

Schaerer Coffee Prime

Operating instructions

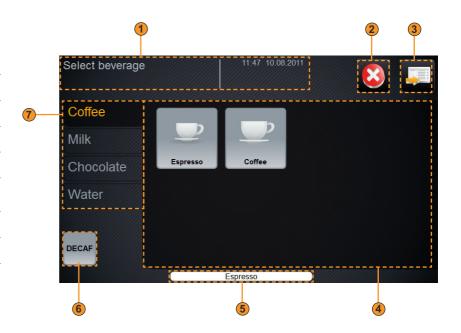
V02 / 09.2011



- Bean hopper viewing window
- 2 User panel
- Beverage outlet (with hot water dispensing)
- 4 Service door
- 5 Cup platform
- 6 Drip tray with drip grid
- 7 Foamer head
- 8 Grounds container
- 9 Drinking water tank
- 10 Bean hopper
- 11 Cleaning tablet inlet
- 12 Powder container



- 1 Status bar
- 2 [Cancel] field
- 3 [Operator Service Menu] field
- 4 Beverage fields (programmable)
- Progress indicator for beverage dispensing
- (DECAF) preselection field
- 7 Beverage register (programmable)



Schaerer Coffee Prime

Operating instructions

V02 / 09.2011

Published by

Schaerer Ltd., P.O. Box, Allmendweg 8, CH-4528 Zuchwil

Edition

Version 02 | 09.2011

Software

V0.60

Concept and editorial department

Schaerer Ltd., P.O. Box, Allmendweg 8, CH-4528 Zuchwil

Copyright by ©

Schaerer Ltd., P.O. Box, Allmendweg 8, CH-4528 Zuchwil

This document is copyrighted. All rights are reserved. The reproduction, distribution, transmission via electronic systems or translation of this document in another language is not permitted without the written consent of Schaerer Ltd. This applies to the entire document, as well as to individual excerpts thereof. The contents of the document are based on the most current data available at the time of printing. Schaerer Ldt. reserves the right to make changes at any time without further notice. All pictures, illustrations and display messages in this manual serve only as examples. Due to the wide variety of possible options, a particular machine may differ from the devices depicted here. Schaerer AG is only liable for the contents of the original German document.

Table of contents

Welcome 6	Waste water	21
Welcome 6	Transport conditions	21
Signs and symbols6	Standby	21
	Switching off	21
Product description 7	End of operation	
Intended use7	Lengthy downtimes (more than 1 week)	22
Beverage types and output7	Cleaning	22
Scope of delivery and accessories7	_	
Options and optional accessories 8	Cleaning intervals	
Technical data	Start automatic machine cleaning	
Serial plate	Automatic switch-off rinsing function (Option)	
Declaration of conformity	Every other day	
Manufacturer's address	Change the foamer head (Option)	
Applied standards	Weekly cleaning	
Installation and commissioning 44	Drip tray	
Installation and commissioning	Bean hopper	
Setting up the coffee machine	Touch screen	
Location	Outer surfaces of the coffee machine	
Power supply	Side cooling unit (Option)	26
Conditions11	Every time before filling	
Power requirements	Internal drinking water tank	
Water connection/draining	Milk container (Option)	
Conditions	As needed	
Power requirements	Brewing unit	
Installation	Powder container (Option)	
Unpacking the machine	Mandatory cleaning	
Automatic commissioning program	Cleaning products	
Deinstallation and disposal13	Cleaning tablet	
•	Bodionor	0
Operation	Service and maintenance	. 29
Check before switching on	Water filter (Option)	29
Switching on14	Installing the water filter for the internal drinking	
Main touch screen window15	water tank (Option)	29
Overview	Changing the water filter for the internal drinking	30
Open the front door of the machine	water tank (Option)	
Filling and connecting	Maintenance	30
Coffee beans 16 Water 17	Programming	. 31
Machine powder (Option)	Overview	
Milk (Option)	Navigation	
Dispensing	USB port	
Adjusting the cup grate	Building custodian profile	
Beverages	System	
Hot water	Configuration	
Hot milk (Option)	Service	
Milk foam (Option)	Info	37
Dispensing options	Toroldon benefits	
Preselection	Troubleshooting	. 38
[DECAF] Button	Water quality	30
[Barista] field (select coffee strength) 20	Water values	
Emptying20		
Grounds container 20	Determining the water hardness	40

Filter technology
Safety notes41
User at risk
Risk from cleaning products
Application42
Storage
Disposal
Emergency information
Risk of damage to the machine42
Hygiene regulations
Water43
Coffee
Milk (Option)
Automatic machine powder/instant powder (Option)44
Liability45
Operator responsibilities
Warranty and liability45

www.schaerer.com Welcome

Welcome

Welcome

This coffee machine is part of the next generation of fully automatic coffee machines. Our company's core competence as well as decades of experience flowed into designing this equipment.

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 further information, please contact our customer service.

The performance of the coffee machine depends on its correct operation and the maintenance. Carefully read the operating instructions before using the machine for the first time, and keep the instructions in an easily accessible place.

We hope you enjoy using your new coffee machine!

Signs and symbols



See also "Safety notes".

The following signs and symbols are used in these operating instructions to point out sources of danger and special features:

DANGER! Risk of electrocution!



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

The measures described to prevent this danger must be adhered to.

CAUTION! User at risk!



A generally dangerous situation that may result in injury.

The measures described to prevent this danger must be adhered to.

CAUTION! Risk of machine damage!



A situation that may result in damage to the machine.

The measures described to prevent this danger must be adhered to.

CAUTION! Hot fluid!



A dangerous situation that may result in scalding injuries. The danger arises at the dispensing locations. In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

CAUTION! Hot steam!



A dangerous situation that may result in scalding injuries. The danger arises at the dispensing locations. In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

CAUTION! Hot surface!



A dangerous situation that may result in burn injuries. The danger arises at the dispensing locations and cup warmer locations (option). In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

CAUTION! Risk of trapping fingers!



A dangerous situation that may result in crushing injuries. In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

Product description www.schaerer.com

Product description

Intended use

The intended purpose of the Schaerer Coffee Prime is to dispense diverse variations of coffee and milk beverages in cups or pots. The device can also dispense hot water. This unit is designed for industrial and commercial use. The unit may be placed in self-service areas if attended to by trained personnel.



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.



Improper handling of the coffee machine can result in damage.

The coffee machine must never be used to heat or dispense any liquids other than coffee, powder beverages, hot water (beverages, cleaning) or milk. The milk must be pasteurised, homogenised and/or ultra-high-temperature treated. Never use raw milk.

