

# Virtu

## User Manual Virtu Coffee Machine



### XEA Medium Cabinet 190 CoEx XL® brewer

5DUXEK20M EN V2.2

# Preface

## Copyright

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The English language version is the original version. All other language versions are translations of the original version.

## Disclaimer

Although this manual has been put together with the utmost care, J.M. de Jong Automatenfabriek B.V. accepts no liability for inaccuracies or omissions. No liability is accepted for the consequences arising from operation of the equipment in accordance with the information contained in these instructions. J.M. de Jong Automatenfabriek B.V. reserves the right to alter specifications at any time and without prior notification to the purchaser.

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## Introduction

- Before using the coffee machine, please read the safety instructions and all of the information in this manual first.
- Keep this manual in a safe and accessible place for later reference.
- The machine serves hot drinks. Keep a distance from the outlet nozzles after selection, during dispense and when the drink is removed from the machine after dispense.
- Only properly trained service personnel may install, move, adjust and repair the machine.
- This machine can be used by children aged 8 years and older and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and they understand the hazards involved.
- All information for normal daily use is found in the paragraph [Using the coffee machine](#) (on page 33).

- The information in the other paragraphs is meant only for persons trained in the operation and maintenance of the machine.
- Solutions to simple issues or malfunctions that may occur are given in the back of the manual.
- The manual cannot be regarded as a replacement for the training and instruction, but must be seen as an addition to the training, and as a reference work.
- The user manual is valid for the machine supplied by the manufacturer, including the options installed by the manufacturer.
- The manufacturer accepts no liability for any damage resulting from incorrect or improper use of the machine, or resulting from modifications that have not been authorized by the manufacturer.
- Only use original parts from the manufacturer when the machine needs to be repaired.
- Contact the dealer / supplier of the coffee machine (see contact information in the next section) for maintenance or repairs not explained in this manual.

## Service and support

For service and support contact the dealer / supplier of the machine.

*Record dealer information in this box or use a dealer stamp.*

Telephone Service Number:

Internet:

Company name:

Address:

Area code - City:

Country:

Telephone:

E-mail:

*Record the serial number of the coffee machine in this box. Mention it when service is required.*

Serial number:

# Contents

<b>Preface</b> .....	<b>2</b>
Copyright.....	2
Disclaimer.....	2
Introduction.....	2
Service and support.....	3
<b>About this manual</b> .....	<b>8</b>
Audience.....	8
Scope.....	8
Conventions.....	8
Related documents.....	9
Availability of this manual.....	10
<b>1 Safety</b> .....	<b>11</b>
1.1 Safety and risk levels.....	11
1.2 Safety and warnings.....	12
1.3 Installation.....	14
1.4 Maintenance.....	14
1.5 Extended down time.....	14
<b>2 Description</b> .....	<b>15</b>
2.1 Overview.....	15
2.1.1 Front view.....	16
2.1.2 Inside view.....	17
2.1.3 Door interior.....	18
2.1.4 Inside view base cabinet — optional.....	19
<b>3 User interface</b> .....	<b>20</b>
3.1 Display layout.....	20
3.2 Main menu - Cup dispensing.....	21
3.2.1 Additional options submenu.....	23
3.2.2 Jug dispensing submenu.....	25
3.2.3 Number selection submenu.....	26
3.2.4 Dispense submenu.....	28
3.2.5 Ready submenu.....	29
3.2.6 Message submenu.....	30



3.2.7 Information submenu. . . . .	32
<b>4 Using the coffee machine. . . . .</b>	<b>33</b>
4.1 Before use. . . . .	33
4.2 Procedures. . . . .	34
4.2.1 Select a beverage. . . . .	34
4.2.1.1 Cup dispensing. . . . .	35
4.2.1.2 Cup dispensing by number — optional. . . . .	36
4.2.1.3 Jug dispensing. . . . .	37
4.2.2 Payment. . . . .	40
<b>5 Preventive maintenance. . . . .</b>	<b>41</b>
5.1 Food safety engagement. . . . .	41
5.2 Preventive maintenance schedule. . . . .	42
5.3 Daily maintenance. . . . .	43
5.4 Weekly maintenance. . . . .	44
5.5 Monthly maintenance. . . . .	45
5.6 Preventive maintenance procedures . . . . .	46
5.6.1 Switch on. . . . .	46
5.6.2 Open the door. . . . .	46
5.6.3 Close the door. . . . .	46
5.6.4 Open or close top lid . . . . .	47
5.6.5 Switch off / Putting out of order. . . . .	48
5.6.6 Scheduled rinse. . . . .	49
5.6.7 Flush mixers and brewer. . . . .	50
5.6.8 Clean waste bucket. . . . .	51
5.6.9 Clean the cup stand. . . . .	53
5.6.10 Clean the waste bin in the base cabinet. . . . .	55
5.6.11 Clean the drip tray. . . . .	56
5.6.12 Clean the mixing system. . . . .	58
5.6.13 Remove and clean the brewer. . . . .	66
5.6.14 Clean brewer with cleaning tablet. . . . .	69
5.6.15 Unblock the grinder. . . . .	71
5.6.16 Fill up the cup dispenser — optional. . . . .	76
5.6.17 Clean the tea brewer. . . . .	78
5.6.18 Clean the canisters. . . . .	80
5.6.19 Clean the cold water outlet nozzle — optional. . . . .	81
5.6.20 Deep clean the cold water outlet nozzle — optional. . . . .	82
5.6.21 Fill up the ingredient canisters. . . . .	84
5.6.22 Fill up the bean canister. . . . .	87
5.6.23 Enter canister ingredient levels — optional. . . . .	90
5.6.24 Clean the outside of the machine. . . . .	91
5.6.25 Clean the touchscreen — optional. . . . .	92

5.6.26 The service key. . . . .	93
5.6.26.1 Insert the service key. . . . .	93
5.6.26.2 Remove the service key. . . . .	94

## 6 Troubleshooting. . . . . 95

6.1 Messages. . . . .	95
6.1.1 Message: Brewer is turning the wrong way, check the wiring. . . . .	95
6.1.2 Message: Brewer out of position. . . . .	95
6.1.3 Message: Clean screen. . . . .	95
6.1.4 Message: Communication error. . . . .	95
6.1.5 Message: Door open. . . . .	96
6.1.6 Message: Drip tray full. . . . .	96
6.1.7 Message: Empty waste bucket. . . . .	96
6.1.8 Message: Enough water?. . . . .	96
6.1.9 Message: Error occurred during recipe cycle. . . . .	97
6.1.10 Message: Filling boiler. . . . .	97
6.1.11 Message: General error. . . . .	97
6.1.12 Message: Grinder blocked. . . . .	97
6.1.13 Message: Heating boiler. . . . .	98
6.1.14 Message: Initialization failed, the brewer did not reach maximum movement. . . . .	98
6.1.15 Message: Install drip tray. . . . .	98
6.1.16 Message: Install waste bucket. . . . .	98
6.1.17 Message: Insert coins. . . . .	98
6.1.18 Message: Mixer blocked. . . . .	99
6.1.19 Message: Machine Blocked. . . . .	99
6.1.20 Message: Machine is temporarily out of order. . . . .	99
6.1.21 Message: Not all ingredients available. . . . .	99
6.1.22 Message: No coffee detected in brewer. . . . .	99
6.1.23 Message: No water connected / No water in boiler. . . . .	100
6.1.24 Message: Piston blocked, dosage too high. . . . .	100
6.1.25 Message: Place cup in center. . . . .	100
6.1.26 Message: Place cup right. . . . .	101
6.1.27 Message: Please load configuration. . . . .	101
6.1.28 Message: Please load the User Interface. . . . .	101
6.1.29 Message: Recipe error, contact tech. support. . . . .	101
6.1.30 Message: Replace water filter. . . . .	101
6.1.31 Message: Rinse brewer with tablet. . . . .	101
6.1.32 Message: Startup problem. . . . .	102
6.1.33 Message: Temp. sensor disconnected. . . . .	102
6.1.34 Message: Temperature boiler (too) high. . . . .	102
6.1.35 Message: The brewer blocked during recipe, did not reach position. . . . .	102
6.1.36 Message: Water level too low. . . . .	103
6.1.37 Message: Wait, Heating boiler. . . . .	103

6.1.38 Message: Waste bucket full / Empty waste bucket. . . . .	103
6.1.39 Message: Water filter installed?. . . . .	103
6.1.40 Message: Wrong brewer defined in the software. . . . .	103
6.1.41 Message: Ready, take your cup. . . . .	104
<b>7 Technical specifications. . . . .</b>	<b>105</b>
7.1 Standards and regulations. . . . .	105
7.2 Type plate. . . . .	105
7.3 Disassembly and recycling. . . . .	106
7.4 Technical specifications. . . . .	107
7.5 Cup and jug sizes. . . . .	108
7.6 Manufacturer contact information. . . . .	109
<b>8 Appendix. . . . .</b>	<b>110</b>
8.1 Appendix list. . . . .	110
8.2 Declaration of conformity. . . . .	111

# About this manual

## Audience

This manual describes how to use and maintain the Virtu coffee machine. Intended users are the end user and staff responsible for regular maintenance of the machine.

De **Jong** DUKE assumes that staff will:

- have sufficient technical knowledge and experience to carry out the tasks assigned to them,
- recognize and prevent possible hazards,
- read and understand this manual,
- follow the procedures described in this manual,
- ensure that the machine will not harm personnel and/or damage its environment.

If the responsible staff has permission to perform maintenance actions or to change parameters, De **Jong** DUKE expects that the operator is trained for these tasks.

## Scope

This manual contains essential information for proper operation and maintenance of the machine. Following the instructions contained in this manual should assure trouble-free, safe operation and maintenance of the machine.



### **CAUTION**

Before using or maintaining the machine read this manual carefully to become familiar with the functionality. Make sure that any operator or service engineer understands the correct operating and maintenance procedures and all safety precautions. If any (part of the) information in this manual is unclear contact the supplier.

Operators and service engineers must be adequately trained in the correct operation of the machine. Keep this manual in a pre-determined place near the machine.

## Conventions

This manual uses the following text conventions:

- Actions that you should perform in a specific sequence are numbered, for instance, e.g.:
  1. Open the door of the coffee machine.

- Black circled numbers (e.g. 1, 2, 3) and numbers between parentheses e.g. (1) in text refer to elements in a figure.
- Bold text is used for (sub)titles and for information that needs special attention: '**Read these instructions carefully**'.
- Menu names in the user interface are shown in bold, for example: return to the **Main menu**.
- Settings in the user interface are shown in italics; for example: *0.45*.
- Soft keys, keyboard buttons and hardware buttons are shown between brackets, for example: **[Start]**, **[Enter]**, **[2]**.
- Messages shown in the user interface are shown between quotation marks and in italics, e.g.:  
'*Place cup right* (see [Message: Place cup right](#) on page 101)'.  
'*Place cup right* (see [Message: Place cup right](#) on page 101)'.
- Cross-references to sections, tables, figures etc. are indicated as blue text or written as (see "....." on page ..). The main purpose is easy recognition in the paper and on-line (PDF) version of the manual. In the on-line version, the cross-references function as hyperlinks that can be used to navigate through the manual by clicking on them. Example: [Scope](#) (on page 8).
- The safety symbols indicate situations or actions that may endanger the operators and service engineers and are explained in detail in the safety section.
- One additional symbol is available to give the reader additional information:



#### **TIP**

Recommendations for the reader.

## Related documents

In addition to this manual, the following documentation is available:

- Technical manual  
containing all information about the functionality of all parts in the machine, procedures for servicing and configuring the recipes.
- Electrical drawings  
contains the electrical drawing/diagrams of the machine.
- Spare parts manual  
containing relevant information for identification of the spare parts.
- Third party documentation  
contains the available documentation of third-party machine parts.

## Availability of this manual

De **Jong** DUKE expects this manual to be available to all operators and service engineers. The original hard copy (paper) version should always be available near the machine.

If the operator has the permission to perform a number of maintenance actions or program activities, De **Jong** DUKE expects that the operator is trained according to the activities and that the appropriate documentation is available for the operator.

# Safety

## 1.1 Safety and risk levels

Four safety and risk levels are used in this manual.

The risk levels and explanations are:

**NOTE**

To show extra information that may help the reader.

**CAUTION**

Indicates a potentially hazardous situation that, if not avoided, can result in minor or moderate injury or damage to the machine or property.

**WARNING**

Indicates a potentially hazardous situation that, if not avoided can result in death, serious injury or machine damage. It includes hazards that are exposed when guards or security features are removed.

**DANGER**

Indicates a hazardous situation that, if not avoided, can result in death or serious injury.

## 1.2 Safety and warnings

The safety warnings in this section apply to the entire document.

The risk level associated with the explanation are:



### **DANGER**

All danger level warnings applicable to the entire document:

- Do not use water in or near the machine unless the instructions contain explicit directions to the contrary. Risk of electrocution when water comes in contact with internal electrical parts.
- Do not use a water jet to clean the coffee machine.
- HOT water! The water system (boiler, pipes, etc.) may contain hot water. Risk of burning when HOT water comes in contact with a person that can cause a scalding injury.
- Do not move, lift or tilt the machine. Risk of serious personal (hand and finger) injuries.
- Only qualified service personnel is allowed access to the internals of the machine.



### **WARNING**

All warning level warnings applicable to the entire document:

- Do not shake the machine while in use. Risk that machine can tip over and fall.
- Do not lean on the door when open. Risk that machine can tip over and fall. Risk of serious injury.



### **CAUTION**

All caution level warnings applicable to the entire document:

- Do not use aggressive cleaning products or abrasives to clean (parts of) the machine.
- Do not use a dish washer to clean parts.
- Do not use a damaged machine. Please contact your supplier.
- If a fault occurs disconnect the machine from the electrical and water supplies. Please contact your supplier immediately.



### **NOTE**

All note level warnings applicable to the entire document:

- Use the machine only in areas where trained personnel can monitor the operation.
- Water and electrical connections must conform to local regulations.
- Make sure a waterlock is used in the water connection.



- If the power cord is damaged it must be replaced by the manufacturer, the supplier or similar qualified persons.
- Do not use an extension cord.
- Do not use an external timing device to manage the availability of the machine.
- Damaged water connection hoses may only be repaired by trained personnel.
- Make sure to follow instructions on all safety labels on and in the coffee machine.
- Do not remove safety labels.

## 1.3 Installation

For instructions about transportation, unpacking, and installation of the machine, consult the Technical manual.

- Installation, transportation, and adjustment of the machine is specialized work, only properly trained service personnel is allowed to do this.
- The coffee machine is for indoor use only.
- Make sure the machine is placed on a level, flat and stable surface in a hygienic, dry room with a temperature between 5 and 40 °C.
- Make sure that the electricity and water supply connections comply to local regulations and remain easily accessible after installation.

## 1.4 Maintenance

Regular cleaning is needed to ensure hygienic operation of the machine. This manual explains all cleaning procedures to ensure a proper operation of the coffee machine.

## 1.5 Extended down time

- If the coffee machine will not be used for a longer period of time (more than one week) it is recommended to turn off the water supply and the electricity (if the power switch is not accessible pulling the main power plug from the wall socket is sufficient). This will also prevent unnecessary use of energy. If the coffee machine was used also check the cleaning procedures in section [Switch off / Putting out of order](#) (on page 48).
- In areas where the temperature can drop below freezing point, the boilers must be emptied. When freezing has occurred allow sufficient time for the machine to reach room temperature before switching on the machine. Contact your supplier (see [Service and support](#) on page 3) for more information.

# Description

## 2.1 Overview

The Virtu coffee machine is a compact semi-automatic (or fully automatic if a cup dispenser mechanism is included) machine for the preparation and vending of hot (and optionally cold) drinks. The coffee machine is equipped with a paperless CoEx XL® brewer to make fresh coffee and, depending on the configuration, also espresso.

The coffee machine is operated using the touchscreen panel on the door. By tapping one of the buttons on the screen a product choice can be made. Before a beverage is dispensed a cup or jug must be placed under one of the outlets. More details are found in the sections:

- [Using the coffee machine](#) (on page 33) and
- [User interface](#) (on page 20) for information shown on the touchscreen.

The next sections contain drawings of the front, the inside and the optional base cabinet of the coffee machine. The drawings show the location and the name of the most important parts of the machine.

### **NOTE**

All pictures show a generic configuration. The actual model can be different. To improve clarity, colors in the pictures may be different from the actual colors.

More details are also found in the chapter [Technical specifications](#) (on page 105).

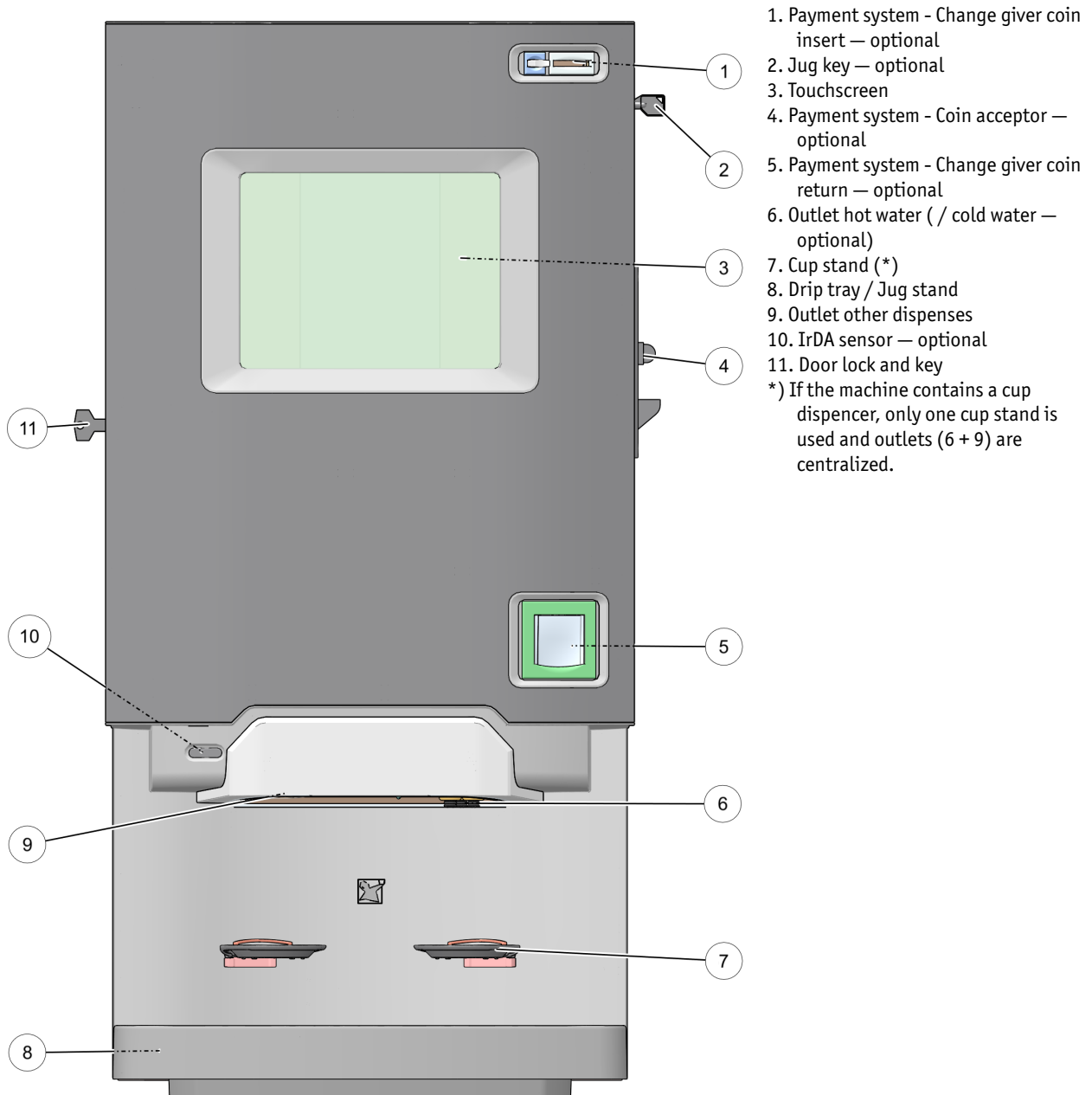
## 2.1.1 Front view

Front view Virtu (medium model)



### NOTE

All pictures show a generic configuration. The actual model can be different. To improve clarity, colors in the pictures may be different from the actual colors.



## 2.1.2 Inside view

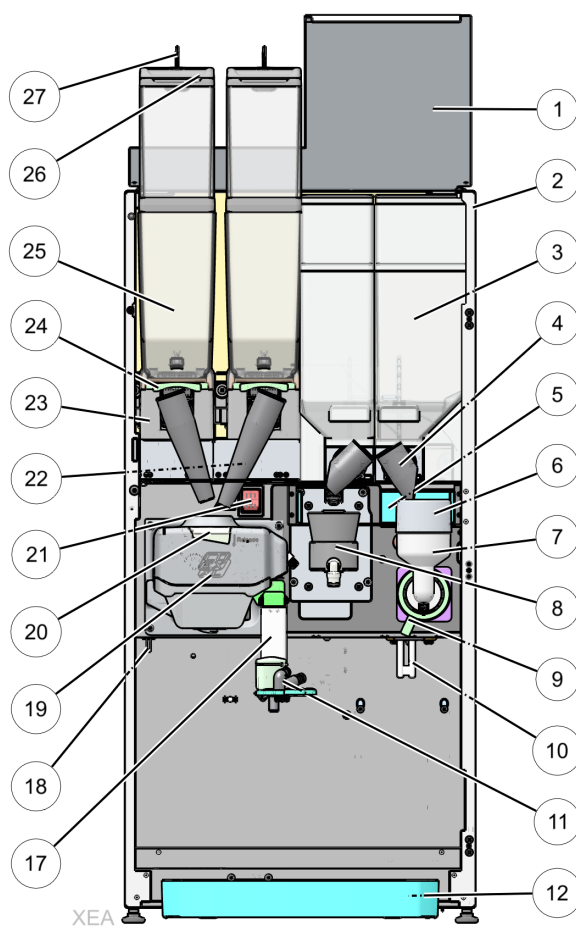
The inside view shows the location and names of the most important parts.



