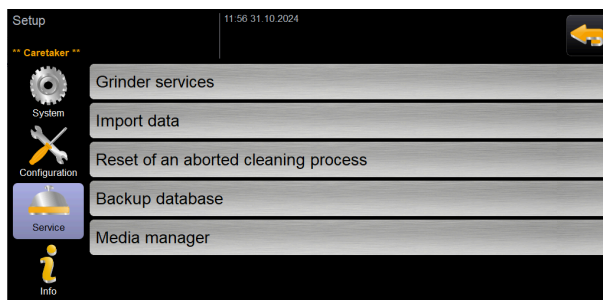

Figure: Service settings

2. Select the desired setting.

11.4.3.1 Grinder service with automatic grinding level adjustment

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⚠️ **WARNING**

Risk of injury due to insufficient qualification!

Improper handling can lead to considerable personal injury and property damage.
The following activities may only be carried out by service staff.

The following functions are available in the **Grinder service** menu:

- Confirm grinder replacement
- Adjust grinding level
- Conventional grinder calibration
- Automatic grinder calibration

The grinder service with grinder replacement also requires grinder calibration (conventional or automatic) and a grinding level adjustment with the grinding level motors.

Starting grinder service

1. Tap on the **Service** setting.

2. Select **Grinder service**.

✓ The confirmation dialog opens.

Grinder services

Figure: Starting grinder service

3. Confirm with ▶.

✓ The service functions for the grinder are available.

4. Open the tab for the desired grinder (left or right).

Grinder services
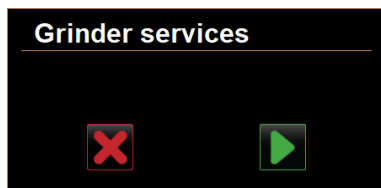
M5: Left grinder	M2: Right grinder

Ingredient: House blend
Last grinding discs change: 13.01.2025 13:29:57
Last initialization: 13.01.2025 13:29:57
Last adjustment: 13.01.2025 13:43:33
Last calibration: 13.01.2025 13:42:42
Grinder status: In position

Confirm replacement of grinder

Grinder adjustment

Conventional grinder calibration

Automated grinder calibration

Figure: Grinder service

Replacing grinder

⚠ **DANGER**

Risk of electrocution!

Danger to life due to improper handling of electrical appliances.
▶ Always disconnect the power supply before carrying out maintenance work.

⚠ **WARNING**

Cutting injury!

Risk of injury due to rotating grinding disks in the grinder.
▶ Never reach into the bean hopper when the coffee machine is switched on.

1. Switch off the machine and disconnect it from the power supply.
2. Remove the grinding level motor.
3. Remove the old grinder.
4. Install the new grinder.
5. Close the empty grinder by hand until there is a noticeable resistance (disk on disk).
6. Open the grinder 45° counterclockwise.
7. Reassemble the grinding level motor.
8. Switch the machine back on.
9. Navigate to the **Grinder service** screen.
10. Tap on the **Confirm grinder replacement** button.

11. Confirm grinder replacement with the ▶ button.
    ✓ The preparation steps for setting the grinding level are displayed.

Adjusting grinding level

1. Empty and clean the grounds container and reinsert it.

2. Confirm that the grounds container is inserted with the ▶ button.
    ✓ The **Adjusting grinding level** screen appears.

