

# Schaerer Coffee SOUL 10/12

## Operating instructions

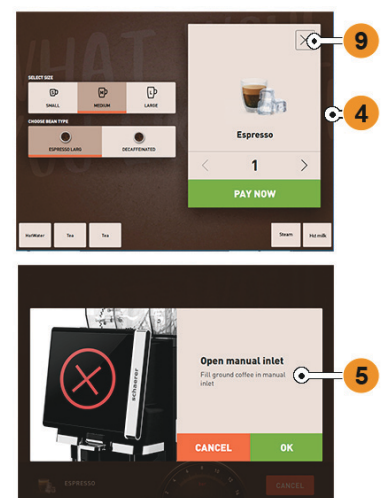
V01 / 11.2020



- 1 10"/12" touch screen user panel
- 2 Machine button ON/OFF
- 3 USB connection
- 4 Beverage outlet
- 5 Hot water dispensing (option)
- 6 Steam wand (option)
- 7 Machine drip tray
- 8 Bean hopper middle (standard)
- 9 Bean hopper right (option)
- 10 Powder container left (option)
- 11 User panel closing device
- 12 Bean/Powder container unlocking lever



- 1 Three possible user interfaces for beverage selection
- 2 User interface for advanced users
- 3 User interface with selection via beverage groups
- 4 Beverage option selection
- 5 Error message or action requests
- 6 Beverage field with symbol or text only
- 7 Access service menu
- 8 Scrolling within beverage selection
- 9 General field [X] back / cancel
- 10 Beverage dispensing external from hot water and/or steam





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V01 / 11.2020

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# 1 Introduction

## 1.1 Welcome

This coffee machine is part of the next generation of fully automatic coffee machines. Core competencies as well as our company's decades of experience flowed in to the design. These operating instructions provide information about the product, its operation and how to clean the coffee machine. If the coffee machine is not used according to the instructions, we shall not be held liable for any damages. However, these operating instructions cannot take every conceivable application into account. For more information, please contact our customer service. The performance of the coffee machine depends on its proper operation and maintenance. Carefully read the operating instructions before commissioning the machine for the first time, and keep the instructions in an easily accessible place. We hope you enjoy your new coffee machine!

## 1.2 Signs and symbols



See also "General safety notes".



### DANGER

**An imminently dangerous situation that may result in death or serious injury from electric shock.**

The measures described for preventing this danger must be adhered to.



### WARNING

**A generally dangerous situation that may result in serious injury.**

The measures described for preventing this danger must be adhered to.



### WARNING

**Danger of poisoning. A dangerous situation that may result in poisoning injuries. In the information below, it is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.



### CAUTION

**A generally dangerous situation that may result in minor injury.**

The measures described for preventing this danger must be adhered to.



### CAUTION

**Hot fluid! A dangerous situation that may result in scalding injuries. Danger arises at the dispensing points. In this document, the danger is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.



### CAUTION

**Hot steam! A dangerous situation that may result in scalding injuries. This danger arises at the dispensing points. In this document, the danger is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

**! CAUTION**

**Hot surface. A dangerous situation that may result in burn injuries. This danger arises at the dispensing points and cup warmer locations (option). In this document, the danger is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

**! CAUTION**

**Risk of trapping fingers! A dangerous situation that may result in crushing injuries. In the information below, it is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

**NOTE**

**A situation that may result in damage to the machine.**

The measures described for preventing this danger must be adhered to.

## 2 General safety notes

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



*The safety notes can be requested from Schaerer AG or downloaded directly from the MediaPool on the website (<http://www.schaerer.com/member>).*

### 2.1 User risks



#### CAUTION

**Improper handling of the coffee machine can lead to minor injuries.**

Please adhere to the following points:

- ▶ Read the User Manual carefully before using the machine.
- ▶ The machine service area may only be accessed by a qualified service technician.
- ▶ Do not use the coffee machine if it is not working properly or is damaged.
- ▶ Under no circumstances may the installed safety devices be modified.
- ▶ Do not touch hot machine parts.
- ▶ This device can be used by children aged 8 and up and by persons with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge, provided they are supervised or have been instructed about the safe use of the device and understand the potential hazards resulting from said use. Children must not play with the device. Children must also not be allowed to perform cleaning procedures or user maintenance without supervision. This must only be done by persons who have the knowledge of and practical experience with the device, particularly when it comes to service and hygiene.
- ▶ The coffee machine must be installed in such a way that there is nothing to hinder care and maintenance.
- ▶ Whether the machine is used for self-service or full-service operation, it must be supervised by trained personnel to ensure that it is cared for correctly and that personnel are available to answer questions regarding its use.
- ▶ Only fill the bean hoppers with coffee beans, the powder containers with automatic machine powder and the manual inlet with ground coffee (or cleaning tablets during cleaning).



## **DANGER**



### **Risk of electrocution! Improper handling of electrical equipment can result in electric shock.**

Please adhere to the following points:

- ▶ Work on electrical systems may only be performed by skilled electricians.
- ▶ The machine must be connected to a fused electrical circuit (we recommend routing the connection through a residual current circuit breaker).
- ▶ All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- ▶ The connection must be properly earthed and protected from electric shock.
- ▶ The voltage must match the specified values on the machine's serial plate.
- ▶ Never touch energised parts.
- ▶ Before carrying out service work, always switch off the main switch and/or disconnect the machine from the power supply system.
- ▶ It must be possible to disconnect the device from the mains power supply at all poles. Disconnected connections must be visible from the site of the device at all times, or a lock must be used to ensure they stay disconnected.
- ▶ The power cable must only be replaced by qualified service technicians.



## **CAUTION**

### **Beverages containing additives or traces of additives may trigger allergies.**

Please adhere to the following points:

- ▶ For self-service mode, a sign should be displayed in the vicinity of the machine to provide information about any additives used which could trigger an allergic reaction.
- ▶ For full-service mode, trained personnel should be on hand to provide information about any additives used which could trigger an allergic reaction.



**! WARNING****Danger of poisoning from ingesting cleaning products.**

Please adhere to the following points:

- ▶ Store cleaning products away from children and unauthorised persons.
- ▶ Do not swallow the cleaning products.
- ▶ Never mix cleaning products with other chemicals or acids.
- ▶ Never pour cleaning products into the milk container.
- ▶ Never pour cleaning products into the drinking water tank (internal/external).
- ▶ Only use the cleaning and descaling products for their intended purpose (see label).
- ▶ Do not eat or drink while handling cleaning products.
- ▶ Ensure that the area is well ventilated when handling cleaning products.
- ▶ Wear safety gloves when handling cleaning products.
- ▶ Wear safety goggles when handling descaling products.
- ▶ Wash your hands thoroughly after handling cleaning products.



*Before using cleaning products, read the information on the packaging carefully. If not available, the HEALTH & SAFETY DATA SHEET can be obtained from the sales partner (see the cleaning product packaging).*

**! CAUTION****Hot fluid! There is a risk of scalding in the area where beverages, hot water and steam are dispensed.**

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

**! CAUTION****Hot surface. The dispensing points and the brewing unit may be hot.**

Please adhere to the following points:

- ▶ Do not touch any part of the dispensing equipment except the grips provided for this purpose.
- ▶ Only clean the brewing unit after the coffee machine has cooled down.

**! CAUTION****Risk of trapping fingers! When working with moving components, there is a risk of fingers or hands becoming trapped.**

Please adhere to the following points:

- ▶ Do not touch any part of the dispensing equipment except the grips provided for this purpose.
- ▶ While the coffee machine is switched on, never reach into the bean or powder containers or into the opening of the brewing unit.

## 2.2 Risk of machine damage!



### NOTE

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

Please adhere to the following points:

- ▶ For water with a carbonate hardness above 6°dKH, install a limescale filter, as the coffee machine can otherwise be damaged by limescale deposits.
- ▶ At the end of the business day, always ensure that the main water valve (coffee machine with mains water supply) is closed and the electrical main power switch is switched off or the power cable is unplugged. This is for insurance reasons.
- ▶ Applicable low voltage guidelines and/or country-specific or local safety regulations and laws must be observed.
- ▶ Do not operate the machine if the water supply is blocked. Otherwise, the boilers will not be refilled and the pump will run dry.
- ▶ Schaerer AG recommends installing a water stop valve (manufacturer-side) in the water connection to prevent water damage in case of hose breakage.
- ▶ After extended downtime (e.g. company holiday), the coffee machine must be cleaned before it is put back into operation.
- ▶ Protect the coffee machine from weather elements (frost, moisture, etc.).
- ▶ Faults must only be remedied by a qualified service technician.
- ▶ Only use Schaerer AG original spare parts.
- ▶ Report any noticeable damage or leaks immediately to an authorised service partner and have any faulty parts replaced and/or repaired.
- ▶ Never spray the device with water or clean it with a steam cleaner.
- ▶ Do not install the machine on a surface where a water jet might be used.
- ▶ When using caramelised coffee (flavoured coffee), clean the brewing unit twice daily.



## NOTE

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

Please adhere to the following points:

- ▶ Only fill the bean hoppers with coffee beans, the powder containers with automatic machine powder and the manual inlet with ground coffee (or cleaning tablets during cleaning).
- ▶ Never use freeze-dried coffee as it clogs the brewing unit.
- ▶ If the coffee machine and/or auxiliary equipment is transported at temperatures below 10°C, the coffee machine and/or auxiliary equipment must be stored at room temperature for three hours before connecting the coffee machine and/or auxiliary equipment to the power supply and switching them on. If these instructions are not followed, condensation may cause short circuits or damage electrical components.
- ▶ Always use the new hose set supplied with the machine (drinking water/waste water hose). Never use old hose sets.

## 3 Product description

### 3.1 Intended use

The Schaerer SOUL 10/12 (SOUL) is designed to dispense coffee beverages, hot water, milk beverages and powder products (toppings & chocolate) and aromas (syrup) in different versions and combinations – in cups, mugs, glasses or small pots.

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

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



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



#### NOTE

**Risk of machine damage! Improper handling of the coffee machine can result in damage.**

Under no circumstances may the SOUL (SOUL) be used to heat or dispense any liquid other than the named or cooled milk (pasteurised, homogenised, UHT).

### 3.2 Scope of delivery and accessories

Quantity	Designation	Article number
Documentation		
1	Operating instructions (OI)	**
1*	Supplementary instructions of optional accessories (cup warmer + Cup & Cool)	**
1*	Side cooling unit operating instructions	**
Cleaning/Maintenance scope of delivery		
1*	Milkpure Powder & Coffeepure tabs delivery set	075350
1*	Coffeepure tabs (equipment without milk)	065221
1	Brush 75-40 (brewing chamber)	067409
1	Cleaning brush (beverage outlet)	062951
Machine scope of delivery		
1*	Drip tray short cpl. SOUL	060387
General scope of delivery		
1	Measuring spoon	067111
Powder system*		
	Powder container outlet restrictor	079940
Descaling accessories***		
1	Decalcification cartridge	079293

\* Depending on machine version





\*\* Language-specific article number




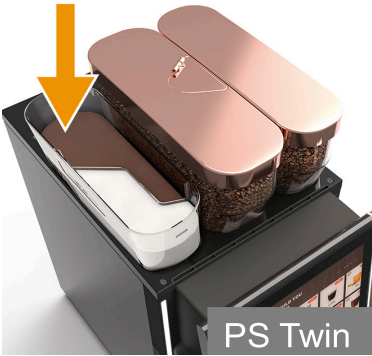




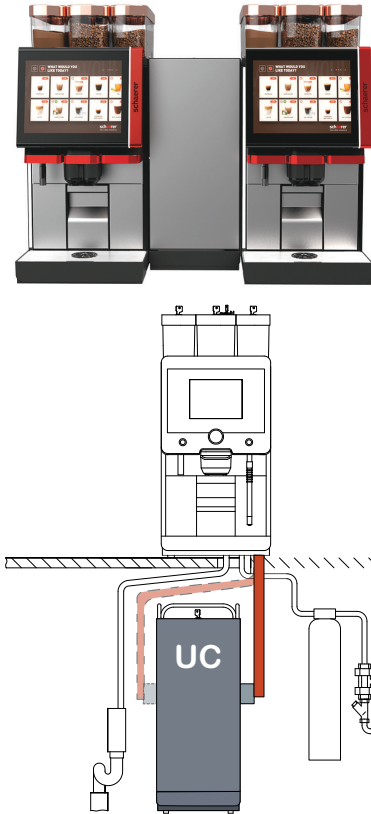
\*\*\* Not included in scope of delivery

3.3 Options and optional accessories





Example	Option	Description
	Schaerer Coffee SOUL 10	The standard version of the Schaerer Coffee SOUL 10 contains décor elements, which depend on the configuration, as well as a 10" touch screen. <i>Various options can be configured while ordering the machine.</i>
	Schaerer Coffee SOUL 12	The standard version of the Schaerer Coffee SOUL 12 contains chrome front elements and copper décor elements as well as a 12" touch screen. <i>Various options can be configured while ordering the machine.</i>
	Ambient light with function*	The ambient light on the right side of the display [A] and on the entire left side of the machine [B] can be colour-coordinated and also provides information about the operating condition of the machine at the same time.





Example	Option	Description
	<b>Automatic height-adjustable beverage outlet (AHA)</b>	<p>The “AHA” equipment is used to automatically adjust the beverage outlet to the optimal height for the previously-selected beverage.</p> <p>The “AHA” option cannot be retrofitted.</p>
	<b>Steam wand</b> (To the right or left of the beverage outlet) <ul style="list-style-type: none"> <li>• Powersteam</li> <li>• Autosteam*</li> <li>• Supersteam*</li> </ul>	<p>The external steam wand with “Powersteam” makes it possible to manually heat and foam milk separately just like a barista does.</p> <p>The “Steam wand” option cannot be retrofitted.</p>
	<b>External hot water</b> To the right or (left of the beverage outlet)	<p>External hot water dispensing provides an separate manual dispensing option to the left of the beverage outlet. The “External hot water” option cannot be retrofitted.</p>
	<b>Additional water</b> Preparation of americanos	<p>To dispense coffee, additional hot water can be dispensed into the cup via a separate hot water outlet.</p> <p>The sequence of coffee and hot water can be defined in the beverage configuration. Particularly suited for the preparation of americanos</p> <p>The “Additional water” option cannot be retrofitted.</p>



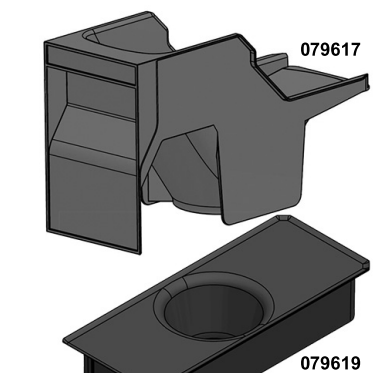

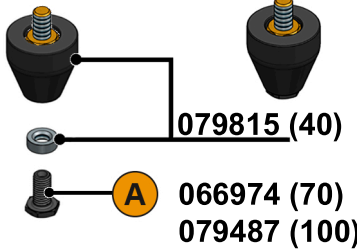
Example	Option	Description
	Lockable bean hoppers	The bean hoppers can be made lockable or be reordered.
	Second grinder 1200 g	<p>A second grinder to the right of the middle standard grinder makes espresso or even decaffeinated coffee beans available. The “Second grinder” option cannot be retrofitted.</p> <p>Bean hopper variants:</p> <ul style="list-style-type: none"> <li>• Standard bean hopper 1200 g</li> <li>• Expanded bean hopper 2000 g</li> <li>• Shortened bean hopper 1000 g</li> </ul>
	Powder system 2000 g (Choco or topping)	<p>A powder system to the left of the middle standard grinder fulfils the need for choco and/or topping powder. The “Powder system” option cannot be retrofitted.</p>
	Twin powder system	<p>The Twin powder system makes it possible to provide two types of powder in one container. The powder container for Twin Choco or Twin Topping is divided in the centre and has two compartments for two different types of powder. The “Twin powder system” option cannot be retrofitted.</p>

Example	Option	Description
	Flavour Point (Beverage syrup flavours)	<p>The “Flavour Point UC” optional accessory can be equipped with the following four syrup aromas.</p> <p>The device is placed directly under the coffee machine as an under-counter solution.</p> <p>In the ingredient configuration, four ingredients can be selected from 18 different flavours.</p> <p>A flavour such as caramel or vanilla can be set in the beverage configuration.</p> <p>The “Flavour Point” option cannot be retro-fitted.</p>
	Side cooling unit* right/ left	<p>The coffee machine is delivered with a milk connection at the right by default. The side cooling unit right does not require any additional adaptation.</p> <p>The cooling unit features a 10 l milk container and its own removable drip tray with drip grid.</p> <p>The position of the side cooling unit left requires an additional adaptation of the milk hose guide in the coffee machine.</p> <p><i>Placement other than on the right side of the machine requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the side cooling unit.</i></p>
	Side cooling unit for Centre Milk (CM)* Side cooling unit used under-counter (UC)	<p>The side cooling unit can also be positioned between two machines, thereby supporting the Centre Milk function.</p> <p>The side cooling unit with Centre Milk equipment can simultaneously supply 2 machines with milk.</p> <p>The side cooling unit can also be placed under the counter (UC).</p> <p><i>Placement other than on the right side of the machine requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the side cooling unit.</i></p>


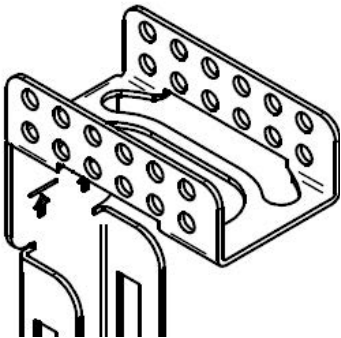
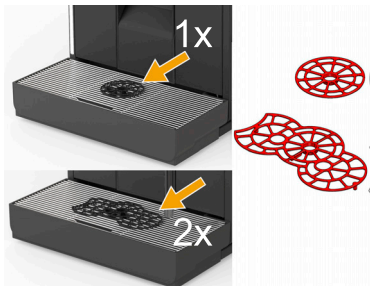


Example	Option	Description
	Under-counter cooling unit (UC)	<p>The under-counter cooling unit is placed under the machine.</p> <p>The cooling unit features a 9.5 l milk container.</p> <p>The under-counter cooling unit with Centre Milk equipment can simultaneously supply 2 machines with milk.</p> <p><i>Using an under-counter cooling unit requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the side cooling unit.</i></p>
	Cup warmer (thin/wide) (Left or right)	<p>The cup warmer optional accessory is placed to the left or right of the coffee machine.</p> <p>The cup warmer (thin) has room for ca.60–264 coffee cups. The wide version has room for 88–320 coffee cups.</p>
	Cup & Cool (thin) (Left)	<p>The Cup &amp; Cool thin optional accessory is placed to the left of the coffee machine.</p> <p>The cooling unit features a 4 l milk container and has space for ca.45–198 coffee cups.</p> <p><i>Using Cup &amp; Cool thin left requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the optional accessory.</i></p>
	Cup & Cool (wide) (Left)	<p>The Cup &amp; Cool wide optional accessory is placed to the left of the coffee machine.</p> <p>The cooling unit features a 9.5 l milk container and has space for ca. 44–160 coffee cups.</p> <p><i>Using Cup &amp; Cool wide left requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the optional accessory.</i></p>

Example	Option	Description
	Cup & Cool CM (wide) (Right)	<p>The Cup &amp; Cool CM optional accessory can be placed to the right of the coffee machine. The cooling unit features a 9.5 l milk container and has space for ca. 44-160 coffee cups.</p> <p><i>Using a Cup &amp; Cool wide right requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the optional accessory.</i></p>
	Cup & Cool CM (wide) Centre Milk	<p>The Cup &amp; Cool CM optional accessory can also be positioned between two machines, thereby ensuring the Centre Milk function. The cooling unit features a 9.5 l milk container and has space for ca. 44 to 160 cups.</p> <p><i>Using a Cup &amp; Cool requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the optional accessory.</i></p>
	Under-machine cooling unit	<p>The under machine cooling unit can be placed directly beneath the coffee machine. The coffee machine is delivered with a milk connection at the right by default.</p> <p><i>Using an under-machine cooling unit requires conversion work. The description of how to perform this conversion work as well as the components required are delivered with the under-machine cooling unit.</i></p> <p>The cooling unit features a 9.5 l milk container.</p>
	Décor elements	<p>The décor element can match the machine to the surroundings. Different colours are available for selection, including copper; see the figure to the left.</p> <p>The "Décor elements" option cannot be retrofitted.</p>

Example	Option	Description
	External waste water / drinking water tank monitored	The coffee machine can be used as a mobile unit thanks to the optional device with the external waste water / drinking water tank. Both tanks features level monitoring and can be retrofitted from software version v2.0.
	UC grounds disposal	The grounds container and the bottom of the coffee machine have an opening that is continued through the counter. The coffee grounds are collected in a large container underneath the counter. With an under-counter grounds disposal system, the capacity for ejected coffee cakes increases. The "UC ground disposal" option can be retrofitted.
	UC grounds disposal retrofitting parts	The collecting vessel under the counter is not included.
	Machine feet Height 40 mm Height 70 mm Height 100 mm	The machine feet increase the distance from the standing surface by 40/70/100 mm. In general, the machine feet are mandatory when using UC optional accessories. <div data-bbox="1098 1576 1458 1823">  </div>
		Fig.: 40/70/100 mm foot (delivery without screw [A])  The "Machine feet" option can be retrofitted.

Example	Option	Description
	Schaerer Coffee Link (Data exchange)	<p>The "Schaerer Coffee Link" digital solution provides comprehensive information for quality assurance as well as the monitoring and optimisation of individual business processes.</p> <p>The Schaerer "Coffee Link" web portal can be used to read various types of data from the coffee machine.</p> <p>The "Schaerer Coffee Link" option can be retrofitted.</p>
	Best Foam™ (Fresh milk system)	<p>The "Best Foam™" function makes it possible to automatically heat and foam milk in an integrated manner just like a barista does. It is possible to dispense cold milk and cold milk foam.</p> <p>The "Best Foam™" option cannot be retrofitted.</p> <p>A cooling unit is mandatory with the "Best Foam™" function.</p> <p>The "Best Foam™" option cannot be retrofitted.</p>
	Hot & Cold (Cold beverages)	<p>The "Hot &amp; Cold" function enables hot and cold beverages to be dispensed alternately.</p> <p>The "Hot &amp; Cold" option cannot be retrofitted.</p>
	Brew accelerator	<p>The brew accelerator permits more efficient beverage dispensing of large volumes of beverages (e.g. americano) with improved beverage quality.</p> <p>An additional quantity of hot water is guided into the coffee outlet after the brewing unit.</p> <p>The "Brew accelerator" option can be retrofitted.</p>

Example	Option	Description
	Payment systems	<p>Commercially available payment systems according to the MDB standard can be connected.</p> <p>Possible interfaces:</p> <ul style="list-style-type: none"> <li>• MDB-S</li> <li>• DIVA 2</li> <li>• DIVA2 Max</li> </ul> <p>Connection to dispensing equipment and cash register systems:</p> <ul style="list-style-type: none"> <li>• Via E protocol</li> <li>• Via CSI protocol</li> </ul> <p>Coin and token testers or coin changers can be placed to the right or left of the machine. The "Payment systems" option can be retrofitted.</p>
	Waste water outlet hose holder	<p>Optimises waste water drainage and prevents it from flowing back.</p> <p>The holder is attached to the waste water outlet on the building side.</p> <p>The end of the waste water hose can be fastened on the holder for optimal drainage.</p> <p>The "Hose holder" option can be retrofitted.</p>
	Cup positioning aid (Positioning aid for 1 or 2 cups/mugs)	<p>The cup positioning aid for snapping into the cup platform.</p> <p>The two cup positioning aid is supplied by default.</p> <p>The "Cup positioning aid" option can be retrofitted.</p>

\* Options which are currently not yet available (status at the end of 2020)

### 3.4 Technical data

Nominal power* Schaerer Coffee Soul	Steam boiler	Hot water boiler
	3000 W	3000 W
Operating temperature	Steam boiler	Hot water boiler
Minimum operating temperature (T min.)	10 °C	10 °C
Maximum operating temperature (T max.)	192 °C	192 °C
Operating temperature	140 °C	95 °C
Overpressure	Steam boiler	Hot water boiler
Working overpressure	2.5 bar	2.5 bar
Permissible operating overpressure (p max)	12 bar	12 bar
Test overpressure	24 bar	24 bar

**Capacities**

Drinking water capacity	Mains water supply
Bean hopper capacity	± 1200 each g
Grounds container capacity	60 – 70 coffee cakes

**External dimensions**

Width without optional accessories	330 mm
Width with cooling unit	723 mm
Height including bean hopper and key	761 mm
Depth	600 mm

**Weight**

Empty weight	±55 kg
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**Sound pressure**

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

Subject to technical changes.

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

\*\* The A-weighted noise level (slow) and Lpa (impulse) at the workplace of the operating personnel is below 70 for every operating mode. dB (A)

## 3.5 Serial plate

### 3.5.1 Type and model designation

Type	Model
Schaerer SOUL 10 (SOUL)	No model versions
Schaerer SOUL 12 (SOUL)	No model versions

The serial plate is located on the front side of the machine behind the right-hand cover:

- Pull the grounds container out of the machine for better accessibility.
- Unfold the right cover section next to the grounds container.
- In the event of a fault or warranty claim, please provide the information on the serial plate, see list below.

Recommended specifications:

- Machine type > (SCS > SOUL)
- Electrical power > e.g. 2900 – 3400 W
- Electrical voltage > e.g. 220 – 240 V
- Electrical current > e.g. 16 A
- Serial number > [JJKW XXXXXX] > e.g. 2001 XXXXXX

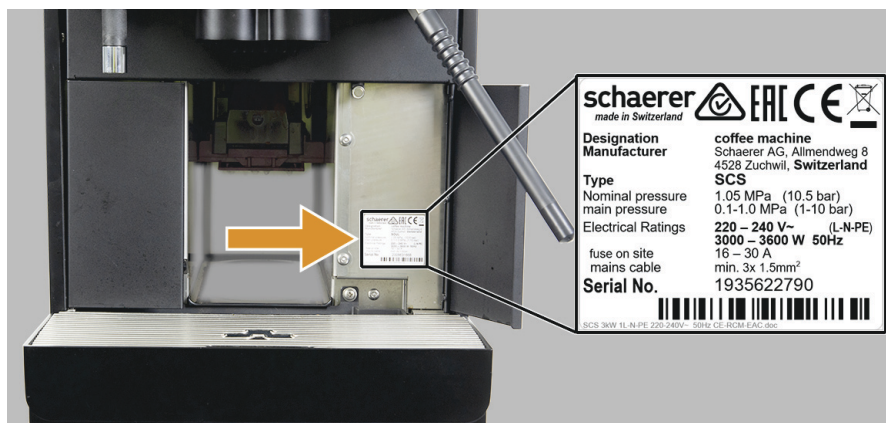




Fig.: SCSoul serial plate behind the cover on the front side.



*If the front serial plate is no longer legible, there is a second serial plate on the rear behind the cover plate.*

### 3.6 Beverage types and output



*See also "Operation" – "Beverage selection and dispensing" – "External hot water or steam".*

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

Beverage output per hour		
Espresso 50 – 60 ml	± 180 cups	
Coffee 120 ml	± 180 cups	
Recommended daily output		
Espresso 50 – 60 ml	± 250 cups	
Coffee 120 ml	± 250 cups	
Available beverages	Standard	Option
Espresso	x	
Coffee	x	
Coffee / Café crème	x	
Mug (250 ml)/ <sup>ZW</sup>		x
Pot (500 ml)/ <sup>ZW</sup>		x
Americano <sup>AC</sup> / <sup>ZW</sup>		x
White americano <sup>*/**</sup> / <sup>AC</sup> / <sup>ZW</sup>		x
Milk coffee (light/dark) <sup>*/**</sup>		x
Cappuccino <sup>*/**</sup>		x
Latte macchiato <sup>*/**</sup>		x
Espresso macchiato <sup>*/**</sup>		x
Chociatto <sup>***</sup>		x
Hot chocolate <sup>***</sup>		x
Flat white <sup>*</sup>		x
Hot milk <sup>*</sup>		x
Hot milk foam <sup>*</sup>		x
Cold milk <sup>*</sup>		x
Cold milk foam <sup>*/**</sup>		x
Best Foam™ milk foam <sup>*</sup>		x
Hot water / External hot water	x	x
Steam		x
Powder products / Instant beverages		x
Liquor / Coffee		x

Recommended machine equipment:

\* With fresh milk

\*\* With fresh milk and/or topping (milk powder)  
 \*\*\* With choco  
 AC Brew acceleration  
 ZW Additional water

## 3.7 EC Declaration of Conformity

### 3.7.1 Manufacturer's address

Manufacturer	Documentation specialist
Schaerer AG P.O. Box 336 Allmendweg 8 CH-4528 Zuchwil T +41 (0)32 681 62 00 F +41 (0)32 681 64 04 info@schaerer.com www.schaerer.com	Schaerer AG Product care & management system P.O. Box 336 Allmendweg 8 CH-4528 Zuchwil

### 3.7.2 Applied standards

The aforementioned manufacturer declares herewith that this machine complies with all relevant stipulations of the specified directives. In case of any modifications of the units that have not been approved by Schaerer, this declaration is rendered invalid. The following harmonised standards have been applied. A quality management system certified by DEKRA, in accordance with ISO 9001 and 14001, has been used to ensure the proper adherence to the requirements.

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

For <sup>(CE)</sup> CE conformity	
<sup>(MD)</sup> MD 2006/42/EG	<sup>(EMC)</sup> EMC Directive 2014/30/EU
<ul style="list-style-type: none"> <li>EN 60335-1:2012 +A11 +A13</li> <li>EN 60335-2-75:2004 +A1 +A11 +A12 +A2</li> <li>EN 62233:2008</li> </ul>	<ul style="list-style-type: none"> <li>EN 55014-1:2017</li> <li>EN 55014-2:2015</li> <li>EN 61000-3-2:2014</li> <li>EN 61000-3-3:2013</li> </ul>
<sup>(RoHS)</sup> RoHS Directive 2011/65/EU	
For compliance with European ordinances	
Ordinance <sup>(EG/EU)</sup> EU)	Ordinance <sup>(EG/EU)</sup> EC)
No. 10/2011	<ul style="list-style-type: none"> <li>No. 1935/2004</li> <li>No. 2023/2006</li> </ul>
<sup>(WEEE)</sup> WEEE 2012/19/EG/EU	
<sup>(REACH)</sup> 1907/2006/EC	

For the Approval Guidelines for Radio Equipment and Receivers
Directive 2014/53/EU <sup>(RED)</sup> RED)
<ul style="list-style-type: none"> <li>EN 301 489-1 V 2.1.1:2017</li> <li>EN 301 489-7 2005 /-24:2010</li> </ul>
EU Chemicals Regulation
Directive 2014/53/EU <sup>(RED)</sup> RED)
<ul style="list-style-type: none"> <li>EN 301 489-1 V 2.1.1:2017</li> <li>EN 301 489-7 2005 /-24:2010</li> </ul>



International <sup>(CB)</sup> CB	
Safety	<sup>(EMC)</sup> EMC
<ul style="list-style-type: none"> <li>• <sup>(IEC)</sup>IEC 60335</li> <li>• <sup>(IEC)</sup>IEC 60335-2-75</li> </ul>	<ul style="list-style-type: none"> <li>• CISPR 14-1</li> <li>• CISPR 14-2</li> <li>• IEC 61000-3-2</li> <li>• IEC 61000-3-3</li> </ul>

(CE)Requirements of harmonisation legislation of the European Community

(MD)Machinery Directives (European Parliament and Council)

(EMC)Electromagnetic compatibility

(RoHS)Restriction of hazardous materials

(CB)Schemes>International system for mutual recognition of test reports and certificates

(IEC)International conformity assessment system for electrotechnical equipment and components

(CISPR)Special International Committee on Radio Interference

(EG/EU)The European Community is part of the European Union consisting of EG/CFSP/PJCCM

(WEEE)Waste of Electrical and Electronic Equipment

(RED)European Approval Guidelines for Radio Equipment and Receivers (radio communication)

(REACH)EU Chemicals Regulation for "Registration, Evaluation, Authorisation and Restriction of Chemicals"

## 4 Installation and commissioning



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



### CAUTION

**Cuts and eye injuries! Packaging materials with sharp edges can cause injuries. Cutting straps can cause eye injuries.**

Wear gloves and protective goggles while unpacking the machine.



### CAUTION

**Risk of infection! Contamination in the milk pump can lead to health problems.**

- ▶ Cleaning must be done after installation, commissioning or recommissioning.
- ▶ Run the display-guided cleaning programme before dispensing the first beverage.



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

### 4.1 Setting up machine

#### 4.1.1 Location



### NOTE

**Risk of machine damage! The location where the coffee machine is set up must meet the conditions specified below. The coffee machine may be damaged if these conditions are not met.**

It is essential to observe the following conditions:

- ▶ The installation surface must be stable, horizontal and level so that it does not become deformed under the weight of the coffee machine.
- ▶ Do not erect on hot surfaces or close to heat sources.
- ▶ Set up the coffee machine in such a way that it can be monitored by trained personnel at all times.
- ▶ The required supply terminals must be within 1 m of the machine location according to the manufacturer-side installation plans.
- ▶ Comply with all applicable local regulations for kitchen equipment.

Maintain the following clearances for maintenance work and operation:

- ▶ Allow enough space above the machine to refill coffee beans or powder (20 cm recommended).
- ▶ Leave at least 5 cm clearance from the rear side of the machine to the wall (air circulation).

#### 4.1.2 Ambient conditions



### NOTE

**Risk of machine damage! The location where the coffee machine is installed must satisfy the ambient conditions specified below. The coffee machine may be damaged if these conditions are not met.**

It is essential to observe the following conditions:

- ▶ Ambient temperature of +10°C to +40°C (50°F to 104°F).
- ▶ Relative humidity of max. 80 % RH.
- ▶ This coffee machine is designed for indoor use only. Do not use in the open and never expose to the weather (rain, snow, subzero temperatures).

## 4.2 Power supply

### 4.2.1 Conditions (energy)

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



#### **! DANGER**

**Risk of electrocution! An imminently dangerous situation that may result in death or serious injury from electric shock.**

Please adhere to the following points:

- ▶ The phase must be fused at the ampere value specified on the serial plate!
- ▶ It must be possible to disconnect the device from the mains power supply at all poles.
- ▶ The manufacturer-side electrical system must conform to IEC 364 (DIN VDE 0100). To increase safety, the device should be connected to a ground fault circuit interrupter with 30 mA nominal error current (EN 61008). (Type B residual current circuit breakers ensure response even in the event of smooth DC residual currents. This results in a high level of safety.)
- ▶ Never operate a device with a damaged power cable. Have a defective power cable or plug replaced immediately by a qualified service technician.
- ▶ Schaefer AG does not recommend using an extension cord. If an extension cord is used despite this (minimum cross-section: 1.5 mm<sup>2</sup>), please comply with the manufacturer's specifications for the cable (operating instructions) and with locally applicable regulations.
- ▶ Route the power cable in such a way that it does not pose a tripping hazard. Do not pull the cable over corners or sharp edges, pinch it between objects or allow it to hang loosely in open spaces. Do not position the cable over hot objects, and protect the cable from exposure to oil and aggressive cleaning products.
- ▶ Never lift or pull the device by the power cable. Never pull the power cable out of the socket by its cable. Never touch the power cable or plug with wet hands. Never insert a wet plug into a power socket.

### 4.2.2 Machine power cable connection



#### **! DANGER**

**Danger to user and/or building! Use of a faulty power cable or one that is not the original cable results in the risk of electric shock and fire. Use the original power cable.**

The measures described for preventing this danger must be adhered to:

- ▶ The original power cable for your country can be obtained from your service partner.
- ▶ Power cables that are plugged in on both sides can be replaced by the customer.
- ▶ Permanently connected power cables must be replaced by a service technician.

### 4.2.3 Electrical connection values

Mains	Connection values			On-site fuse	Connecting cable conductor cross-section
1L, N, PE	220 – 240 V CA	50/60 Hz	<sup>1)</sup> 2000-2400 W	10-30 A	3 x 1 mm <sup>2</sup> 3 x 17 AWG
1L, N, PE	220 – 240 V CA	50/60 Hz	<sup>2)</sup> 3000-3600 W	16-30 A	3 x 1.5 mm <sup>2</sup> 3 x 15 AWG
1L, N, PE	220 – 240 V CA	50/60 Hz	<sup>3)</sup> 6000-7000 W	30 A	3 x 4 mm <sup>2</sup> 3 x 11 AWG
2L, PE	220 V CA	60 Hz	<sup>1)</sup> 2000 W	10-30 A	3 x 1 mm <sup>2</sup> 3 x 17 AWG
2L, PE	220 V CA	60 Hz	<sup>2)</sup> 3000 W	16-30 A	3 x 1.5 mm <sup>2</sup> 3 x 15 AWG
2L, PE	220 V CA	60 Hz	<sup>3)</sup> 6000 W	30 A	3 x 4 mm <sup>2</sup> 3 x 11 AWG

Mains	Connection values			On-site fuse	Connecting cable conductor cross-section
2L, PE	208 – 240 V CA	60 Hz	<sup>1)</sup> 1900-2400 W	10-30 A	3 x 1 mm <sup>2</sup> 3 x 17 AWG
2L, PE	208 – 240 V CA	60 Hz	<sup>2)</sup> 2800-3600 W	15-30 A	3 x 1.5 mm <sup>2</sup> 3 x 15 AWG
2L, PE	208 – 240 V CA	60 Hz	<sup>3)</sup> 5100-7000 W	30 A	3 x 4 mm <sup>2</sup> 3 x 11 AWG
2L, PE	200 V CA	50/60 Hz	<sup>1)</sup> 1800 W	15-25 A	3 x 2 mm <sup>2</sup> 3 x 14 AWG
2L, PE	200 V CA	50/60 Hz	<sup>2)</sup> 2600 W	15-25 A	3 x 2 mm <sup>2</sup> 3 x 14 AWG
3L, PE	220 V CA	60 Hz	<sup>4)</sup> 5700-8700 W	25-30 A	4 x 2.5 mm <sup>2</sup> 3 x 13 AWG
3L, PE	208 – 240 V CA	60 Hz	<sup>3)</sup> 5100-6400 W	25-30 A	4 x 2.5 mm <sup>2</sup> 3 x 13 AWG
3L, PE	208 – 240 V CA	60 Hz	<sup>4)</sup> 7700-10300 W	25-30 A	4 x 2.5 mm <sup>2</sup> 3 x 13 AWG
3L, PE	200 V CA	50/60 Hz	<sup>3)</sup> 4700 W	25 A	4 x 2.5 mm <sup>2</sup> 3 x 13 AWG
3L, PE	200 V CA	50/60 Hz	<sup>4)</sup> 6900 W	25 A	4 x 2.5 mm <sup>2</sup> 3 x 13 AWG
3L, N, PE	380 – 415 V CA	50/60 Hz	<sup>3)</sup> 5700-6400 W	16-30 A	5 x 1.5 mm <sup>2</sup> 3 x 15 AWG
3L, N, PE	380 – 415 V CA	50/60 Hz	<sup>4)</sup> 8700-10300 W	16-30 A	5 x 1.5 mm <sup>2</sup> 3 x 15 AWG

- 1) Equipment 1 or 2 boilers with 2 kW (serial)  
 2) Equipment 1 or 2 boilers with 3 kW (serial)  
 3) Equipment 2 boilers with 3 kW (simultaneous)  
 4) Equipment 3 boilers with 3 kW (simultaneous)



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

## 4.3 Mains water supply and waste water outlet

### 4.3.1 Conditions (fixed water)



#### NOTE

**Water quality** The machine can suffer damage due to bad material and incorrect water values. Check recommended water quality and optimise if needed.

The measures described for preventing this danger must be adhered to:

- ▶ The water must be free of contaminants and the chlorine content must not exceed 50 mg mg per litre.
- ▶ Do not connect the machine to pure reverse osmosis water 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 total hardness value must always be greater than the carbonate hardness.
- ▶ The minimum carbonate hardness is 4 °dKH or 8 °fKH. The pH value must be between 6.5 – 7.
- ▶ Always use the new hose set (fresh water/waste water hose) supplied with the machine.

The machine must be connected to the water supply in accordance with applicable requirements and the regulations of the respective country. If the machine is connected to a newly installed water pipe, the pipe and intake line must be rinsed thoroughly to ensure that no dirt gets into the machine.

The coffee machine must be connected to an installed drinking water line with a shut-off valve. Installation takes place via the installed pressure hose and the G 3/8" screw connection onto the pressure reducing valve that is mounted on the water tap (set to 0.3 MPa (3 bar)).

The machine requires an waste water outlet. The supplied temperature-stable waste water hose is connected to a siphon on the building side. The waste water hose should create a downward slope to the connection to prevent the siphon effect.

Machines with external drinking or waste water tank are directly connected. Corresponding level monitoring is available.



*The "Water quality supplementary instructions no. 022960" include information on recording the water values and using filter equipment. The supplementary instructions can be requested from Schaerer AG or downloaded directly from the MediaPool on the website (<http://www.schaerer.com/member>).*

### 4.3.2 Water connection values

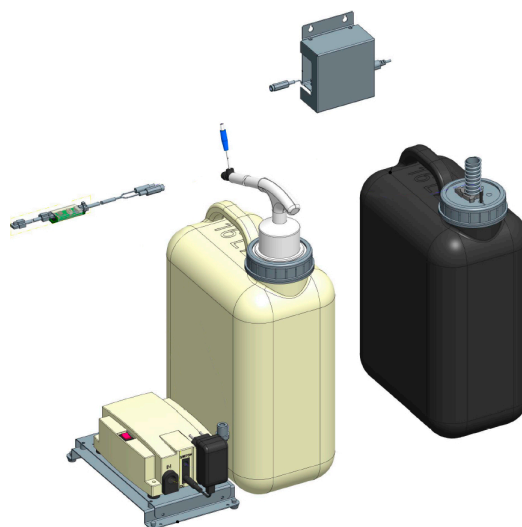
Water pressure	Recommended:	0.1 – 0.6 MPa (1 – 6 bar)
	Maximum:	1.0 MPa (10 bar)
Water inlet temperature	Minimum:	10°C
	Maximum:	30°C

### 4.3.3 External drinking and waste water tank(Optional)

The SCSoul coffee machine can be operated with a monitored external drinking water and waste water tank as an option.



*The "Monitored SCSoul drinking water and waste water tank" conversion instructions contain information about setting up and connecting the external drinking water and waste water tank. The conversion instructions can be requested from Schaerer AG or downloaded directly from the MediaPool on the website (<http://www.schaerer.com/member>).*



## 4.4 Installation

### 4.4.1 Unpacking the machine



*Read the "Setting up the coffee machine" and "Power supply" chapters carefully before installing.*

- ▶ Unpack the machine.
- ▶ Check the remaining package contents for accessories.
- ▶ Remove the accessories supplied in the grounds container and accessory box.



*See also "Product description" - "Scope of delivery and accessories".*

- ▶ Keep the original packaging in case the equipment needs to be returned.

### 4.4.2 Drip tray assembly

The drip tray is disassembled when transporting the coffee machine. The drip tray is delivered in a separate cardboard box as an accessory.

