

# Schaerer ProCare

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## Operating instructions



## Legal notice

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## Table of Contents

1	Safety.....	4
1.1	Signs and symbols.....	4
1.1.1	Safety notes.....	4
1.1.2	Warning symbols used.....	4
1.1.3	Prohibition symbols used.....	5
1.2	Intended use.....	5
1.3	Foreseeable misuse.....	5
1.4	Operator responsibilities.....	6
1.5	Staff requirements.....	6
1.6	Residual risks.....	6
1.6.1	Risk of electrocution.....	7
1.6.2	Danger from cleaning products.....	7
1.7	Danger of property damage.....	8
2	Technical data.....	9
2.1	Machine data.....	9
2.2	On-site mains connection.....	9
2.3	Water connection values.....	10
2.4	Ambient conditions.....	10
2.5	Serial plate.....	10
3	Compliance information.....	12
3.1	Applied standards.....	12
3.2	Manufacturer's address.....	13
4	Product description.....	14
4.1	ProCare overview.....	14
5	Installation and commissioning.....	16
5.1	Connecting ProCare unit.....	16
5.2	Connecting ProCare unit to machine.....	16
5.3	Connecting ProCare unit to cooling unit.....	17
5.4	Connecting ProCare unit cable.....	18
5.5	Inserting ProCare cleaning bags.....	19
6	Operation.....	22
6.1	Logging in to Service menu.....	22
6.2	Cyclical system cleaning.....	22
6.3	Calling up cleaning schedule.....	23
6.4	Setting cleaning times.....	25
6.5	ProCare cleaning variants.....	27
6.5.1	Starting scheduled cleaning with ProCare.....	27
6.5.2	Additional cleaning.....	34
6.6	ProCare: Cleaning (Plug&Clean) milk hose piece.....	35
7	Cleaning.....	38
8	Troubleshooting.....	39
9	Disassembly.....	40
10	Disposal.....	41

# 1 Safety

## 1.1 Signs and symbols

### 1.1.1 Safety notes



#### DANGER

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

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



#### WARNING

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

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



#### CAUTION

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

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









#### ADVICE

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

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

### 1.1.2 Warning symbols used

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

Charac- ters	Type of danger	Charac- ters	Type of danger
	Warning of hot fluids		Warning of hot surface
	Warning of hot steam		Warning of dangerous electrical voltage
	Warning of poisonous substances		Warning of hand injuries

### 1.1.3 Prohibition symbols used

Charac- ters	Significance	Charac- ters	Significance
	Read documentation!		Wear safety gloves!
	Wear safety goggles!		Wash your hands!
	Disconnect the power plug!		

## 1.2 Intended use

**ProCare** is an optional accessory for different coffee machines from Schaerer AG. The module dissolves cleaning powder and supplies the connected machine with cleaning solution with the required concentration. This allows the coffee machine to be cleaned automatically without any interaction required from the operator.

**ProCare** and the Schaerer coffee machine are intended for commercial use as well as in hotels, restaurants or similar locations and may be installed in self-service locations if a responsible person is on site while they are in operation. **ProCare** and the coffee machine may be used in businesses, offices and other similar work environments, hotels, motels and bed and breakfast establishments.

Children must also not be allowed to perform cleaning procedures or user maintenance without supervision. Only have cleaning and user maintenance done by persons who have knowledge of and practical experience with the device, particularly when it comes to service and hygiene.



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

## 1.3 Foreseeable misuse

Any use of the device beyond its intended use or in a different manner is considered misuse and can lead to dangerous situations. Improper handling of the device can lead to injuries.

- ▶ Read the operating instructions carefully before use.
- ▶ Only allow qualified service staff access to the service area of the machine and optional accessories.
- ▶ Only have cleaning and user maintenance done by persons who have knowledge of and practical experience with the device, particularly when it comes to service and hygiene.
- ▶ Have the device supervised by trained staff in Self-service mode and in operation by staff so that they are available to the user for questions and to ensure compliance with the cleaning and maintenance measures.
- ▶ Never modify the safety devices of the device.
- ▶ Only use the device if it is working properly and is not damaged.

## 1.4 Operator responsibilities

The operating company must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a 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 later than 18 months after the product leaves the factory in Zuchwil.

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

The operator is responsible for compliance with the maintenance regulations.

## 1.5 Staff requirements



### WARNING

#### **Risk of injury due to insufficient qualification!**

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

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

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

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

#### **Instructed person**

Has been instructed by the operator about the tasks assigned to him/her and the possible dangers in the event of improper behaviour.

#### **Specialist staff**

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

#### **Service staff**

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

#### **Qualified electrician**

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

## 1.6 Residual risks

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



These safety notes can be requested from Schaefer AG or downloaded directly from the Media Pool on the website ([schaerer.com/member](http://schaerer.com/member)).

### 1.6.1 Risk of electrocution



#### DANGER

##### Risk of death due to electrocution!



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

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

### 1.6.2 Danger from cleaning products



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



#### WARNING

##### Danger of poisoning from cleaning products!

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

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

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

Swiss Toxicological Information Centre

International calls

+4144 251 51 51

Swiss Toxicological Information Centre

Calls from Switzerland

145

Internet

[www.toxi.ch](http://www.toxi.ch)

## 1.7 Danger of property damage



### ADVICE

#### **Material damage due to improper handling of the device!**

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

- ▶ In the event of malfunctions, observe the information in the operating instructions and call in a qualified service technician if necessary.
- ▶ Only use original Schaefer AG spare parts.
- ▶ Report any noticeable damage or leaks immediately to an authorised service partner and have any affected parts replaced or repaired.
- ▶ Never spray the 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.

## 2 Technical data

### 2.1 Machine data

Technical data	
Nominal power	28-30 W
Fuses, at the installation site	Max. 16 A
Rated current	0.16 A
Output voltage	5 VDC, 24 VDC
Control connection	2 x CAN Mini-DIN 6-poles
Capacities	
Basic cleaner capacity	600 g
Acidic cleaner capacity	600 g
External dimensions	
Width	120 mm
Height	583 mm (SOUL), 524 (SKYE)
Depth	459 mm
Weight	
Empty weight	8 kg
Noise level	
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 operating personnel workstation is below 70 dB (A) in every operating mode.

### 2.2 On-site mains connection

Mains	Connection values			On-site fuse	Connection cable conductor cross-section
1/N/PE	100 – 240 V	50/60 Hz	28 – 30 W	Max. 16 A	Min. 1.0 mm <sup>2</sup>

## 2.3 Water connection values

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

### Water quality

Chlorine content	Maximum:	Please observe the local regulations on the maximum permitted chlorine content.
pH value	Minimum:	6.5
	Maximum:	7
Carbonate hardness (German)	Minimum:	4 °dKH
	Maximum:	6 °dKH
Carbonate hardness (French)	Minimum:	8 °fKH
	Maximum:	12 °fKH
Total hardness		> Carbonate hardness

## 2.4 Ambient conditions

Ambient temperature	Minimum:	10 °C (50 °F)
	Maximum:	+40 °C (104 °F)
Relative humidity	Maximum:	80% RH
Height above sea level	Maximum:	2500 m (8202 ft)
Degree of protection		IP X0

## 2.5 Serial plate

Type	Model
Schaerer ProCare	No model versions



Figure: Serial plate

The serial plate is located on the back of the device.

