

e2 e2<sup>ct</sup> e2<sup>m</sup> e4 e4<sup>m</sup>

# INSTALLATION MANUAL



 **VERSYS**

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# 1 SUMMARY

This manual provides the service technician with detailed installation instructions for the e'2ct/e'2/e'2m/e'4/e'4m fully automatic coffee machine.

## 1.1 USAGE

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

The appliance must be installed and serviced by instructed and trained service engineers only.

The appliance was manufactured to grind, brew and dispense hot coffee, and to dispense hot water, hot milk and steam products.

The appliance is designed for indoor use only.

Do not use the appliance to produce other products than described in this manual.

## 1.2 APPLIANCES WITH MILK PRODUCTS

This manual is based on standard coffee machines with coffee, hot water and steam products. For models with milk products, some special manipulations have to be done. These are highlighted visually in this manual to announce a deviation to the standard models.

Example:



### **Cleaning the milk container**

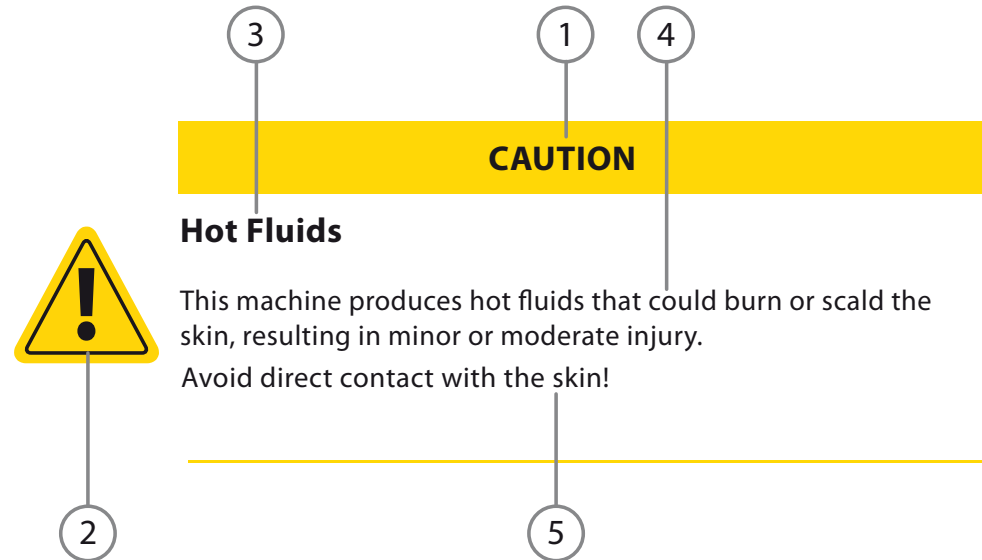
Open the fridge door and remove the milk container. Clean it with a damp cloth.



## 2 GENERAL SAFETY INSTRUCTIONS

### 2.1 STRUCTURE

The safety instructions in this document are structured as follows:



- |   |                    |   |                      |
|---|--------------------|---|----------------------|
| 1 | Safety signal word | 4 | Impact of danger     |
| 2 | Safety symbol      | 5 | Prevention of danger |
| 3 | Source of danger   |   |                      |

### 2.2 SAFETY WARNINGS

The following types of safety warnings are used in the present manual:

#### **DANGER**



#### **Danger**

The safety warning with the signal word “Danger” is used to indicate a hazardous situation which, if not avoided, **will** result in death or serious injury.

## WARNING



### Warning

The safety warning with the signal word "Warning" is used to indicate a hazardous situation which, if not avoided, **could** result in death or serious injury.

---

## CAUTION



### Caution

The safety warning with the signal word "Caution" - in combination with the safety alert symbol - is used to indicate a hazardous situation which, if not avoided, **could** result in minor or moderate injury.

---

## NOTICE



### Notice

The safety warning with the signal word "Note" is used to address practices that could lead to property damage but not to injury.

---

## 2.3 HINTS

---



### Hint

The hint with the signal word "Hint" is used to address practices that help the reader using the machine.

---

## 2.4 GENERAL SAFETY WARNINGS FOR THIS MACHINE

### DANGER



#### Incorrect Installation

The appliance must be installed by an instructed service engineer in compliance with the local regulations.

The manufacturer is not liable for injuries caused by an improper installation of the appliance.

### DANGER



#### Incorrect Operation

The appliance must be serviced by trained personnel only.

The appliance must not be used to produce other products than described in this manual.

### DANGER












#### General Safety Hints

- 1 In case of an emergency, immediately isolate the power to the machine and if possible remove the plug from the power socket.
- 2 Check that the voltage quoted on the rating plate is identical to the mains voltage.
- 3 Use the specific power supply cord(s) only. The use of incorrect connections voids the warranty!
- 4 Never immerse the machine, power cord, or plug in water or any other liquid.
- 5 Install the power cord out of reach of children.
- 6 Never leave the power cord near or in contact with hot parts of the machine, a source of heat, or a sharp edge.
- 7 Place the machine on a flat, stable, heat resistant surface.

## 3 SECURITY

### 3.1 SIGNS AND SYMBOLS

	Warning: High voltage		Warning: Hot		Warning: Rotating grinders
	Rule: Caution		Rule: Read the instruc- tions		Rule: Wear pro- tective gloves
	Rule: Wear safety goggles		Prohibi- tion: Do not touch		Prohibi- tion: Do not reach in

### 3.2 ELECTRICAL SAFETY

#### WARNING

##### Hazardous Voltage



The current-carrying parts are located inside the housing of the appliance. Contact with live parts will result in electric shock, causing serious injury or death.



- 1 Before opening the housing, switch off the main switch and check the appliance for correct earthing.
- 2 Keep the machine away from wetness.
- 3 Never pour any liquids into the grinders or powder chute.
- 4 Do not use the machine when the power cord(s) or plug(s) are damaged. Have the defective part repaired or replaced by an authorised service agent.
- 5 To reduce the risk of electric shock, do not remove or open covers. No user-serviceable parts inside. Refer servicing to qualified personnel only!

### 3.3 MAINTENANCE

#### WARNING



#### Unauthorised Amendments to the Machine and Use of Non-Original Spare Parts



Unauthorised amendments to the machine or the use of material not authorised by the manufacturer could cause malfunction resulting in damage to the installation or in serious injury or death.

Worn and/or defective parts/components must be replaced with original spare parts only.

The manufacturer does not take any responsibility for malfunction, damage or injury caused by unauthorised amendments made to the machine.

### 3.4 GRINDERS

#### WARNING



#### Avoid Contact with Grinders

Contact with the grinders could result in serious injury to fingers and hands.

Take the following precautions:



1 Never touch the grinders, even if the bean hoppers are not installed.

2 If work on the grinders is required, unplug the machine



## 3.5 HOT SURFACES

### CAUTION



#### Avoid Contact with Hot Surfaces

Contact with hot surfaces may result in minor or moderate injury.

Take the following precautions:



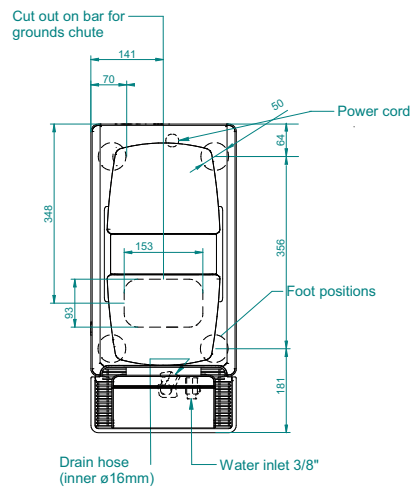
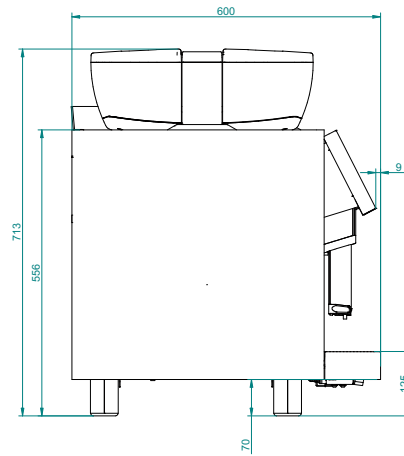
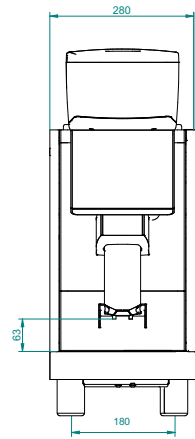
- 1 Do not put your hands under outlets while dispensing product.
- 2 Do not touch the outlets after product dispensing, especially the tea and steam outlets which will be very hot.
- 3 Be careful when handling the grounds drawer content, as the content may be hot.
- 4 Do not remove the coffee/milk spout during product dispense or while the cleaning process is running.
- 5 Be careful when emptying the drip tray, as the content may be hot.

## 4 TECHNICAL DATA

### 4.1 E'2 CT STANDARD

<b>Hourly productivity</b> Espresso or Hot water	175+ espresso (23s extraction time) or 120 hot water (2.0dl hot water portions)
<b>Bean hopper capacity</b>	2 x 0.6...1.5 kg
<b>Brew chamber capacity</b>	1 x up to 24 g (super drive ø64 mm ceramic burrs)
<b>Coffee spout height</b>	65...165 mm
<b>User interface</b>	1 x 8" Colour Touch Screen
<b>Lighting front</b>	Full colour LED, all colours and colour gradient adjustable
<b>Communication interfaces</b>	USB, SD-Card, Ethernet, Serial RS-232, CCI (24VDC, 15W)
<b>Power requirement</b> Single-phase Two-phases	1 x 220...240 V, 1L-N-PE, 16 A, 50/60 Hz 2 x 110...120 V, 2L-N-PE, 16 A, 50/60 Hz
<b>Standby consumption</b>	less than 2 W
<b>Water connection</b>	Stainless steel braided hose L: 2 m with screw-top G3/8", 0...4 bar
<b>Drain</b>	Drain hose ø 23 mm, l = 2 m
<b>Water quality</b> Total hardness Carbonate hardness pH value	5...8°dH max. 6°KH ideal 7.0...7.2
<b>Weight</b>	approx. 60 kg
<b>Dimensions</b>	282 mm x 600 mm x 713 mm (W x D x H)

# CUT SHEET E'2CT STANDARD

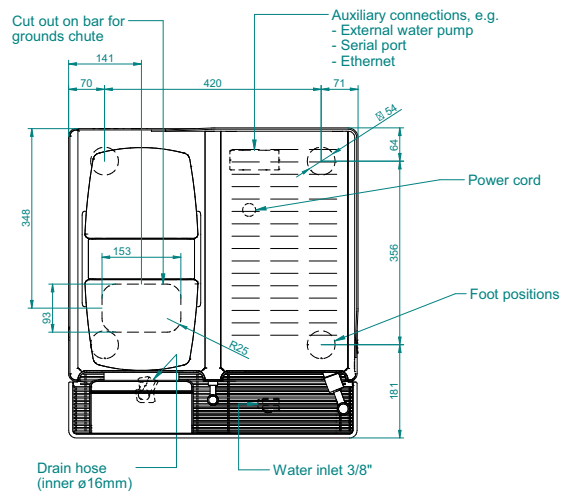
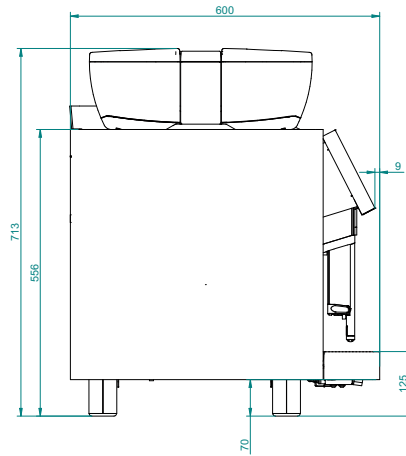
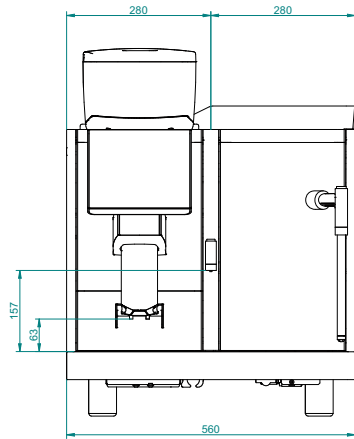