The following articles are packaged with the drip tray:

- [A] Operating instructions and declaration of conformity supplementary sheet
- [B] Cleaning product (according to machine equipment)
- [C] Spoon for ground coffee manual inlet
- [D] Simple cup positioning aid
- [E] Double cup positioning aid
- [F] Brush for cleaning inside of grounds container
- [G] Drip tray with assembled waste water hose
- [H] Milk hose guide to the left
- [I] Small cleaning brush

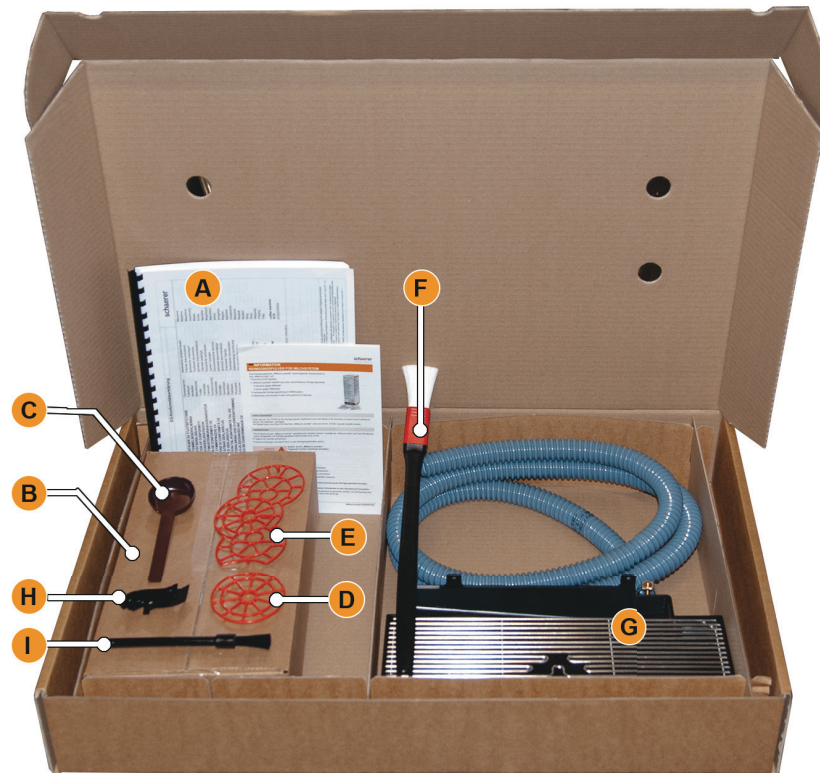
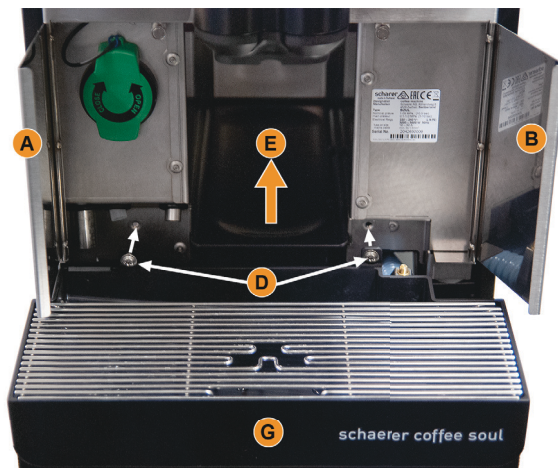


Fig.: SOUL accessories included with delivery



#### Positioning and fastening drip tray

- Open the two front flaps [A] and [B].
  - ☑ The mounting holes [D] can be seen.
- Pass the waste water hose at the drip tray to the rear through the machine.
- Position drip tray [G] and press against machine. If necessary, lift tray [E] slightly at the same time.
- Fix the drip tray with the two screws [D].

#### 4.4.3 Milk connection squeeze valve



The optional milk hose is removed from the squeeze valve during transport. Before commissioning the coffee machine, the milk hose must be correctly reinserted into the squeeze valve, see figure below.

- Lift user panel.



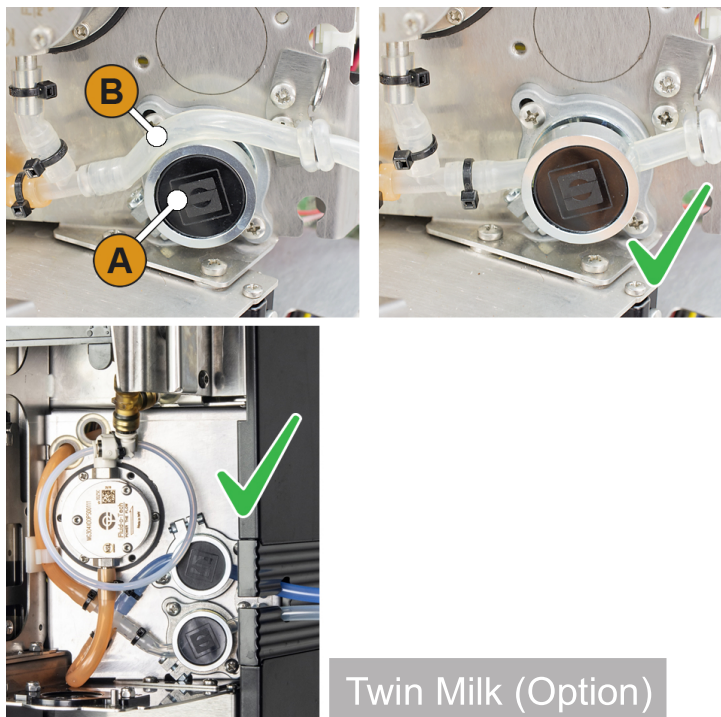
See "Operation" - "User panel" - "Open user panel".



- Pull black cover to the right front without a tool.
  - ☑ The milk pump and squeeze valve [A] are now accessible.

- Insert milk hose [B] into squeeze valve [A] as shown.

**INFORMATION:** 2 squeeze valves are installed with the “Twin Milk” option.



Twin Milk (Option)

#### 4.4.4 Coffee machine connections



*For better access, position the back of the machine ca. 5 cm over the support plate.*

The following connections are required at the installation site:

- [A] Socket for mains plug (230 V CA or 400 V CA) or fixed connection with main switch
  - The serial plate provides information about the required max.fuse.
  - The serial plate provides information about the necessary min. conductor cross-section
- [B] Optional interface for communication of coffee machine with optional accessories
- [C] Mains water supply 3/8" inch or connection to external drinking water tank (option)
- [D] Syphon or external waste water tank for waste water outlet hose ø 20mm
- [E] Optional socket for power cable with country-specific mains plug 230 V (optional accessory)

**INFORMATION:** All machine-side connections are ready for use at the time of delivery. The connections listed above must be made at the installation site.



*See also “Installation and commissioning” - “Electro connection values”.*



- ▶ Mains connection [A] by mounting with mains plug common in the specific country.
- ▶ (Optional) Connect CAN control cable [B] with 6-pin DIN plug to \*optional accessory.
- ▶ Connect mains water supply [C] to manufacturer-side sanitary system via a tap.
- ▶ Lead waste water hose [D] into manufacturer-side syphon or into external waste water tank (option).
- ▶ Correctly place the machine on the work surface.



Fig.: Connections for coffee machine with side cooling unit

\* Optional accessories such as side cooling unit, Cup & Cool or Flavour Point.



*When the machine is switched on for the first time, display-guided setup of the machine configuration follows automatically.*

#### 4.4.5

#### Display-guided commissioning



*The commissioning program automatically starts the first time the machine is switched on. It explains all aspects of installation. The service technician can trigger the commissioning program manually at any time.*



*See also "Operation" – "Switching on" for a description on how to switch on the coffee machine.*

## 4.5

### Connecting optional accessories



#### NOTE

**Storage and transport measures** The machine milk hoses are taken out of the squeeze valve for transport.

When connecting the milk hoses, ensure that all connections have been correctly established and routed.



## NOTE



**Milk hose guide** Optional accessories can be placed to the left and right of the coffee machine, or under the counter (UC). In the standard version, the milk hose from the machine is generally on the right.

If the optional accessory should be placed to the left or under the counter, the milk hose must be converted.

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

### 4.5.1

#### Connecting optional accessories(Option)



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

The following optional variants are possible:

- A 230 V CA mains connection (socket) is required by all optional accessories
- CAN connection control cable with 6-pin. DIN plug

Connection version

[A] Coffee machine according to ...[B], or [C], or [D], and according to [E]

[B] Cup & Cool thin/wide

[C] Cup & Cool thin/wide Centre Milk

[D] Under-machine cooling unit

[E] Flavour Point (syrup UC)

**NOTE:** The 230 V CA mains connection is executed via an assembled and tested apparatus cable.

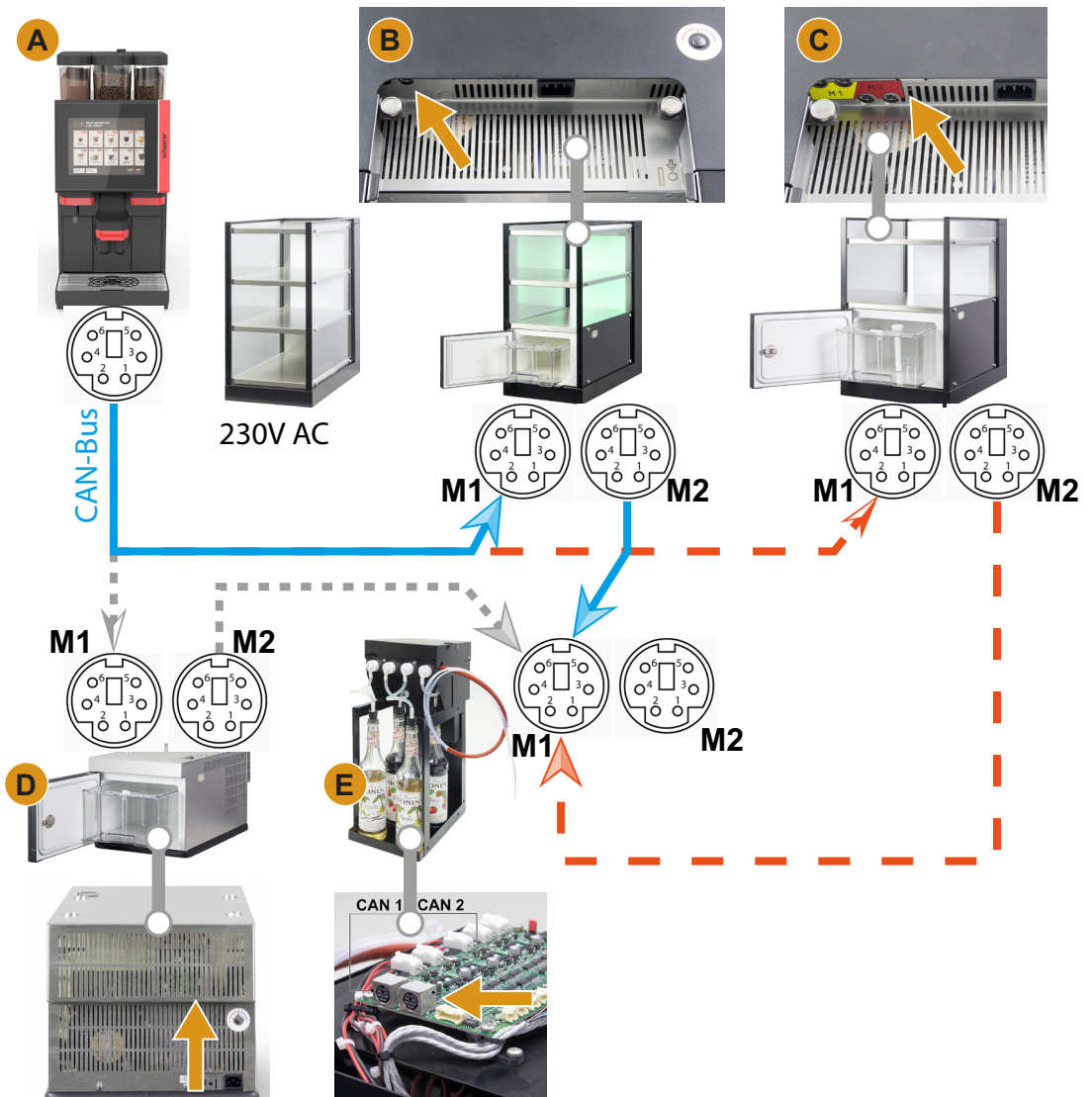


Fig.: Overview of CAN bus coffee machine and optional accessory connections

#### 4.5.2

##### Milk hose guide to the left



*The milk hose of coffee machines with side cooling unit is always guided to the right.*

- ☐ If the side cooling unit is to be positioned on the left side of the machine, it is necessary to divert the milk hose to the left machine side.

##### Accessories included in delivery

The plastic hose guide [A] (079880) is included in the delivery and should be available during the conversion.

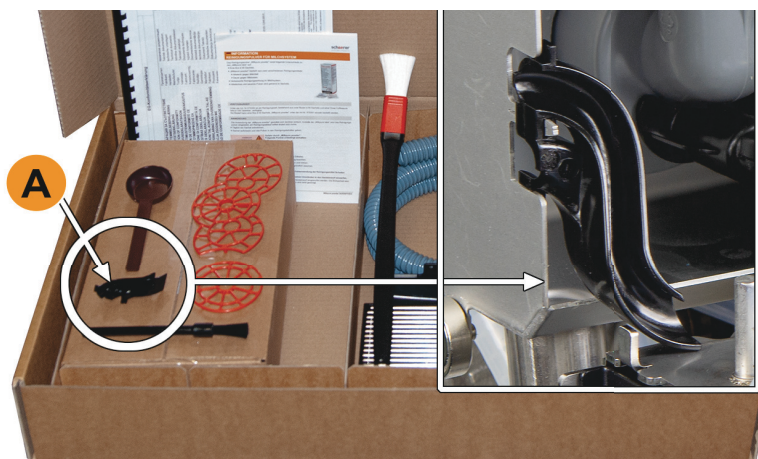


Fig.: Accessories included in delivery

## Required components and tools

- Plastic hose guide 079880
- Cross-head screwdriver PH1

## Preparation for conversion:

- Remove the bean hopper and powder container.
- Remove top, left and right housing.
- User panel in the upper position
- Remove squeeze valve cover [B]. (Possible without tools)
- ▶ Remove squeeze valve cover [B] behind the user panel by releasing it (at positions 1, 2 and 3).
- ▶ Lift cover [D] and remove it as well.
- ☑ The machine is ready for conversion [C].

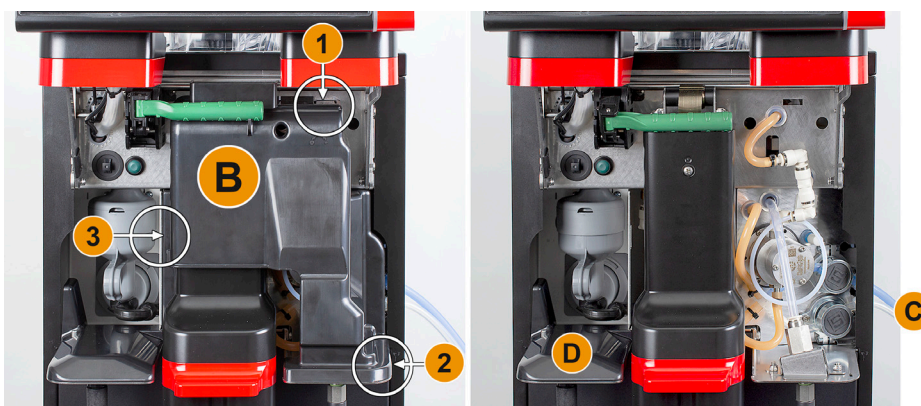


Fig.: Remove squeeze valve cover.

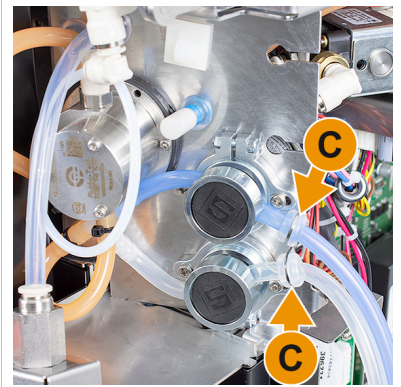
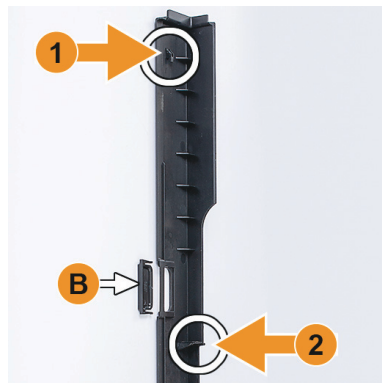
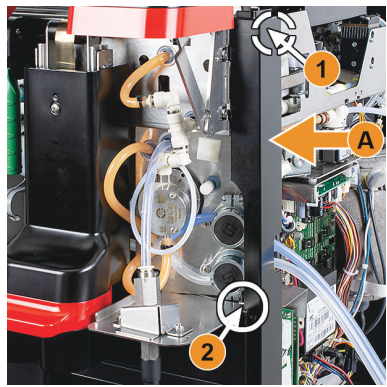
## Converting side strip openings

- ☐ Side housing were removed.
- ☐ Squeeze valve cover was removed

**NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>▶ Push right and left side strip [A] upwards and guide out of fastener [1] and [2].</li> <li>☑ The right and left side strips are disassembled.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Remove the milk hoses from the right side strip.</li> <li>▶ Remove the blind cover [B] from the left side strip and push it into the right side strip.</li> <li>☑ Both side strips are now ready for reassembly.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Remove the milk hoses from the guides [C].</li> <li>▶ Guide the milk hoses to the rear.</li> <li>☑ Milk hoses can be guided to the rear.</li> </ul> |
|---|--|--|





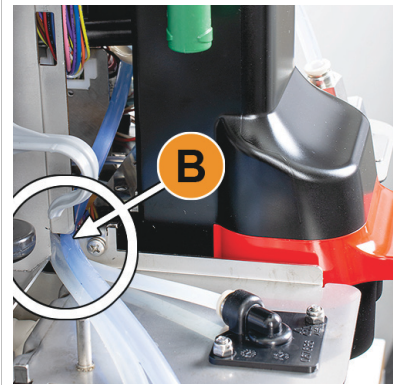
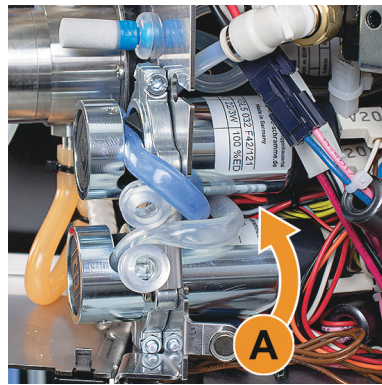
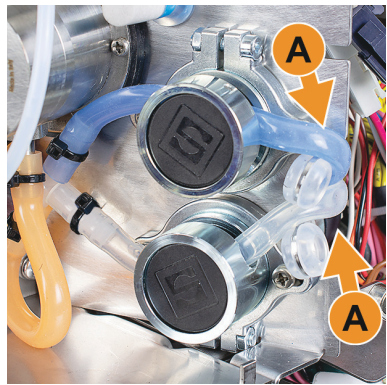
### Guiding milk hose to the left side

- ☐ Milk hose without guide [C].
- ☐ Side strip openings converted

**NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.

- ▶ Guide milk hoses to the rear as shown in the figures [A].
- ▶ Guide the milk hoses behind the beverage outlet to the left side.

- ▶ Guide the milk hose through the sheet metal opening [B].
- ☒ Milk hoses lead out of the machine on the left side.

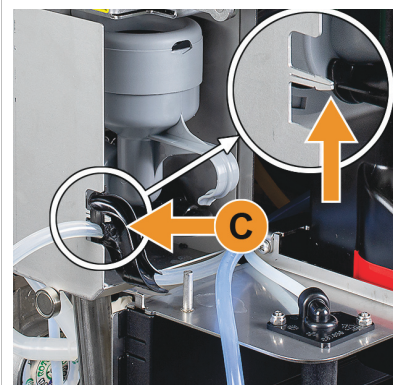
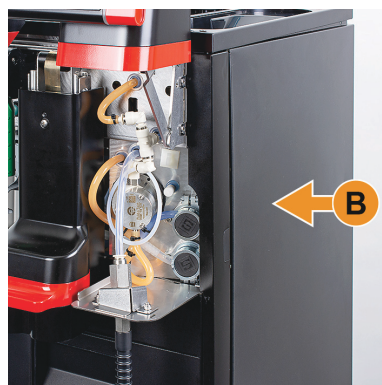
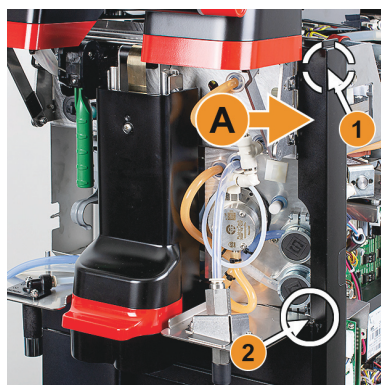


### Assembling right housing and left hose guide

- ☐ Milk hoses are ready on the left side.
- ☐ Have hose guide 079880 ready

**NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.

- ▶ Reassemble the right side strip [A]. Note fixtures [1] and [2].
- ▶ Reassemble the right side housing [B].
- ▶ Push milk hose guide 079880 onto side panel [C].
- ☒ Milk hose guide is positioned.

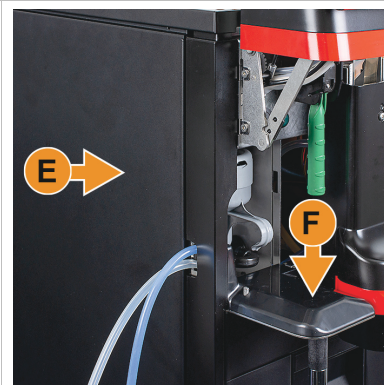
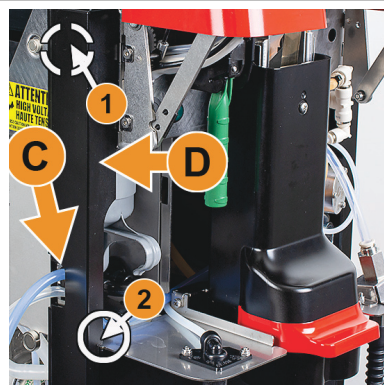
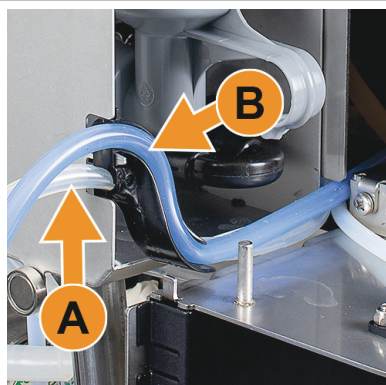


### Guiding milk hose to the left

- ☐ Hose guide 079880 is positioned.

**NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>▶ Insert milk hose [A] at the rear into the hose guide.</li> <li>▶ Insert milk hose [B] into the top of the hose guide.</li> <li>☑ Milk hoses are guided out of the machine on the left side.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Guide the milk hoses through the left side strip [C].</li> <li>▶ Reassemble the left side strip [D]. Note fixtures [1] and [2].</li> </ul> | <ul style="list-style-type: none"> <li>▶ Position side housing [E].</li> <li>▶ Put on cover [F].</li> <li>▶ Assemble the top housing and re-insert the hopper.</li> <li>☑ Milk hose is now guided to the left.</li> </ul> |
|---|---|---|



#### 4.5.3

#### Connecting 4-fold Flavour Point UC (syrup module)(Option)



The 4-fold UC Flavour Point optional accessory cannot be retrofitted. For correct hose guidance, assemble the machine feet (min. 40mm) on the coffee machine.

#### Flavour Point hose connections

- ☐ The coffee machine was prepared for the "Flavour Point" option in the factory.
- ☐ The necessary hose connections are led on the right machine side.
- ▶ Lift bean and powder container out of the machine.
- ▶ Loosen 4 screws from machine cover and raise cover slightly to the right.
- ▶ Push thin housing strip to the right and upwards and unlock.
- ☑ The plug-in connections led from the machine are now accessible on the right machine side [B].
- ▶ Attach connection hoses from Flavour Point [A] to the prepared plug-in connections so they are staggered.
- ▶ Reassemble right side housings and machine cover.
- ▶ Reinsert the bean hopper/powder container.
- ☑ The Flavour Point – coffee machine hose connection is complete.

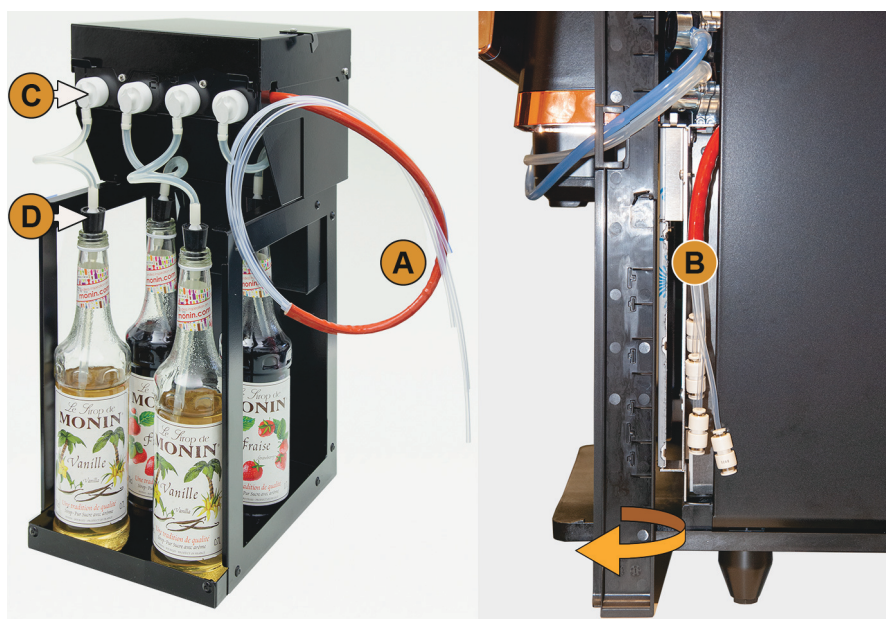


Fig.: Flavour Point SOUL hose connection



### Syrup type labelling

- ☐ Labelling strips are self-adhesive.
- ▶ Divide labelling strips into 4 fields (4 pumps) of ca. 5 cm.
- ▶ Label the syrup pumps according to the syrup types, see figure below.
  - ☒ The hose connection from the syrup bottle to the syrup pump is labelled.
  - ☒ After cleaning, assignment under the syrup types is clearly visible.

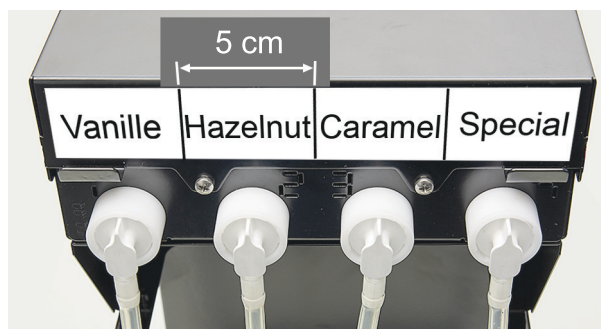


Fig.: Labelling of hose connections from syrup bottle to syrup pump

## 4.6 Disassembly and disposal



The coffee machine must be disposed of correctly in conformity with local and legal regulations.

- ▶ Contact your service partner.

## 5 Operation



### CAUTION

**Hot fluid! Most of the beverages dispensed by the machine are hot.**

Never reach beneath the beverage outlet or into the machine when beverages are being dispensed.



### CAUTION

**Hot steam! There is a danger of scalding in the dispensing area of the steam wand.**

Never reach under the steam wand when dispensing steam.



### CAUTION

**Hot surface! A dangerous situation that may result in burn injuries. This danger arises at the dispensing points and cup warmer locations (option).**

Always hold the beverage outlet or steam wand by the operating elements provided for this purpose.



### CAUTION

**Risk of trapping fingers! The user panel can fall down on account of its own weight.**

Hold the user panel firmly and guide it upwards or downwards in a controlled fashion until it engages.



### NOTE

**Risk of machine damage! Incorrect use may damage the touch screen.**

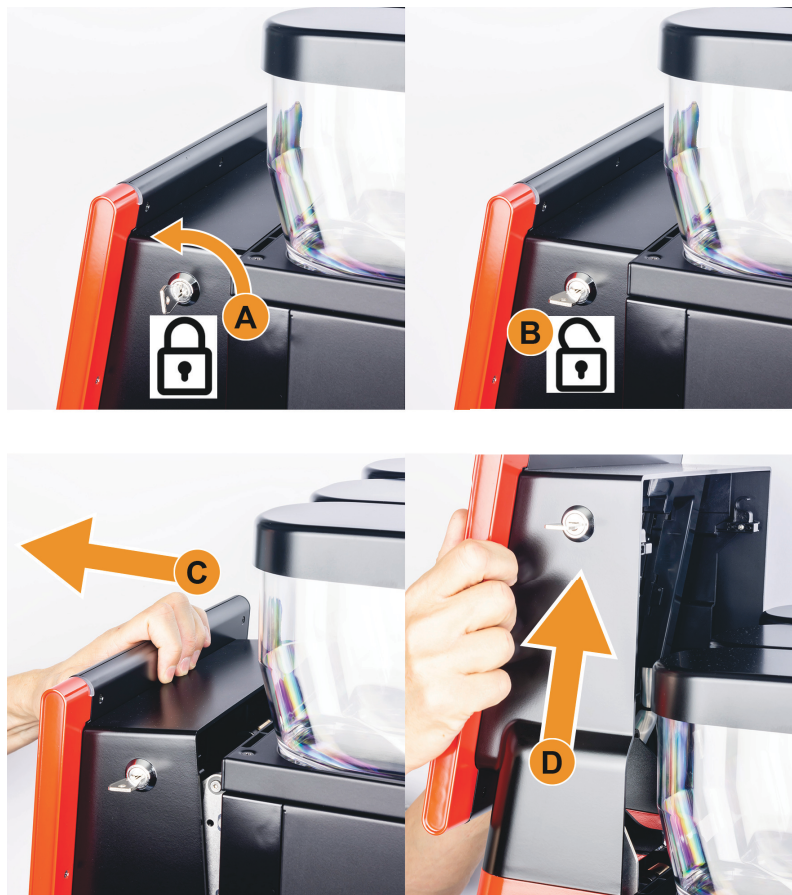
Never use force, strong pressure or sharp objects when pressing on the display.



## 5.1 User panel

### 5.1.1 Open user panel

- ▶ Open closing device [A] with key.
  - ☑ The lock is open when horizontal [B].
- ▶ Unlock user panel top [C] by pulling with force.
  - ☑ The user panel is unlocked.
- ▶ Push the user panel from below [D] using both hands until it snaps into place.
  - ☑ The user panel is automatically held in the upper position.
  - ☑ All operating elements [E] behind the user panel are now accessible.



### 5.1.2 Close user panel

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

- ▶ Gently guide the open user panel downwards up to the stop.
- ▶ Gently press the upper edge of the user panel in.
  - ☑ The user panel locks and is now closed.
- ▶ If necessary, lock the closing device with the key.

## 5.2 Machine operating elements

### 5.2.1 Exterior machine operating elements

- [A] Manual inlet (ground coffee/cleaning tab)
- [B] Touch screen (touch-sensitive display, 10" or 12")
- [C] User panel can be pushed upwards
- [D] Manual beverage outlet (manually move up/down) or optionally with automatic height-adjustable beverage outlet (AHA)
- [E] Grounds container
- [F] Fixed drip tray with drip grid
- [G] Cup positioning aid (single or double cup)
- [H] Closing device (user panel)



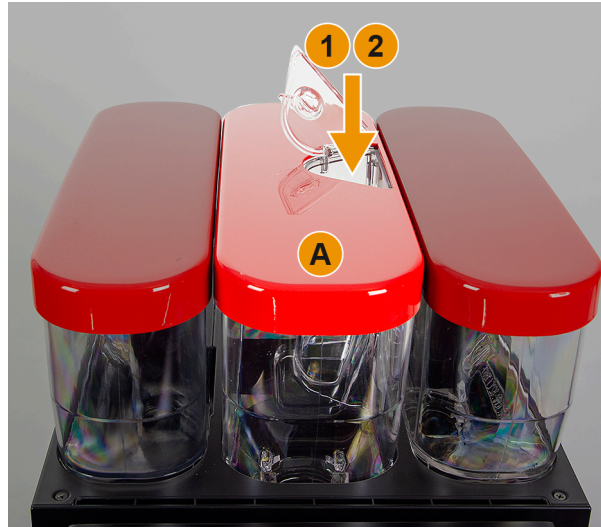
### Bean hopper with integrated manual inlet

The centre bean hopper with integrated manual inlet comes as standard. The opening for the Coffee pure cleaning tablet inlet is the same as the manual inlet.

[A] Middle bean hopper (1200 g)

Functions of centre bean hopper:

- 1 Cleaning tablet insert (Coffeepure tab)
- 2 Manual inlet for ground coffee (e.g. decaffeinated coffee)



**INFORMATION:** Bean and powder container covers are available with closing device as an option.

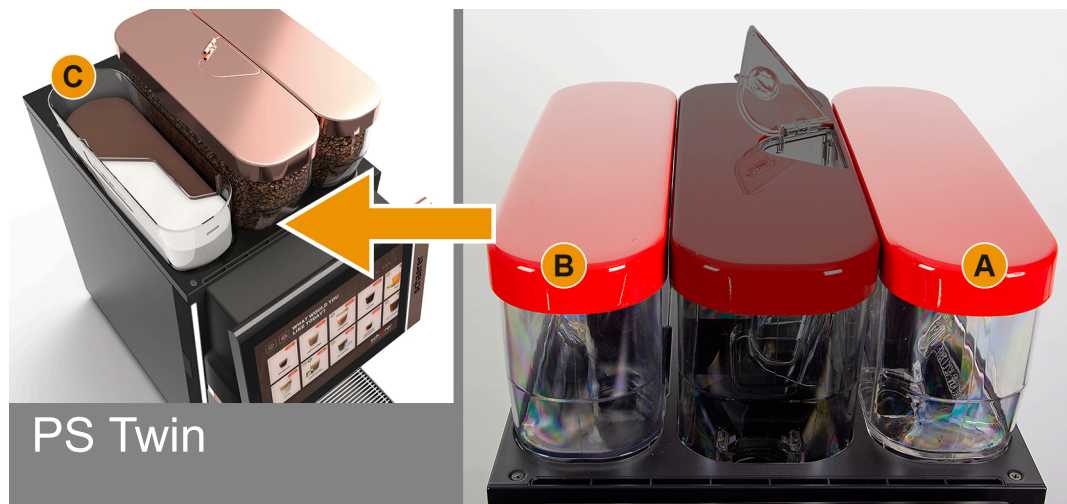
### Option: Additional bean hopper and/or powder container

The machine can optionally be equipped with an additional bean hopper on the right and/or a powder container on the left:

[A] Additional bean hopper on the right, e.g. for espresso (1200 g)

[B] Left powder container (choco or topping) (2000 g/2750 ml)

[C] Twin powder container



**INFORMATION:** Bean and powder container covers are available with closing device as an option.

### Option: External hot water and steam outlet



*The dispensing options of the external hot water [A] or steam outlet [C] can be placed on the left or right, depending on the customer requirements.*

The additional external operating elements for hot water and/or steam outlet are optional:

- [A] External hot water button (preconfigured dispensing quantity in ml)
- [B] Hot water dispensing
- [C] Steam button (preconfigured dispensing duration in sec)
- [D] Steam wand (Powersteam standard)

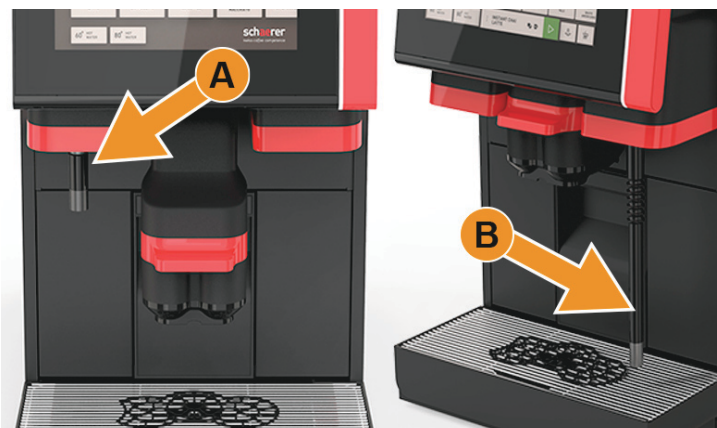


Fig.: External hot water dispensing and steam wand (Powersteam)

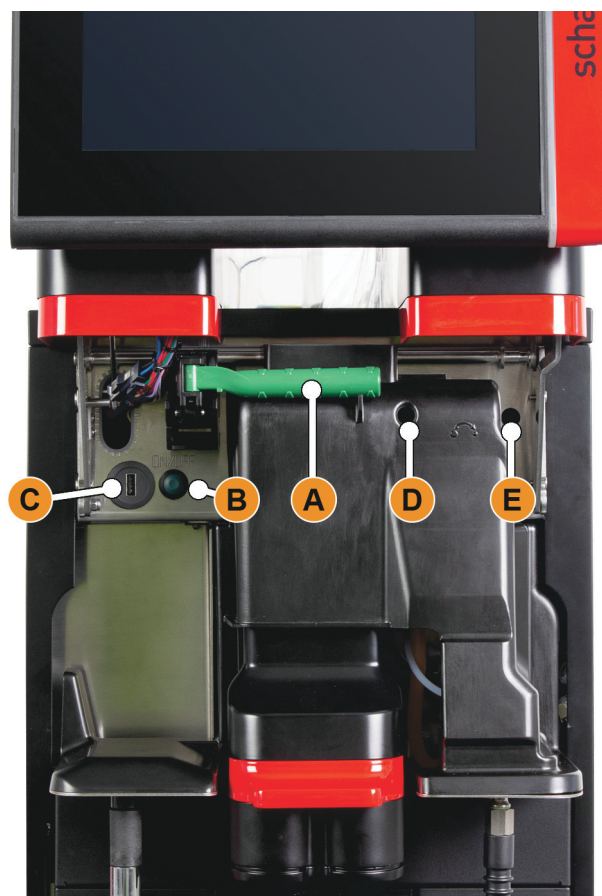
### 5.2.2 Machine operating elements



*If the machine is equipped with the optionally available automatic grinding level adjustment, the setting devices [D] and [E] are not available, see figure below. The coffee machine automatically regulates the grinding level according to the brewing time of a reference beverage. The coffee reference beverage is determined by the service technician.*

The following operating elements listed are available behind the user panel.

- [A] Handle for bean hopper and powder container central locking mechanism
- [B] USB connection
- [C] Machine power button (shutting down by pressing and holding for 4 sec)
- [D] Manual grinding level adjustment of middle grinder (standard equipment)
- [E] Manual grinding level adjustment of the optionally available right grinder







See also "Operation" - "User panel" - "Open user panel".

## Grinding level adjustment



### NOTE

**Change in taste! Adjusting the grinding level changes the taste and flavour of all coffee beverages.**

The grinding level can only be adjusted by a caretaker or service technician.  
After grind level adjustment, we recommend calibrating the grinders.



See also "Programming" - "Service (Caretaker)" - "Grinder service".

## Unlocking bean hoppers

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

- ▶ Open the user panel.
- ▶ Swivel the green handle [A] of the central locking mechanism [1] from the machine forwards [2].
- ▶ Fold the central locking mechanism [2] downwards [3] into the machine.
- ☑ The bean hoppers and powder containers are now unlocked, position [B].



Fig.: Bean hopper and powder container release (option)



See also "Operation" - "User panel" - "Open user panel".

## Option: Mixing cup for powder or topping system

The machine can optionally be equipped with a choco or topping powder system.

- ☐ The mixing cup is removed from the machine during the cleaning programme in line with the instruction.
- ▶ Pull the mixing cup straight out of the machine using the handle.



Fig.: Disassembling mixing cup



When installing the mixing cup, make sure that the [A] ventilation, [B] water supply, [C] mixing bowl and [D] choco/topping lines are correctly connected and correctly pressed in up to the stop.



See also "Cleaning" - "Daily machine cleaning".

## 5.3 Optional accessory operating elements (Option)

### 5.3.1 Cooling unit operating elements

The machine is equipped with the Best Foam™ milk system as an option and can be operated with a side or under-machine cooling unit:

[A] Cooling unit on/off toggle switch

[B] Cooling unit operating elements



Fig.: Side cooling unit thermostat/operating elements

### 5.3.2 Cup & Cool / Cup warmer operating elements

The machine is equipped with the Best Foam™ milk system as an option and can be operated with the Cup & Cool optional accessory or a cup warmer:

[A] Cooling unit on/off toggle switch

[B] Cup warmer on/off toggle switch

[C] Thermostat setup

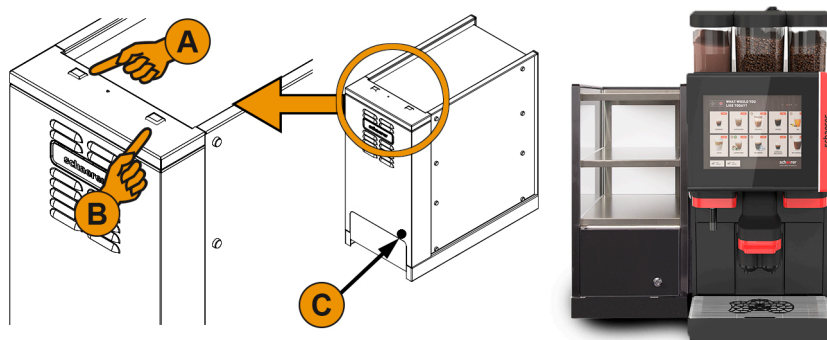


Fig.: Cup & Cool optional accessory operating elements



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

### 5.3.3 Under-machine cooling unit operating elements

The machine is equipped with the Best Foam™ milk system as an option and can be operated with an under-machine cooling unit:

[A] Cooling unit on/off toggle switch (behind front door)

[B] Cooling unit thermostat (rear side)

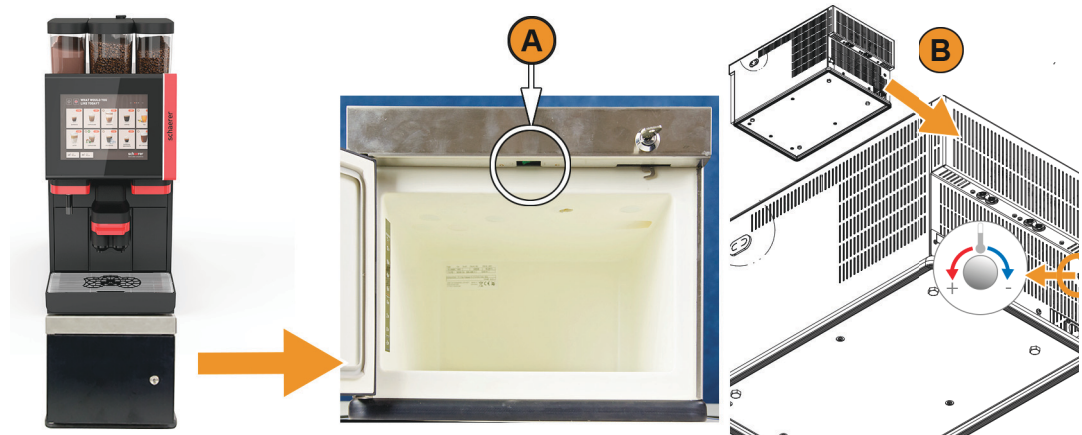


Fig.: On/Off switch, under-machine cooling unit thermostat



See also the detailed information in the enclosed separate description “SCSoul optional accessories” for this optional accessory.