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

- Machine type
- Nominal power > e.g. 28 – 30 W
- Nominal voltage > e.g. 100 - 240 V
- Fuse value on site > e.g. 16 A
- Serial number > [YYCW XXXXXX] > e.g. 2305 XXXXXX

## 3 Compliance information

### 3.1 Applied standards

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

##### MD 2006/42/EC

- EN 60335-1:2020-08 +A11 +AC
- EN 60335-2-75:2010-11 +A1 +A11 +A12 +A2
- EN 62233:2008

##### EMC Directive 2014/30/EU

- EN 55014-1:2018-08 +A1 +A2
- EN 55014-2:2016-01 +A1 +A2 +AC
- EN 55014-2:2016-01 +A1 +A2 +AC
- EN 61000-3-11:2021-03

##### RoHS Directive 2011/65/EU

- EN IEC 63000:2019-05

##### RED 2014/53/EU

- EN 301 489-1 V2.1.1:2017
- EN 301 489-7 V1.3.1:2005
- EN 301 489-24 V1.5.1:2010

#### For compliance with European directives and ordinances

##### WEEE Directive 2012/19/EU

##### POP Ordinance 2019/1021

#### For the EU Chemicals Regulation

##### REACH Ordinance 1907/2006/EC

#### International (CB)

##### Safety

- IEC 60335-1:2020-08
- IEC 60335-2-75
- BS EN 62233:2008
- UL197
- CSA C22.2 no.109

##### EMC

- CISPR 14-1
- CISPR 14-2
- IEC 61000-3-2
- IEC 61000-3-11
- NSF / ANSI 372
- NSF / ANSI 4

CB Scheme > International system for mutual recognition of test reports and certificates

CE Requirements of harmonisation legislation of the European Community

CISPR Special International Committee on Radio Interference

EC/EU	The European Community is part of the European Union consisting of EG/CFSP/PJCCM
EMC	Electromagnetic compatibility
IEC	International conformity assessment system for electrotechnical equipment and components
MD	Machinery Directive (European Parliament and Council)
POP	Regulation (EU) on persistent organic pollutants
REACH	EU chemicals regulation for "Registration, Evaluation, Authorisation and Restriction of Chemicals"
RED	European approval guidelines for radio equipment and receivers (radio communication)
RoHS	Restriction of hazardous materials
WEEE	Waste of Electrical and Electronic Equipment
NSF	National Sanitary Foundation. Product testing, inspection and certification organisation
UL	Underwriters Laboratories. Product safety standards for the US market.
CSA	Canadian Standards Association.
ANSI	American National Standards Institute.

## 3.2 Manufacturer's address

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

## 4 Product description

### 4.1 ProCare overview



Figure: External overview

- |   |                            |   |                          |
|---|----------------------------|---|--------------------------|
| 1 | Cam lock                   | 4 | CAN bus connection cable |
| 2 | Hose adapter               | 5 | Power cable              |
| 3 | Connections for Plug&Clean |   |                          |

The Plug&Clean connections **(2)** are used for complete hose cleaning. The two milk hoses **(3)** are connected here and cleaned when Plug&Clean cleaning is selected.

The hose adapters **(3)** are the connecting piece between the milk hose and the suction pipe. The intake tube is inserted into the milk cooking box.

The ProCare unit is connected to the mains power supply with the power cable **(5)**.

The CAN bus connection cables **(4)** makes it possible to exchange data and commands between the machine and the optional accessories.

The cam lock **(1)** locks the drawer when closed, preventing unauthorised access.

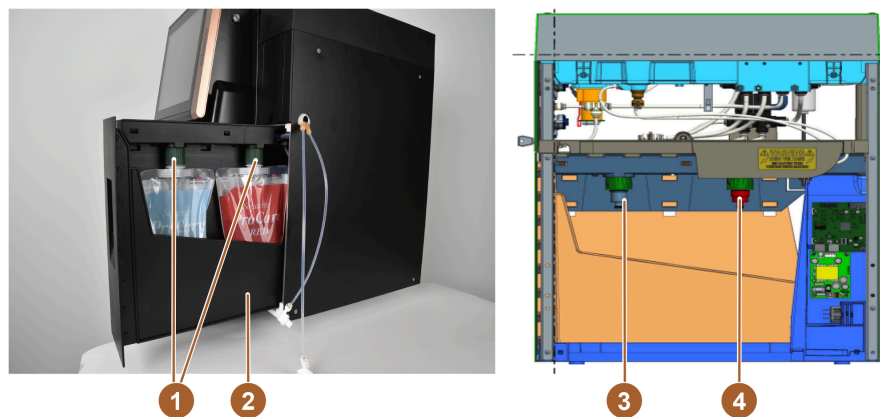


Figure: Internal overview

- |   |                 |   |  |
|---|-----------------|---|--|
| 1 | Cap nut         | 3 | Coupling for ProCare cleaning bag blue |
| 2 | Collecting tray | 4 | Coupling for ProCare cleaning bag red  |

The cap nut **(1)** secures the connection of the ProCare cleaning bags to the coupling and the drawer housing.

Both ProCare cleaning bags **(2)** are located in the collecting tray. The collecting tray also functions as a collecting tank in the lower area. If liquid unintentionally escapes from the cleaning bags, it is collected. The sensor issues an error message at the same time.

The ProCare cleaning bag blue is placed over the coupling nozzle **(3)** and tightened with the cap nut. The coupling is monitored by a sensor.

The ProCare cleaning bag red is placed over the coupling nozzle **(4)** and tightened with the cap nut. The coupling is monitored by a sensor.

## 5 Installation and commissioning

### 5.1 Connecting ProCare unit

Prerequisite: The machine must be switched off to connect the ProCare unit.

#### Overview of installation steps

1. Connect the ProCare unit to the machine.
2. Connect the ProCare unit to the cooling unit.
3. Connect the milk hoses.
4. Connect a **CAN bus** connection cable to the machine.
5. Connect the other **CAN bus** control cable to the optional accessory (e.g. milk system).
6. Connect the mains plug to the mains power supply.
  - ✓ The module is switched on.
7. Switch on the machine.
  - ✓ The modules connects to the machine.
8. Start the machine commissioning routine.



See the operating instructions for the coffee machine for details on the commissioning routine.



More information on retrofitting a coffee machine with the ProCare unit or the side cooling unit with the ProCare unit can be found in the separate ProCare installation instructions.

### 5.2 Connecting ProCare unit to machine

The following requirements must be fulfilled for a machine with ProCare preparation:

- The metal bracket for holding the ProCare unit is installed in the machine.
- The side panel of the machine already has the hole for the ProCare unit mounting screw.
- The hoses for connecting to the ProCare unit are routed out of the side of the machine and fastened with cable ties.

