



## **Operating instructions Swiss Egro 70 Series**



## Table of contents

<b>1</b>	<b>Introduction .....</b>	<b>3</b>
1.1	Copyright protection .....	3
1.2	Purpose of operating instructions .....	3
1.3	Warranty .....	3
1.4	Symbols .....	3
1.5	Quality assurance .....	4
1.6	Conventional use .....	4
1.7	User .....	4
1.8	Safety Instructions .....	4
1.9	Legal information .....	5
<b>2</b>	<b>Control elements .....</b>	<b>6</b>
2.1	Overall view .....	6
2.2	Main switch .....	7
2.3	Main water tap .....	7
2.4	Mode switch .....	7
2.5	Keypad .....	8
2.5.1	Keypad 15 products .....	8
2.5.2	Keypad 9 products .....	9
2.6	Keypad elements .....	10
2.6.1	Display .....	10
2.6.2	Power On LED .....	10
2.6.3	Stop key .....	11
2.6.4	Product keys .....	11
2.6.5	Status LED .....	11
2.6.6	Shift-Key (only by models 7021, 7025P, 7027P) .....	11
<b>3</b>	<b>Operation cooling units .....</b>	<b>12</b>
3.1	Cooling box KB 3 .....	12
3.2	Refrigerator KS7 .....	13
<b>4</b>	<b>Operation coffee machine .....</b>	<b>14</b>
4.1	Preparations .....	14
4.2	Filling the bean container .....	14
4.3	Switching on .....	14
4.4	Product delivery .....	15
4.4.1	Bean coffee .....	15
4.4.2	Grinded coffee (manual dosage) .....	16
4.4.3	Milk products .....	16
4.4.4	Tea (hot water) .....	17
4.4.5	Steam (if applicable) .....	18
<b>5</b>	<b>Special functions .....</b>	<b>19</b>
5.1	Pre-selection .....	19
5.2	Cancelling of a task .....	19
5.3	Switching off .....	19
5.3.1	Switching off the machine through main switch .....	19
5.3.2	Switching off through keypad .....	19
5.4	Cleaning system for milk supply line (MSL) .....	19
<b>6</b>	<b>Operation modes .....</b>	<b>20</b>
6.1	Change mode .....	20
6.2	Modes 0 to 3 .....	21

<b>7</b>	<b>Programming.....</b>	<b>22</b>
7.1	Use of product keys for programming.....	22
7.2	Adjustments .....	23
7.2.1	Menu key programming coffee or tea .....	23
7.2.2	Menu product price change .....	24
7.2.3	Menu water volume change .....	25
7.2.4	Menu grinded coffee amount adjustment .....	25
7.2.5	Menu milk or milk foam volume adjustment .....	26
7.2.6	Date and time adjustment .....	27
7.2.7	Programming waiter pens .....	29
7.3	Counters .....	30
7.3.1	Menu reading out daily counter .....	30
7.3.2	Menu deleting daily counters .....	31
7.3.3	Menu reading out total counter .....	32
<b>8</b>	<b>Maintenance .....</b>	<b>33</b>
8.1	Daily cleaning .....	33
8.2	Cleaning demand .....	33
8.3	Automatic cleaning program: .....	34
8.3.1	Automatic coffee cleaning program Swiss Egro Series 70 .....	34
8.3.2	Automatic milk cleaning .....	35
8.3.3	Procedure .....	35
8.3.4	Manual cleaning of cappuccino heads.....	38
8.3.5	Manual cleaning of milk suction hoses and cooling units .....	40
8.3.6	Cleaning of bean container .....	40
8.3.7	Cleaning of waste container, drip grid and drip tray .....	40
8.3.8	Cleaning of housing .....	40
<b>9</b>	<b>Service-messages.....</b>	<b>41</b>
9.1	Display message waste container full .....	41
9.1.1	Removal of waste container.....	41
9.2	Display message water service .....	42
9.3	Display message Coffee service.....	42
<b>10</b>	<b>What to do when... ..</b>	<b>43</b>
<b>11</b>	<b>Technical data .....</b>	<b>44</b>
11.1	Dimensions .....	44
11.2	Weight and working temperature .....	44
11.3	Noise level of the appliance .....	44
11.4	Boiler Data .....	44
11.5	Connection values.....	45
11.6	Performance data .....	45
11.7	Water connection .....	45
<b>12</b>	<b>Installation and commissioning.....</b>	<b>46</b>
12.1	Installation .....	46
12.2	Water preparation .....	46
12.3	Connection of water drain .....	47
12.4	Electrical connection .....	47
<b>13</b>	<b>Consumable supplies .....</b>	<b>48</b>

## Serie 70

# 1 Introduction

First of all, we thank you for choosing Egro.