## 4.2 E'2 / E'2M

<b>Hourly productivity</b> Espresso & Hot water & Steam <a href="#">emilk system</a>	175+ espresso (23s extraction time) & 150 hot water (2.0dl hot water portions) & continuous steam supply <a href="#">175+ cappuccino</a>
<b>Bean hopper capacity</b>	2 x 0.6...1.5 kg
<b>Brew chamber capacity</b>	1 x up to 24 g (super drive ø64 mm ceramic burrs)
<b>Coffee spout height</b>	65...165 mm
<b>User interface</b>	1 x 8" Colour Touch Screen
<b>Lighting front</b>	Full colour LED, all colours and colour gradient adjustable
<b>Communication interfaces</b>	USB, SD-Card, Ethernet, Serial RS-232, CCI (24VDC, 15W)
<b>Power requirement</b> Single-phase Two-phases Three-phases	1 x 220...240 V, 1L-N-PE, 30 A, 50/60 Hz 2 x 110...120 V, 2L-PE, 30 A, 50/60 Hz 3 x 220...240 V, 3L-N-PE, 16 A, 50/60 Hz
<b>Standby consumption</b>	less than 2 W
<b>Water connection</b>	Stainless steel braided hose L: 2 m with screwcap G3/8", 0...4 bar
<b>Drain</b>	Drain hose ø 23 mm, l = 2 m
<b>Water quality</b> Total hardness Carbonate hardness pH value	5...8°dH max. 6°KH ideal 7.0...7.2
<b>Weight</b>	approx. 83 kg, 87 kg with fridge
<b>Dimensions with fridge</b>	560 mm x 600 mm x 713 mm (W x D x H) 840 mm x 600 mm x 713 mm (W x D x H)

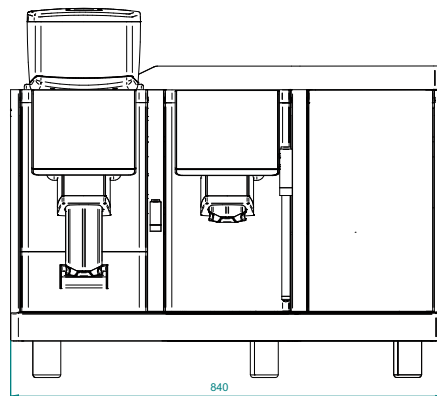
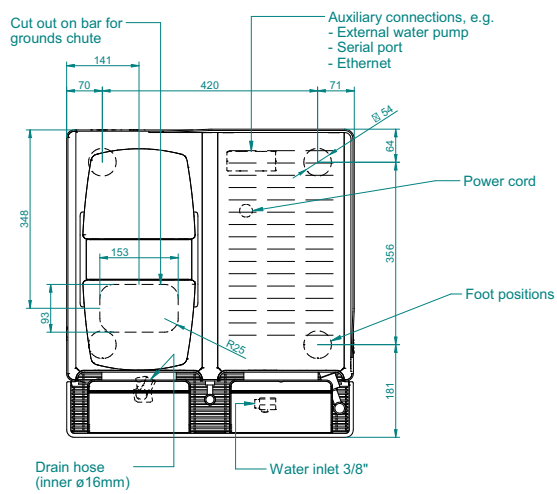
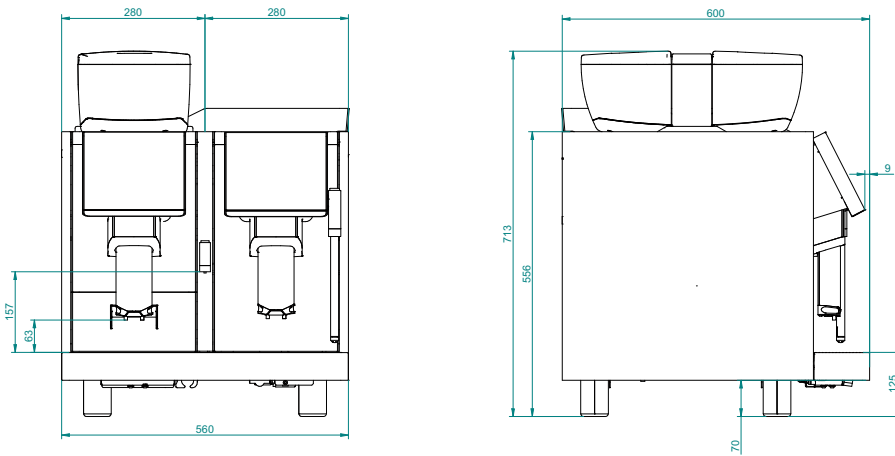
# CUT SHEET E'2 / E'2M



### 4.3 E'4 / E'4M

<b>Hourly productivity</b> Espresso & Hot water & Steam or emilk system	350 espresso (23s extraction time) & 150 hot water & continuous steam supply or 350 cappuccino
<b>Bean hopper capacity</b>	2 x 0.6...1.5 kg
<b>Brew chamber capacity</b>	2 x up to 24 g (super drive ø64 mm ceramic burrs)
<b>Coffee spout height</b>	65...165 mm
<b>User interface</b>	2 x 8" Colour Touch Screen
<b>Lighting front</b>	Full colour LED, all colours and colour gradient adjustable
<b>Communication interfaces</b>	USB, SD-Card, Ethernet, Serial RS-232, CCI (24VDC, 15W)
<b>Power requirement</b> Single-phase Two-phases Three-phase	1 x 220...240 V, 1L-N-PE, 30 A, 50/60 Hz 2 x 110...120 V, 2L-PE, 40 A, 50/60 Hz 3 x 220...240 V, 3L-N-PE, 16 A, 50/60 Hz
<b>Standby consumption</b>	less than 2 W
<b>Water connection</b>	Stainless steel braided hose L: 2 m with screwcap G3/8", 0...4 bar
<b>Drain</b>	Drain hose ø 23 mm
<b>Water quality</b> Total hardness Carbonate hardness pH value	5...8°dH max. 6°KH ideal 7.0...7.2
<b>Weight</b>	approx. 90 kg, 94 kg with fridge
<b>Dimensions with fridge</b>	560 mm x 600 mm x 713 mm (W x D x H) 840 mm x 600 mm x 713 mm (W x D x H)

# CUT SHEET E'4 / E'4M



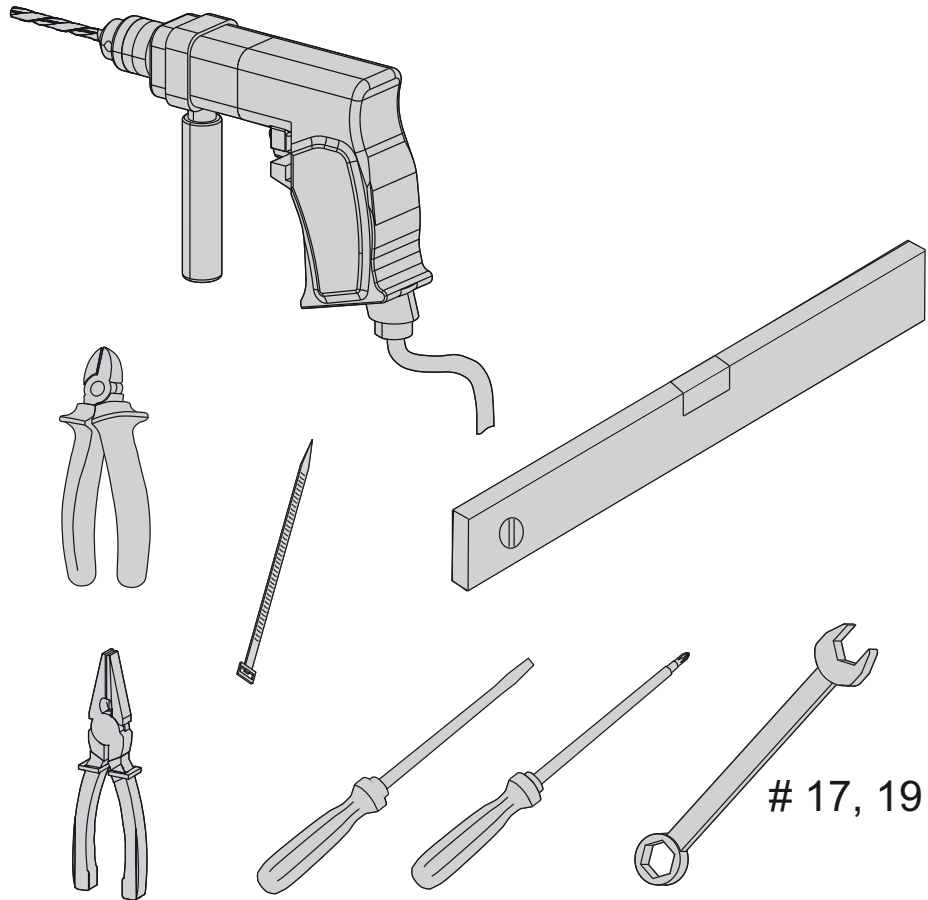
*e'4m with fridge beside*



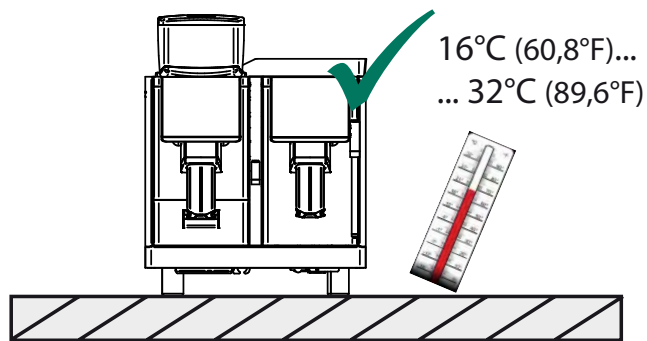
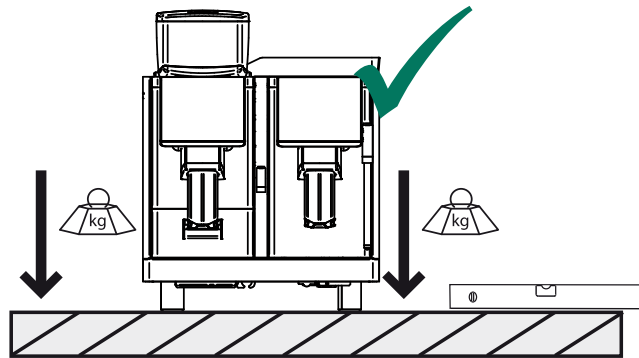
# 1 INSTALLATION STEPS

## 1.1 TOOLS

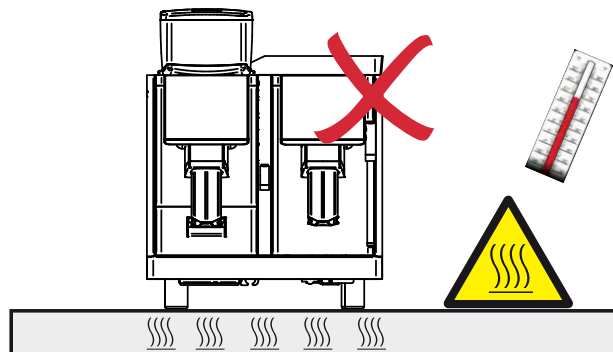
For a safe and correct installation, the following tools are required.