Connecting ProCare unit



Figure: Fastening ProCare unit to machine

- 1 Connecting plate
- 2 Hoses to ProCare unit
- 3 Mounting screw

1. Snap the ProCare unit into the connecting plate **(1)** on the machine.
2. Insert the Teflon hoses **(2)** into the ProCare unit.
3. Screw the ProCare unit onto the machine **(3)**.

#### Connecting hoses

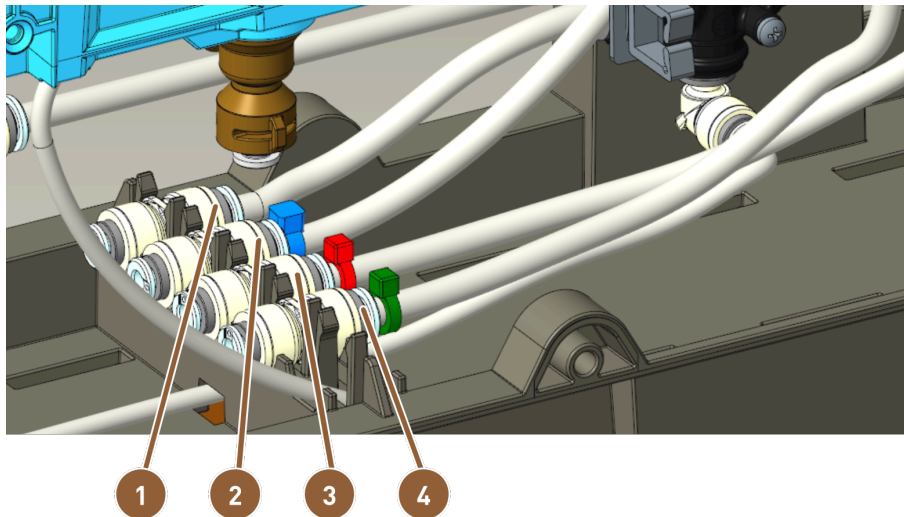


Figure: Assignment of hose connections

- 1 White: Milk
- 2 Blue: Water
- 3 Red: Descaling
- 4 Green: Coffee

1. Cut the hoses to length so that they can be arranged in a loop.
2. Arrange the hoses in a loop in case you ever need to remove the module.
3. Connect the hoses according to the label.
4. Make sure that the hoses do not block the closing mechanism of the front panel.

## 5.3 Connecting ProCare unit to cooling unit

#### Assembling cooling unit

1. Assemble the metal bracket on the side of the ProCare unit where the cooling unit is attached.
2. Close the ProCare unit with the supplied side panel depending on the positioning of the right housing or the left housing.
3. Attach the cooling unit to the ProCare unit.

### Adjusting milk hose

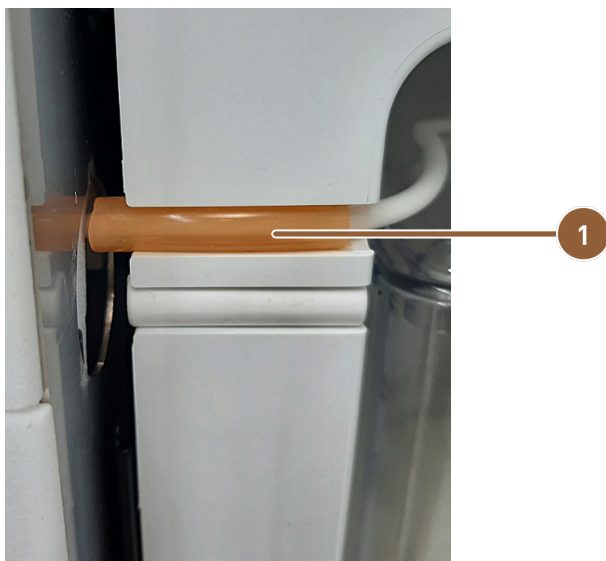


Figure: Milk hose in cooling unit

1 Orange marking hose

1. Install the milk hose and cut it so it reaches the Plug & Clean connection on the ProCare unit.
2. Cover the milk hose with the orange 4/8 silicone hose (1) and use it to clamp the hose into the recess of the refrigerator.

## 5.4 Connecting ProCare unit cable

Connect the power cable and CAN bus before switching on the device.

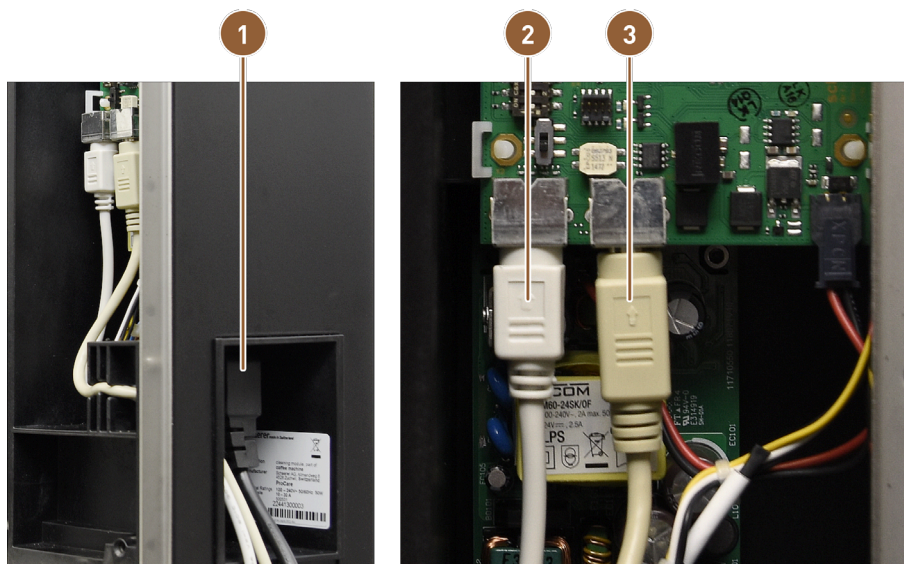


Figure: ProCare cable connections

- 1 Mains connection with cold device plug
  - 2 Can bus cable from machine
- 3 Can bus cable from cooling unit

1. Connect the cold device plug to the connection on the back of the ProCare unit **(1)**.
2. Connect the 2 m CAN mini DIN 6-pole control cable **(2)** to the ProCare unit.
3. Connect the CAN bus cable of the refrigerator **(3)**.

## 5.5 Inserting ProCare cleaning bags

One ProCare cleaning bag is enough for about 100 cleanings.  
Empty cleaning bags must then be disposed of.

The cleaning bags are filled with the cleaning powder and sealed. The blue cleaning bag contains an alkaline-based cleaning product, the red bag contains an acid-based cleaning product.



Figure: Opening ProCare

- 1 Drawer with collecting tray

1. Open the cam lock and pull out the drawer with the drip tray **(1)** and the cleaning bags. The cam lock is located under the milk connection flap (Plug&Clean).



Figure: Removing cleaning bags

## 2 Cap nuts

2. Loosen the cap nuts **(2)** from the cleaning bags.
3. Remove and dispose of the empty cleaning bags.
4. Remove the end caps and the protective film from the new ProCare cleaning bags.
5. Place the new ProCare cleaning bags on the free coupling nozzles and tighten the end caps of the cleaning bags with the cap nuts.