### 5.3.4 Under-counter cooling unit operating elements

The machine is optionally equipped with the Best Foam™ milk system and can be operated with an under-counter cooling unit that is lower in height:

[A] Cooling unit on/off toggle switch (behind front door)

[B] Cooling unit thermostat (rear side)

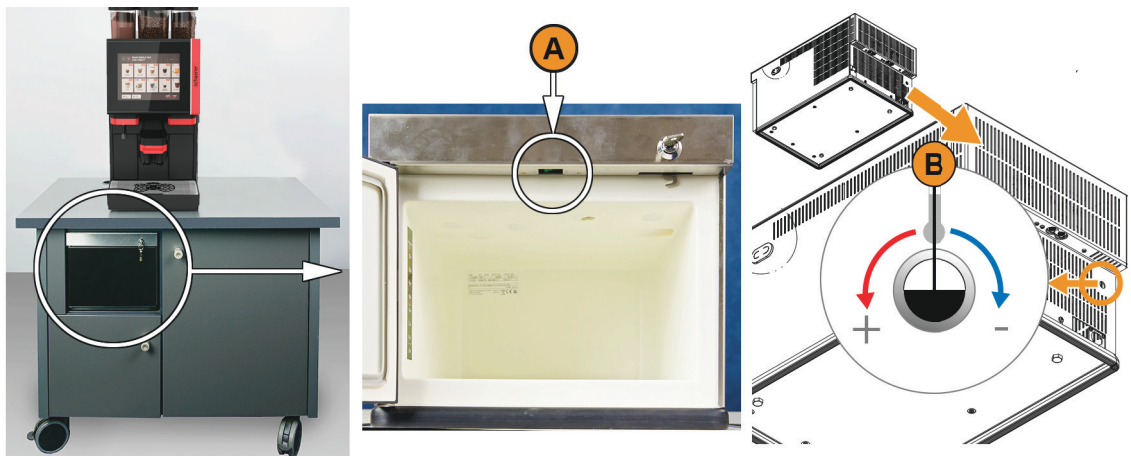


Fig.: On/Off switch, under-counter cooling unit thermostat



See also the detailed information in the enclosed separate description “SCSoul optional accessories” for this optional accessory.

### 5.3.5 Flavour Point operating elements (syrup module)

The machine is equipped with the optional "Flavour Point" syrup module and offers 4 different beverage aromatisations:

[A] On/off switch

[B] Connection for 4 adapters for syrup bottles or 4 hoses from cleaning set.



Fig.: On/Off switch, hose adapter connections

## 5.4 Check before switching on

- Before switching on the coffee machine, check whether the following conditions are fulfilled.

Conditions for switching on the coffee machine:

- The stop valve of the water supply (in machines with a mains water supply) is open/the external drinking water tank (option) is filled with fresh water.
- The waste water outlet (standard) has been correctly laid/the waste water tank (option) is connected.
- The bean hopper(s) is/are filled.
- The grounds container is empty and inserted correctly.
- The coffee machine is correctly connected to the mains power supply in accordance with the country-specific or local safety regulations.

## 5.5 Switching on

### 5.5.1 Switching on coffee machine

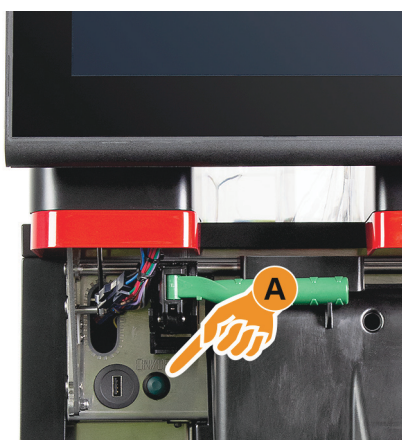


Fig.: Coffee machine switch-on button

- Check the machine mains connection.
- Unlock the user panel and slide it upwards.
- Briefly press power button [A].
  - ☑ The machine starts up.
  - ☑ The main screen user interface appears in the touch screen, the machine begins to heat up.
  - ☑ The machine is ready for use as soon as the required temperature is reached.
- Close user panel.



See also "Operation" – "User panel" – "Open or close user panel".





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

### 5.5.2 Switching on side cooling unit(Optional)

- ▶ Open doors.
- ▶ Switch toggle switch [A] to position [I].
- ▶ Press and hold button [B] for  $\pm 3$  sec.
  - ☒ The device is switched on.
  - ☒ The current interior temperature is shown on the display.

#### Variant: "Standby" mode

- ▶ Press and hold button [B] for  $\pm 3$  sec.
  - ☒ The cooling unit switches to Standby mode.

#### Variant: Temperature setting

- ▶ Press and hold button [C] for  $\pm 3$  sec.
- ▶ Set the temperature 3 – 5°C higher with button [B], or lower with button [D].
- ▶ Confirm setup with button [C].
  - ☒ The cooling unit switches to the operating mode.
  - ☒ The current interior temperature is shown on the display.



Fig.: Switch on and set the side cooling unit.



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

### 5.5.3 Switching on Cup & Cool/cup warmer(Optional)



#### ! CAUTION

**Hot surface! The cup storage gets hot and can cause burns.**

Shut down cup storage before cleaning and wait until the surfaces are cooled.

- ▶ Switch toggle switch [A] to position [I].
- ▶ Adjust the thermostat on the rear [C] if needed.
  - ☒ The cooling unit is switched on.
- ▶ Switch toggle switch [B] to position [I].
  - ☒ The cup storage is switched on.

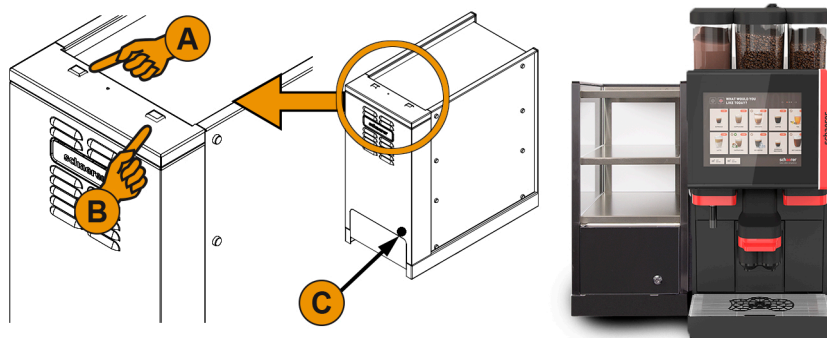


Fig.: Switch on and set the Cup & Cool optional accessory



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



See also "Operation" – "Filling and connecting" – "Milk".

#### 5.5.4 Switching on under-machine cooling unit(Option)

- ▶ Open doors.
- ▶ Switch toggle switch [A] to position [I].
- ▶ Set the thermostat [B] on the rear to the middle position [B].
  - ☒ The under-machine cooling unit is switched on.

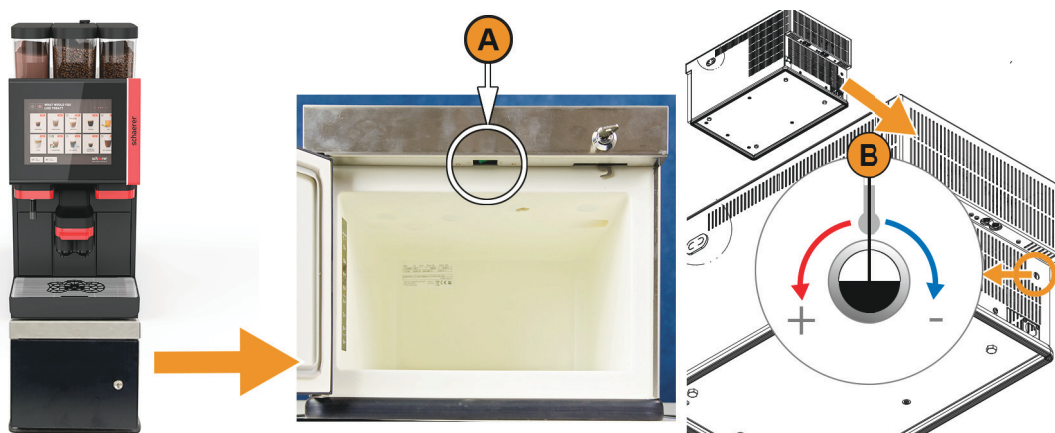


Fig.: Switching on and setting the under-machine cooling unit



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



See also "Operation" – "Filling and connecting" – "Milk".

### 5.5.5 Switching on under-counter cooling unit(Optional)

- ▶ Open doors.
- ▶ Switch toggle switch [A] to position [I].
- ▶ Set the thermostat [B] on the rear to the middle position [B].
- ☑ The under-counter cooling unit is switched on.

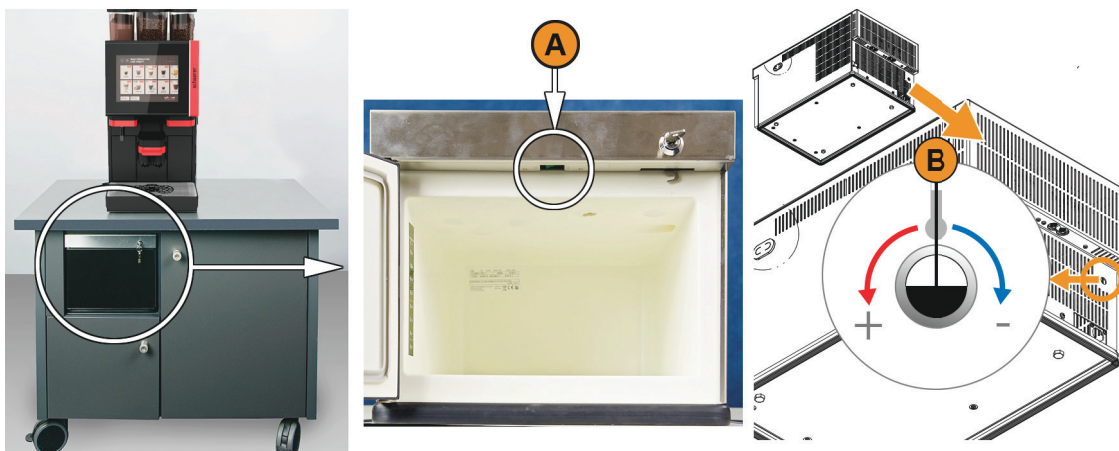


Fig.: Switching on and setting the under-counter cooling unit



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



See also "Operation" – "Filling and connecting" – "Milk".

### 5.5.6 Switching on Flavour Point (syrup module)(Option)

- ▶ Switch toggle switch [A] to position [I].
- ☑ The "Flavour Point" syrup module is switched on.



Fig.: Switch on Flavour Point UC

## 5.6 Main touch screen window

### 5.6.1 Overview of user interfaces

#### Variants: Guest mode



Coffee machine operation by users without any previous knowledge is supported with the preconfigured “Guest mode” interface. The service technician can also make individual settings.



Fig.: Standard “Guest mode” user interface



Fig.: “Guest mode” user interface with selection via beverage groups

The beverage is selected in sequential steps in self-service.

☐ Operating mode > “Guest mode” is active.

The following max. number of groups and beverages are available:

- 10 tabs (groups)
- 24 beverages per tab (group)
- max. 240 beverages available

Possible functions in “Guest mode”:

[A] Display of a maximum of 240 beverage fields (10 groups with max. 24 beverages each)

[B] Horizontal scrolling (arrow)

[C] Access to service menu

[D] Selection via beverage groups

Possible steps to beverage dispensing:

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

**NOTE:** The service technician can extend or reduce the standard configuration with the following additional functions:

- Screensaver image [ON]
- [Service menu] field [C] visible [ON]
- Group selection [D] (max. 10 groups with horizontal navigation [B] possible) [OFF]
- Sequential beverage modification [ON-fixed]
- Place cup/mug instruction [ON]
- Display progress information [ON-fixed]
- “Display beverage complete” information [ON]



See also “Operation” – “Beverage selection”.

### Variant: Staff mode



Coffee machine operation by knowledgeable professionals (staff) is optimized with the preconfigured “Staff mode” interface. The service technician can also perform individual setups.



Fig.: The “Staff mode” standard user interface

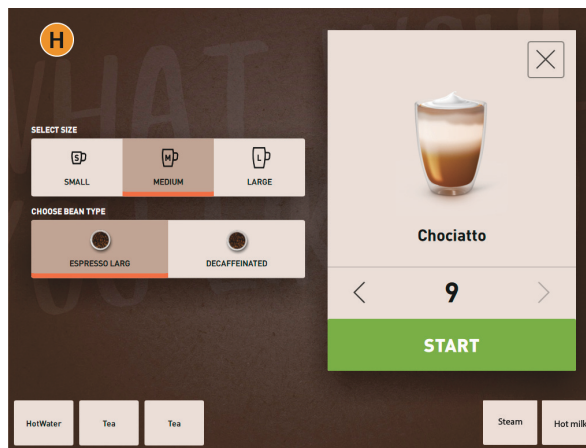


Fig.: Beverage option selection in “Staff mode”

The beverage is selected individually by staff.

☐ Operating mode > “Staff mode” is active.

The following max.number of groups and beverages are available:

- 10 tabs (groups)
- 24 beverages per tab (group)
- max. 240 beverages available

Possible functions in “Staff mode”:

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

[B] Horizontal scroll function (finger)

[C] Beverage filter (DECAF, double beverage)

[D] Service menu field visible

[E] “Barista” (coffee strength) preselection [OFF]

[F] max.3 additional separate beverages (left)

[G] max.2 additional separate beverages (right)

[H] Beverage options selection window

Possible steps to beverage dispensing:

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

**NOTE:** The service technician can extend or reduce the standard configuration with the following additional functions:

- Field [C] for double beverage dispensing [ON]
- Field [C] for decaffeinated coffee (DECAF) [ON]
- Field [E] for coffee strength (Barista) [OFF]
- Beverage preselection possible (multiple dispensing) [ON]
- Display of number of preselected beverage [OFF]
- Service menu field visible [ON]
- Display “Place cup information” [OFF]
- Display “Show progress” information [OFF]
- Display “Beverage complete” information [OFF]



## Variant: Frequent user mode



See also "Operation" – "Beverage selection".



Coffee machine operation by advanced users (office areas) is supported with the preconfigured "Frequent user mode" interface. The service technician can also make individual settings.



Fig.: "Frequent user mode" user interface

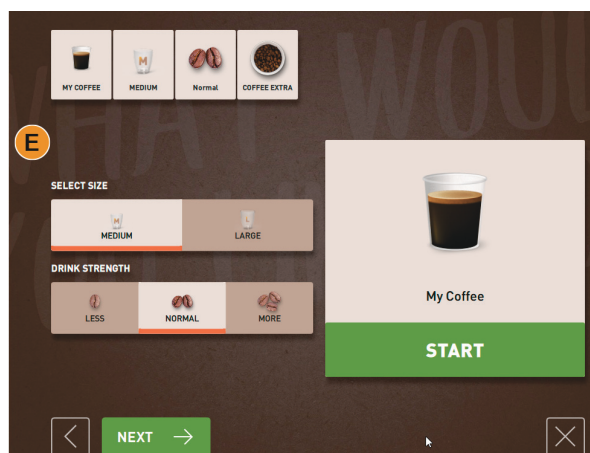


Fig.: Beverage option selection in "Frequent user mode"



Fig.: "Frequent user mode" user interface with selection by beverage groups

The beverage is selected in sequential steps.

- ☐ Operating mode > "Frequent user mode" is active.

The following max. number of groups and beverages are available:

- 10 tabs (groups)
- 24 beverages per tab (group)
- max. 240 beverages available

Possible functions in "Frequent user mode":

- [A] Display of a maximum of 240 beverage fields (10 groups with max. 24 beverages each)
- [B] Horizontal scrolling (arrow)
- [C] Service menu field visible
- [D] Max. 3 additional separate beverages (left)
- [E] Beverage options selection window
- [F] Selection via beverage groups

Possible steps to beverage dispensing:

- Select the desired beverage field
- Define size of cup/mug
- Select coffee roast (option)
- Confirm selection
- Payment (with payment system, option)
- Place cup/mug instruction
- Start dispensing
- Fill ground coffee (with separate manual inlet)
- Confirm manual inlet
- Beverage is dispensed

**NOTE:** The service technician can extend or reduce the standard configuration with the following additional functions:

- Field [E] for coffee strength (Barista) [ON]
- Screensaver image [ON]
- Service menu field [C] visible [ON]
- Group selection [F] (max. 10 groups with horizontal navigation [B] possible) [OFF]
- Place cup instruction [ON]
- "Display beverage complete" information [OFF]

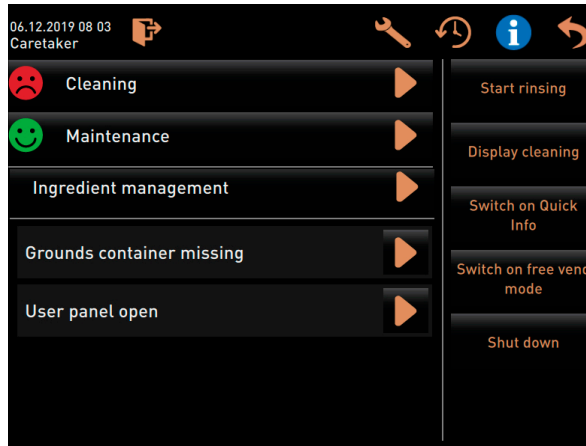


See also "Operation" – "Beverage selection".

## Service menu and functions



The service technician can limit access to the Service menu with a PIN. This configured PIN number corresponds to the PIN of the operator.



Functions and information:

- Pending action requests (cleaning/descaling)
- Pending error messages
- Ingredient management
- Beverage dispensing history
- Direct selection functions
- Logging in with profile
- System information

See also "Operation" – "Main touch screen window" – "Service menu overview" for a detailed description.

Fig.: "Service menu" view




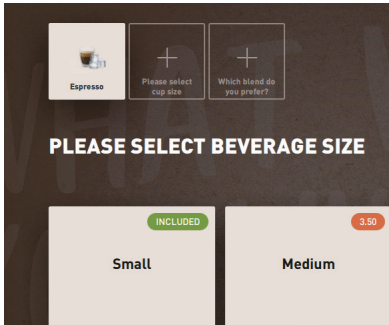
## 5.6.2 Touch screen operating field overview



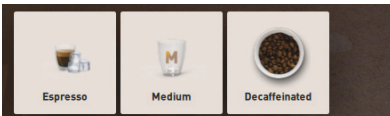
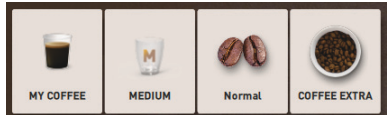
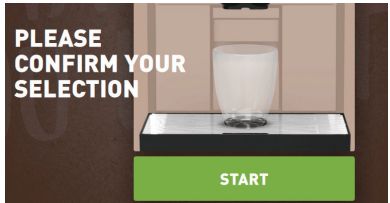
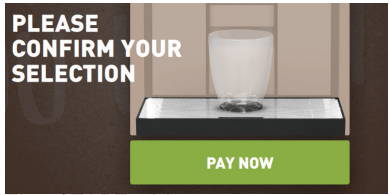
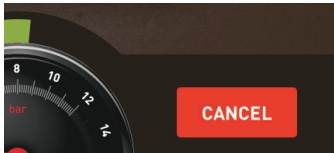

Symbol	Description
<p><b>Tabs</b></p>	<p>Configured menu cards are shown as horizontal tabs in "Staff mode".</p> <p><input type="checkbox"/> Operating mode &gt; "Staff mode" is activated.</p> <p>The following number of tabs and beverages are available:</p> <ul style="list-style-type: none"> <li>• 10 tabs (groups)</li> <li>• 24 beverages per tab (group)</li> <li>• max. 240 beverages available</li> </ul> <p>The menu cards and tabs can be named and assigned as desired by a service technician.</p>
<p><b>Scrolling</b></p>	<p>Scrolling through all tabs (menu cards)</p> <p><b>Variant: Guest mode/Frequent user mode</b></p> <p><input type="checkbox"/> "Guest mode" or "Frequent user mode" operating mode is activated.</p> <p>View of all beverages by:</p> <ul style="list-style-type: none"> <li>• Scrolling field [&lt; arrow] to the left</li> <li>• Scrolling field [&gt; arrow] to the right</li> <li>• The number of points signals the number of available menu cards</li> </ul>
<p><b>Swiping</b></p>	<p><b>Variant: Staff mode</b></p> <p><input type="checkbox"/> "Staff mode"/"Frequent user mode" operating mode is activated</p> <p>View of all beverages by:</p> <ul style="list-style-type: none"> <li>• Direct selection of a tab (menu card) by tapping on it</li> <li>• Tapping on a tab and swiping to the left or right</li> <li>• The number of tabs (menu cards) is not yet directly identifiable</li> </ul> <p>The menu cards and tabs can be named and assigned as desired by a service technician.</p>



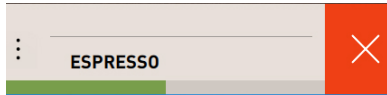
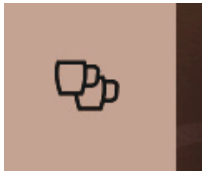
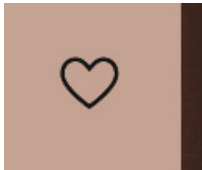
Fig.: Guest mode

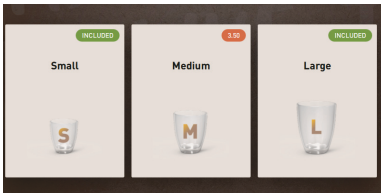
Fig.: Staff/Frequent user mode

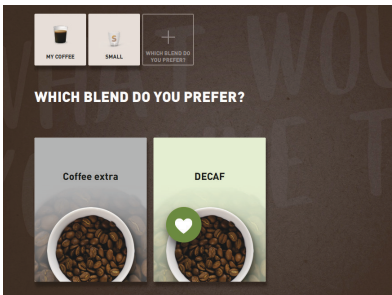
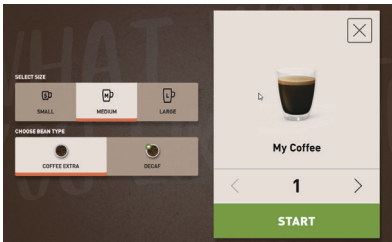

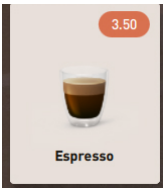
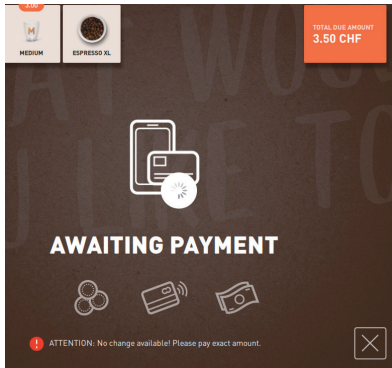



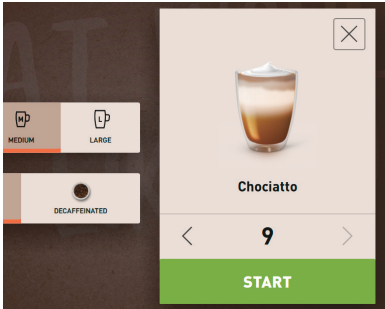
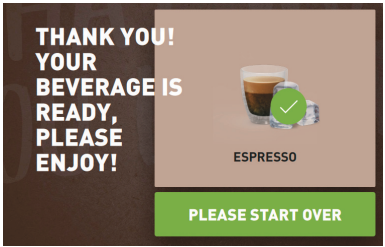


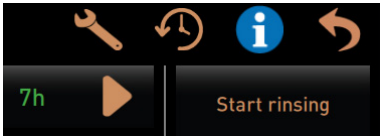
Symbol	Description
<p>Beverage selection from groups</p> 	<p><b>Variant: "Guest mode"/"Frequent user" mode</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The "Show group selection" function is activated in this operating mode.</li> <li>▶ Select a group <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Group (menu card) with beverages appears.</li> </ul> </li> </ul> <p><i>The menu cards and tabs can be named and assigned as desired by a service technician.</i></p>
<p>Sizes beverage field</p> 	<ul style="list-style-type: none"> <li><input type="checkbox"/> Size of beverage field is defined in the menu card configuration.</li> </ul> <p>Available beverage field sizes:</p> <ul style="list-style-type: none"> <li>• Small</li> <li>• Medium</li> <li>• Large</li> <li>• Extra large</li> <li>• Dynamic</li> </ul> <p><i>The menu card is configured by the service technician.</i></p>
<p>Symbol/Beverage field</p> 	<p>Different beverage field display</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The beverage field display is set in this operating mode.</li> </ul> <p>The following beverage icons can be set by the service technician:</p> <p>[A] Default (display with glass)</p> <p>[B] Cup (display with cup)</p> <p>Each beverage field can be stored individually with a beverage. The beverage field starts the respective beverage dispensing process or preselection for additional ingredients and beverage options.</p> <p><i>The beverage fields can be named and assigned as desired by a service technician.</i></p>
<p>Sequential beverage modification</p> 	<p>Sequential beverage selection consists of a possible preselection of beverage options displayed in succession, each in a separate window for selection.</p> <p>Without the "Sequential beverage modification" function, the beverage options are selected directly from a window.</p> <p>Possible beverage options:</p> <ul style="list-style-type: none"> <li>• Beverage type (coffee, espresso, cappuccino, etc.)</li> <li>• Beverage size (S,M,L)</li> <li>• Coffee type (2-3 grinders)</li> <li>• Milk type (Twin Milk)</li> <li>• Choco (with powder system)</li> <li>• Aroma (with Flavour Point syrup system)</li> </ul> <p><i>"Sequential beverage modification" is only active in "Guest mode" and cannot be disabled.</i></p>

Symbol	Description
<p>Display of beverage ingredient progress</p>  <p>Fig.: Beverage selection</p>  <p>Fig.: Beverage size selection</p>  <p>Fig.: Coffee type selection</p>	<p>Informs about already-selected beverage ingredients and which still need to be selected.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The beverage was configured for dispensing various ingredients.</li> <li><input type="checkbox"/> The "Beverage selection progress" type of display is available in "Guest mode".</li> </ul> <p>► Select beverage.</p> <p>► Select ingredients.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Each selected ingredient is displayed by a symbol.</li> <li><input checked="" type="checkbox"/> Every ingredient still to be selected is signalled by an empty field [+].</li> </ul> <p><i>The [Beverage selection progress] display cannot be disabled.</i></p>
<p>Overview of beverage ingredients</p>  <p>Fig.: Contained beverage ingredients</p>	<p>Provides information about the selected or contained beverage ingredients.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The beverage was configured for dispensing various ingredients.</li> <li><input type="checkbox"/> The "Beverage selection progress" type of display is available in "Frequent user mode".</li> </ul> <p>► Select beverage.</p> <p>► Select ingredients.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The contained ingredients are displayed by a symbol.</li> </ul> <p>► Adjust ingredient, e.g. beverage size.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The newly-selected beverage size is displayed in the overview.</li> </ul> <p><i>The "Beverage selection progress" display cannot be disabled.</i></p>
<p>Starting dispensing (Confirming selection)</p>  <p>Fig.: START without payment system</p>  <p>Fig.: START with payment system</p>	<p>The [START]/[Pay] field starts beverage dispensing</p> <p>The [START] field is displayed during beverage preselection and starts beverage dispensing.</p> <p>If a payment system is activated, the payment request appears.</p> <p><b>Variant: Without payment system</b></p> <p>The [START] field confirms the selection options made and then starts beverage dispensing.</p> <p><b>Variant: With payment system</b></p> <p>The [Pay] field confirms the selection options made and then starts the payment process.</p> <p>When payment is complete, beverage dispensing starts when the [START] field is selected.</p>
<p>Stop</p> 	<p>The [Stop] field interrupts beverage dispensing.</p> <p>The [Stop] field is displayed while a beverage is being dispensed. The beverage currently being dispensed and any other previously selected beverages can be cancelled using this field.</p>
<p>Cancel</p> 	<p>The [X] field takes you back to the beverage selection user interface.</p> <p>The [Cancel] field is displayed while beverage options are being selected. The current selection and any other previously selected beverage options can be aborted using this field.</p>

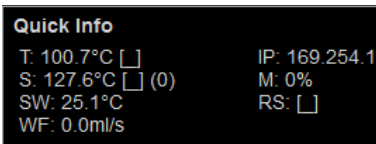
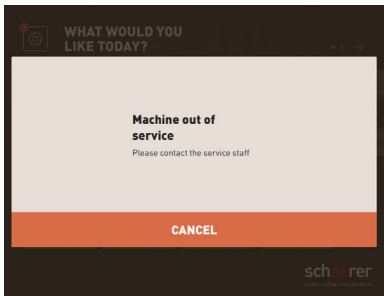


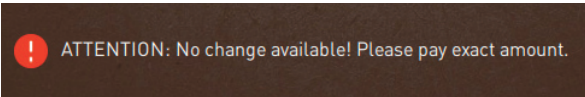
Symbol	Description
Back/Next 	The [>] / [<] field continues to the next page, or back to a previous page.
Progress  Fig.: Progress (Guest mode)	The progress screen (green bar) provides information about the remaining dispensing time during beverage dispensing. <b>Variant: Guest mode/Frequent user mode</b> The dynamic green bar goes around the digital manometer from left to right in a 180° semicircle. <i>The digital manometer provides information on the current water pressure during coffee brewing.</i>
 Fig.: Progress (Staff mode)	<b>Variant: Staff mode</b> The dynamic green bar runs horizontally from left to right.
Double beverage preselection 	Preselection for double beverage <ul style="list-style-type: none"> <li><input type="checkbox"/> The "Double button visible" function is activated in the "Staff mode" operating mode.</li> <li><input type="checkbox"/> Beverages with double dispensing have been configured.</li> </ul> Activates double beverage dispensing. <ul style="list-style-type: none"> <li>► Activate [Double beverage dispensing] field.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> All beverages which are configured for double beverage dispensing are actively displayed for selection in the user interface.</li> </ul> </li> </ul> <i>The [Double beverage] preselection can be set in the beverage configuration and activated/disabled in the "Staff mode" operating mode by the service technician.</i>
Decaffeinated coffee preselection 	Preselection for decaffeinated coffee <ul style="list-style-type: none"> <li><input type="checkbox"/> The "DECAF button visible" function is activated in the "Staff mode" operating mode.</li> <li><input type="checkbox"/> To be able to dispense decaffeinated beverages, two grinders are needed, one of which is filled with decaffeinated beans or...</li> <li><input type="checkbox"/> The machine is filled with decaffeinated ground coffee via the manual inlet.</li> </ul> <i>The [Decaffeinated coffee] preselection can be set in the beverage configuration and activated/disabled in the operating mode by the service technician.</i> <b>Variant: With second grinder</b> <ul style="list-style-type: none"> <li>► Select the [Without caffeine] field.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> All beverages which are configured with decaffeinated coffee beans are available for selection.</li> </ul> </li> </ul> <b>Variant: With ground coffee and manual inlet</b> <ul style="list-style-type: none"> <li>► Select the [Without caffeine] field.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> All beverages which are configured as a source with "DECAF" are available for selection.</li> <li><input checked="" type="checkbox"/> When dispensing, a request for filling the decaffeinated ground coffee appears.</li> </ul> </li> </ul>

Symbol	Description
<div>Barista preselection</div> 	<div>Preselection for different coffee strengths</div> <div><div><input type="checkbox"/> The “Barista” function is available in the “Staff mode” operating mode.</div><div><input type="checkbox"/> The beverage was configured with the “Barista” option.</div></div> <div>The Barista field can be used to adjust the strength of the dispensed beverage for one brewing. After beverage dispensing, the Barista field returns to the standard setting of “medium”.</div> <div><i>The [Barista] preselection can be activated/disabled in the “Staff mode” operating mode by the service technician.</i></div>
<div>Cup size S / M / L</div> 	<div>Selection of a desired cup/mug size.</div> <div><div><input type="checkbox"/> The beverage was configured for dispensing various cup sizes.</div></div> <div>If several cup sizes are assigned to a beverage, they can be selected before beverage dispensing.</div> <div><i>The [Cup size] preselection can be set in the beverage configuration by the service technician and is available in every operating mode.</i></div>
	<div>Fig.: Selection of “Staff mode” size</div>
	<div>Fig.: Selection of “Frequent user mode” size</div>


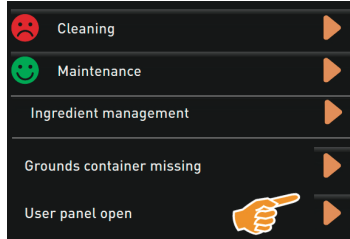

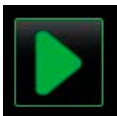
Symbol	Description
<p>Selection of beverage ingredients</p>  <p>Fig.: Selection of ingredient ("Guest mode")</p>	<p>Selection of available beverage ingredients</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The beverage was configured for dispensing various ingredients.</li> <li><input type="checkbox"/> Ingredient selection can differ depending on the operating mode set.</li> </ul> <p>Ingredients can be selected as follows:</p> <ul style="list-style-type: none"> <li>• "Guest mode" &gt; sequential selection (step by step)</li> <li>• "Staff mode" &gt; with preselection of ingredients</li> <li>• "Frequent user mode" &gt; direct selection of all ingredients</li> </ul> <p><i>The [Ingredients] preselection can be set in the beverage configuration and activated/disabled by the service technician.</i></p> <p>The following ingredients max. are available:</p> <ul style="list-style-type: none"> <li>• Beverage type (coffee, espresso, cappuccino, etc.)</li> <li>• Beverage size (S,M,L)</li> <li>• Coffee type (if with 2 or 3 grinders)</li> <li>• Milk type (when with Twin Milk)</li> <li>• Choco (with powder system)</li> <li>• Aroma (with Flavour Point syrup system)</li> </ul>
 <p>Fig.: Selection of ingredient ("Staff mode")</p>	
 <p>Fig.: Selection of ingredient ("Frequent user mode")</p>	
<p>Display of beverage price</p> 	<p><b>Variant: With payment system</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A payment system is activated.</li> <li><input type="checkbox"/> A beverage price has been configured</li> </ul> <p>► Start beverage dispensing.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Payment request is displayed.</li> </ul>
<p>Payment request</p> 	

Symbol	Description
<p>Positioning</p> 	<p>During beverage dispensing, the request for positioning the mug/cup appears.</p> <p><i>The "Place cup" request can be activated/disabled in the operating mode by the service technician.</i></p>
<p>Preselection and multiple dispensing</p> 	<p>Multiple dispensing from already-selected beverages</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Preselection is activated in the operating mode.</li> <li><input type="checkbox"/> No preselection is possible in the "Guest mode" operating mode.</li> </ul> <p>► Select beverage.</p> <p>► Select ingredients.</p> <p>► Set multiple dispensing using the [&lt;] 1-9 [&gt;] arrow keys</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Beverage dispensing is repeated max.9 times</li> <li><input checked="" type="checkbox"/> The progress of all dispensing is shown.</li> </ul> <p><i>The function is available if the parameter is activated in the "Configuration" - "Operating mode" - "Enable preselection on touch screen" setup.</i></p> <p>.</p>
<p>Beverage complete</p> 	<p>If dispensing is complete, the display indicates this.</p> <p><i>The information appears if the parameter is activated in the "Configuration" - "Operating mode" setup.</i></p>
<p>Service menu</p>  <p>Fig.: "Guest mode" service menu</p>  <p>Fig.: Service menu of "Staff mode" and "Frequent user" mode</p>	<p>Access service menu</p> <p>► Press the Service menu [⚙️] field.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The "Service menu" window opens.</li> </ul> <p>Additional information with colour coding:</p> <ul style="list-style-type: none"> <li>• The orange colour [!] marking in the upper left section of the field provides information on a pending machine message.</li> <li>• The red colour marking in the upper right section of the field provides information on a pending error message which requires action.</li> </ul> <p><i>See "Operation" - "Main touch screen window" - "Service menu" for further information.</i></p>
<p>Functions in the Service menu</p> 	<p>The following direct selection functions are available in the Service menu.</p> <ul style="list-style-type: none"> <li>• Warm rinsing</li> <li>• Screen cleaning (disable touch sensitivity)</li> <li>• "Quick Info" activation</li> <li>• Free vend mode (with active payment system)</li> <li>• Sleep mode activation</li> </ul> <p><i>Also see the following "Functions in the Service menu" description.</i></p>



Symbol	Description
<p>Quick Info</p> 	<p>The “Quick Info”, which only appears in the Service menu, provides information on the following:</p> <ul style="list-style-type: none"> <li>• T &gt; Hot water boiler temperature (tea) in [°C]</li> <li>• S &gt; Steam boiler temperature sensor in [°C]</li> <li>• SW &gt; Steam wand temperature (optional) in [°C]</li> <li>• WF &gt; Water flow in [ ml]</li> <li>• IP &gt; Network adapter address (SOUL=1 Adapter)</li> <li>• M &gt; Available memory in [%]</li> <li>• RS &gt; Provides information on intensity of beverage supply (Rush hour mode) <ul style="list-style-type: none"> <li>• Active with more than 30 beverages per hour</li> <li>• When active, beverage outlet rinsing is suppressed</li> <li>• Active mode is displayed by &gt; RS[*]</li> </ul> </li> </ul> <p><i>See also “Operation” – “Service menu functional scope” – “Quick Info on/off direct selection”.</i></p>
<p>Display messages (simple)</p> 	<p>Error messages or requests are shown in the display corresponding to the set operating mode.</p> <p><b>Variant: “Simple” (“Guest mode”)</b></p> <p>Display messages in the “Guest” operating mode with “Simple” setup</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The coffee machine is no longer ready for use.</li> <li><input checked="" type="checkbox"/> The “Inform service staff” request is displayed.</li> </ul> <p><i>Display messages in “Specific” mode are only displayed in the “Guest” operating mode.</i></p>
<p>Display messages (specific)</p> 	<p><b>Variant: “Specific” (“Staff mode”/“Frequent user mode”)</b></p> <p>Display messages in the “Staff” or “Frequent user” operating mode with “Specific” setup.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Action requests or errors are displayed directly.</li> <li><input checked="" type="checkbox"/> It may be possible to make the coffee machine ready for use regardless.</li> </ul> <p><i>Display messages in “Specific” mode are displayed in the “Staff” and “Frequent user” operating mode.</i></p> <p><i>The service technician can change the setup to the error message.</i></p>
<p>Pending error/fault message or action request</p> 	<p>Error/Fault messages are displayed at the top or bottom edge of the user interface. If an error/fault message is active, intervention by a user or service technician is needed.</p> <p>► Select the [Error/Fault message] field.</p> 
<p>Fig.:</p>	<p>Fig.: Error/Fault message</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The Service menu is displayed.</li> <li>► Select the pending error/fault message with the [&gt;] field in the Service menu.</li> <li><input checked="" type="checkbox"/> The “Smart info” window containing additional information appears.</li> </ul> <p><i>See “Troubleshooting” – “Smart info window” for a detailed description.</i></p>



Symbol	Description
<p>Open error/fault message or action</p> 	<p>In the Service menu, the [▶] field opens the window for a pending action or error/fault message.</p>  <p>Fig.: Error/Fault message in the Service menu</p>
<p>Confirmation in the Service menu</p> 	<p>The [Confirmation] field starts pending actions or confirms displayed action requests.</p>
<p>Next and confirmation in the Service menu</p> 	<p>The field takes you step-by-step through display-guided steps for cleaning, descaling or grinder service.</p>

### 5.6.3 [Log-in/Log-out] profile

Access rights for functions and parameters are adjusted as appropriate in line with each profile.



See "Programming" – e.g. "Caretaker profile" for a detailed overview and description of the profiles.

#### Variant: Access to Service menu without PIN entry

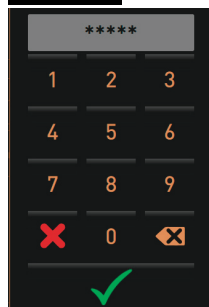
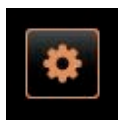


- ▶ Press the [Service menu] field at the bottom left of the user interface.
  - ☒ The Service menu opens with the last activated user profile, or without an active profile (not logged in).



Fig.: No profile is logged in.

#### Variant: Access to Service menu with PIN entry



- ☐ Access to the Service menu is protected by a PIN configured by the service technician.
- ▶ Press the [Service menu] field at the bottom left of the user interface.
  - ☒ The numeric keypad for PIN entry appears.
- ▶ Enter the configured PIN number and confirm.
  - ☒ The Service menu opens without an active user profile.
  - ☒ All direct selection functions, with exception of "Free vend", are available for selection.
  - ☒ "Info" – "Show versions" is available in the setup.

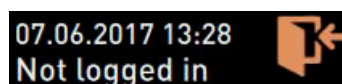


Fig.: No profile is logged in.

#### Profile overview access window



If the Service menu is closed, the currently logged-in profile is retained. The registered profile is logged out (log-out) after the [Log-out] field is pressed or after a restart.



Fig.: Log-in field

- Select the [Log-in] field at the top of the Service menu.
  - ☒ The window with the profiles configured by the service technician opens.
  - ☒ Profiles protected with a PIN are marked with a lock symbol.

The following profiles can be provided by the service technician:

- Caretaker
- Bookkeeper
- Bookkeeper reduced
- Facilities manager
- Quality manager
- Operator

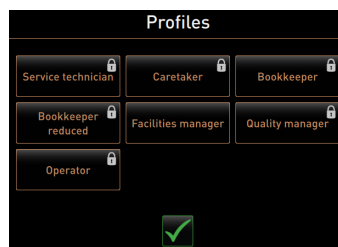


Fig.: Profile overview window

*Profiles marked with a lock are PIN-protected.*

#### Variant: Activating unprotected profile

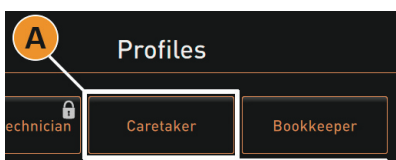


Fig.: Profile without PIN

- Select desired unprotected profile [A], 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.

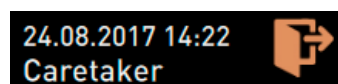


Fig.: Caretaker profile enabled



See "Programming" – "Profiles" for detailed information on the functions of the individual profiles.

#### Variant: Activating protected profile

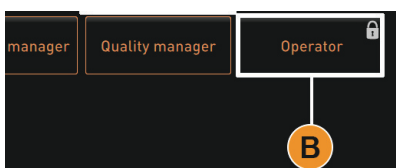


Fig.: Profile with PIN

- ☐ The field, e.g. "Operator" profile, is protected by a PIN and is marked with a lock symbol.
- Activate protected profile, e.g. [Operator] [B].
  - ☒ The keypad for PIN entry opens.
- Enter the configured PIN and confirm using the [OK] [C] field.
  - ☒ The Service menu appears as per the selected profile.

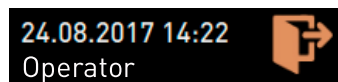
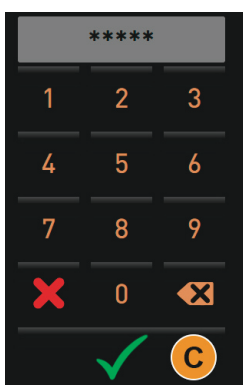


Fig.: Operator profile enabled



The service technician can activate profiles. Every profile has specific authorisations. Logging in with a profile can be protected with a PIN. The service technician can configure a PIN and assign it to the profile.



See "Programming" – "Profiles" for detailed information on the specific functions.

### Profile log-out



Fig.: Field log-out

- ▶ Select the [Log-out] field at the top of the Service menu.
  - ☑ The currently logged-in profile is logged out.
  - ☑ Any authorisations become invalid.
  - ☑ "Not logged in" appears in the Service menu.

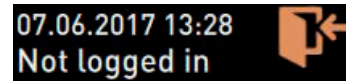


Fig.: No profile is active.