Beverage types and output

Depending on the machine version and options, the following beverages can be prepared (specify beverage output? in cups per hour/day):

Coffee / Espresso (50 – 60 ml)	±60 cups
--------------------------------	----------

Scope of delivery and accessories

Quantity	Designation	Article number	
1	Schaerer Coffee Prime coffee machine	-	
Documenta	tion		
1	Operating instructions	-	
1	Delivery Quality Form	-	
General acc	cessories		
1	Replacement cartridge 200	072617	
1	Adapter for replacement cartridge 200	33.2327.1000	
1	Carbonate hardness test (bag with 2 test strips)	067720	
1	Multi-tool with opener for service door	072816	
1	Molykote grease 111	33.2179.9000	
1*	Foamer head cpl. (9 pcs.)	072696	
1*	Drain hose	00.0048.0042	
Cleaning/cle	eaning accessories		
1	Cleaning tablets (bottle with 100 pcs.)	065221	
1	Cleaning brush	062951	

^{*} Depending on machine version.

www.schaerer.com Product description

Options and optional accessories

Example	Option	Description
	side cooling unit	External cooling unit for machines with Milk Smart. Capacity: 8 I
	Payment systems	Payment systems can be installed via an MDB interface.
	Coin tester	A Coin tester can be installed as an optional extra. This is installed in place of the second powder system.
	Cup dispenser	Storage for three different cup sizes. Other cup sizes can be retrofitted at any time. A deposit surface at the top for sugar, stirring tabs or similar.
	Second bean hopper	A second bean hopper complete with a grinder can be retrofitted. Bean hopper capacity:700 g

Product description www.schaerer.com

Example	Option	Description
	Powder system with one or two powder	Capacity per powder container:300 g
	container(s)	The second powder container can be retrofitted.
	Under-counter grounds disposal	The grounds container and the bottom of the coffee machine have a breakthrough that is continued through the counter. The coffee grounds are collected in a large container underneath the counter.



For detailed information, please contact your distributor.

Technical data

Nominal power *	2000-2400 W		
	•		
Operating temperature	Steam boiler	Hot water boiler	
Minimum operating temperature (T min.):	115°C	70°C	
Maximum operating temperature (T max.)	135°C	98°C	
Overpressure	Steam boiler	Hot water boiler	
Working overpressure	4 bar	16 bar	
Permissible working overpressure (p max):	16 bar	16 bar	
Test overpressure	20 bar	20 bar	
Water tank capacity	5.2		
Bean hopper capacity	700 g		
Grounds container capacity	35– 20 coffee grounds cakes		
External dimensions			
Width	344 mm		
Height	560 mm		
Depth	538 mm		
Empty weight	25 kg		
Permanent noise level**	<70 dB (A)		

We reserve the right to make technical changes.

- * For special equipment, see serial plate. The values specified here apply to the basic equipment.
- ** The A-weighted noise level (slow) and Lpa (impulse) at the workplace of the operating personnel is below 70 dB (A) for every operating mode.

www.schaerer.com Product description

Serial plate



Designation Manufacturer coffee machine Schaerer AG, Allmendweg CH-4528 Zuchwil SCP

Typ Serial No. Nominal pressure main pressure Electrical Ratings

Fuse on-site

1115 FT 004 1.6 MPa (16 bar) 0 - 0.6 MPa (0 - 6 bar) 2000-2400W 220-240V~ 50/60Hz 10-16A The serial plate is located on the rear side of the service door.

▶ In the event of a fault of warranty case, please quote the data on the serial plate.

Declaration of conformity

Manufacturer's address

Manufacturer	Responsible for documentation
Schaerer AG	Schaerer AG
P.O.Box	Hans-Ulrich Hostettler
Allmendweg 8	P.O.Box
CH-4528 Zuchwil, Switzerland	Allmendweg 8
Tel. +41 (0) 32 681 62 00	CH-4528 Zuchwil, Switzerland
F +41 (0)32 681 64 04	
info@schaerer.com	
www.schaerer.com	

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 Bureau Veritas, in accordance with SN EN ISO 9001: 2008, has been used to ensure the proper adherence to the requirements.

CE conformity			
Machinery Directive 2006/42/EC	EMC Directive 2004/108/EC		
 EN 60335-1:2002 +A1 +A11 +A12 +A13 +A14 +A2 EN 60335-2-75:2004 +A1 +A11 +A12 +A2 EN 62233:2008-04 	• EN 55014-2:1997 +A1 +A2		

International (CB)			
Safety	EMC		
• IEC 60335-1 Ed4.2:2006	CISPR 14-1 Ed 5.1: 2009		
• IEC 60335-2-14 Ed 5.1:2008	CISPR 14-2 Ed 1.2: 2008		
• IEC 60335-2-15 Ed 5.2:2008	• IEC 61000-3-2 Ed 3.2: 2009		
• IEC 60335-2-75 Ed 2.2:2009	• IEC 61000-3-2 Ed2.1:2001		
• IEC 62233 Ed1:2005	• IEC 61000-3-3:2008		
	• IEC 61000-6-2:2005		
	• IEC 61000-6-4:2006 +A1		

10 BASCP_EN V02 | 09.2011

Installation and commissioning www.schaerer.com

Installation and commissioning

Setting up the coffee machine

Location



The location where the coffee machine is set up must meet the conditions specified below. If these conditions are not ensured, the coffee machine may become damaged. The following conditions absolutely must be met:

- The installation surface must be stable and level so that is does not become deformed under the weight of the coffee machine.
- Do not set up the coffee machine on hot surfaces or close to ovens.
- Set up the coffee machine in such a way that it can be monitored by trained personnel at any time.
- Route the necessary supply connections to within 1 m of the machine location according to the on-site installation plans.
- Maintain the following clearances for maintenance work and operation:
 - · Allow enough space above the machine to refill beans.
 - Leave min. 15 cm clearance from the rear side of the machine to the wall (air circulation).
- Comply with all applicable local kitchen regulations.

Ambient conditions



The location where the coffee machine is set up must provide the ambient conditions specified below. If these conditions are not ensured, the coffee machine may become damaged.

The following conditions absolutely must be met:

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

If the coffee machine was exposed to subzero temperatures:

► Contact customer service before commissioning.

Power supply

Conditions

The electrical power supply must be connected in accordance with the applicable regulations (VDE 0100) and the regulations of the country of installation. The mains connection cable type must be at least H 05 VV-F. The voltage specified on the serial plate must match the supply voltage at the installation location.



Danger of electric shock!

The following instructions absolutely must be complied with:

- 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.
- Never operate a device with a damaged power cord. Have a defective power cord or plug replaced immediately by a qualified service technician.
- Schaerer AG recommends against using an extension cable. If, despite this, an extension cable is used (minimum cross-section: 1.5 mm²), observe the manufacturer data for the cable (operating instructions) and the locally applicable regulations.
- Route the power cord in such a way that it does not present a tripping hazard. Do not pull the cord over corners or sharp edges, pinch it between objects or allow it to hang loosely

- in the open. Do not position the cord over hot objects, and protect the cord from exposure to oil and aggressive cleaning products.
- Never lift or pull the device by the power cord. Never pull the plug out of the socket by its cord. Never touch the power cord or plug with wet hands. Never insert a wet plug into a power socket.

Power requirements

Mains	Power requirements		Fuse protection (site face)	Connecting cable conductor cross-section	
1L, N, PE	220 – 240 V ~	50/60 Hz	2000 – 2400 W	10 – 16 A	3 x 0.75 mm ² 3 x 1 mm ²

Water connection/draining

Conditions

CAUTION! Risk of machine damage!