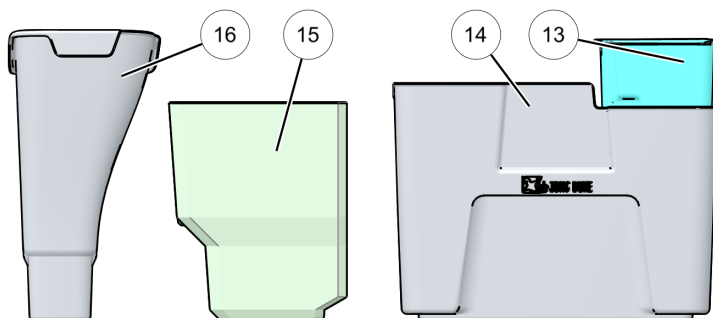
### NOTE

All pictures show a generic configuration. The actual model can be different. To improve clarity, colors in the pictures may be different from the actual colors.

*Inside view CoEx XL (medium model)*



1. Top lid
2. Cabinet
3. Ingredient canisters (Fresh tea / Instant / Topping)
4. Canister outlet nozzle
5. Exhaust filter drawer
6. Mixer suction trap
7. Mixer house
8. Tea brewer
9. Mixer bayonet catch
10. Drip water bucket sensor
11. Dispensing nozzles
12. Drip tray
13. Brewer drip bucket (used with item 14)
14. Waste bucket
15. Waste water bucket (used with item 16)
16. Waste guide to base cabinet — optional
17. Dispense arm
18. Waste bucket detector switch
19. CoEx XL brewer
20. Brewer locking grip
21. Power switch
22. Grinder outlet
23. Grinder
24. Bean canister locking slider
25. Bean canister
26. Bean canister lid
27. Bean canister lid lock — optional



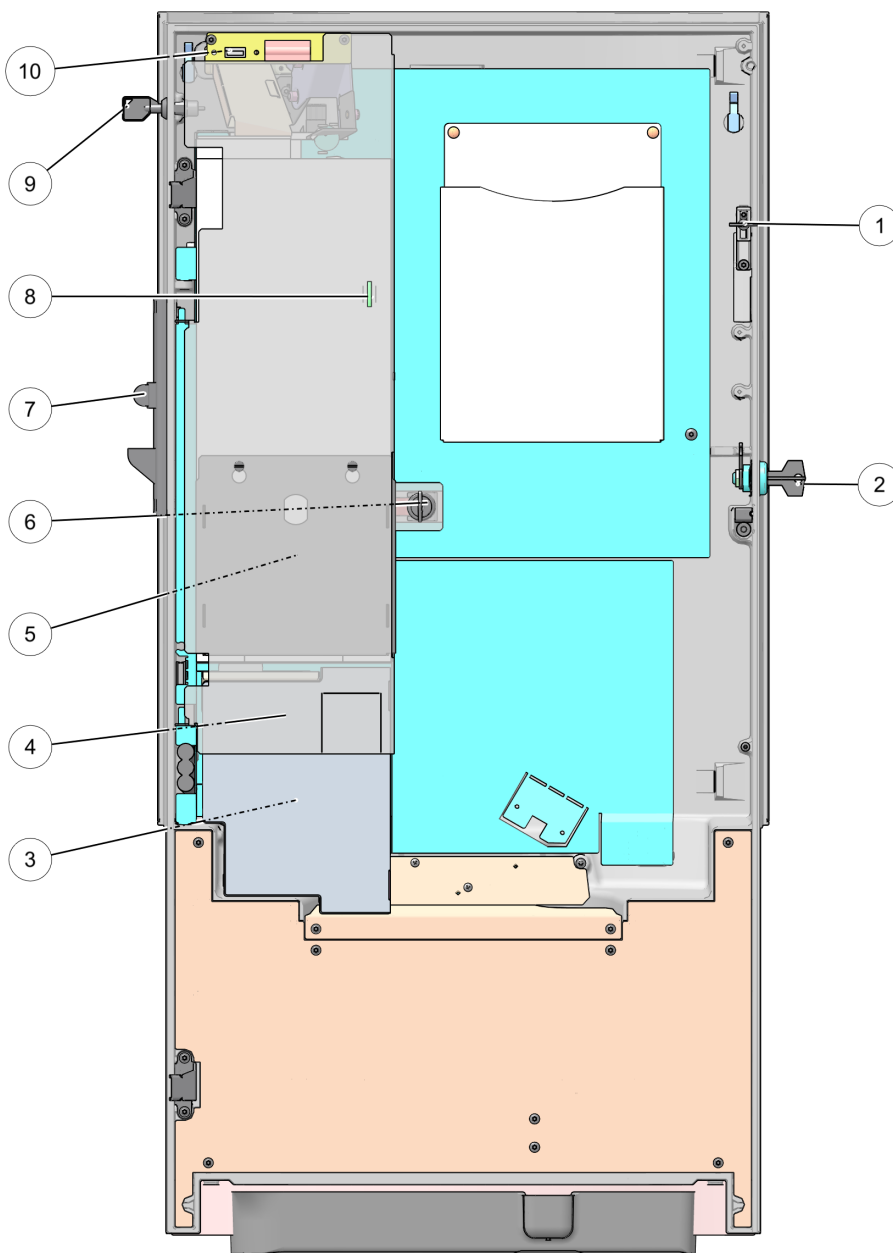
## 2.1.3 Door interior

*Door interior Virtu medium model with optional payment devices (coin acceptor and change giver)*



### NOTE

All pictures show a generic configuration. The actual model can be different. To improve clarity, colors in the pictures may be different from the actual colors.



1. Service key entry
2. Door lock and key
3. Coin box for change giver — optional
4. Cover - payment device — optional
5. Coin box - coin acceptor — optional
6. Lock payment device cover — optional
7. Payment device - coin acceptor — optional
8. USB port location without installed payment device
9. Jug key — optional
10. USB port location with installed payment device

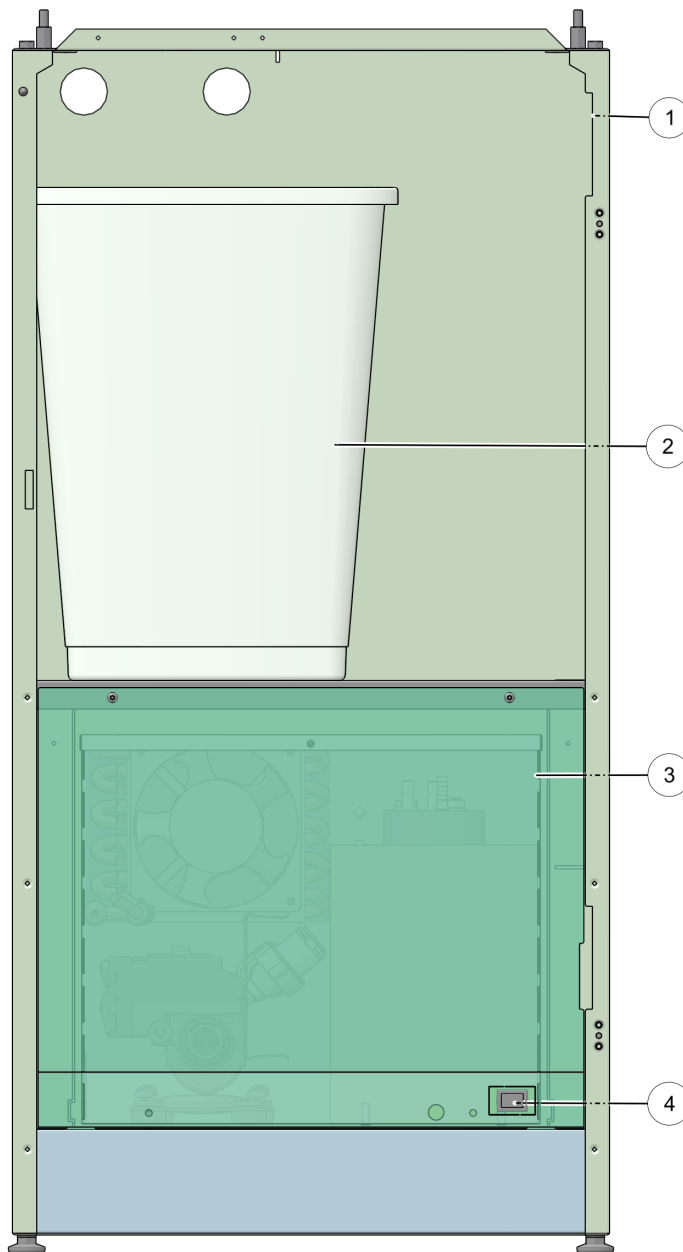
## 2.1.4 Inside view base cabinet — optional

*Inside view base cabinet (medium model)*



### **NOTE**

All pictures show a generic configuration. The actual model can be different. To improve clarity, colors in the pictures may be different from the actual colors.



1. Base cabinet
2. Waste bin
3. Chiller sub cabinet -- optional
4. Chiller flush button CO<sup>2</sup>-- optional

## User interface

### 3.1 Display layout

The coffee machine is operated with a touchscreen on the door. All selections are made by tapping (a short press) on one of the buttons or menu tabs on the touchscreen.

*Main screen layout (example)*



#### **NOTE**

All drawings and screen images of the coffee machine are based on generic configurations. The actual model will be different but the functionality is similar.

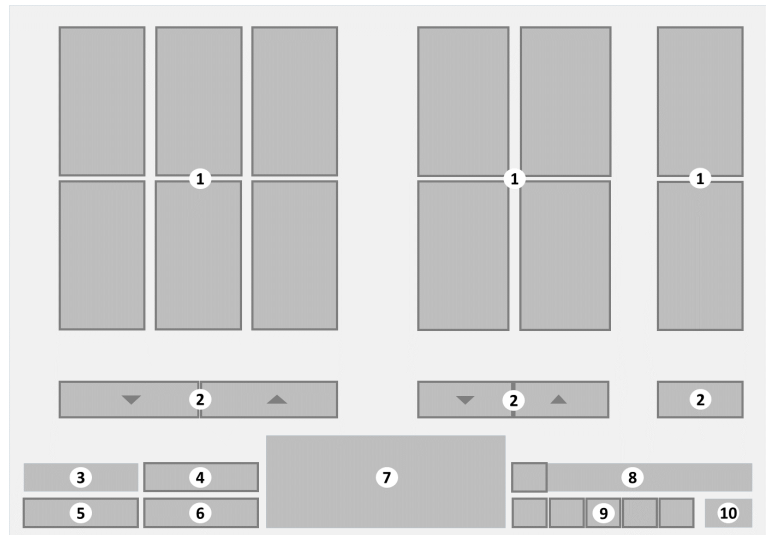
All screens and menus are explained in detail in the next sections. Using the touchscreen to dispense a beverage is explained in the chapter [Using the coffee machine](#) (on page 33).



## 3.2 Main menu - Cup dispensing

The **Main** menu (or screen) is displayed when the machine is ready for use. It gives access to selections for cup dispensing and all other functions.

### *Main selection screen*



1. **[Cup beverage selections]** buttons
2. **[Scroll up/down]** buttons — optional
3. Credit amount — optional
4. **[Info]** — optional
5. **[Jug]** button — optional
6. **[Number selection]** button — optional
7. Logo — optional
8. Message area
9. **Language menu** buttons — optional
10. Clock — optional

### **Beverage selection**

The main screen shows a selection of the most popular beverages. The available beverages are logically grouped in blocks. When more selections are available than can be displayed in a block, a **[Scroll up/down]** button with an arrow is displayed. Tap this button to show the other available beverage selections. Each beverage button contains a small impression of the beverage, the name and, when payment mode is activated, the price of the beverage. Tap a button to select a beverage.

### **Lower part of the screen**

The lower part of the screen contains at least:

- Message area  
Relevant status information about the coffee machine is displayed in the message area. If more than one message must be displayed they are shown in sequence. Tap the **[!]** exclamation mark in front of the message to open the **Message submenu** (on page 30) to see all messages completely. Check the **Message submenu** (on page 30) for more details.
- Clock

Displays the current time (as set in the coffee machine).

**Optional** Depending on the model and configurations of the coffee machine the following options can be available:

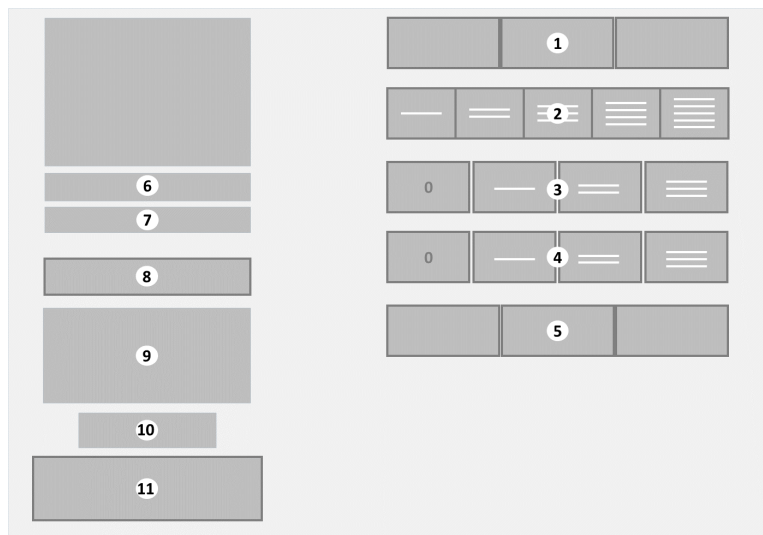
- **Credit amount** — optional  
When payment mode is activated, the credit value is displayed. It is the total amount of money already entered for payment of a beverage.
- **[Info]** — optional  
Tap the **[Info]** button to open the **Information submenu** (on page 32) with more details about ingredients.
- **[Jug]** — optional  
Tap this button to open the **Jug dispensing submenu** (see [Jug dispensing](#) on page 37) with selections to fill complete jugs.
- **[Number selection]** — optional  
Tap this button to open the **Number selection submenu** for quick dispense of a beverage.
- **Logo** — optional
- **Language** — optional  
If more languages are available the screen shows a selection of language buttons. Tap on the desired language button to change the text on the screen to the selected language.

### 3.2.1 Additional options submenu

The **Additional options submenu** is displayed after a beverage selection (cup or jug) is made on the **Main menu** (see [Main menu - Cup dispensing](#) on page 21).

- This submenu is not available if the (selected beverage on the) coffee machine is configured for **direct** dispense only.
- The options shown in the submenu depend on the selected beverage, some beverages will have no options at all.
- If a jug dispense is selected, the **[Start]** and **[Cancel]** buttons are available. If canister selection is possible this button bar is displayed.

#### *Additional options submenu*



- |                                                         |                                |
|---------------------------------------------------------|--------------------------------|
| 1. <b>[Canister selection]</b> button bar — optional    | 7. Currently selected beverage |
| 2. <b>[Strength]</b> button bar — optional              | 8. <b>[Cancel]</b> button      |
| 3. <b>[Add-on]</b> button bar — optional                | 9. Message area                |
| 4. <b>[2<sup>nd</sup> Add-on]</b> button bar — optional | 10. Credit amount — optional   |
| 5. <b>[Cup size]</b> button bar — optional              | 11. <b>[Start]</b> button      |
| 6. Price for this beverage — optional                   |                                |

Depending on the configuration additional options are displayed in the submenu. The following options are possible:

- *Canister selection bar*: to select an ingredient from a different canister after initial selection. For example, when coffee is selected, it is then possible to select the type of coffee from different canisters. The current selection is highlighted. Depending on configuration and availability of ingredients, a two or three options bar is shown. Tap the desired canister.
- *Strength selection bar*: to adjust the amount of coffee ingredient. The default strength is the middle button. The selected strength will be highlighted.

- tap a **[LINE]** button for the desired strength. More lines is more strength.
- *Add-on selection bar*: to add an extra ingredient, for example milk, to the selected coffee. The selected amount is highlighted. Tap the desired amount.
  - **[0]** is **no** added ingredient (default).
  - tap a **[LINE]** button for the desired amount of added ingredient. More lines is more ingredient.
- *2<sup>nd</sup> Add-on selection bar*: to add another extra ingredient, for example sugar, to the selected coffee.
- *Cup size bar*: to select different cup sizes, a two or three options bar can be displayed. The current cup size selection is highlighted. Tap the desired cup size.

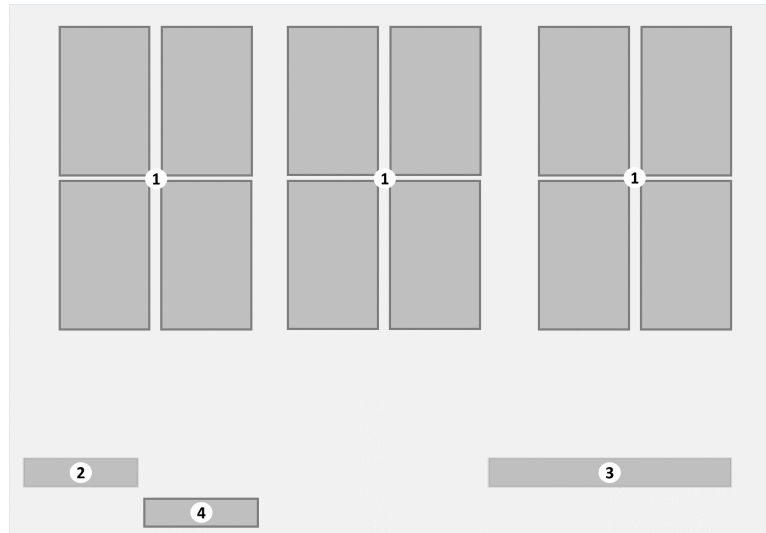
The remaining information on the screen:

- Price for the selected beverage. Only visible if payment is activated for the machine.
- The currently selected beverage.
- The **[Cancel]** button. Tap to cancel the current selection and return to the Main menu.
- The Message area. Displays relevant messages of the coffee machine. Tap the **[!] exclamation mark** button to open the [Message submenu](#) (on page 30). Details of all messages and possible solutions to solve simple issues are listed in the section [Messages](#) (on page 95).
- Credit. Displays the amount already entered to pay for the selected beverage. Only visible if payment is activated for the machine.
- The **[Start]** button. Tap this button to start the preparation of the beverage. The button is disabled if no full payment is made or if another problem is found that prevents the dispense. Check the displayed message(s) in the message area.

### 3.2.2 Jug dispensing submenu

The **Jug dispensing** submenu is displayed after tapping the **[Jug]** button on the **Main** menu (see [Main menu - Cup dispensing](#) on page 21). On some models this menu is only available if the jug function is activated with a jug key or pin code.

#### *Jug dispensing menu*



1. **[Jug selection]** buttons
2. Credit amount — optional
3. Message area
4. **[Cup mode]** button

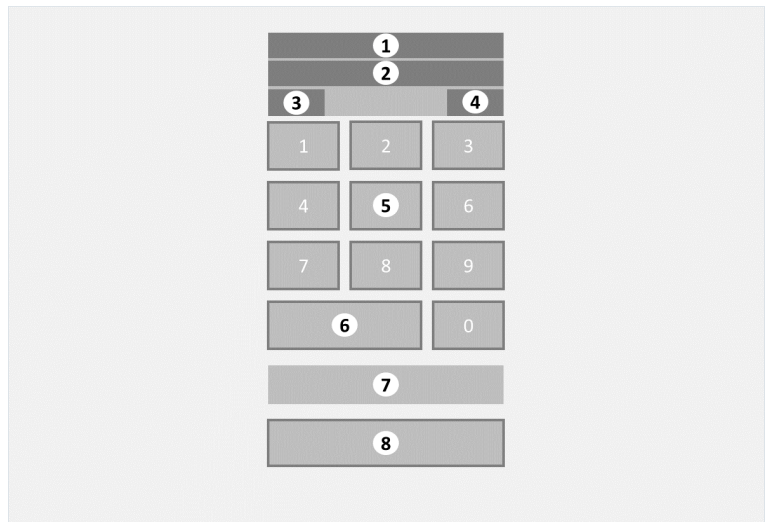
The menu shows the following information:

- The Jug dispensing submenu displays a number of selection buttons with beverages to fill (part of) a jug. Each button contains a small image with an impression of the beverage, the name and, when payment mode is activated, the price of the jug dispense. Tap a button to select a beverage.
- The Message area displays relevant messages of the coffee machine. Tap the **[!] exclamation mark** button to open the [Message submenu](#) (on page 30). Details of all messages and possible solutions to solve simple issues are listed in the section [Messages](#) (on page 95).
- The **[Cup mode]** button. Tap it to cancel the jug selection and return to the Main menu (see [Main menu - Cup dispensing](#) on page 21).

### 3.2.3 Number selection submenu

The **Number selection** submenu is displayed when the **[Number Selection]** button is tapped on the **Main** menu (see [Main menu - Cup dispensing](#) on page 21).

#### *Number selection menu*



1. Currently entered number selection
2. Actual beverage name
3. Beverage price in payment mode — optional
4. Credit in payment mode — optional
5. Numeric keypad with **[0...9]** buttons
6. **[Cancel]** button
7. Message area
8. **[Start]** button

The display shows the following information:

- The unique number entered for the selected beverage is visible in the small window.
- The actual name connected to the entered number.
- Use the keypad to tap in the **[number selection]** of the desired beverage.



#### **NOTE**

The unique number that must be entered here is shown on the **Dispense** menu (see [Dispense submenu](#) on page 28) screen when a beverage is prepared.

- Tap the **[Start]** button to start the preparation and dispense of the beverage.
- Tap the **[Cancel]** button to exit the number selection and return to the **Main** menu.

**NOTE**

If payment is activated for this beverage and the credit amount is smaller than the price of the beverage the **[Start]** button is disabled until full payment has been made. The price for the selected beverage is shown and the credit amount already entered.

- The Message area displays relevant messages of the coffee machine. Details of all messages and possible solutions to solve simple issues are listed in the section [Messages](#) (on page 95).