Figure: Adjusting grinding level: Remove old ground coffee
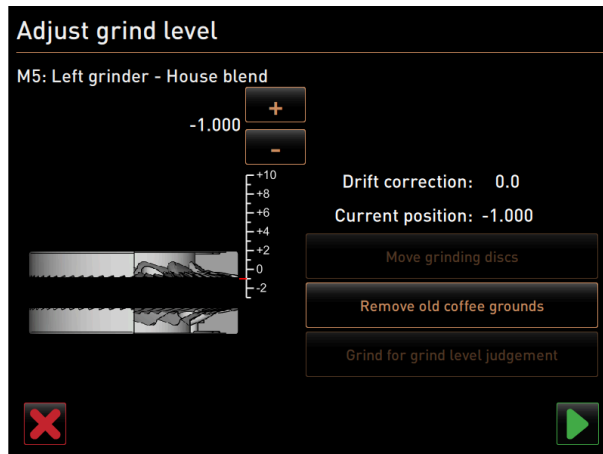
3. Tap on the **Remove old ground coffee** button.
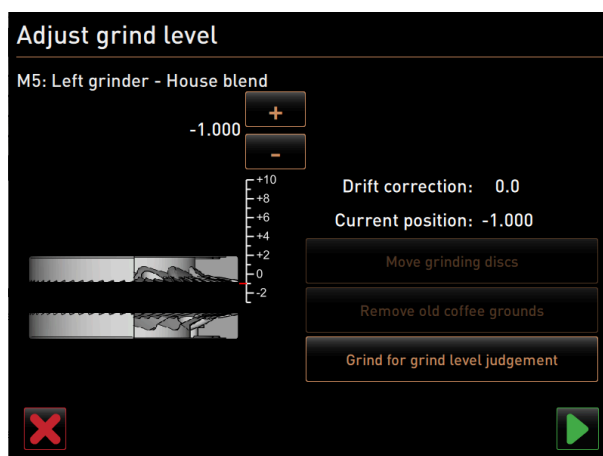   ✓ The old ground coffee is removed.

Figure: Adjusting grinding level: Grinding level assessment

    ✓ The **Grind for grind level evaluation** button becomes active.

4. Clean the grounds container again.

5. Tap on the **Grind for grind level evaluation** button.
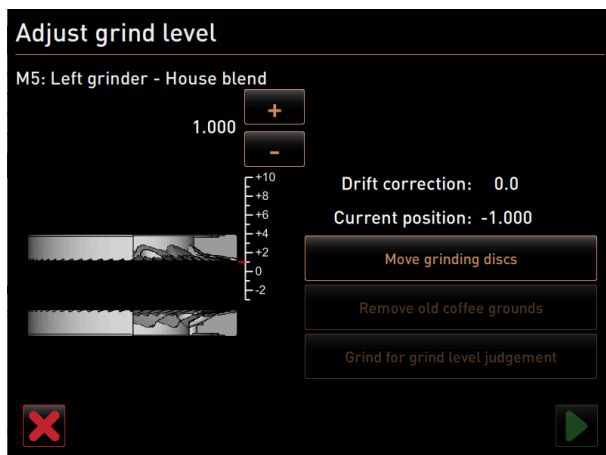   ✓ A grind is performed.

Figure: Adjusting grinding level: Moving grinding disks

6. Adjust the grinding level result with the **Plus** = coarser or **Minus** = finer button.

7. Make grinding level adjustments in small ±1 steps.

8. Use the **Move grinding disks** button to set the grinding disk to the previously set position.

9. 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 screen for selecting the calibration method is displayed.

Grinder calibration

Calibration is required in the following cases:

- The machine is new.
- The operating time has been more than a year.
- The grinding level is changed.
- The grinder is opened.
- The grinder is replaced.
- The type of coffee has been changed.

Conventional grinder calibration:

1. Tap on the **Conventional grinder calibration** 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. Weigh the ground coffee of the reference grind.

5. Set the calibration value (determined weight of ground coffee) using the **Plus** or **Minus** button.

6. If needed, start additional reference grinding with the **Reference grinding** button.

7. If several reference grinding operations are performed, always weigh the entire resulting quantity of ground coffee and enter the amount as a reference value.

8. Confirm calibration of the grinder with the ✅ button.
   ✓ The **Grinder service** screen opens.
   ✓ The set grinder is ready for use.

Automatic grinder calibration:

1. Tap on the **Automatic grinder calibration** button.
   ✓ The preparation steps for calibration are displayed.

2. Empty and clean the grounds container and reinsert it.

3. Fill the bean hopper.

4. Make sure that the water supply and the waste water outlet are functional.

5. Confirm the preparation steps with the ▶ button.
    ✓ Reference grindings start.
    ✓ The machine automatically detects all triggered grinds and calculates the correct grind quantity itself.

6. Confirm calibration of the grinder with the ✔ button.
    ✓ The **Grinder service** screen opens.
    ✓ The set grinder is ready for use.