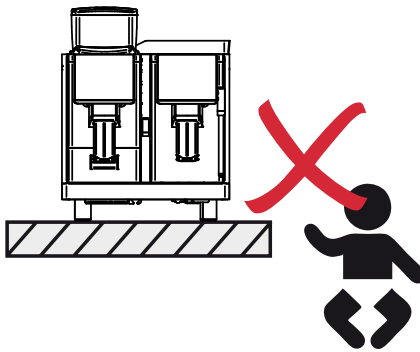
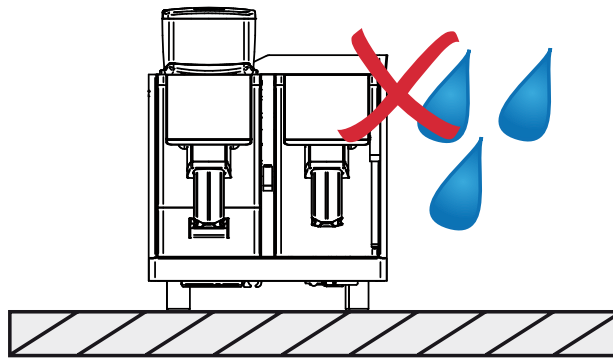


## 1.2 POSITIONING AND ENVIRONMENT



*Storage temperature between 16° and 32°C*





### 1.3 ELECTRICAL CONNECTIONS

- 1 The mains connection must correspond with the voltage, amperage and frequency indicated on the machine label and the chosen machine configurations (see tag on the power cord).

#### NOTICE



#### Overloaded Power Network

An overloaded power network could lead to malfunction of or damage to the machine.

When starting up the machine for the first time, immediately select the menu "Machine Configuration" (see page 40) to check whether the settings correspond with the electrical connection.



## WARNING



### Risk of Fire

Installation of wrong or improper electric plugs can cause short circuit resulting in fire.

The plug has to be selected and installed by qualified service personnel only, according to the labels on the power cord.

- 2 This appliance is electrically safe only when properly earthed as described in the current electrical safety specifications. Check for compliance and, when in doubt, have the wiring thoroughly inspected by skilled personnel. The manufacturer does not take any responsibility for any damage caused by incorrect earthing.
- 3 Using adapters, multiple plugs and cable extensions is not recommended. If they are indispensable, use simple or multiple adapters and extensions that comply with the current safety regulations. Do not exceed the limit current load shown on simple adapters and extensions, and the limit power load shown on multiple adapters. To prevent dangerous overheating, uncoil the power cord to its full length. When the appliance is permanently connected to a field terminal, a disconnection switch must be installed at the field terminal. The disconnection switch must disconnect all power lines from the power network, except for the earthing. The distance between the contacts of the disconnection switch must be at least 3.0 mm.

## 1.4 WATER CONNECTION

The machine requires a cold water connection of 3/8 inch. The distance between the machine and the water connection should not be more than 1 meter (to connect the appliance, use the supplied original hose only). The water pressure must be between 2 and 4 bar (29...58 psi). If the water pressure is more than 4 bar (58 psi), a pressure reducing valve must be installed.

## NOTICE



### Noise and Vibrations

Motors, grinders and pumps inside the machine may cause noise and vibrations.

Ensure the machine is installed on a stable base to reduce these factors.

---

## NOTICE



### Local Plumbing Codes

Wrong plumbing can cause malfunction on the machine.

This machine is to be installed with adequate back flow protection to comply with applicable federal, state or local plumbing codes.

---

## 1.5 WATER QUALITY

For tasty coffee, the water quality is an important factor. Use drinking water only!

The following water quality parameters have to be guaranteed:

- Total hardness                                      0.9... 1.5 mmol/l  
(= ca. 5...8°dH / 9...15°FH / 6...10°e)
- Carbonate hardness                                max. 1.1mmol/l (6°dH / 11°FH / 8°e)
- pH value    ideal 7.0...7.2
- Chlorine (Cl)                                         max. 20 mg/l

To guarantee the required water quality, a filter system (ion exchanger, active carbon) might need to be installed.

## 1.6 WATER DRAIN

The distance between the water drain and the machine should not be more than 1 meter. For proper draining, make sure that the water drain (hose) does not sag.

## 1.7 TRANSPORTATION

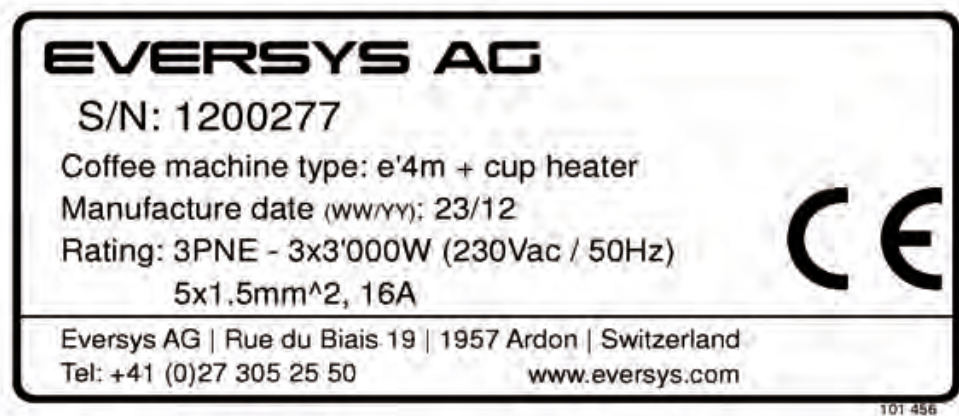


Before transporting the machine, be aware of the machine weight. When moving the machine manually, wear protective gloves and make sure to only transport the machine with the help of a second person.

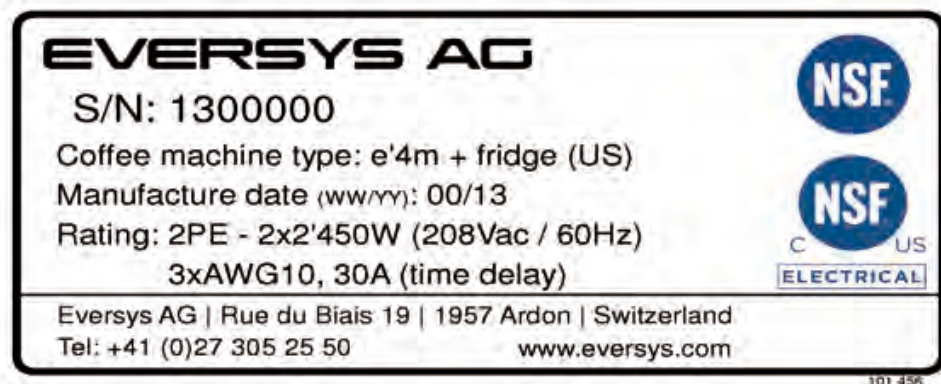
Use a lifting support according to local regulations.

## 1.8 POSITION OF RATING PLATE

The rating plate is located at the bottom of the housing, underneath the drip tray.



Check that the voltage quoted on the rating plate is identical with the mains voltage.



UL/NSF/CCC version

## 1.9 DISPOSAL

### PACKAGING MATERIAL

The packaging material (cardboard, PE plastic film, PE, PE-foam, EPS) must be disposed of according to the local regulations.

### REMOVAL OF EQUIPMENT

Disconnect the appliance from power. If the appliance is hard-wired, it must be disconnected by an authorised service agent!

### SAFETY INSTRUCTIONS

In order to prevent any accidents caused by inappropriate use or in particular by playing children, the appliance must be put out of operation. Unplug the appliance from power source or in case of hardwired installations have it disconnected by an authorised service agent! Subsequently cut off the plug from the power cord.

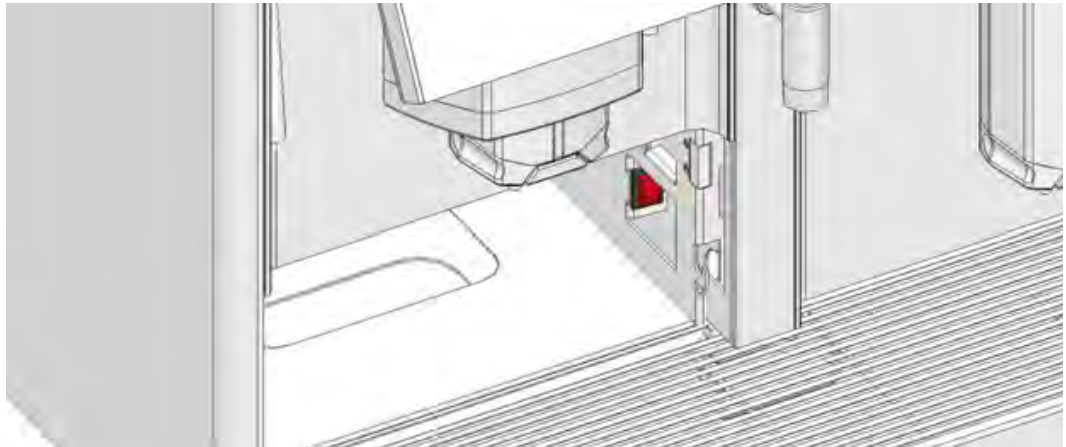
### DISPOSAL INSTRUCTIONS

Make sure the old appliance is disposed of or recycled according to the local regulations. For any further information about disposal, contact your manufacturer's agent.

## 2 START-UP

### 2.1 TURNING ON

- 1 Turn on the ON/OFF switch, which is located inside the housing on the right hand side behind the grounds drawer.



- 2 Push the rinse button as required.



- 3 Follow the display messages and wait until the machine is heated up.



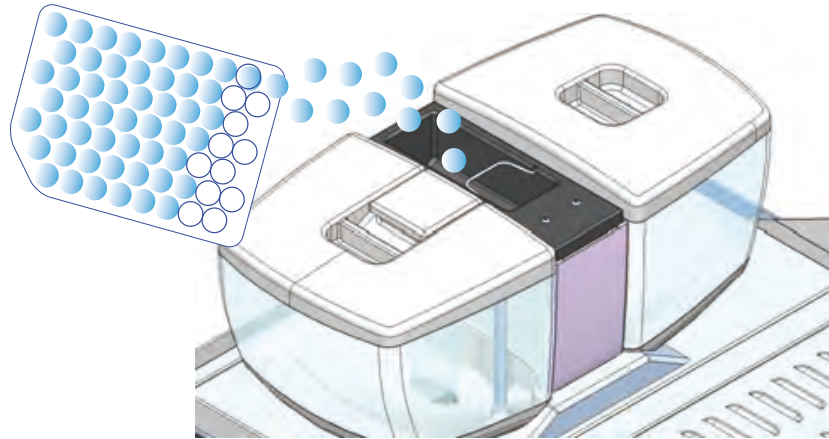
#### Remaining Water

After the start-up rinsing procedure, the grounds drawer is filled with hot water.