## 5.6.4

### Service menu overview

#### Operating field for the Service menu



The operating field for the Service menu in the user interface provides information about pending information or error messages.

Colour coding in the [Service menu] operating field:

- [No colour] [A] There are no pending messages in the Service menu.
- [Orange] [B] Informs about pending information in the Service menu.
- [Red] [C] Provides information on pending error messages or action requests in the Service menu.

#### Functions in the Service menu



- ▶ Press the [Service menu] field at the bottom left of the user interface.
  - ☑ The Service menu appears.

Pending messages:

- [A] Cleaning status and [▶] field for cleaning start
- [B] Maintenance and [▶] field for carrying out maintenance
- [C] Ingredient management
- [D] Pending error messages and action requests
- [E] Direct selection of operating fields
  - 1 [Start rinsing]
  - 2 [Display cleaning] (30 sec)
  - 3 [Switch Quick Info on/off]
  - 4 [Switch on free vend mode] (with activated payment system)
  - 5 [Shut down]
- [F] [Back] takes you back to the user interface.
- [G] [Info] system information including QR code [Quick Response Code].
- [H] [Beverage dispensing history] list of dispensed beverages.
- [I] [Setup] takes you to the machine configuration.
- [J] [Log-in/Log-out] profile selection and profile log-in/log-out.

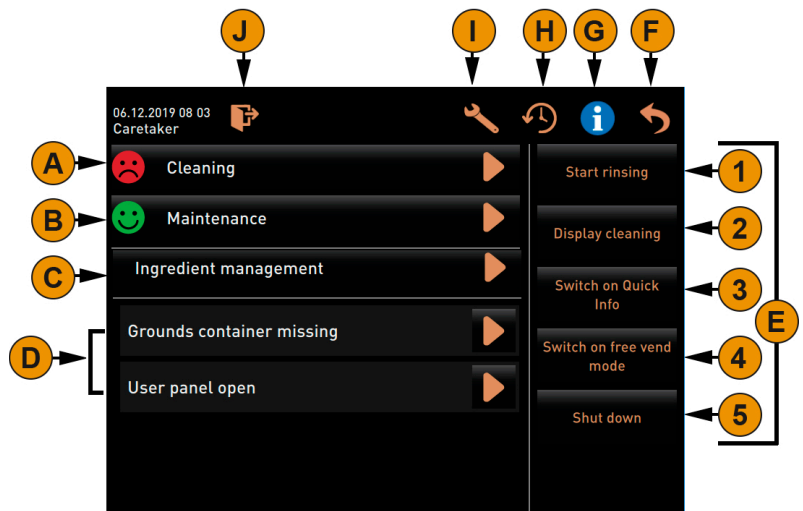


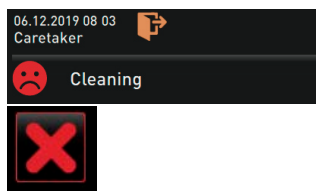
Fig.: "Service menu" window view



If an error is detected while the machine is being restarted, the Service menu is displayed straight away.

## 5.6.5 Service menu functional scope

### Cleaning



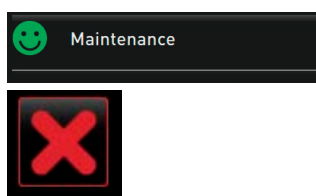
PIN-protected function (caretaker, operator, service technician).

- ▶ Select the [Cleaning] field.
  - ☒ The display-guided cleaning process starts.
  - ☒ Cancelling is possible with the [X] field.
  - ☒ The last executed cleaning process is displayed.

### Maintenance



In general, a [green smiley] indicates that cleaning has been completed. A [red smiley] indicates that cleaning is pending.



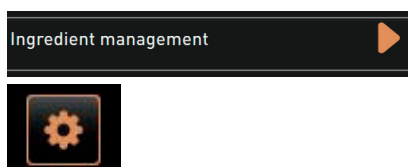
PIN-protected function (caretaker, operator, service technician).

- ▶ Perform the displayed maintenance.
- ▶ Select the [Maintenance] field.
  - ☒ Cancelling is possible with the [X] field.
- ▶ Acknowledge the maintenance process.
  - ☒ The acknowledged maintenance process is indicated with the date and a [green smiley].



In general, a [red smiley] indicates that maintenance is pending. A [green smiley] indicates that maintenance has been performed and none is pending.

### Ingredient management



Available ingredients, e.g. milk system, can be enabled/disabled in ingredient management.

A displayed-guided bottle change can also be started in the ingredient [Flavour1-4] [syrup1-4].

#### Variant: Disabling/Enabling ingredient

- ▶ Select the [Ingredient management] field.
  - ☒ The window with the active ingredients opens.
- ▶ Under "Action", select [ON/OFF] field.
  - ☒ The ingredient is enabled/disabled.
- ▶ Select field to get back to the Service menu.

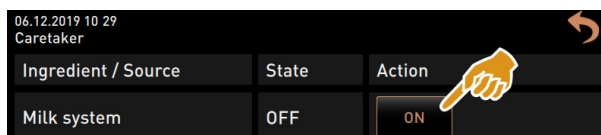
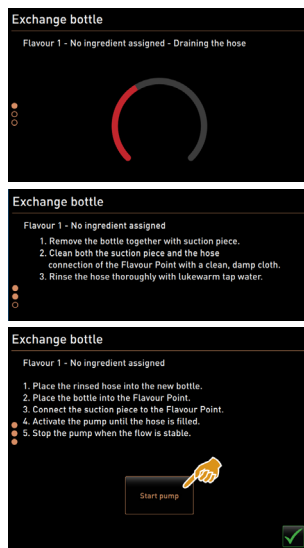


Fig.: Ingredient management window



### Variant: Syrup bottle change

- ▶ Select the [Ingredient management] field.
  - ☑ The window with the active ingredients opens.
- ▶ Select syrup type [1 to 4], under "Action", [Bottle change] field.

Ingredient / Source	State	Action
Milk system	OFF	ON
Flavour 1 - No ingredient...	ON	Exchange bottle
Flavour 2 - No ingredient...	ON	Exchange bottle

Fig.: Ingredient management window

- ☑ The display-guided bottle change steps open in a separate "Bottle change" window.
- ☑ The previously selected syrup hose is drained.
- ▶ Remove bayonet lock of the empty bottle on the Flavour Point and thoroughly clean hose with bottle adapter.
- ▶ Confirm cleaning with the field.
- ▶ Insert bottle adapter with cleaned hose into the new syrup bottle.
- ▶ Reconnect the bayonet lock to the Flavour Point.
- ▶ Select the [Start pump] field, then the [Start pump] field to refill the hose.

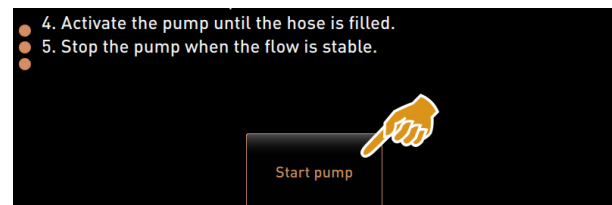
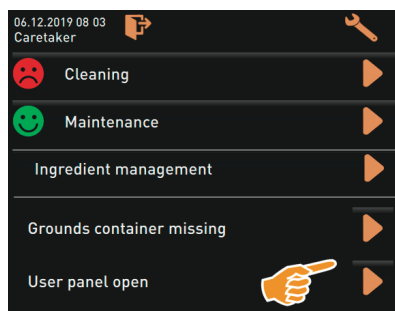


Fig.: Ingredient management window

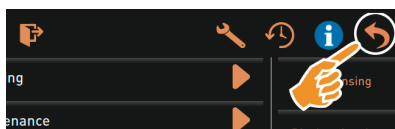
- ▶ Confirm hose filling with the field.
- ☑ The "Bottle change" window closes, the user interface is displayed.

### Error/Fault message or action request



- ▶ Select the pending message with the field.
  - ☑ The pending request is displayed in a separate window.
  - ☑ The pending fault/error message is displayed and described in a separate window.
- ▶ Rectify the pending message or perform the action request.
  - ☑ The fault/error message or the action request is automatically deleted from the list.
  - ☑ The service technician has an overview of events in the "Info" - "Error statistics" main menu.

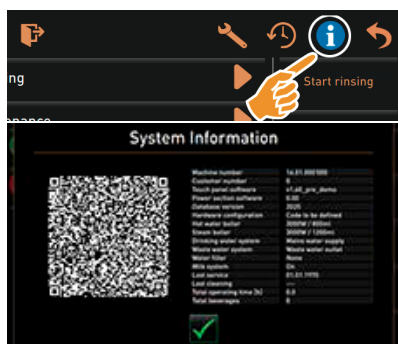
### Back to the user interface



The field takes you back to the user interface.

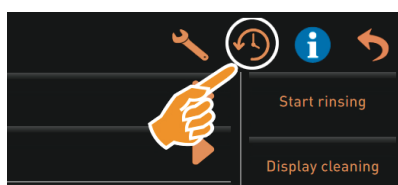
- ▶ Select the [Back] field.
  - ☑ The user interface appears.
  - ☑ The registered profile is logged out.

## System information



- ▶ Select the [i] field.
  - ☑ The system information is displayed in a separate window.
  - ☑ A QR code with system information is also displayed.

## Beverage dispensing history



- ▶ Select the [clock with arrow] field.
  - ☑ A window opens and all beverages already dispensed are displayed in a list.
  - ☑ In addition, the dispensing time for the respective beverage is displayed for every dispensing process.
  - ☑ The pure beverage dispensing time (coffee) is listed at the right.

Timestamp	Beverage	Pure dispensing time (s)	Dispensing time (s)
08.11.19 08:12	Tea	9.3s	12s
08.11.19 08:11	Mein Kaffee	30.9s	15s
08.11.19 08:10	Espresso	25.2s	12s

The pure dispensing time for single coffee beverages should be between 10–15 sec ca.20 –25 sec sec for double beverages. However, this is only a reference value and can vary due to the grind quantity, grinding level, water temperature and coffee type.

## Settings



PIN-protected function.

- ▶ Select the [wrench] field.
  - ☑ The "Setup" is displayed.
  - ☑ These make the parameter settings available.

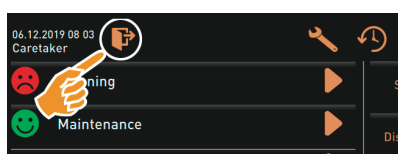


The access authorisation for parameter settings depends on the registered profile.



See also "Programming" chapter for a detailed description.

## Log-in/Log-out

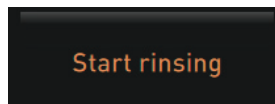


Logging in and selecting a profile.

- ▶ Select the [person with arrow] field.
  - ☑ The window for selecting a profile appears.

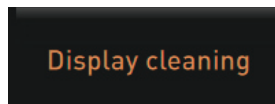
See "Operation" – "Main touch screen window" – "Log-in and log-out" for a detailed description.



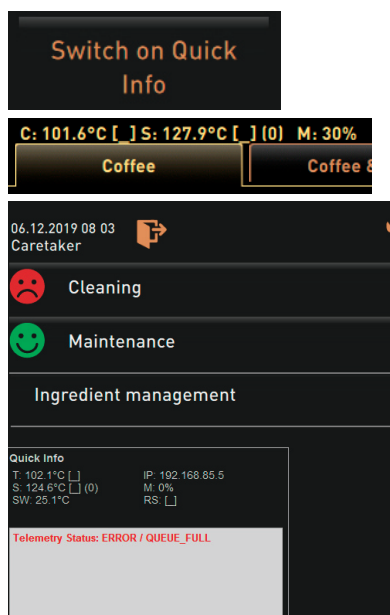
**[Start rinsing] direct selection**

- ▶ Select the [Start rinsing] field.
  - ☒ Hot rinsing for the all systems (coffee system, milk system or powder system) is performed.
  - ☒ Cancelling is not available.

See "Cleaning" – "Rinsing intervals".

**[Display cleaning] direct selection**

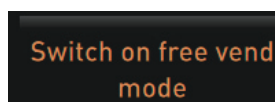
- ▶ Select the [Display cleaning 30 sec] field.
  - ☒ The display is insensitive for a period of 30 sec and can be cleaned.

**[Quick Info on/off] direct selection**

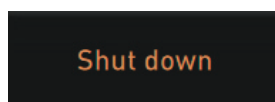
- ▶ Select the [Switch Quick Info on/off] field.
  - ☒ The Quick Info window appears at the top left of the user interface.
  - ☒ The Quick Info window provides information on the boiler temperatures, coffee hot water (C) tea hot water (T) and steam (S).
  - ☒ [SW] informs about the waste water tank temperature.
  - ☒ [M:xx%] provides information on the memory used.

The "Quick Info" window in the Service menu contains an additional text window [A].

The text window contains current status messages such as connection monitoring if telemetry is active.

**Direct selection [Switch on free vend mode] (with payment system)**

- ▶ Select the [Switch on free vend mode] field.
  - ☒ Chargeable beverages are made available for free vend.
  - ☒ The [Switch on free vend mode] field is accessible to the service technician, bookkeeper and caretaker.

**[Shut down] direct selection**

- ▶ Select the [Shut down] [F] field.
  - ☒ The machine is shut down.
  - ☒ The machine is shut down but not de-energised.
  - ☒ The display does not show anything and is inactive.

## 5.7 Filling and connecting



When refilling, take special care that the max.filling level is selected so that the content does not touch the container cover.

### 5.7.1

#### Coffee beans



### ! WARNING

**Cutting injuries! Danger of injury from the rotating grinding discs in the grinder.**

Never reach into the bean hoppers while the coffee machine is switched on.



## NOTE

**Clogging and blocking hazard!** Filling the hopper with foreign objects can lead to clogging, blocking or destruction of the grinder.

Never fill the bean hopper with anything other than coffee beans.

### Filling the bean hopper



*If necessary, clean coffee residues off the container and cover before filling the bean hopper.*



*See "Operation" - "Operating elements on the machine" - "Interior machine operating elements" to unlock the bean hoppers.*

- ▶ Remove the cover from the bean hopper.
- ▶ Fill the bean hopper. Observe the maximum fill volume.
- ▶ Put the cover back on the bean hopper and lock.
  - ☒ The bean hopper(s) is/are filled and locked.
  - ☒ Coffee beans do not touch the cover.



Fig.: Bean hopper with max. filling quantity

## 5.7.2

### Water

#### Fixed water connection



## NOTE

**Closed water supply** The machine can suffer damage if the water pump runs dry.

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

- ▶ Open the stop valve on the main water valve.



*For reasons relating to insurance law, it is advisable that the main water valve of the water supply be closed at the end of the day.*

**Option: External drinking water tank**

- ▶ Rinse out the external drinking water tank thoroughly with fresh water every day.
- ▶ Clean the cover of the drinking water tank with fresh water.
- ▶ Fill the drinking water tank with fresh drinking water before using it.
- ▶ Reinsert the drinking water tank.



Ensure that the filled drinking water does not touch the closed drinking water tank cover.

**5.7.3****Coffee machine powder(Option)****! WARNING**

**Risk of trapping fingers! Danger of injury on the rotating dosing screws!**

Never reach into the powder container while the device is switched on.

**NOTE**

**Coffee machine powder Danger of blockage due to filling with impermissible powder!**

Never fill anything other than powder for automatic operation into the powder container.



Ensure that the filled choco or topping powder does not touch the closed powder container cover.

**Filling the powder container**

- ▶ Remove the cover from the powder container.
- ▶ Carefully refill the powder container.
- ▶ Reattach the powder container cover.
  - ☒ The powder does not touch the cover.



Fig.: Powder container with max.filling quantity



See "Operation" - "Operating elements on the machine" - "Interior machine operating elements" to unlock the powder container.

### 5.7.4 Best Foam™ milk system(Optional)



#### CAUTION

**Risk of infection! Contamination in the milk pump can lead to health problems.**

- ▶ Cleaning must be done after installation, commissioning or recommissioning.
- ▶ Run the display-guided cleaning programme before dispensing the first beverage.



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

#### Side or under-machine cooling unit

- ▶ Open the side cooling unit door.
- ▶ Remove the milk hose adapter [A] from the milk container cover.
- ▶ Pull out the milk container [B] and lift the cover.
- ▶ Rinse out the milk container, riser pipe and cover with fresh water.
- ▶ Pour in milk, observing max. fill level [C] of 10 l.
  - ☒ The milk does not touch the cover.
- ▶ Close the milk container with the cover and slide it back into the side cooling unit.
- ▶ Attach the milk hose adapter to the milk container cover.
- ▶ Close the cooling unit door.

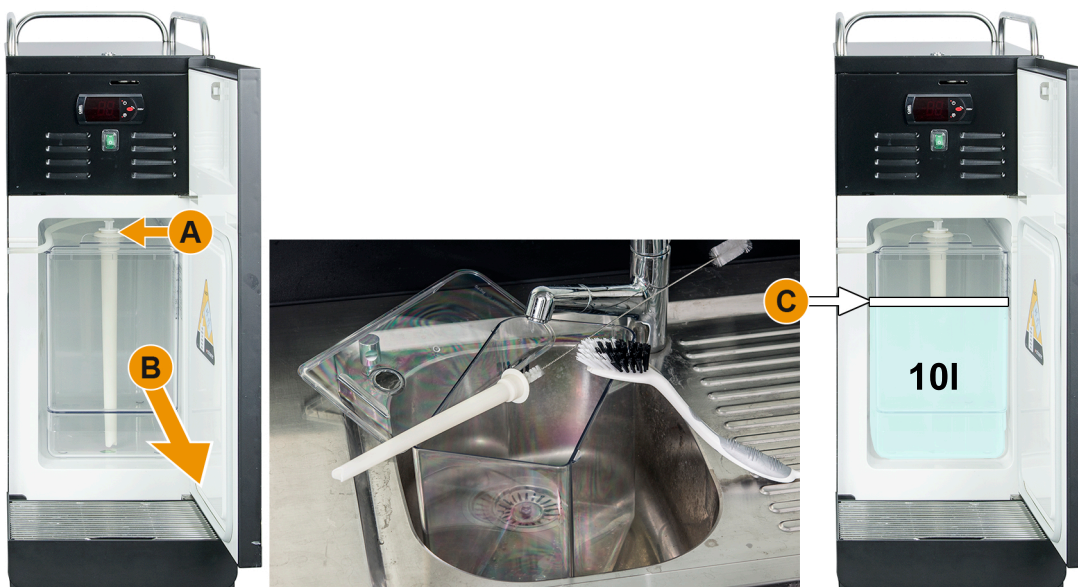


Fig.: Refill cooling unit



Check the cooling temperature of 3 – 5 °C regularly.



See "Operation" – "Switching on" – "Side or under-machine cooling unit".

#### Cup & Cool, under-machine cooling unit and under-counter cooling unit



#### NOTE

**Pre-cooled milk** The Cup & Cool cooling unit cannot cool down warm milk.

Always use pre-cooled milk with 3 – 5 °C for refilling.

- ▶ Open the side cooling unit door.
- ▶ Remove the milk hose adapter [A] from the milk container cover.
- ▶ Pull out the milk container [B] and lift the cover.
- ▶ Rinse out the milk container and cover with integrated riser pipe with fresh water.
- ▶ Pour in milk, observing the max. fill level.

Filling quantities:

- Cup & Cool milk container = max.4 l
- Milk container under-machine cooling unit (UM CU) = max.9.5 l
- Milk container under-counter cooling unit (UC CU) = max.9.5 l

- ▶ Close the milk container with the cover and slide it back into the side cooling unit.
- ▶ Attach the milk hose adapter to the milk container cover.
- ▶ Close the cooling unit door.

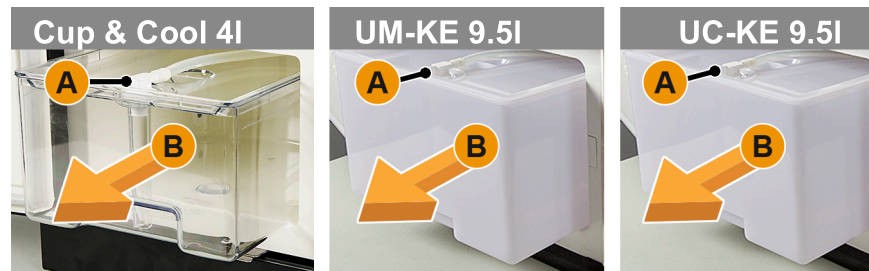


Fig.: Available options for Refill milk function



*Check the cooling temperature of 3 – 5 °C regularly.*



*See "Operation" - "Switching on" - "Side or under-machine cooling unit".*

### 5.7.5

#### Filling Flavour Point (syrup module) or bottle change(Option)

- ▶ Put syrup bottles (max. 4 bottles) in the Flavour Point.
- ▶ Remove bottle caps and lead plug [A] with hose [B] into bottle.
- ▶ Firmly press plug [A] into bottle.
- ▶ Insert adapter [C] into Flavour Point and lock by turning to the right, bayonet lock.
- ▶ Repeat steps listed above for all syrup bottles



Fig.: Flavour Point refilling or bottle exchange





After connecting syrup bottles, refilling from the syrup hose is required. The “Ingredient management” routine is used for this purpose.



See also “Operation” – “Main touch screen window” – “Service menu” – “Functional scope” – “Ingredient management”.

## 5.8 Positioning the beverage outlet and cups



The AHA (automatic height-adjustable beverage outlet) automatically adjusts to the correct outlet height corresponding to the previously selected beverage.



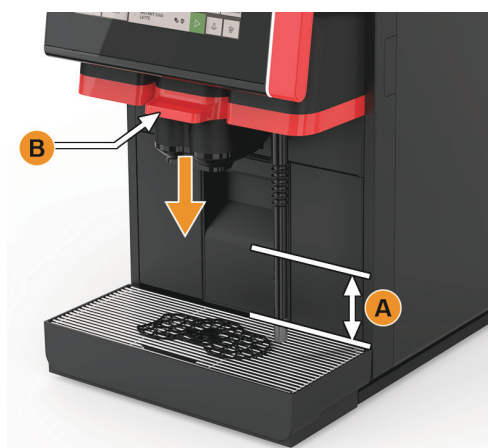
Fig.: Manual beverage outlet with gripping option [A].



Fig.: Automatic “AHA” beverage outlet without gripping option.

### 5.8.1 Positioning beverage outlet (with manual beverage outlet)

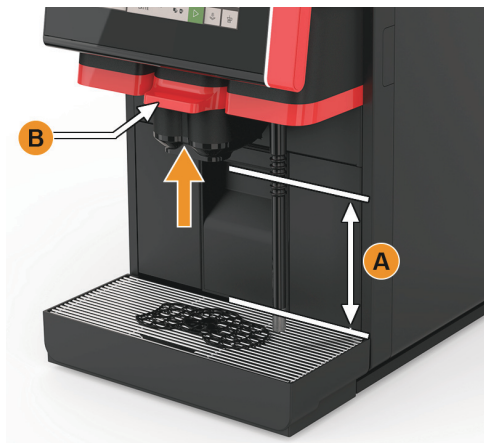
Beverage outlet in low position [A] 65 mm, e.g. for espresso



► Lead the beverage outlet to the cup using the handle [B].



### Beverage outlet in high position [A] 185 mm, e.g. for Latte Macchiato



- Slide the beverage outlet all the way up using the handle [B].
- Lead the beverage outlet to the cup or glass using the handle [B].

## 5.8.2

### Cup positioning aid

#### Positioning aid in cup platform

The following cup positioning aids can be used in the cup platform:

- Single positioning aid (option) for dispensing single beverages
- Double positioning aid (standard) for dispensing double beverages

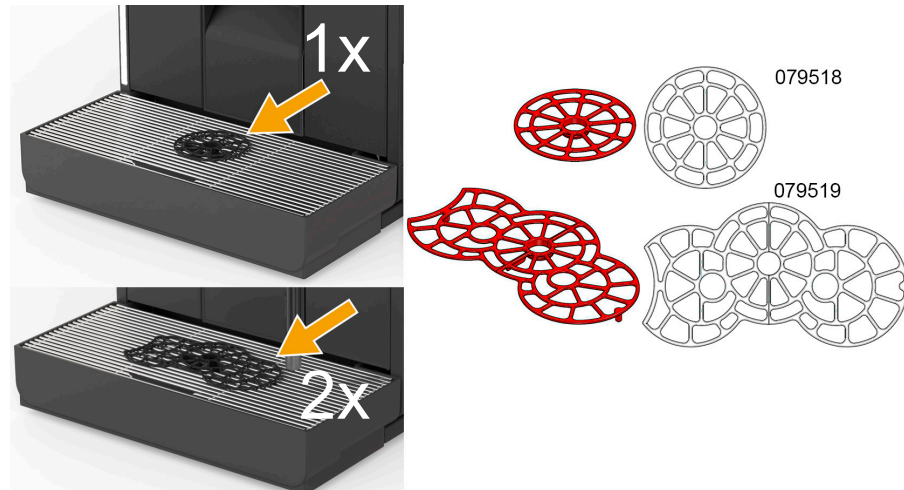


Fig.: Article number for cup positioning aids

The positioning aid can be clicked into the cup platform.

- Click positioning aid into the cup platform.
  - ☒ The (centre) positioning aid for individual beverages is aligned to the centre of the beverage outlet.
  - ☒ The (centre) positioning aid for individual beverages is aligned to the rear of the machine.
  - ☒ The recess in the positioning aid for external hot water dispensing is located on the left.

### Individual beverages



Fig.: Single beverage position

- Position a cup or glass at position [A].

### Double beverage



Fig.: Double beverage positions

- Position cups or glasses at positions [A] and [B].

### Option: External hot water dispensing



Fig.: Left hot water dispensing position

- Position a cup or glass for separate hot water dispensing at position [A].

*The hot water or steam outlet is customer-specific and can be mounted on the left or the right.*

**Option: Steam dispensing**

Fig.: Right steam outlet position

- Position a small mug under the steam wand at position [A].  
*The hot water or steam outlet is customer-specific and can be mounted on the left or the right.*



See also "Product description" – "Scope of delivery" under "General accessories" – "Cup positioning aid".

## 5.9 Beverage selection

### 5.9.1 Beverage selection overview



#### **CAUTION**

**Risk of infection! Contamination in the milk pump can lead to health problems.**

- Cleaning must be done after installation, commissioning or recommissioning.
- Run the display-guided cleaning programme before dispensing the first beverage.



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



*The selection and number of the available menu cards (tabs) and the beverages contained therein are dependent on the selected operating mode, "Standard" or "Custom". The operating mode can be preselected and individually configured by the service technician.*



#### **NOTE**

**Restrictions without mains water supply! Machines with external drinking water tank are restricted in the beverage selection.**

Cooled beverages are not possible with external drinking water tank!  
 Powder products are **always** dispensed hot with an external drinking water tank, regardless of the set temperature.



*A beverage selection can be automatically aborted after a period of inactivity of 5 – 40 sec. The user interface is displayed so that a new beverage can be selected. The service technician can adjust the time span in the "Configuration" - "Operating mode" "Time-out selection reset" setup.*

The [Guest mode], [Staff mode] and [Frequent user mode] user interfaces feature different functions and fault messages. Other functions and displays which are activated in the standard setting can be seen in the following table.

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

Operating mode	Guest mode	Staff mode	Frequent user mode
Display of notification mode	Simple	Specific	Specific
Barista button visible	0	0	ON
Cup size button visible	0	0	0
Cup icons visible	ON	ON	ON
Icon set	Paper cups	Default	Paper cups
Screen saver	ON	0	ON
Menu cards	Custom	Custom	Custom
Activate beverage pre-selection	0	ON	0
Enable preselection on touch screen	0	ON	0
Number of positions in preselection	0	0 – 8 [8]	0
Enable preselection on 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
Show group selection	0	0	0
Sequential beverage modification	ON	0	0
Show "Place cup"	0	0	ON
Show "Progress"	ON	0	ON
Show "Beverage finished"	ON	0	0
Show "Beverage finished" interruption	0.5 – 60 [3 sec]	0.5 – 60 [3 sec]	0.5 – 60 [3 sec]
Access service menu	PIN	PIN	PIN


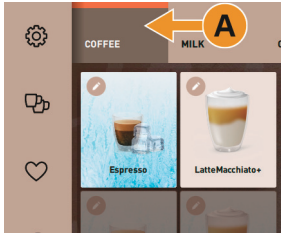
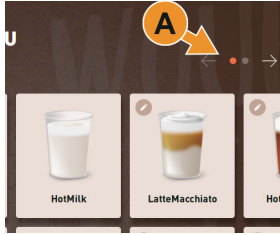
**Legend:**

0	Default > disabled > activation not possible
0	Default > disabled > activation is still possible
ON	Default > active > disabling is possible
ON	Default > active > disabling is not possible

## 5.9.2 Beverage selection step sequence


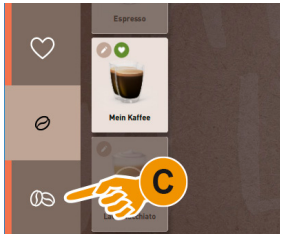
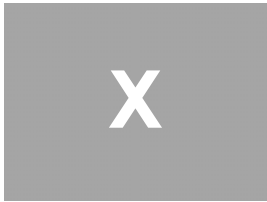
### Navigating to menu cards

- ☐ The machine is ready for use.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
0	User interface view			
1	Navigating to the menu card with the desired beverage field	<p>► Scroll through the beverage fields with the [A] [&lt; / &gt;] field.</p> <p><input checked="" type="checkbox"/> The desired beverage field is active and displayed.</p>	<p>► Directly select (Menu card) tab with the [A] field.</p> <p><input checked="" type="checkbox"/> Stored and active beverage fields are displayed.</p>	<p>► Scroll through the beverage fields with the [A] [&lt; / &gt;] field.</p> <p><input checked="" type="checkbox"/> The desired beverage field is active and displayed.</p>


### Preselection of beverage options

- ☐ The Staff mode user interface is active.


Sequences	Target	Guest mode	Staff mode	Frequent user mode
2	User interface view			
	Beverage preselection	<i>Beverage preselection is not available.</i>	<p>► Define beverage preselection with the [C] (coffee strength) field, for example.</p> <p><input checked="" type="checkbox"/> All beverages with the respective preselection are displayed.</p> <p>Possible preselection:</p> <ul style="list-style-type: none"> <li>• Double beverage dispensing</li> <li>• Decaffeinated coffee</li> <li>• Coffee strength (barista)</li> </ul>	<i>Beverage preselection is not available.</i>


### Selecting beverage field

- ☐ The menu card contains configured beverages.
- ☐ The preselection contains configured beverages.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
3	Beverage field			
	Activating beverage field	▶ Tap on desired beverage field [B]. <input checked="" type="checkbox"/> Window for additional beverage options opens.		

### Beverage modification

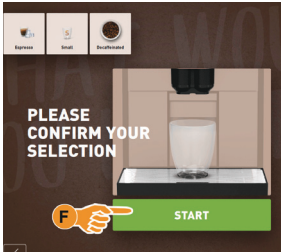
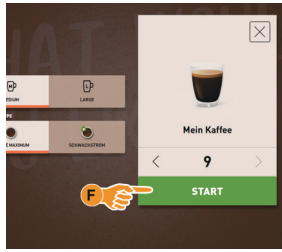
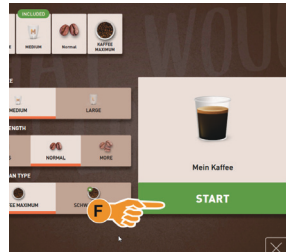
- ☐ The previously-selected beverage field contains the  symbol.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
4	Beverage modifications			
	Determining desired beverage modification	<ul style="list-style-type: none"> <li>▶ Tap on desired modification [D].</li> <li>☑ The activated modification is displayed.</li> <li>☑ Other modifications are displayed for selection.</li> <li>▶ Select other modifications.</li> </ul> <p><i>Sequential selection of the beverage modifications.</i></p>		
		<ul style="list-style-type: none"> <li>▶ Tap on desired modification [D].</li> <li>▶ Set multiple dispensing [E] [2-9].</li> <li>☑ Activated modification is active.</li> </ul> <p><i>Direct selection of the beverage modifications.</i></p>		
		<ul style="list-style-type: none"> <li>▶ Tap on desired modification [D].</li> <li>☑ Activated modification is active.</li> <li>☑ Contained modifications are displayed above [D1].</li> </ul> <p><i>Direct selection of the beverage modifications.</i></p>		





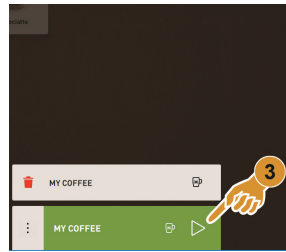
## Starting dispensing

- ☐ Beverage modification is complete and the beverage is ready for dispensing.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
5	Beverage ready for dispensing			
	Start dispensing	<ul style="list-style-type: none"> <li>▶ Select the [F] [START] field.               <ul style="list-style-type: none"> <li>☑ Place cup request is displayed.</li> </ul> </li> <li>▶ Select the [F] [START] field.               <ul style="list-style-type: none"> <li>☑ Beverage dispensing starts.</li> </ul> </li> </ul> <p><i>The Place cup request can be activated in the operating mode.</i></p>		


## Multiple dispensing overview (Staff mode)

- ☐ A beverage preselection was previously activated (max.2-9 beverages)

Sequences	Target	Staff mode
5a	Multiple dispensing in "Staff mode"	  
	Removing and confirming beverages	<ul style="list-style-type: none"> <li>▶ Select the field [1] with 3 points.               <ul style="list-style-type: none"> <li>☑ All preselected beverages [2] are listed</li> <li>☑ Completed beverage dispensing is displayed in green.</li> </ul> </li> <li>▶ Remove cup or mug from beverage outlet.</li> <li>▶ Select the green [&gt;] field.               <ul style="list-style-type: none"> <li>☑ The first beverage dispensing is confirmed.</li> <li>☑ Dispensing for the next beverage in the list starts.</li> </ul> </li> <li>▶ Repeat step [3] for additional beverages.</li> </ul> <p><i>Preselection for several beverages is only available in Staff mode.</i></p>

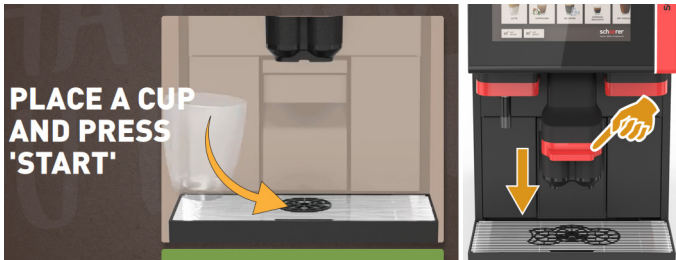
## Payment

- ☐ A payment system is activated and the beverage contains a beverage price.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
5b	Payment			
	Selecting means of payment and paying	<p><i>The cup/mug placement animation is shown on the display.</i></p> <ul style="list-style-type: none"> <li>▶ Select the [1] [Pay] field.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The window with the available means of payment appears.</li> <li><input checked="" type="checkbox"/> If there is a coin changer system, [3] appears when changing coins is no longer possible.</li> </ul> </li> <li>▶ Select available and desired means of payment [2].</li> <li>▶ Confirm payment process and finish.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Beverage dispensing starts.</li> </ul> </li> </ul>		

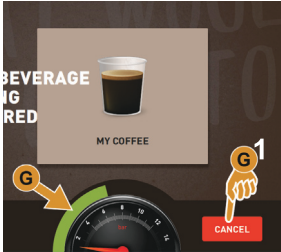

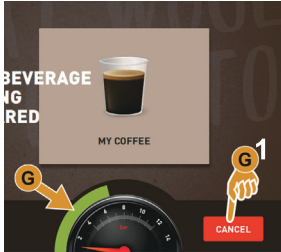
## Placing cup/mug

- ☐ The "Place cup" function is activated in the operating mode.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
5c	Placing cup display			
		<p><i>The cup/mug placement animation is shown on the display.</i></p> <ul style="list-style-type: none"> <li>▶ Place a cup or mug under the beverage outlet.</li> <li>▶ Pull beverage outlet down to cup/mug (manual beverage outlet)</li> </ul>		

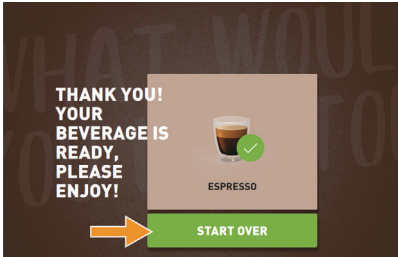
### Show "Progress"

- ☐ Beverage dispensing is started.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
6	Beverage dispensing progress Stop dispensing			
	Stopping beverage dispensing	<p>The progress [G] is shown as a green bar in a 180° semicircle.</p> <ul style="list-style-type: none"> <li>► Select the [G1] [Stop] field.</li> <li><input checked="" type="checkbox"/> Dispensing is aborted.</li> </ul> <p><i>The progress screen can be activated in the operating mode.</i></p>	<p>The progress [G] is shown as a green bar.</p> <ul style="list-style-type: none"> <li>► Select the red [G1] [X] field.</li> <li><input checked="" type="checkbox"/> Dispensing is aborted.</li> </ul> <p><i>The progress screen with a 180° bar can be activated in the operating mode.</i></p>	<p>The progress [G] is shown as a green bar in a 180° semicircle.</p> <ul style="list-style-type: none"> <li>► Select the [G1] [Stop] field.</li> <li><input checked="" type="checkbox"/> Dispensing is aborted.</li> </ul> <p><i>The progress screen can be activated in the operating mode.</i></p>

### Complete message

- ☐ The "Show Beverage finished" function is activated in the operating mode.

Sequences	Target	Guest mode	Staff mode	Frequent user mode
7	Beverage dispensing complete display	 <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Beverage dispensing is complete.</li> <li><input checked="" type="checkbox"/> The display goes out automatically and leads back to the user interface.</li> <li>► Remove cup or mug from the drip tray.</li> </ul> <p><i>The display is hidden after the set time.</i></p>		

### 5.9.3 Coffee beverages with manual inlet

The manual inlet makes it possible to prepare beverages with ground coffee.



*The configuration for coffee beverages with ground coffee is available in the beverage settings. Configuration can be done by the service technician.*

- ▶ Select the tab or beverage group from the user interface.
- ▶ (If available) Select a beverage option, e.g. [2x].
- ▶ Select a beverage type, e.g. espresso or coffee.
- ▶ (If available) Select a dispensing option, e.g. small, medium or large.
- ▶ Start dispensing.
  - ☑ A request to add ground coffee appears.
- ▶ Open the cover [A] of the manual inlet.
- ▶ Use the measuring spoon [B] (see scope of delivery) to pour 1 portion of ground coffee into the opening of the manual inlet.
- ▶ Confirm addition of ground coffee in the user interface using the [C] field.
  - ☑ Beverage dispensing starts.

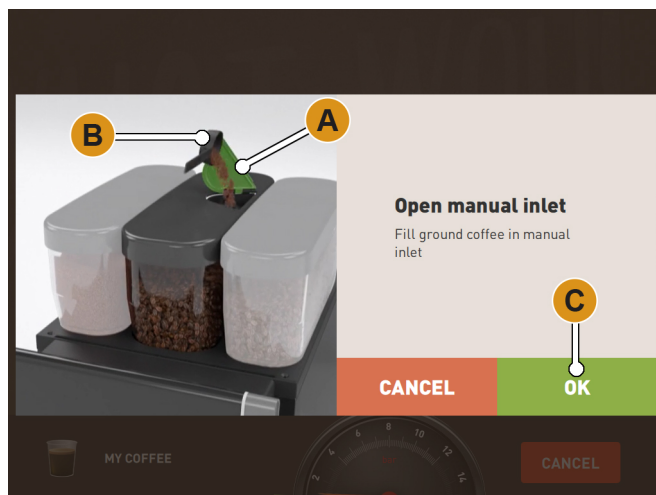
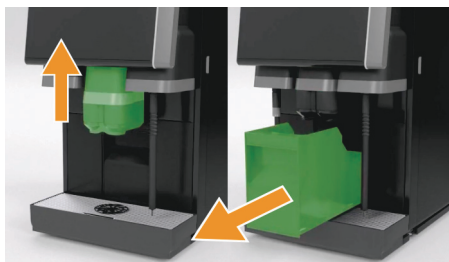


Fig.: Fill ground coffee request.

## 5.10 Emptying

### 5.10.1 Grounds container

#### Standard grounds container



- ▶ If without "AHA", push the beverage outlet upwards until it snaps into place.
- ▶ Pull the grounds container out of the machine towards the front.
  - ☑ The "Grounds container missing" message appears on the display.
- ▶ Empty grounds container and clean.
- ▶ Dry the grounds container and reinstall it, pushing it in until it snaps into place.
  - ☑ The machine is ready for use.



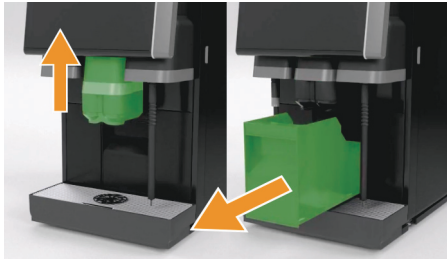
*The grounds container contains about 60 – 70 coffee cakes. After this number has been reached, the request for emptying the grounds container appears in the user interface.*

## Under-counter grounds container(Optional)

**NOTE**

**Possible overfilling** The optional equipment for the under-counter grounds container is not monitored. There is a risk of overfilling. During emptying, beverage selection is possible even without the under-counter grounds container.

- ▶ Check the grounds container more frequently depending on machine usage.
- ▶ Make sure that no beverages are dispensed while the under-counter ground container is being emptied.



- ▶ If without "AHA", push the beverage outlet upwards until it snaps into place.
- ▶ Pull the integrated grounds container out halfway.
  - ☒ This prevents accidental beverage dispensing.
- ▶ Empty and clean the under-counter grounds container.
- ▶ Position the under-counter grounds container under the machine grounds disposal.
- ▶ Insert the integrated grounds container until it snaps into place.
  - ☒ The machine is ready for use.

## 5.10.2

## Waste water

## Waste water outlet



*The machine features a waste water outlet. The drip tray is fixed and cannot be removed.*

**NOTE**

**Correct guidance of waste water hose** Odours can arise if the waste water hose is not correctly guided.

- ▶ Guide the machine waste water hose directly into the waste water outlet without creating a siphon effect.
- ▶ A siphon is absolutely necessary on the waste water outlet on the building side.

☐ The machine is ready for beverage dispensing.

- ▶ Correctly attach the waste water hose to the waste water connection on the building side.



*See "Installation and commissioning" - "Water connection/outlet" - "Conditions".*

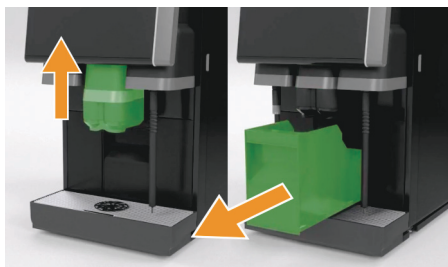
### External waste water tank(Optional)



## NOTE

**Level monitoring** The external drinking water and waste water tanks feature integrated level monitoring.

- ▶ Check the mechanical function of the level monitoring floater during each drainage process.
- ▶ Before the waste water tank is removed, make sure that no beverages can be dispensed.



- ▶ If without "AHA", push the beverage outlet upwards until it snaps into place.
- ▶ For safety reasons, pull the grounds container out of the machine towards the front.
  - ☑ The "Grounds container missing" message appears on the display.
- ▶ Remove the cover with waste water hose from the external waste water tank.
- ▶ Drain the waste water tank.
- ▶ Clean the waste water tank thoroughly with household cleaner and rinse with fresh water.
- ▶ Check the function of the level monitoring floater.
- ▶ Insert the cover with waste water hose back into the tank.
  - ☑ The machine is ready for beverage dispensing.
- ▶ Fit the grounds container back into the machine.