### 3.2.4 Dispense submenu

The **Dispense** submenu is shown during preparation and dispense of the beverage.

#### *Dispense submenu*



- 1 Progress indicator
2. Beverage name
3. Unique beverage code
4. **[Stop]** button

When the beverage is prepared / dispensed the display shows:

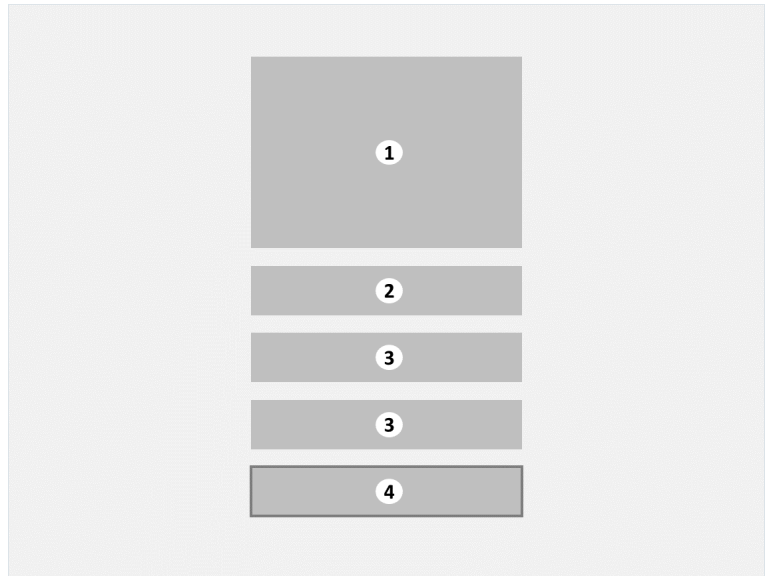
- An impression and/or the name of the beverage currently being prepared.
- An indicator showing the progress of the dispense of the beverage.
- The number displayed is the unique number for the beverage currently prepared. Use this number in the [Number selection submenu](#) (on page 26) — optional for quick dispense of the preferred beverage.
- The **[Stop]** button. Tap it to abort the current dispense and return to the **Main** menu (see [Main menu - Cup dispensing](#) on page 21).



### 3.2.5 Ready submenu

The **Ready** submenu is shown when the coffee machine is finished with the dispense.

*Ready submenu*



1. Progress indicator
2. Message when dispense is finished
3. Unique number of prepared beverage
4. **[Cancel]** button

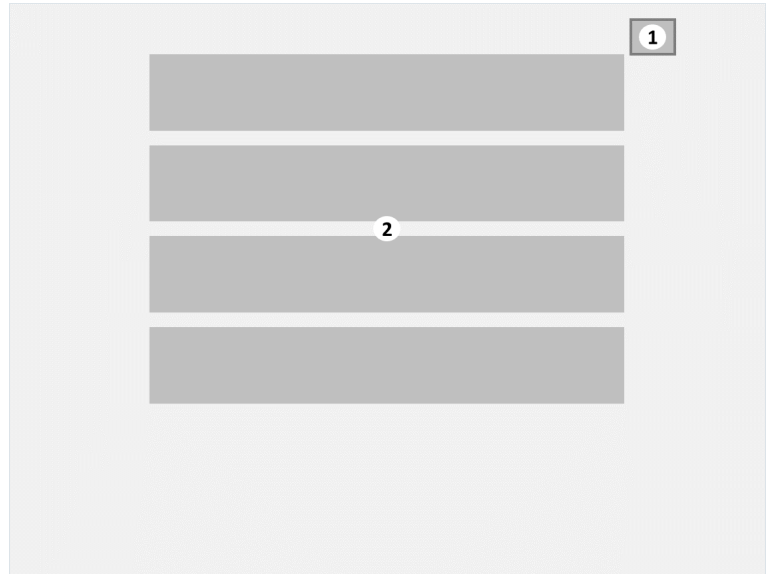
When the dispense is completed the display shows:

- A dispense progress indicator at 100% completed.
- the message 'Ready, take your cup' to indicate it is safe to remove the beverage (cup or jug).
- The unique number for the beverage that was prepared. Instead of using the selection and options screens to prepare the preferred beverage this unique number can be entered using the [Number selection submenu](#) (on page 26) — optional.
- The **[Cancel]** button. Tap it or remove the cup/jug to return to the **Main** menu (see [Main menu - Cup dispensing](#) on page 21).

### 3.2.6 Message submenu

The **Message** submenu shows all relevant messages for this coffee machine in one screen. Tap the **[!]** **exclamation mark** button on any screen to open this [Message submenu](#) (on page 30). Details of all messages and possible solutions to solve simple issues are listed in the section [Messages](#) (on page 95).

#### *Message submenu*



1. **[X]** close button
2. List of all active messages

The message screen displays all active messages from the coffee machine.

- Tap the **[X]** button or tap somewhere in the message area to return to the previous menu.

#### **There are three levels of messages**

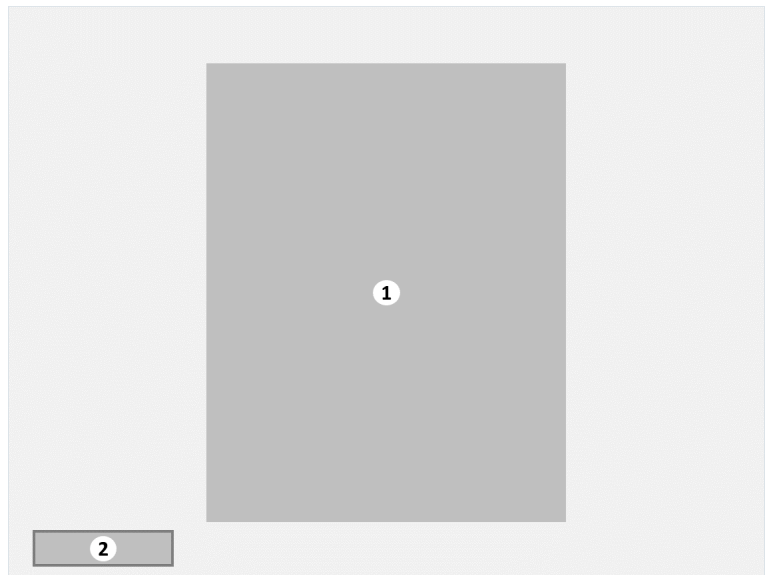
- display only messages, e.g. 'Install drip tray (see [Message: Install drip tray](#) on page 98)'. When this message is displayed the coffee machine continues to work, even without the drip tray.
- disable dispense messages, e.g. 'Insert coins (see [Message: Insert coins](#) on page 98)'. When this message is displayed the coffee machine is fully functional except for the dispense. In this case the **[Start]** button will be enabled after full payment is made.
- disable selections messages, e.g. 'Water level 2 too low'. When this message is displayed some or all beverage selection buttons are disabled. When the boilers are filled and the water level is correct the message is removed and the selection buttons are enabled.

Details of all messages and possible solutions to solve simple issues are listed in section [Messages](#) (on page 95).

### 3.2.7 Information submenu

The **Information** submenu is displayed after tapping the **[Info]** button on the **main menu** screen. It shows details about the ingredients or the coffee machine.

#### *Information submenu*



1. Customized information
2. **[Cancel]** button

The customized information image shows details about the beverage or coffee machine and is defined for every available language (for example: Food allergy warnings).

Tap the **[Cancel]** button to return to the **Main menu**.

# Using the coffee machine

## 4.1 Before use

Transportation, installation and adjustment of the machine is specialized work. Only properly trained service personnel should carry this out. Instructions about transportation, unpacking, and installation of the machine can be found in the Technical manual.

**Switch on the coffee machine** Perform the steps described in the procedure [Switch on the machine](#) (see [Switch on](#) on page 46).

**Fill up the ingredient canisters** Perform the steps described in the procedure [Fill up the ingredient canisters](#) (on page 84).

## 4.2 Procedures

### 4.2.1 Select a beverage

**NOTE**

If the **Main** menu (see [Main menu - Cup dispensing](#) on page 21) is not shown, tap on the screen somewhere or place a cup on the cup stand.

**NOTE**

If the button **[Place cup and press here]** is shown, first perform a rinse procedure. (see [Scheduled rinse](#) on page 49)

**Procedure** Perform the following steps:

1. Tap the desired **[language]** button on the screen (optional). The screen will change to the selected language.

**TIP**

The selected language will remain active until the beverage is dispensed.

2. From the **Main** menu (see [Main menu - Cup dispensing](#) on page 21) select one of the following:
  - To fill a single cup using the selection menus continue with the procedure [Cup dispensing](#) (on page 35).
  - To (quickly) fill a single cup using pre-set ingredients continue with the procedure [Cup dispensing by number — optional](#) (on page 36).
  - To fill (part of) a jug continue with the procedure [Jug dispensing](#) (on page 37).

#### 4.2.1.1 Cup dispensing

**Procedure** Perform the following steps:

1. Tap the desired beverage button from the selections on the **Main** menu (see on page 21).
  - or first tap one of the **[Scroll Up/down]** buttons and then select the desired beverage.
2. The [Additional options submenu](#) (on page 23) with the selected beverage is shown.
3. When available and needed, tap one or more of the desired options to make additional changes.
4. Place a cup under the correct outlet.
  - check the drawing of the [front view](#) (on page 16) for the correct outlet.
  - if the coffee machine contains a cup dispenser, a cup is automatically placed.
5. Tap the **[Start]** button to prepare the beverage.
  - or tap **[Cancel]** to return to the **Main** menu (see on page 21).
  - when payment mode is activated, full payment is needed first to enable the **[Start]** button. Check the [payment](#) (on page 40) section for more details.
6. The **Dispense** submenu (see on page 28) is now shown and the beverage is prepared.
  - or tap the **[Stop]** button to interrupt and stop the dispense.
7. When the dispense is finished the [Ready submenu](#) (on page 29) is shown.
  - do not remove your cup before the message 'Ready, take your cup (see [Message: Ready, take your cup](#) on page 104)' is visible. The message will remain visible on the screen until the cup is removed.
  - To add an additional beverage to the same cup, do not remove the cup but tap the **[Cancel]** button and select the next beverage.
8. The prepared drink is ready.



**WARNING**

Hot liquid can leak from the outlet nozzle after the dispense is finished.

#### 4.2.1.2 Cup dispensing by number — optional

Each beverage with specific strength and/or added ingredients has its own code. Instead of entering all selections, this code can be used to dispense the beverage more quickly with required strength and additional ingredients.



#### NOTE

This procedure is optional and only available if the **[Number Selection]** button is available on the Main menu.

**Procedure** Perform the following steps:

1. Tap the unique **[number]** of the desired beverage on the keypad displayed on the screen.



#### NOTE

The actual number that needs to be entered here is shown on the **Dispense** menu (see [Dispense submenu](#) on page 28) screen when the beverage is prepared / during dispense.

2. Tap the **[Start]** button to prepare the beverage.
  - or tap **[Cancel]** to return to the **Main** menu (see on page 21).
  - when payment mode is activated, full payment is needed first to enable the **[Start]** button. Check the [payment](#) (on page 40) section for more details.
3. The **Dispense** submenu (see on page 28) is now shown and the beverage is prepared.
  - tap the **[Stop]** button to interrupt and stop the dispense.
4. When the dispense is finished the [Ready submenu](#) (on page 29) is shown.
  - do not remove your cup before the message 'Ready, take your cup (see [Message: Ready, take your cup](#) on page 104)' is visible. The message will remain visible on the screen until the cup is removed.
  - To add an additional beverage to the same cup, do not remove the cup but tap the **[Cancel]** button and select the next beverage.
5. The prepared drink is ready.



#### WARNING

Hot liquid can leak from the outlet nozzle after the dispense is finished.



### 4.2.1.3 Jug dispensing

**Purpose** When configured it is possible to fill complete jugs at once. On some models this option is available after activation with a jug key or pin code.

**Procedure** Perform the following steps:

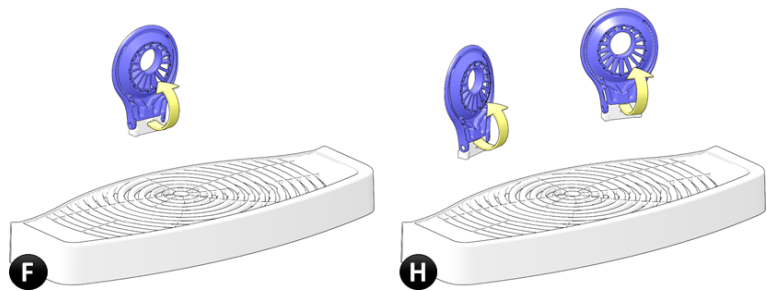
**WARNING**

The outlet of the machine may occasionally drip hot liquid even when the machine is not in use.

When hot liquid comes in contact with a person, this can lead to serious scalding injuries.

If the coffee machine is provided with a cup dispenser the door contains one central cup stand (**F**-fully automatic) for beverages and water dispense. If the door of the coffee machine contains two cup stands the user places the cup on the correct cup stand depending on the beverage selection (**H**-half automatic).

1. Place the cup stand(s) in the upright position.

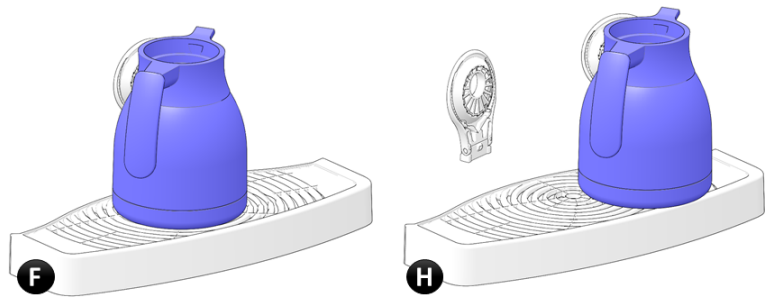


2. For hot water : on a machine with one cup stand (F) place the jug in the **middle**. On a machine with two cup stands (H) place the jug on the **right** side below the hot water outlet.

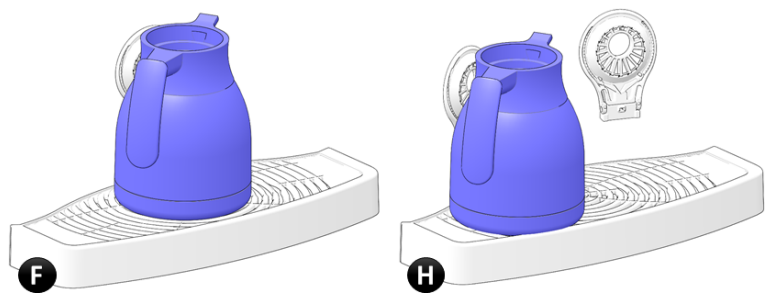


**WARNING**

If jugs are not correctly placed, the machine can spill hot liquid down the front. This can cause serious scalding injuries.



3. For all other dispenses: on a machine with one cup stand (F) place the jug in the **middle**. On a machine with two cup stands (H) place the jug on the **left** side below the main outlet.

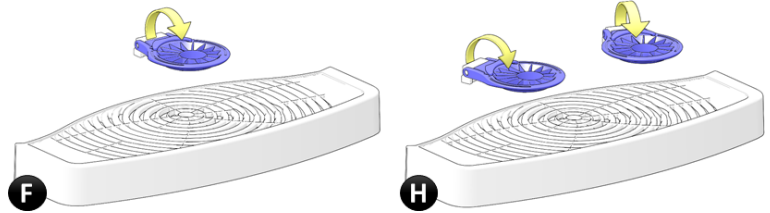


4. If the jug submenu is not visible tap the **[Jug]** button from the main menu (see [Main menu - Cup dispensing](#) on page 21).
5. Tap the desired beverage and jug filling from the shown selection buttons.
- or tap the **[Cup mode]** button to return to the **Main menu**
6. Tap the **[Start]** button to start the dispense.
- tap the **[Cancel]** button to return to the **Main menu** (see [Main menu - Cup dispensing](#) on page 21).
  - when payment mode is activated, full payment is needed first to enable the **[Start]** button. Check the [payment](#) (on page 40) section for more details.
  - if the **[Start]** button is disabled check the Message area for more details.
7. The Dispense submenu (see [Dispense submenu](#) on page 28) is now displayed.
- tap the **[Stop]** button to interrupt and stop the dispense.
8. When the dispense is finished the [Ready submenu](#) (on page 29) is shown.
- do not remove your cup/jug until the message "*Ready, take your cup*" (see [Message: Ready, take your cup](#) on page 104) is shown.
  - the message will remain visible on the screen until the cup/jug is removed.
  - to add an additional beverage to the **same** cup/jug tap the **[Cancel]** button.



CAUTION - Hot liquid can leak from the outlet nozzle after the dispense is finished.

9. The filled jug is ready.
10. Pull down the cup stands to the original position.



## 4.2.2 Payment

**Purpose** If the coffee machine is activated for payment, the cup or jug dispense will only start after full payment is made.

**Procedure** Perform the following steps:

1. The *price* for the dispense of the selected cup / jug is shown on the screen.
2. Make the full payment.
  - The entered *credit* amount is calculated and shown on screen.



**NOTE**

The **[Start]** button will remain disabled until full payment is made.

## Preventive maintenance

### 5.1 Food safety engagement

Food safety and quality are important for both customer and those who work in the vending industry. Respecting a number of basic principles, such as personal hygiene, is essential. We therefore advise you to follow the advice given in "A hygiene guide for vending". This guide is published by the European Vending and Coffee Association and has been prepared to help ensure that a hygienic product is delivered to the customer on every occasion.

## 5.2 Preventive maintenance schedule



### NOTE

Skipping maintenance can affect the quality of the dispensed drink and may lead to malfunctioning of the machine. Clean the coffee machine at the end of the day and before the machine is switched off for a longer period.

The schedule below gives an overview of all procedures needed to maintain the coffee machine.

*Preventive maintenance schedule CoEx (XL) brewer (medium model)*

Cleaning procedures for the coffee machine with intervals	D	W	M	H
<a href="#">Scheduled rinse</a> (on page 49)	X			
<a href="#">Flush mixers and brewer</a> (on page 50)	X			
<a href="#">Clean the mixing system</a> (on page 58)		X		
<a href="#">Clean the tea brewer</a> (on page 78) — optional		X		
<a href="#">Remove and clean the brewer</a> (on page 66)		X		
<a href="#">Clean brewer with cleaning tablet</a> (on page 69)		X		
<a href="#">Clean waste bucket</a> (on page 51)	X			
<a href="#">Clean the drip tray</a> (on page 56)	X			
<a href="#">Clean the cup stand</a> (on page 53)	X			
<a href="#">Clean the waste bin in the base cabinet</a> (on page 55)		X		
<a href="#">Clean the cold water outlet nozzle — optional</a> (on page 81)		X		
<a href="#">Deep clean the cold water outlet nozzle — optional</a> (on page 82)			X	
General Cleaning cold water system <sup>(1)</sup>				X
Sanitization cold water system <sup>(1)</sup>				X
<a href="#">Fill up the cup dispenser — optional</a> (on page 76)	X			
<a href="#">Clean the canisters</a> (on page 80)			X	
<a href="#">Fill up the ingredient canisters</a> (on page 84)	X			
<a href="#">Enter canister ingredient levels — optional</a> (on page 90)	X			
<a href="#">Clean the outside of the machine</a> (on page 91)	X			
<a href="#">Clean the touchscreen — optional</a> (on page 92)	X			

<sup>(1)</sup> Cold water specific cleaning procedures must be performed by a certified dealer and are not explained in this end user manual.

Interval column codes	D	W	M	H
Daily	D			
Weekly		W		
Monthly			M	
Every 6 months				H



### NOTE

Clean the brewer every other day, if the coffee machine dispenses more than 250 coffee related beverages every day.

## 5.3 Daily maintenance

**Purpose** Performing daily maintenance will ensure the quality of your beverages and a proper operation of the machine.

**Procedure** For daily maintenance follow these steps:

1. [Open the door](#) (on page 46) of the machine.
2. [Flush mixers and brewer](#) (on page 50).
3. [Clean waste bucket](#) (on page 51).
4. [Clean the drip tray](#) (on page 56).
5. [Clean the cup stand](#) (on page 53) in the door.
6. [Clean the waste bin in the base cabinet](#) (on page 55).
7. Fill up the cup dispenser (see [Fill up the cup dispenser — optional](#) on page 76)
8. [Fill up the ingredient canisters](#) (on page 84).
9. [Enter canister ingredient levels — optional](#) (on page 90).
10. [Close the door](#) (on page 46).
11. [Clean the outside of the machine](#) (on page 91).
12. [Clean the touchscreen — optional](#) (on page 92)
13. Check correct functioning by taking a test beverage.

Each step is described in detail in the next sections.

## 5.4 Weekly maintenance

**Purpose** Performing weekly maintenance will ensure the quality of your beverages and a proper operation of the machine.

**Procedure** For weekly maintenance follow these steps:

1. [Open the door](#) (on page 46) of the machine.
2. [Clean the mixing system](#) (on page 58).
3. [Clean the tea brewer](#) (on page 78) — optional
4. [Remove and clean the brewer](#) (on page 66).
5. [Clean brewer with cleaning tablet](#) (on page 69).
6. [Clean waste bucket](#) (on page 51).
7. [Clean the drip tray](#) (on page 56).
8. [Clean the cup stand](#) (on page 53) in the door.
9. [Clean the waste bin in the base cabinet](#) (on page 55).
10. [Clean the cold water outlet nozzle — optional](#) (on page 81).
11. Fill up the cup dispenser (see [Fill up the cup dispenser — optional](#) on page 76)
12. [Fill up the ingredient canisters](#) (on page 84).
13. [Enter canister ingredient levels — optional](#) (on page 90).
14. [Close the door](#) (on page 46).
15. [Clean the outside of the machine](#) (on page 91).
16. [Clean the touchscreen — optional](#) (on page 92).
17. Check correct functioning by taking a test beverage.  
Each step is described in detail in the next sections.