11.4.3.2   Importing data

Importing machine configurations from the USB data carrier into the machine

1. Lift the user panel.
    See "Open and close user panel"

2. Insert the USB data carrier into the USB interface.
    See 11.2.1 ""

3. Tap on the **Service > Import data** setting.

4. Open the **Import settings** with the ▶ button.

5. Select the desired machine configuration from the USB data carrier.

6. Load the machine configuration into the machine.

7. Once the data has been loaded into the machine, remove the USB data carrier.

8. Close the user panel.
    ✓ The data is imported.

11.4.3.3   Resetting cleaning

A cleaning program can be canceled for the following reasons:

• Manual cancellation using the button ✖
• Cancellation due to a power failure

After a canceled cleaning or descaling process, the status of the machine remains in **Cleaning** mode. In order to leave the mode, cleaning must be reset.

Resetting cleaning

1. Tap on the **Service > Reset canceled cleaning process** setting.

2. Confirm that the process with the ▶ button.
    ✓ The cleaning program is reset.
    ✓ The next automatic cleaning process will only take place according to the configuration in the **System > Cleaning** and **System > Maintenance** settings.

3. It is absolutely essential to restart cleaning right away.

11.4.3.4   Backing up database

Backing up database

NOTE

Property damage due to data loss

The touch screen contains an SD memory card for storing the machine data.

▶ Back up the database on a USB data carrier before carrying out an update.

▶ Back up the database on a USB data carrier before replacing the touch screen.

▶ Insert the previously used SD memory card into the new touch screen. This ensures it is ready for use immediately.

1. Lift the user panel.
   See "Open and close user panel"

2. Insert the USB data carrier into the USB interface.
   See 11.2.1 ""

3. Tap on the **Service > Back up database** setting.

   ✓ The machine database is saved to the USB stick.

   ✓ The saved database version is compatible with the installed machine software version.

4. Remove the USB data carrier when the **Data backup complete** message appears on the display.

5. Close the user panel.

   ✓ The database is saved on the USB data carrier under
   Schaerer/SCA3/backup/database/sca3db.db3_<yyyymmdd_hhmmss>
   .

   ✓ The database is automatically saved periodically every 5 minutes to the SD memory card inserted in the touch screen. It is also saved directly in the system at the same time.

   ✓ With a **downgrade**, the database version saved on the USB data carrier is again compatible with the older machine software.

11.4.3.5   Media manager

Importing media packages from the USB data carrier into the machine

1. Lift the user panel.
   See "Open and close user panel"

2. Insert the USB data carrier into the USB interface.
   See 11.2.1 ""

3. Tap on the **Service > Media manager** setting.

4. Open the file storage on the USB data carrier with the 🟢 button.

5. Select the media package and confirm your selection with the ✅ button.

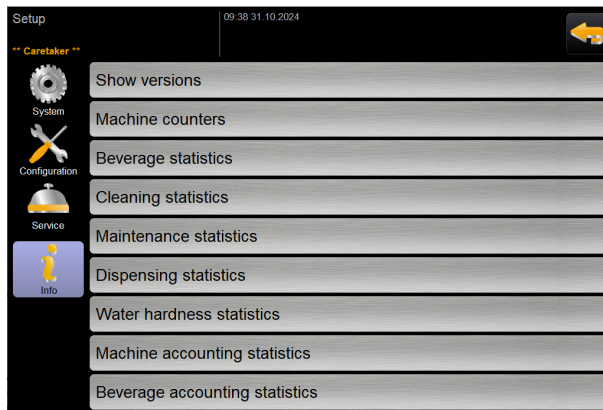   ✓ The media package is imported into the machine.

11.4.4   Calling up information

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

1. In the configuration settings on the left, tap on the **Info** category.

2. Select the desired information.
3. Configure the desired information statistics as follows.

Beverage statistics: Resetting individual counters

1. Tap on the **Beverage statistics** button.
2. Tap on the ❌ button for the corresponding beverage in the right column.
   ✓ The beverage counter for the selected beverage is set to zero.

Beverage statistics: Resetting all counters

1. Tap on the **Beverage statistics** button.
2. Tap on the large ❌ button at the top right of the screen.
   ✓ All listed beverage counters are reset to zero.

Deleting beverage dispensing statistics

1. Tap on the **Beverage dispensing statistics** button.
2. Tap on the large ❌ button at the top of the screen.
   ✓ All counter levels are reset to zero.