## 5.11 Transport conditions



## CAUTION

**Risk of injury** Transporting the coffee machine incorrectly can result in injuries.

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

- ▶ Before moving the coffee machine, it is essential that you detach the drinking water supply, power supply and waste water outlet.
- ▶ Before moving the coffee machine, check the floor for obstacles and uneven areas.



## NOTE

**Transport recommendations** Incorrectly transporting machines on a trolley may damage the machine.

Adhere to the following instructions when moving machines on a cart:

- ▶ For safety reasons, the cart must be pulled and not pushed when moving the coffee machine.
- ▶ Only pull on the cart and never on the machine.
- ▶ The cart is not intended for transporting cargo.



*The manufacturer cannot be held liable for any damage resulting from unintended use of the cart or from failure to follow the operating instructions.*



## 5.12 Shutting down

### 5.12.1 End of operation

#### Standby mode



### **! DANGER**



**Risk of electrocution! The machine is still energised in Standby mode.**

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

- ▶ Start machine cleaning [A] in the Service menu, see figure below, if this has not already been done.
  - ☒ Cleaning is started.
- ▶ If necessary, clean daily and weekly.
- ▶ If there is an external drinking water tank present (option), drain and clean it.



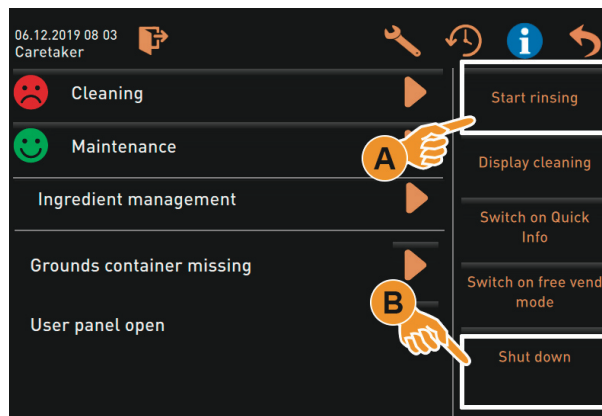
See "Cleaning" for detailed information.



After automatic cleaning, the machine can be shut down directly from the cleaning programme.

#### Variant: Shutting down using touch screen

- ▶ Select the [Shut down] field [B] in the Service menu.
  - ☒ The machine is shut down.
  - ☒ The display does not show anything.
  - ☒ The machine is in Standby mode.



#### Variant: Shutting down using button

Shutting down the machine can also be done using the power button behind the user panel.



See "Operation" – "Switching on" – "Coffee machine".



### **! DANGER**



**Risk of electrocution! Even when the machine is shut down, there are live parts present in the machine.**

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



Failure to do so will result in a loss of warranty coverage in the event of damage.

## 5.12.2 Lengthy downtimes (more than 1 week)



*During extended downtime, for example company holidays, the coffee machine and all associated devices taken out of operation.*

- ▶ Carry out all the steps described in the "End of operation" chapter.
- ▶ Disconnect the mains connection by pulling out the mains plug or switching off a main switch installed on the building side.
  - ☒ The machine is de-energised.

If the machine will be exposed to freezing sub-zero temperatures, the boilers must be drained beforehand.



### NOTE

**Temperatures under 0°C! The boilers can be destroyed by freezing water as it expands.**

In rooms where the temperature can fall below freezing, the boilers must be drained.

- ▶ Contact your service partner.



*Perform a daily cleaning operation before putting the machine back into operation.*

## 5.12.3 Shutting down optional accessories



### NOTE

**Maintenance after end of operation Unclean and switched-off optional accessories can cause technical faults and possible health problems when they are switched back on due to possible contamination.**

Before optional accessories which transport milk are switched off, the machine must be cleaned daily.

If the optional accessories are to be switched off for a long period of time, we recommend disconnecting it from the mains.

Accessory parts such as milk container, cover and adapter must be stored in a clean and dry place.

- ▶ Drain the milk container in optional accessories which transport milk.
- ▶ Execute a daily machine cleaning.
- ▶ Clean accessory parts such as milk container, cover and adapter in a washing machine or clean them thoroughly with fresh, clean water.
- ▶ Shut down optional accessory via the device main switch.



*See "Operation" - "Switching on" - "Switching on optional accessories" for more information on shutting down any optional accessories.*

- ▶ Keep the accessory parts in a clean and dry place.
- ▶ Disconnect the mains connection by pulling out the 230 V CA mains plug.
  - ☒ The optional accessory is powered off.
  - ☒ The optional accessory can be stored over a long period of time.



*Perform a daily cleaning operation before putting the machine back into operation.*

## 6 Cleaning

### 6.1 Cleaning intervals

Cleaning intervals					
Daily	Weekly	As needed	As instructed	Optional	
Automatic cleaning					
X					Automatic rinsing (if programmed)
X		X			Hot rinsing
X		X			Milk hose rinsing
Cleaning programme					
X		X	X	0	Milk system cleaning
X		X	X		Coffee system cleaning
		X		0	Flavour Point (syrup system)
X		X		0	Rinsing of mixing cup with manual cleaning process
X	X			0	Steam boiler rinsing
Manual cleaning work					
X					Empty grounds container and clean
X					Brewing chamber
X					Cleaning of drip tray and drip grid
X				0	Rinsing of milk container
X				0	Cooling unit interior
X					Cleaning touch screen
X		X		0	Steam wand
X				0	Rinsing of external drinking water tank
X				0	Rinsing of external waste water tank
				0	Cleaning optional accessories
	X	X			Cleaning the bean hoppers
		X			Lower beverage outlet part
		X		0	Rinsing of powder container
		X		0	Defrosting of cooling unit
		X			Cleaning of outer surfaces of coffee machine
		X		0	Cooling unit outer surfaces
Legend of cleaning intervals					
Daily:		At least once a day, or more often if necessary.			
Weekly:		At least once a week, or more often if necessary.			
As needed:		As needed (if dirty).			
As instructed:		Instructions appear on the display.			

### Legend of cleaning intervals

Optional:

Depending on machine equipment

## 6.2 Active cleaning schedule

The following two cleaning schedules are available for configuration by the service technician:

- Cleaning schedule with the "SchaererDefault" presetting (standard).
- Cleaning schedule with the "Manual" presetting.



### NOTE

**Compliance with HACCP cleaning concept** The cleaning intervals given in this chapter correspond to the "SchaererDefault" cleaning schedule. This setup meets the requirements for the HACCP cleaning concept.

Any differing manual adjustments that are made by the service technician in the "Manual" cleaning schedule should fulfil the requirements for the HACCP cleaning concept. If the cleaning level is set to "None", the operating company is responsible for carrying out the necessary cleaning.



See also "Cleaning" – "HACCP cleaning concept".



The information shown in the display about pending or completed cleaning operations varies according to which configuration is selected in the cleaning schedule.



See "Cleaning" – "Cleaning level" and "Cleaning instructions" for more information.

### 6.2.1 "SchaererDefault" cleaning schedule



In the "SchaererDefault" cleaning schedule, most setups are preset and cannot even be changed by the service technician. The start time and the cleaning level is updated simultaneously for all weekdays whenever an adjustment is made.

The time for a cleaning operation is set by the service technician as a general time setting [B] for each day of the week:

[A] Selection of the cleaning level, see "Cleaning level" below.

[B] Time of cleaning (optimum start time)

[C] \* Cleaning day

[D] \* Active cleaning level, see "Cleaning level" below.

[E] \* Unit to be cleaned [Coffee system]

[F] \* Unit to be cleaned [Milk system]

[G] \* Unit to be cleaned [Powder system]

[H] \* Steam boiler rinsing active/inactive

[I] \* Cleaning schedule configuration

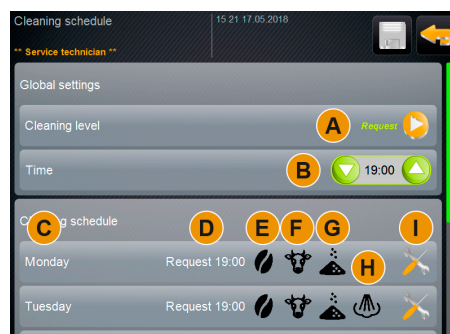


Fig.: "SchaererDefault" cleaning schedule

\* Setup cannot be done in the cleaning schedule with the "SchaererDefault" presetting.



See "Cleaning" – "Cleaning levels" and "Cleaning instructions".

## 6.2.2 "Manual" cleaning schedule



All available setups in the "Manual" cleaning schedule can be configured by the service technician.

The service technician can do the following setup in the "Manual" cleaning schedule:

- Configuration of a cleaning day
- Setup of the cleaning level
- Starting time of a cleaning
- System to be cleaned (powder system or steam boiler rinsing)
- Deleting or adding days with a cleaning
- Setup of the time window before/after cleaning



### NOTE

**Requirements: The coffee system, or an optional powder system, can be activated individually, regardless of the other systems.**

Milk system cleaning also activates the coffee system automatically.

The steam boiler rinse automatically activates the coffee system as well as the optional milk system, if present.

## 6.3 Cleaning levels



The cleaning levels are set in the cleaning schedule. The cleaning schedule can be accessed by the service technician.

By presetting a "cleaning level", the following advance notifications can be set for configured cleaning operations:

- [None]
- [Instruction]
- [Forced]

**Variant: [None], i.e. no cleaning instructions**



With the "None" setup, no information is provided about pending cleaning operations. The operating company is responsible for the timing of necessary cleaning operations and for ensuring they are carried out.

- ☒ The "Service menu" field [A] does not provide information on pending cleaning with a red colour marking.
  - ☒ The [Cleaning] field in the "Service menu" never turns into a red smiley.
  - ☒ The cleanings are started manually in the "Service menu".
- Start cleaning manually in the service menu with the [▶] [C] field.

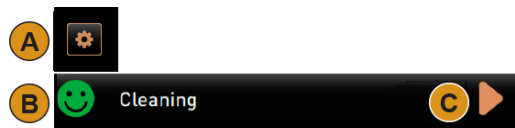


Fig.: Cleaning level [None]

**Variant: With [Request]**



With the "Request" setup, information about pending cleaning operations is shown in the display. The operating company is informed at all times about pending and completed cleaning operations.

If the cleaning instruction setup is set to [Request], the following functions and information are provided:

- [A] A red mark appears in the "Service menu" field
- [B] The "Cleaning" field in the "Service menu" with a green smiley provides information about the next pending cleaning in [ h].
- [C] The field with a red smiley provides information about a cleaning operation that has been overdue for [1 - 4 h] in [ h].
- Start cleaning manually in the service menu with the [▶] [C] field.
  - ☒ After cleaning has been carried out, the display shows the next scheduled cleaning operation [D] in [ h].

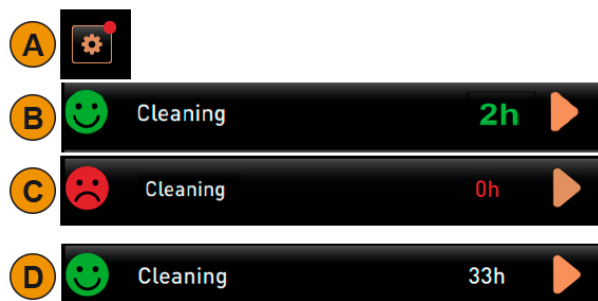



Fig.: Cleaning level [Request]

#### Variant: With [Forced]

 With the "Forced" setup, information about overdue cleaning operations is shown in the display. If this overdue cleaning does not take place within the configured time window of [0-4 h], mandatory cleaning is enforced. The coffee machine cannot dispense any more beverages.

If the setup for cleaning instructions is set to [Forced], the following functions and information are provided:

- [A] A red mark appears in the "Service menu" field
- [B] The "Cleaning" field with a green smiley provides information about the next pending cleaning operation in [ h].
- [C] The field with a red smiley provides information about a cleaning operation that has been overdue for [1 - 4 h] in [ h].
  - ☐ Scheduled cleaning [B] was not carried out.
  - ☐ Overdue cleaning [C] was not carried out in the displayed time window [1 - 4 h].
  - ☐ The coffee machine is blocked for beverage dispensing.
  - ☐ The display indicates that cleaning must be carried out.
- Start cleaning manually in the service menu with the [▶] [C] field.
  - ☒ After cleaning has been carried out, the display shows the next scheduled cleaning operation [D] in [ h].
  - ☒ The coffee machine is ready for use again.

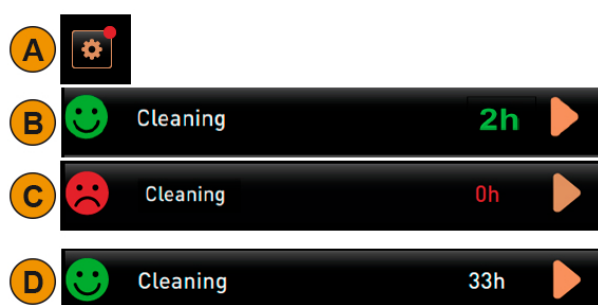




Fig.: Cleaning level [Request]/[Forced]

## 6.4 Cleaning instructions

 Cleaning instructions appear according to the "Cleaning level" presetting and can be set by the service technician.

 See "Cleaning" – "Active cleaning schedule" and "Cleaning levels".



## Setting options for cleaning instructions



The [Before cleaning] [B] and the [After cleaning] [C] time windows cannot be changed in the "SchaererDefault" cleaning schedule.

Time window	Display message	Parameter setting (Service technician)
A)	Cleaning operations performed during this time window will be ignored.	Depending on the time setting [B].
B)	Cleaning operations performed in this time window are too early and are not in accordance with the optimum schedule. Nevertheless, these cleaning operations are recognised as having been carried out.	**System > Cleaning > Edit cleaning schedule >  > [Time window before cleaning] [B] Setup (0 – 10 h) possible
C)	Time window for optimum cleaning on schedule.	**System > Cleaning > Edit cleaning schedule >  > [Time window after cleaning] [C] Setup (1 – 4 h) possible
C1)	Optimum start of cleaning according to schedule	*System > Cleaning > Edit cleaning schedule > [Time] [C1] **System > Cleaning > Edit cleaning schedule >  > [C1] time Setup (00.00 – 23.00) possible
D)	Time window for mandatory cleaning. Overdue cleaning operations cannot be delayed any longer. The coffee machine is not ready for use again. Cleaning is mandatory.	*System > Cleaning > Edit cleaning schedule > Cleaning level **System > Cleaning > Edit cleaning schedule >  > Cleaning level The [For] option is active. Mandatory cleaning becomes due on expiry of time window [C].

\* "SchaererDefault" cleaning schedule setup.

\*\* "Manual" cleaning schedule setup.

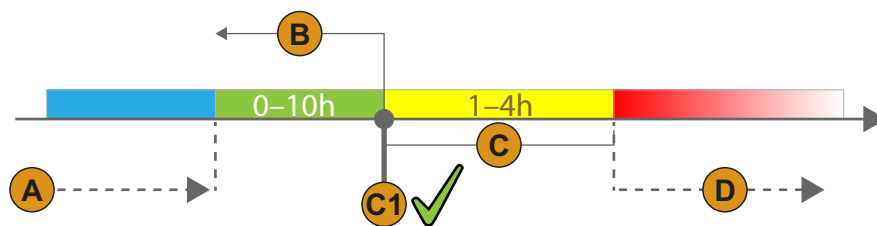


Fig.: Time axis with cleaning time window

## 6.5 Mandatory cleaning



When mandatory cleaning is active, a pending cleaning operation cannot be put off. The pending cleaning operation does not allow further beverage dispensing. Mandatory cleaning and the period that elapses before it is enforced can be defined in the cleaning schedule by the service technician.

Running the cleaning programme makes the machine ready for use again.



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



See also "Cleaning" – "Cleaning levels".

## 6.6 Cleaning products



### ! WARNING



**Danger of poisoning! Cleaning products can lead to poisoning if not used properly.**

- Use only cleaning products recommended by Schaerer.
- Keep children away from the cleaning products.
- Do not touch cleaning products with bare hands and do not breathe them in.
- Do not pour cleaning products into milk container, always use cleaning container.



*Before using a cleaning product, read the information on the packaging and the safety data sheet carefully. If a safety data sheet is not available, please request it from your sales partner.*



### NOTE



**Recommended cleaning products Use of incorrect cleaning products may damage the machine.**

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

### 6.6.1 Cleaning tablet (coffee systems)

#### "Coffeepure tabs"



Application	Coffee system cleaning
Purpose of cleaning	Removal of grease residue in the coffee system
Application interval	Every day
Application	Request to add tab during display-guided cleaning

### 6.6.2 Cleaning powder for the "Milkpure powder box" milk system

#### "Milkpure powder box"



Application	Milk system cleaning
Purpose of cleaning	Removal of milk fat and bacteria from the milk system
Application interval	Use one 10 g bag once a day. Allocation of cleaning bags: <ul style="list-style-type: none"> <li>• 4x) Alkaline = green = Cleaner 1</li> <li>• 1x) Acid = red = Cleaner 2</li> </ul> <i>Ideally, daily cleaning should be done in an interval of 4x with "Cleaner-1" NS and 1x with "Cleaner-2".</i>
Application	Request to add cleaning powder during display-guided cleaning

### 6.6.3 Cleaning product reorder

#### "Milkpure powder box" & "Coffeepure tab"



Set reorder

- 2x "Milkpure powder"
  - 1x "Coffeepure powder"
- Article number: 075350  
*The set contains cleaning agents for 100 daily cleanings.*

## 6.7 Rinsing intervals



### ! CAUTION

**Danger of scalding! While the machine is being rinsed, hot water runs out of the beverage outlet.**

Do not reach under a beverage outlet while a machine is being rinsed.  
 Align the optional steam wand in the drip tray.  
 Configured rinsing processes are automatically restarted. The beverage outlet should therefore always be free.

### 6.7.1 Automatic switch on/off rinsing

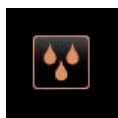


*The automatic switch on/off rinsing process is the standard setting and cannot be deactivated.*

The following rinsing processes are executed automatically after switching on or before switching off the machine:

- 1 Rinsing > Hot & cold system (option)
- 2 Rinsing > Coffee system
- 3 Rinsing > BestFoam blender (option)
- 4 Rinsing > Milk system (option)
- 5 Rinsing > Powder system (option)

### 6.7.2 Manual rinsing processes (user interface)

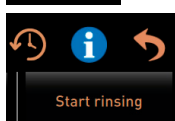
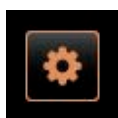


The following rinsing can be activated manually at any time:

- Select the [Rinsing] field at the lower right in the user interface.
- ☒ Coffee system hot rinsing is performed.

*The [Rinsing] operating field is at the lower right in the user interface.*

### 6.7.3 Manual rinsing processes (service menu)



The following rinsing processes can be activated manually in the service menu at any time:

- Press the [Service menu] field at the bottom left of the user interface.
- ☒ The service menu appears.
- Select the [Start rinsing] field.
- ☒ A system rinsing is executed in the same sequence as the automatic switch on/off rinsing.

*See also "Cleaning" – "Rinsing intervals" – "Automatic switch on/off rinsing".*

### 6.7.4 Configured rinsing processes

The rinsing processes which can be configured regarding the time can be configured by the service technician:

- Rinsing > Beverage outlet [rinsing interval outlet] (1 – 180 min).
- Rinsing > Milk system [rinsing interval external milk hose] (1 – 180 min).
- Rinsing > Milk system [rinsing interval internal milk system] (1 – 180 min)
- Rinsing > Reverse flow cooler [rinsing interval heat exchanger] (1 – 180 min)



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

## 6.8 Every time before filling

### 6.8.1 External drinking water tank (Option)



#### **WARNING**

**Risk of infection! There is a contamination danger for the external drinking water tank due to deposits and bacteria. A contaminated drinking water tank can lead to health problems.**

Clean the external drinking water tank every time before filling it.

- ▶ Remove the cover on the drinking water tank.
- ▶ Pull the machine water hose out of the drinking water tank and cover.
- ▶ Place the water hose end on a clean towel.
- ▶ Thoroughly rinse the external drinking water tank with fresh water several times.
- ▶ Clean the cover of the drinking water tank thoroughly with fresh water.
- ▶ Fill the drinking water tank with fresh water.
- ▶ Lead the water hose through the cover and back into the tank.
- ▶ Close the drinking water with the cover.



*See "Cleaning" – "Weekly manual cleaning" for machines with an optional mains water supply.*

## 6.9 Daily machine cleaning

### 6.9.1 Display-guided cleaning program

#### Preparations

The following is required during the cleaning programme:

- Schaerer > coffee system cleaning tablet (Coffeepure tabs) [1x tablet]
- Schaerer > milk system cleaning powder (Milkpure powder) [1x bag]
- Schaerer > cleaning container (milk system) [1x container, blue]
- Commercial detergent
- Clean commercial cleaning cloths
- Collecting vessel for remaining milk (if needed)
- Collecting vessel for remaining choco powder or topping (if needed)
- With the powder system equipment, you must be able to access the area behind the user panel. Keep key to the optionally lockable user panel or open lock in advance.



*When steam boiler rinsing is active, the steam wand must be pointed into the drip tray before cleaning starts. The "Steam boiler rinsing" function can be set in the cleaning plan by the service technician.*

#### Starting the cleaning program



#### **WARNING**

**Danger of poisoning! Contamination of cleaned machine components by cleaning products can lead to health problems.**

Wear safety gloves during the cleaning programme.





## CAUTION

**Danger of scalding! Hot fluid will be dispensed during the cleaning programme.**

- ▶ During cleaning, do not reach under the dispensing points because you could get burned.
- ▶ Remove the drip grid before cleaning starts.



## NOTE

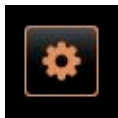
**Risk of flooding! A plugged waste water outlet causes the drip tray to overflow.**

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

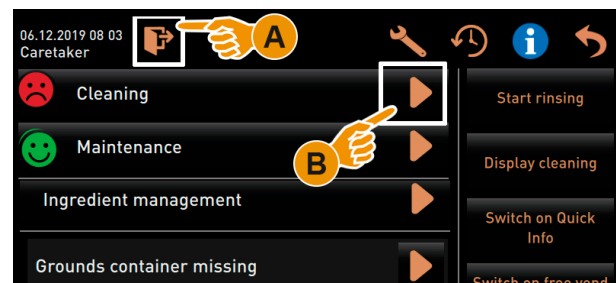


*The cleaning programme can be interrupted at any time. After cleaning is aborted, the coffee machine is not ready for use. The cleaning programme must be completed. Restart the aborted cleaning programme as soon as possible.*

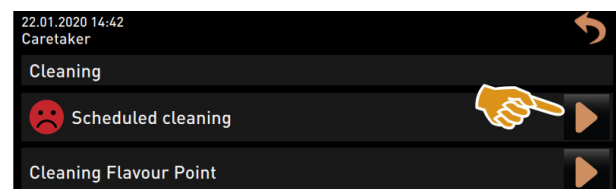
The cleaning programme is started in the service menu. On the touch screen, the user is guided through all required actions.



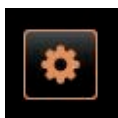
- ☐ A pending cleaning operation is displayed in "Service menu" field.
- ▶ Remove the drip grid in advance for separate cleaning.
- ▶ Press the [Service menu] field at the bottom left of the user interface.
  - ☒ The "Service menu" opens.
  - ☒ The [Cleaning] field is still inactive if it is PIN-protected.
- ▶ If necessary, select a profile [caretaker, operator or service technician] in the [Log-in] field [A].
- ▶ If necessary, enter the configured PIN.
  - ☒ Authorization is granted.
  - ☒ The [Cleaning] field is now active.
- ▶ Press the [Start cleaning] field [B] (see figure below).
  - ☒ A selection of cleaning options is displayed.



- ▶ Select the [▶] field for [Scheduled cleaning].
  - ☒ The "Cleaning" window opens.



### Variant: Cleaning active systems



All three systems in the machine which are in use were cleaned.

- ▶ Select the [▶] field (A).
- ☒ The cleaning programme starts in a new window.
- ☒ The active systems are cleaned, see (A).

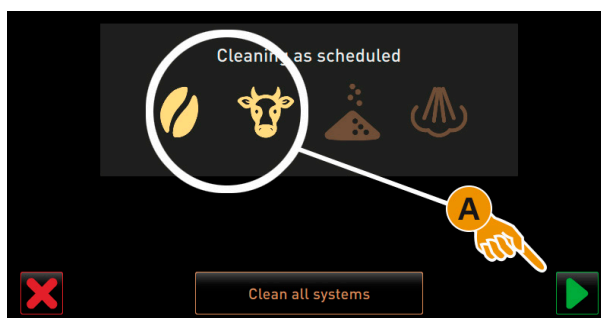
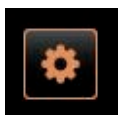


Fig.: Selection of coffee/milk system for cleaning

### Variant: Cleaning all systems



All systems in the machine are cleaned.

- ▶ Select the [Clean all systems] (B) field.
- ☒ The cleaning programme starts in a new window.

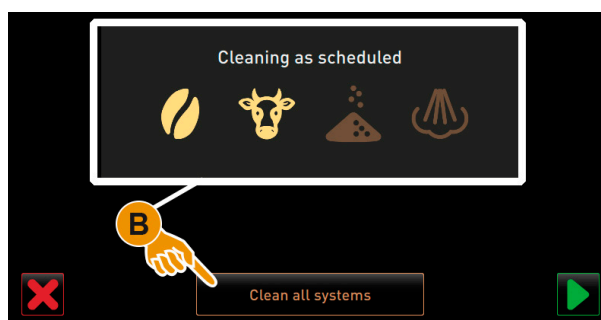


Fig.: Cleaning selection, all systems

### Cleaning programme start window with external drinking and waste water tank(Optional)



Preparatory steps on machines with external drinking/waste water tank

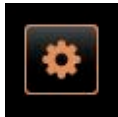
- [A] Draining waste water tank
- [B] Fill drinking water tank.
- ▶ Drain and rinse waste water tank [A].
- ▶ Confirm drainage with the [▶] field.
- ▶ Fill drinking water tank with fresh drinking water.
- ▶ Confirm filling with the [▶] field.
- ☒ The "Drain grounds container" request appears.



Fig.: Cleaning programme with external drinking/waste water tank



### Cleaning programme start window (standard)



Possible operating fields in the "Cleaning programme" start window.


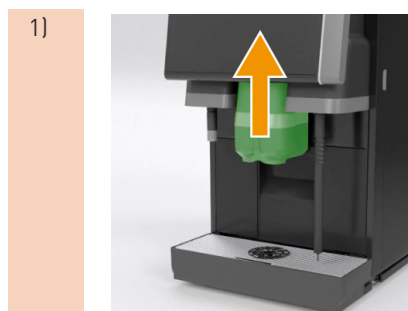
- [A] Progress screen
- [B] Cancel field for cancelling cleaning
- [C] Field for Next, next step
- [D] Action request or information
- [E] Image or animation for current action
- Execute request in the display, see following steps.
  - ☒ The cleaning programme starts after confirmation with the  field in the Service menu.

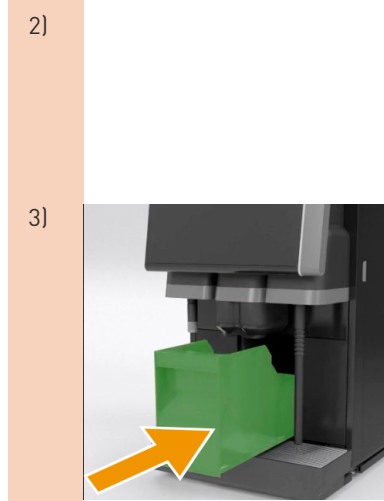


Fig.: Elements and functions in the cleaning programme window

### Cleaning grounds container



- Push the beverage outlet up.
- Pull the grounds container out of the machine.




- ☒ Request appears, thoroughly clean grounds container and interior with brush, reinsert ground container.
- Remove any ground coffee residue from the brewing chamber with a brush.
- Empty grounds container and clean and rinse it with fresh water and detergent, then dry.
- Reinsert the grounds container into the machine until it snaps into place.
  - ☒ Request appears, remove beverage outlet cover.

### Cleaning the beverage outlet cover

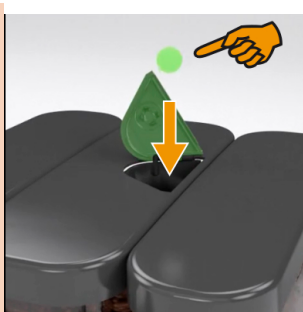
4)




- ▶ Release the beverage outlet cover by pushing on the centre and pulling down at the same time.
- ▶ Clean the beverage outlet cover with a brush under warm running water.
- ▶ Reinsert the cleaned cover.
  - ☒ Engage at the rear
  - ☒ Snap in at the front
- ▶ **CAUTION:** An incorrectly inserted beverage outlet cover can cause spraying during beverage dispensing.
- ▶ Check that the beverage outlet cover is correctly positioned.
- ▶ Select the  field for the next step.
  - ☒ Request, insert small "Coffeepure tab" cleaning tablet.

### Inserting a cleaning tablet (Coffeepure tab)

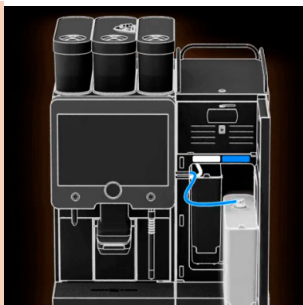
5)




- ▶ Insert a "Coffeepure tab" cleaning tablet into the slot in the manual inlet (centre bean hopper).
- ▶ Confirm insertion using the  field.
  - ☒ Request, remove milk container.

### Cleaning milk container(Optional)

6)

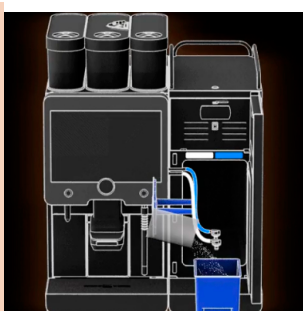


- ▶ Open the cooling unit door.
- ▶ Remove the milk container from the cooling unit.
- ▶ If necessary, pour any remaining milk into a container.
- ▶ Clean the milk container, cover and riser pipe with fresh water and detergent and rinse well.
- ▶ **INFORMATION:** Observe the detailed cleaning information in the separate SCSoul optional accessory operating instructions.
- ▶ **NOTE:** Machine equipment options with "Twin Milk" contain 2 milk containers.

- ▶ Select the  field for the next step.
  - ☒ Request, place the cleaning powder into the blue cleaning container.

### Cleaning agent (Milkpure powder)(Option)

7a)



- ▶ Shake the contents of a "Milkpure powder" bag (alkaline or acid) into the cleaning container.

Fig.: "Milkpure powder" cleaning powder in the bag.

See also "Cleaning" - "Cleaning products" - "Cleaning powder for the milk system"

### Inserting the cleaning container(Optional)


7b)



- ▶ Insert the blue cleaning container into the cooling unit.
- ▶ Attach the milk hose adapter to the cover of the cleaning container.

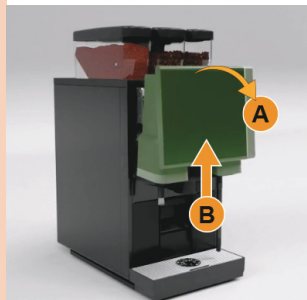
*Cooling unit with "Twin Milk" application option, contains 2 milk hoses.*

**NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.

- ▶ Confirm the cleaning container is inserted and the "Milkpure powder" cleaning powder is added with the  field.
- ☒ Request, remove mixing cup (optional).

### Cleaning the mixing cup(Optional)

8)





- ▶ Unlock user panel top [A] by pulling with force.
  - ☒ The user panel is unlocked.
- ▶ Push the user panel from below [B] using both hands until it snaps into place.
  - ☒ The user panel is automatically held in the upper position.
  - ☒ The mixing cup is now accessible.
- ▶ Pull mixing cup out of machine using recessed grip, see the following steps.

9)



Pull mixing cup out of machine:

- 1 Pull mixing cup using recessed grip [A]
- 2 Confirm removal of the mixing cup with the  field.
  - 1 Clean and rinse the individual components of the mixing cup under clean, warm running water.
  - 2 Clean and thoroughly wipe out the mixing cup with a clean towel.
  - 3 Reinsert the mixing cup.
- 3 Confirm cleaning of the mixing cup with the  field.



**CAUTION:** An incorrectly inserted mixing cup can lead to overflowing.


- ▶ Check that the mixing cup is correctly positioned.

*See also "Operation" – "Operating elements on the machine" – "Mixing cup option" to ensure mixing cup is correctly positioned.*

- ▶ Close user panel.

10)



- ▶ Confirm that cleaned mixing cup has been inserted with the  field.
- ☒ The cleaning process starts.

### Progress screen for automatic cleaning

11)



- ☒ Note [A], no beverages available.
- ☒ Progress screen with time bar [B].



### Removing the cleaning container

12)



- ▶ Remove blue cleaning container from the cooling unit, rinse and clean it.
  - ▶ Pull the milk hose adapter off the cover of the cleaning container and wipe with a damp cloth.
- NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.

- ▶ Confirm removal of the cleaning container with the field.
- ☒ Request to insert milk container appears (optional).

### Reinsert milk container(Optional)



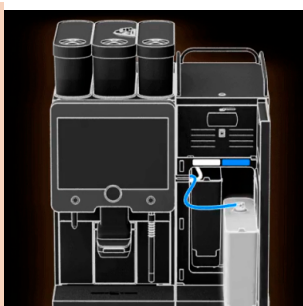
## ! WARNING



**Danger of poisoning! Cleaning product residues are hazardous to health.**

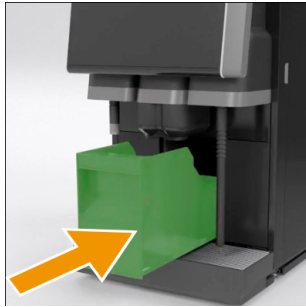
After completing cleaning, thoroughly wash your hands with commercial soap.

13)



- ▶ Place cleaned milk container back into the cooling unit.
  - ▶ Attach the milk hose adapter to the cover of the milk container.
- INFORMATION:** Detailed information on the cooling unit, milk container or adapter can be found in the separate SCSoul optional accessory operating instructions.
- ▶ If needed, pour in fresh and pre-cooled milk (3°C – 5°C).
- NOTE:** Machine equipment options with "Twin Milk" contain 2 milk containers.
- ▶ Confirm milk container connection with the field.
  - ☒ The system is rinsed.
  - ☒ An automatic restart is performed.
  - ☒ The machine is ready for use again.
  - ☒ The next cleaning is shown in hours [ h ] in the service menu.
  - ▶ Clean the drip grid with a brush under running water.
  - ▶ Reinsert the clean drip grid.

### 6.9.2 Cleaning grounds container



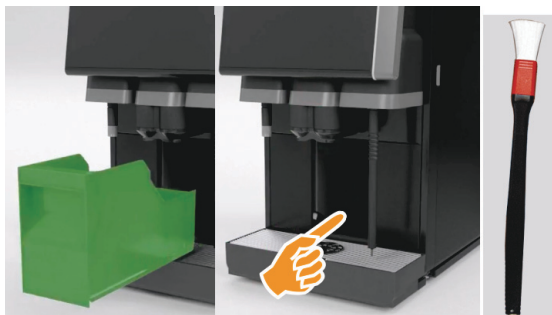
**CAUTION:** Coffee grounds in the grounds container can quickly lead to mould formation. The spread of mould spores in the machine results in the danger of contamination of the coffee.

- ▶ Therefore, clean the grounds container daily.
- ▶ Slide the beverage outlet upwards (with manual beverage outlet).
- ▶ Pull the grounds container out of the machine.

**NOTE:** High temperatures may lead to damage. Never clean the grounds container in the dishwasher.

- ▶ Thoroughly clean the grounds container with water and a household cleaning product.
- ▶ Rinse with clear water and dry with a clean cloth.
- ▶ Fit the dry grounds container back into the machine.

### 6.9.3 Cleaning brewing chamber



- ▶ Slide the beverage outlet upwards (with manual beverage outlet).
- ▶ Pull the grounds container out of the machine.
- ▶ Remove ground coffee from the machine brewing chamber using a cleaning brush.

**NOTE:** The cleaning brush is included in the scope of delivery of the coffee machine.

- ▶ Wipe and dry the brewing chamber with a clean, damp cloth.
- ▶ Reinsert the grounds drawer.

### 6.9.4 Cleaning of drip tray and drip grid



#### ! CAUTION

**Danger of scalding! Automatic rinsing flushes hot water out of the beverage outlet.**

- ▶ Shut down the machine before the drip grid is removed for cleaning.
- ▶ Shut down the machine before cleaning the drip tray.

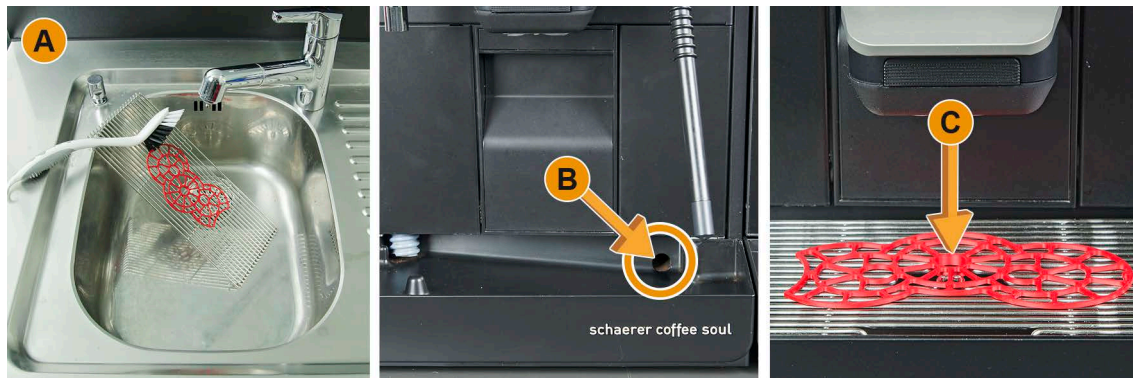


#### NOTE

**Risk of flooding! A plugged waste water outlet causes the drip tray to overflow.**

Before the descaling process is done, checking whether the waste water outlet is plugged is mandatory.

- ▶ Thoroughly clean the complete drip tray from the cooling unit and the drip grid with positioning grid [A] from the coffee machine using running water and detergent.
  - ▶ Rinse the coffee machine drip tray with clean water and check that the waste water outlet [B] is not plugged while doing so.
- INFORMATION:** Check that there is no clogging, see chapter "Service and maintenance" - "Descaling" - "Preparation for descaling" on page .
- ▶ Place the drip grid back in the drip tray and check that it is correctly positioned.
  - ▶ Check that the positioning grid [C] is positioned correctly regarding the beverage outlet.



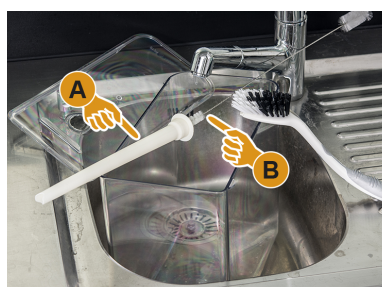
### 6.9.5 Cleaning milk container(Optional)



#### **WARNING**

**Risk of infection! There is a danger of contamination of the milk and milk container due to milk deposits and bacteria.**

- ▶ Clean the milk container and cover every time before filling.
- ▶ Wear gloves while cleaning.



- ▶ Dispose of the remaining milk from the milk container.
- INFORMATION:** Observe the detailed cleaning instructions in the separate SCSoul optional accessory operating instructions without fail.
- ▶ Clean the milk container with fresh water and detergent.
- ▶ Clean riser pipe [A] with brush [B].
- NOTE:** The cleaning brush is contained in the scope of delivery.
- ▶ Clean milk container with a fresh, unused cloth.
- ▶ Place the milk container back into the cooling unit.

### 6.9.6 Cleaning cooling unit(Optional)



#### **WARNING**

**Risk of infection! There is a risk of contamination of the milk and cooling unit due to milk deposits and bacteria.**

- ▶ Clean the cooling unit daily.
- ▶ Wear gloves while cleaning.







- ▶ Remove the milk container from the cooling unit.  
**INFORMATION:** Observe the detailed cleaning information in the separate SCSoul optional accessory operating instructions without fail.
- ▶ Wipe out the inside of the cooling unit with fresh water and a fresh, unused cloth.
- ▶ Place the milk container back into the cooling unit.

*It is possible to use different side cooling units. Detailed information can be found in the SCSoul optional accessory operating instructions.*

### 6.9.7 Cleaning touch screen



#### ! CAUTION

**Danger of scalding! Unsupervised beverage dispensing can cause scalding during cleaning.**

Deactivate the touch screen in the service menu before cleaning or shut down the machine.



Display cleaning

- ▶ Press the [Service menu] field at the bottom left of the user interface.
  - ☒ The Service menu opens.
- ▶ Select the [Cleaning display] field.
  - ☒ Touch screen is deactivated for 30 sec.
  - ☒ The display no longer reacts to touch.

**NOTE:** Damage to the touch screen during cleaning procedure. Do not use abrasive cleaning products. Never use force, strong pressure or sharp objects when pressing on the display.
- ▶ During the available 30 sec, clean the touch screen using paper towels and a commercially available glass cleaner.
  - ☒ After the countdown ends, the touch screen is reactivated.

### 6.9.8 Cleaning steam wand(Optional)



#### **! WARNING**



**Risk of infection! There is a danger of contamination for the steam wand due to deposits and bacteria.**

- ▶ Wipe the steam wand with a moist cloth after every use.
- ▶ Wear gloves while cleaning.

- ▶ Press steam dispensing button [A] several times to remove milk remains from the steam wand.
  - ▶ Wipe the milk remains off the steam wand using a clean, moist cloth.
- INFORMATION:** The position of the optional button [A] for steam dispensing depends on the selected user interface.



### 6.9.9 Cleaning external drinking water tank(Optional)



#### **! WARNING**

**Danger of poisoning! Cleaning product residue in the drinking water tank can lead to poisoning.**

Never fill cleaning products into the drinking water tank.



**WARNING:** There is a contamination danger for the external drinking water tank due to deposits and bacteria.

**NOTE:** Wear gloves while cleaning.

- ▶ Rinse the external drinking water tank daily; do not use cleaning products.
- ▶ Thoroughly rinse the external drinking water tank with fresh water several times.
- ▶ Dry with a clean cloth.
- ▶ Check if the floater can move freely (level monitoring).

### 6.9.10 Cleaning external waste water tank(Optional)



**WARNING:** There is a contamination danger for the external waste water tank due to deposits and bacteria.

**NOTE:** Wear gloves while cleaning.

- ▶ Rinse and clean the external waste water tank and cover every day.
- ▶ Wear gloves while cleaning.
- ▶ Thoroughly rinse the external waste water tank with fresh water several times.
- ▶ Thoroughly clean the cover of the external waste water tank with fresh water.
- ▶ Dry with a clean cloth.
- ▶ Check if the level monitoring floaters can move freely.

### 6.9.11 Cleaning optional accessories(Optional)



Care and cleaning of the Cup & Cool and cup warmer optional accessories as well as the under-machine cooling unit are described in separate operating instructions 020888.

## 6.10 Weekly cleaning

### 6.10.1 Cleaning the bean hoppers



#### ! CAUTION



**Cutting injuries! Danger of injury from the rotating grinding discs in the grinder.**

- ▶ Never reach into the bean hoppers while the coffee machine is switched on.
- ▶ Wear gloves while cleaning.



Shut down

- ▶ Press the [Service menu] field at the bottom left of the user interface.
- ▶ Select the [Shut down] field in the service menu.
  - ☒ The machine is in Standby mode.
- ▶ Unlock the bean hopper with the central locking mechanism behind the user panel.