**NOTE**

Clean the brewer every other day, if the coffee machine dispenses more than 250 coffee related beverages every day.



## 5.5 Monthly maintenance

**Purpose** Performing monthly maintenance will ensure the quality of your beverages and a proper operation of the machine.

**Procedure** For monthly maintenance follow these steps:

1. [Open the door](#) (on page 46) of the machine.
2. [Clean the mixing system](#) (on page 58).
3. [Clean the tea brewer](#) (on page 78) — optional
4. [Remove and clean the brewer](#) (on page 66).
5. [Clean brewer with cleaning tablet](#) (on page 69).
6. [Clean waste bucket](#) (on page 51).
7. [Clean the drip tray](#) (on page 56).
8. [Clean the cup stand](#) (on page 53) in the door.
9. [Clean the waste bin in the base cabinet](#) (on page 55)
10. [Deep clean the cold water outlet nozzle — optional](#) (on page 82).
11. Fill up the cup dispenser (see [Fill up the cup dispenser — optional](#) on page 76)
12. [Clean the canisters](#) (on page 80).
13. [Fill up the ingredient canisters](#) (on page 84).
14. [Enter canister ingredient levels — optional](#) (on page 90).
15. [Close the door](#) (on page 46).
16. [Clean the outside of the machine](#) (on page 91).
17. [Clean the touchscreen — optional](#) (on page 92).
18. Check correct functioning by taking a test beverage.

Each step is described in detail in the next sections.



### **NOTE**

Clean the brewer every other day, if the coffee machine dispenses more than 250 coffee related beverages every day.

## 5.6 Preventive maintenance procedures

### 5.6.1 Switch on

**Procedure** Perform the following steps:

1. Turn on the water supply.
2. Connect the power cord to the power mains socket.
3. [Open the door](#) (on page 46).
4. Switch the **[ON/OFF]** power switch to the *ON* position.
  - check the inside view drawing (see on page 17) for the precise location.
5. [Close the door](#) (on page 46).
6. The coffee machine will start up.
7. The main screen is displayed with the message 'filling boiler' and then 'heating boilers' in the message area (see on page 21) on the screen.



**NOTE**

If the door was left open for too long the service menu is shown.

Tap the **[Exit]** button and then the **[Close door and press here to quit service]** button to leave the **Service** menu.

8. After a few minutes the message 'heating boilers' disappears and the machine is ready for use.

### 5.6.2 Open the door

**Procedure** Perform the following steps:

1. Insert the **key** in the lock of the door of the coffee machine.
2. Turn the **key** 90 degrees.
3. Open the door.
  - The **Service** menu is displayed on the screen.



**NOTE**

Do not leave the door open unattended to prevent unauthorized access to the inside of the machine.

### 5.6.3 Close the door

**Procedure** Perform the following steps:

1. Insert the **key** in the lock of the door of the coffee machine.

2. Turn the **key** 90 degrees.
3. Close the door.
4. Turn the **key** 90 degrees to lock the door.
5. Remove the **key** and store it in a safe place.

**NOTE**

Always remove the key from the coffee machine to prevent unauthorized opening of the door.

6. (Optional) Leave the **Service** menu: tap the **[Exit]** button and then the **[Close door and press here to quit service]** button to return to the main menu.

### 5.6.4 Open or close top lid

**Purpose**

To fill up or clean the canisters they need to be removed from the coffee machine. To allow easy access to the canisters, the top lid of the coffee machine can be opened.

**NOTE**

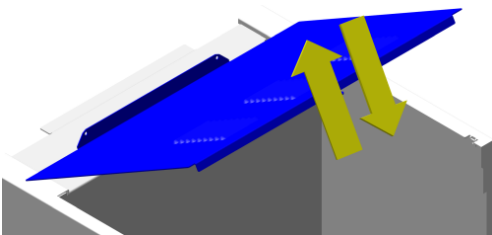
The top lid locks inside the door and can only be opened if the door is opened.

Depending on the model, the top lid can contain cut outs for one or two (bean) canisters.

**Procedure**

Perform one of the following steps:

1. To open, lift the top lid in the front and swing it open to the back. The top lid stays open in the upright position.
2. To close, swing the opened top lid back down. Make sure it is lowered completely and locks when the door is closed.



## 5.6.5 Switch off / Putting out of order

**Procedure** Perform the following steps:

1. [Open the door](#) (on page 46).
2. Switch the **[ON/OFF]** power switch to the *OFF* position.
  - check the inside view drawing (see on page 17) for the precise location.
- If the coffee machine is not used for a longer period of time (more than one week) it is recommended to:
  - perform a daily (see [Daily maintenance](#) on page 43) maintenance cleaning procedure or, if the machine is not used for a longer time it is recommended to perform a monthly (see [Monthly maintenance](#) on page 45) maintenance procedure.
  - turn off the water supply.
  - switch off the power supply (pulling the plug from the wall socket is sufficient). This will also prevent unnecessary use of energy.

See also section: [Extended down time](#) (on page 14).

## 5.6.6 Scheduled rinse

**Purpose** Cleaning the coffee machine can be skipped or forgotten. The scheduled rinse is forced every day using a scheduler. When activated follow the procedure below to perform the rinse. Instead you can also run the [daily maintenance](#) (on page 43) or [weekly maintenance](#) (on page 44).

**Required** Use the following parts to perform the procedure:

- A rinsing tub or 1 liter jug

**Interval** Perform this procedure:

- Daily (see [Daily maintenance](#) on page 43), announced on screen.

**Procedure** Perform the following steps:

1. Place a rinsing tub or jug under the outlet nozzle to collect the rinse water.
1. Tap the button **[Place cup and press here]** on the screen.
  - Hot water from the boiler flows through mixers and brewer.
2. A progress screen is shown.
  - Wait until the rinse procedure is finished.
  - Total time to rinse is 1 to 2 minutes.
3. Remove the rinsing tub.
4. The machine returns to the **Main** menu (see [Main menu - Cup dispensing](#) on page 21) and is ready for use.

## 5.6.7 Flush mixers and brewer

**Purpose** The Rinse process flushes hot water through the mixers and the brewer to remove any residue.

**Required** Use the following parts to perform the procedure:

- Rinsing tub.

**Interval** Perform this procedure:

- At least Daily (see [Daily maintenance](#) on page 43), more if needed.

**Total time** • Total time needed to rinse is 1 to 2 minutes.

**Procedure** Perform the following steps:

1. If needed [Open the door](#) (on page 46) to show the service menu on the touch screen.
2. [Close the door](#) (on page 46).
3. Place a rinsing tub underneath the outlet nozzle to collect the hot waste water.
4. Tap the **[Maintenance]** button and then the **[Daily Cleaning Cycle]** button from the **Service** menu.
  - Hot water from the boiler flows through the mixers and brewer.
5. Repeat the previous step until clean water comes out of the machine.



## 5.6.8 Clean waste bucket

**Purpose** After every dispense, coffee residue (the coffee cake) is moved into the waste bucket. Excess water from the brewer is captured in a drip bucket, placed inside the waste bucket (B). If an external waste bin is used, the waste bucket is replaced by a waste guide (G) in combination with a larger waste water bucket or a fixed connection to the waste water drain. All parts need to be emptied and cleaned regularly.

**NOTE**

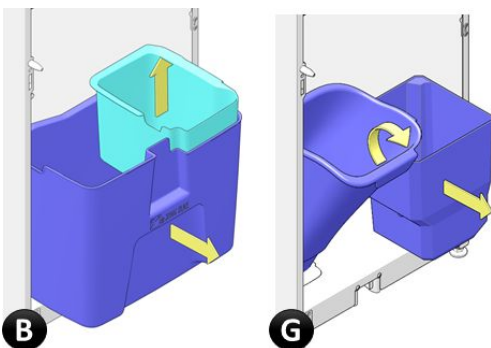
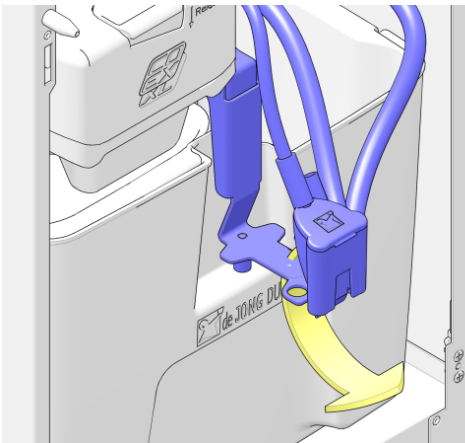
If a fixed waste water connection is used, a drip bucket or waste water bucket is not needed.

**Interval** Perform this procedure:

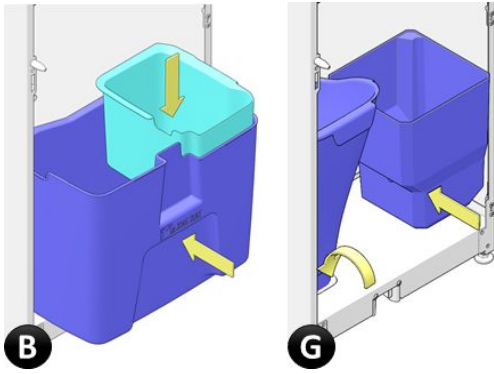
- Daily (see [Daily maintenance](#) on page 43).

**Procedure** Perform the following steps:

1. Flip up the dispense arm with the outlet nozzles.

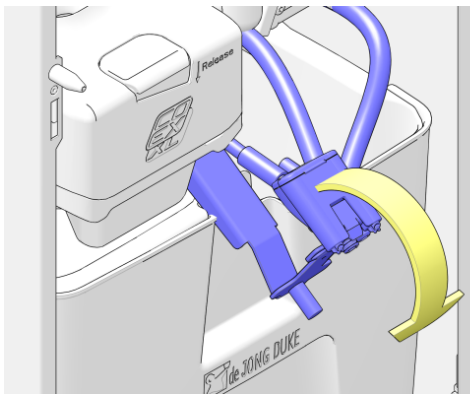


2. Depending on the used bucket types:
  - B) Remove the waste bucket (with the drip bucket inside it) from the machine, or
  - G) Remove the waste guide and water bucket from the machine.
3. Rinse the removed parts with clean warm water.
4. Dry parts completely.



5. Install the waste buckets:

- B) Place the drip bucket inside the waste bucket and install both inside the machine, or
- G) Place the water bucket on the right side and the waste guide on the left side in the machine.



6. Flip down the dispense arm to the normal position.



## 5.6.9 Clean the cup stand

**Purpose** To clean the cup stands they must be removed from the machine.



**NOTE**

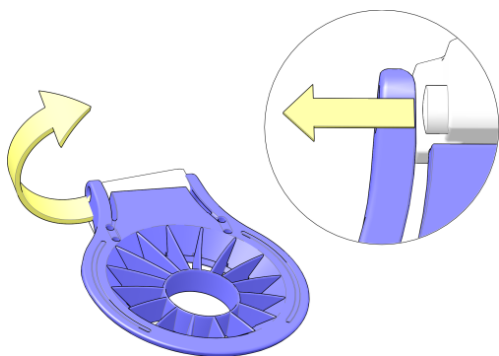
Depending on the model, the coffee machine contains one or two cup stands.

**Interval** Perform this procedure:

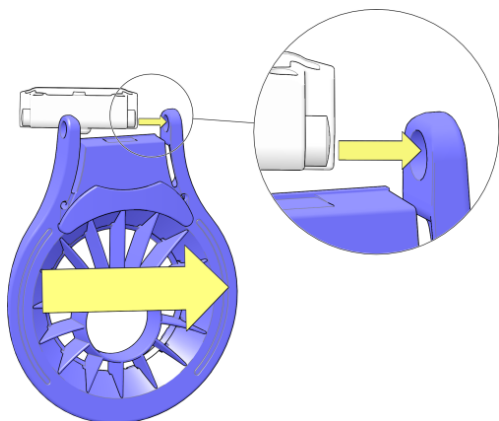
- Daily (see [Daily maintenance](#) on page 43).

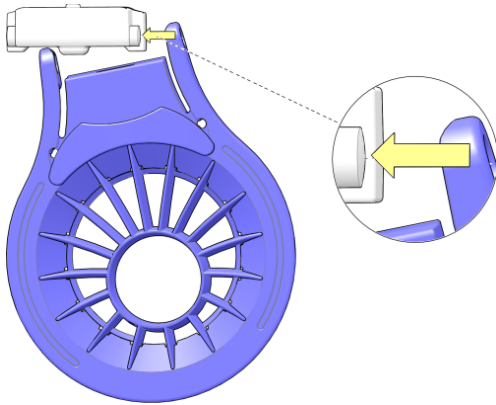
**Procedure** Perform the following steps to remove the cup stands:

1. Hold the cup stand and pull one leg from the hinge pin.

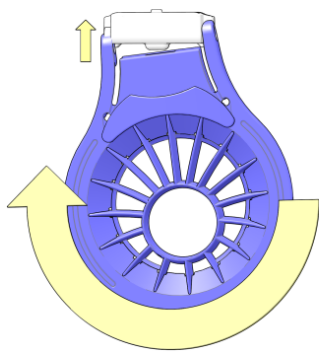


2. Lift one side slightly and move the other leg of the cupstand in the direction of the arrow to release it from the other hinge pin.
3. If needed, repeat the steps to remove the other cup stand.
4. Rinse all removed items with clean warm water.





5. To install, place one leg of the cup stand on the hinge pin in the door.



6. Turn the cup stand towards the other hinge pin and push the leg with a little force onto it.

7. Repeat the last steps to install the other cup stand.

## 5.6.10 Clean the waste bin in the base cabinet

**Purpose** If the coffee machine is placed on a base cabinet (or other external cabinet), the internal waste buckets can be replaced by a waste guide and a fixed waste water connection. The waste bin in the external cabinet needs to be cleaned regularly.



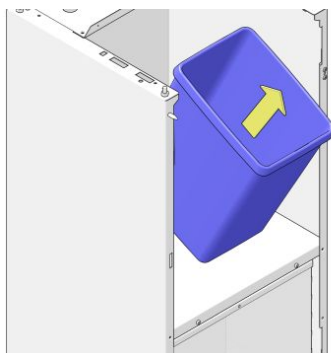
### NOTE

If a fixed waste water connection is used, a waste water bin is not installed.

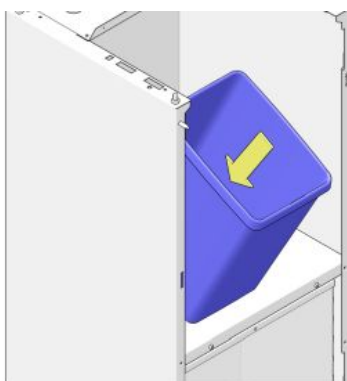
**Interval** Perform this procedure:

- Weekly (see [Preventive maintenance schedule](#) on page 42) or more if needed.

**Procedure** Perform the following steps:



1. Remove the waste bin from the base cabinet.
2. Rinse the removed bin with clean warm water.
3. Dry the bin completely.



4. Place the waste bin in the base cabinet, position it below the waste guide.
5. If the coffee machine displays the message '*Waste bucket full / Empty waste bucket*', tap the **[Maintenance]** button in the Service menu and then the **[Reset waste bin]** button to reset the counter and remove the message.

## 5.6.11 Clean the drip tray

**Purpose** The drip tray collects waste water from the coffee machine and waste water during the dispense of products and must be cleaned regularly. The drip tray is covered by the jug stand. Depending on the model, the jug stand can contain a metal inlay grid.

**Interval** Perform this procedure:

- Daily (see [Daily maintenance](#) on page 43).



**NOTE**

If the drip tray is connected to a larger waste bucket/bin or directly to the main waste water disposal the cleaning interval can be lowered to once a week.

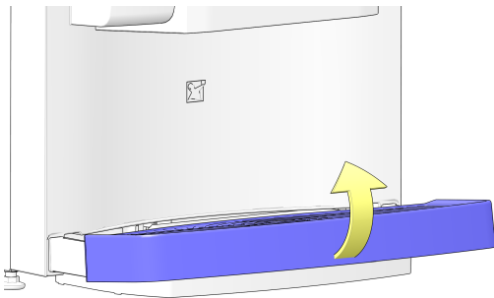
**Procedure** Perform the following steps:

1. Lift the jug stand at the front and remove it from the support guides in the door.
  - Depending on model the jug stand can contain a metal inlay that must be removed too.

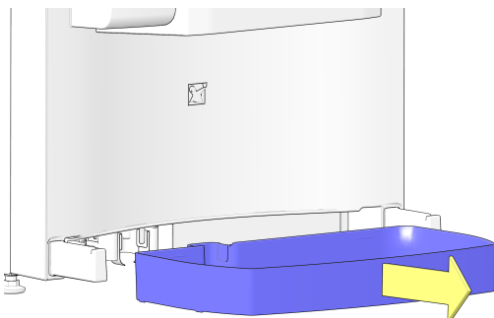


**NOTE**

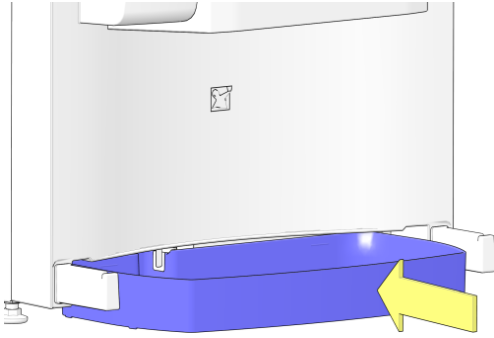
For clarity reasons the cup stands are not shown in the picture.



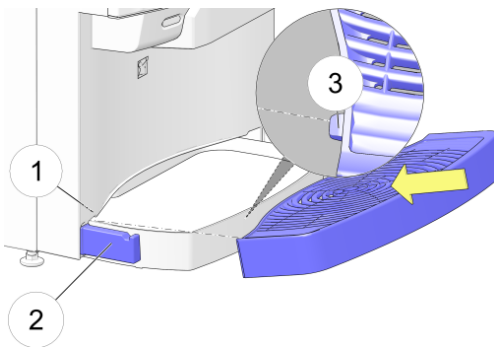
2. Pull the drip tray in the direction of the arrow and remove it from the machine.
3. Rinse all removed items with clean warm water.
4. Dry all items.



5. Place the drip tray.



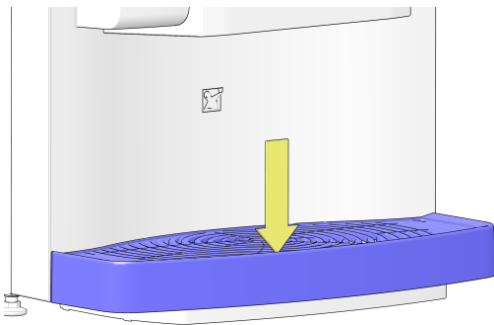
6. Place the jug stand on the guides (2) and slide it in the direction of the arrow.



**i** **NOTE**  
Make sure that the ledges on the back of the jug stand (3) fit inside the notches in the door (1).

7. Push the jug stand down to secure it properly to the door and the support guides (2).

8. Depending on the model: place the metal inlay grid.



## 5.6.12 Clean the mixing system

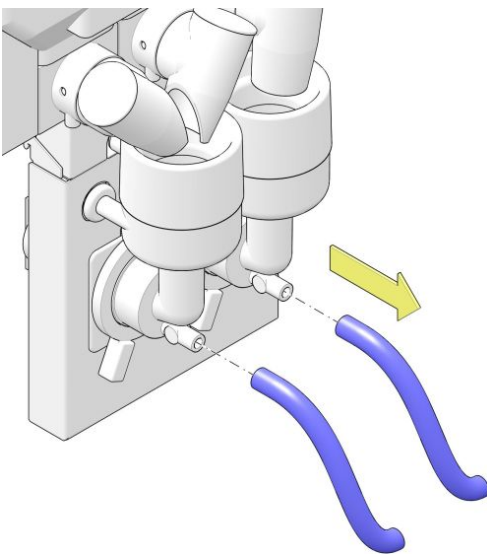
**Purpose** To prevent clogging of ingredients the mixers must be removed from the coffee machine and cleaned.

**Interval** Perform this procedure:

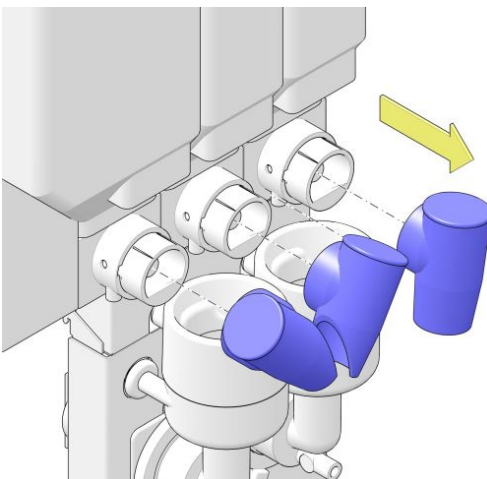
- Weekly (see [Preventive maintenance schedule](#) on page 42), more if needed.

**Procedure** Perform the following steps:

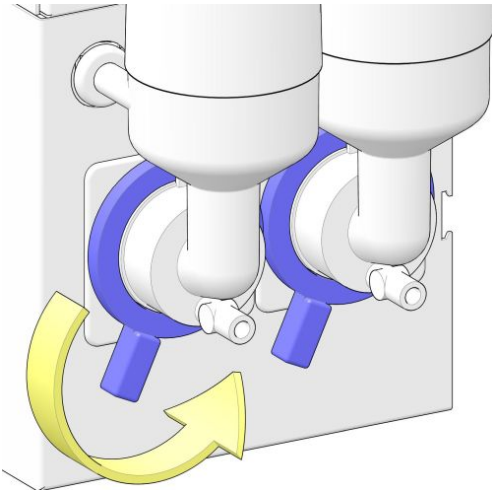
1. Remove the outlet hoses from the mixers.