## 2.2 CLEANING

For hygienic reasons, a cleaning is required at the first start-up of the machine.

- 1 Make sure that there are sufficient cleaning balls in the dispenser.



- 2 Push the rinse button for at least two seconds.



- 3 Press "Yes" in the pop-up window.



- 4 Follow the display messages.



Appliances with milk products require additional intervention to clean the milk part:





---

## Remaining Water

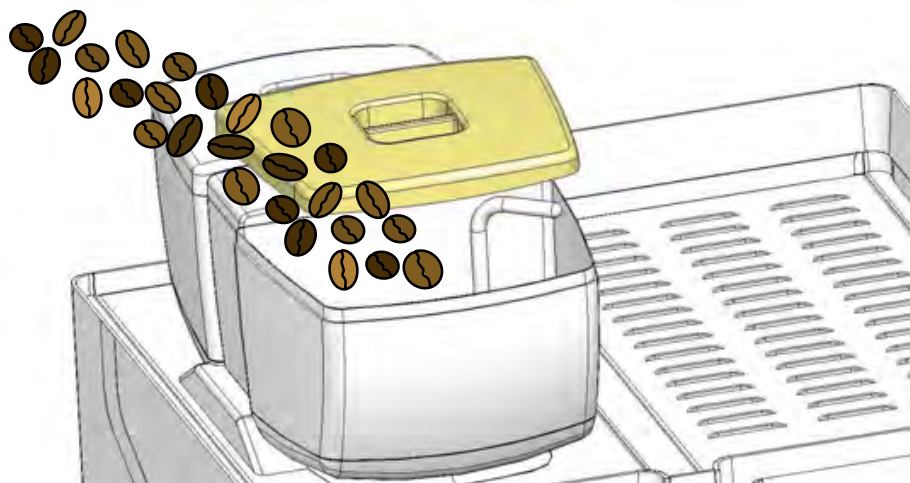
After the cleaning procedure, the grounds drawer is filled with hot water. Empty and clean the grounds drawer!

---

- 5 Clean the milk tubes with a damp cloth after the daily cleaning procedure.
- 6 Do not clean plastic parts with alcohol, ethanol, methanol, denatured alcohol, solvents or disinfectant. Only use warm water with washing-up liquid or neutral cleaner.
- 7 Only use Eversys cleaning products for the automatic cleaning process. For the external cleaning of the housing use only standard, non-abrasive cleaning agents.
- 8 Do not use the plastic parts in a microwave.
- 9 Do not clean the machine with a water jet.

## 2.3 FILLING THE HOPPERS WITH FRESH BEANS

- 1 Make sure the beans are always fresh.
- 2 Lift the lid and fill the hopper with fresh beans.



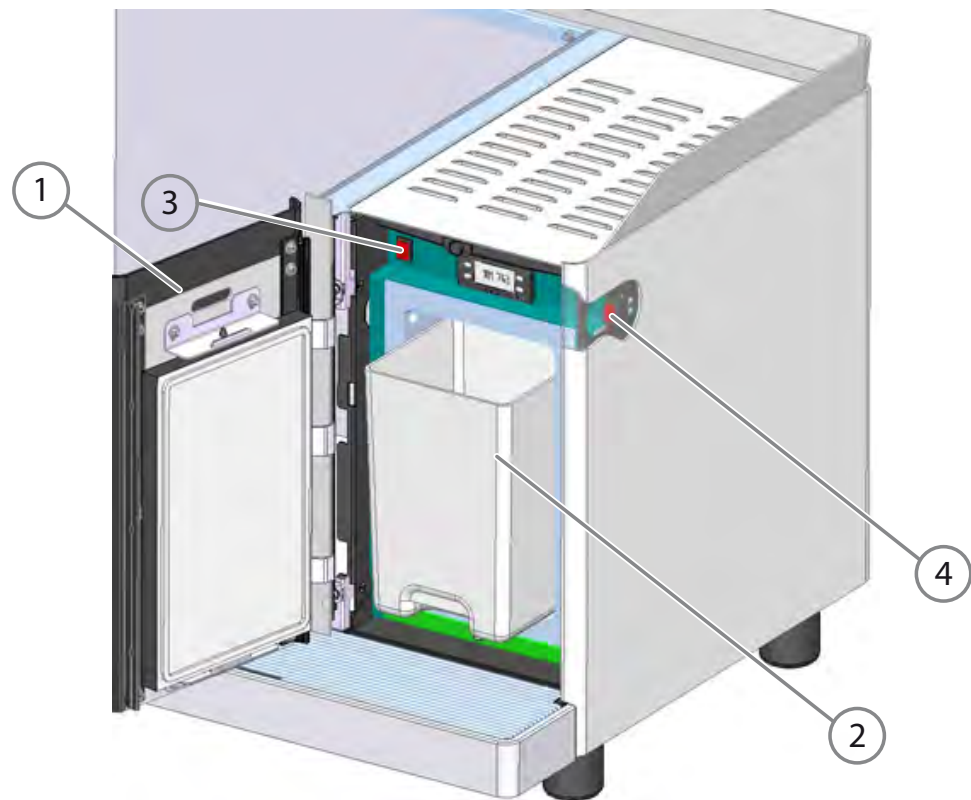


## 2.4 FILL MILK



Appliances with milk products need to be operated with a refrigerator either besides or below the coffee machine. This example shows the manipulation with a refrigerator beside the machine.

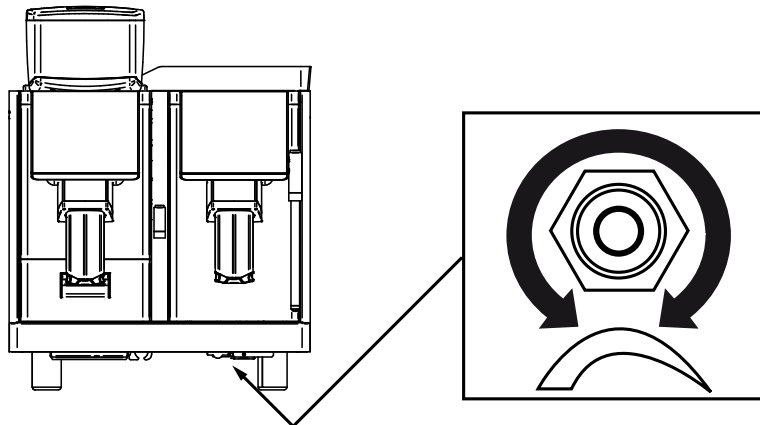
- 1 Open the fridge door (1)
- 2 Remove the milk inlet container (2)
- 3 Fill the container with the corresponding amount of fresh, cold (4°C) milk needed
- 4 Re-insert the milk container
- 5 Turn the refrigerator on by pushing the ON/OFF switch (3)
- 6 Turn the cup heater on by pushing the ON/OFF switch (4)
- 7 Close the fridge door



## 2.5 MECHANICAL REGULATORS

### EVERFOAM AIR REGULATOR

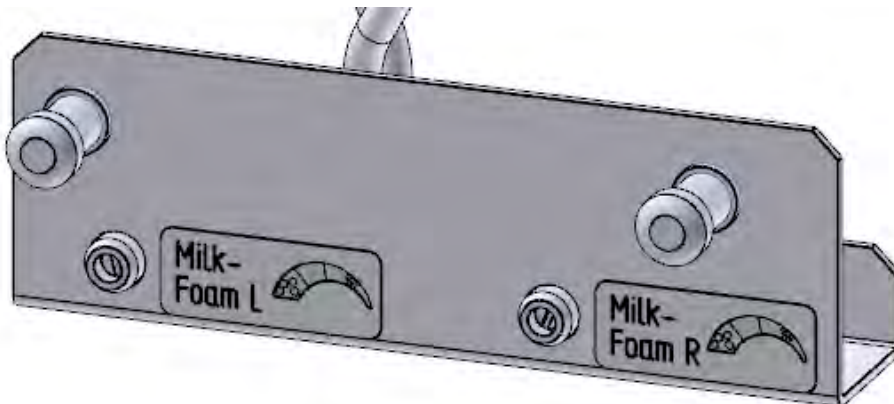
The air regulator is located underneath the steam boiler on the right bottom side of the machine.



- Turn the air regulator clockwise to decrease the air volume.
- Turn the air regulator counter clockwise to increase the air volume.

### MILK FOAM AIR REGULATORS

The milk foam air regulator is located underneath the steam boiler on the right bottom side of the machine.



- Turn the air regulator clockwise to decrease the foam thickness (less air).
- Turn the air regulator counter clockwise to increase the foam thickness (more air).



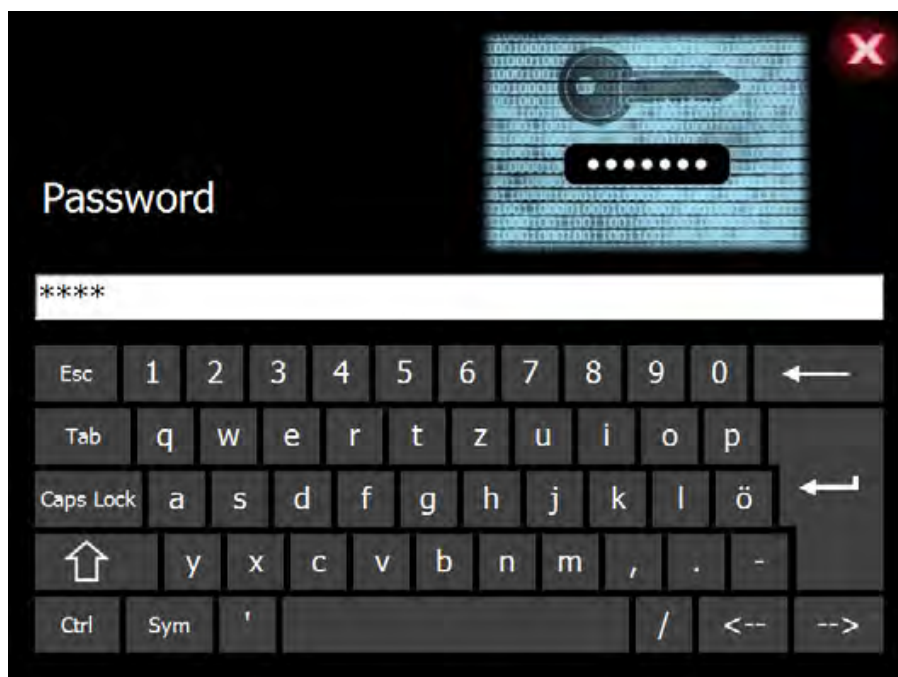
# 1 NAVIGATION

## 1.1 ENTERING THE SERVICE MENU

- 1 Push the menu access point for at least two seconds.



- 2 Enter your personal technician password and press "enter".





---

### Personal password

When accessing the service menu for the first time, the default password "tech" can be used and be changed later.

The personal password can be changed in the menu "Password".

---

## NOTICE



### Forgotten Password

Make sure not to forget your personal password!

In case of a forgotten password, a specific software is required to reset all passwords to default.