The machine can suffer damage due to bad material and wrong water values. It is imperative that the following points are complied with:

- The water must be free of contaminants and the chlorine content must not exceed 100 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 5 6°dKH (German carbonate hardness) or 8 - 10°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 7°fKH. The pH value must be between 6.5 and 7
- Always use the new hose set (fresh water/waste water hose) provided with the machine.

The water supply connection must be made in accordance with the applicable requirements and the regulations of the respective country. If the machine is connected to a newly installed water pipe, the pipe and infeed hose must be rinsed well 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 3/8"-threaded union piece onto the pressure reducer that is mounted on the water tap (set to 0.3 MPa (3 bar)).

If the machine is connected to a drain, the included temperature-resistant drain hose must be connected to the drip tray and the siphon. It must be firmly attached to the drain and slanted at a downward angle (so that the water can flow downward).

Power requirements

Water pressure	Recommended:	0.1 – 0.6 MPa (1-6 bar)
	Maximum:	0.6 MPa (6 bar)

Water inlet temperature	Minimum:	10°C
water inlet temperature	Maximum:	35°C

12 BASCP EN Installation and commissioning www.schaerer.com

Installation

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 water tank.
- ▶ Keep the original packaging in case the equipment needs to be sent back.

Automatic commissioning program

- ► Connect the coffee machine to the mains power supply.
- ► Switch on the coffee machine.
 - ☑ The commissioning program automatically starts the first time the machine is switched on. It explains all aspects of installation.

Deinstallation and disposal



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

► Contact service partner.

www.schaerer.com Operation

Operation

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 main water valve (in machines with a mains water supply) is open/the drinking water tank is filled with fresh water.
- The waste water outlet has been correctly laid/the waste water tank is connected.
- The bean hopper(s) is/are filled and the locking mechanism (option) is open.
- · The grounds container is empty and inserted correctly.
- · The coffee machine is connected to the mains power supply.

Switching on

- ▶ Switch on the coffee machine with the rocker switch on the lower back side.
 - ☑ The machine switches on.
 - ☑ The main screen appears and heating begins.
 - $\ \ \, \square$ The machine is ready to use as soon as the required temperature is reached.

Option: side cooling unit

- Connect the additional cooling unit to the line supply.
- Open the door.
- ▶ Switch on the side cooling unit using the green on/off button (see figure).
- Close the door.





Take heed of the operating instructions of the side cooling unit.



See "Operation" - "Fill and connect" - "Milk" - "Option: side cooling unit".

Operation www.schaerer.com

Main touch screen window

Overview



Main screen

The following elements are visibly displayed on the main screen depending on the machine status:

Symbol	Description
Beverage tab	There are five beverage tabs that can be used. Eight beverages can be stored on each tab.
Coffee	The beverage tabs can be named and assigned as desired by a service technician.
Beverage but- ton	The desired beverage can be assigned to each beverage button and programmed accordingly.
	The respective beverage is dispensed by pressing a beverage button.
	The beverage buttons can be named and assigned as desired by a service technician.
Coffee	
DECAF	To be able to dispense decaffeinated beverages (DECAF), the coffee machine must have two mills, one of which must be filled with decaffeinated beans.
DECAF	The grinder that is to grind decaffeinated beans must be selected in the [DECAF] field. Any coffee beverage can then be selected and is prepared with decaffeinated beans.
	The [DECAF] field must be programmed by a service technician or caretaker.
Barista	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 "medium" setting.
	The [Barista] field must be programmed by a service technician or caretaker.

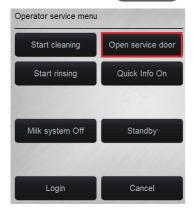
www.schaerer.com Operation

Symbol	Description
Operator Ser-	Entering the Operator Service menu.
vice menu	➤ Press the [Operator Service menu] field.
	☑ The window for the Operator Service menu opens.
	See "Operator Service menu"
Stop	The [Stop] field is only displayed while a beverage is being dispensed. It can be used to clear the current beverage and any preselected beverages.
Info	The [Info] field is only displayed if a malfunction exists or intervention by a user or service technician is needed to ensure operating readiness of the
	machine.
1	See "Troubleshooting"
Heating	The small frame to the left of the date display is only displayed while the
16 13 15.09	machine is heating up. It is not possible to dispense beverages during this process.

Open the front door of the machine



- ▶ Press the [Operator Service menu] field on the touch screen (see figure).
 - ☑ The Operator Service menu appears.



- $\blacktriangleright\,$ Press the field for opening the service door (see figure).
 - $\ oxdot$ The service door opens.

Filling and connecting

Coffee beans



Danger of injury from the rotating grinding discs in the grinder. Never reach into the bean hopper while the coffee machine is switched on. Operation www.schaerer.com

CAUTION! Risk of machine damage!



Filling foreign objects into the hopper can lead to clogging or destruction of the grinder. Never fill anything other than beans into the bean hopper.

▶ Open the machine service door.



See "Main window touch screen" - "Service door open".



- Open the machine cover (see illustration).
- ▶ Pour in coffee beans (max. 700 g).
- Close the cover again.
- Close the service door.

Water

▶ Open the machine service door.



See "Main window touch screen" - "Service door open".

Option 1: Internal drinking water tank

- ▶ Remove the drinking water tank daily and rinse out thoroughly with fresh water.
- ▶ Fill the drinking water tank with fresh drinking water before using it.
- ► Reinsert the drinking water tank.

Option 2: Mains water supply

CAUTION! Risk of machine damage!



The machine can suffer damage, if the pump runs dry. Before switching on the machine make sure that the main water valve 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 is closed at the end of the day.

Machine powder (Option)

Service door of the machine is open.



See "Main window touch screen" - "Service door open".

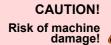


- Open the machine cover (see illustration).
- Remove the cover from the powder container(s).



Danger of injury on the rotating dosing augers!

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





Danger of blockage through filling with unallowed powder! Never fill anything other than powder for automatic operation into the powder container. www.schaerer.com Operation

Option 1: Choco

▶ Pour in the desired choco powder.

Option 2: Topping

▶ Pour in the desired milk powder.

Milk (Option)

Option 1: Milk Smart



No more than 40 cm should be between the milk package and the beverage outlet.

- ► Have fresh, pre-cooled milk (3 5°C) ready.
- ▶ Hang the hose or hoses into the milk.☑ The hose end must be in contact with the container floor.



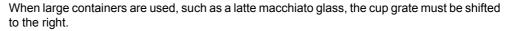
See also "Safety notes" - "Hygiene" - "Milk".

Option 2: Additional cooling unit

- ▶ Open the door.
- ► Remove and rinse the milk container.
- ► Fill in fresh, pre-cooled milk (3 5°C).
- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose or hoses into the container.☑ The hose end must be in contact with the container floor.
- ▶ Close the door.

Dispensing

Adjusting the cup grate



- Grasp the cup grate, push it to the right and let it engage.
- Place the cup on the cup grate.



Beverages

▶ Place a cup under the beverage outlet.



☐ The progress of the beverage dispensing will be shown on the main screen.