See "Operation" – "Operating elements on the machine" – "Interior machine operating elements" to unlock the bean hoppers.

**NOTE:** The bean hopper could get scratched by scouring agents.

- ▶ Do not use abrasive cleaning products.
- ▶ Unlock bean hoppers [A].
- ▶ Raise the bean hopper from the machine [B].
- ▶ Remove remaining coffee beans from machine and bean hopper.
- ▶ Rinse bean hopper thoroughly under running water [C] and wipe clean using a soft cloth.
- ▶ Wipe the cover and container dry with a clean cloth.
- ▶ Reinsert the bean hopper into the machine.
- ▶ Latch bean hopper using the central locking mechanism.

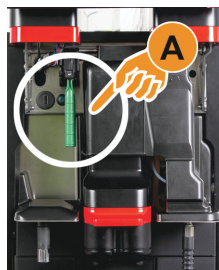


Fig.: Bean hopper removal

## 6.11 As needed

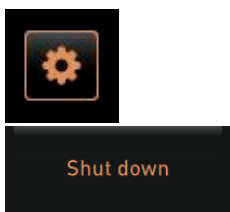
### 6.11.1 Cleaning lower beverage outlet



#### CAUTION

**Danger of scalding! Automatic rinsing flushes hot water out of the beverage outlet.**

Only disassemble the beverage outlet cover if the machine is switched off, or after receiving a request during the cleaning programme.



- ▶ Press the [Service menu] field at the bottom left of the user interface.
- ▶ Select the [Shut down] field in the service menu.
  - ☒ The machine is in Standby mode.
- ▶ Disassemble the front beverage outlet cover [A] by releasing it (pushing and pulling it down).
- ▶ Clean the beverage outlet [B] with water and a brush.
- ▶ Clean the lower beverage outlet [C] with a brush under running water.
- ▶ Reassemble the beverage outlet cover onto the beverage outlet (by inserting into the rear side and engaging on the front side).
- ▶ Unlock the user panel and slide it upwards.
- ▶ Switch on the machine.
- ▶ Close user panel by slightly lifting it until it disengages and then press it back down until it engages.
  - ☒ The machine is ready for use again.



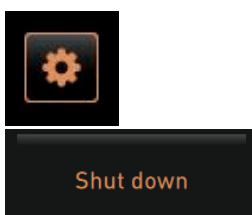
Fig.: Beverage outlet bottom cover removal

### 6.11.2 Cleaning powder container(Optional)

**Variant: Dosing device disassembly**



*The powder system can be equipped with different powder containers. The disassembly steps differ a little depending on the installed container.*



- NOTE:** The powder containers could get scratched by scouring agents.
- ▶ Do not use scouring agents for cleaning.
  - ▶ Press the [Service menu] field at the bottom left of the user interface.
    - ☒ The Service menu opens.
  - ▶ Select the [Shut down] field.
  - ▶ Unlock the powder container with the central locking mechanism behind the user panel.

*See "Operation" – "Operating elements on the machine" – "Interior machine operating elements" to unlock the bean hoppers.*

- ▶ Pull the powder container out of the machine.
- ▶ Empty the remaining choco or topping powder.

#### Variant: Drive side [A]

- ▶ Loosen union nut [1] (standard powder container) or push slider down if Twin powder container [1] is present.
- ▶ Loosen Phillips screws size PH1 [2].
- ▶ Pull out drive elements [7].
- ▶ [6] Loosen countersunk-head screws slot l.h. M5x8 with screwdriver size 4.
- ▶ Pull drive elements [8] out of the powder container.

#### Variant: Dispensing side [B]

- ▶ Loosen union nut [3] (standard powder container) or three Phillips screws size PH1 [2].
- ▶ Remove outlet elements [3] and [4].

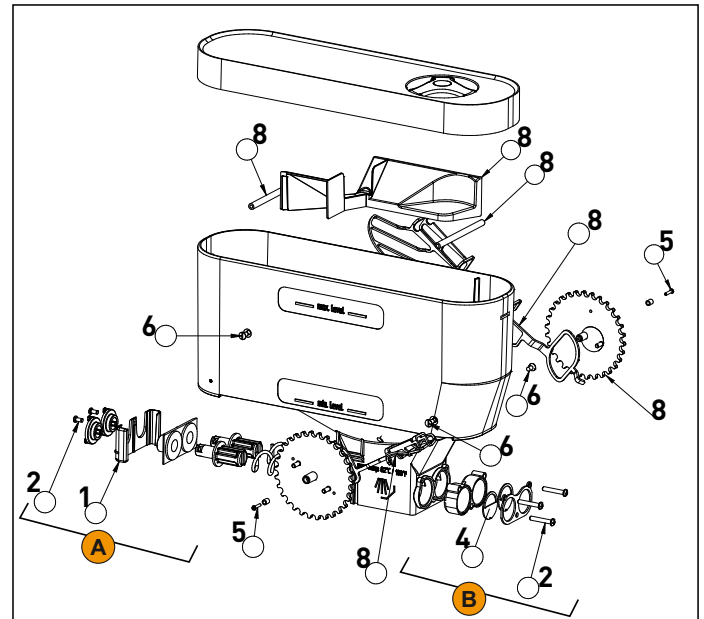
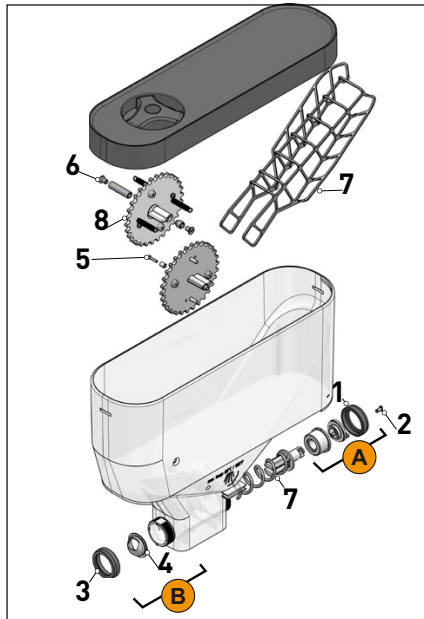


Fig.: Powder container 2 kg Standard (left) and Twin powder container 2x 1 kg (right)

- ▶ Thoroughly clean the powder container and individual parts of the dosing device under running water.  
**NOTE:** Before reassembly, allow all parts to dry fully.
- ▶ Reassemble the dosing device in the reverse order.  
**CAUTION:** Make sure that the dosing plate [4] is correctly aligned on the dispensing side.

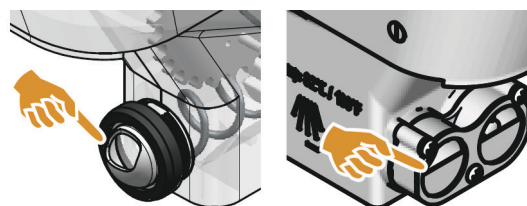


Fig.: Alignment of Standard and Twin dosing plate version on powder container dispensing side.

### 6.11.3 Display-guided Flavour Point cleaning(Optional)

#### Preparations

The following is required during the cleaning programme:

- Provide cleaning container with four hose adapters
- Clean and damp cloth (cleaning rag)



*Before cleaning, fill the cleaning container with hot water. Filling is done via the beverage outlet, or optionally via external hot water dispensing.*

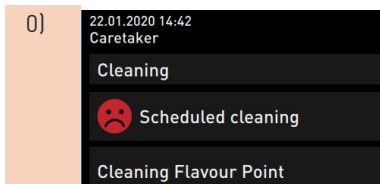


## CAUTION

**Danger of scalding! There is a danger of scalding at the hot water dispensing points. Before cleaning, hot water is dispensed into the cleaning container.**

- ▶ Do not reach under the dispensing points during hot water dispensing.
- ▶ Place the cleaning container so that it cannot be overturned.

### Cleaning Flavour Point start



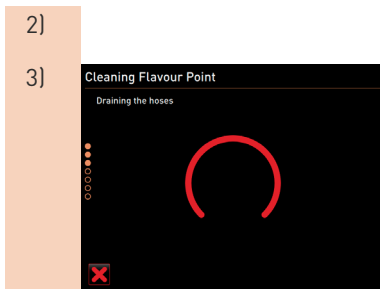
1)



- ▶ Open the Service menu with the field.
  - ☑ The Service menu opens with the last active profile.**INFORMATION:** Cleaning can be started with the Caretaker or Operator profile or by the service technician.
- ▶ Select the field for [Cleaning].
  - ☑ The window for selecting cleaning opens.
- ▶ Enable cleaning with the field for [Cleaning Flavour Point].
  - ☑ The window for Flavour Point cleaning opens.
  - ☑ The "Place cleaning container under beverage outlet" request appears.

- ▶ Place cleaning container under the beverage outlet or hot water outlet.  
*In machines with external hot water outlet, hot water is not dispensed into the cleaning container via the beverage outlet. Observe display.*
- ▶ Select the field for the next step.

### Filling cleaning container with hot water



2)

3)

- ☑ The cleaning container is filled with hot water.
- ☑ The syrup hoses are then automatically drained.

### Connecting cleaning container to Flavour Point



4)

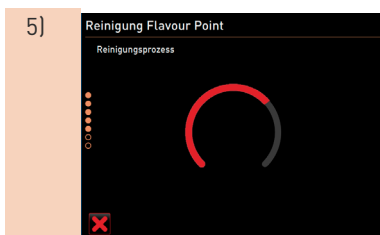


- ▶ Remove the bayonet lock on the Flavour Point.
- ▶ Wipe the bayonet lock and connection to the Flavour Point using a clean, moist cloth.
- ▶ Connect cleaning container hoses to the Flavour Point.
- ▶ Move the beverage outlet to the lowest position.

*With machine with automatic beverage outlet, the lowest position is set automatically.*

- ▶ Start the cleaning process with the field.

### Flavour Point cleaning process




5)

- ☑ The cleaning process starts.
- ☑ In this step, the cleaning process lasts ca. 5 to 10 min.




### Removing cleaning container



- ▶ Remove cleaning container and cleaning hoses.
  - ▶ Reconnect the syrup bottles to the Flavour Point.
- 
- ▶ Confirm syrup bottle connections with the  field.
    - ☒ The cleaning process changes to the "Refilling Flavour" mode.

### Syrup hose filling



- ▶ Select [Start pump] field of syrup 1.
  - ☒ Syrup hose is filled.
- ▶ Select [Start pump] field of syrup 1 again.
  - ☒ The syrup pump is disabled.
  - ☒ The syrup hose is refilled.
- ▶ Repeat process 2 to 4 with syrup.
  - ☒ All syrup hoses are now refilled.
  - ☒ Cleaning Flavour Point is therefore complete.
- ▶ Complete cleaning process with the  field.
  - ☒ The "Cleaning Flavour Point" window closes.
  - ☒ An automatic restart is performed.
  - ☒ The coffee machine with Flavour Point is again ready for use.

## 6.11.4 Defrosting of cooling unit



**CAUTION:** The surface of the cooling unit interior can be damaged. Never remove the ice layer with pointed or sharp objects; always let it defrost.

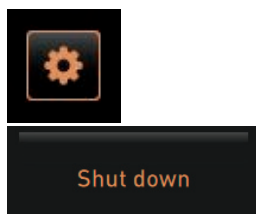
- ▶ Shut down the additional side cooling unit or pull out the mains plug.
- ▶ Open the front door and leave it open.
- ▶ Wipe up the condensation water incurred with an absorbent cloth.
- ▶ Repeat the procedure until the ice layer has melted completely.
- ▶ Close the front door and switch the device on again or reinsert the mains plug.

**NOTE:** Observe the detailed cleaning information in the separate SC-Soul optional accessory operating instructions.



See also "Operation" - "Switching on" - "Side or under-machine cooling unit" for a detailed description on switching on/off

### 6.11.5 Cleaning outer surfaces



- NOTE:** The machine housing could get scratched by scouring agents.
- ▶ Do not use scouring agents for cleaning.
  - ▶ Press the [Service menu] field at the bottom left of the user interface.
    - ☑ The Service menu opens.
  - ▶ Select the [Shut down] field.
    - ☑ The machine is in Standby mode.
  - ▶ Wipe the outer surfaces of the coffee machine and optional accessory with a clean, moist cloth.
  - ▶ Unlock the user panel and slide it upwards until it snaps into place.
  - ▶ Switch the machine back on using the power button.
  - ▶ Lightly lift the user panel and push downwards until it snaps into place.
    - ☑ The machine is switched on and ready for use.



See also "Cleaning" – "Daily machine cleaning" – "Cleaning touch screen".

## 6.12 HACCP cleaning concept

### 6.12.1 Cleaning requirements and conditions

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



#### **! WARNING**

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

Note and adhere to the following instructions:

- ▶ Wear safety gloves during cleaning.
- ▶ Wash your hands thoroughly before and after cleaning.
- ▶ Clean the coffee machine daily after beverage supply has ended.
- ▶ Clean the milk container every time before filling and after you have finished dispensing beverages for the day.
- ▶ Never pour cleaning products into the milk container.
- ▶ Never pour cleaning products into the drinking water tank (internal/external).
- ▶ Never mix cleaning products.
- ▶ Store cleaning products separately from coffee, milk and coffee machine powder.
- ▶ Do not use any abrasive products, brushes or cleaning tools made of metal.
- ▶ Do not touch parts that come into contact with beverages after cleaning.
- ▶ Read and follow the dosing and safety notes specified on the cleaning product.
- ▶ For daily and weekly cleaning, proceed as described in the operating instructions.

## 7 Service and maintenance



*A descaling process which, for whatever reason, was not correctly completed must be repeated without fail. The machine can only again be ready for use if the descaling program has been correctly completed.*

### 7.1 Descaling



#### NOTE

**Descaling duration** A descaling process takes at least 85 min. The coffee machine is not ready for use during this time.

- Report that the coffee machine is not ready for use in a timely manner.
- Plan at least 85 min for the descaling process.

#### 7.1.1 Uptime! descaling agent



#### WARNING



**Danger of poisoning! Descaling products can lead to poisoning if not used properly.**

Observe the following instructions without fail when using decalcification cartridges:

- Do not remove the decalcification cartridge during the descaling process. Always wait for the request in the display.
- Keep children away from the decalcification cartridges.
- Do not touch the descaling product with bare hands and read the supplied safety data sheet.



#### NOTE

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

- For the descaling process, only use the decalcification cartridges recommended by Schaerer AG.
- Always use cartridges taken directly out of the packaging.



*Before using the decalcification cartridge, read the information on the packaging and the safety data sheet carefully. If a safety data sheet is not available, please request it from your sales partner.*

## 7.1.2 Decalcification cartridge

### Information

Purpose:	Coffee machine descaling
Descaling:	Descaling the boiler including the hot water/steam system
Application interval:	As instructed
	

Fig.: Schaerer "Uptime!" decalcification cartridge packaging and in use

## 7.1.3 Preparation for descaling

### Checking waste water outlet



### NOTE

**Risk of flooding! A plugged waste water outlet in the drip tray causes overflowing of the drip tray.**

Before the descaling process, check the drain speed without fail.

The following are needed to check the waste water outlet:

- 1 l water
- Timer
- ▶ Remove the drip grid from the drip tray.
- ▶ Empty 1 l of water into the drip tray and start the timer at the same time.
  - ☒ When the waste water outlet is not plugged, 1 l of water completely drains within 30 sec.



*If 1 l of water does not drain in the required time of 30 sec, the waste water outlet is plugged. Descaling must not be done. The waste water outlet must first be repaired by a service technician.*

### Provision of required descaling material

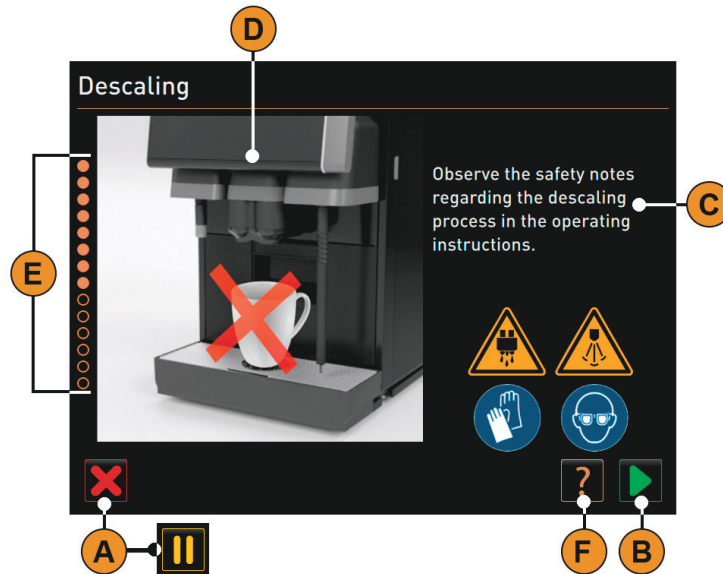
Have the following items ready before descaling the machine:

- 1x Schaerer "Uptime1" SCSoul decalcification cartridge
- 1x Schaerer cleaning container 1 l, blue
- 1x Schaerer cleaning container cover
- Gloves
- Protective goggles

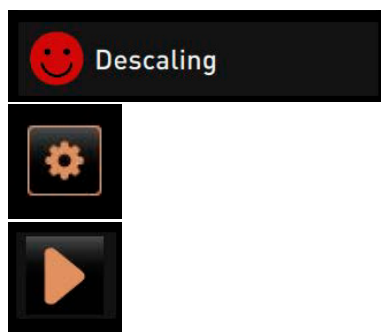
### Information during a descaling process

Information and operating elements:

- [A] Cancel descaling field [X] or pause after the descaling process has started
- [B] Confirmation of [▶] field after action request
- [C] Display of action request and information text
- [D] Animations for action requests
- [E] Step sequences [1–14] during the cleaning programme
- [F] The [?] field opens a window with additional information.







#### 7.1.4 Starting descaling program



- ☐ The pending descaling process is displayed in the service menu with a red smiley.
- ▶ Press the [Service menu] field at the bottom left of the user interface.
  - ☒ The Service menu is displayed.
- ▶ Select the [▶] [Maintenance] field.
  - ☒ All executed and pending maintenance processes are displayed.



- ▶ Select the [A] [▶] field in the "Maintenance" window.
  - ☒ The descaling programme window opens.
  - ☒ "Test waste water outlet for blockage" request appears.

02.01.2017 07:31 Caretaker			 
	Last done	Due	
 Descaling	02.08.2016	in 5 months 2068 litres	


## 7.1.5 Descaling programme steps

### Unpacking decalcification cartridge

1)

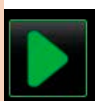


- Take the Schaerer "Uptime!" decalcification cartridge out of the packaging.

- Select the  field for the next step.  
☒ Request, remove grounds container.


### Preparation - Check waste water outlet


2)



- Make sure the waste water outlet in the drip tray is clear.

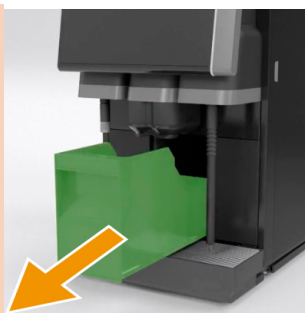
See "Service maintenance" – "Descaling preparation" – "Check waste water outlet".

**INFORMATION:** The  field in the display leads to the step-by-step description of a waste water outlet test.

- Select the  field for the next step.  
☒ Request, remove grounds container.

### Removing the grounds container

3)

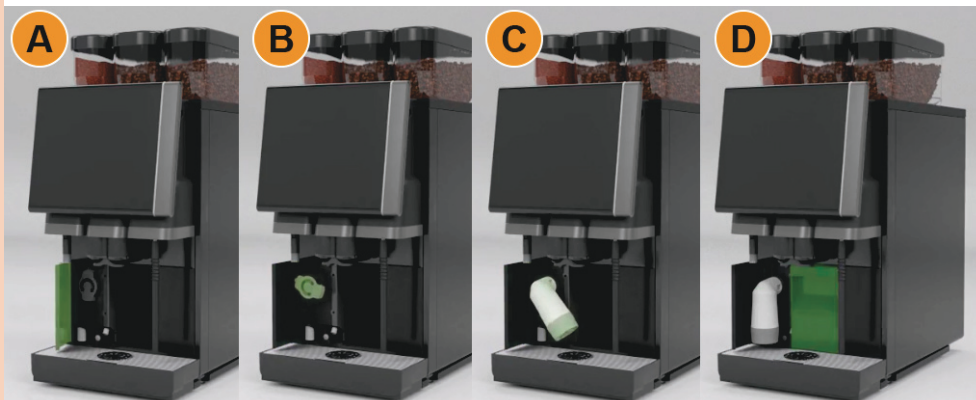


- Remove the grounds container from the machine, then empty and clean it.  
☒ Request, insert cartridge.



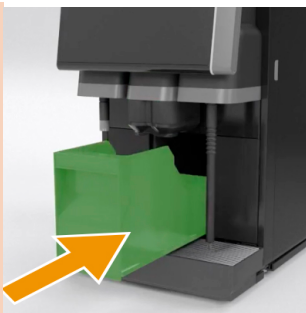
### Inserting cartridge

- 4)
- ▶ Open the left front cover [A].
  - ▶ Remove the green end cap by turning it to the left [B].
  - ▶ Position the freshly-unpacked cartridge and insert it by turning it to the right. [C].
  - ☑ The cartridge is inserted [D].
  - ☑ Request, insert grounds container.



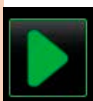
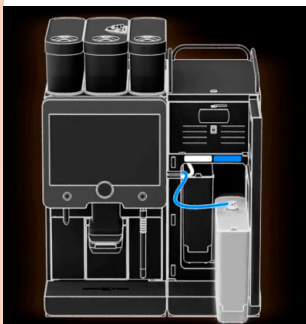
### Replacing the grounds container


- 5)
- ▶ Insert the cleaned grounds container into the machine.
  - ☑ Request, remove milk container (option).



### Removing the milk container from the cooling unit(Option)

- 6)
- ▶ Remove the milk container from the cooling unit, then empty and clean it if necessary.
  - NOTE:** Make sure to store the milk container with milk in a cool place during descaling.



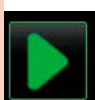
- ▶ Select the  field for the next step.
- ☑ Request, place cleaning container in cooling unit.


### Placing the cleaning container in the cooling unit (Option)

7)



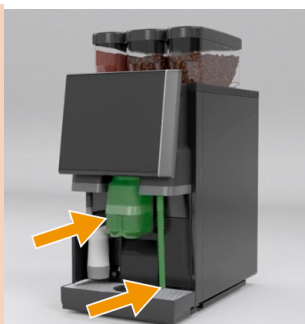
- ▶ Place the empty cleaning container in the cooling unit.
- ▶ Attach the milk hose to the cover of the cleaning container.
- ▶ Close the cooling unit door.



- ▶ Select the  field for the next step.
  - ☒ Request, position beverage outlet and steam wand (option).


### Positioning beverage outlet and steam wand (option)

8)



- ▶ Remove the cup platform from the drip tray.
- ▶ Move the beverage outlet to the lowest position (with manual beverage outlet).
- ▶ Align the steam wand (option) in the drip tray.



- ▶ Select the  field for the next step.
  - ☒ Request, read safety notes in the operating instructions.

### Safety notes

9a)

- ▶ Read and observe the following safety notes.



#### **WARNING**

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

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



#### **CAUTION**

**Danger of scalding! The hot water outlet and beverage outlet dispense hot water.**

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



#### **CAUTION**

**Danger of scalding! The steam wand dispenses hot water.**

- ▶ Do not reach under the steam wand during the descaling process.
- ▶ Align the steam wand in the drip tray.

## Starting the descaling process



The descaling process takes at least 85 min. The Pause field [II] interrupts the descaling process. The descaling programme can be aborted with the [X] field up to and at step [8].

9b)



- ▶ Start the descaling process with the [A] field.
- ☑ The descaling progress is shown in [%].
- ☑ The descaling process ends after about 85 min.



Fig.: Starting descaling

10)

- ☑ [A] The machine starts to cool down (blue).
- ☑ [B] Descaling (yellow) is active.
- ☑ Rinsing (green) is active.

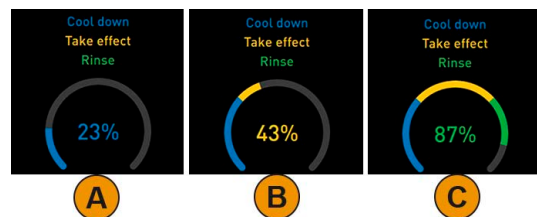


Fig.: Information during a descaling process

The descaling process can be interrupted with the field and continued with the field.



## Removing the decalcification cartridge

11)



**WARNING:** Make sure to wait for request in the display without fail before removing the decalcification cartridge.

- ☐ The descaling process is complete.
- ☐ A request appears in the display prompting you to remove the decalcification cartridge.
- ▶ Remove the decalcification cartridge from machine.
- ☑ Request, replace the safety cap.
- ▶ Replace the green safety cap.
- ▶ Close the left front cover.

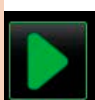
12)



- ▶ Select the field for the next step.
- ☑ Request, remove cleaning container.

### Removing cleaning container from the cooling unit(Optional)

13)



- ▶ Pull the milk hose out of the cover of the cleaning container.
- ▶ Remove cleaning container from the cooling unit.

**NOTE:** Machine equipment options with "Twin Milk" contain 2 milk hoses.


- ▶ Select the  field for the next step.
- ☒ Request, insert milk container

### Placing the milk container in the cooling unit(Optional)

14)

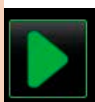



- ▶ Remove cleaning container from the cooling unit.
- ▶ Place milk container with cooled milk into the cooling unit.

- ▶ Select the  field for the next step.
- ☒ Request, reorder a decalcification cartridge.

### Reordering a decalcification cartridge

14)



- ☐ The article number appears in the user interface.
- ▶ Reorder a cartridge from your service partner for the next descaling process.
- ▶ Select the  field for the next step.
- ☒ Request, reorder a decalcification cartridge.

### Ending the descaling process and restarting the machine

14a)

- ☒ The descaling programme closes.
- ☒ Restart machine.
- ☒ Ready for use, the user interface appears.
- ☒ The last executed descaling process is shown in the service menu under "Maintenance".




11.04.2017 15 08 Bookkeeper			
	Last done	Due	
 Descaling	11.04.2017	in 6 months	
		2096 litres	

Fig.: Information on descaling executed in service menu (date)

### 7.1.6 Disposing of decalcification cartridges

The decalcification cartridge is made of plastic and cannot be disposed of with household waste after a proper descaling process. The decalcification cartridge must be completely emptied and rinsed with water after descaling.



#### NOTE

**Aborted descaling** A descaling process which was not run properly or was incomplete does not completely empty the decalcification cartridge.

- ▶ Run the descaling process properly to the end.
- ▶ Do not disconnect the machine from the mains before descaling is complete.
- ▶ If descaling is interrupted, the decalcification cartridge must be disposed of as hazardous waste in line with the local regulations.

## 7.2 External water filter(Optional)



*The external water filter must be replaced by an authorised service partner/service technician after the programmed number of litres is reached.*



*The "Water quality" supplementary instructions include information on recording the water values and using filter equipment. The supplementary instructions can be requested from Schaerer AG or downloaded directly from the MediaPool on the website (<http://www.schaerer.com/member>).*

## 7.3 Coffee machine maintenance

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

- ▶ Notify your service partner that maintenance is due.



#### NOTE

**Maintenance interval** Run pending maintenance in a timely manner for smooth operation. Putting off maintenance can lead to wear.

Have pending maintenance work done by your service partner as quickly as possible. Safety-relevant components must be checked and/or replaced without fail after the end of their service lives has been reached! If not observed, the liability of Schaerer AG becomes invalid.

### 7.3.1 Maintenance routine

Maintenance intervals are defined in the separate maintenance regulations.

- ☐ Perform all descaling intervals in line with the requests displayed by the machine.



*Descaling should also be done a day before maintenance work.*



*See "Service maintenance" – "Descaling" and directly "Start descaling programme".*

Safety-relevant components			
Components	24 months	48 months	72 months
Hot water boiler	Inspection (Only replace if necessary)	(Replace)	Inspection (Only replace if necessary)
Steam boiler	Inspection (Only replace if necessary)	(Replace)	Inspection (Only replace if necessary)
Safety valve 12 bar	(Replace)	(Replace)	(Replace)
Safety valve 5 bar	(Replace)	(Replace)	(Replace)

## 8 Programming

### 8.1 Overview

#### Profile log-in



The following predefined profiles are available for the end user in the "Service menu" under [Profile log-in].

- Service technician profile
- Caretaker profile
- Bookkeeper profile
- Bookkeeper reduced profile
- Facilities manager profile
- Quality manager profile
- Operator profile

**INFORMATION:** The profiles can be activated/disabled by a service technician.

**NOTE:** Access to the profile can be protected with an assigned PIN (personal identification number). The "Service technician" profile may only be accessed by the service technician.



See "Operation" – "Main touch screen window" – "[Log-in/Log-out] profile".



*This chapter contains a detailed description of the individual profiles.*



## 8.2 Navigation

### User interfaces



- Select the [Service menu] field [A] at the top left of the user interface.
  - ☑ The Service menu [B] opens.

The navigation behind the graphical user interface (GUI) consists of the following elements:

[A] Beverage selection user interface (GUI)

[B] Navigation elements in the Service menu

- 1 Cleaning status and start
- 2 Maintenance status and start (descaling)
- 3 Ingredient management status and on/off
- 4 ...5 etc. pending error messages

[C] Selection of activated profiles

[D] Machine configuration setup

[E] System information

[F] Beverage dispensing history

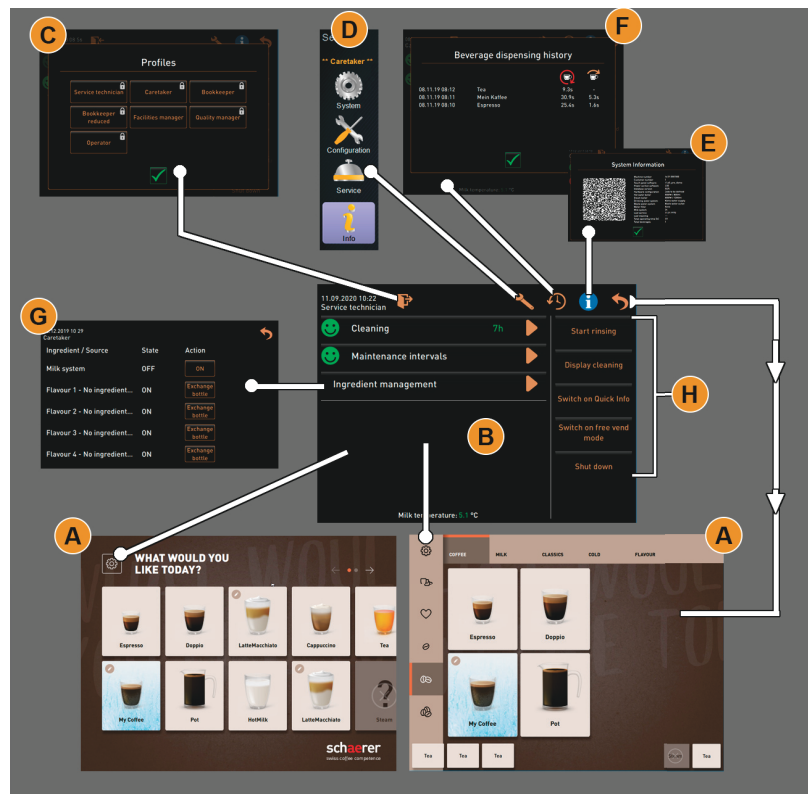


Fig.: User interface navigation

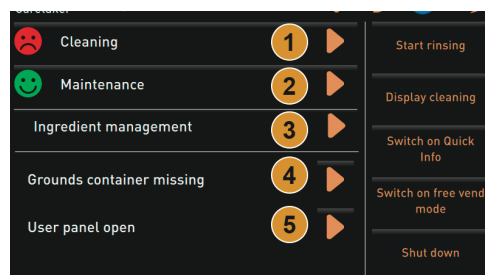







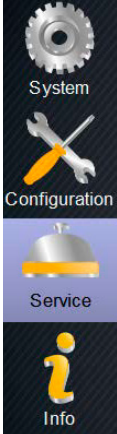


Fig.: Service menu with maintenance and error status

### Navigation elements

Symbol	Designation	Description
	Service menu entry	The [Service menu] field at the bottom left of the user interface opens the "Service menu". <i>See "Operation" – "Main window touch screen" – "Service menu overview and functional scope".</i>

Symbol	Designation	Description
	Back to User interface Beverage selection	The [Back] field takes you back to the beverage selection user interface.
	Information System	The [Info] field opens the window for the system information. <i>See "Operation" – "Main window touch screen" – "Service menu overview and functional scope".</i>
	Beverage dispensing history	The [Beverage dispensing history] field shows all beverages which have already been dispensed. The following information is displayed for each beverage: <ul style="list-style-type: none"> <li>• Beverage dispensing duration</li> <li>• Beverage dispensing time</li> </ul> <i>See also "Operation" – "Main touch screen window" – "Service menu functional scope" for more information.</i>
	Settings Main menus	The [Setup] field at the top right of the "Service menu" opens the window with the parameters for configuring the machine. <i>See "Operation" – "Main window touch screen" – "Service menu overview and functional scope".</i>
	Log-in Operator profile	The [Profile log-IN] field opens the window for selecting the available profiles. The profiles have different access rights. <i>See "Operation" – "Main window touch screen" – "Service menu overview and functional scope".</i> <ul style="list-style-type: none"> <li>▶ Select [Profile log-IN]. <ul style="list-style-type: none"> <li>☑ The window for selecting a profile opens.</li> </ul> </li> <li>▶ Select a profile and, if configured, enter the PIN. <ul style="list-style-type: none"> <li>☑ The Service menu appears again.</li> <li>☑ The [Profile log-IN] field changes to [Profile log-OUT].</li> </ul> </li> </ul> <b>INFORMATION:</b> If a profile with corresponding authorisations is logged in, the [Setup] field appears.
	Log-out Operator profile	The [Profile log-OUT] field closes the currently registered profile. <b>INFORMATION:</b> The "Setup" field is no longer available.
	Settings Machine configuration	The machine configurations are divided into the following setups: <ul style="list-style-type: none"> <li>• System</li> <li>• Configuration</li> <li>• Service</li> <li>• Info</li> </ul> The parameters displayed here depend on the authorisations of the selected profile. <b>INFORMATION:</b> The "Service technician" profile lists all setups and configuration options. <ul style="list-style-type: none"> <li>▶ Select setup, e.g. [System]. <ul style="list-style-type: none"> <li>☑ The currently active setup, e.g. [System] is highlighted in colour.</li> <li>☑ The available setups [A] are listed at the right of the window.</li> </ul> </li> </ul>

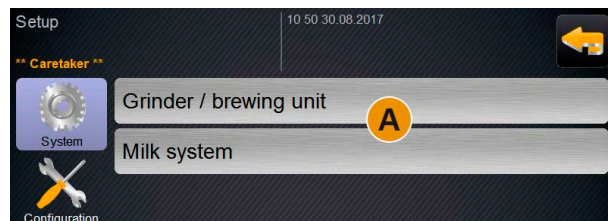




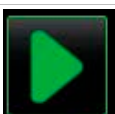





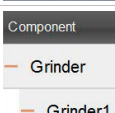
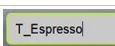


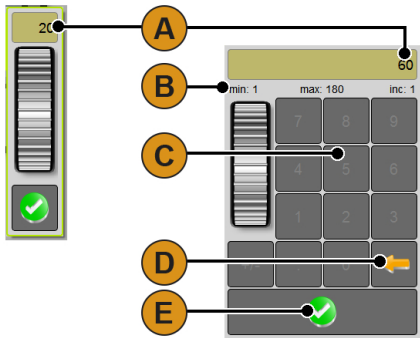




Fig.: System main menu with submenus

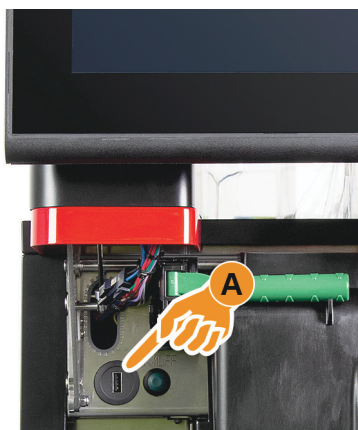
*See also "Programming" – "Profiles and authorisations".*

Symbol	Designation	Description
	Restart	The [Restart] field activates a machine restart. A restart is required after the machine configurations have been run.
	Configuration	The [Configuration] field opens the configuration window for: <ul style="list-style-type: none"> <li>• Ingredient sources</li> <li>• Beverages</li> <li>• Beverage step for specific setup</li> </ul>
	Activation Confirmation	The [Activation/Confirmation] field confirms a selection of an assigned coffee type or temperature setting, for example.
	Remove	The [Remove] field removes the following setup: <ul style="list-style-type: none"> <li>• Remove a value or beverage, or set it to zero</li> <li>• Cancel beverage dispensing</li> <li>• Closes the window for selecting media files</li> </ul>
	Confirmation Action request	Executed action requests can be confirmed with the [Confirmation] field.
	Next Selection list	The [Next] field opens a selection list or leads back to the next program step.
	Back window	The [Back window] field returns you to the previous window.
	Save	The [Save] field saves any parameter settings made.
	Copy	The [Copy] field copies a beverage that has already been configured as a basis for other beverage configurations.
	Add	The [Add] field adds beverages or beverage steps. <b>INFORMATION:</b> The beverages are removed from the list of available beverages. The additional beverage is automatically added to the list of configured beverages.
	Configuration Beverage step	The [Beverage step configuration] field leads to the setup of the beverage configuration with the single beverage steps.
	Structure tree Open	The [-] field opens the structure tree in the statistics.
	Input field	The "Input field" can be used to enter the name for the beverage, beverage group, ingredients or for the menu cards using a displayed keyboard. <b>NOTE:</b> Tapping on the input field opens the keyboard.
	Keyboard	Keyboard for entering text or numbers in the input field. <i>See also "Input field" above.</i>

Symbol	Designation	Description
	Parameter value	<p>With the [Parameter value] operating field, the value of a parameter, e.g. fill level, temperature, etc. can be set.</p> <p><b>Variant: Setup with control dial</b></p> <ul style="list-style-type: none"> <li>▶ Set the desired value by turning the dial up and down.</li> <li>▶ Confirm the set value by pressing the [Activation/Confirmation] field.</li> </ul> <p><b>Variant: Setup with keyboard</b></p> <ul style="list-style-type: none"> <li>▶ Touch the field containing the current setup [A]. <ul style="list-style-type: none"> <li>☑ Keyboard entry opens.</li> <li>☑ min. and max. of possible setups [B] are displayed.</li> </ul> </li> <li>▶ Remove current setup with field [D]. <ul style="list-style-type: none"> <li>☑ The numeric keypad is activated.</li> </ul> </li> <li>▶ Enter new setup using keyboard [C].</li> <li>▶ Confirm setup using the [E] field.</li> </ul>
		Fig.: Input of parameter value using keyboard
	On/off Function	<p>The [On/Off] field activates or disables a function.</p> <p>Lit up green = On Matt grey - Off</p>
	Factory setting Arrow downwards Arrow upwards	<p>The factory setting for the times and date is made using the [Arrow downwards] or [Arrow upwards] fields.</p> <ul style="list-style-type: none"> <li>▶ Tap on the value to be set with your finger. <ul style="list-style-type: none"> <li>☑ The value is marked.</li> </ul> </li> <li>▶ Select the marked value with the [Arrow upwards/downwards] field. <ul style="list-style-type: none"> <li>☑ The time or date is set.</li> </ul> </li> <li>▶ The [Save] field saves the setup.</li> </ul>

## 8.3 USB port

### Data exchange interface




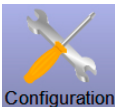
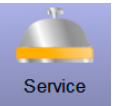
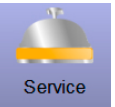

In the Schaerer Coffee Soul, software updates, data storage or data exchange are performed using a USB stick. The USB port is located behind the user panel.

- ▶ Unlock the user panel and slide it upwards until it automatically snaps into place.
- ☑ The USB port [A] is at the left next to the On/Off button.

See also "Operation" - "Open user panel".

## 8.4 Profiles and authorisations

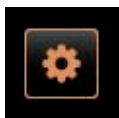
### 8.4.1 Overview of profile authorisations

	Setup	Setup/Parameters	Caretaker	Bookkeeper	Bookkeeper reduced	Facilities manager	Quality manager	Operator
System		Grinder/Brewing unit <ul style="list-style-type: none"> <li>• Grounds container capacity [50]</li> <li>• Grounds container emptying time [5]</li> <li>• Current grounds container counter</li> <li>• Centre, right grinder calibration value</li> </ul>	X	-	-	-	-	-
		Milk system (milk level detection) <ul style="list-style-type: none"> <li>• Milk container</li> <li>• Milk 1 hose length from squeeze valve - cooling unit</li> <li>• Milk 2 hose length from squeeze valve-cooling unit</li> <li>• Milk detection configuration</li> </ul>	X	-	-	-	-	-
		Flavour Point (flavour level detection)	X	-	-	-	-	-
Configuration		General (language)	X	X	X	X	X	X
		Time/Date/Timer (Monday to Sunday)	X	-	-	-	-	-
		Menu card (beverage field)	-	X	X	X	-	-
Service		Grinder service	X	-	-	-	-	-
		Backup database	X	-	-	-	-	-
		Reset descaling counters	X	-	-	-	-	-
		Reset cleaning/descaling	X	-	-	-	-	-
Info		Show versions	X	X	X	X	X	X
		Machine counters	X	-	-	X	-	-
		Beverage statistics	X	X	X	X	-	-
		Cleaning statistics	X	-	-	X	X	-
		Maintenance statistics	X	-	-	-	-	-
		Dispensing statistics	X	X	X	X	-	-
		Water hardness statistics	X	-	-	-	-	-
		Machine accounting statistics	X	X	X	X	-	-
		Beverage accounting statistics	X	X	X	X	-	-



The options available in the Service menu for manual cleaning or descaling are reserved for the operator, caretaker or the service technician.

## 8.5 Caretaker profile

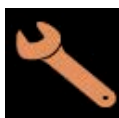


**INFORMATION:** The "Caretaker" is the first person to contact in the event of technical problems. He or she possesses solid technical knowledge and works regularly with the coffee machine.

The following functions are available in the "Service menu" in the [Caretaker] profile:

- Start rinsing
- Display cleaning
- Switching Quickinfo on/off
- Switch on free vend mode (with payment system)
- Shutting down
- Starting (machine/Flavour Point) cleaning
- Starting maintenance (descaling)
- Ingredient management

See also "Operation" – "Service menu functional scope".



The [Caretaker] profile contains the following setup:

- System
- Configuration
- Service
- Info



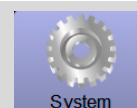
See "Operation" – "Profile [Log-in / Log-out]" for introduction to the setup.



The contents of the available setup are described in the following in this chapter.

### 8.5.1 System (Caretaker)

Setup> "System" - "Grinder / brewing unit"



Grounds container capacity



Sets the number of cycles (coffee cake) until the "Empty grounds container" message appears.

Setting range: 0 – 100

Standard: 60 (coffee cakes)

**CAUTION:** Do not exceed the standard setting of [60] coffee cakes.

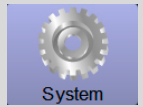
► Set the standard setting of 60 cycles.

*If the machine equipment is set up with the "Grounds disposal" option, set the value [0]. The brewing unit cycles will be ignored.*

*The machine blocks dispensing of coffee beverages after 65 brewing cycles (+5) until the grounds container is emptied.*



## Setup&gt; "System" - "Grinder / brewing unit"



Grounds container emptying time



Sets the amount of time that should elapse before the "Current grounds container counter" is reset to [0] after it is emptied.