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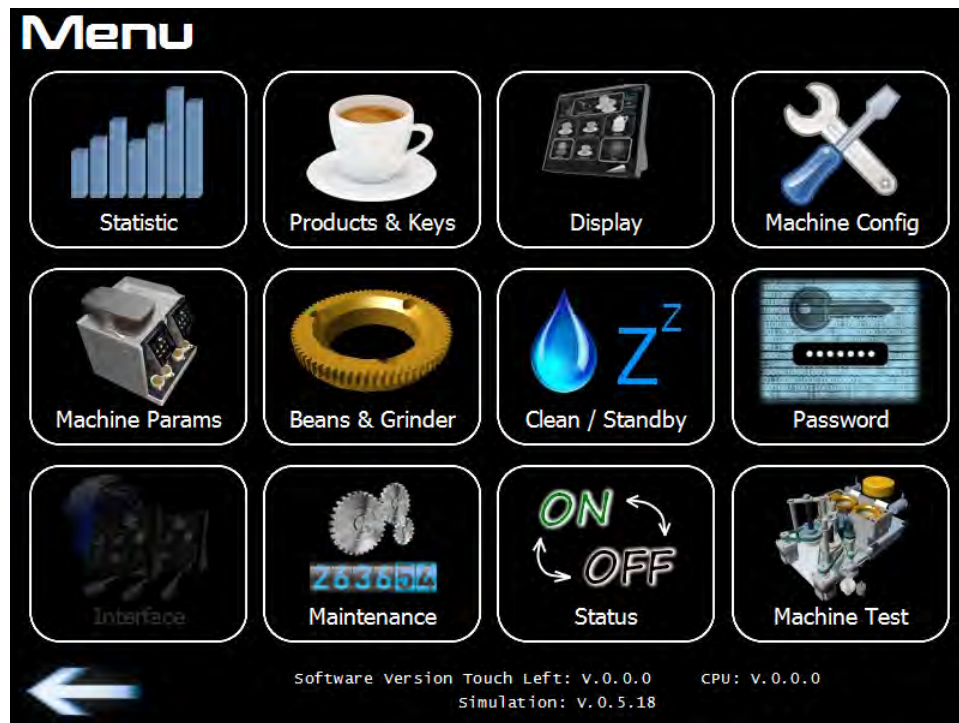
## 1.2 SERVICE MENU ACCESS

The service menu is available on both touch screens left and right. According to the entered password, several menus are available.

There are different access levels:







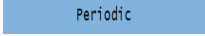



- Operator: Minimal access, read only
- Manager: Medium access, read and minimum change rights
- Technician: Full access, read and maximum change rights

The technician has access to the following menus:



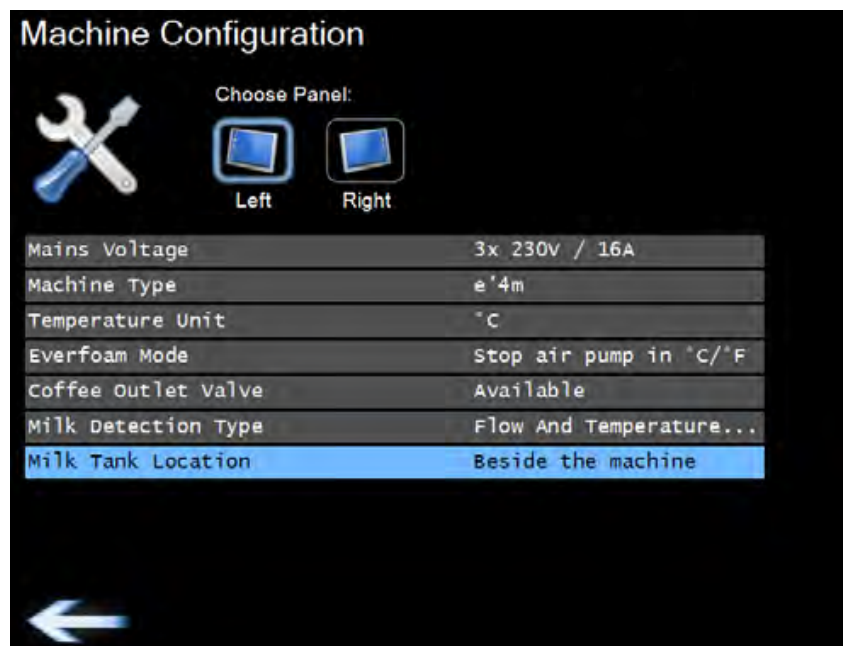
- Check the software version at the bottom of the display.

## 1.3 NAVIGATION BUTTONS

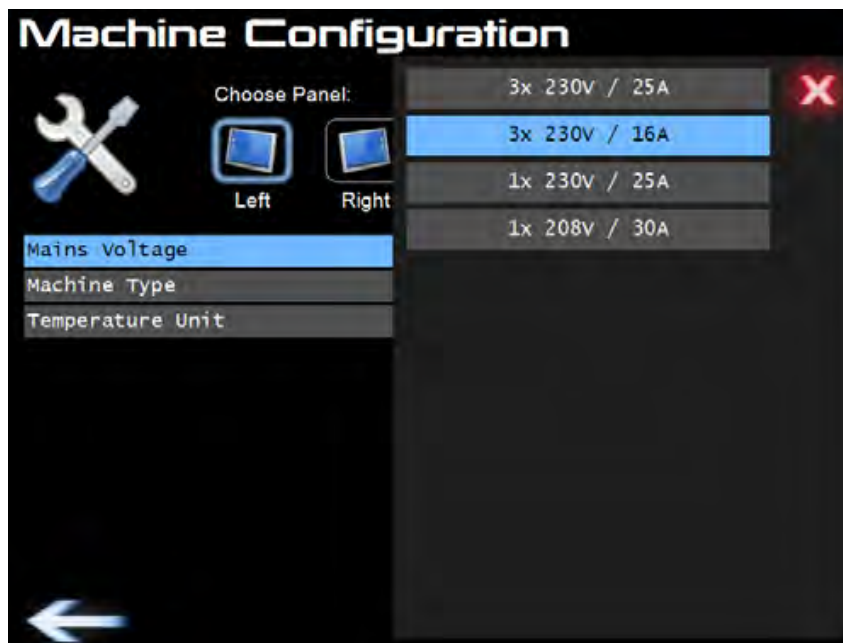
Button	Function	Button	Function
	Browse arrow: Browse pages		Browse up arrow: Browse upwards in menus
	Back arrow: Exit menu one step back		Browse down arrow: Browse downwards in menus
	Slide bar: Slide with finger to increase or decrease		Increase arrow: Increase settings in small steps
	Touch bar: Activate by touching		Decrease arrow: Decrease settings in small steps
	Stop-x: Stops the actual action		Tuner: Increase/decrease by sliding with finger up/down

## 2 MACHINE CONFIGURATION

- 1 Enter the menu "Machine Configuration".



- 2 Check whether all configurations correspond to the name plate.
- 3 Change if necessary or exit with the "X" button.

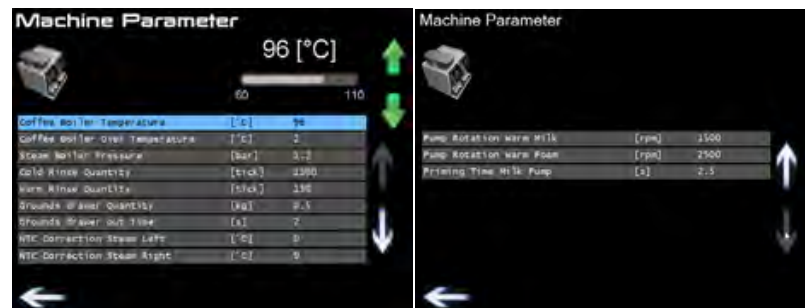


- 4 Exit the menu with the back arrow.



## 3 MACHINE PARAMETERS

- 1 Enter the menu "Machine Parameter".



- 2 Scroll left and right on the scroll bar for large changes of the parameter values.
- 3 Use the green arrows for fine tuning.
- 4 Use the white arrows to browse the menu up and down (appears only if there are additional parameters e.g. for milk products).
- 5 Exit the menu with the back arrow.

### PARAMETER DESCRIPTION

**Coffee boiler temperature:** After 3 minutes without selecting a product, the heating will increase by the pre-defined value (machine parameters range from 0 to 5°C).

**Cold rinse quantity:** This function automatically fills the boiler with the default value of 1500 ml, when the machine / boiler is cold.

**Warm rinse quantity:** Informs about the water quantity used for rinsing when the boiler is warm. If the temperature of the boiler is above 55°C, a restart of the machine is necessary.

**Ground drawer quantity:** Sets the amount of coffee powder inside the drawer before the machine asks for emptying the grounds drawer.

**Ground drawer out time:** Informs about the minimal time the grounds drawer has to be removed before automatic detection. The default value is fixed as of 3 seconds.

## 4 PRODUCT SETTINGS

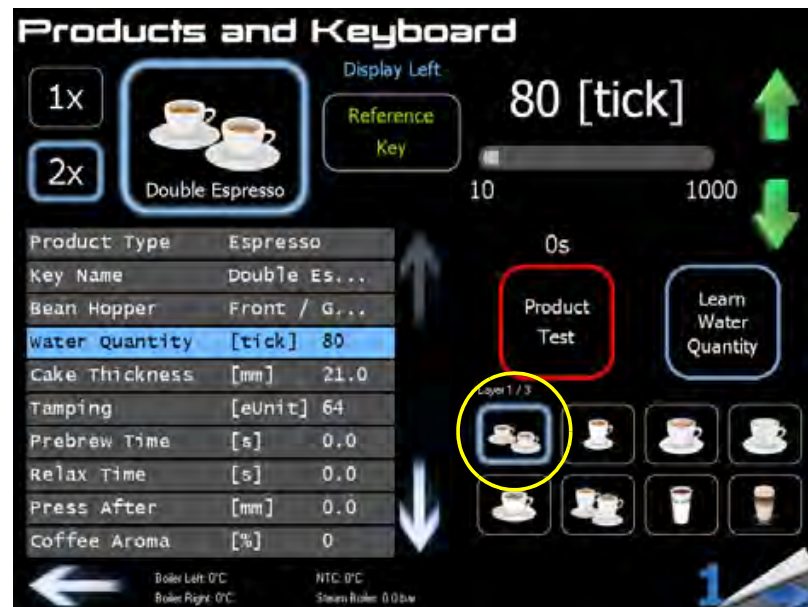
### 4.1 PRODUCT SELECTION



1 Enter the menu "Products & Keys".



2 Select the product selection button to be set.

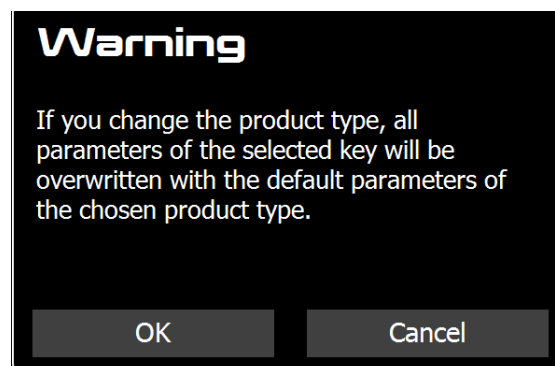


## 4.2 PRODUCT ASSIGNMENT

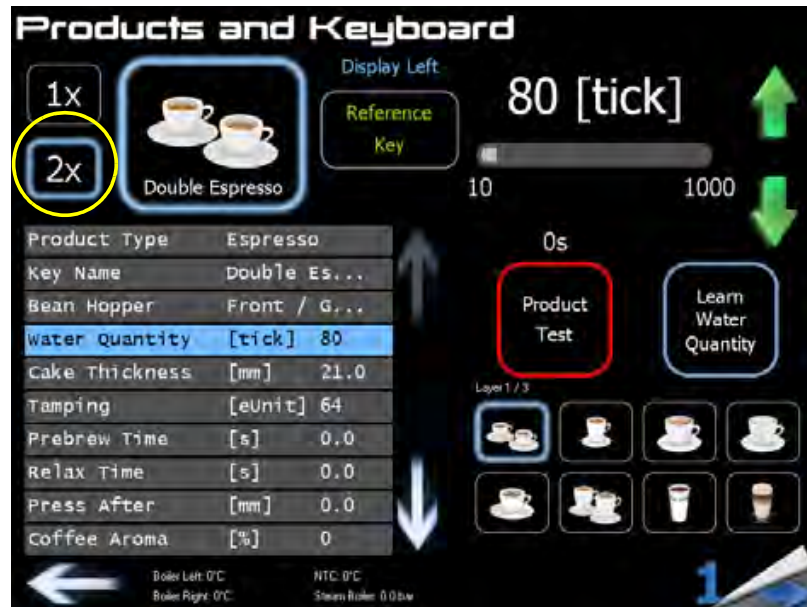
- 1 Assign a product type to the selected button by touching the submenu "Product Type".