Espresso

▶ Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.



Operation www.schaerer.com

Hot water





▶ Place a cup under the beverage outlet.



Press the hot water button (see illustration).
 The progress of the beverage dispensing is shown on the display.

Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Hot milk (Option)

CAUTION! Hot fluid!



Place a cup under the beverage outlet.



- Press the button [Hot Milk] (see illustration).
 The progress of the beverage dispensing is shown on the display.
- ▶ Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Milk foam (Option)

CAUTION! Hot fluid!



▶ Place a cup under the beverage outlet.



- ▶ Press the [Milk foam] button (see figure).☑ The progress of the beverage dispensing is shown on the display.
- ▶ Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Dispensing options

Stopping continuous dispensing

The dispensing of beverages and hot water can be stopped at any time.

Press the button.

☑ The current dispensing process is stopped.

Preselection

While a beverage is being dispensed, additional beverages can be selected that are to be dispensed afterward. Up to four beverages can be preselected.



- ▶ Place a cup under the beverage outlet.
- ► Press the desired beverage button(s).
 - ☑ The preselected beverages will be shown on the main screen in their dispensing order.



www.schaerer.com Operation

Preselected beverages can be deleted at any time:

Press the button.

☑ All preselected beverages will be deleted.

[DECAF] Button

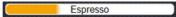
The prerequisite for dispensing DECAF beverages (decaffeinated beverages) is having two mills, one of which is filled with decaffeinated beans. The field [DECAF] must be programmed by a service technician or building custodian.

- ▶ Place a cup under the beverage outlet.
- Press the [DECAF] field.



Press the required beverage button.

 $\ensuremath{\square}$ The progress of the beverage dispensing will be shown on the main screen.



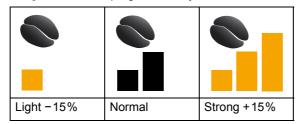
Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

[Barista] field (select coffee strength)

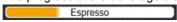
The Barista field can be used to adjust the strength of the dispensed beverage for one brewing. After beverage dispensing, the Barista field returns to the standard "medium" setting. The [Barista] field must be programmed by a service technician or caretaker.



- ▶ Place a cup under the beverage outlet.
- ▶ Press the [Barista] field repeatedly until the desired strength is reached (see table).



- Press the required beverage button.
 - ☑ The progress of the beverage dispensing is shown on the main screen.



Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Emptying

Grounds container

The grounds container must be emptied as soon as the prompt to do so appears on the display, however, at least once daily.

▶ Open the machine service door.



See "Main window touch screen" - "Service door open".

- ► Remove and empty the grounds container.
 - ☑ Dispensing of beverages is disabled while the grounds container is not in place.
- ► Reinsert the grounds container.
- Close the service door.

Operation www.schaerer.com

Waste water

Option 1: Empty the drip tray

In coffee machines without a waste water outlet or external waste water tank, the drip tray must be emptied regularly, at the latest when the floater appears.



- Carefully pull out the drip tray.
- Empty the drip tray and reinsert it.
- Check that it is seated correctly; an improperly inserted drip tray can result in water leaks.

Option 2: Emptying the waste water tank

In coffee machines with an external waste water tank, the tank needs to be emptied regularly, at the latest when the empty instruction appears on the display.

- ► Remove and empty the waste water tank.
- ▶ Clean the waste water tank thoroughly with household cleaner and rinse with fresh water.
- ► Replace waste water tank.

Transport conditions

- Before moving the coffee machine, disconnect the drinking water supply, the power supply and the dirty water outlet.
- ▶ Before moving the coffee machine, check the floor for obstacles and uneven areas.



Improper transport of the machine may result in machine damage.

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.

Standby





- ▶ Press the [Operator Service menu] field on the touch screen (see figure).
 ☑ The Operator Service menu appears.
- Press the [Standby] field.
 - ☑ The machine switches to standby.

To take the coffee machine out of standby:

▶ Press the switch on the right side of the user panel.
 ☑ The main screen appears and the machine is ready for use.

Switching off

End of operation

- Perform the daily cleaning routine.
- ► Empty the drinking water container, clean it and reinsert it.
- ▶ Empty the grounds container, clean it and reinstall it.

www.schaerer.com Operation



When the "Switch off after cleaning" parameter is activated, the machine switches off automatically after cleaning.

Switch off the coffee machine with the rocker switch on the lower back side.
 ☑ The machine is de-energised.



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

Lengthy downtimes (more than 1 week)



During extended downtimes, such as during holidays, the machine must be taken out of operation.

▶ Perform all steps described in the chapter entitled "End of operation".

If the machine will be exposed to subzero temperatures, the boilers must be emptied first.

► Please contact your service partner.

CAUTION! Risk of machine damage! The boilers can be destroyed by freezing water as it expands. In rooms where the temperature can fall below zero, the boilers must be emptied.



When taking the device back into service, run the daily cleaning first.

Cleaning www.schaerer.com

Cleaning

Cleaning intervals

Clea	aning	inte	rvals			
Every other day	Weekly	Every time before filling	Every time before switching off	As instructed	As needed	
Auto	omat	ic cle	anin	g		
				Х		Machine cleaning
			Х			Switch-off rinsing (optional)
Mar	nual d	clean	ing			
Х				Х		Empty and clean the grounds container
		Х				Rinse out drinking water tank
	Х				Х	Empty and clean the drip tray
	Х					Cleaning the bean hopper
					Х	Rinse brewing unit
	Х					Clean touch screen
	Х					Clean the outer surfaces of the coffee machine
Opt	ional	acce	essor	ies/o	ption	ns
Х						Replace the foamer head
					Х	Rinse powder container
	х					Rinse outlet mixing cup (instruction and description under "Machine cleaning")
		Х				Rinse milk container
	Х					Clean interior of side cooling unit
	Х					Clean exterior of side cooling unit

Legend

Every other day At least every other day, more often if necessary.

Weekly: At least once a week or more often if necessary.

Every time before filling: Every time the container is refilled.

Every time before switching

off:

Automatically when the coffee machine is switched off.

As instructed: An instruction appears on the display.

As needed: If cleaning is obviously necessary.



For a better overview of the cleaning steps that are required or that have already been performed, use the cleaning schedule in this chapter.

www.schaerer.com Cleaning

Start automatic machine cleaning

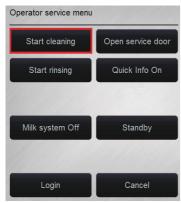
The cleaning programme is started from the touch screen. On the touch screen, the user is guided through all actions required of him or her.



☑ The Operator Service menu appears.



- Press the [Start cleaning] field (see figure).
 - Cleaning begins.
 - ☑ Guidance is provided for all necessary steps on the touch screen.



Automatic switch-off rinsing function (Option)

CAUTION! Hot fluid!



The switch-off rinsing function must be activated by a service technician or caretaker. If this has been done, the switch-off rinsing function is performed automatically before the machine is switched off.



The automatic switch-off rinsing function takes approx. 20 sec.

Every other day

Change the foamer head (Option)

CAUTION! User at risk!



There is a risk of contamination of the milk and foamer head due to milk deposits and bacteria.