Setting range: 0 – 30 sec

Standard: 5 sec

- ▶ Set standard setting of 5 sec.
- ▶ Empty the grounds container after an empty message.
- ▶ Replace the emptied grounds containers at the earliest after 5 sec.
  - ☒ The "Current grounds container counter" is reset to [0].

*If the grounds container is only briefly pulled out and immediately pushed back in, the counter value is retained and it is not reset.*

Current grounds container counter



Information on the brewing cycles executed since the last time the grounds container was emptied.

Setting range: No setup possible

Standard: Continuous counting of the brewing cycles.

*If the preset value [60] is reached, the request for emptying the grounds container appears.*

*See also the "Grounds container capacity" parameter.*

Middle grinder calibration value for 10 sec



Calibration value in grams which was determined for the middle grinder during grinder calibration.

Setting range: 1.0 – 50.0 g

Standard: Calibration executed accordingly.

- ▶ Start calibration in the "Service" – "Grinder services" setup.
- ▶ Execute calibration using the assistant.
- ▶ Set the defined value in this parameter.
  - ☒ Grinder calibration for the middle grinder is complete.
  - ☒ The output grind quantity corresponds to the grind quantity set in the coffee recipe.

**NOTE:** The service technician can change the calibration value in [g] displayed in this parameter for a blanket adjustment of the coffee beverages from the middle grinder without calibrating the grinder.

*Adjusting the calibration value influences all coffee recipes which were assigned to the middle grinder.*

Right grinder calibration value for 10 sec



Calibration value in grams which was determined for the right grinder during grinder calibration.

Setting range: 1.0 – 50.0 g

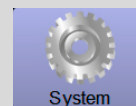
Standard: Calibration executed accordingly.

- ▶ Start calibration in the "Service" – "Grinder services" setup.
- ▶ Execute calibration using the assistant.
- ▶ Set the defined value in this parameter.
  - ☒ Grinder calibration for the right grinder is complete.
  - ☒ The output grind quantity corresponds to the grind quantity set in the coffee recipe.

**NOTE:** The service technician can change the calibration value in [g] displayed in this parameter for a blanket adjustment of the coffee beverages from the right grinder without calibrating the grinder.

*Adjusting the calibration value influences all coffee recipes which are assigned to the right grinder.*

## Setup&gt; "System" - "Grinder / brewing unit"



Left grinder calibration value  
for 10 sec



Calibration value in grams which was determined for the left grinder during grinder calibration.

Setting range: 1.0 – 50.0 g

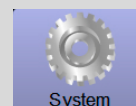
Standard: Calibration executed accordingly.

- ▶ Start calibration in the "Service" – "Grinder services" setup.
- ▶ Execute calibration using the assistant.
- ▶ Set the defined value in this parameter.
  - ☒ Grinder calibration for the left grinder is complete.
  - ☒ The output grind quantity corresponds to the grind quantity set in the coffee recipe.

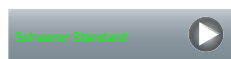
**NOTE:** The service technician can change the calibration value in [g] displayed in this parameter for a blanket adjustment of the coffee beverages from the left grinder without calibrating the grinder.

*Adjusting the calibration value influences all coffee recipes which have been assigned to the left grinder.*

## Setup&gt; "System" – "Milk system" – "Milk container"



Milk container\*



Detection of the milk hose length up to the milk container.

Setting range: None, service technician> [Custom/Schaerer standard]

Standard: Schaerer standard

Setup for the effective milk hose length with or without riser pipe in the milk container.

#### Variant: Custom

- ▶ Select [Custom] from the selection.
  - ☒ The milk hose is not automatically detected.
- ▶ Measure the exact milk hose length from the milk container to the squeeze valve in the machine and set the calculated value in the "Milk 1 hose squeezer valve -> cooling cell" parameter.

*See the following parameter description "Milk 1 hose squeezer valve -> cooling cell".*

#### Variant: Schaerer standard

- ▶ Select [Schaerer standard] from the selection.
  - ☒ The milk hose length is thereby automatically detected.
  - ☒ The standard setting [37 cm] in the following parameter does not require any additional adaptation.

*See the following parameter description "Milk 1 hose squeezer valve -> cooling cell".*

## Setup&gt; "System" – "Milk system" – "Milk container"



Milk 1 hose length  
Squeeze valve ->cooling cell\*



Setup of the milk hose dimension from the squeeze valve to the cooling cell for the external milk hose.

Setting range: None, service technician> [0 – 200 cm]

Standard: 37 cm (with "Schaerer standard" selection)

If the "Custom" selection is chosen in the previous "Milk container" parameter, the exact milk hose length is defined.

- ▶ Measure the milk hose length from squeeze valve in the machine until the milk container in the cooling cell.
- ▶ Set the defined value in the parameter.
  - ☒ The system now knows the milk hose length.
  - ☒ The correct milk quantity is now periodically exchanged for the "Rinsing interval external milk hose".

*With the "Left side cooling unit" standard equipment, the "Schaerer standard" set-up is set in the previous "Milk container" parameter. With this setup, the preset value of 37 cm has the correct milk hose length.*

Milk systems with non-standard equipment:

- Left cooling unit of the machine
- Cooling unit with "Twin Milk" equipment
- Under-counter cooling unit
- All optional accessories, e.g. Cup & Cool and Center Milk
- Under-machine cooling unit

Milk 2 hose length  
Squeeze valve ->cooling cell\*



Setup of the milk hose dimension from the squeeze valve to the cooling cell for the 2nd "Twin Milk" milk hose.

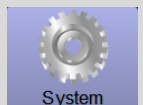
Setting range: None, service technician> [0 – 200 cm]

Standard: 37 cm (with "Schaerer standard" selection)

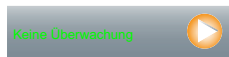
*For parameter description, see the "Milk 1 hose length" parameter above.*

\* The parameter is only displayed in the selected profile as information. Parameters can only be set by the service technician.

## Setup&gt; "System" – "Milk system" – "Milk detection configuration"



Milk level detection



Setup of type for the level monitoring of the milk container.

Setting range: No monitoring/Warning/Disable beverage dispensing

Standard: No monitoring

### Variant: No monitoring

Milk monitoring is configured but is not in use.

### Variant: Warning

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

### Variant: Disable beverage dispensing

If the milk level drops to a low level, a message appears on the touch screen. Dispensing of milk beverages is blocked.



The "Flavour Point" parameter in the "System" setup displays if the Flavour Point hardware equipment is selected in the hardware detection.

#### Setup> "System" – "Flavour Point" – "Flavour level detection"



Fill level detection  
Flavour Point



Setup of type for the level monitoring of the syrup bottles.

Setting range: No monitoring/Warning/Disable beverage dispensing

Standard: No monitoring

##### **Variant: No monitoring**

Syrup level monitoring is configured but is not in use.

##### **Variant: Warning**

If a low level is detected in the syrup bottle, a message appears on the display. Other beverages containing flavour can be dispensed.

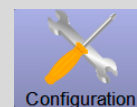
##### **Variant: Disable beverage dispensing**

If the syrup level drops to a low level, a message appears on the touch screen. Dispensing of beverages containing aroma is blocked.

## 8.5.2

### Configuration (Caretaker)

#### Setup> "Configuration" – "General"



Main language



Changes the display language.

Setting range: All provided languages.

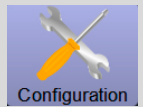
Standard: Free selection.

- ▶ Open selection menu using the [▶] field.
  - ☒ The options menu appears.
- ▶ Select the desired language.
- ▶ Save your choice with the [OK] field.
- ▶ With the [←] field, exit the parameter and the "Configuration" setup.
  - ☒ The machine performs a restart.
  - ☒ The selected language is displayed.

*All display messages and parameter names appear in the activated language.*

- ▶ Select "Configuration" - "Time / date / timer mode" setup.
- ☒ All parameters are executed for a setup.

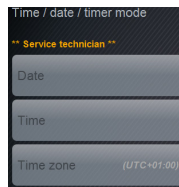
#### Setup> "Configuration" - "Time / date / timer mode"



Date

Time

Time zone



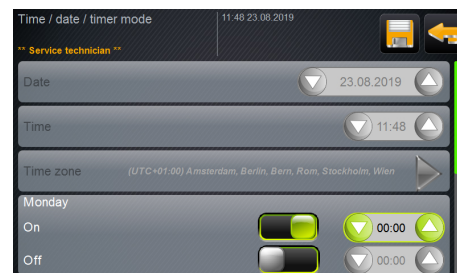
Information about the preset time zone with time and date.

Setting range: No setup possible.

*See "Service" - "Start commissioning" to change a set time zone.*

Standard: Country-specific/User-specific

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

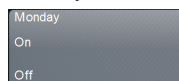


Available time zones:

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

*Each time zone contains sub-divisions, e.g. "Central European Time (CET/MEZ)".*





Monday On/Off to  
Sunday On/Off



Programming of the automatic switch on/off times.

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

Standard: User-specific

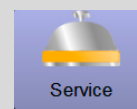
- ▶ Activate the switch-on time for the desired weekday with the  field.
  - ☒ The setting window for the time is active.
- ▶ Set time with the  fields, e.g. 07:00 (7:00AM).
- ▶ Activate the switch-off time for the desired weekday with the  field.
  - ☒ The setting window for the time is active.
- ▶ Set time with the  fields, e.g. 22:30 (10:30PM).



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

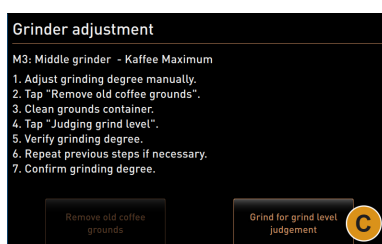
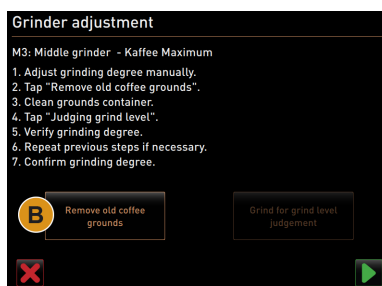
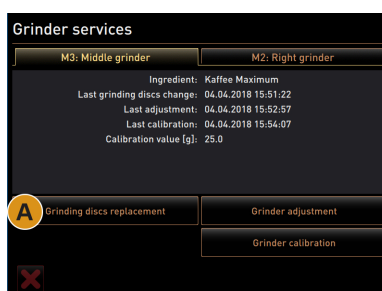
### 8.5.3 Service (Caretaker)

#### Select "Service" – "Grinder services" setup (if with manual grind level adjustment)



The "Grinder services" setup starts the following display-guided service functions on the grinder after confirmation:

- Grinding discs replacement
- Grinder adjustment
- Grinder calibration



- ▶ Select "Service" – "Grinder services" setup.
  - ☒ The confirmation window opens.
- ▶ Confirm grinder services with the [▶] field.
  - ☒ The service functions for the grinders are available.
- ▶ Select tab from desired grinder (left, right, centre).

#### Variant: Grinding discs replacement [A]

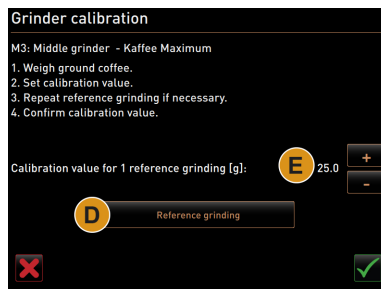
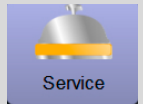
- ▶ Select field [A] [Grinding discs replacement].
    - ☒ The request prompting you to replace the grinding disc appears.
- To replace the grinding discs, carry out the following installation steps:
- [A] Remove manual grind level adjustment and install new grinding discs.
  - [B] Close the empty grinder by hand until resistance can be felt (grinding disc against grinding disc).
  - [C] Open grinder by 45° (anticlockwise).
  - [D] Reinstall manual grind level adjustment.
  - [E] Complete "Grinding discs replacement" installation steps with the [▶] field.
    - ☒ The preparation steps for "Prepare grind level adjustment" are displayed.

#### Variant: Grinder adjustment [B+C]

- ▶ Continue with the setup steps after "Grinding discs replacement" or directly select the [Grinder adjustment] field.
  - ☒ The preparation steps for "Prepare grind level adjustment" are displayed.
- ▶ Empty grounds container, clean it and reinstall it.
- ▶ Confirm that grounds container has been inserted with the [▶] field.
- ▶ Set grind level manually.
- ▶ Remove old coffee grounds, select field [B].
  - ☒ Old coffee grounds are being removed.
  - ☒ The [Grind for grind level judgement] field [C] becomes active.
- ▶ Clean grounds container again
- ▶ Select field [C] [Grind for grind level judgement].
- ▶ Check the grind level and, if necessary, repeat the steps for setting the grind level or use the [▶] field to confirm the set grind level.
  - ☒ The preparation steps for calibrating the grinder are displayed.



## Select "Service" – "Grinder services" setup (if with manual grind level adjustment)

**Variant: Grinder calibration [D+E]**

- ▶ Continue with the setup steps after "Grinder adjustment" or directly select the [Grinder calibration] field.
  - ☒ The preparation steps for "Calibration" are displayed.
- ▶ Empty grounds container, clean it and reinstall it.
- ▶ Confirm that grounds container has been inserted with the [▶] field.
  - ☒ Reference grinding starts immediately.
- ▶ If necessary, activate another reference grinding operation with the [Reference grinding] field.

*If several reference grinding operations are performed, the entire resulting quantity of ground coffee must be weighed and entered as a reference value. The machine automatically detects all the grinding operations triggered and calculates the correct grind quantity from this.*

- ▶ Weigh ground coffee from reference grinding.
- ▶ Set calibration value (measured ground coffee weight) with the two fields [E] [+/-].
- ▶ Complete calibration of the grinder with the [✓] field.
  - ☒ The "Grinder services" window appears again.
  - ☒ The set grinder is now ready for use again.

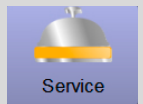
A calibration should be performed when:

- The machine is new or after an operation period of a year.
- The grind level is changed.
- The grinder is opened.
- The grinding discs are replaced.
- The coffee type is changed.



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

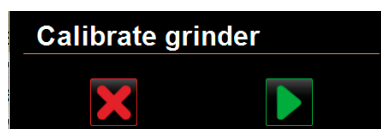
## Select "Service" – "Grinder services" setup (if with automatic grind level adjustment)



The "Grinder services" setup starts the following display-guided service functions on the grinder after confirmation:

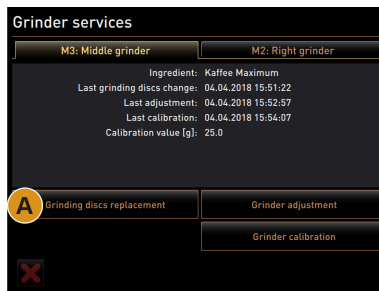
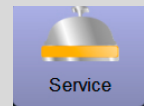
- Grinding discs replacement
- Grinder adjustment
- Grinder initialisation
- Grinder calibration

- ☐ The machine is equipped with an automatic grinder adjustment.



- ▶ Select "Service" – "Grinder services" setup.
  - ☒ The confirmation window opens.
- ▶ Confirm grinder services with the [▶] field.
  - ☒ The service functions for the grinders are available.
- ▶ Select tab from desired grinder (left, right, centre).

## Select "Service" – "Grinder services" setup (if with automatic grind level adjustment)

**Variant: Grinding discs replacement [A]**

- ▶ Select field [A] [Grinding discs replacement].

☑ The request prompting you to replace the grinding disc appears.

To replace the grinding discs, carry out the following installation steps:

[A] Remove grind level motor and install new grinding discs.

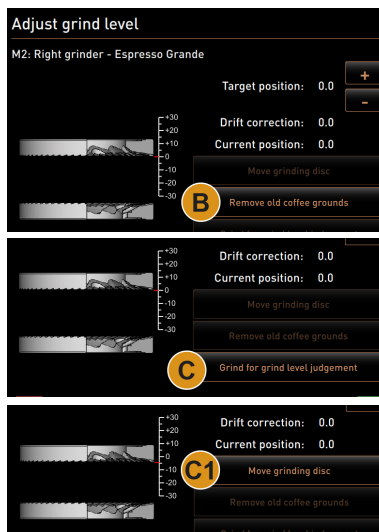
[B] Close the empty grinder by hand until resistance can be felt (grinding disc against grinding disc).

[C] Open grinder by 45° (anticlockwise).

[D] Reassemble the grind level motor.

[E] Confirm the "Grinding discs replacement" and "Grinder initialisation" installation steps with the [▶] field.

☑ The preparation steps for "Prepare grind level adjustment" are displayed.

**Variant: Grinder adjustment [B+C]**

- ▶ Continue with the setup steps after "Grinding discs replacement" or directly select the [Grinder adjustment] field.

☑ The preparation steps for "Prepare grind level adjustment" are displayed.

- ▶ Empty grounds container, clean it and reinstall it.

- ▶ Confirm that grounds container has been inserted with the [▶] field.

- ▶ Remove old coffee grounds, select field [B].

☑ Old coffee grounds are being removed, wait.

- ▶ Select field [C] "Grind for grind level judgement".

☑ A grinding is carried out.

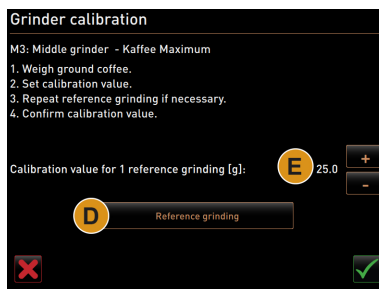
- ▶ Tap the two buttons for a [+] = coarser or [-] = finer grind level result.

**NOTE:** Execute grind level adjustments in small steps ( $\pm 1$ ).

*With the "Move grinding disc" field [C1], the disc is set to the previously set position.*

- ▶ Check the grind level and, if necessary, repeat the steps for setting the grind level or use the [▶] field to confirm the set grind level.

☑ The preparation steps for calibrating the grinder are displayed.

**Variant: Grinder calibration [D+E]**

- ▶ Continue with the setup steps after "Grinder adjustment" or directly select the [Grinder calibration] field.

☑ The preparation steps for "Calibration" are displayed.

- ▶ Empty grounds container, clean it and reinstall it.

- ▶ Confirm that grounds container has been inserted with the [▶] field.

☑ Reference grinding starts immediately.

- ▶ If necessary, activate another reference grinding operation with the [Reference grinding] field.

*If several reference grinding operations are performed, the entire resulting quantity of ground coffee must be weighed and entered as a reference value. The machine automatically detects all the grinding operations triggered and calculates the correct grind quantity from this.*

- ▶ Weigh ground coffee from reference grinding.

- ▶ Set calibration value (measured ground coffee weight) with the two fields [E] [+/-].

- ▶ Complete calibration of the grinder with the [✓] field.

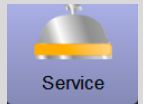
☑ The "Grinder services" window appears again.

☑ The set grinder is now ready for use again.

A calibration should be performed when:

- The machine is new or after an operation period of a year.
- The grind level is changed.
- The grinder is opened.
- The grinding discs are replaced.
- The coffee type is changed.

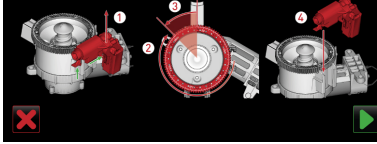
## Select "Service" – "Grinder services" setup (if with automatic grind level adjustment)



## Mühle initialisieren

M2: Rechte Mühle - Espresso Grande

1. Mahlgradmotor entfernen.
2. Die leere Mühle von Hand schliessen bis ein Widerstand spürbar ist (Mahlmesser auf Mahlmesser).
3. Mühle um 45 Grad öffnen (Gegenuhrzeigersinn).
4. Mahlgradmotor wieder einbauen.
5. Mühleninitialisierung bestätigen.




## Variant: Grinder initialisation

*After a fault or after the grinding discs have been replaced, the automatic grind level adjustment must be initialised.*

- Follow the display-guided instructions.

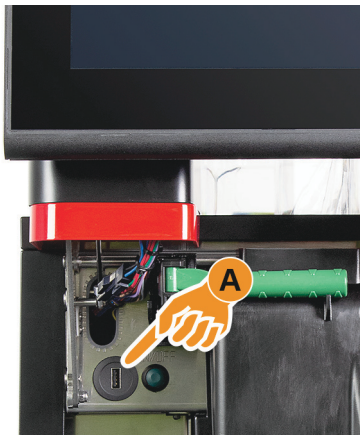
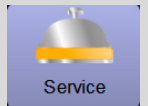
The following steps are required for initialisation:

- [A] Remove grind level motor and install new grinding discs.
- [B] Close the empty grinder by hand until resistance can be felt (grinding disc against grinding disc).
- [C] Open grinder by 45° (anticlockwise).
- [D] Reassemble the grind level motor.
- [E] Confirm "Grinder initialisation" installation steps with the  field.



*Backing up the entire database on a USB stick*

## Setup &gt; "Service" – "Back up database"



- Lift user panel.
- Insert the USB stick into the USB interface [A].
- Select "Service" – "Back up database" setup.
  - ☒ The machine database is saved onto the USB stick.
  - ☒ The saved database version is compatible with the installed machine software version.
  - ☒ The "Database back-up complete" information message appears in the display.
- Remove the USB stick.
- Close user panel.

*The database is saved on the USB stick in the "Schaerer" – "SCA3" – "backup" – "database" – "sca3db.db3\_20170623\_112422" folder structure.*

**NOTE:** The database is automatically saved periodically on the SD memory card inserted in the touch screen every 5 min. It is also saved directly on the motherboard at the same time. As a general rule, the database must always be saved on a USB stick before carrying out an update. This saved database version is compatible with the older machine software should you ever need to carry out a "downgrade".

The following data is stored on the USB stick:

- Machine number
- Beverage recipes
- Hardware configuration
- All beverage counters

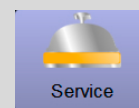


## NOTE

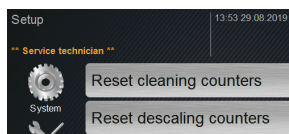
**The touch screen contains an SD memory card for storing the machine data.**

- Before a touch screen is replaced, the database must be saved on a USB stick.
- The previously used SD memory card can be inserted into a newly installed touch screen. This ensures that the system is immediately ready for use.

## Setup &gt; "Service" – "Reset descaling counters"



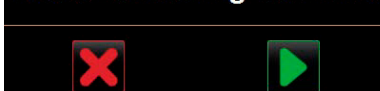
## Reset descaling counters



The parameter deactivates a pending descaling operation.

- ▶ Select "Service" setup.
- ▶ Select the "Service" – "Reset descaling counters" setup.
- ☒ The confirmation window opens.

## Reset descaling counters



- ▶ Confirm the "Reset descaling counters" procedure with the ☒ field.
- ☒ The descaling counter is reset and any pending descaling operation is deleted.
- ☒ The next automatic descaling operation is performed in line with what has been configured in the "System" – "Maintenance" setup.



## NOTE

**Skipping descaling can lead to damage and malfunctions.**

Descaling operations which are not performed automatically because the counter has been reset must be carried out as soon as possible by starting them manually.



*After cleaning or descaling is aborted, the status of the machine remains in the cleaning or descaling mode. In order to leave the mode, it is necessary to reset the cleaning or descaling flag. A cleaning or descaling programme can be aborted via the ☒ field. A power failure also leads to interruption of any cleaning or descaling operation that is in progress.*

**WARNING****Remains of cleaning and descaling agents caused by aborted cleaning or descaling operations can lead to health problems.**

No beverages may be dispensed after a cleaning or descaling operation is aborted. Incomplete cleaning operations must be restarted right away after resetting the cleaning flag.

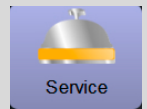


## NOTE

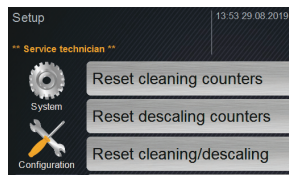
**Incomplete cleaning or descaling operations can lead to damage and malfunctions.**

Incomplete descaling operations must be restarted right away after resetting the descaling flag.

## Setup &gt; "Service" – "Reset descaling/cleaning"

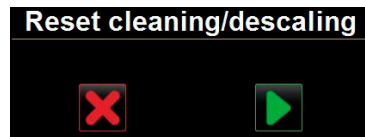



## Reset descaling/cleaning



Delete the cleaning or descaling flag. Any aborted cleaning or descaling operation is reset.

- ▶ Select "Service" setup.
- ▶ Select the "Service" – "Reset descaling/cleaning" setup.
  - ☒ The confirmation window opens.



- ▶ Confirm the "Reset descaling/cleaning" procedure with the  field.
  - ☒ The cleaning and descaling flag is reset and any pending descaling operation is deleted.
  - ☒ The next automatic cleaning or descaling operation is only performed in line with what has been configured in the "System" – "Cleaning" and "System" – "Maintenance" setup.
- ▶ It is absolutely essential to restart cleaning or descaling right away.

## 8.5.4

## Information (Caretaker)

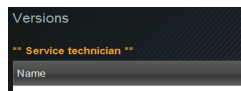


*When reporting an error, this information should be passed on to the service technician.*

## Setup &gt; "Info" – "Show versions"



## Show versions



Informs of the installed versions of the machine software.

Setting range: None (used for informational purposes)

Standard: –

The following information can be obtained here:

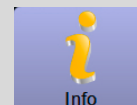
- Touch panel software version
- Power section software version
- Database version
- BSP accounting system version
- Mac address version
- Qt (source code) version
- Qt licence version
- SQLite version
- Copyright SCS software

Versions		10:30 23.03.2018
** Service technician **		
Name	Version	
Software Touchpanel	SCS_4.10.5.ec80fb4_Sim (Created: 2019-11-26 08:03)	
Software Leistungsteil	0.0	
Version Datenbank	2068	
BSP Version	N/A	
MAC Adresse	54:EE:75:7A:D1:60	
Qt version	5.2.1 (Quellcode: info@schaerer.com)	
Qt license	GNU LGPL version 2.1	
SQLite Version	3.7.17	
Software SCA3	Copyright 2017 Schaerer Ltd., Switzerland. All rights reserved.	

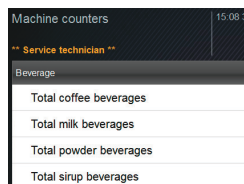


Each ingredient that makes up a beverage is listed as a separate "beverage" in this list.

## Setup > "Info" – "Machine counter"



### Machine counter



Overview of the beverage counters according to the ingredients contained.

Setting range: None (used for informational purposes)

Standard: –

Ingredient example from the "Chociatto" beverage:

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

The following ingredients are differentiated:

- Coffee
- Fresh milk
- Choco or topping
- Syrup (flavours)
- Hot water
- Steam

Machine counters	
15.08.30.08.2019	
** Service technician **	
Beverage	Total
Total coffee beverages	0
Total milk beverages	1
Total powder beverages	1
Total sirup beverages	0
Total hot water	0
Total steam	0

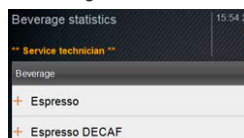


All beverages added on the menu cards are listed.

## Setup > "Info" – "Beverage statistics"



### Beverage statistics



Informs of the beverage dispensing performed.

Setting range: Removal of single or total counter readings.

Standard: Custom

#### Variant: To clear single counters

- [A] Select the small [X] field for the respective beverage in the right-hand column.
- ☑ One beverage counter is reset to [0].

#### Variant: Removing all counters

- [B] The large [X] field at the top of the window removes all listed beverage counters.
- ☑ All beverage counters are reset to [0].





## Setup &gt; "Info" – "Cleaning statistics"



## Cleaning statistics

Cleaning statistics			08:55
** Service technician **			
Date / time	Profile		
20.03.2017 11:59	Service technician	P	
20.03.2017 11:59	Service technician	S	

Informs of the cleaning processes performed.

Setting range: None

Standard: –

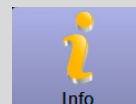
The following information is listed:

- Date and time
- Profile
- System
- Event

*Executed, aborted or reset cleaning processes are shown in the "Event" column.*

Cleaning statistics				08:55 03.09.2019
** Service technician **				
Date / time	Profile	System	Event	
20.03.2017 11:59	Service technician	Powder system	Reset timestamps	
20.03.2017 11:59	Service technician	Steam boiler rinsing	Reset timestamps	
15.03.2017 15:05	Service technician	Coffee system	Reset timestamps	
15.03.2017 15:05	Service technician	Milk system	Reset timestamps	

## Setup &gt; "Info" – "Maintenance statistics"



## Maintenance statistics

Date/time	Profile	
08.03.2017 13:21	Service technician	C

Informs of the maintenance (descaling) performed.

Setting range: None

Standard: –

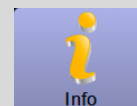
The following information is listed:

- Date and time
- Profile
- System
- Event

*Executed, aborted or reset descaling processes are shown in the "Event" column.*

Date/time	Profile	Maintenance	Event
08.03.2017 13:21	Service technician	Descaling	Done

## Setup &gt; "Info" – "Dispensing statistics"



## Dispensing statistics

Informs of all beverage dispensing processes which contain the beverage data.

Dispensing statistics	
06.08.09.01.2020	
** Carstaker **	
Beverage	Date / time
Pot (5038)	19.12.2019 14:50:27
Espresso (5028)	19.12.2019 14:46:46
Cup sizes	Medium   Single
Aborted	No
Duration	24.6s
Extraction time	1.6s
Beverage modified	No
Doppio (5034)	19.12.2019 14:44:36

Setting range: The field deletes all counter readings

Standard: –

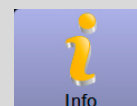
The following beverage data is listed:

- Cup sizes
- Aborted dispensing
- Dispensing duration
- Extraction time
- Beverage modified

*The date of beverage dispensing including the time is entered in the "Date / time" column. In addition, the values, e.g. cup sizes, are listed for the various dispensed beverage options.*

Beverage	Date / time
+ Pot (5038)	19.12.2019 14:50:27
– Espresso (5028)	19.12.2019 14:46:46
Cup sizes	Medium   Single

## Setup &gt; "Info" – "Water hardness statistics"



## Water hardness statistics

Informs of the previously set water hardness.

Water hardness statistics	
10.39.03.09.2019	
** Service technician **	
Date / time	Water hardness [°dKH]
22.09.2016 15:09	9

Setting range: None

Standard: –

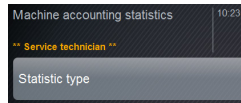
The following information is listed:

- Date and time
- Water hardness

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

Water hardness statistics	
10.39.03.09.2019	
** Service technician **	
Date / time	Water hardness [°dKH]
22.09.2016 15:09	9

## Setup &gt; "Info" – "Machine accounting statistics"

Accounting statistics  
Machine

The statistics provide information about the number of beverages dispensed, with or without sale, as well as the total of these beverage prices.

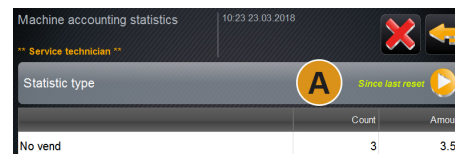
Setting range: Since last reset/Since initialization

Standard: –

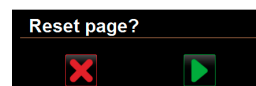
**Variant: Since last reset**

*The "Since last reset" statistics can be deleted. It is thus possible to allow counters to run for a specific time.*

- ▶ Open selection list [A] with the [▶] field.



- ▶ Select [Since last reset] statistics.
- ▶ Select the remove [X] field.
  - ☒ Confirmation request is displayed.
- ▶ Confirm with the [▶] field.



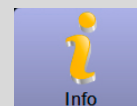
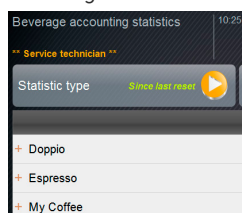
- ☒ The "Since last reset" statistics are deleted.

**Variant: Since initialization**

*The statistics with the "Since initialization" setup cannot be deleted.*

**NOTE:** "Initialization" means "since commissioning".

## Setup &gt; "Info" – "Beverage accounting statistics"

Accounting statistics  
Beverage

The statistics provide information about all beverages dispensed and in which configuration, as well as the beverage count and their price.

*According to the default setting, the user statistics show the entries "Since last reset" or – if the complete statistics are being displayed – "Since initialization" (commissioning).*

Setting range: Since last reset/Since initialization

There are also the following vend types to choose from:

- All
- No vend

*With the "No vend" vend type, all beverages are listed without payment.*

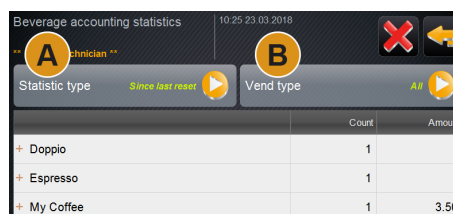
Standard: –

The statistics type can be preset in the selection list [A] and the vend type [B].

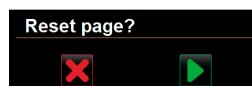
**Variant: Since last reset**

*The "Since last reset" statistics can be deleted. It is thus possible to allow counters to run for a specific time.*

- ▶ Open the selection list [A] or [B] with the [▶] field.



- ▶ Select the desired statistics and vend type.
- ▶ Select [Since last reset] statistics.
  - ☒ The selected statistics are displayed with the vend type.
- ▶ Select the remove [X] field.
  - ☒ Confirmation request is displayed.
- ▶ Confirm with the [▶] field.



- ☒ The "Since last reset" statistics are deleted.

**Variant: Since initialization**

*The statistics with the "Since initialization" setup cannot be deleted.*

**NOTE:** "Initialization" means "since commissioning".

## 8.6 Bookkeeper profile



**INFORMATION:** The "Bookkeeper" and "Bookkeeper reduced" have limited service functions.

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

- Start rinsing
- Display cleaning
- Switching Quickinfo on/off
- Switch on free vend mode if there is a payment system (bookkeeper)
- Shutting down
- Starting maintenance (descaling)
- Ingredient management

*See also "Operation" – "Service menu" functional scope.*



The [Bookkeeper] profile contains the following setup:

- Configuration
- Info



See "Operation" – "Profile [Log-in / Log-out]" for introduction to the setup.

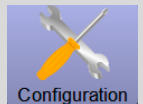


The contents of the available setup are described in the following in this chapter.

### 8.6.1

#### Configuration (Bookkeeper and Bookkeeper reduced)

Setup> "Configuration" – "General"



Main language



Changes the display language.

Setting range: All provided languages.

Standard: Free selection.

- ▶ Open selection menu using the [▶] field.
  - ☒ The options menu appears.
- ▶ Select the desired language.
- ▶ Save your choice with the [OK] field.
- ▶ With the [←] field, exit the parameter and the "Configuration" setup.
  - ☒ The machine performs a restart.
  - ☒ The selected language is displayed.

*All display messages and parameter names appear in the activated language.*

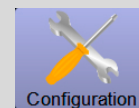


Changes to the menu cards, such as name or sequence, can be made by the service technician. Beverages in the menu card can be made by the bookkeeper or the service technician.

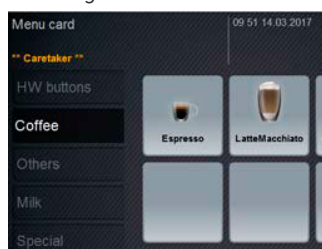


See the following description "Adjusting beverage price by the bookkeeper".

## Adjusting beverage price by the bookkeeper (Standard operating mode)



Beverage field in menu card

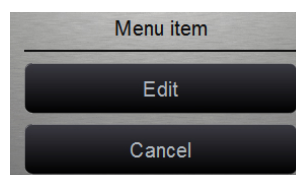


### Beverage price setup with or without payment system

- ☐ "Configuration" – "Operating mode" – "Menu card" setup contains the [Standard] setup.
- ▶ Open the service menu via the [⚙️] field.
- ▶ Log in with the [Bookkeeper] or [Service technician] profile.

See also "Operation" – "Service menu functional scope" – "Log-in / Log-out".

- ▶ Open the setup using the [🔧] field.
- ▶ Select "Configuration" – "Menu card" setup.
- ☒ The "Standard" menu card opens.
- ▶ Select the desired beverage field.
- ☒ The "Menu item" context entry opens.



- ▶ Select the [Edit] field.
- ☒ The "Menu card item" window opens.
- ☒ The individual beverage sizes are listed separately according to the beverage configuration.

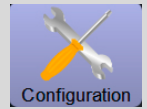
Cup	ID	PLU	0	1	2	3	
Medium   Single	31	0	3.50	0.00	0.00	0.00	🔧
Large   Single	33	0	4.00	0.00	0.00	0.00	🔧
Medium   Double beverage	32	0	6.50	0.00	0.00	0.00	🔧
Large   Double beverage	34	0	7.50	0.00	0.00	0.00	🔧

- ▶ Select the [🔧] field with the desired beverage size.
- ☒ The "Edit menu card item" window opens.
- ▶ Enter the required beverage prices in the [0], [1], [2], and/or [3] price lists via the entry field.

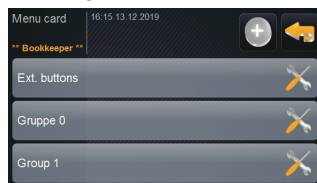
See below for "Setting price using control dial".



## Adjusting beverage price by the bookkeeper (Custom operating mode)



### Beverage field in menu card



### Beverage price setup with or without payment system

- ☐ "Configuration" – "Operating mode" – "Menu card" setup contains the [Custom] option.

- ▶ Open the service menu via the [⚙️] field.
- ▶ Log in with the [Bookkeeper] or [Service technician] profile.

See also "Operation" – "Service menu functional scope" – "Log-in / Log-out".

- ▶ Open the setup using the [🔧] field.
- ▶ Select "Configuration" – "Menu card" setup.
  - ☒ The "Custom" menu card opens.
- ▶ Selected the desired menu card from the list using the [🔧] field.
  - ☒ The menu card opens.

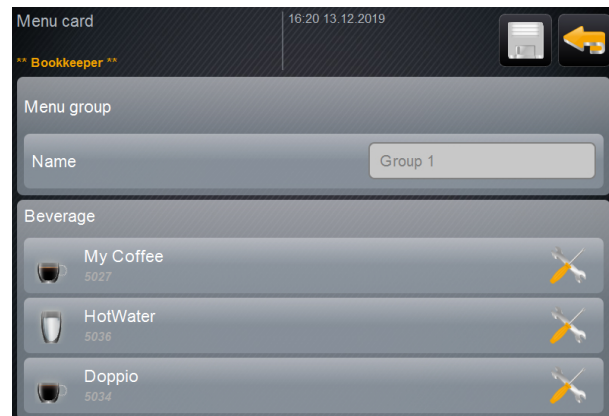


Fig.: Beverages in Custom menu card

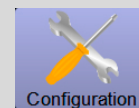
- ▶ Select the [🔧] field.
  - ☒ The "Menu card item" window opens.
  - ☒ The individual beverage sizes are listed separately according to the beverage configuration.



Fig.: Price lists

- ▶ Select the [🔧] field with the desired beverage size.
  - ☒ The "Edit menu card item" window opens.
- ▶ Enter the required beverage prices in the [0], [1], [2], and/or [3] price lists via the entry field.

## Adjusting beverage price by the bookkeeper (Custom operating mode)



### Setting price using control dial

- ▶ Select setting field.
  - ☒ The window with the control dial opens.
- ▶ Set the required value with the control dial or the keyboard.

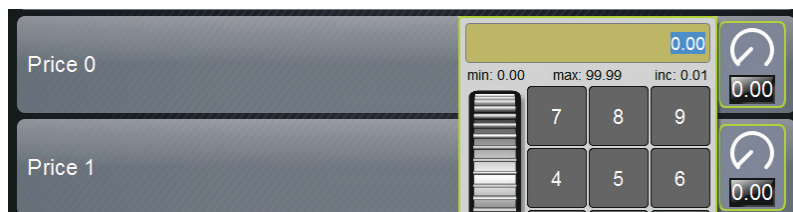




Fig.: Beverage price entry field with control dial.

- ▶ Save the setup using the [  ] field and return to the menu card or user interface with the [  ] field.
  - ☒ The beverage field is now displayed in the user interface with the selected price.
  - ☒ The beverage price is changed when the beverage selection, cup or mug size is changed.

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



*A beverage selection can be cancelled at any time before payment with the [X] field. If the beverage has been paid for, cancelling the order is no longer possible.*

## 8.6.2 Information (Bookkeeper and Bookkeeper reduced)

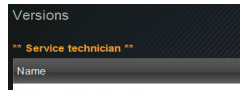


*When reporting an error, this information should be passed on to the service technician.*

### Setup > "Info" – "Show versions"



#### Show versions



Informs of the installed versions of the machine software.

Setting range: None (used for informational purposes)

Standard: –

The following information can be obtained here:

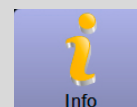
- Touch panel software version
- Power section software version
- Database version
- BSP accounting system version
- Mac address version
- Qt (source code) version
- Qt licence version
- SQLite version
- Copyright SCS software

Versions		10:30 23.03.2018
** Service technician **		
Name	Version	
Software Touchpanel	SCS_4.10.5.ec80fb4_Sim (Created: 2019-11-26 08:03)	
Software Leistungsteil	0.0	
Version Datenbank	2068	
BSP Version	N/A	
MAC Adresse	54:EE:75:7A:D1:60	
Qt version	5.2.1 (Quellcode: info@schaerer.com)	
Qt license	GNU LGPL version 2.1	
SQLite Version	3.7.17	
Software SCA3	Copyright 2017 Schaerer Ltd., Switzerland. All rights reserved.	

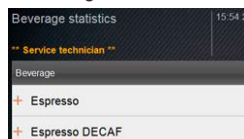


All beverages added on the menu cards are listed.

## Setup > "Info" – "Beverage statistics"



### Beverage statistics



Informs of the beverage dispensing performed.

Setting range: Removal of single or total counter readings.

Standard: Custom

#### Variant: To clear single counters

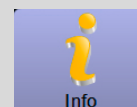
- ▶ [A] Select the small [X] field for the respective beverage in the right-hand column.
- ☒ One beverage counter is reset to [0].

#### Variant: Removing all counters

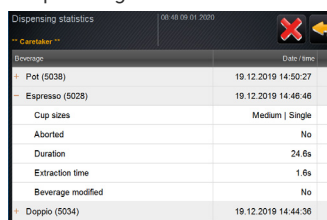
- ▶ [B] The large [X] field at the top of the window removes all listed beverage counters.
- ☒ All beverage counters are reset to [0].



## Setup > "Info" – "Dispensing statistics"



### Dispensing statistics



Informs of all beverage dispensing processes which contain the beverage data.

Setting range: The [X] field deletes all counter readings

Standard: –

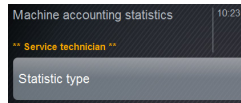
The following beverage data is listed:

- Cup sizes
- Aborted dispensing
- Dispensing duration
- Extraction time
- Beverage modified

*The date of beverage dispensing including the time is entered in the "Date / time" column. In addition, the values, e.g. cup sizes, are listed for the various dispensed beverage options.*

Beverage	Date / time
+ Pot (5038)	19.12.2019 14:50:27
– Espresso (5028)	19.12.2019 14:46:46
Cup sizes	Medium   Single

## Setup &gt; "Info" – "Machine accounting statistics"

Accounting statistics  
Machine

The statistics provide information about the number of beverages dispensed, with or without sale, as well as the total of these beverage prices.