- 2 Choose and confirm the selection or exit with the "X" button.



- 3 Select if single or double product using the “1x” or “2x” button.



- 4 Assign an icon to the product by pushing the large product icon.



- 5 Enter submenu “Key Name” to set a name for this product.

- Assign the bean hopper to the product by selecting the sub-menu "Bean Hopper".



- Repeat point 1 to 5 to assign all other product selection buttons.



---

### Default Setting

After assignment of all product selection keys, the set parameters are used as default setting.

For good quality coffee, the parameters need to be finely adjusted based on the available coffee beans.

---

## 5 COFFEE QUALITY ADJUSTMENT



### Default Setting Coffee Aroma

Prior to making any parameter changes, make sure that the coffee aroma setting is set to ZERO (see page 56).

### 5.1 GRINDER ADJUSTMENT

#### (adjusts the fineness of the powder)

The following procedure is a product setting recommendation in order to reach perfect coffee quality. The fine setting depends on type of coffee beans and on individual taste. Start with the adjustment of the double espresso as a base setting for the grinder.



#### e'4(m) Machines

With e'4 machines (2 displays), it is possible to simultaneously open the menu "Grinder Adjustment" on the right touch screen.



- 1 Enter the menu as described in paragraph "1.1 Entering the Service Menu" on page 36.



- 2 Select "Beans & Grinder" -> "Grinder Adjust".



- 3 Remove the grounds drawer.
- 4 Hold a piece of paper or a paper cup underneath the brewing unit.
- 5 Press the "Powder Test" button. The ground coffee powder falls onto the piece of paper or into the paper cup.
- 6 Weigh the ground coffee powder with a gram scale.
- 7 Put the grounds drawer back in place.
- 8 Test the product by pushing the "Product Test" button on the "Products and Keyboard" display.
- 9 Check the extraction time.



### Extraction Time

The extraction time of a tasty double espresso should be between 18 and 23 seconds.

The extraction time of a tasty single espresso should be between 10 and 15 seconds.

- 10 If necessary, set the grinder one or two clicks finer or coarser (in menu “Grinder Adjustment”).



- 11 Repeat point 2 to 7 until the correct extraction time/coffee quality is reached.

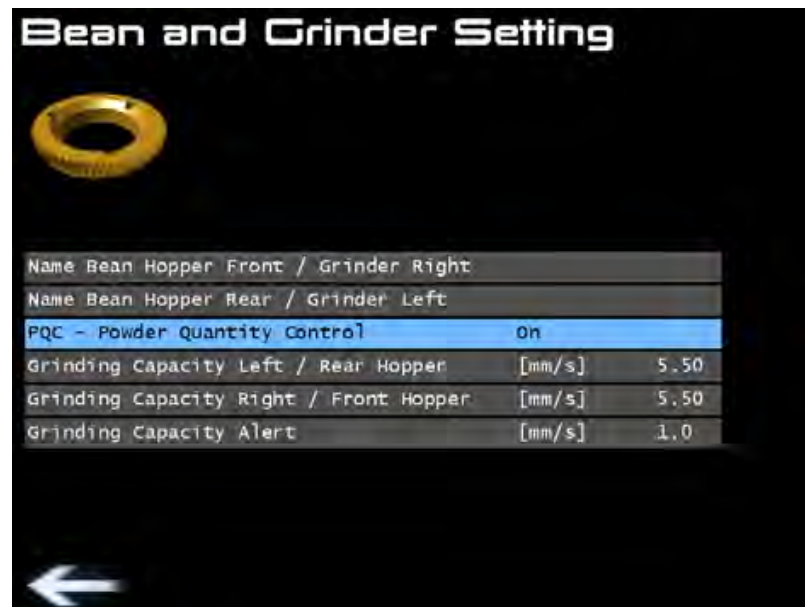


## 5.2 PQC - POWDER QUANTITY CONTROL

### (continuously controls and adjusts the powder quantity for each coffee product)

The PQC is a software feature, that guarantees a stable cake thickness for all coffee products and automatically corrects the grinding time when necessary.

- 1 Enter the menu as described in paragraph "1.1 Entering the Service Menu" on page 36.
- 2 Select "Beans & Grinder" -> "Beans/Grinder".
- 3 Set PQC On.



### PQC Features

The PQC controls both grinders separately and helps to stabilise the extraction time of the coffee product.

The last five products are used as reference to set up the corrections accordingly. An interrupted product dispense will not refer for an average.

## EXAMPLE OF PRODUCT ADJUSTMENT WITH PQC

- Machine is on factory default settings
  - As a reference, the cake thickness of 20 mm corresponds to a powder quantity of 15 to 17 grams.
  - Settings to be done for product “double espresso”:
- 1 Adjust the espresso grinder according to this manual.



- 2 Enter the menu “Products & Keys”.



- 3 Select the product selection button “double espresso” to be set.

- 4 Adjust the product as follows:

- Define the bean hopper (front/rear)
- Define the water quantity (70 to 100 ticks)
- Define the cake thickness (up to 20 mm)
- Set the tamping (64)
- Set the pre brew time (0)
- Set the relax time (0)
- Set the press after (-2.0 to 0)
- Set the by-pass (0)

- 5 Exit the menu with the back arrows.



- 6 Dispense a double espresso (don't stop).

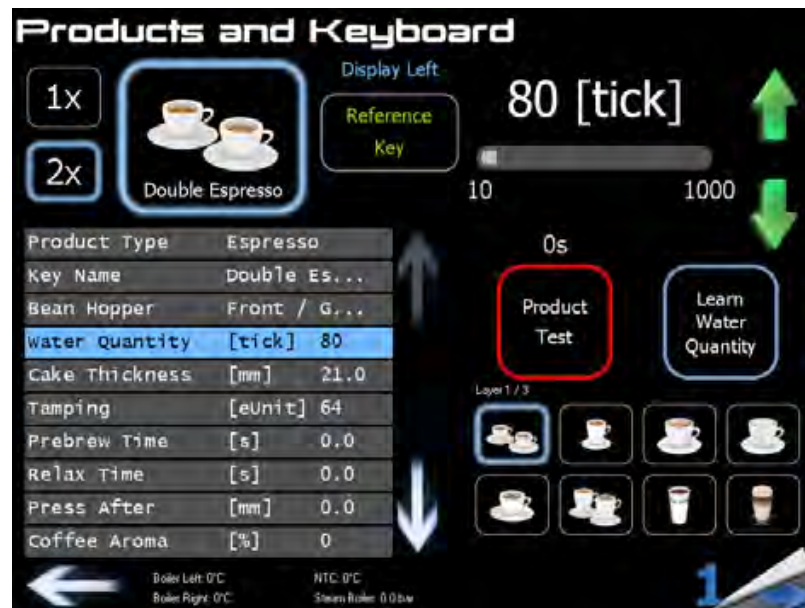
- 7 Dispense a next double espresso and check the extraction time:

- If the extraction time is out of range (18 to 25 s), set the grinder accordingly.
- If the extraction time is ok, dispense another four double espressi.

- 8 From this moment on, the PQC automatically controls and adjusts the powder quantity/cake thickness.

- 9 Repeat this procedure for the second grinder accordingly.

## 5.3 WATER QUANTITY (adjusts the product to cup size)

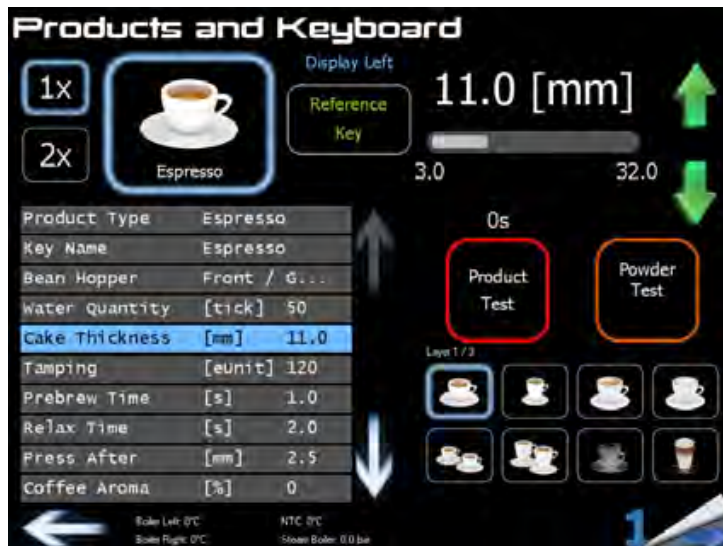


Learn  
Water  
Quantity

Product  
Test

- 1 Place the relevant cup underneath the left coffee spout.
- 2 Push the “Learn Water Quantity” button to start the product dispense.
- 3 When the required water quantity is reached, press the “Learn Water Quantity” again to stop the product dispense.
- 4 Use the green up/down arrows for the fine adjustments.
- 5 Test the product by pushing the “Product Test” button.

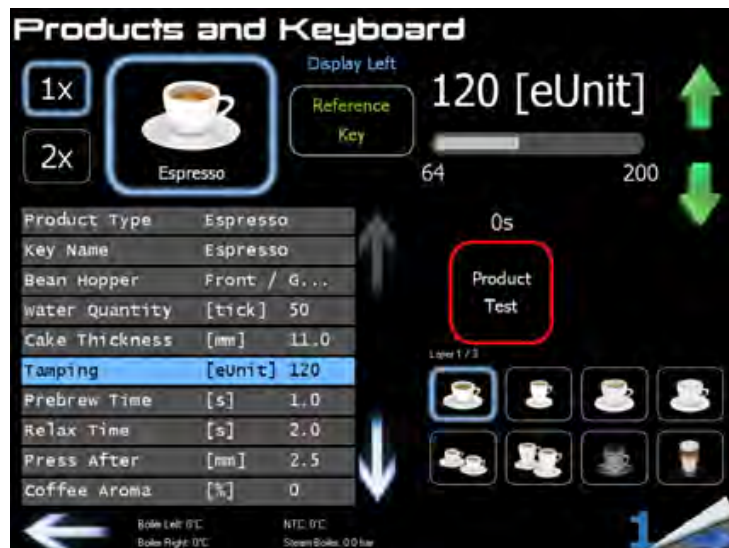
## 5.4 CAKE THICKNESS (adjusts the powder quantity)



Product  
Test

- 1 Use the green up/down arrows for the fine adjustments.
- 2 Test the product by pushing the "Product Test" button.