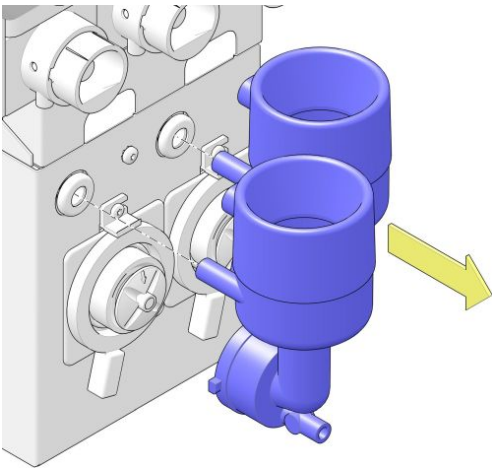
2. Remove the canister outlets and remember the correct position and location of each outlet.



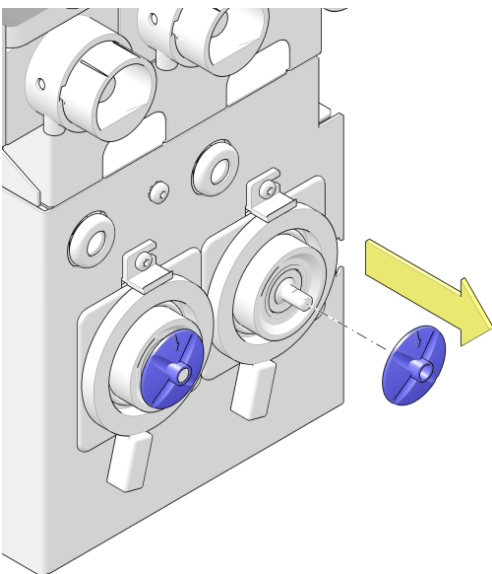
3. Turn the bayonet catches counterclockwise (approx. 10°).

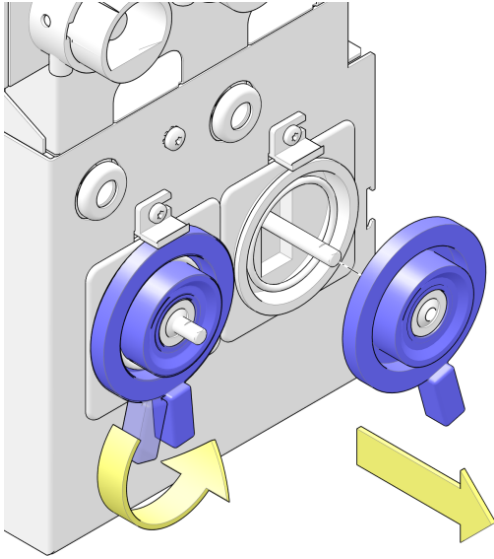


4. Pull the mixer houses in the direction of the arrow and remove them from the machine.

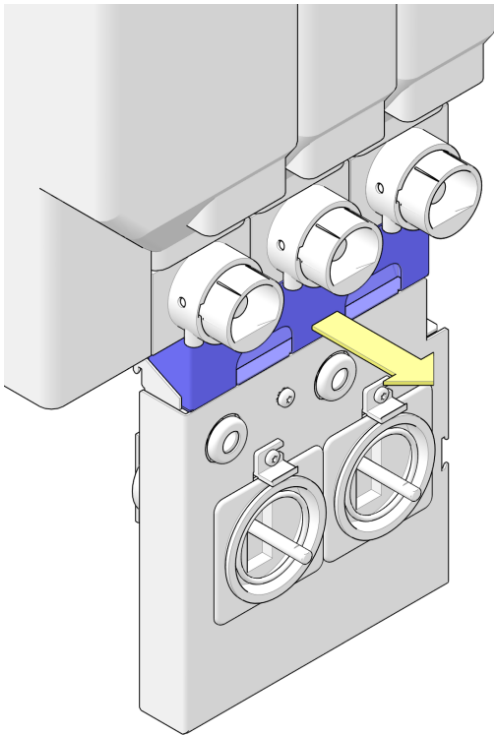


5. Pull the mixer propeller in the direction of the arrow and away from the shaft.



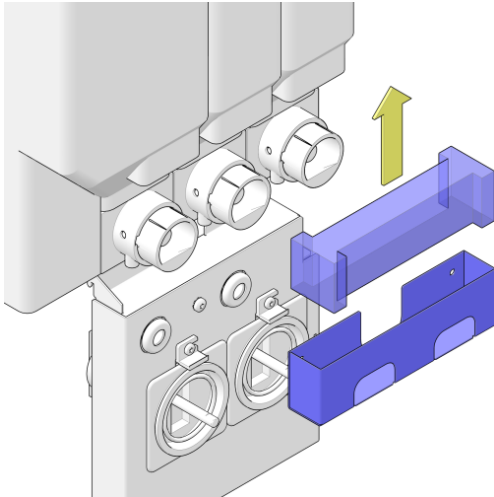


6. Turn the bayonet catches counterclockwise (approx.  $10^\circ$ ) again to release and pull them in the direction of the arrow away from the machine.

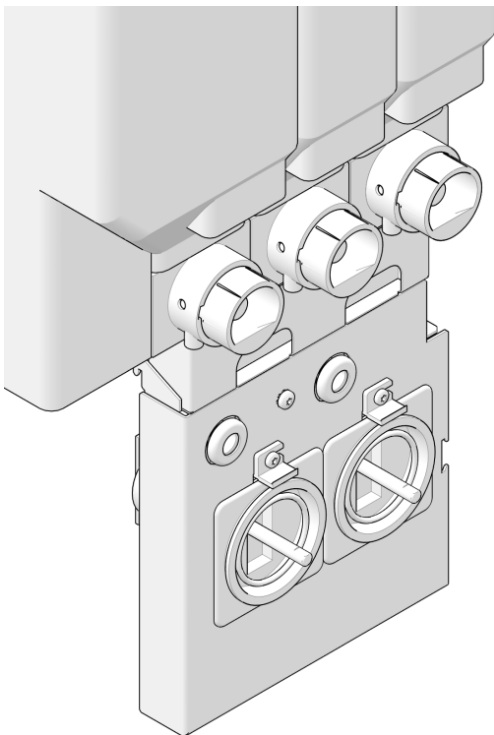


7. Pull the exhaust filter drawer in the direction of the arrow and remove it from the machine.





8. Remove the exhaust filter from the drawer.
9. Rinse out all removed parts of the mixing system with clean warm water.
  - Make sure to clean the inside of the hoses with a hose cleaning brush.



10. Clean the parts of the mixing system that remain in the machine with a brush.
11. Before continuing with the installation of the mixing system make sure **ALL** parts are dry.



**TIP**

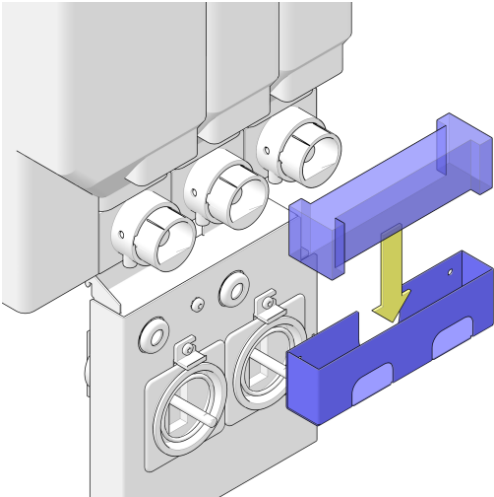
When available, use the clean and dry parts from the hygiene kit. The cleaning of the removed parts can be done after the machine has been put in operation again.

12. Insert the mixer exhaust filter in the filter drawer.

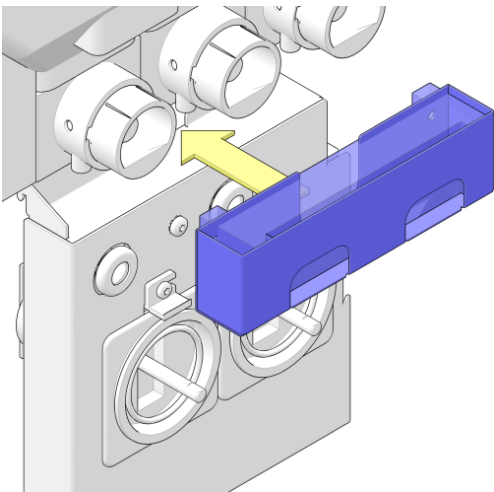


**CAUTION**

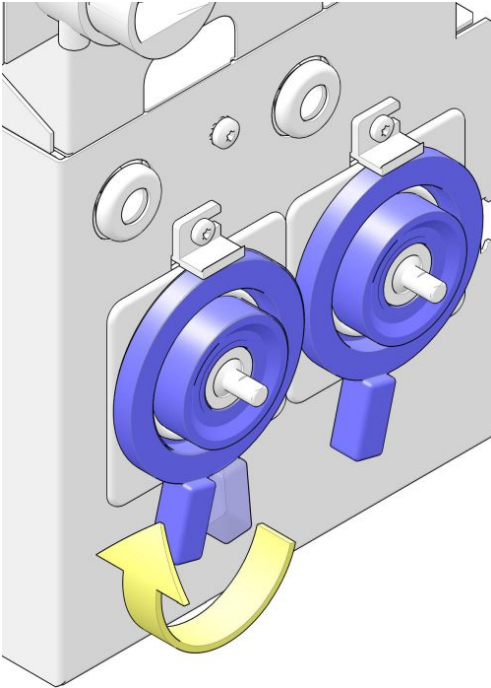
Make sure the exhaust filter is **completely dry** before installing it in the filter drawer.



13. Install the filter drawer.



14. Install the bayonet catches and turn clockwise (approx. 10°).

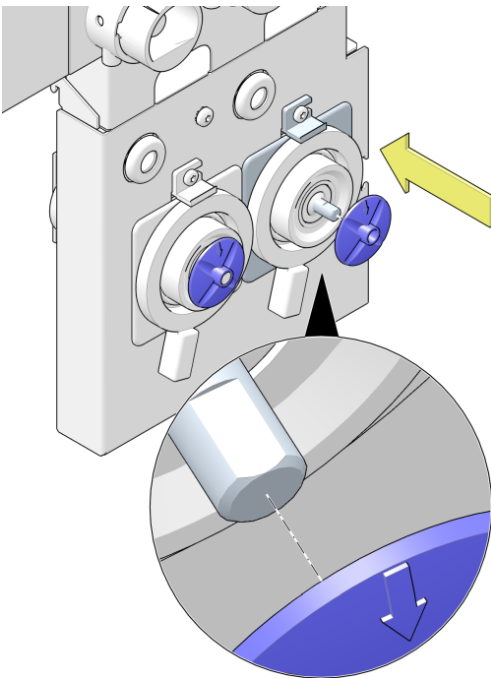


15. Install the mixer propellers.

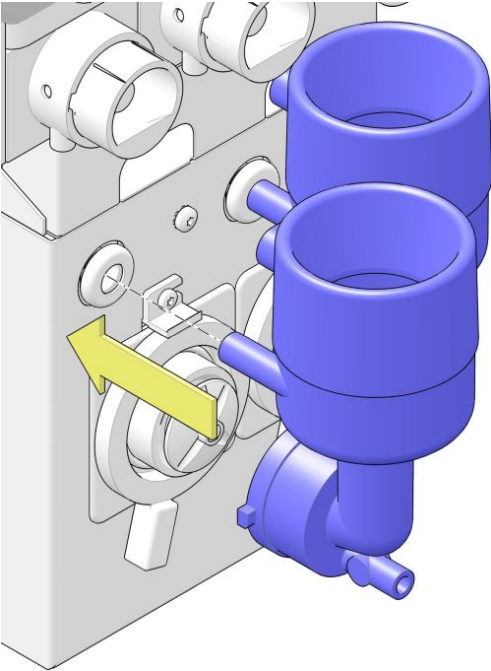


**NOTE**

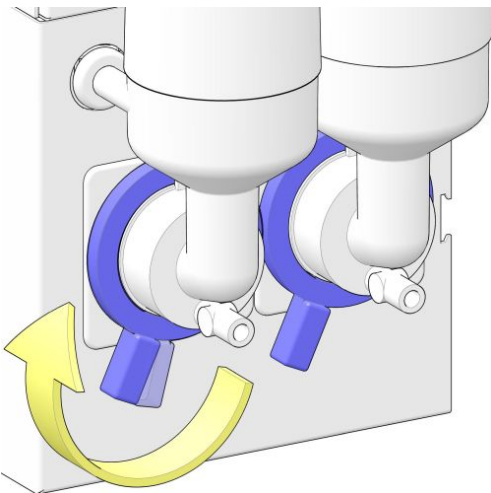
Make sure that the **arrow** on the mixer propeller points in the direction of the **flat** side of the shaft.



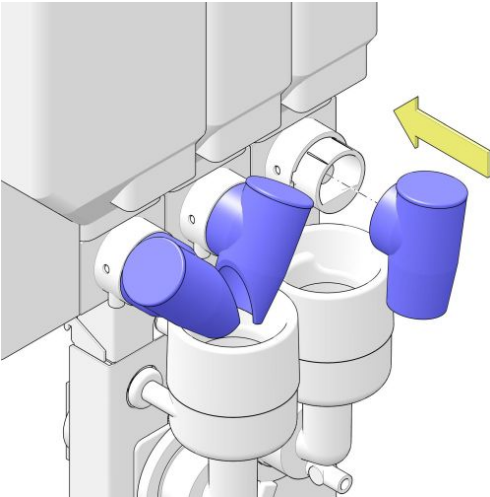
16. Install the mixer houses.



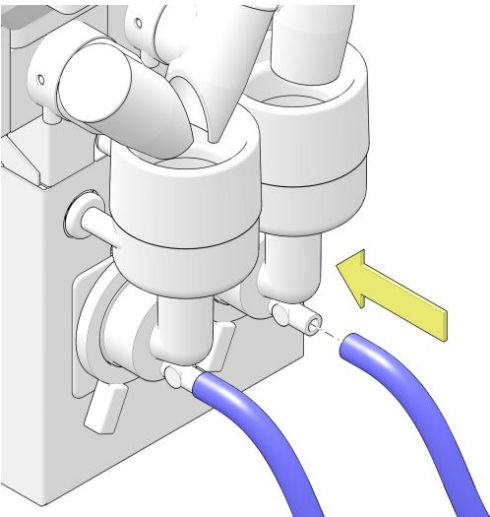
17. Turn the bayonet catches clockwise to lock the mixer houses.



18. Install the canister outlets on the canisters and make sure the locations and positions are correct.



19. Connect the outlet hoses to the mixers.



### 5.6.13 Remove and clean the brewer

**Purpose** For cleaning with water, the brewer must be removed from the coffee machine. The brewer mounting frame needs to be checked and cleaned to prevent malfunctioning of the brewer.



**WARNING**

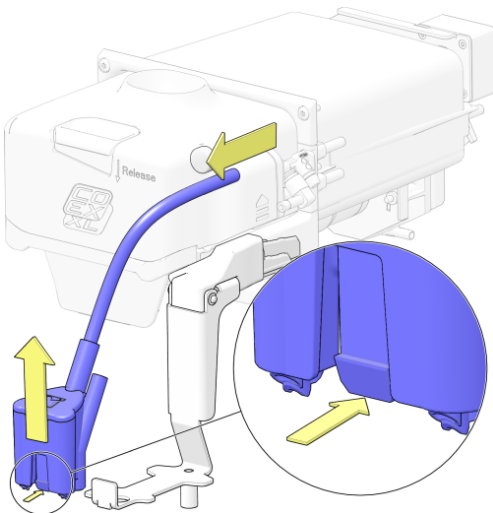
Do not take the brewer itself apart. Only properly trained personnel may work on the brewer itself. Instructions for performing work on the brewer itself is found in the technical manual.

**Interval** Perform this procedure:

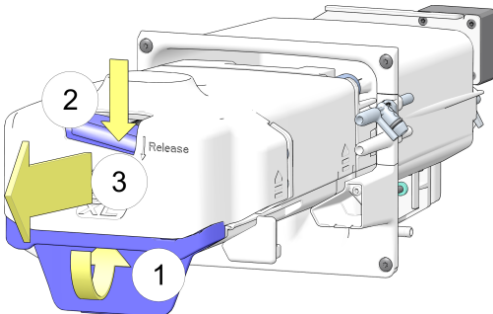
- At least once a week, increase the frequency if needed.

**Procedure** Perform the following steps:

1. Remove the coffee outlet and hose from the dispense arm and clean with warm water.
  - Make sure to clean the inside of the hoses with a hose cleaning brush.

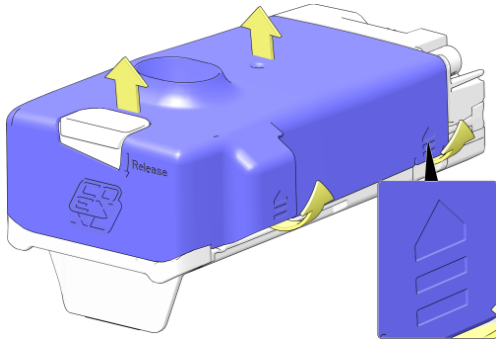


2. Remove the brewer from the coffee machine: place four fingers in the lower grip (1). With your thumb, push and hold down the locking grip (2) and pull the brewer from the mounting frame in the direction of the arrow (3).

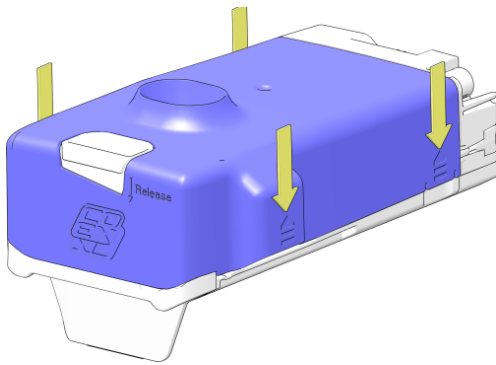


**CAUTION**

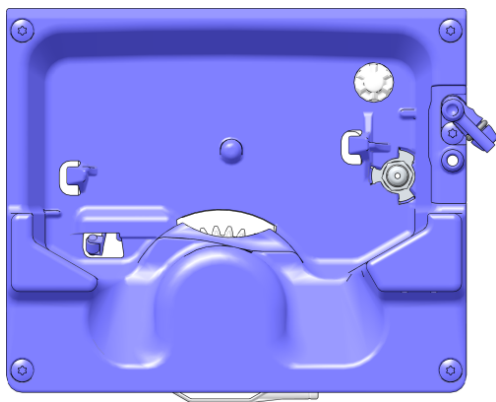
Water and ground coffee (residue) may fall out of the brewer.



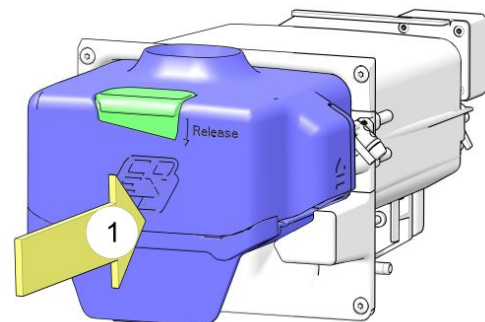
3. Place the brewer on a flat surface. Locate the cover release marks on the sides of the brewer cover (see inset). Pull the sides, near these release marks, a few millimeters away from the brewer and lift the cover from the brewer.
4. Clean the brewer with clean warm water (a mild detergent may be used).



5. Place the cover on top of the brewer and push down. Make sure all sides lock.



6. Make sure the inside of the brewer mounting frame in the coffee machine is clean.



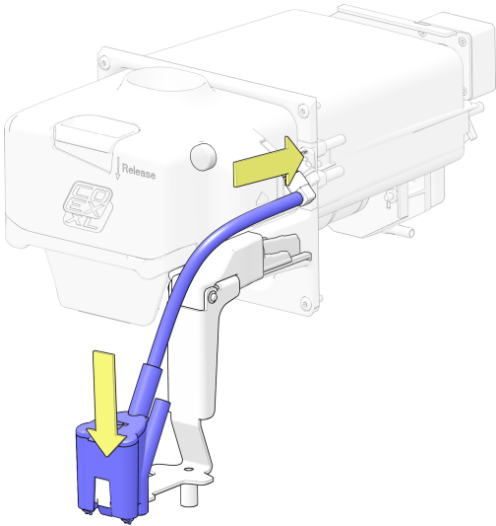
7. Insert the brewer into the mounting frame and push until it locks. Make sure the locking grip (shown in green in the picture) is not pushed in anymore.



**CAUTION**

When the brewer is not installed correctly, the message 'Brewer out of position' is displayed and coffee based dispenses are disabled.

8. Install the coffee outlet nozzle in the dispense arm and connect the hose to the connector on the brewer mounting frame.





## 5.6.14 Clean brewer with cleaning tablet



### NOTE

Failure to clean the brewer with the recommended cleaning tablet, available from the manufacturer, will void the warranty on related parts. Not cleaning the brewer can cause the machine to malfunction! Our advice is to do this at least once a week.

**Purpose** Cleaning of the brewer with a cleaning tablet removes all coffee residue. The brewer remains in the coffee machine.

**Required** Use the following parts to perform the procedure:

- Cleaning tablet.
- Rinsing tub or 1 liter jug.
- Protective clothing, gloves and safety glasses.
- Green service key.

**Interval** Perform this procedure:

- At least once a week, increase the frequency if needed.



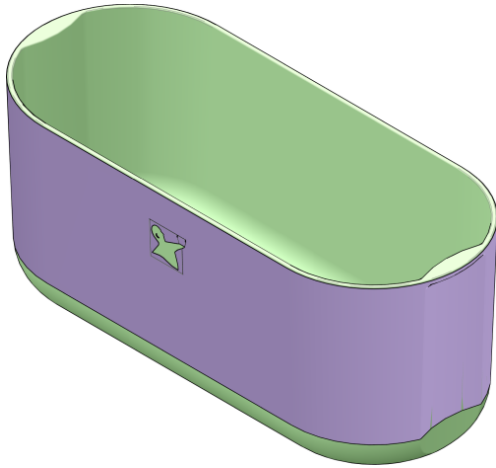
### NOTES

- Total time for the cleaning cycle is 8 minutes.
- A message is shown if the brewer is **not** cleaned after 7 days.
- A message is shown and coffee dispense is **disabled** if the brewer is not cleaned after 9 days.