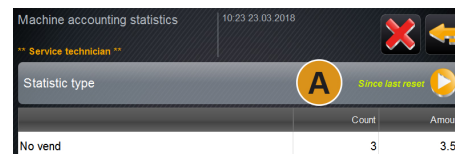
Setting range: Since last reset/Since initialization

Standard: –

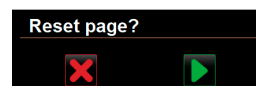
**Variant: Since last reset**

*The "Since last reset" statistics can be deleted. It is thus possible to allow counters to run for a specific time.*

- ▶ Open selection list [A] with the [▶] field.



- ▶ Select [Since last reset] statistics.
- ▶ Select the remove [X] field.
  - ☒ Confirmation request is displayed.
- ▶ Confirm with the [▶] field.



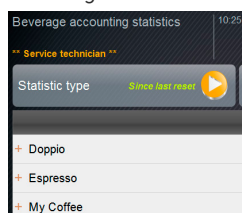
- ☒ The "Since last reset" statistics are deleted.

**Variant: Since initialization**

*The statistics with the "Since initialization" setup cannot be deleted.*

**NOTE:** "Initialization" means "since commissioning".

## Setup &gt; "Info" – "Beverage accounting statistics"

Accounting statistics  
Beverage

The statistics provide information about all beverages dispensed and in which configuration, as well as the beverage count and their price.

*According to the default setting, the user statistics show the entries "Since last reset" or – if the complete statistics are being displayed – "Since initialization" (commissioning).*

Setting range: Since last reset/Since initialization

There are also the following vend types to choose from:

- All
- No vend

*With the "No vend" vend type, all beverages are listed without payment.*

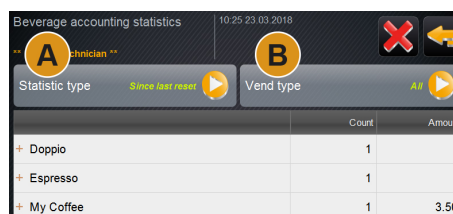
Standard: –

The statistics type can be preset in the selection list [A] and the vend type [B].

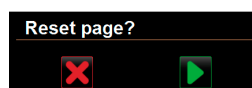
**Variant: Since last reset**

*The "Since last reset" statistics can be deleted. It is thus possible to allow counters to run for a specific time.*

- ▶ Open the selection list [A] or [B] with the [▶] field.



- ▶ Select the desired statistics and vend type.
- ▶ Select [Since last reset] statistics.
  - ☒ The selected statistics are displayed with the vend type.
- ▶ Select the remove [✗] field.
  - ☒ Confirmation request is displayed.
- ▶ Confirm with the [▶] field.



- ☒ The "Since last reset" statistics are deleted.

**Variant: Since initialization**

*The statistics with the "Since initialization" setup cannot be deleted.*

**NOTE:** "Initialization" means "since commissioning".

## 8.7 Facilities manager profile



**INFORMATION:** The "Facilities manager" has limited access to service functions.

In the [Facilities manager] profile, the following functions are available for direct selection in the "Service menu":

- Start rinsing
- Display cleaning
- Switching Quickinfo on/off
- Shutting down
- Starting maintenance (descaling)
- Ingredient management

*See also "Operation" – "Service menu" functional scope.*





The [Facilities manager] profile contains the following setup:

- Configuration
- Info



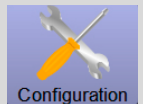
See "Operation" – "Profile [Log-in / Log-out]" for introduction to the setup.



The contents of the available setup are described in the following in this chapter.

### 8.7.1 Configuration (Facilities manager)

#### Setup> "Configuration" – "General"



Main language



Changes the display language.

Setting range: All provided languages.

Standard: Free selection.

- ▶ Open selection menu using the [▶] field.
  - ☒ The options menu appears.
- ▶ Select the desired language.
- ▶ Save your choice with the [OK] field.
- ▶ With the [←] field, exit the parameter and the "Configuration" setup.
  - ☒ The machine performs a restart.
  - ☒ The selected language is displayed.

*All display messages and parameter names appear in the activated language.*

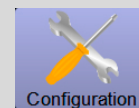


Changes to the menu cards, such as name or sequence, can be made by the service technician. Beverages in the menu card can be made by the bookkeeper or the service technician.

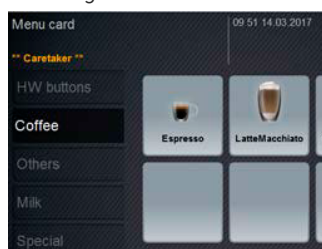


See the following description "Adjusting beverage price by the bookkeeper".

## Adjusting beverage price by the bookkeeper (Standard operating mode)



Beverage field in menu card

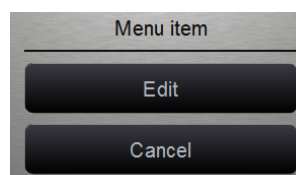


### Beverage price setup with or without payment system

- ☐ "Configuration" – "Operating mode" – "Menu card" setup contains the [Standard] setup.
- ▶ Open the service menu via the [⚙️] field.
- ▶ Log in with the [Bookkeeper] or [Service technician] profile.

See also "Operation" – "Service menu functional scope" – "Log-in / Log-out".

- ▶ Open the setup using the [🔧] field.
- ▶ Select "Configuration" – "Menu card" setup.
- ☒ The "Standard" menu card opens.
- ▶ Select the desired beverage field.
- ☒ The "Menu item" context entry opens.



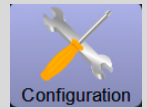
- ▶ Select the [Edit] field.
- ☒ The "Menu card item" window opens.
- ☒ The individual beverage sizes are listed separately according to the beverage configuration.

Cup	ID	PLU	0	1	2	3	
Medium   Single	31	0	3.50	0.00	0.00	0.00	🔧
Large   Single	33	0	4.00	0.00	0.00	0.00	🔧
Medium   Double beverage	32	0	6.50	0.00	0.00	0.00	🔧
Large   Double beverage	34	0	7.50	0.00	0.00	0.00	🔧

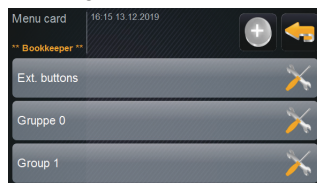
- ▶ Select the [🔧] field with the desired beverage size.
- ☒ The "Edit menu card item" window opens.
- ▶ Enter the required beverage prices in the [0], [1], [2], and/or [3] price lists via the entry field.

See below for "Setting price using control dial".

## Adjusting beverage price by the bookkeeper (Custom operating mode)



### Beverage field in menu card



### Beverage price setup with or without payment system

- ☐ "Configuration" – "Operating mode" – "Menu card" setup contains the [Custom] option.

- ▶ Open the service menu via the [⚙️] field.
- ▶ Log in with the [Bookkeeper] or [Service technician] profile.

See also "Operation" – "Service menu functional scope" – "Log-in / Log-out".

- ▶ Open the setup using the [🔧] field.
- ▶ Select "Configuration" – "Menu card" setup.
  - ☒ The "Custom" menu card opens.
- ▶ Selected the desired menu card from the list using the [🔧] field.
  - ☒ The menu card opens.

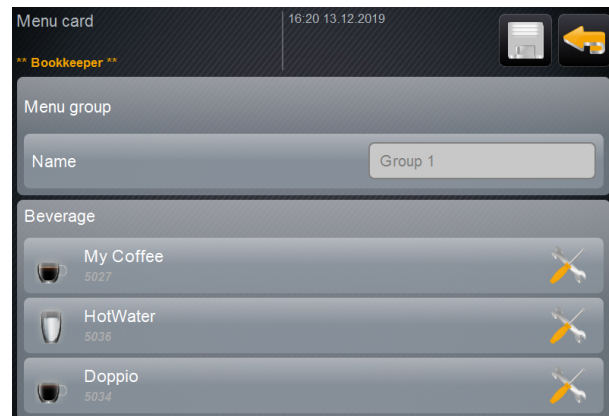


Fig.: Beverages in Custom menu card

- ▶ Select the [🔧] field.
  - ☒ The "Menu card item" window opens.
  - ☒ The individual beverage sizes are listed separately according to the beverage configuration.

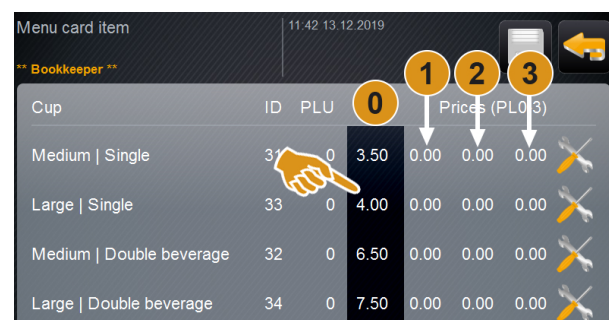
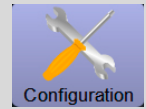


Fig.: Price lists

- ▶ Select the [🔧] field with the desired beverage size.
  - ☒ The "Edit menu card item" window opens.
- ▶ Enter the required beverage prices in the [0], [1], [2], and/or [3] price lists via the entry field.

## Adjusting beverage price by the bookkeeper (Custom operating mode)



### Setting price using control dial

- ▶ Select setting field.
  - ☑ The window with the control dial opens.
- ▶ Set the required value with the control dial or the keyboard.



Fig.: Beverage price entry field with control dial.

- ▶ Save the setup using the [Save] field and return to the menu card or user interface with the [Back] field.
  - ☑ The beverage field is now displayed in the user interface with the selected price.
  - ☑ The beverage price is changed when the beverage selection, cup or mug size is changed.

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



*A beverage selection can be cancelled at any time before payment with the [X] field. If the beverage has been paid for, cancelling the order is no longer possible.*

## 8.7.2 Information (Facilities manager)

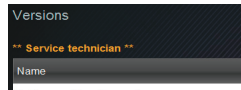


*When reporting an error, this information should be passed on to the service technician.*

### Setup > "Info" – "Show versions"



#### Show versions



Informs of the installed versions of the machine software.

Setting range: None (used for informational purposes)

Standard: –

The following information can be obtained here:

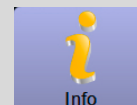
- Touch panel software version
- Power section software version
- Database version
- BSP accounting system version
- Mac address version
- Qt (source code) version
- Qt licence version
- SQLite version
- Copyright SCS software

Versions		10:30 23.03.2018
** Service technician **		
Name	Version	
Software Touchpanel	SCS_4.10.5.ec80fb4_Sim (Created: 2019-11-26 08:03)	
Software Leistungsteil	0.0	
Version Datenbank	2068	
BSP Version	N/A	
MAC Adresse	54:EE:75:7A:D1:60	
Qt version	5.2.1 (Quellcode: info@schaerer.com)	
Qt license	GNU LGPL version 2.1	
SQLite Version	3.7.17	
Software SCA3	Copyright 2017 Schaefer Ltd., Switzerland. All rights reserved.	

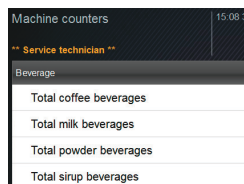


Each ingredient that makes up a beverage is listed as a separate "beverage" in this list.

## Setup > "Info" – "Machine counter"



### Machine counter



Overview of the beverage counters according to the ingredients contained.

Setting range: None (used for informational purposes)

Standard: –

Ingredient example from the "Chociatto" beverage:

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

The following ingredients are differentiated:

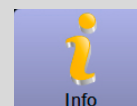
- Coffee
- Fresh milk
- Choco or topping
- Syrup (flavours)
- Hot water
- Steam

Machine counters	
15.08.30.08.2019	
** Service technician **	
Beverage	Total
Total coffee beverages	0
Total milk beverages	1
Total powder beverages	1
Total sirup beverages	0
Total hot water	0
Total steam	0

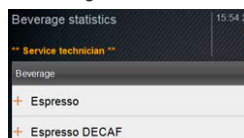


All beverages added on the menu cards are listed.

## Setup > "Info" – "Beverage statistics"



### Beverage statistics



Informs of the beverage dispensing performed.

Setting range: Removal of single or total counter readings.

Standard: Custom

#### Variant: To clear single counters

- [A] Select the small [X] field for the respective beverage in the right-hand column.
- ☑ One beverage counter is reset to [0].

#### Variant: Removing all counters

- [B] The large [X] field at the top of the window removes all listed beverage counters.
- ☑ All beverage counters are reset to [0].



## Setup &gt; "Info" – "Cleaning statistics"



## Cleaning statistics

Cleaning statistics			08:55
** Service technician **			
Date / time	Profile		
20.03.2017 11:59	Service technician	P	
20.03.2017 11:59	Service technician	S	

Informs of the cleaning processes performed.

Setting range: None

Standard: –

The following information is listed:

- Date and time
- Profile
- System
- Event

*Executed, aborted or reset cleaning processes are shown in the "Event" column.*

Cleaning statistics				08:55 03.09.2019
** Service technician **				
Date / time	Profile	System	Event	
20.03.2017 11:59	Service technician	Powder system	Reset timestamps	
20.03.2017 11:59	Service technician	Steam boiler rinsing	Reset timestamps	
15.03.2017 15:05	Service technician	Coffee system	Reset timestamps	
15.03.2017 15:05	Service technician	Milk system	Reset timestamps	

## Setup &gt; "Info" – "Dispensing statistics"



## Dispensing statistics

Dispensing statistics		08:48 09.01.2020
** Carstaker **		
Beverage		Date / time
+ Pot (5038)		19.12.2019 14:50:27
- Espresso (5028)		19.12.2019 14:46:46
Cup sizes	Medium   Single	
Aborted	No	
Duration	24.6s	
Extraction time	1.6s	
Beverage modified	No	
+ Doppio (5034)		19.12.2019 14:44:36

Informs of all beverage dispensing processes which contain the beverage data.

Setting range: The  field deletes all counter readings

Standard: –

The following beverage data is listed:

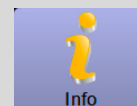
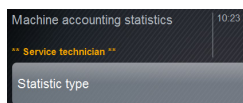
- Cup sizes
- Aborted dispensing
- Dispensing duration
- Extraction time
- Beverage modified

*The date of beverage dispensing including the time is entered in the "Date / time" column. In addition, the values, e.g. cup sizes, are listed for the various dispensed beverage options.*

Beverage	Date / time
+ Pot (5038)	19.12.2019 14:50:27
- Espresso (5028)	19.12.2019 14:46:46
Cup sizes	Medium   Single



## Setup &gt; "Info" – "Machine accounting statistics"

Accounting statistics  
Machine

The statistics provide information about the number of beverages dispensed, with or without sale, as well as the total of these beverage prices.

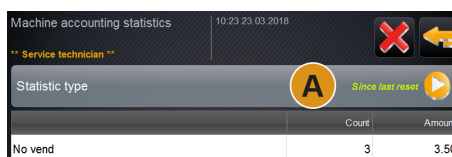
Setting range: Since last reset/Since initialization

Standard: –

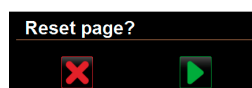
**Variant: Since last reset**

*The "Since last reset" statistics can be deleted. It is thus possible to allow counters to run for a specific time.*

- ▶ Open selection list [A] with the [▶] field.



- ▶ Select [Since last reset] statistics.
- ▶ Select the remove [✗] field.
  - ☒ Confirmation request is displayed.
- ▶ Confirm with the [▶] field.



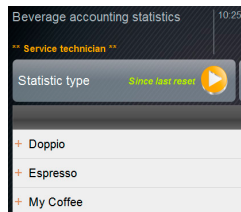
- ☒ The "Since last reset" statistics are deleted.

**Variant: Since initialization**

*The statistics with the "Since initialization" setup cannot be deleted.*

**NOTE:** "Initialization" means "since commissioning".

## Setup &gt; "Info" – "Beverage accounting statistics"

Accounting statistics  
Beverage

The statistics provide information about all beverages dispensed and in which configuration, as well as the beverage count and their price.

*According to the default setting, the user statistics show the entries "Since last reset" or – if the complete statistics are being displayed – "Since initialization" (commissioning).*

Setting range: Since last reset/Since initialization

There are also the following vend types to choose from:

- All
- No vend

*With the "No vend" vend type, all beverages are listed without payment.*

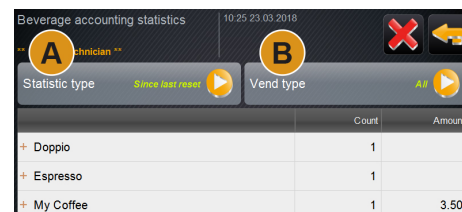
Standard: –

The statistics type can be preset in the selection list [A] and the vend type [B].

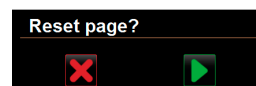
**Variant: Since last reset**

*The "Since last reset" statistics can be deleted. It is thus possible to allow counters to run for a specific time.*

- ▶ Open the selection list [A] or [B] with the [▶] field.



- ▶ Select the desired statistics and vend type.
- ▶ Select [Since last reset] statistics.
  - ☒ The selected statistics are displayed with the vend type.
- ▶ Select the remove [✗] field.
  - ☒ Confirmation request is displayed.
- ▶ Confirm with the [▶] field.



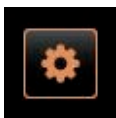
- ☒ The "Since last reset" statistics are deleted.

**Variant: Since initialization**

*The statistics with the "Since initialization" setup cannot be deleted.*

**NOTE:** "Initialization" means "since commissioning".

## 8.8 Quality manager profile

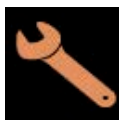


**INFORMATION:** The "Quality manager" has limited access to service functions.

The following functions are available in the "Service menu" in the [Quality manager] profile:

- Start rinsing
- Display cleaning
- Switching Quickinfo on/off
- Shutting down
- Starting maintenance (descaling)
- Ingredient management

*See also "Operation" – "Service menu" functional scope.*



The [Quality manager] profile contains the following setup:

- Configuration
- Info



See "Operation" – "Profile [Log-in / Log-out]" for introduction to the setup.

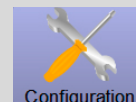


The contents of the available setup are described in the following in this chapter.

### 8.8.1

#### Configuration (Quality manager)

Setup> "Configuration" – "General"



Main language



Changes the display language.

Setting range: All provided languages.

Standard: Free selection.

- ▶ Open selection menu using the [▶] field.
  - ☒ The options menu appears.
- ▶ Select the desired language.
- ▶ Save your choice with the [OK] field.
- ▶ With the [←] field, exit the parameter and the "Configuration" setup.
  - ☒ The machine performs a restart.
  - ☒ The selected language is displayed.

*All display messages and parameter names appear in the activated language.*



Changes to the menu cards, such as name or sequence, can be made by the service technician. Beverages in the menu card can be made by the bookkeeper or the service technician.



See the following description "Adjusting beverage price by the bookkeeper".

## 8.8.2 Information (Quality manager)

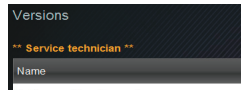


When reporting an error, this information should be passed on to the service technician.

### Setup > "Info" – "Show versions"



#### Show versions



Informes of the installed versions of the machine software.

Setting range: None (used for informational purposes)

Standard: –

The following information can be obtained here:

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

Versions		10:30 23.03.2018
** Service technician **		
Name	Version	
Software Touchpanel	SCS_4.10.5.ec80fb4_Sim (Created: 2019-11-26 08:03)	
Software Leistungsteil	0.0	
Version Datenbank	2068	
BSP Version	N/A	
MAC Adresse	54:EE:75:7A:D1:60	
Qt version	5.2.1 (Quellcode: info@schaerer.com)	
Qt license	GNU LGPL version 2.1	
SQLite Version	3.7.17	
Software SCA3	Copyright 2017 Schaerer Ltd., Switzerland. All rights reserved.	

### Setup > "Info" – "Cleaning statistics"



#### Cleaning statistics

Cleaning statistics			06:55
** Service technician **			
Date / time	Profile		
20.03.2017 11:59	Service technician	P	
20.03.2017 11:59	Service technician	S	

Informes of the cleaning processes performed.

Setting range: None

Standard: –

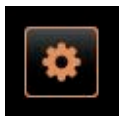
The following information is listed:

- Date and time
- Profile
- System
- Event

*Executed, aborted or reset cleaning processes are shown in the "Event" column.*

Cleaning statistics				06:55 03.03.2019
** Service technician **				
Date / time	Profile	System	Event	
20.03.2017 11:59	Service technician	Powder system	Reset timestamps	
20.03.2017 11:59	Service technician	Steam boiler rinsing	Reset timestamps	
15.03.2017 15:05	Service technician	Coffee system	Reset timestamps	
15.03.2017 15:05	Service technician	Milk system	Reset timestamps	

## 8.9 Operator profile

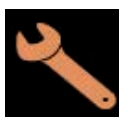


**INFORMATION:** The "Operator" has limited access to service functions.

In the [Operator] profile, the following functions are available for direct selection in the "Service menu":

- Start rinsing
- Display cleaning
- Switching Quickinfo on/off.
- Shutting down
- Starting (machine/Flavour Point) cleaning
- Starting maintenance (descaling)
- Ingredient management

*See also "Operation" – "Service menu" functional scope.*



The [Machine operator] profile contains the following setup:

- Configuration
- Info



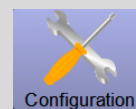
*See "Operation" – "Profile [Log-in / Log-out]" for introduction to the setup.*



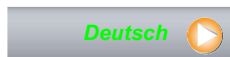
*The contents of the available setup are described in the following in this chapter.*

### 8.9.1 Configuration (Operator)

#### Setup> "Configuration" – "General"



Main language



Changes the display language.

Setting range: All provided languages.

Standard: Free selection.

- ▶ Open selection menu using the [▶] field.
  - ☒ The options menu appears.
- ▶ Select the desired language.
- ▶ Save your choice with the [💾] field.
- ▶ With the [⬅] field, exit the parameter and the "Configuration" setup.
  - ☒ The machine performs a restart.
  - ☒ The selected language is displayed.

*All display messages and parameter names appear in the activated language.*



*Changes to the menu cards, such as name or sequence, can be made by the service technician. Beverages in the menu card can be made by the bookkeeper or the service technician.*



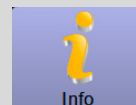
*See the following description "Adjusting beverage price by the bookkeeper".*

## 8.9.2 Information (Operator)

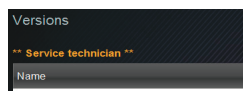


When reporting an error, this information should be passed on to the service technician.

### Setup > "Info" – "Show versions"



#### Show versions



Informs of the installed versions of the machine software.

Setting range: None (used for informational purposes)

Standard: –

The following information can be obtained here:

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

Versions		10:30 23.03.2018
** Service technician **		
Name	Version	
Software Touchpanel	SCS_4.10.5.ec80fb4_Sim (Created: 2019-11-26 08:03)	
Software Leistungsteil	0.0	
Version Datenbank	2068	
BSP Version	N/A	
MAC Adresse	54:EE:75:7A:D1:60	
Qt version	5.2.1 (Quellcode: info@schaerer.com)	
Qt license	GNU LGPL version 2.1	
SQLite Version	3.7.17	
Software SCA3	Copyright 2017 Schaerer Ltd., Switzerland. All rights reserved.	

## 9 Troubleshooting

### 9.1 "Smart info" window

#### 9.1.1 Instructions on error messages

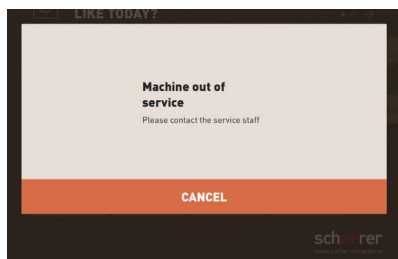


Fig.: "Simple" error message in "Guest mode"

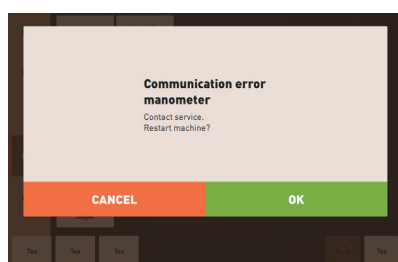


Fig.: "Specific" error message in "Staff mode"

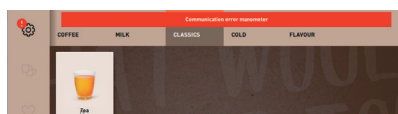


Fig.: "Specific" error message in "Staff mode"

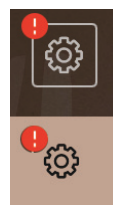


Fig.: Service menu with pending error message

Error messages are displayed in accordance with the selected user interface.

##### Variant: "Simple" Guest mode

- ☐ The "Guest mode" user interface is activated in the operating mode.
  - ☒ If there is an error message, the coffee machine remains out of operation until the service staff acknowledges the message.
  - ☒ The "Inform service staff" request is displayed.
  - ☒ The error message cannot be acknowledged.
- Inform service staff.

##### Variant: "Specific" Staff or Frequent user mode

- ☐ The "Staff or Frequent user mode" user interface is activated in the operating mode.
  - ☒ If there is an error message, the coffee machine is briefly out of operation.
  - ☒ The "Restart" or "Inform service technician" request is displayed.
  - ☒ Error messages can be partially acknowledged.
- Follow action requests and acknowledge, or select [OK] field for a restart.
- ☒ The pending error, e.g. "Grounds container missing" is acknowledged. The machine is again ready for use.
  - ☒ The machine performs a restart and is again ready for use.
  - ☒ The error message cannot be acknowledged under certain circumstances.
- Inform service technician if the pending error message cannot be rectified and therefore not be reset.

##### Variant: Error messages in the Service menu

- ☐ The Service menu is open.
- Select the Service menu field, see figure on the left.
- ☒ The Service menu opens and all pending error messages are listed.

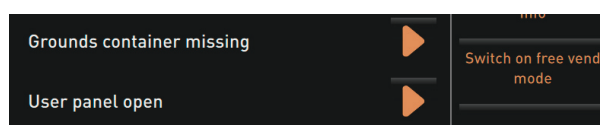


Fig.: Error/fault message list in the "Service menu"

- Open error message using the [▶] field.
- Execute displayed measure and possibly acknowledge with [OK].



*Machines with appropriate equipment also signalise pending error messages with lit LED colour stripes on the coffee machine.*

### 9.2 Malfunctions

#### 9.2.1 Machine ready for use during pending message



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

- Select any other pending error messages in the "Service menu" and remedy them in line with the measures described below.
  - ☐ If the error message persists, a malfunction may exist.
- Contact your Service partner (see [www.schaerer.com](http://www.schaerer.com)).



### 9.2.2 Pending error message in the Service menu



The [Service menu] operating field without colour marking provides information on when the machine is completely ready for use.



The [Service menu] operating field with orange marking provides information on pending information or upcoming action requests while the machine is ready for use.

☑ It will soon be necessary to take action.



The [Service menu] operating field with red colour marking provides information on pending error messages, cleaning processes and maintenance.

☑ Action must be taken.

Pending error messages, information or action requests are listed in the "Service menu".

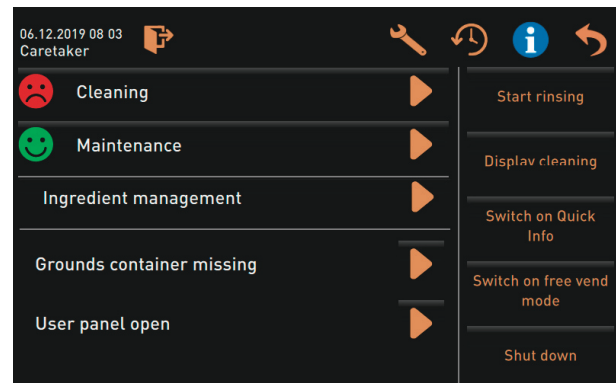


















Fig.: "Service menu" window with error message










## 9.3 Displayed texts

Fault	Error	Request	Note	Display message	Cause	What to do
				Caution: A blocked waste water outlet can cause flooding.	Left-over coffee grounds in waste water.	► Check the waste water outlet and drip tray for blockages.
				Wait until the accounting system is fully initialized.	Initialization in progress.	► Wait for the accounting system to finish initialising.
				Wait until telemetry connection is established or contact service.	"Coffee Link" indication missing	► Restart the telemetry module. ► If the fault persists: Contact your service partner.
				Brewer Encoder error	Brewer encoder motor was not detected during machine initialization.	► Restart machine. ► If the fault persists: Contact your service partner.
				Error while adjusting the grind level middle, left or right	Motor for automatic grinding level adjustment	► Cancel grinding level adjustment. ► Restart machine. ► If the fault persists: Contact your service partner.
				Error machine configuration	Discrepancy between software and machine hardware	► Restart hardware detection. ► Restart machine. ► If the fault persists: Contact your service partner.
				Interrupt temperature sensor steam wand	Temperature sensor from steam wand is not closed	► Restart machine. ► If the fault persists: Contact your service partner.

Fault	Error	Request	Note	Display message	Cause	What to do
				Short circuit temperature sensor steam wand	Temperature sensor from steam wand	<ul style="list-style-type: none"> <li>▶ Restart machine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Reset cleaning/descaling	Cleaning/descaling is pending	<ul style="list-style-type: none"> <li>▶ Perform cleaning/descaling in the "Service menu".</li> <li>▶ Acknowledge cleaning/descaling in the "Service menu".</li> </ul>
				Milk level low	Milk level in milk container is low	<ul style="list-style-type: none"> <li>▶ Fill the milk container at the earliest opportunity.</li> </ul>
				Milk empty	There is no milk in the milk container or the level is too low.	<ul style="list-style-type: none"> <li>▶ Fill milk container immediately.</li> <li>▶ Remove the container for the fresh milk.</li> <li>▶ Thoroughly clean the container.</li> <li>▶ Fill the container with fresh milk pre-cooled at <math>\pm 5^{\circ}\text{C}</math> and insert it back into the machine.</li> </ul>
				Flavour Point (syrup system) 1–4 empty	Flavour (syrup) level in bottle 1–4 empty	<ul style="list-style-type: none"> <li>▶ Start the "Flavour 1–4" process in the Service menu.</li> <li>▶ Follow the requests shown on the display.</li> <li>▶ Remove and clean the hose.</li> <li>▶ Reconnect the hose and activate the syrup pump with the [Start pump] field.</li> </ul>
				Grounds container full	The grounds container contains about 60 – 70 coffee cakes.	<ul style="list-style-type: none"> <li>▶ Empty the grounds container.</li> <li>▶ Rinse out the grounds container and wipe it dry.</li> <li>▶ Replace the grounds container.</li> </ul>
				Grounds container full soon	The grounds container will soon contain about 60 – 70 coffee cakes.	<ul style="list-style-type: none"> <li>▶ Empty the grounds container at the next opportunity.</li> </ul>
				Insert grounds container	The grounds container is missing. The grounds container was not completely inserted into the machine.	<ul style="list-style-type: none"> <li>▶ Correctly insert the grounds container into the machine.</li> </ul>
				Close user panel	The user panel is open or was not completely closed.	<ul style="list-style-type: none"> <li>▶ Push the user panel downwards until it snaps into place.</li> </ul>
				Refill external drinking water tank (option)	The filling level of the external drinking water tank (option) is too low.	<ul style="list-style-type: none"> <li>▶ Remove level monitoring from drinking water tank. Rinse drinking water tank with fresh water and fill. Reinsert level monitoring.</li> </ul>
				External drinking water nearly empty (option)	The filling level of the external drinking water tank (option) is too low.	<ul style="list-style-type: none"> <li>▶ Fill the drinking water tank at the next opportunity.</li> </ul>
				Empty waste water tank (option)	The filling quantity of the external waste water tank has been reached.	<ul style="list-style-type: none"> <li>▶ Remove the level monitoring from the waste water tank.</li> <li>▶ Drain the waste water tank.</li> <li>▶ Rinse the waste water tank.</li> <li>▶ Reinsert the level monitoring.</li> </ul>

Fault	Error	Request	Note	Display message	Cause	What to do
				Middle grinder (standard), right grinder (option) overloaded or blocked	An excessively high current value (>8 A) has been measured over a defined period. The machine makes 5 more attempts to start grinding, after which the following message appears: "Left/right grinder overloaded". If another beverage is requested while in this state and the problems remain, the message changes to "Middle or right grinder/blocked". Beverage dispensing is disabled.	<ul style="list-style-type: none"> <li>▶ Shut down the machine.</li> <li>▶ Check the grinder for blockages and remove any foreign bodies.</li> <li>▶ Restart machine.</li> <li>▶ If the error appears again, the problem has not been resolved: Contact your service partner.</li> </ul>
				Top up beans (middle grinder empty)	The middle bean hopper is empty.	▶ Refill bean hopper.
				Top up beans (right grinder empty)	The right bean hopper is empty.	▶ Refill bean hopper.
				Fill ground coffee in manual inlet	Do not insert ground coffee into the manual inlet.	<ul style="list-style-type: none"> <li>▶ Open the manual inlet cover in the middle bean hopper.</li> <li>▶ Fill ground coffee.</li> <li>▶ Close cover to the manual inlet.</li> </ul>
				Fill choco or milk powder in the 1st container (1st powder container empty)	The 1st powder container is empty.	▶ Refill first powder container.
				Fill choco or milk powder in the 2nd container (2nd powder container empty)	The 2nd powder container is empty.	▶ Refill second powder container.
				Tea or coffee hot water boiler Excess temperature	<p>The water supply has been interrupted.</p> <p>The machine has overheated.</p> <p>The SSR is defective.</p> <p>The Klixon has triggered.</p>	<ul style="list-style-type: none"> <li>▶ Check the level of the external drinking water tank (option) or the state of the mains water supply.</li> <li>▶ Disconnect the machine from the power supply and let it cool down.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Steam boiler excess temperature	<p>The water supply has been interrupted.</p> <p>Blockage in the steam system.</p> <p>The machine has overheated.</p> <p>The SSR is defective.</p> <p>The Klixon has triggered.</p>	<ul style="list-style-type: none"> <li>▶ Check the level of the external drinking water tank (option) or the state of the mains water supply.</li> <li>▶ Check and clean the beverage outlet and steam system.</li> <li>▶ Disconnect the machine from the power supply and let it cool down.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>

Fault	Error	Request	Note	Display message	Cause	What to do
				Hot water temperature too low Steam boiler temperature too low	Heating phase. Error while heating up.	► Wait until the machine is heated-up. ► Disconnect the machine from the power supply. ► Connect the machine again and switch it on.
				HW boiler heating timeout Steam boiler heating timeout	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 Steam boiler NTC short	The main board does not detect resistance. A maximum temperature (approx. 150°C) is measured. Beverage dispensing is disabled.	► If the fault persists: Contact your service partner.
				Hot water boiler NTC interrupted Steam boiler NTC interrupted	The temperature sensor has been interrupted. A minimum temperature is measured.	► If the fault persists: Contact your service partner.
				Brewing unit overcurrent	An overcurrent was detected on the brewing unit motor.	► If the fault persists: Contact your service partner.
				Brewing unit standby current	Even when the brewing unit is not running, it must consume a minimal amount of current. If it does not, there is an error. This may be due to the brewing unit, the power board or the wiring.	► Check the brewing unit for blockages. ► If the error persists: Contact your service partner.
				Insert decalcification cartridge	Descaling agent required for the descaling process	► Insert decalcification cartridge. ► After descaling and when a request appears on the display, remove the cartridge again.
				Brewing unit timeout	The brewing unit does not have a press switch for the "home position". The position of the brewing cylinder is detected by measuring the current value. The following peak values are detected: Upper and lower position The following timeout is defined: If, after a movement of the brewing unit, a current peak is not detected within 10 sec, the "Brewing unit timeout" error is displayed.	► If the fault persists: Contact your service partner.

Fault	Error	Request	Note	Display message	Cause	What to do
				Water flow error	While a coffee product is being dispensed, the flow meter performs fewer than the defined number of minimum rotations. It is likely there is a total or partial blockage somewhere in the water system.	<ul style="list-style-type: none"> <li>▶ Check the level of the drinking water tank or the state of the mains water supply.</li> <li>▶ Check the internal or external drinking water tank (saturation of the filter reduces the water flow).</li> <li>▶ Check whether the upper plunger is blocked or partially congested.</li> <li>▶ Check the grinding setting. <b>INFORMATION:</b> If the grinding setting is too fine, this can inhibit or completely block the water flow.</li> <li>▶ If the error persists: Contact your service partner.</li> </ul>
				Steam boiler supply error	The level sensor detected a low level in the steam boiler. An attempt was made to fill the boiler. However, the level probe did not detect water within 60 seconds. Filling is aborted. The dispensing of beverages that require steam is disabled.	<ul style="list-style-type: none"> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Modbus BP processing error	Communication error between power section and touch screen.	<ul style="list-style-type: none"> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Modbus MV processing error	Communication error between manometer and touch screen.	<ul style="list-style-type: none"> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Modbus MR processing error	Communication error between cooling unit and touch screen.	<ul style="list-style-type: none"> <li>▶ Check the cooling unit and machine wiring.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Payment system error	Communication error between payment system and touch screen.	<ul style="list-style-type: none"> <li>▶ Restart machine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Machine out of service	Setup in self service mode if no beverages are to be dispensed.	<ul style="list-style-type: none"> <li>▶ Set the "Configuration" – "Timer mode" parameter as appropriate.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Machine out of service	Setup in self service mode if no beverages can be dispensed for various reasons.	<ul style="list-style-type: none"> <li>▶ Check products such as coffee beans, milk, choco powder or milk powder.</li> <li>▶ Check temperature inside cooling unit.</li> <li>▶ Carry out any cleaning or descaling operation that is pending.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
				Communication error (Various)	Communication error between software and various modules, such as the HCU power section, Flavour Point, brewing unit, manometer, and so on.	<ul style="list-style-type: none"> <li>▶ Restart machine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>

## 9.4 Errors without display message

Fault	Cause	What to do
Display dark	<ul style="list-style-type: none"> <li>Machine not connected to the mains supply</li> <li>Machine not switched on</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the machine is connected to the mains supply.</li> <li>▶ Check whether the machine is switched on.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
No milk	<ul style="list-style-type: none"> <li>Milk container empty</li> <li>Milk system clogged</li> <li>Milk system incorrectly disabled</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the milk container is filled.</li> <li>▶ Check the cable connection from the coffee machine control cable to the cooling unit.</li> <li>▶ Perform the daily cleaning routine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
No syrup (Flavour Point)	<ul style="list-style-type: none"> <li>Syrup bottle empty</li> <li>Flavour Point system clogged</li> <li>Flavour Point system incorrectly disabled</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the syrup bottles are filled.</li> <li>▶ Check the cable connection from the coffee machine control cable to the Flavour Point.</li> <li>▶ Flavour Point system hose cleaning</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
No milk foam	<ul style="list-style-type: none"> <li>Milk container empty</li> <li>Milk system clogged</li> <li>Milk system incorrectly disabled</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the milk container is filled.</li> <li>▶ Perform the daily cleaning routine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>

## 10 Precautionary measures

### 10.1 Cleaning products

#### 10.1.1 Application



#### WARNING



**Danger of poisoning! Cleaning products can lead to poisoning if not used properly.**

Please adhere to the following points:

- ▶ Store cleaning products away from children and unauthorised persons.
- ▶ Do not swallow the cleaning products.
- ▶ Never mix cleaning products with other chemicals or acids.
- ▶ Never pour cleaning products into the milk container.
- ▶ Never pour cleaning products into the drinking water tank (internal/external).
- ▶ Only use the cleaning and descaling products for their intended purpose (see label).
- ▶ Do not eat or drink while handling cleaning products.
- ▶ Ensure that the area is well ventilated when handling cleaning products.
- ▶ Wear safety gloves when handling cleaning products.
- ▶ Wash your hands thoroughly after handling cleaning products.



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

#### 10.1.2 Storage

Please adhere to the following points:

- Store in a place that is inaccessible to children and unauthorised persons.
- Protect cleaning products from heat, light and moisture.
- Store in a separate location from acids.
- Only store in the original packaging.
- Store cleaning products separately from each other.
- Do not store together with foodstuffs or other similar items.
- Local regulations regarding the storage of chemicals (cleaning products) apply.

#### 10.1.3 Disposal

If recycling is not possible, cleaning agents and their containers must be disposed of in accordance with the specifications of the local and legal regulations.

#### 10.1.4 Emergency information

Obtain the phone number of the emergency information service (toxicological information centre) from the cleaning product manufacturer (see cleaning product label). If your country does not have this type of institution, please see the following table:

##### Swiss Toxicological Information Centre

International calls	+41(0)44 251 51 51
Calls from Switzerland	145
Internet	www.toxi.ch



## 10.2 Hygiene regulations

### 10.2.1 Water



#### CAUTION



**Health problems Improper handling of water can cause health problems.**

Please adhere to the following points:

- ▶ The water must be free of dirt and bacteria.
- ▶ Do not connect the machine to pure reverse osmosis water 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.
- ▶ Maximum chlorine content of 50 mg per litre.
- ▶ pH value between 6.5-7 (pH neutral).

For machines with drinking water tank (internal & external):

- ▶ Fill the drinking water tank with fresh water daily.
- ▶ Rinse the drinking water tank thoroughly before filling.



#### CAUTION



**Health problems Improper handling of coffee can cause health problems.**

Please adhere to the following points:

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

### 10.2.2 Milk



#### CAUTION



**Health problems Improper handling of milk can cause health problems!**

Please adhere to the following points:

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

### 10.2.3 Coffee machine powder



#### **CAUTION**



**Health problems Improper use of automatic machine powder can be hazardous to health!**

Please adhere to the following points:

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

### 10.2.4 Syrup flavour (Flavour Point)



#### **CAUTION**



**Health problems Improper handling of syrup can lead to health problems.**

Please adhere to the following points:

- ▶ Use syrup directly from the original packaging.
- ▶ Check the packaging for damage before opening.
- ▶ Close the Flavour Point immediately after filling.
- ▶ Store the syrup in a cool, dry, dark place.
- ▶ Store syrup separately from cleaning products.
- ▶ Use up the oldest products first ("first in, first out" principle).
- ▶ Use products before the expiry date.
- ▶ Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

# 11 Liability

## 11.1 Operator responsibilities

### 11.1.1 Application

The operator must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a Schaefer AG service partner, a representative thereof, or other authorised persons. Schaefer AG must be notified in writing of any defects within 30 days!

For hidden defects, this period is extended to 12 months from the date of installation (work report, handover report), but no longer than 18 months after the product leaves the factory in Zuchwil. Safety-relevant parts such as safety valves, safety thermostats, boilers etc. must not be repaired under any circumstances. Safety-relevant components must be replaced without fail!

The following maintenance intervals apply:

- Replace safety valves 5 bar and 12 bar after 24 months.
- Check boilers (steam boilers, continuous flow heaters) every 24 months. Replace if necessary. Replace the boilers after 48 months.



*See "Service and maintenance" - "Maintenance routine" for detailed information on the maintenance intervals in these operating instructions.*

## 11.2 Warranty and liability claims

No responsibility will be taken for warranty or liability claims in the event of personal injury or material damage as a result of one or more of the following causes:

- Improper use of the machine.
- Improper installation, commissioning, operation, cleaning and maintenance of the machine and the associated optional devices.
- Failure to observe maintenance intervals.
- Operation of the machine with safety devices that are defective or safety and protective equipment that is not properly installed or is not functional.
- Failure to observe the safety notes in the operating instructions pertaining to storage, installation, commissioning, operation and maintenance of the machine.
- Operation of the machine when it is not in good working condition.
- Repairs that have not been carried out properly.
- Use of spare parts that are not original Schaefer AG spare parts.
- Use of cleaning products that are not recommended by Schaefer AG.
- Catastrophic incidents due to foreign objects, accidents, vandalism or force majeure.
- Penetration of the machine with any type of object or opening of the housing.

The manufacturer shall only and exclusively accept liability or honour liability claims if the specified maintenance and service intervals are adhered to and if original spare parts have been used that were ordered from the manufacturer or another authorised supplier.