Replace the foamer head every two days.

The foamer head of the coffee machine is a disposable part and must be replaced every two days.

▶ Open the machine service door.



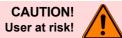
See "Main window touch screen" - "Service door open".

Cleaning www.schaerer.com



- Turn the foamer head 90° to the right and pull forward together with the hose and restrictor.
- Insert the new foamer head with the hose and restrictor.
- Turn the foamer head to the left until it engages.
- Close the service door again.

Grounds container



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 every other day.

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

Weekly cleaning

Drip tray

- ► Thoroughly clean the drip tray and the drip grid with water and a household cleaning product.
- Rinse with clear water and dry with a clean cloth.

Bean hopper

Old bean grease in the bean hopper can have a negative impact on the coffee quality.



Danger of injury from rotating grinding discs in the grinder.

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

- Wipe the inside of the bean hopper with a moist cloth.
- Dry with a clean cloth.

Touch screen



The touch screen can suffer damage from improper handling.

Never press the touch screen using force, strong pressure or pointed objects. Do not use abrasive cleaning products. Never spray glass cleaning products directly onto the touch screen.



- ▶ Press the [Operator Service menu] field on the touch screen (see figure).
 - $\ensuremath{\square}$ The Operator Service menu appears.
- ► Press the [Standby] field.
 - ☑ The machine switches to standby.
- ▶ Spray a commercially available glass cleaner onto a paper towel.
- ► Clean the touch screen.
- Press the switch on the right side of the user panel.
 - $\ensuremath{\square}$ The main screen appears and the machine is ready for use.

www.schaerer.com Cleaning

Outer surfaces of the coffee machine

- ▶ Press the [Operator Service menu] field on the touch screen (see figure).
 - ☑ The Operator Service menu appears.
- ▶ Press the [Standby] field.
 - ☑ The machine switches to standby.
- ▶ Clean the outer surfaces of the coffee machine with a moist cloth.
- ▶ Press the switch on the right side of the user panel.
 - ☑ The main screen appears and the machine is ready for use.

Side cooling unit (Option)



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

Clean the cooling unit daily.

- ► Take the milk out of the cooling unit.
- ► Thoroughly clean the interior of the cooling unit with water and a household cleaning prod-
- ▶ Place the milk back into the cooling unit.

Every time before filling

Internal drinking water tank





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

Clean the drinking water tank every time before filling it.

- ▶ Thoroughly rinse the drinking water tank with fresh water several times.
- ▶ Dry with a clean cloth.

Milk container (Option)

CAUTION! User at risk!



There is a danger of contamination of the milk and milk container due to milk deposits and bacteria.

Clean the milk container every time before filling it.

- ▶ Thoroughly rinse the milk container with fresh water several times.
- ▶ Dry with a clean cloth.

As needed

Brewing unit

CAUTION! User at risk!



Coffee residue in the brewing unit can quickly lead to the formation of mould. The spread of mould spores in the machine results in the danger of contamination of the coffee.

The brewing unit must therefore be cleaned once a week as described.

▶ Open the machine service door.



See "Main window touch screen" - "Service door open".

Cleaning www.schaerer.com



- Remove the grounds container.
- Take the brewing unit out of the machine.
- ► Turn the thread on the head of the brewing unit anticlockwise until the ejector is located in the front position.



- Turn the spindle of the brewing unit anticlockwise with the multi-tool until the scraper (A) is in the front ejection position.
- ▶ Push both springs outwards over the edge, thereby releasing them.



- ▶ Pull out funnel (B) in the direction of the arrow.
- ▶ Hinge the insertion chute (C) upwards out of the way.
- ▶ Remove any ground coffee residue with a dry brush.
- Clean the brewing unit in warm running water.



- ► Clean the brewing screen in running water.
- ▶ Let the brewing unit dry fully before reinstalling it in the machine.
- Insert the grounds container.
- Close the service door.

Powder container (Option)



Deposits can result in the danger of contamination and clogging of the powder container.

Clean the powder container every time before filling it.

- ► Thoroughly rinse the powder container with fresh water several times.
- ▶ Dry with a clean cloth.

Mandatory cleaning

If a pending cleaning procedure is not performed although it is requested on the display, mandatory cleaning will set in (if programmed) after a certain time. When mandatory cleaning sets in, dispensing of beverages is blocked.

Beverages cannot be dispensed again until after the machine has been cleaned.



Mandatory cleaning and the period that elapses before it sets in can only be programmed by the service technician.

V02 | 09.2011

www.schaerer.com Cleaning

Cleaning products



Use of incorrect cleaning products can damage the machine.
Use only cleaning products for daily and weekly cleaning that are recommended by Schaerer AG.

Cleaning tablet



Before using the cleaning tablet, carefully read the information on the packaging and the "HEALTH & SAFETY DATA SHEET". If a HEALTH & SAFETY DATA SHEET is not present, please request it from the sales partner.

Information			
Application	Daily cleaning of the coffee system		
Purpose of cleaning	Removal of grease residue in the coffee system		
Application interval	7 times a week		
State and odour	See the "HEALTH & SAFETY DATA SHEET".		

Decalcifier



Before using the descaler, carefully read the information on the packaging and the "HEALTH & SAFETY DATA SHEET". If a HEALTH & SAFETY DATA SHEET is not present, please request it from the sales partner.

Information	
Application	Boiler and pipe system decalcification
Purpose of cleaning	Removal of lime scale deposits in the coffee machine
Application interval	As instructed by the coffee machine
State and odour	See the "HEALTH & SAFETY DATA SHEET".

Service and maintenance www.schaerer.com

Service and maintenance

Water filter (Option)

Installing the water filter for the internal drinking water tank (Option)



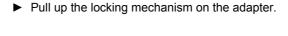
The supplied water filter is only suitable for installation in the machine's internal drinking water tank

Prior to installation of the supplied water filter in the internal drinking water tank, a water test must be performed to determine whether use of the water filter is necessary. In addition the water value must be entered when the machine is first put into service.



See "Determining the water hardness" in this chapter.

- ▶ Remove the water outlet screen installed in the water tank.
- ▶ Open the water filter box.
 - ☑ The water filter adapter is located at the top, and the separately packaged filter cartridge is found beneath it.





▶ Attach the adapter to the water outlet connector and push down the locking mechanism.



▶ Unpack the filter cartridge and mount it on the adapter.



www.schaerer.com Service and maintenance



Changing the water filter for the internal drinking water tank (Option)

When the filter needs to be changed, a corresponding prompt appears on the display.

- ► Take the drinking water tank out of the machine.
- Take the old filter cartridge out of the adapter.
- Unpack the new filter cartridge and mount it on the adapter.
- ▶ Slide the drinking water tank back into the machine.



The replacement cartridges can be ordered from Schaerer AG as a 4-piece set (order number: 071397).

Maintenance

The coffee machine does not require regular maintenance. The maintenance schedule depends on multiple factors, especially the degree to which the machine is used.

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.



Failure to perform a required maintenance in due time may lead to wear and reliable operation is no longer assured.