**Procedure** Perform the following steps:

1. [Open the door](#) (on page 46).
2. In the **Service** menu, tap the **[Maintenance]** button and then the **[Brewer Cleaning Cycle]** button. A first submenu (step 1 of 3) is shown.
  - Follow the *Brewer Cleaning Cycle* instruction shown on-screen and described in the next steps.
3. Place the service key.





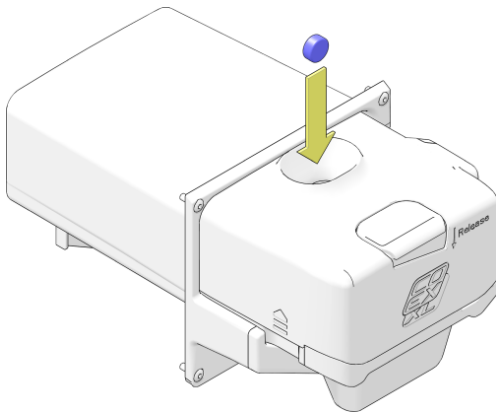
4. Place a 1-liter jug or a rinsing tub under the outlet.



**WARNING**

Wear protective clothing, gloves and safety glasses when working with cleaning tablets.

5. Tap the **[Press here to run rinse cycle]** button.
  - The first part of the brewer cleaning procedure starts, wait until the rinse is finished.
6. The second submenu (step 2 of 3) is shown, tap the **[Press HERE]** button to place the brewer in the home position.
7. Wait until the third submenu (step 3 or 3) is shown.



8. Drop a cleaning tablet in the brewer.
9. Tap the **[Press here to run Brewer cleaning cycle]** button on the screen.
  - The final brewer cleaning cycle starts.
  - Wait until the cleaning cycle is **completely** finished (about 8 minutes) and the service menu is shown.



**WARNING**

Never cancel or interrupt the cleaning cycle. Repeat the full cleaning procedure if the cleaning cycle is not completely finished.

10. [Remove the service key](#) (on page 94) from the door.
11. Remove and empty the rinsing tub.

## 5.6.15 Unblock the grinder

**Purpose** Occasionally small twigs or small rocks (known as foreign objects) are in between the fresh beans. The grinder will stop if these objects are blocking the grinder. A message '*Grinder blocked*' (see [Message: Grinder blocked](#) on page 97) is displayed in the warning message area.

**Procedure** To unblock the grinder perform the following steps:

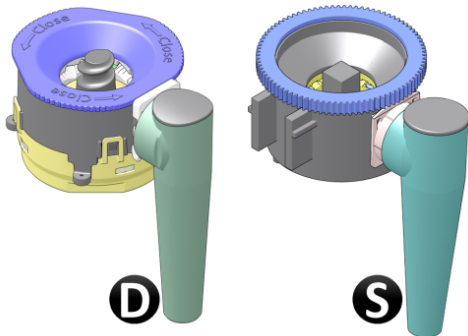
1. Locate the grinder that needs cleaning up.
2. Remove the canister to get access to the grinder.



**NOTE**

Check the section Fill the bean canister for details about the removal of the canisters. When the canister is removed the grinder itself is visible.

**Grinder type** Determine the grinder type.



1. If the coffee machine contains a grinder, one of two grinder types are possible:

- D) the D-grinder, recognizable by the grinder top house that can be removed or
- S) the original Schaerer grinder, that contains a gear-like top.

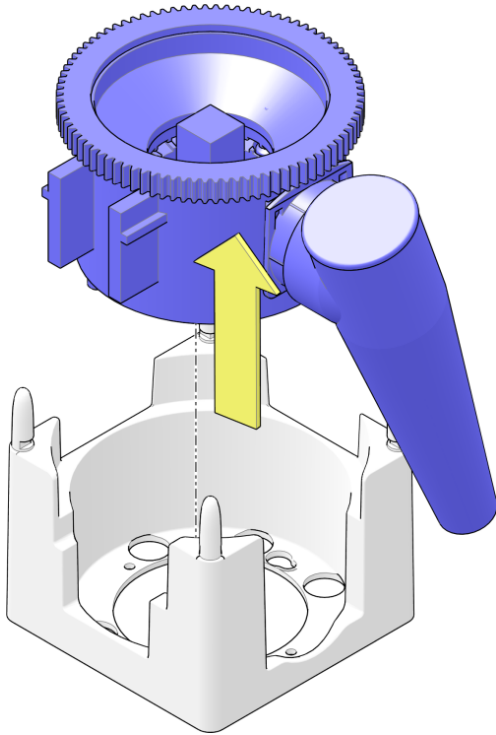
If the machine contains a D-grinder continue the cleaning procedure with step 5. Cleaning the Schaerer grinder is described in the next steps.

2. To clean the Schaerer grinder, lift and remove the grinder from the grinder base.



**CAUTION**

The grinder is filled with beans and ground coffee. When the grinder house is turned upside down, coffee beans and ground coffee can fall out.



3. Keep the grinder upside down. Turn the squared top inside the geared wheel at the top side, or the shaft at the bottom side, back and forth repeatedly to loosen and remove the foreign objects.



**NOTE**

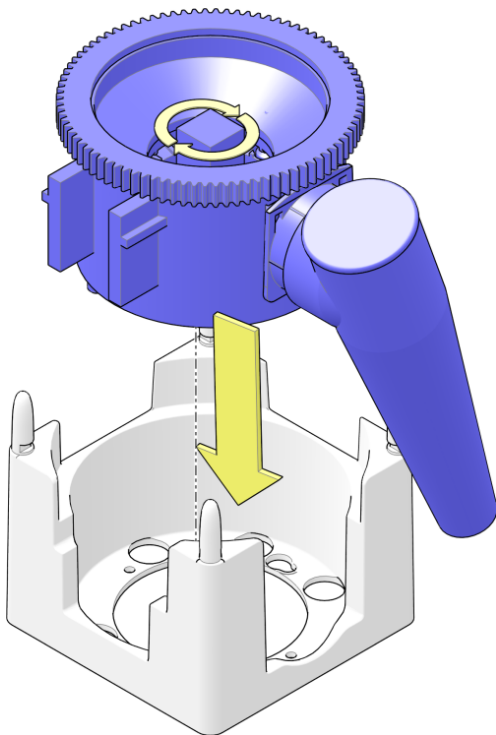
The shaft should rotate easily if nothing is blocking the grinder.

4. Place the grinder back into the grinder base and continue with step 12.

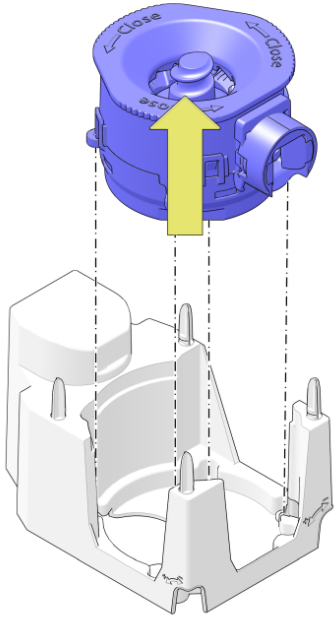


**TIP**

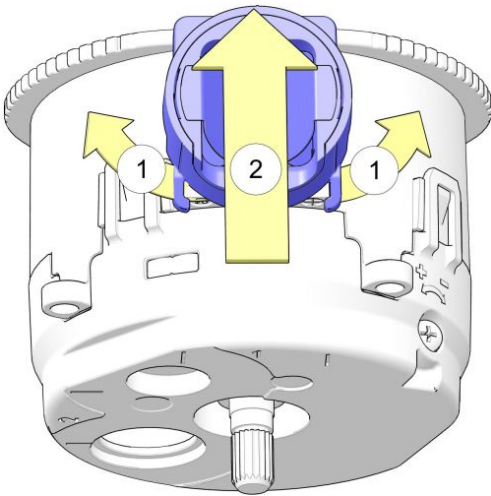
If needed, rotate the squared top a little to allow the ribbed shaft to fit the grinder motor and is fully lowered inside the grinder base.



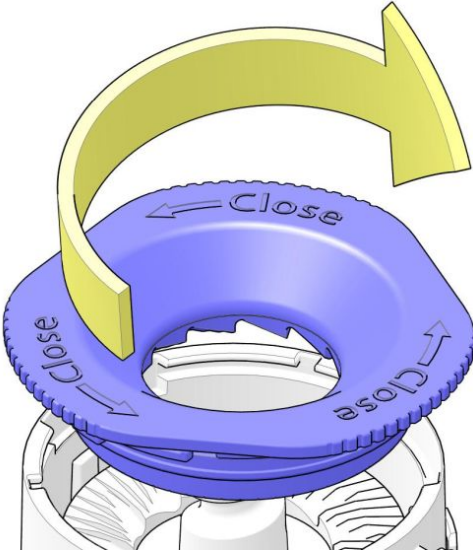
5. To clean the D-grinder, lift and remove the grinder from the base.



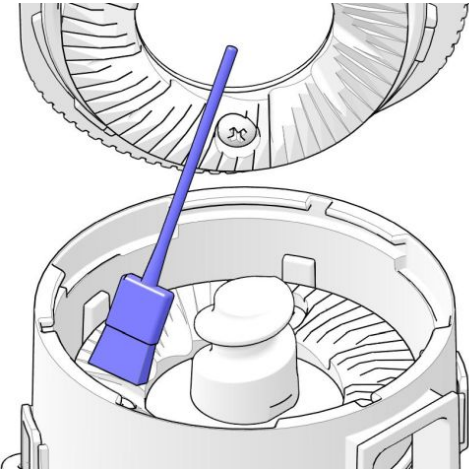
6. Pull out the clips of the grinder outlet (1), slide the outlet from the grinder house (2) and remove it from the grinder.



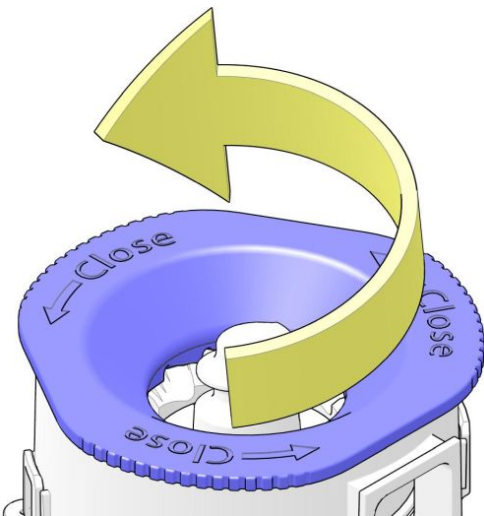
7. Loosen the bayonet locked grinder house top in the direction of the arrow and remove it from the grinder.

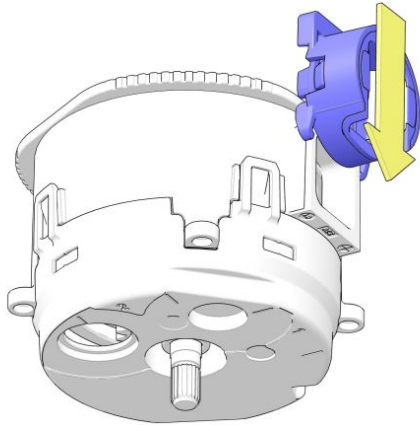


8. Clean both grinder discs and the inside of the grinder house.

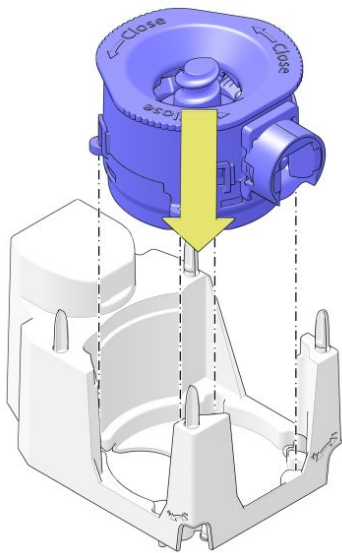


9. Place the grinder house top assembly, and turn it in the direction of the arrow to lock.





10. Slide the outlet on the grinder house in the direction of the arrow.
  - Make sure the clips lock properly.



11. Place the grinder back into the grinder base.
12. Place the canister back.

**i** **TIP**  
Check the last steps of section Fill the bean canister for more details.

13. Close the door and lock with the key.
14. Leave the **Service** menu.

**i** **TIP**  
Dispense two cups of coffee to fill up the grinder with fresh coffee and throw the contents of the cups away.

15. Check correct functioning by taking a test coffee.

## 5.6.16 Fill up the cup dispenser — optional

**Purpose** Follow this procedure when the machine contains a cup dispenser. In order to prevent that the machine can no longer dispense drinks due to a lack of cups, the machine must be refilled in time.



**TIP**

It is always possible to place a cup by hand.

**Required** Use the following parts to perform the procedure:

- Paper or plastic cups for coffee machines (diameter 70 mm or 73 mm).

**Interval** Perform this procedure:

- When needed.

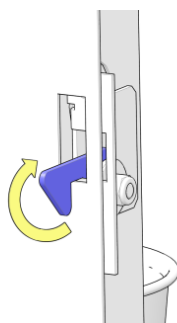
**Procedure** Perform the following steps:

1. [Open the door](#) (on page 46) of the machine.
2. On the inside of the door flip up the locking lever of the cup dispenser door.
3. Open the cup dispenser door.

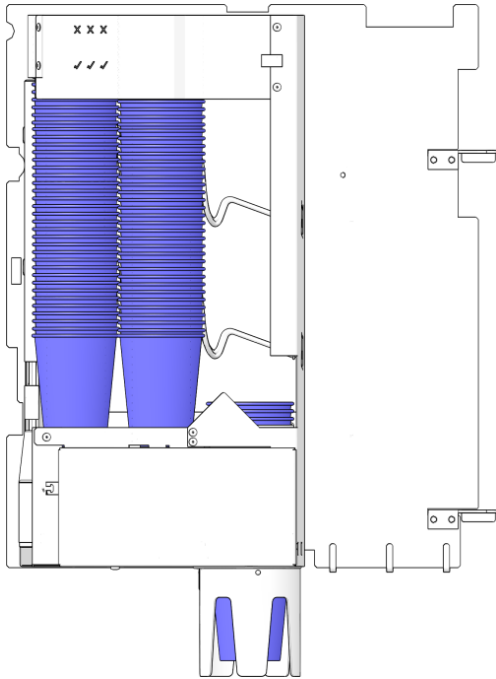


**NOTE**

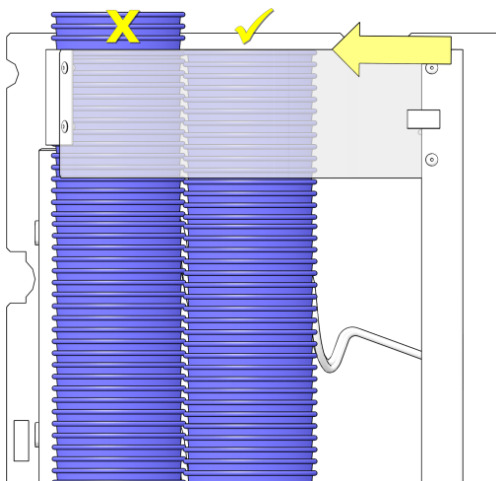
Be careful when opening the cup dispenser door. Cups can fall out.







4. Place the new cups in the dispenser door.
  - A maximum of three stacks of cups is possible. Start filling with the stack on the right side.



5. To prevent damage to the cups do not stack them higher than the top support plate. Remove all cups visible above the support plate.
6. Close and lock the dispenser door.

## 5.6.17 Clean the tea brewer

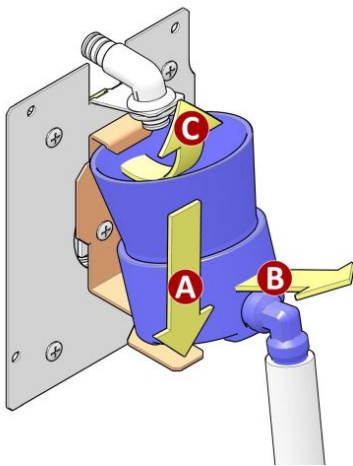
**Purpose** Cleaning of the tea brewer removes all residue. To clean the tea brewer, it needs to be removed from the coffee machine.

**Interval** Perform this procedure:

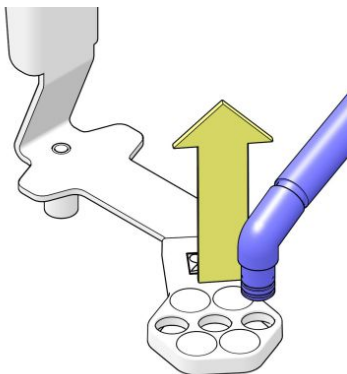
- Weekly.

**Procedure** Perform the following steps:

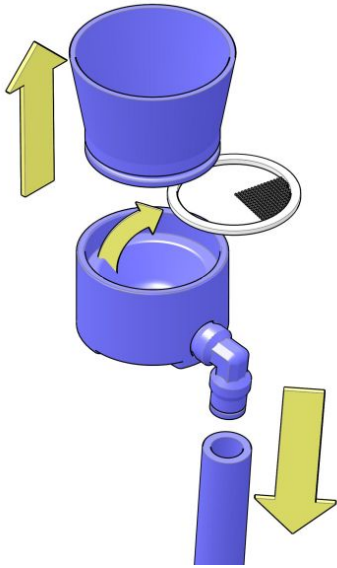
1. [Open the door](#) (on page 46).
2. Remove the brewer from the bracket.
  - Push down and hold the bottom part of the bracket (A).
  - Tilt the tea brewer in the direction of the arrow (B) to release it from the bottom fixation of the bracket.
  - Lower the brewer (C) out of the top fold of the bracket.



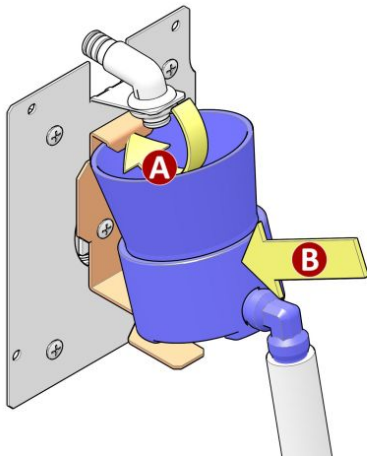
3. Remove the hose from the dispenser arm.



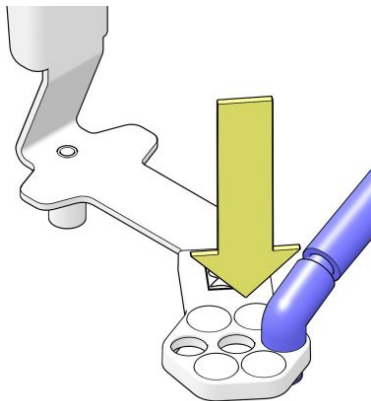
4. Disassemble the tea brewer.
5. Clean all parts, including the hose, with warm water.
6. Assemble the tea brewer.



7. Install the brewer.
  - Position the brewer inside the top fold of the bracket (A).
  - Push the lower part of the brewer inside the bracket (B) and make sure it locks properly in position.



8. Insert the hose in the dispenser arm.



## 5.6.18 Clean the canisters

**Purpose** All ingredients leave residue inside the canister. To clean the canisters they need to be removed from the machine.

**Interval** Perform this procedure:

- at least once a month.

**Procedure** Perform the following steps:

1. [Open the door](#) (on page 46).
2. Open the top lid (see [Open or close top lid](#) on page 47) of the coffee machine.
3. Remove the canisters from the machine.
  - Check the first steps in the section [Fill up the ingredient canisters](#) (on page 84) for more details about the removal of the canisters.
4. Unlock (optional) and remove the lid from the canisters.
5. Empty the canisters.
6. Clean the canisters with warm water.



**NOTE**

Use a mild detergent if warm water only is not sufficient.

7. Dry the canisters thoroughly on the inside and outside.



**WARNING**

Do not fill the canisters until they are completely dry. The product may form lumps which makes the system unusable.

## 5.6.19 Clean the cold water outlet nozzle — optional

**Purpose** The cold water outlet nozzle must be cleaned regularly to prevent bacteria growth.

**Required** Use the following parts to perform the procedure:

- Multi purpose, disposable cloth.
- Cleaning agent.
- Disposable paper towels.
- Rinsing tub or 1 liter jug.
- Protective clothing, gloves and safety glasses.



**NOTE**

Do not use aggressive cleaning products or abrasives to clean (parts of) the machine.

**Interval** Perform this procedure:

- Weekly (see [Weekly maintenance](#) on page 44), more if needed (depending on machine usage and environmental conditions).

**Procedure** Perform the following steps:



**WARNING**

Wear protective clothing, gloves and safety glasses when working with cleaning chemicals.

1. Use the cloth to apply the cleaning agent. Submerge a clean cloth into the cleaning agent (concentration recommended by cleaning agent manufacturer's instructions). Remove the cloth and remove excess water.
2. Clean the cold water outlet nozzle wiping the cloth over the entire area re-submerging the cloth as necessary.
3. Rinse the cloth in clean warm water and wipe off excess cleaning agent residue and soil.
4. Dry cold water nozzle using disposable paper towels.
5. Close the door of the coffee machine.
6. Place a rinse tub below the cold water outlet nozzle.
7. Leave the **Service** menu: tap the **[Exit]** button and then the **[Close door and press here to quit service]** button to return the main menu.
8. Select a full jug of cold water and dispense at least 1 liter of cold water and ensure any cleaning residue is flushed out.

## 5.6.20 Deep clean the cold water outlet nozzle — optional

**Purpose** The cold water outlet nozzle must be cleaned and disinfected regularly to prevent bacteria growth.

**Required** Use the following parts to perform the procedure:

- Multi purpose, disposable cloth.
- Cleaning agent.
- Protective clothing, gloves and safety glasses.
- Disinfectant solution.
- Disposable paper towels.
- Rinsing tub or 1 liter jug.
- Brush.