The couplings are not the same size. That means cleaning bags cannot be mixed up.



Figure: Inserting drawer

## 1 Drawer

6. Push the drawer **(1)** back into the housing and close the ProCare.
  - ✓ A dialogue with the **ProCare** message: **Cleaning bag inserted** opens.
7. Confirm with **OK**.
  - ✓ The screen for conditioning the used cleaning bag opens.

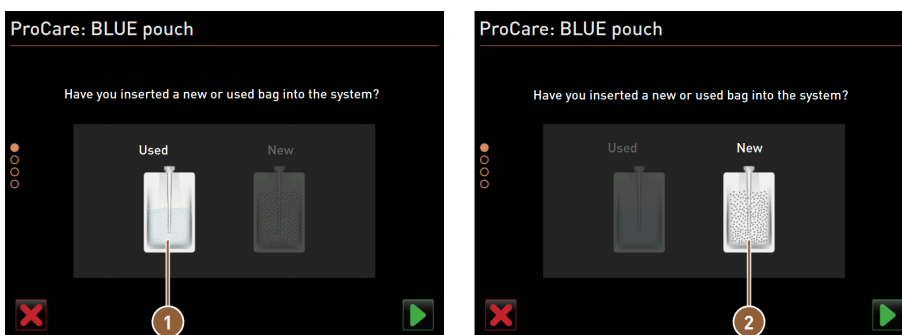



Figure: ProCare BLUE example: Changing cleaning bags

**1** Used cleaning bag: Air is extracted.

**2** New cleaning bag: Is filled with water, then the air is extracted.


8. Tap on **Used** if you have inserted a used cleaning bag or on **New** if you have inserted a new cleaning bag.
9. Confirm the selection with **▶**.
  - ✓ The air is now extracted from an already used cleaning bag **(1)**. A new cleaning bag **(2)** is filled with water and the air is then extracted.
  - ✓ A confirmation dialogue with the **ProCare** message: **Bag exchange successful** opens.

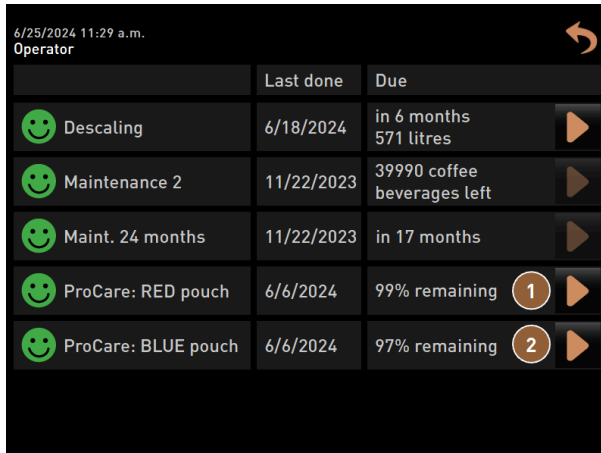
10. Confirm with .

- ✓ The cleaning bag(s) has (have) been inserted and conditioned. ProCare is ready for cleaning processes.

The same process can be initiated manually in the Service menu.

**To change the bag with the Service menu:**

1. Open the Service menu with .
2. Tap on the **Maintenance intervals** button.














	Last done	Due	
 Descaling	6/18/2024	in 6 months 571 litres	
 Maintenance 2	11/22/2023	39990 coffee beverages left	
 Maint. 24 months	11/22/2023	in 17 months	
 ProCare: RED pouch	6/6/2024	99% remaining	
 ProCare: BLUE pouch	6/6/2024	97% remaining	



Figure: Display of the remaining content

-  Cleaning bag red  Cleaning bag blue

3. In the **Maintenance interval** screen, tap on the  button for the **ProCare:** menu item **Bag RED** or **ProCare: Bag BLUE**.
4. Change the bag or cancel the process.
  - ✓ You will be taken back to the main menu.

## 6 Operation

### 6.1 Logging in to Service menu

- ▶ Tap on the **Service menu**  button.
  - ✓ The Service menu opens.
- 1. Log out with the  and then log back in.
  - ✓ The **Profiles** dialogue opens.

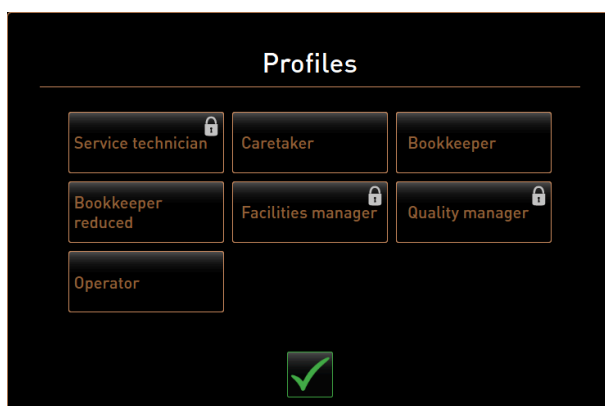


Figure: **Profiles** dialogue

- 2. Log in as a service technician.

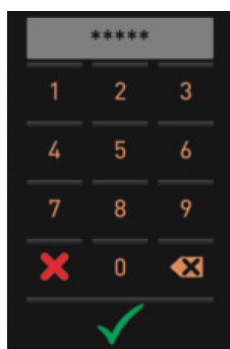



Figure: Numeric keypad for PIN entry

- ✓ The dialogue with the numeric keypad opens.
- 3. Enter the PIN for the service technician.
- 4. Open the settings with the  button.

### 6.2 Cyclical system cleaning

Regular cleaning is a prerequisite for fault-free operation and for optimal beverage quality.

System cleaning takes place automatically at defined intervals and cleans the available liquid paths of the coffee machine.

Daily cleaning with ProCare consists of two cycles and lasts 10 minutes.

- Cleaning cycle blue
- Cleaning cycle red

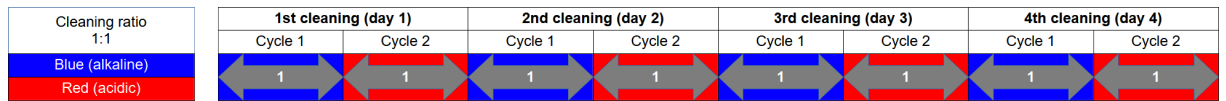


Figure: Cleaning cycles

### Checking remaining cleaning cycles

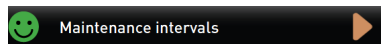


Figure: **Maintenance intervals** button

1. Tap on the **Settings** button on the machine screen.
  - ✓ The menu with the settings appears.
2. Tap on the **Maintenance intervals** button.