Inform the service partner as soon as possible after the maintenance message appears.

Programming www.schaerer.com

Programming

Overview

The following profiles have been predefined in the programming for end users:

- · Building custodian menu
- Complete settlement menu
- · Reduced settlement menu
- Menu Chef de service
- · Quality manager menu

The profiles can be enabled by a service technician. He also assigns an access code for each profile.



The profiles and functions are subsequently described in this chapter.

Navigation

Symbol	Description
	Touching this field opens the Operator Service menu.
	Stop / cancel a procedure
	Confirm
	Continue / start
	Back to previous window
	Save settings that have been made

www.schaerer.com Programming

Symbol	Description
	Delete / set a value to zero
(S)	Touching this field opens the adjustment wheel. ► Set desired value by turning the wheel up or down. ► Confirm set value by pressing the checkmark.
	Enable / disable a function
	Opens a selection field.

USB port

In the Schaerer Coffee Prime, software updates or backups are performed using a flash drive. The USB port is located on the right side next to the user panel and is protected by a cover.

► Switch off the machine.

Programming www.schaerer.com



Press a small screwdriver into the hole next to the USB cover (see figure).
 The cover can now be removed.

Building custodian profile

The building custodian is the first contact person if there is a technical malfunction. He or she possesses solid technical knowledge and is regularly occupied with the coffee machine.

The "Building custodian" profile contains the following main menus:

- System
- Configuration
- Service
- Info



The contents of the main menus are subsequently described in this chapter.

System

"Maintenance" menu item				
Display text	Description	Setting range	Notes	
Filter change according to quantity (litres)	When performing a filter change: ► Enter the range of the filter.	0 - 10,000	The range can be read from the filter packaging.	
Last filter change	When performing a filter change: ▶ Enter the date.	DD/MM/YYYY	-	
Water hardness (carbonate hardness)	The water hardness is entered by a service technician during the commissioning procedure. As the water quality continuously changes, the water hardness should also be remeasured at each filter change. In the result.	0 - 50	A carbonate hardness tester with 2 test strips is included in the scope of delivery of the machine. Additional test strips are available through your Service partner.	

www.schaerer.com Programming

"Water supply" menu item				
Display text	Description	Setting range	Notes	
Water supply source	Aquachange switching Option 1: Switch from drinking water tank to fixed mains water supply ▶ Open service door and remove drinking water tank. ▶ Screw in Aquachange screw with a	Fixed mains water supply / Int. drinking wa- ter tank		
	 screwdriver (size 3). Put the drinking water tank back in place and shut the service door. Set the water supply source to "Fixed 	Aquachange screw	Aquachange screw	
	main water supply". Option 2: Switch from fixed mains water supply to drinking water tank			
	Open service door and remove drinking water tank.			
	Unscrew in Aquachange screw with a screwdriver (size 3).			
	Put the drinking water tank back in place and shut the service door.			
	Set the water supply source to "Int. drink- ing water tank".			

Menu item "Grinder/brewing unit"				
Display text	Description	Setting range	Notes	
Grounds container capacity	Here you can set how much coffee grounds cake the grounds container can contain before the instruction to empty the grounds container appears.	0 – 36	Scroll wheel	
	 ▶ Press the Settings field. ☑ The scroll wheel appears. ▶ Set the desired value. ▶ Confirm by pressing the checkmark. 			

Menu item "Cleaning"				
Display text	Description	Setting range	Notes	
Cleaning instruction timing	Here you can set the time at which the cleaning instruction should appear in the display. ▶ Press on the hours. ▶ Make setting by using the arrow buttons. ▶ Press on the minutes. ▶ Make setting by using the arrow buttons.	hh:mm	_	
Cleaning instruction for Monday Cleaning instruction for Tuesday Cleaning instruction Cleaning instruction for Sunday	Specifies the weekdays on which a cleaning instruction should appear. ▶ Push the slider to the right = On ▶ Push the slider to the left = Off	On/Off	_	

Programming www.schaerer.com

Menu item "Milk system"				
Display text	Description	Setting range	Notes	
Milk suction time (s)	The milk suction time is the time that is required to fill the milk hose with milk. It must be specified, as otherwise the effectively set milk dispensing time will be shortened. The "Milk suction time" parameter must be changed, for example, whenever a longer milk hose is installed. ▶ Press the Settings field. ☑ The scroll wheel appears. ▶ Set the desired value. ▶ Confirm by pressing the checkmark.	0.0 – 20.0	Determine the milk suction time for a new length of hose: Set the parameter to 0.0, dispense the milk product and, while doing so, measure the time it takes from the first suction intake until the dispensing of milk.	

Configuration

Menu item "General"				
Display text	Description	Setting range	Notes	
Main language	 Changing the display language ▶ Press the arrow button. ☑ The Options menu appears. ▶ Select the desired language. 	All provided languages	_	
Beverage button, text only	If this setting has been activated, the beverage buttons will only display text and no symbols. ▶ Push the slider to the right = On ▶ Push the slider to the left = Off	On/Off	_	
Beverage buttons symbols	Two different symbol sets are available. ► Press the arrow button. ☑ The Options menu appears. ► Select the desired symbol set.	Set 1 Set 2 (default)	_	
Display brightness	With this you can adjust the brightness of the display. ► Press the Settings field. ☑ The scroll wheel appears. ► Set the desired value. ► Confirm by pressing the checkmark.	60 – 100%	Scroll wheel	
Lighting brightness	With this you can adjust the brightness of the bean hopper lighting. ▶ Press the Settings field. ☑ The scroll wheel appears. ▶ Set the desired value. ▶ Confirm by pressing the checkmark.	60 – 100%	Scroll wheel	
Temperature unit	 The temperature unit can be changed here. ▶ Press the arrow button. ☑ The Options menu appears. ▶ Select the desired unit. 	Celsius Fahrenheit	_	

www.schaerer.com Programming

Menu item "Beverage parameters"				
Adjustment options	Description Setting range		Notes	
Tabs 1 to 5	Rename beverage tabs: ► 5 sec Hold down the tab. ☑ The keyboard appears. ► Enter the desired name and confirm with ☑ .		_	
Change programmed beverages	Different parameters of the preset beverages can be changed under this menu item. There are various parameters depending on the beverage. Only a reduced range of settings is available for these parameters. Access to the range of settings is restricted to service technicians.	All letters and numbers	Pretreatment level steps: 1: Quick-brew coffee, maximum chamber opening, compression pressure low 2: Chamber opening medium, compression pressure medium	
	Coffee beverage only	Dependent upon beverage Depends on be-	3: Compression pressure low 4 (Default): compression pressure medium 5: Compression pressure high 6: Pre-brewing (1 ml/1 g)	
	 Dosing time (s) milk foam Dosing time (s) milk With powder Water volume (ml) Amount of coffee grounds (%) 	Depends on beverage	6: Pre-brewing (1 ml/1 g), pre-brewing time 2 sec, compression pressure high 7: Pre-brewing (1 ml/1 g), pre-brewing time 2 sec, compression pressure high, wet pressing	
	Temperature (water) All settings are made with the slider control: ► Set the slider control to the desired value.	_	Slider control	

Menu item "Time / Date / Timer operation"				
Display text	Description	Setting range	Notes	
date	Setting the date:	DD/MM/YYYY	-	
	Press on the days.			
	► Make setting by using the arrow buttons.			
	► Press on the months.			
	► Make setting by using the arrow buttons.			
	► Press on the years.			
	► Make setting by using the arrow buttons.			
Time	Setting the time:	hh:mm	_	
	Press on the hours.			
	► Make setting by using the arrow buttons.			
	► Press on the minutes.			
	► Make setting by using the arrow buttons.			
Format date / time	Setting the formats for the date and time:	12 h / 24 h	_	
	► Press the arrow button.			
	☑ The Options menu appears.			
	➤ Select the desired format.			