**NOTE**

Do not use aggressive cleaning products or abrasives to clean (parts of) the machine.

**Interval** Perform this procedure:

- Monthly (see [Monthly maintenance](#) on page 45), more if needed (depending on machine usage and environmental conditions).

**Procedure** Perform the following steps:



**WARNING**

Wear protective clothing, gloves and safety glasses when working with cleaning chemicals.

1. Submerge a clean cloth in warm water. Pre clean the cold water outlet nozzle using the cloth.
2. Submerge a clean cloth into the cleaning agent (concentration recommended by cleaning agent manufacturer's instructions). Remove the cloth and remove excess water.
3. Clean the cold water outlet nozzle wiping the cloth over the entire area re-submerging the cloth as necessary.
4. Using a brush, brush around the cold water nozzle to dislodge any dried on soil. Remove the soil with a cloth.
5. Soak a clean disposable cloth in clean warm water and rinse the outlet nozzle until all soil and cleaning agent residues are removed.
6. Soak a clean disposable cloth in disinfectant solution, ensure that the whole area is wiped.
7. Leave for 10 minutes.

8. Rinse off disinfectant using disposable cloth in clean warm water.
9. Dry cold water nozzle with disposable paper towels.
10. Close the door of the coffee machine.
11. Place a rinse tub below the cold water outlet nozzle.
12. Leave the **Service** menu: tap the **[Exit]** button and then the **[Close door and press here to quit service]** button to return the main menu.
13. Select a full jug of cold water and dispense at least 1 liter of cold water and ensure any cleaning residue is flushed out.

## 5.6.21 Fill up the ingredient canisters



### NOTE

- Make sure that the canisters remain filled with a layer of at least 4 cm of product.
- Only use ingredients recommended by the supplier of the machine.

- To fill up a bean canister (optional) check the section Fill the bean canister.

**Purpose** To prevent that the machine can no longer dispense drinks due to a lack of ingredients, the machine must be refilled in time.

**Required** Use the following to perform the procedure:

- Ingredients.

**Procedure** Perform the following steps:

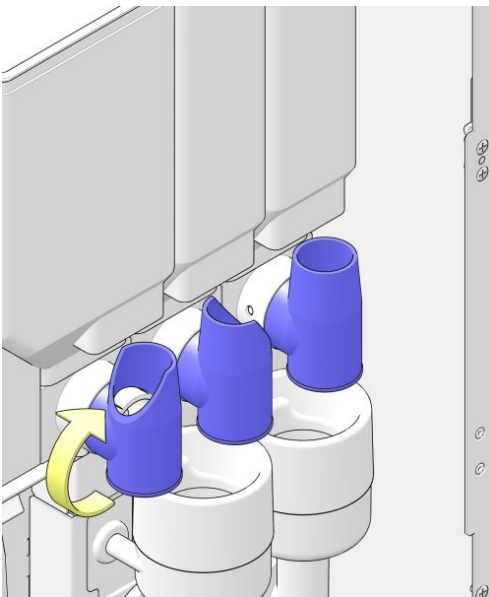
1. [Open the door](#) (on page 46).
2. Open the top lid (see [Open or close top lid](#) on page 47) of the coffee machine.



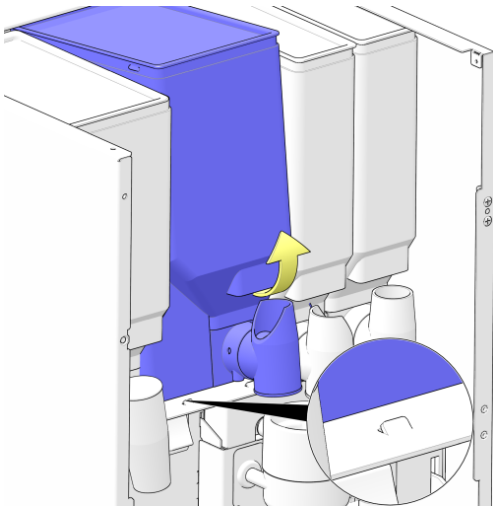
### NOTE

Filling the canisters must be done outside the machine.

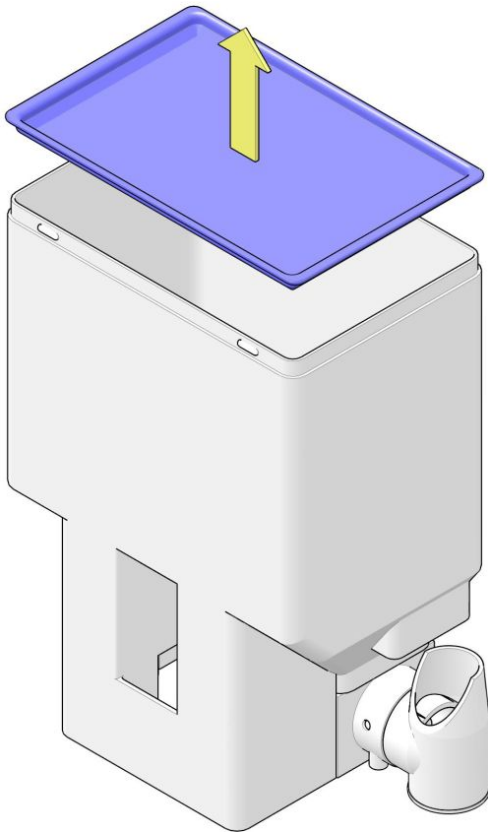
3. Remember (or write down) the position of the outlets and turn the outlets of the canisters upwards.







4. Slightly lift the canister at the front until the small locking ridge (see inset) is visible.
5. Pull the canister towards you and take it out of the machine.

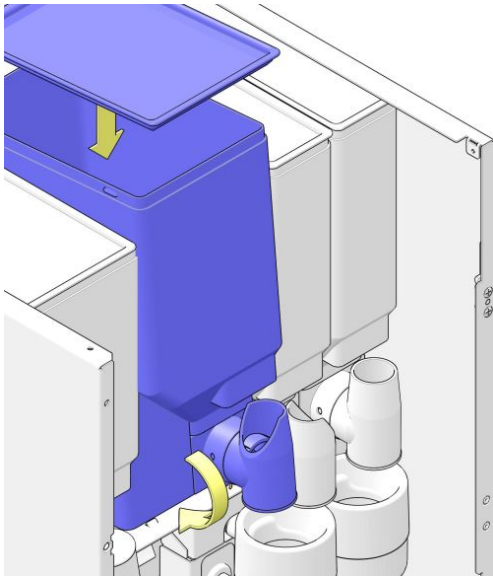


6. Remove the lid and place the canister on a stable surface.
7. Fill the canister with the ingredient indicated on the canister.



**TIP**

Do not fill the canisters more than necessary for one or two days. This will keep the products fresh.

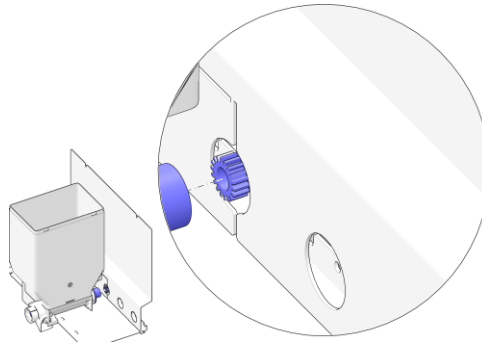


- Place the lid back on the canister and position the canister back into the machine.



**CAUTION**

Make sure the drive at the back of the canister fits well on the motor drive.

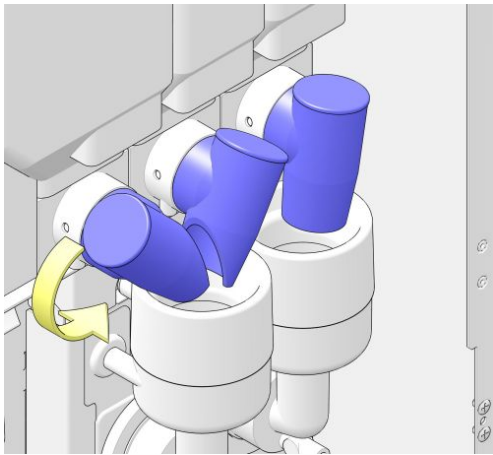


- Turn the outlets of the canister downwards.



**CAUTION**

Check the position of the outlet of the canister. It must be positioned towards the correct mixing bowl.



- Close the top lid (see [Open or close top lid](#) on page 47) of the machine.

## 5.6.22 Fill up the bean canister



### NOTE

- Make sure that the canisters remain filled with a layer of at least 4 cm of product.
- Only use ingredients recommended by the supplier of the machine.
  
- To fill up an ingredient canister (optional) check section [Fill up the ingredient canisters](#) (on page 84).

### Purpose

In order to prevent that the machine can no longer dispense drinks due to a lack of ingredients, the machine must be refilled in time.

### Required

Use the following to perform the procedure:

- Coffee beans.

### Procedure

Perform the following steps:

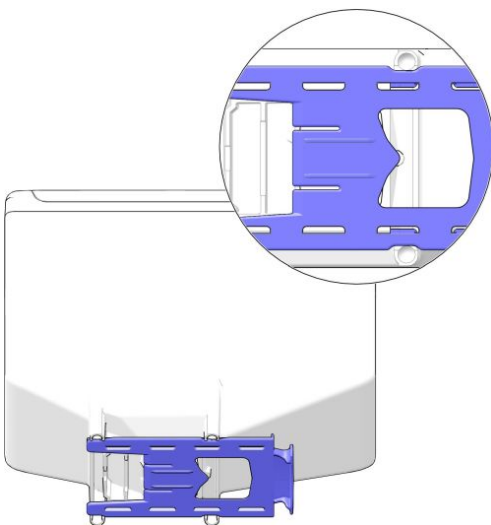
1. [Open the door](#) (on page 46).
2. Open the top lid (see [Open or close top lid](#) on page 47) of the coffee machine.

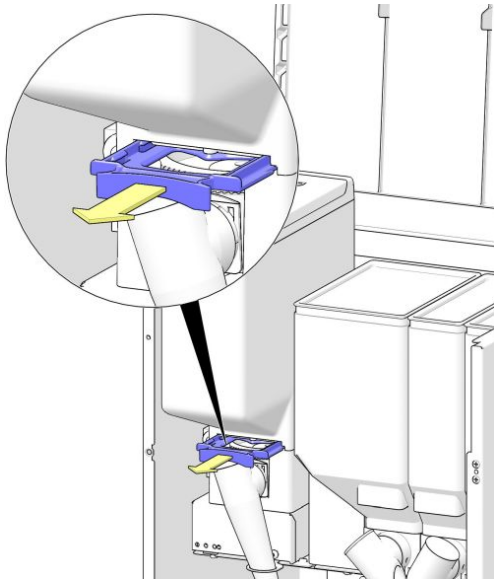


### NOTE

Filling the canisters must be done outside the machine.

3. Locate the canister locking slider in between the grinder and the bean canister.





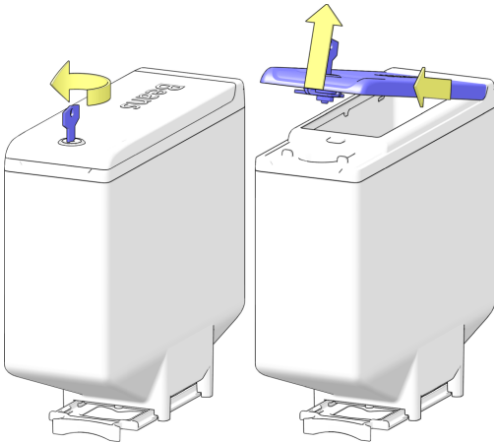
4. Pull the canister locking slider in the direction of the arrow. The bean canister will be closed and unlocked from the grinder base.
5. Lift the bean canister from the grinder base and take it out of the machine.



**CAUTION**

When the canister locking slider is not fully pulled out, coffee beans will fall out of the canister.

6. Place the bean canister on a stable and flat surface for refilling.

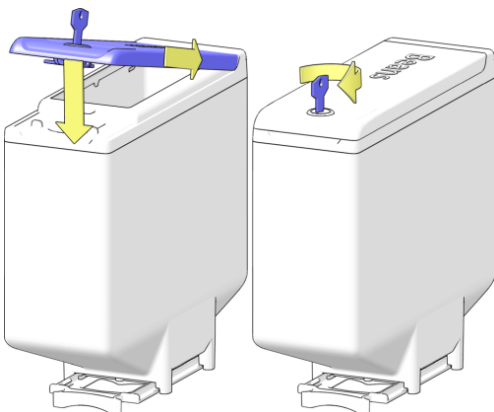


7. Unlock the lid (optional). Lift the lid in the front and then pull the lid from the canister in the direction of the arrow.
8. Fill the canister with fresh coffee beans.



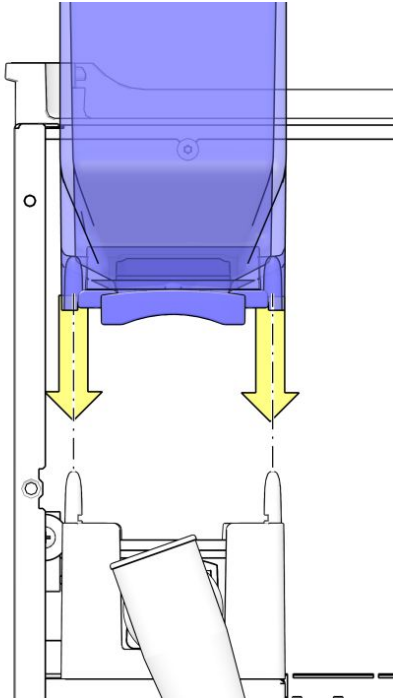
**TIP**

Fill the canister with beans sufficient for one or two days. This will keep the products fresh.

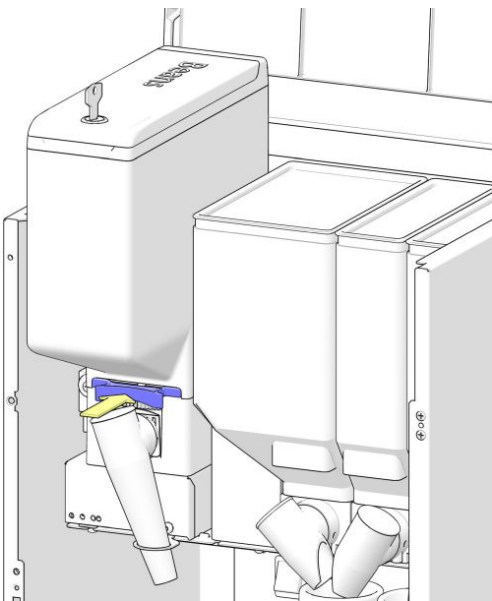


9. Place the back side of the lid on the canister and then lower the front side. Lock the lid (optional).

10. Place the bean canister back into the coffee machine on the four position ridges of the grinder base.



11. Push the canister locking slider back in the direction of the arrow to open the bean canister and secure it to the grinder base.
12. Repeat the procedure if more bean canisters must be filled up.



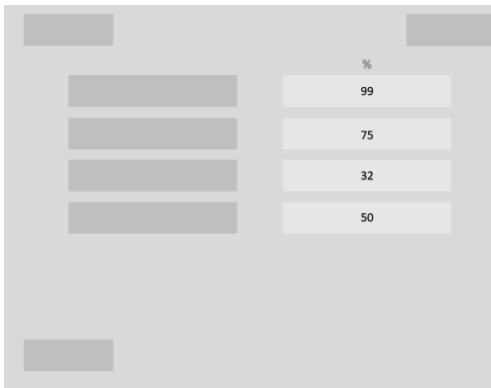
## 5.6.23 Enter canister ingredient levels — optional

**Purpose** When activated the coffee machine displays a message on the screen when the ingredient canisters are almost empty. Based on the number of beverages taken, the machine calculates the amount of ingredients left in the canisters. When the canisters are filled up the counters must be reset. Follow the steps in the procedure below to reset the counters.

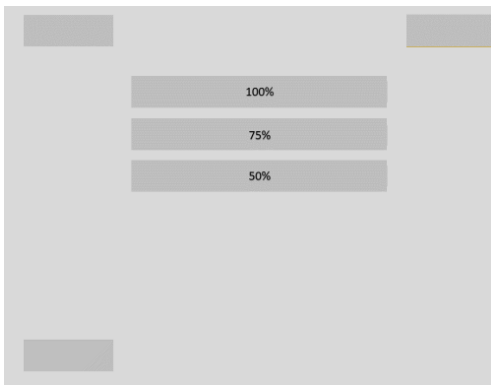
**Interval** Perform this procedure:

- When this option is active the *Enter ingredient level screen* is displayed when the **[Exit]** button is tapped in the **Service** menu to return to the **Main** menu (see [Main menu - Cup dispensing](#) on page 21).

**Procedure** Perform the following steps:



1. When the **[Exit]** button is tapped to leave the **Service** menu the *Enter ingredients levels screen* is displayed.
  - The current filling level of each canister is displayed (only the canisters activated for this option are shown).
2. To change a canister filling level tap one of the **ingredient** buttons in the left column.
  - or tap the **[Exit]** button to leave the **Service** menu.



3. Tap the correct **[filling level %]** button for the selected canister.



**NOTE**

A completely filled canister is filled 100 %. To keep ingredients fresh it is also possible to fill the canister for 50%.

4. Repeat the steps for each canister that is filled up (or where the shown value is not correct) or tap **[Exit]** to leave the **Service** menu.

## 5.6.24 Clean the outside of the machine

**Purpose** To clean all outside areas of the coffee machine that are not cleaned in any other procedure.

**Required** Use the following parts to perform the procedure:

- Soft damp cloth.

**Interval** Perform this procedure:

- Daily (see [Preventive maintenance schedule](#) on page 42),

**Procedure** Perform the following steps:

1. Clean the outside of the machine with a soft damp cloth.



**NOTE**

Do not use aggressive cleaning products or abrasives to clean (parts of) the machine.

## 5.6.25 Clean the touchscreen — optional

**Purpose** The touchscreen is the main interface between user and coffee machine. To ensure a hygienic and flawless use, the touchscreen must be cleaned regularly.

**Required** Use the following parts to perform the procedure:

- A clean soft cloth for disinfection purposes.
- (Isopropyl) alcohol.

**Interval** Perform this procedure:

- At least Daily (see [Daily maintenance](#) on page 43).
- When announced on screen, after a defined number of dispensed beverages.

**Procedure** Perform the following steps:

1. Tap one of the buttons with the message **[PRESS here to start cleaning]**. The screen will be switched off now.
  - or tap **[Cancel]** to return to the main *Menu*.



**TIP**

If the Clean Screen window is not shown, tap the on-screen clock first. (If no clock is displayed, check the section [Main menu - Cup dispensing](#) (on page 21) and tap on the location of the clock.

2. Clean the touchscreen with some (Isopropyl) alcohol on a clean soft cloth.



**CAUTION**

- Do not use any other (aggressive) chemicals to clean the surface of the touchscreen.
- Prevent dripping, do not use too much cleaning liquid on the cloth.

3. After some time, the touchscreen is switched on again. The machine returns to the *Main menu* and is ready for use.



## 5.6.26 The service key

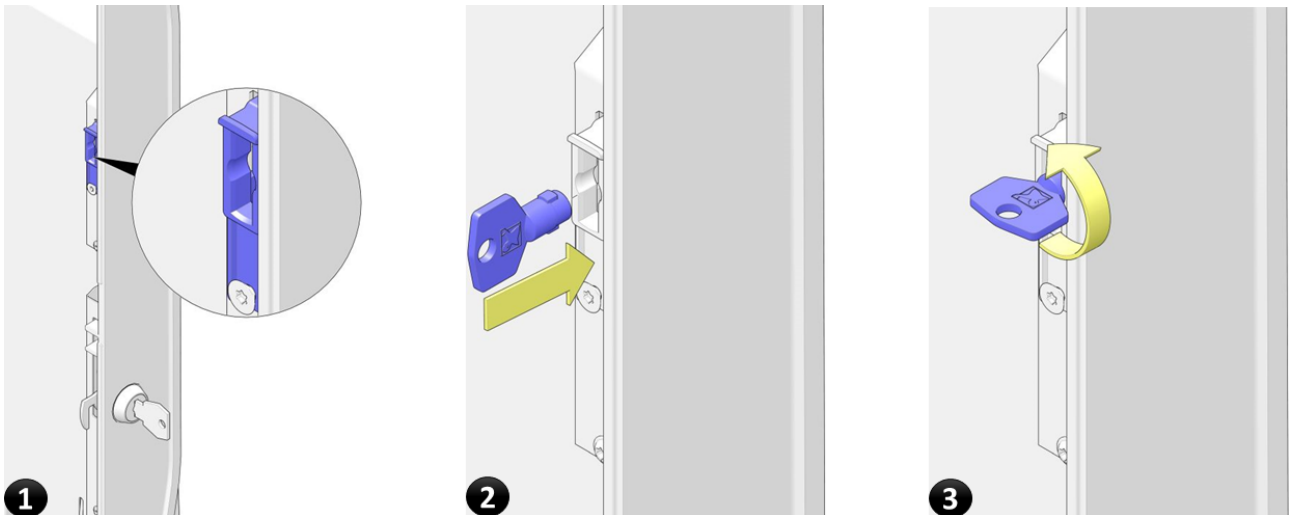
**Purpose** For safety reasons all dispense functions are disabled if the door of the machine is opened. Use the green service key to override this safety for maintenance procedures that need a fully functioning machine.

### 5.6.26.1 Insert the service key

**Required** Use the following parts to perform the procedure:

- Green service key.

**Procedure** Perform the following steps:



1. Locate the entry for the **Service key** on the inside of the door.
2. Insert the **Service key** in the service key entry.
3. Turn the **Service key** a quarter turn (90°).
  - The grey options in the **Service** menu change to *yellow/green*.
  - The coffee machine is now fully functional with an open door.
  - The key remains locked in the entry.