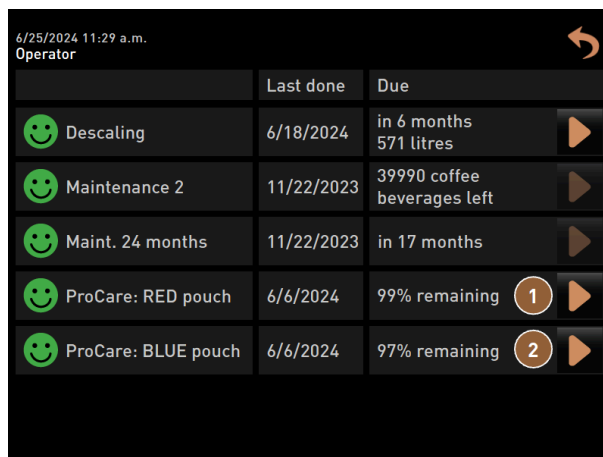


Figure: Display of the remaining content

- 1 Cleaning bag red
  - 2 Cleaning bag blue
- ✓ The remaining cleaning intervals with the inserted cleaning bags appear.

## 6.3 Calling up cleaning schedule

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

- ▶ Tap on the **Service menu** button.
    - ✓ The Service menu opens.
1. Tap on the **Log out** button then on **Log in**.
  2. Log in as a service technician with the corresponding PIN.
  3. Tap on the **Settings** button.
    - ✓ The **Settings** opens right away with the system settings.



Figure: Calling up cleaning settings

4. Click on the **Cleaning** button.

✓ The screen with the cleaning settings appears.

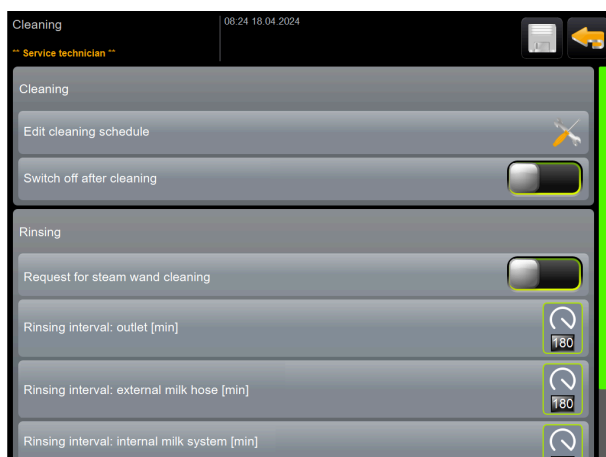


Figure: Screen with the cleaning settings

5. Click on the **Cleaning schedule** button.

✓ The schedule for cleaning work appears.



Figure: Schedule for cleaning work

## 6.4 Setting cleaning times

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



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

The following system can be cleaned:

- Coffee system
- Milk system
- Powder system
- Boiler system
- Plug&Clean system (with ProCare)

### To add cleaning work:

1. In the table with the cleaning work, tap on the plus sign in the desired empty field.
  - ✓ The dialogue for adding cleaning work opens.

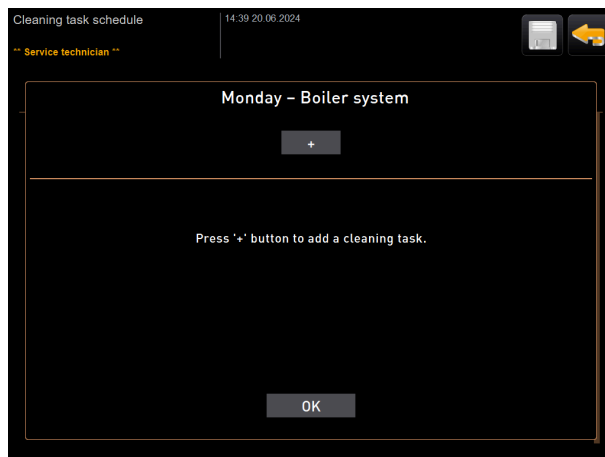


Figure: Dialogue for adding cleaning work

2. Tap on the plus sign and continue as described below.

To edit existing cleaning work:

- ▶ On the **Cleaning work schedule** screen, select a system and the days of the week on which cleaning should be carried out.
  - ✓ The dialogue with the settings appears.

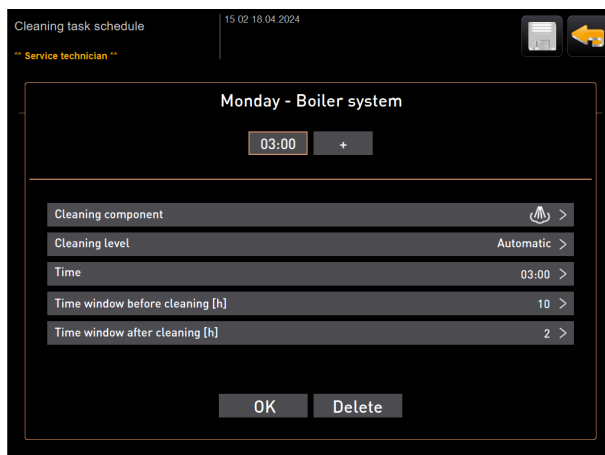


Figure: Schedule for cleaning work of the boiler system

### Defining cleaning step

1. Tap on the **Cleaning step** line.  
Three cleaning levels are possible:
  - **Instruction** = The coffee machine is still ready for use.
  - **Forced** = The coffee machine is locked.
  - **Automatic** = Cleaning starts automatically. (only with ProCare)
2. Confirm the selection with the **OK** button.  
✓ The cleaning stage is saved.

### Defining time

You can define up to four times.

1. To do this, tap on the plus sign next to the time.
2. Tap on the **Time** line.  
✓ The dialogue with the time appears.

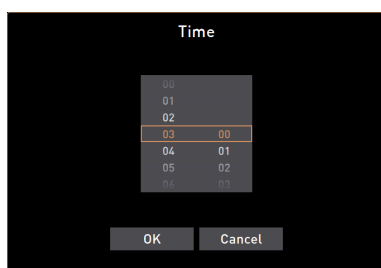


Figure: Selecting time for cleaning

3. Scroll to select the time.
4. Confirm the selection with the **OK** button.  
✓ The selected time appears in the dialogue.
5. Confirm the selection with the **OK** button.  
✓ The time is saved.
6. Use the **Cancel** button to cancel the respective entry.

### Defining time window before and after cleaning

The **Time window before cleaning [h]** defines the time before scheduled cleaning in which you can move forward this scheduled cleaning.

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


1. Tap on the **Time window before cleaning [h]** or **Time window after cleaning [h]** line.
  - ✓ The dialogue with selection of the hours, similar to that for the time, appears.
2. Scroll to set the time window.
3. Proceed as when setting the time.
  - ✓ The hours for the respective time window are displayed in the dialogue.



The **Time window before cleaning (h)** and **Time window after cleaning (h)** time settings can be used to postpone a scheduled cleaning cycle.