Programming www.schaerer.com

Menu item "Time / Date / Timer operation"				
Display text	Description	Setting range	Notes	
Summer time	Setting to take into account the time change due to summer time: No summer time		_	
	▶ Press the arrow button.☑ The Options menu appears.	EU summer time		
	➤ Select the desired time format.	USA summer time		
Timer, Monday to Sunday	Here, the automatic switching on and off of the machine can be specified for each day of the week:		_	
	Activate the switching on and off of the daily timer with the slider.			
	► Set the switching on and off times using	On/Off		
	the arrow buttons.	hh:mm		

Service

Display text	Description	Setting range	Notes	
Calibrate display	Calibrate display During calibration, a cross appears on different positions of the display. Click on the cross when it appears on the display until the calibration is completed.	-	Calibration of the display makes sense if users have problems navigating with the touchscreen. For example, if no reaction is triggered when a field is pressed on.	
Calibrate the grinder	Grinder calibration is display-guided. ► Follow the instructions on the touch screen.	_	_	
Back up database	The current status of the settings can be saved on a USB memory stick with this function. ▶ Insert the USB memory stick. ▶ Press the [Save database] field.	k with this func-		
	☐ The current status has been saved on the memory stick.			

Info

Display text	Description	Setting range	Notes	
Displaying the versions	The following information can be obtained here: Touchpanel software version Power unit software version Database version Qt Framework version Paint engine version	_	When reporting a fault, please pass this information to the service technician.	
Service counter	The counter values of all machine components can be read off here.	-	_	
Machine/temporary counter	The counter values of beverages and processes for beverage preparation can be read off here.	_	_	
Cleaning counter	The date and time of the various cleanings can be read off here.	-	_	

www.schaerer.com Troubleshooting

Troubleshooting

The [Info] field is displayed if a malfunction exists or intervention by a user or service technician is needed to ensure operating readiness of the machine. For instance, if the drinking water tank must be refilled.

If such a case occurs, the [Info] field appears on the main screen.



Depending on the cause, beverage dispensing is disabled until the required measure has been carried out.



▶ Press the [Info] button (see figure).☑ The "Smart Info" window opens (see figure).

► Carry out the described measure.

If the display message persists, a malfunction may exist.

Grounds container removed

Description The grounds container is removed

Troubleshooting Open the service door and insert / check grounds container is removed.

1/1



See "Troubleshooting".

38

Water quality www.schaerer.com

Water quality

A cup of coffee consists of 99 percent water. Therefore, the water has a significant effect on the coffee's taste. To obtain an excellent cup of coffee, you need excellent water.

The water is important not only to the taste of the coffee but also to the coffee machine itself. Poor water quality can lead to permanent machine damage.

Therefore, close attention needs to be paid to the water quality in order to obtain high quality coffee and protect the coffee machine.

Water values



Poor water values can lead to machine damage.

It is imperative that the specified values be complied with. Otherwise, Schaerer AG shall not accept liability.

The following water values are a precondition for the correct operation of the coffee machine:

- 4 6°dKH (German carbonate hardness)
- 7 8°dGH (German total hardness)
- pH value 6.5 7 (pH-neutral)
- Chlorine content max. 100 mg per litre

Water is referred to as hard or soft depending on its composition. The hardness of water is referred to as its total hardness.

The total hardness is differentiated into carbonate hardness (temporary hardness) and non-carbonate hardness (permanent hardness). In terms of the water hardness, the concentration of bicarbonate anions (HCO3-) is of special significance. The concentration of bicarbonate ions or the equivalent quantity of alkaline earth metal ions is referred to as carbonate hardness.

International conversion table (factors apply to total hardness and carbonate hardness)						
Unit		° dH	° eH	° fH	ppm	mmol/l
German hardness	1°dH	1	1.253	1.78	17.8	0.1783
English hardness	1°eH	0.798	1	1.43	14.3	0.142
French hardness	1°fH	0.560	0.702	1	10	0.1
Part(s) per million (USA)	1 ppm	0.056	0.07	0.1	1	0.01
Millimole per litre	1 mmol/l	5.6	7.02	10	100	1



If the water values do not correspond to the above-mentioned specifications, the water must be prepared accordingly (decalcification/enrichment with minerals).



The service partner can provide detailed information on filter options and versions and can install this equipment at your location.

www.schaerer.com Water quality

Determining the water hardness

A water hardness test must be performed to determine whether a water filter is needed. If the water values are poor, trouble-free operation of the machine cannot be ensured.

The water values must also be entered when the machine is taken into service and can be readily adjusted in the machine menu. On the basis of the entered values, the machine calculates the time to the next filter change (if a filter is in use) and the time to the next decalcification routine.

▶ Check whether a house filter system is already connected upstream from the machine.



In most water, the carbonate hardness is markedly lower than the total hardness. This is a good indicator for determining whether the water is straight from the mains or if it first passed through a house filter system.

Option 1: Requesting information from the drinking water supplier

Ask the local drinking water supplier for information on the water hardness (total hardness) of the drinking water.

Option 2: Performing a test

- ▶ Determine the water hardness using the test strips included in the scope of delivery.
- Dip the test strip into the tap water for ca. 1 sec.
- Remove the test strip and wait for ca. 1 min.
 The test strips changes colour.
- Compare the water analysis result with the "Total hardness" table in the "Water values" chapter.
- Install a water filter if the test result is poor.



See "Filter equipment" in this chapter or, for machines that are operated with drinking water, see the chapter entitled "Service and maintenance" - "Installing a water filter for the internal drinking water tank".

Filter technology

To protect the coffee machines and the coffee quality against hard or soft water, filters are used. Filters are essential for the care and maintenance of the machine, not to mention for hygiene, and for the best quality of coffee.

Even when using a filter, it is still necessary to measure the water values once a year. Water is a living element and therefore changes frequently.



The service partner can provide detailed information on filter options and versions and can install this equipment at your location.

Safety notes www.schaerer.com

Safety notes

Maximum safety is one of Schaerer AG's most important product features. The effectiveness of the safety devices is guaranteed only if the following instructions are observed to prevent injuries and health hazards:

- · Read the User Manual carefully before using the device.
- · Do not touch hot machine parts.
- 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.

User at risk

DANGER!
Risk of electrocution!