#### **WARNING**

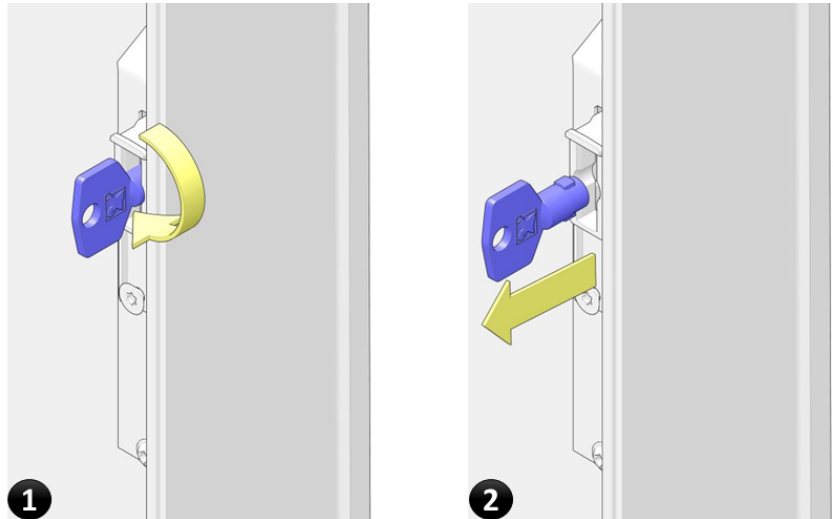
When the service key is inserted, the machine is powered up with open door. Parts in the machine can move and hot water can flow out. Only insert the service key when requested.

### 5.6.26.2 Remove the service key

**Required** Use the following parts to perform the procedure:

- Green service key.

**Procedure** Perform the following steps:



1. Turn the **Service key** a quarter turn (90°).
2. Remove the **Service key** from the door.

# Troubleshooting

## 6.1 Messages

Always check if a message is shown on the display. If no message is shown and the machine does not work correctly, you still may find the possible cause and solution in the following table. For failures not mentioned in this manual: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.1 Message: Brewer is turning the wrong way, check the wiring

**Message** *Brewer is turning the wrong way, check the wiring.*

**Solution** Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.2 Message: Brewer out of position

**Message** *Brewer out of position.*

**Solution** Perform the following steps to solve the problem:

1. Remove the brewer from the coffee machine and insert it again. Make sure it locks properly.

If problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.3 Message: Clean screen

**Message** *Clean Screen.*

**Cause** After a defined number of consumptions, the touchscreen needs to be cleaned.

**Solution** Perform the steps as explained in the section Clean the touchscreen (see [Clean the touchscreen — optional](#) on page 92).

### 6.1.4 Message: Communication error

**Message** *Communication error*

**Solution** Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.5 Message: Door open

**Message** *Door open*

**Solution** Perform the following steps to solve the problem:

1. Close the door or install the green service key to activate the machine.

### 6.1.6 Message: Drip tray full

**Message** *Drip tray full*

**Solution** Perform the following steps to solve the problem:

1. [Clean the drip tray](#) (on page 56) in front of machine and/or clean the brewer drip tray (see [Clean waste bucket](#) on page 51) inside the waste bucket.
2. Make sure the water level sensors in the drip bucket / drip tray are dry.

See section [Daily maintenance](#) (on page 43).

### 6.1.7 Message: Empty waste bucket

**Message** *Empty waste bucket*

**Solution** Perform the following steps to solve the problem:

1. Clean the waste bucket (see [Clean waste bucket](#) on page 51).
  - If message is still shown check if the detector switch is clean.
  - If a base cabinet is used, tap the **[Maintenance]** button in the Service menu and then the **[Reset waste bin]** button to reset the counter and remove the message.
  - If the problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.8 Message: Enough water?

**Message** *Enough water?*

- Solution** Perform the following steps to solve the problem:
1. Connect and open the water supply and restart the machine.
  2. [Clean brewer with cleaning tablet](#) (on page 69).
  3. Check if the problem also occurs when a hot water dispense is made.
    - If problem persists: Consult the service engineer (see [Service and support](#) on page 3). Do not forget to mention the results.

### 6.1.9 Message: Error occurred during recipe cycle

**Message** *Error occurred during recipe cycle.*

- Solution** Perform the following steps to solve the problem:
1. Open and close the door of the coffee machine to initialize the brewer.
  2. Check correct functioning by taking a coffee beverage. If problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.10 Message: Filling boiler

**Message** *Filling boiler*

- Solution** Perform the following steps to solve the problem:
1. Wait until the boiler is filled.
  2. If message is still shown after 10 minutes: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.11 Message: General error

**Message** *General error*

**Cause** The coffee machine is still busy.

- Solution** Perform the following steps to solve the problem:
1. Wait until the machine is ready.
  2. If message is still shown after 10 minutes: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.12 Message: Grinder blocked

**Message** *Grinder blocked*

- Solution** Perform the following steps to solve the problem:
1. Clean the grinder. (see [Unblock the grinder](#) on page 71)

### 6.1.13 Message: Heating boiler

**Message** *Heating boiler*

- Solution** Perform the following steps to solve the problem:
1. Wait until boiler is heated.
  2. If message is still shown after 10 minutes: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.14 Message: Initialization failed, the brewer did not reach maximum movement

**Message** *Initialization failed, the brewer did not reach maximum movement.*

- Solution** Perform the following steps to solve the problem:
1. Open and close the door of the coffee machine to initialize the brewer.
  2. Check correct functioning by taking a coffee beverage. If problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.15 Message: Install drip tray

**Message** *Install drip tray*

- Solution** Perform the following steps to solve the problem:
1. Place the drip tray.  
See also section [Daily maintenance](#) (on page 43).

### 6.1.16 Message: Install waste bucket

**Message** *Install waste bucket*

- Solution** Perform the following steps to solve the problem:
1. Place the waste bucket.

### 6.1.17 Message: Insert coins

**Message** *Insert coins*

**Solution**

Perform a full payment with coins, tokens or card.

### 6.1.18 Message: Mixer blocked

**Message** *Mixer blocked*

**Solution**

Perform the following steps to solve the problem:

1. [Clean the mixing system](#) (on page 58).

### 6.1.19 Message: Machine Blocked

**Message** *Machine Blocked*

**Cause**

The coffee machine is locked during this time by the scheduler and not available for use.

**Solution**

Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.20 Message: Machine is temporarily out of order

**Message** *Machine is temporarily out of order*

**Cause**

The message is set on purpose by the operator, for instance, because there are no ingredients available. The coffee machine can not be used.

**Solution**

As soon as the issue is solved, the operator removes the message and the machine will be available again.

### 6.1.21 Message: Not all ingredients available

**Message** *Not all ingredients available*

**Solution**

Perform the following steps to solve the problem:

1. One or more canisters must be refilled.  
See section Fill the ingredient canisters.

### 6.1.22 Message: No coffee detected in brewer

**Message** *No coffee detected in brewer*

**Solution** Perform the following steps to solve the problem:

1. Check if a canister must be refilled.  
See section Fill the ingredient canisters.
2. Check if the grinder runs to fill the brewer.

### 6.1.23 Message: No water connected / No water in boiler

**Message** *No water connected / No water in boiler*

**Cause** No water detected for more than 2 minutes.

**Solution** Perform the following steps to solve the problem:

1. First check if the water supply is opened / connected.
2. Open the door of the coffee machine to display the **Service** menu, wait 2 seconds and close the door again to allow the coffee machine to re-activate itself.
  - If this does not help restart the coffee machine (Switch the coffee machine OFF, wait 5 seconds and then switch ON again).
  - If problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.24 Message: Piston blocked, dosage too high

**Message** *Piston blocked, dosage too high.*

**Solution** Perform the following steps to solve the problem:

1. Open and close the door of the coffee machine to initialize the brewer.
2. Check correct functioning by taking a coffee beverage. If problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.25 Message: Place cup in center

**Message** *Place cup in center*

**Cause** Cup needs to be placed under the correct dispensing nozzle before the **[Start]** button is available.

**Solution** Perform the following steps to solve the problem:

1. If cup is placed in the correct position clean the cup sensor.



### 6.1.26 Message: Place cup right

**Message** *Place cup right*

**Cause** Cup needs to be placed under the water dispensing nozzle before the **[Start]** button is available.

**Solution** Perform the following steps to solve the problem:  
1. If cup is placed in the correct position clean the cup sensor.

### 6.1.27 Message: Please load configuration

**Message** *Please load configuration*

**Solution** Perform the following steps to solve the problem:  
Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.28 Message: Please load the User Interface

**Message** *Please load the User Interface*

**Solution** Perform the following steps to solve the problem:  
Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.29 Message: Recipe error, contact tech. support

**Message** *Recipe error, contact tech. support.*

**Solution** Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.30 Message: Replace water filter

**Message** *Replace water filter*

**Solution** Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.31 Message: Rinse brewer with tablet

**Message**

*Rinse brewer with tablet*

**Solution**

Perform the following steps to solve the problem:

1. Clean the brewer with cleaning tablet (see [Clean brewer with cleaning tablet](#) on page 69) (again).  
See also [Weekly maintenance](#) (on page 44).

### 6.1.32 Message: Startup problem

**Message**

*Startup problem*

**Solution**

1. Open/connect the water supply and restart the machine.  
If the problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.33 Message: Temp. sensor disconnected

**Message**

*Temp. sensor disconnected*

**Solution**

Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.34 Message: Temperature boiler (too) high

**Message**

*Temperature boiler (too) high*

**Solution**

1. Open the door of the coffee machine.
2. Insert the service key.
3. Perform the procedure [Flush mixers and brewer](#) (on page 50) several times.
4. If message is still shown: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.35 Message: The brewer blocked during recipe, did not reach position

**Message**

*The brewer blocked during recipe, did not reach position.*

**Solution**

Perform the following steps to solve the problem:

1. Open and close the door of the coffee machine to initialize the brewer.
2. Check correct functioning by taking a coffee beverage. If problem persists: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.36 Message: Water level too low

**Message** *Water level too low*

**Solution** Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.37 Message: Wait, Heating boiler

**Message** *Wait, Heating boiler*

**Solution** Perform the following steps to solve the problem:

1. Wait until boiler is heated.
2. If message is still shown after 10 minutes: Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.38 Message: Waste bucket full / Empty waste bucket

**Message** *Waste bucket full / Empty waste bucket*

**Solution** Perform the following steps to solve the problem:

1. Empty waste bucket (see [Clean waste bucket](#) on page 51).
  - If message is still shown, remove the waste bucket and wait 6 seconds before placing it back.
  - If message is still shown, check if the waste bucket detector switch is clean (check the [Inside view](#) (on page 17) drawing for the location).
  - If a base cabinet is used, tap the **[Maintenance]** button in the Service menu and then the **[Reset waste bin]** button to reset the counter and remove the message.
  - If the problem persists: Consult the service engineer.

### 6.1.39 Message: Water filter installed?

**Message** *Water filter installed?*

**Solution** Consult the service engineer (see [Service and support](#) on page 3).

### 6.1.40 Message: Wrong brewer defined in the software

**Message** *Wrong brewer defined in the software.*

**Solution** 1. Consult the service engineer (see [Service and support](#) on page 3).

#### 6.1.41 Message: Ready, take your cup

**Message** *Ready, take your cup*

**Cause** The dispense of the beverage is finished.

**Solution** Remove the cup or jug.

## Technical specifications

### 7.1 Standards and regulations

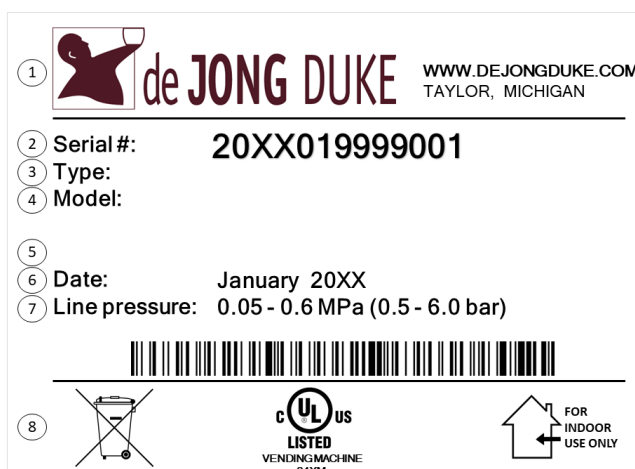
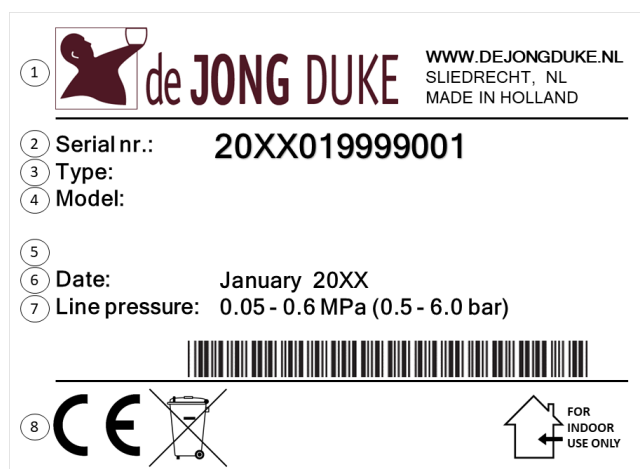
If the type plate inside the machine contains the CE mark in the lower left hand corner it conforms to CE standards.

- Check the appendix of this manual for the Declaration of Conformity.

### 7.2 Type plate

The type plate is located inside the machine on the left side panel.

*Type plate layout examples (depending on manufacturing location)*



- |                               |                                               |
|-------------------------------|-----------------------------------------------|
| 1. Manufacturer details       | 5. Mains power specifications                 |
| 2. Serial number              | 6. Date of production                         |
| 3. Model code                 | 7. Water connection specifications            |
| 4. Model name / configuration | 8. Markings for conformity, disposal and use. |



#### NOTE

Data shown in the picture is for illustration purposes only.

## 7.3 Disassembly and recycling



The coffee machine contains recyclable materials. Dispose of the coffee machine in conformity with local laws and regulations.

## 7.4 Technical specifications

*Machine dimensions ( $\pm 5$  mm) and weight specifications ( $\pm 10\%$ )  
Virtu XEA Medium Cabinet*

Height	875 mm
Height with extended bean canister	1020 mm
Width	433 mm
Depth	575 mm
Depth door only	185 mm
Weight (empty)	55 kg

*Machine electrical specifications*

Mains supply ( $\pm 10\%$ )	Refer to the <a href="#">type plate</a> (on page 105) inside the coffee machine for the correct values.
Frequency ( $\pm 2\%$ )	
Max. capacity	

*Machine water specification*

<b>Water pressure</b>	
Minimum pressure	50 kPa (0,5 bar)
Maximum pressure	600 kPa (6,0 bar)
Water connection	$\frac{3}{4}$ BSP connection
<b>Quality of water</b>	
Hardness	5-7° dH (German standard) 8-12 fH (French standard)
pH Value	approx. 7
Temperature water	The incoming temperature may not be above 30°C
Main water connection	Between water tap and coffee machine an (electronic) waterlock needs to be connected

*Machine hot water pressure system*

<b>Pressure Systems Safety Regulations 2000 (PSSR)</b>	Water vessel
Vessel category	SEP
Operating (rated) pressure	11 bar
Maximum allowable pressure	24 bar
Design temperature	135°C
Safety relief valve	12 bar

*Machine ambient temperature specifications*

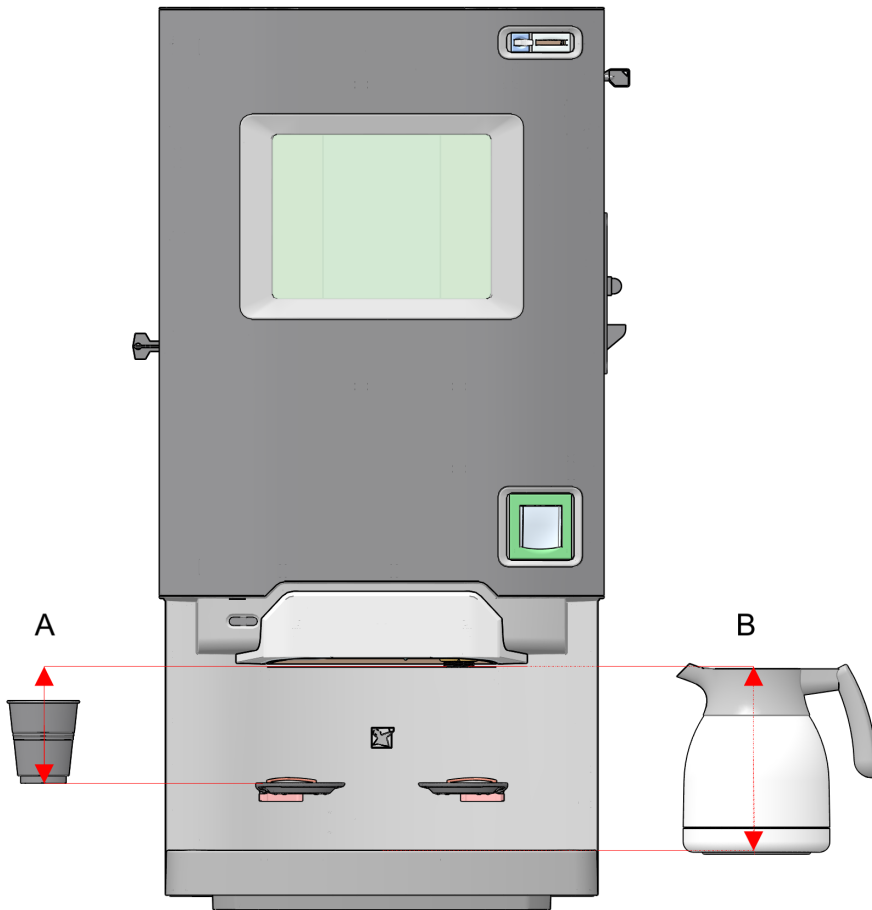
When in storage	+ 10 °C ~ + 50 °C
When in use	+ 5 °C ~ + 40 °C

*Machine sound pressure*

Standby	< 20 dB(A)
Grinder / Coffee	≤ 63.07 dB(A)

## 7.5 Cup and jug sizes

*Cup and jug dimensions Virtu (medium model)*



### **A. Cups**

Maximum cup height (*)	110 mm
Maximum cup diameter	85 mm

### **B. Jugs**

Maximum jug height	180 mm
Maximum jug diameter	135 mm

(\*) The height of the cup stand is fixed and depends on specifications during ordering.



## 7.6 Manufacturer contact information



### **De Jong DUKE**

Postbus 190  
3360 AD SLIEDRECHT  
The Netherlands



+31 (0) 184 209 767

[www.dejongduke.nl](http://www.dejongduke.nl)



[support@dejongduke.nl](mailto:support@dejongduke.nl)



### **De Jong DUKE North America**

12680 Delta Street  
Taylor, MI, 48180  
U.S.A.



+1 734 403 1708

[www.dejongduke.com](http://www.dejongduke.com)



[support@dejongduke.com](mailto:support@dejongduke.com)

### Service and support

For questions, service and ingredients for this coffee machine: Consult the service engineer (see [Service and support](#) on page 3).

# Appendix

## 8.1 Appendix list

Information related to this document and the coffee machine are:

- [Declaration of conformity](#) (on page 111).

## 8.2 Declaration of conformity



de Jong DUKE  
Postbus 190  
3360 AD Sliedrecht  
The Netherlands  
[www.dejongduke.com](http://www.dejongduke.com)

### EG Verklaring van Conformiteit

#### EC Declaration of Conformity

De firma: J.M. de Jong DUKE Automatenfabriek B.V.  
The company: Postbus 190  
3360 AD Sliedrecht  
The Netherlands

Verklaart geheel onder eigen verantwoordelijkheid dat de onderstaande machines:  
Declares under its own sole responsibility that the machines:

- |                      |                      |                      |                       |
|----------------------|----------------------|----------------------|-----------------------|
| ▪ Virtu 10 00 Series | ▪ Virtu 40 00 Series | ▪ Virtu 70 00 Series | ▪ Virtu 18.000 Series |
| ▪ Virtu 20 00 Series | ▪ Virtu 50 00 Series | ▪ Virtu 80 00 Series | ▪ Virtu 19.000 Series |
| ▪ Virtu 30 00 Series | ▪ Virtu 60 00 Series | ▪ Virtu 90 00 Series |                       |

Met veiligheidslimieten: 135 °C/ 5.5 bar (steam vessel)  
With Safe Operating Limits: 135 °C/ 12 bar (water vessel)

In overeenstemming zijn met de volgende

EG-richtlijnen:  
Are in conformity with the following EC directives:

[2014/30/EU](#)

[2014/35/EU](#)

[2006/42/EC](#)

[2009/125/EC](#)

[2012/19/EU](#)

[2011/65/EU](#)

[1907/2006/EC](#)

[2015/863/EU](#)

[2019/1021/EU](#)

[1935/2004/EC](#)

[2014/68/EU](#)

[PSSR2000](#)

[1282/2011/EU](#)

[2023/2006/EC](#)

Electromagnetic Compatibility Directive

Low Voltage Directive

Machinery Directive

ECO Design

WEEE Directive

RoHS Directive

REACH directive

Delegated directive amending directive 2011/65/EU

POPs regulation

Food Safety Directive

Pressure Equipment Directive

UK regulation: Pressure Systems Safety Regulations

Food contact plastics and articles

Good manufacturing practice for materials and articles intended to come into contact with food

Voldoen aan de volgende geharmoniseerde

Europese normen:

Comply with the following harmonized European standards:

*Electromagnetic Compatibility:*

EN 55014 - 1

EN 55014 - 2

EN 61000 - 3 - 2

EN 61000 - 3 - 3

EN 62233

*Electric Safety:*

EN 60335 - 1

EN 60335 - 2 - 75

*Technical documentation for assessment:*

IEC 63000:2016

Sliedrecht, April 6th 2021

M.J.C. de Jong - Managing Director