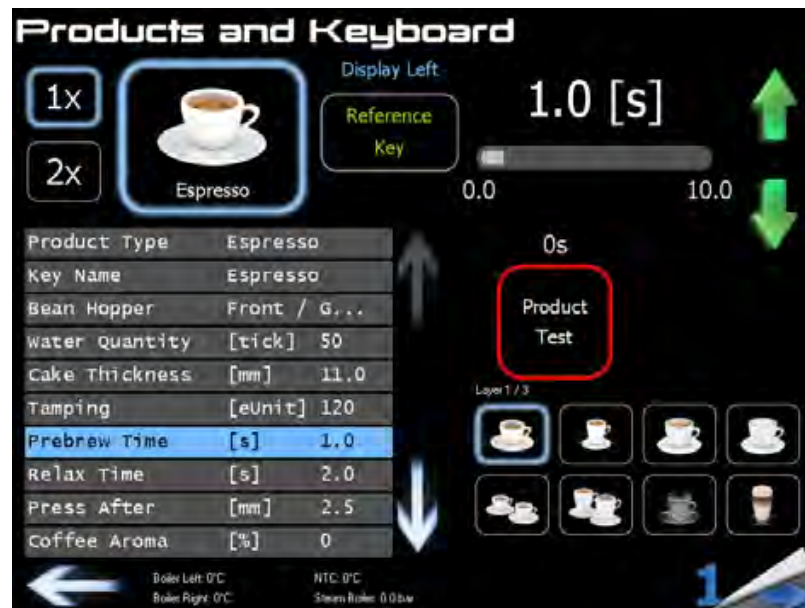
## 5.5 TAMPING (adjusts the pressure of the powder)



Product  
Test

- 1 Use the green up/down arrows for the fine adjustments.
- 2 Test the product by pushing the "Product Test" button.

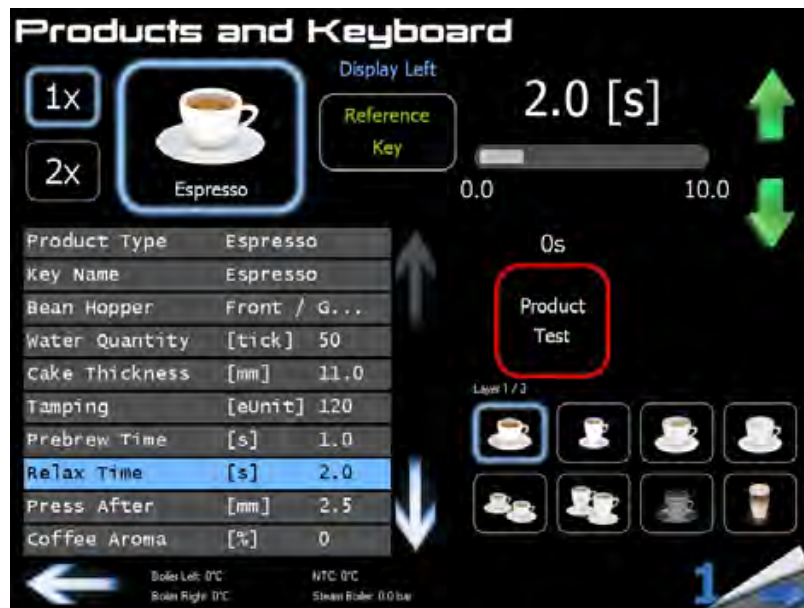
## 5.6 PREBREW TIME (adjusts the pre-infusion water quantity)



- 1 Use the green up/down arrows for the fine adjustments. (the water quantity is set by how long the brewing valve stays open in seconds).
- 2 Test the product by pushing the "Product Test" button.



## 5.7 RELAX TIME (adjusts the soaking time)



Product  
Test

- 1 Use the green up/down arrows for the fine adjustments.
- 2 Test the product by pushing the "Product Test" button.

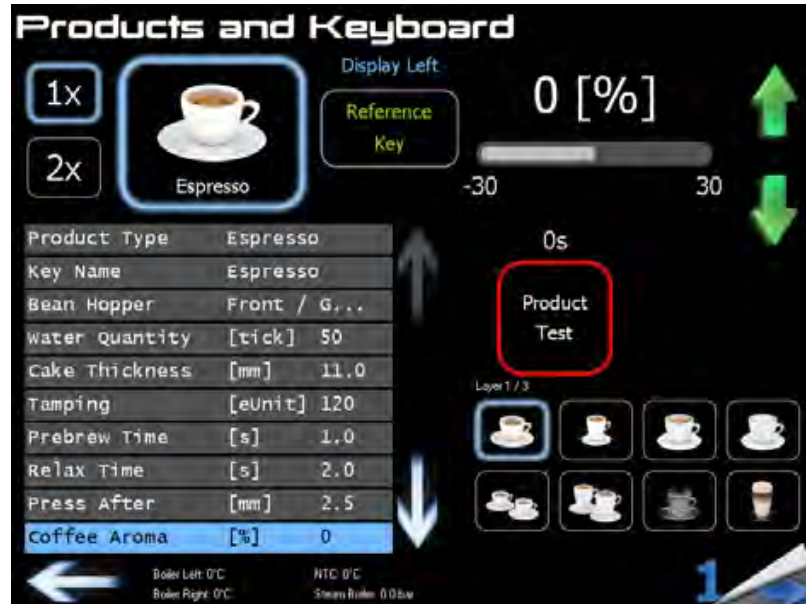
## 5.8 PRESS AFTER (adjusts the secondary tamping pressure)



- 1 Use the green up/down arrows for the fine adjustments.
- 2 Test the product by pushing the "Product Test" button.
  - Positive value = the brew chamber closes and squeezes the powder
  - Negative value = the brew chamber opens after the first tamping

## 5.9 COFFEE AROMA

(pre-programmed overriding adjustment for use by operator)

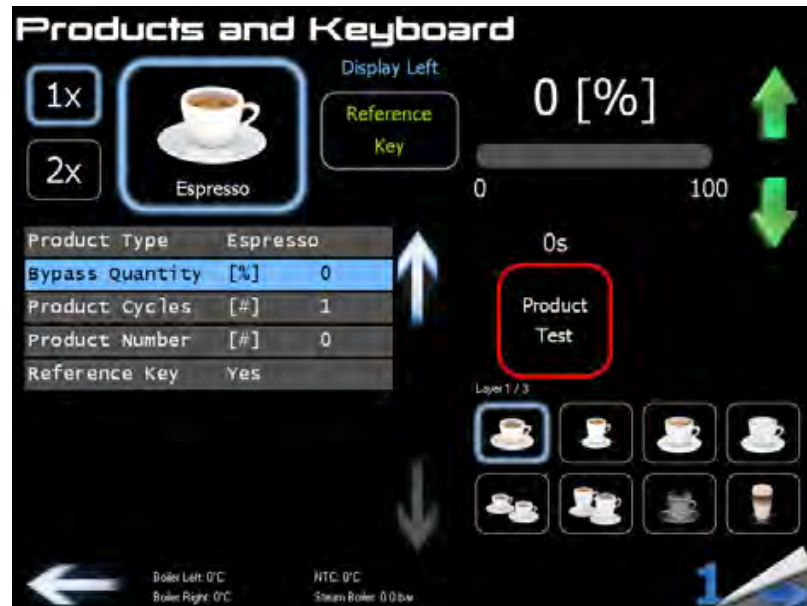


### Coffee Aroma

Make sure the coffee aroma setting is set to ZERO. This menu is used for the manager level only.

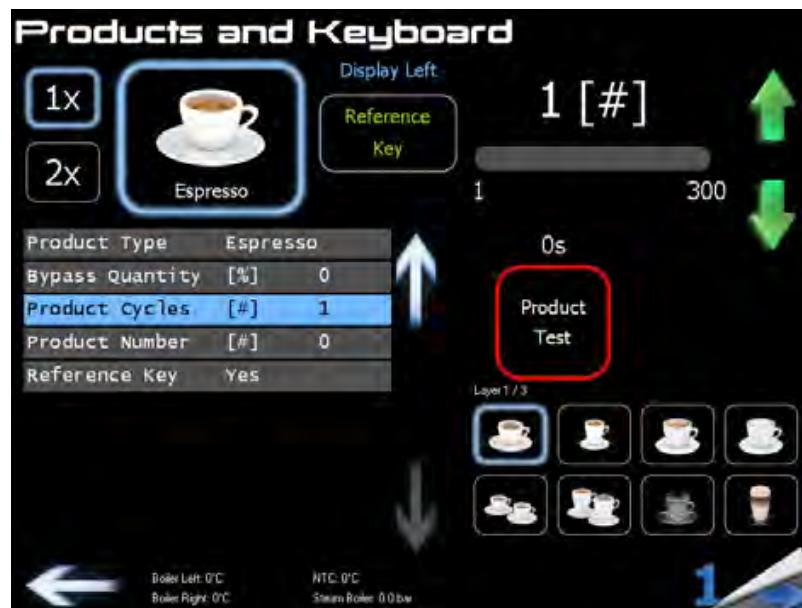


## 5.10 BYPASS QUANTITY (adjusts the hot water ratio in the final product)



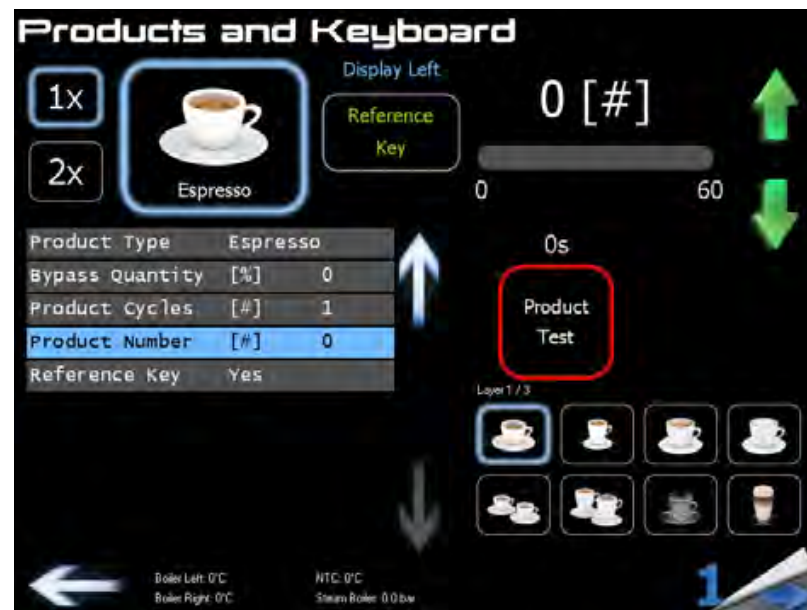
- 1 Use the green up/down arrows for the fine adjustments.
  - 2 Test the product by pushing the "Product Test" button.
- Example:  
20% = 80% of the water runs through the coffee powder, 20% runs directly into the cup.