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

## 6.5 ProCare cleaning variants

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



1. Tap on the **Cleaning** button.
  - ✓ The **Cleaning** window opens.

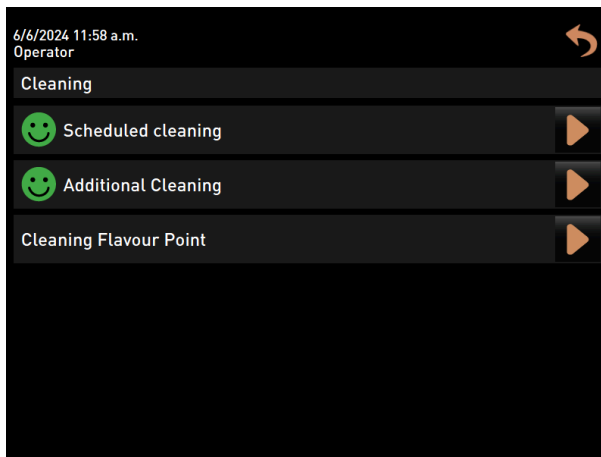


Figure: Screen for selecting the cleaning types

The following cleaning types are possible:

- Scheduled cleaning
- Additional cleaning
- Flavour Point cleaning (optional)

### 6.5.1 Starting scheduled cleaning with ProCare




If the ProCare cleaning process, for whatever reason, was not completely and correctly completed, it must be repeated without fail. The machine can only be ready for use again if the cleaning process has been correctly completed.

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


**Prerequisite:** A pending cleaning is displayed on the **Service menu** button.



Figure: The **Service menu** button with pending cleaning

1. Remove the drip grid for separate cleaning.
2. Tap on the **Service menu**  button.
  - ✓ The Service menu opens.
3. If the cleaning process is PIN-protected, enter the PIN configured for this.
  - ✓ Authorisation is granted.
  - ✓ The **Cleaning** button is active now.



4. Tap on the **Cleaning** button.
  - ✓ The **Cleaning** screen with the menu items for the different cleaning types opens.
5. Tap on the **Scheduled cleaning**  button.

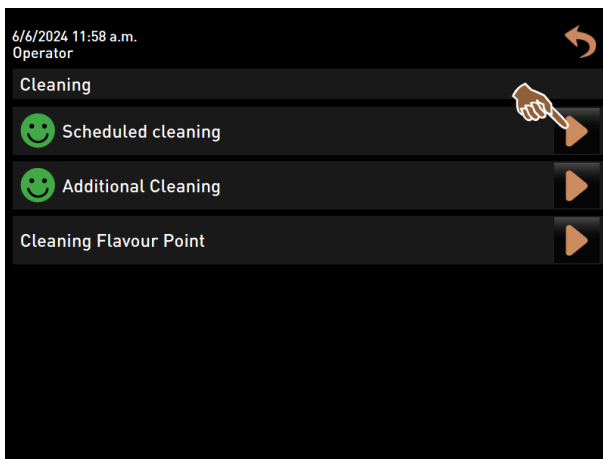


Figure: Opening scheduled cleaning

- ✓ The **Cleaning according to schedule** dialogue opens.

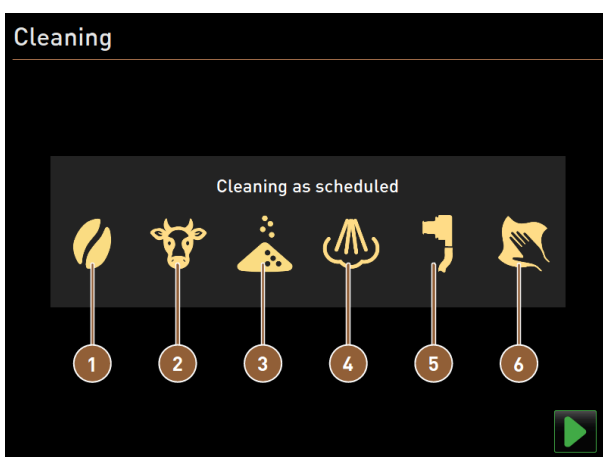



Figure: Dialogue for cleaning according to cleaning schedule

- |   |                               |   |                                      |
|---|-------------------------------|---|--------------------------------------|
|  1 | Cleaning of the coffee system |  4 | Cleaning of the boiler system        |
|  2 | Cleaning of the milk system   |  5 | Plug&Clean cleaning                  |
|  3 | Cleaning of the powder system |  6 | Display-guided manual cleaning steps |

6. Start the scheduled cleaning with .
  - ✓ Cleaning is started according to the set cleaning schedule.
  - ✓ The systems to be cleaned are highlighted in the dialogue with their icon.

#### Connecting 1 Plug&Clean connection



Figure: Connecting milk hoses to **Plug&Clean** connections

1. Open the door of the cooling unit.
2. Remove the milk hose(s) from the milk container.
3. Connect the milk hose(s) to the respective **Plug&Clean** connections on the **ProCare** unit.

#### Display-guided manual cleaning steps

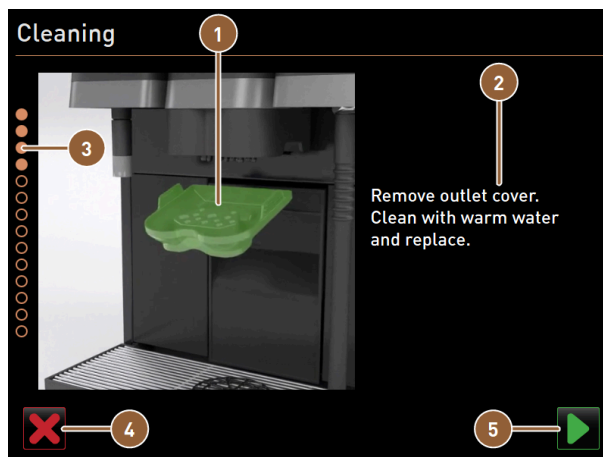








Figure: Start dialogue for cleaning programme

- |   |  |
|---|--|
|  Image or animation for current action |  Button for cancelling cleaning       |
|  Action request or information text    |  <b>Next</b> button for the next step |
|  Progress screen                       |  |

1. Follow the instructions on the display.
2. After completing the activities shown on the screen, tap on  to go to the next cleaning step.