To delete machine accounting statistics: Since last reset

1. Tap on the **Machine accounting statistics** button.
2. Open the **Statistics type** selection list with the ▶ button.
3. Select the **Since last reset** statistic.
4. Tap on ❌.
   ✓ An instruction for confirmation appears.
5. Confirm with ▶.
   ✓ The **Since last reset** statistic is deleted.

Beverage accounting statistics: Since last reset

1. Tap on the **Beverage accounting statistics** button.
2. Open the **Statistics type** selection list with the ▶ button.
3. Select the **Since last reset** statistic.
   ✓ The selected statistic with sales type appears.
4. Tap on ❌.
   ✓ An instruction for confirmation appears.

5. Confirm with ▶.

   ✓ The **Since last reset** statistic is deleted.

11.4.5   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.

12 Troubleshooting

A distinction can be made between the following error messages:

- Display via the functional lighting
- Messages in the display

12.1 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 color strips on the machine.

The different colors have the following meanings:

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

12.2 Messages in the display

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

- Simple error message
- Specific error message
- Error message in the Service menu

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 acknowledge the message.

✓ The **Inform service staff** instruction appears.

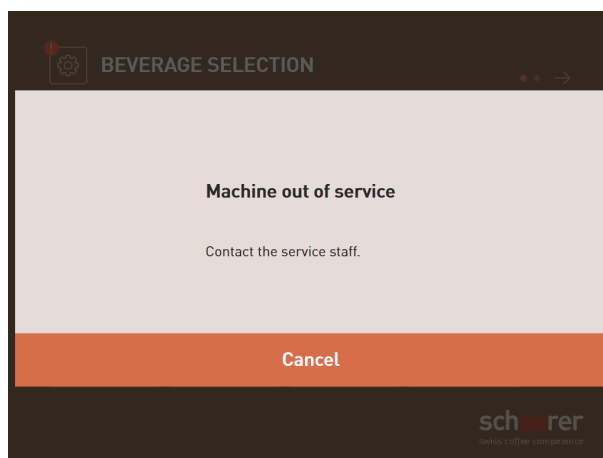✓ The error message cannot be acknowledged.

▶ Inform the service staffs.

Figure: Simple error message

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.
- ✓ **Restart** or **Inform service technician** instruction appears.
- ✓ Error messages can be partially acknowledged.
1. Depending on the type of error, carry out one of the following actions:
2. a) Follow the instruction for action and acknowledge the error message.
3. b) Tap **OK** 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.
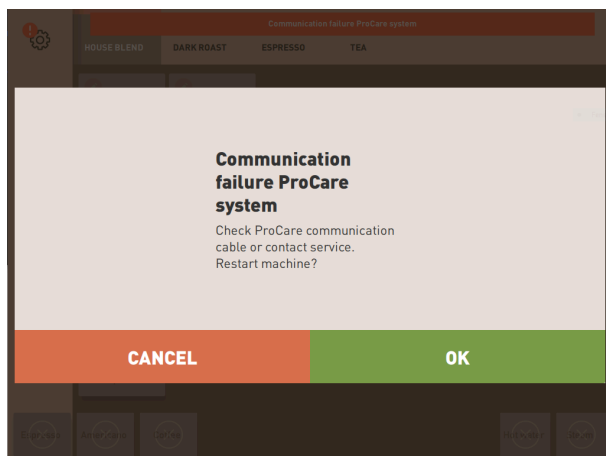
Figure: Specific error message

Figure: Specific error message

Error message in the Service menu

In addition to the error messages in the user interface, the error messages are displayed in the Service menu.