Improper handling of electrical devices can result in electric shock. The following instructions absolutely must be complied with:

- Work on electrical systems may only be performed by skilled electricians.
- The device must be connected to a fused electrical network (we recommend passing the connection through a fault 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 correspond to the data on the device's serial plate.
- Never touch energised parts.
- Before carrying out service work, always switch off the main switch and/or disconnect the device from the power supply system.
- The power cable may only be replaced by qualified service technicians.

CAUTION! User at risk!



Improper handling of the coffee machine can lead to light injuries. The following instructions absolutely must be complied with:

- This device is not intended to be operated by persons (including children) with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge unless they are supervised by a person responsible for their safety or obtain instructions from this person on how to operate the device.
- Supervise children to ensure that they do not play with the device.
- The coffee machine must be installed so that there are no impediments to care and maintenance.
- In both self-service and full-service applications, trained personnel must supervise the machine in order to ensure that the care instructions are observed and the personnel is available for questions regarding use.
- Fill the bean hopper with beans only, the powder container with coffee machine powder only and the manual inlet with ground coffee only (or cleaning tablets during cleaning).

CAUTION! Hot fluid!



There is a risk of scalding in the dispensing area of beverages, hot water and steam. During dispensing or cleaning, never reach under the dispensing positions.

CAUTION! Hot surface!



The dispensing positions and the brewing unit may be hot.

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

CAUTION! Risk of trapping fingers!



There is a risk of trapping fingers or hands when handling moving components. While the coffee machine is switched on, never reach into the bean or powder containers or into the opening of the brewing unit.

www.schaerer.com Safety notes

Risk from cleaning products

Application

CAUTION! User at risk!

Danger of poisoning from swallowing cleaning products. The following instructions absolutely must be complied with:

- 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 put cleaning products in the milk container.
- · Never put cleaning products in the drinking water tank (internal/external).
- · Only use the cleaning and decalcification products for their intended purpose (see labels).
- 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 the cleaning products, carefully read the information on the packaging and the "HEALTH & SAFETY DATA SHEET". If not available, the HEALTH & SAFETY DATA SHEET can be obtained from the sales partner (see the cleaning product packaging).

Storage

The following instructions absolutely must be complied with:

- Store them in a place that is inaccessible to children and unauthorised persons.
- · Protect cleaning products from heat, light and moisture.
- · Store them in a separate location from acids.
- · Store them in the original packaging only.
- Store cleaning products for daily and weekly use separately.
- Do not store them together with foodstuffs or other edibles.

Disposal

If recycling is not possible, cleaning products and their containers must be disposed of according to the information on the "HEALTH & SAFETY DATA SHEET", all well as all local rules and regulations.

Emergency information

Obtain the phone number of the emergency information service (toxicology information centre) from the cleaning product manufacturer (see cleaning product label). If your country does not have this type of institution, note the following table:

Swiss Toxicology Information Centre		
International calls:	+41 44 251 51 51	
Call from Switzerland	145	
Internet	www.toxi.ch	

Risk of damage to the machine



Improper handling of the coffee machine can lead to damage or contamination. The following instructions absolutely must be complied with:

- For water with a carbonate hardness above 5°dKH, install a water filter, as otherwise the coffee machine can be damaged due to calcification.
- For insurance law reasons, always ensure that after closing for the day, the main water valve (coffee machine with mains water supply) is closed and the electrical main switch is

Safety notes www.schaerer.com

- switched off or the mains plug is unplugged.
- All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- Do not operate the device if the water supply is blocked. Otherwise, the boilers will not be refilled and the pump will run dry.
- To prevent water damage in case of hose breakage, Schaerer AG recommend routing the water supply connection via a water stop valve (at the installation site).
- After extended downtime (e.g. holiday), the coffee machine must be cleaned before it is put back into operation.
- Protect the coffee machine from weather (frost, humidity etc.).
- Faults may be remedied by a qualified service technician only.
- · 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.
- · When using caramelised coffee (flavoured coffee), clean the brewing unit twice daily.
- Fill the bean hopper with beans only, the powder container with coffee machine powder only and the manual inlet with ground coffee only (or cleaning tablets during cleaning).
- Never use freeze-dried coffee as it clogs the brewing unit.
- If the coffee machine and/or accessories are transported at temperatures below 10°C, the coffee machine and/or accessories must be stored for three hours at room temperature before the coffee machine and/or accessories are connected to the mains and switched on. Failure to observe this precaution can result in a danger of short-circuit or damage to electrical components.
- Always use the new hose set (drinking water/waste water hose) provided with the machine.
 Never use old hose sets.

Hygiene regulations

Water



Improper handling of water can lead to health problems.

The following instructions absolutely must be complied with:

- · The water must be uncontaminated.
- 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 7-10°fKH (French carbonate hardness).
- The total hardness must always be higher than the carbonate hardness.
- The minimum carbonate hardness is 4°dKH or 7°fKH.
- Maximum chlorine content of 100 mg per litre.
- pH value between 6.5 7 (pH neutral).

Machines with drinking water tank (internal & external)

- Fill the drinking water tank daily with fresh water.
- · Rinse the drinking water tank thoroughly before filling.

www.schaerer.com Safety notes

Coffee



Improper handling of coffee can lead to health problems. The following instructions absolutely must be complied with:

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

Milk (Option)



Improper handling of milk can lead to health problems. The following instructions absolutely must be complied with:

- · Do not use unpasteurised or raw milk.
- Only use pasteurised milk or milk heated at ultra-high temperatures.
- 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 cool, dry (max. 7°C) and dark location.
- Store milk separately from cleaning products.
- Use the oldest products first ("first-in-first-out" principle).
- Use before the expiry date.
- Always reclose packages after opening to ensure that the contents remain fresh and are protected from contamination.

Automatic machine powder/instant powder (Option)





The improper handling of vending machine powder can lead to health complaints! The following instructions absolutely must be complied with:

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

Liability www.schaerer.com

Liability

Operator responsibilities

The operator must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a Schaerer AG service partner, a representative thereof, or other authorised persons.

Complaints about material defects must be reported to Schaerer AG in writing 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 in any circumstances. They must always be replaced!

The following intervals apply:

- Safety valves: every 24 months.
- · Boilers (steam boilers, flow heaters) every 72 months.

These measures are performed by a Schaerer AG service technician or your service partner as part of the maintenance routine.

Warranty and liability

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:

- · Non-intended use of the machine.
- Improper installation, commissioning, operation, cleaning and maintenance of the device and the associated optional devices.
- · Failure to observe maintenance intervals.
- Operating the unit with defective safety devices 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.
- · Operating the device when it is not in perfect condition.
- · Repairs carried out improperly.
- Use of spare parts that are not original Schaerer AG spare parts.
- Use of cleaning products that are not recommended by Schaerer AG.
- Catastrophic incidents due to foreign objects, accident, vandalism or force majeure.
- Penetrating the device with any type of object or opening the housing.

The manufacturer only accepts liability or honours warranty claims provided that all specified maintenance and service intervals have been kept and that only original spare parts supplied by the manufacturer or by a supplier authorised by the manufacturer have been used.



The "General Terms and Conditions" of Schaerer AG apply.