### Manual cleaning: Grounds container

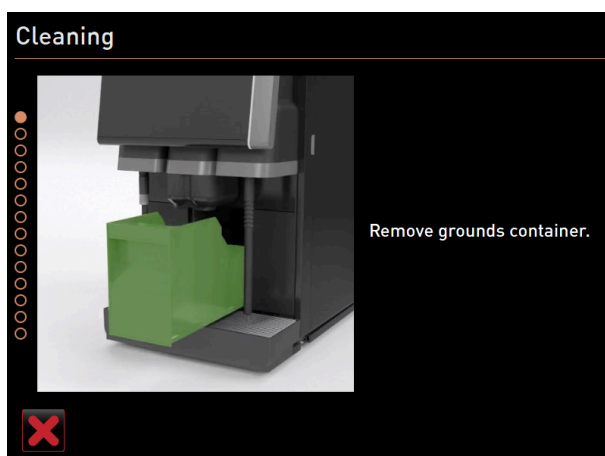


Figure: Removing grounds container

1. Slide the beverage outlet upwards.
2. Pull the grounds container out of the machine.

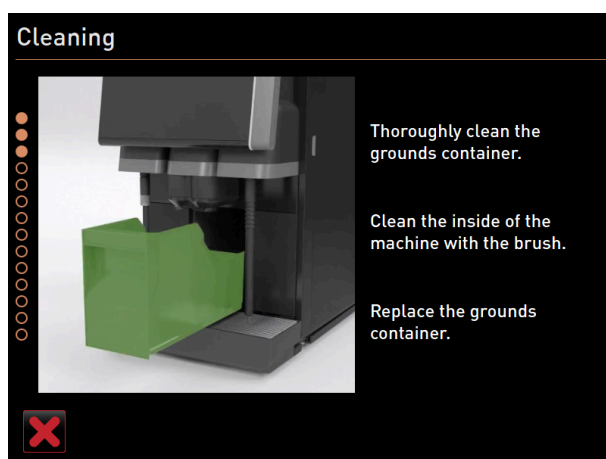


Figure: Replacing the grounds container

- ✓ The instruction to thoroughly clean the grounds container, clean the machine interior with a brush and reinsert the grounds container appears.
3. Wipe any remaining ground coffee out of the brewing chamber with the brush.
  4. Empty the grounds container and clean and rinse it with fresh water and detergent, then dry.
  5. Reinsert the grounds container into the cooling unit up to the stop.
    - ✓ The **Remove beverage outlet cover** instruction appears.

### Manual cleaning: Beverage outlet cover

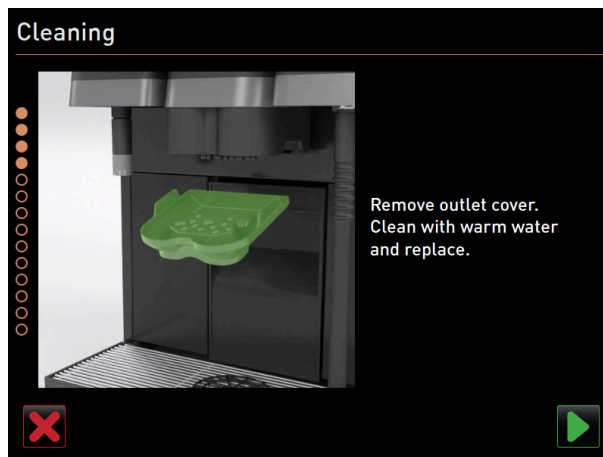



Figure: Removing beverage outlet cover

1. Release the beverage outlet cover by pressing it in the centre and pulling it down at the same time.
2. Clean the beverage outlet cover under warm running water using a brush.
3. Replace the cleaned cover by clipping the cover into place at the back and snapping it into place at the front.
- Caution** An incorrectly inserted beverage outlet cover can cause spraying during beverage dispensing.
4. Check that the beverage outlet cover is correctly positioned.
5. Confirm with the  button to get to the next step.

### Manual cleaning: Mixing cup



Figure: Lifting user panel

1. Unlock the user panel at the top by pulling it firmly towards you.
  - ✓ The user panel is unlocked.
2. Push the user panel from below using both hands until it snaps into place.
  - ✓ The user panel is automatically held in the upper position.
  - ✓ The mixing cup is accessible.

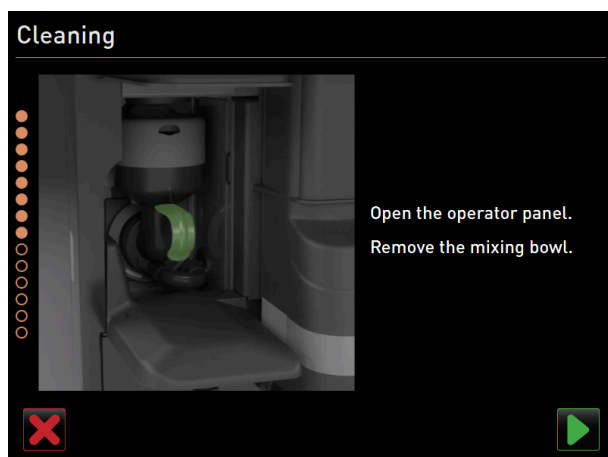



Figure: Pulling out mixing cup

3. Pull the mixing cup out of the machine by the recessed grip.
4. Confirm removal of the mixing cup with .

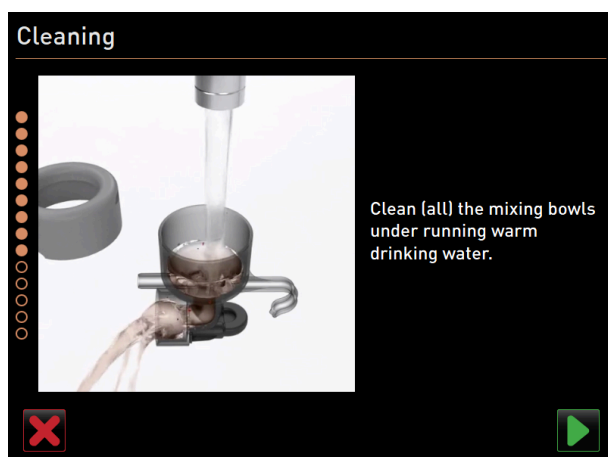



Figure: Cleaning mixing cup

5. Clean and rinse the individual parts of the mixing cup under clean, warm water.
6. Wipe the mixing cup dry with a clean cloth.
7. Confirm cleaning of the mixing cup with .

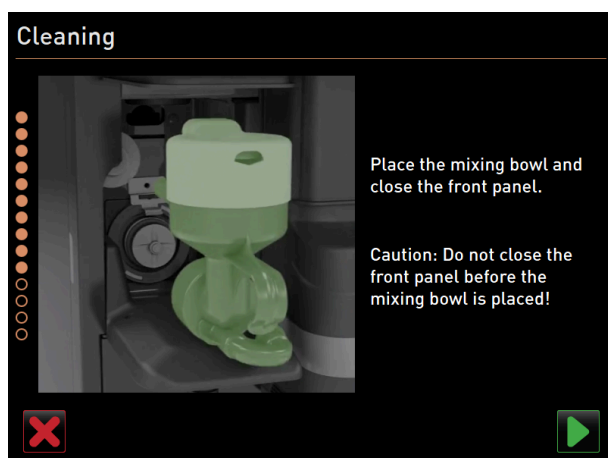



Figure: Inserting mixing cup

8. Reinsert the mixing cup.
9. Check that the mixing cup is correctly positioned.

**Caution** An incorrectly inserted mixing cup can lead to overflowing.

10. Close the user panel.
11. Confirm cleaning and insertion of the mixing cup with .
  - ✓ The cleaning process starts.

### Progress screen for automatic cleaning

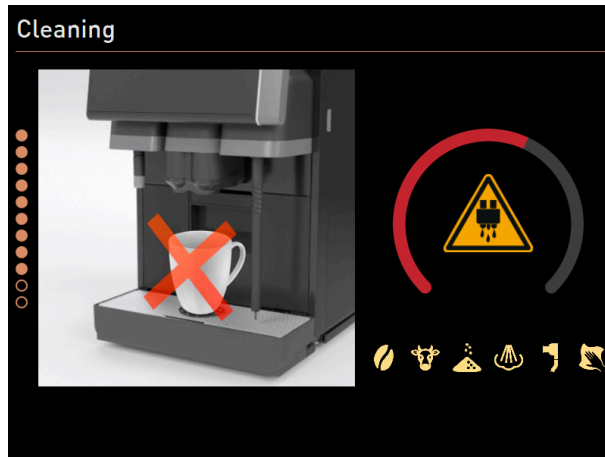


Figure: Progress screen for cleaning

During cleaning, the display shows the following:

- The crossed-out cup indicates that no beverages are available at this time.
- The progress circle indicates the completed and remaining cleaning process.
- A warning of hot liquids escaping is indicated by a warning symbol.
- The systems to be cleaned are highlighted with their icon.