Service menu button

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

Figure: **Service menu** button with messages

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

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

Calling up error message in the Service menu

1. Tap on the **Service menu** button.
   - ✓ The Service menu opens and all pending error messages are listed.
2. Open the error message with the ▶ button.
3. Carry out the displayed instruction for action and acknowledge any errors with **OK**.
4. If the error message cannot be acknowledged, inform the service technician.
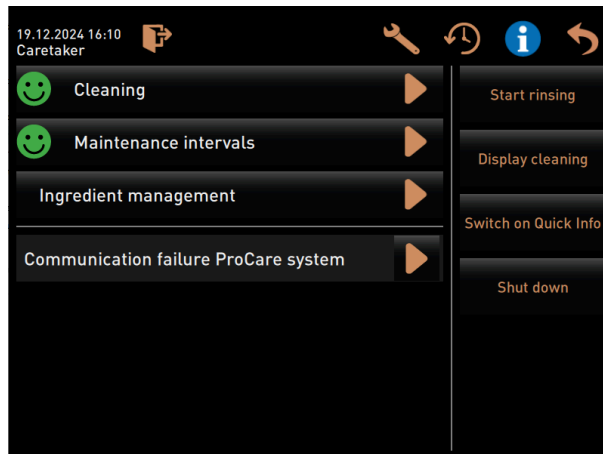
Figure: **Service menu** screen with error message

12.3   Faults with display messages

In the case of faults with a display message, a distinction is made between the following categories:

- Fault
- Error
- Instruction
- Note

12.3.1   "Fault" display message

🟥 The following display messages are highlighted in red in the control system.

Display message	Cause	Remedy
Grounds container full	The grounds container contains approx. 60 – 70 coffee cakes.	1. Empty the grounds container. 2. Rinse out the grounds container and wipe it dry. 3. Reinsert the grounds container.
Insert grounds container	The grounds container is missing.	▶ Correctly insert the grounds container into the machine.
	The grounds container has not been fully inserted into the machine.	▶ Correctly insert the grounds container into the machine.

Display message	Cause	Remedy
Left/Right grinder (optional) overloaded or blocked	An excessively high current value (> 8 A) was measured over a defined period of time. The machine tries to restart grinding five times, then the **Left or right grinder overloaded** message appears. If a beverage is requested again in this state and the problems persist, the message changes to **Grinder right / blocked**. Beverage dispensing is blocked.	1. Switch the machine off. 2. Check the grinder for blockages and remove any foreign objects. 3. Restart the machine. 4. If the error is displayed again, the fault persists: Contact your service partner.
Fill with beans (right grinder empty)	The right bean hopper is empty.	▶ Refill beans.
Tea hot water boiler or coffee overtemperature	The water supply is interrupted.	▶ Check the level of the external/internal drinking water tank (optional) and the condition of the mains water supply.
	The machine is overheated.	▶ Disconnect the machine from the power supply and let it cool down.
	The SSR is defective.	▶ If the fault persists, contact your service partner.
	The excess temperature switch has triggered.	
Steam boiler excess temperature	The water supply is interrupted.	▶ Check the level of the external/internal drinking water tank (optional) and the condition of the mains water supply.
	The steam system is clogged.	▶ Check and clean the beverage outlet and the steam system.
	The machine is overheated.	▶ Disconnect the machine from the power supply and let it cool down.
	The SSR is defective.	▶ Contact your service partner.
	The excess temperature switch has triggered.	
Hot water temperature too low, steam boiler temperature too low	The heating phase is still running.	▶ Wait until the machine has heated up.
	There is an error when heating up.	1. Disconnect the machine from the power supply. 2. Reconnect and switch on.
HW boiler heating time-out, steam boiler heating time-out	Although the heating is switched on, the set temperature was not reached within 5 min.	▶ If the fault persists, contact your service partner.
Hot water boiler NTC short-circuited, steam boiler NTC short-circuited	The main board does not detect any resistance. A maximum temperature sensor (approx. 150 °C or 302 °F) is measured. Beverage dispensing is blocked.	▶ If the fault persists, contact your service partner.

Display message	Cause	Remedy
Hot water boiler NTC interrupted, steam boiler NTC interrupted	The temperature sensor is interrupted. A minimum temperature sensor is measured.	▶ If the fault persists, contact your service partner.
Brewing unit overcurrent	Overcurrent was detected on the motor of the brewing unit.	▶ If the fault persists, contact your service partner.
Brewing unit closed current	Even if the brewing unit is not in operation, it must be able to draw a minimum current. If this is not the case, there is a fault. This may be caused by the brewing unit, the power board or the wiring.	1. Check the brewing unit for blockages. 2. If the fault persists, contact your service partner.
Brewing unit time-out	The brewing unit does not have a home position switch. The position of the brewing cylinder is detected by measuring the current value. The following peak values are detected: Upper and lower position. The following time-out is defined: If no current peak is detected within 10 s of the brewing unit being moved, **Brewing unit time-out** is displayed.	▶ If the fault persists, contact your service partner.
Water flow error	During dispensing of a coffee product, the flow meter performs less than the defined number of minimum revolutions. A blockage or partial blockage somewhere in the entire water system is likely.	1. Check the level of the drinking water tank and 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 piston is blocked or partially blocked. 4. Check the grinding level. If the grinder setting is too fine, this can inhibit or completely block the water flow. 5. If the fault persists, contact your service partner.
Steam supply error	The level sensor detects a low level in the steam boiler. An attempt is made to fill the boiler. However, no water was detected by the level probe within 60 s. The filling process is canceled. The dispensing of beverages that require steam is blocked.	▶ If the fault persists, contact your service partner.
Modbus processing error BP	Communication error between power unit and touch screen	▶ If the fault persists, contact your service partner.