## 5.11 PRODUCT CYCLES (adjusts the product repetition)



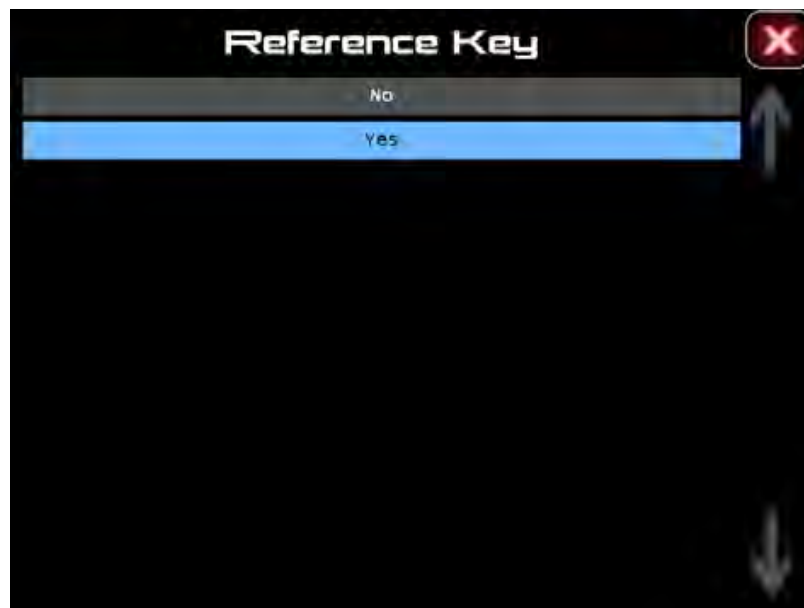
- 1 Use the green up/down arrows for the fine adjustments.
- 2 To test the "Cycles" function, switch to operator mode and press the "Product Test" button.

## 5.12 PRODUCT NUMBER (adjusts the product ID for vending systems)

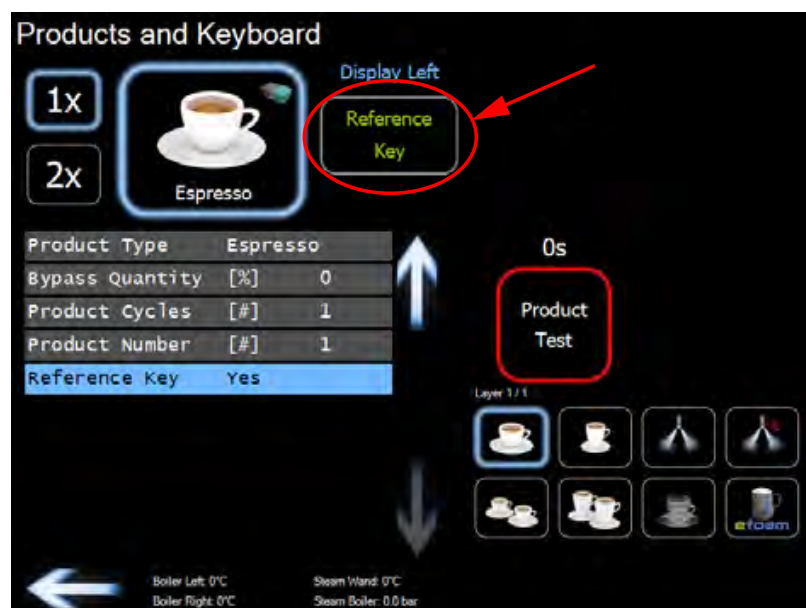


- 1 Use the green up/down arrows for the fine adjustment.
- 2 Taste the product by pushing the "Product Test" button.

## 5.13 REFERENCE KEY (baseline value for use on both touch screens)



- 1 Set the reference key on/off by pushing Yes/No or exit the menu with "X".
- 2 It is also possible to select / de-select the "Reference Key" by pushing the reference key button.

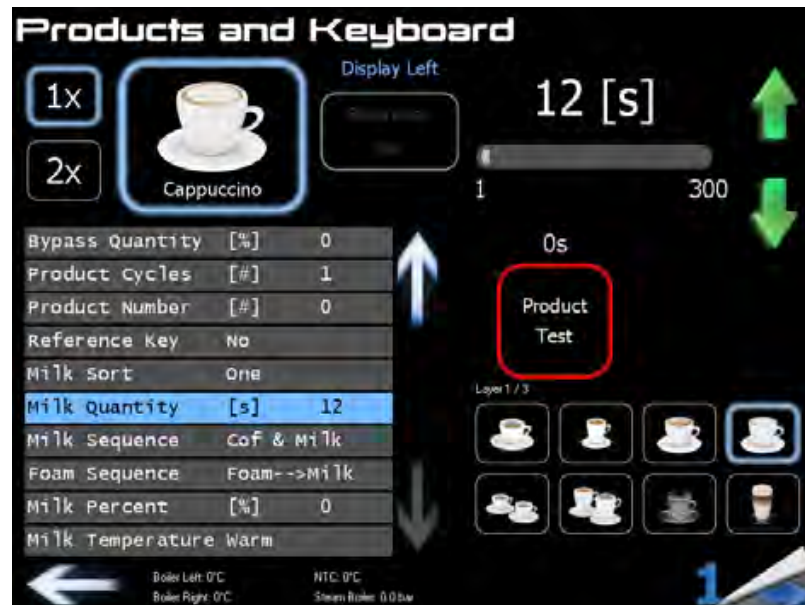


- 3 Exit all menus with the back arrow.

## 6 MILK QUALITY ADJUSTMENTS

### 6.1 MILK QUANTITY

(adjusts the product to the cup size)



- 1 Place the relevant cup underneath the left coffee/milk spout.
- 2 Use the green up/down arrows for the fine adjustments.
- 3 Test the product by pushing the "Product Test" button.



## 6.2 MILK SEQUENCE

(defines the sequence of milk and coffee dispense)



- 1 Set the desired sequence by pushing the corresponding touch bar.
- 2 Test the product by pushing the "Product Test" button.



## 6.3 FOAM SEQUENCE

(defines the sequence of milk and foam dispense)

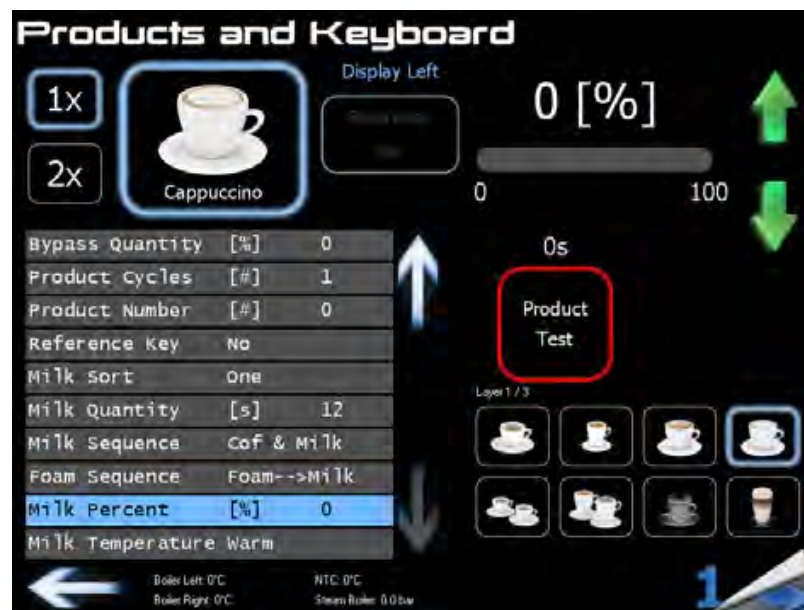


- 1 Set the desired sequence by pushing the corresponding touch bar.
- 2 Test the product by pushing the "Product Test" button.



## 6.4 MILK PERCENT

(adjusts the percentage of milk relative to the foam)



Product  
Test

- 1 Use the green up/down arrows for the fine adjustments.
  - 2 Test the product by pushing the "Product Test" button.
- Example:
    - Milk percent 0% = only foam
    - Milk percent 100% = only milk



## 6.5 MILK TEMPERATURE

(defines the temperature of the milk dispense)



- 1 Set the desired temperature(s) by pushing the corresponding touch bar.
- 2 Test the product by pushing the "Product Test" button.
- 3 Exit all menus with the back arrow.



## 7 CLEAN/STANDBY MENU



- 1 Select "Clean / Standby"

### 7.1 CLEANING MODE

**(choose between periodic or fixed time cleaning)**

- 1 Set the desired mode by pushing the corresponding touch bar.



- Periodic = default 24 hours after the last cleaning



Use the green up/down arrows to set the cleaning period.

- Fixed time = the cleaning starts every day at a fixed time (including a time tolerance)



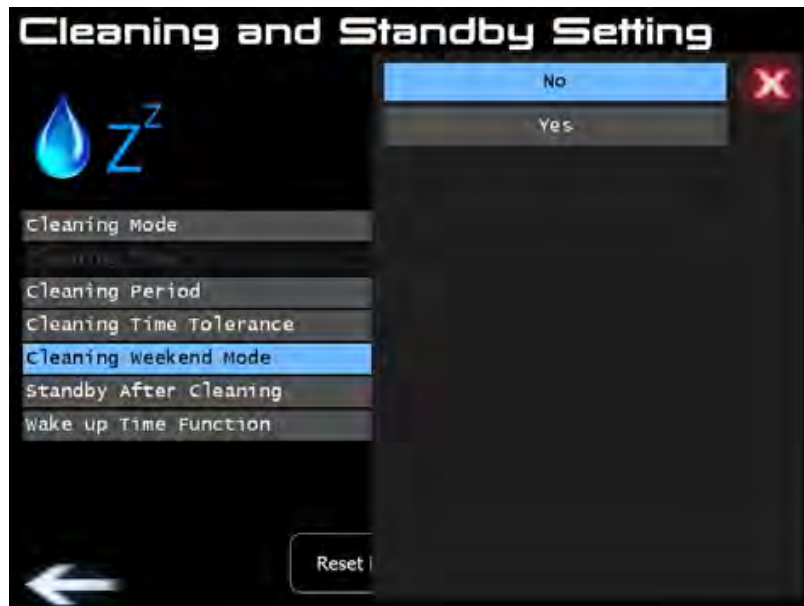
Use the green up/down arrows to set the cleaning fixed time.

## 7.2 CLEANING TIME TOLERANCE



- 1 Use the green up/down arrows to set the cleaning time tolerance.
- Example:  
The fixed time is set to 18:00 and time tolerance 2 hours means that the machine reminds the user to clean the machine at 18:00 but is locked only at 20.00 if no cleaning is performed.

### 7.3 CLEANING WEEKEND MODE



- 1 Set the desired mode by pushing the corresponding touch bar.

  - Yes = the cleaning is not requested during the weekend, Milk products are deactivated. Default: No

### 7.4 STANDBY AFTER CLEANING



- 1 Set the desired mode by pushing the corresponding touch bar.

Yes = the machine automatically enters the Standby mode after the cleaning.

## 7.5 WAKE UP TIME



- 1 Set the time with the green arrows, select the days by pushing.
- The machine automatically starts up at the set time.

## 8 MAINTENANCE MENU



- 1 Select "Maintenance" -> "Water Filter"



### 8.1 WATER FILTER (define and set water filter cartridge)



- 1 Select the water filter supplier.
- 2 Use the "Filter Guide" function to select the suitable filter.

- 3 Adjust the "Carbonate hardness" and the "Total hardness".
- 4 Adjust the "Bypass" of your water filter according to the information provided by the software.
- 5 Activate and start the water counter "Start Counter/Reset".
- 6 Deactivate the water filter control by selecting "Other Filter" and set "water filter capacity" to 0 L.



## NOTICE

### Notice

Water filters not properly adjusted will invalidate the warranty!

## 8.2 SERVICE PARAMETERS



- This function allows an automatic warning when servicing the machine is needed.
- Default parameters are set up at 100,000 cycles or 12 months. This setting can be adjusted according to your service strategy.