### Removing Plug&Clean connection




Figure: Removing milk hoses from **Plug&Clean** connections

1. Remove the adapter(s) of the milk hose from the respective **Plug&Clean** connection of the **ProCare** unit and wipe the adapter(s) with a damp cloth.

## Reinserting milk container



Figure: Inserting milk container

1. Reinsert the cleaned milk container(s) into the cooling unit.
2. Insert the milk tube adapter back into the cover of the respective milk container.
3. When needed, fill with fresh and pre-cooled milk (3 °C – 5 °C or 37.4 °F – 41 °F).  
**ADVICE** Machine equipment options with **Twin Milk** contain 2 milk containers.
4. Confirm the connection of the milk container(s) with .

## Completion of planned cleaning



Figure: The milk system switches on.

- ✓ The milk system is switched on.
  - ✓ The system is rinsed.
  - ✓ An automatic restart is performed.
  - ✓ The next scheduled cleaning in hours [h] appears in the Service menu.
1. Clean the drip grid with a brush under running water.
  2. Reinsert the cleaned drip grid.
    - ✓ The machine is clean and ready for use.


## 6.5.2 Additional cleaning

Additional cleaning can be carried out at any time.

- ☑ Coffee system
- ☑ Powder system
- ☑ Boiler system
- ☑ Milk connection hose piece (Plug&Clean, when cleaning with ProCare)
- ☑ Manual cleaning (when cleaning with ProCare)



### Starting additional cleaning

1. Tap on the **Additional cleaning** button.
  - ✓ The screen with the available systems for cleaning appears.
2. Select the desired systems to be cleaned.
3. Confirm the selection with .
4. Follow the instructions on the machine screen.
  - ✓ The selected systems are cleaned.

## 6.6 ProCare: Cleaning (Plug&Clean) milk hose piece

The milk hose (**Plug&Clean**) is cleaned at the end of the cleaning process.

You can trigger the **Plug&Clean** cleaning step manually at any time.

1. To do this, connect the milk hoses to the ProCare milk connection (**Plug&Clean**).
  - ✓ The following dialogue opens:

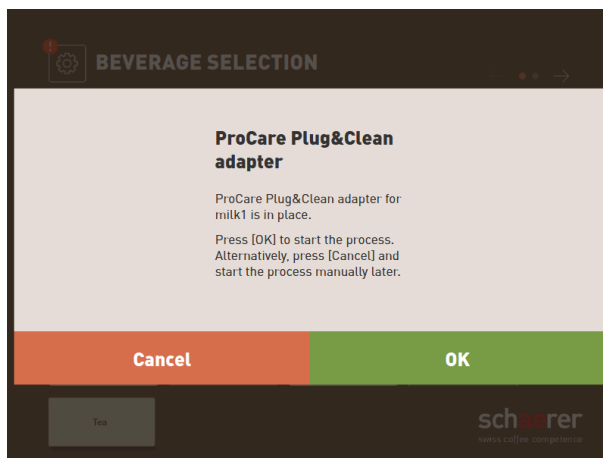


Figure: **Plug&Clean** dialogue

2. Confirm the cleaning on the screen with **OK**.



Figure: Removing milk hoses from **Plug&Clean** connections

- When cleaning is complete, remove the adapter(s) of the milk hose from the respective **Plug&Clean** connection of the **ProCare** unit and wipe the adapter(s) with a damp cloth.

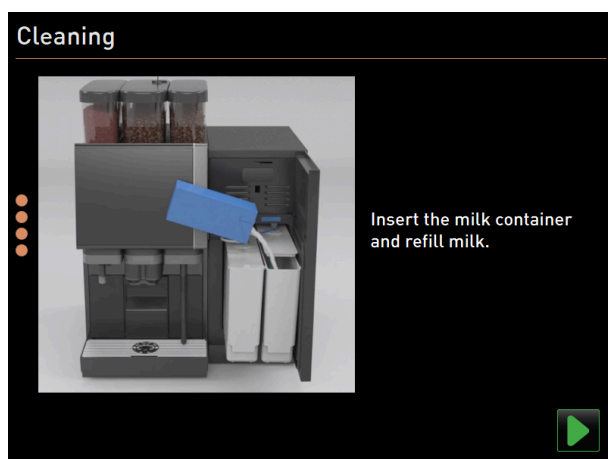


Figure: Inserting milk container


- The dialogue with the instruction to insert the milk container(s) appears.
- Reinsert the cleaned milk container(s) into the cooling unit.
- Insert the milk tube adapter back into the cover of the respective milk container.
- When needed, fill with fresh and pre-cooled milk (3 °C – 5 °C or 37.4 °F – 41 °F).
- Confirm the connection of the milk container(s) with .



Figure: The milk system switches on.

- ✓ The **Switch on milk system** status screen appears.

- ✓ An automatic restart is performed.
- ✓ The machine is clean and ready for use.

## 7 Cleaning

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



### ADVICE

**Improper cleaning can result in scratches on the device.**

- ▶ Use a clean, dust-free cloth.
- ▶ Do not clean the surfaces with scouring powder or similar products.
- ▶ Do not use harsh cleaning products.
- ▶ Do not clean the device with a water jet.

Tools for cleaning the ProCare unit

- Microfibre cloth
- Cotton rag

Cleaning process

1. Clean the outside of the device with a damp microfibre cloth.
2. Dry the device with a fine cotton cloth.
3. Clean collecting tray inside and out.
4. Clean the milk connection (Plug&Clean) sockets.
5. Clean the inside of the device before and after long breaks in operation.

## 8 Troubleshooting

Error description	Instruction
No device function	<ul style="list-style-type: none"><li>▶ Check: Is there a mains connection?</li><li>▶ Check: Is the fuse at the installation site faulty?</li></ul>
Empty message does not report.	<ul style="list-style-type: none"><li>▶ Check the CAN node connection to the coffee machine.</li></ul>

## 9 Disassembly

After end of service life

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

1. Disconnect the device from the machine.
2. Disassemble the device.
3. Dispose of the device in an environmentally friendly manner.

## 10 Disposal



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

- ▶ Contact your service partner.

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

1. Scrap metal parts.
2. Recycle plastic elements.
3. Dispose of the remaining components after sorting them according to material properties.