Display message	Cause	Remedy
Machine out of service	Setting in Self-service mode if no beverages can be dispensed for various reasons.	1. Set the **Configuration – Timer operation** parameter setting accordingly. 2. Check the temperature sensor of the cooling unit. 3. Carry out the pending cleaning process. 4. If the fault persists, contact your service partner.
Communication errors (various)	Communication error between software and various modules such as the HCU power unit, brewing unit, manometer, etc.	1. Restart the machine. 2. If the fault persists, contact your service partner.

12.3.2 "Error" display message

■ The following display messages are stored in yellow in the control system.

Display message	Cause	Remedy
Brewing unit encoder error	The brewing unit motor encoder was not detected during machine initialization.	1. Restart the machine. 2. Contact your service partner if the error persists.
Error in automatic grinding level correction for left or right	The motor of the automatic grinding level adjustment function is running incorrectly.	1. Cancel the grinding level adjustment. 2. Restart the machine. 3. Contact your service partner if the error persists.
Machine configuration error	There is a discrepancy between the software and the 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 steam wand temperature sensor is not closed.	1. Restart the machine. 2. Contact your service partner if the error persists.
Steam wand temperature sensor short circuit	The steam wand temperature sensor is defective.	1. Restart the machine. 2. Contact your service partner if the error persists.
Reset cleaning	Cleaning was interrupted/not fully completed.	1. Carry out cleaning in the Service menu. 2. Acknowledge cleaning in the Service menu.
Grounds container full soon	The grounds container will soon contain approx. 60 – 70 coffee cakes.	▶ Empty the grounds container when convenient.
Close user panel	The user panel is open or has not been fully closed.	▶ Press the user panel down until it clicks into place.

12.3.3 "Instruction" display message

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

Display message	Cause	Remedy
Insert grounds container	The grounds container is missing or has not been fully inserted into the machine.	▶ Correctly insert the grounds container into the machine.
Close operator panel	The user panel is open or has not been fully closed.	▶ Press the user panel down until it clicks into place.
Fill with beans (right grinder empty)	The right bean hopper is empty.	▶ Fill the bean hopper.

12.3.4 "Note" display message

Display message	Cause	Remedy
Caution: A blocked waste water outlet can cause flooding.	There are coffee ground residues in the waste water.	▶ Check the waste water outlet and the drip tray for blockages and clean them.
Wait until telemetry connection is established or contact service.	The **Coffee Link** display is pending.	1. Restart the telemetry system. 2. If the fault persists, contact your service partner.
Hot water temperature too low, steam boiler temperature too low	The machine is in the heating-up phase.	▶ Wait until the machine has heated up.
	An error occurred during heating.	1. Disconnect the machine from the power supply. 2. Reconnect the machine to the power supply and switch it on.
Grounds container full soon	The set grounds container capacity will soon be reached.	▶ Empty the grounds container.

12.4 Malfunctions without display messages

Fault	Cause	Remedy
The display is dark.	The machine is not connected to the power supply.	1. Connect the machine to the power supply. 2. If the fault persists, contact your service partner.
	The machine is not switched on.	1. Switch the machine on. 2. If the fault persists, contact your service partner.

13   Disassembly

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

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

After the period of use

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

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

14   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 the metal.
2. Recycle the plastic elements.
3. Dispose of the remaining components sorted according to material properties.
4. Dispose of operating materials and cleaning products in line with local regulations and the respective manu-
    facturer instructions.