We are confident that the product you have purchased will meet all your expectations. The coffee system you are about to use is the outcome of extensive research and development.

The coffee machine is the most efficient, user-friendly and well designed machine of its kind.

This manual outlines the correct use and maintenance and will help you get the best results from your machine.

We trust you will find our explanations clear and we may continue to earn your business in the future.

## 1.1 Copyright protection

Egro Suisse AG reserves the right to make any technical changes to products described in these instructions without a prior notice in order to continuously develop and improve the machine.

Partial or full photocopying, reproduction or dissemination, translation into foreign languages or transfer into electronic or machine readable format of this documentation is strictly prohibited.

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## 1.2 Purpose of operating instructions

These instructions are specially drawn up for employees operating, servicing, maintaining and repairing the machine. The instructions describe the functions and operation of your machine.

All operating persons must carefully read and understand these instructions before starting their work at the machine. Operating instructions should be stored near the machine.

A failure-free functioning of the machine is guaranteed provided that all these instructions are followed. In the event of disregard, especially concerning the chapter Important Safety Regulations, the device may present a hazard for operating and servicing personnel. Additionally, damages to the device or surrounding devices may arise.

No liability will be accepted for any damage or break down of service caused by disregarding the operating manual.

## 1.3 Warranty

Warranty and ex-gratia payments offered by Egro Suisse AG should be valid provided that your coffee machine is installed and maintained on a regular basis by an Egro service partner. Any changes or installation of components not approved by the producer will terminate the warranty.

## 1.4 Symbols

Different symbols are used in these operating instructions. Meaning of symbols is described below:



Danger

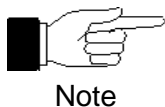
This symbol is placed at safety instructions of special importance. Following of these instructions is essential. Disregard of instructions may result in injuries to user.

It concerns your own safety!



Attention

This warning symbol is placed at safety instructions of special importance. It means that the relevant instructions should be strictly followed in order to prevent damages to the machine.



This symbol is placed to important product notes. It means that they give relevant notes or additional information about the system.

## 1.5 Quality assurance

Egro Suisse AG applies the QA-system based on EN 29001/ISO 9001.

## 1.6 Conventional use

Swiss Egro Serie 70 is a fully automatic coffee machine that also can be used in staff kitchen areas in shops, offices and other working environments (i.e. farm houses; by clients in hotels, motels and other residential type environments; bed and breakfast type environments).

## 1.7 User

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

Children should not play with the machine, whether they are supervised or unsupervised.

## 1.8 Safety Instructions

- Don't leave the packing elements (plastic bags, expanded polystyrene, nails, cardboard, etc.) within the reach of children, as these elements are potential sources of danger.
- Do not place heavy items on the packaging. Do not stack more than three items of the same kind.
- Keep the packed machine in a dry place, not exposed to environmental elements and in conditions in which the temperature does not go below 5°C.
- If liquids inside the machine freeze, leave the coffee machine in a place with a minimum temperature of 20°C for at least 20 minutes before switching it on.
- Switch off the appliance and disconnect from power supply before changing accessories or approaching parts that move in use.
- Do not leave the machine exposed to environmental elements or place them in damp rooms such as bathrooms.
- Install the machine on a water repellent surface (laminated, steel, ceramic, etc.) away from heat sources (oven, cooking stove, fireplace, etc.) and in conditions in which the temperature may not go below 5°C. KEEP WARM. Place on even surface.
- The support surface shall be plane, dry, stable and as high that the top surface is more than 150 cm from the floor
- Do not obstruct the drain outlet or drip tray and do not cover with cloths, etc.
- Only use original spare parts in order to avoid compromising the safety and proper functioning of the machine.
- In an emergency, such as fire, unusual noise, overheating, etc., take immediate action, disconnect the power and close water taps.
- The coffee machine and the fridge are fixed together by means of two C-brackets screwed to the lateral panels; power off and disconnect devices from the power supply before removing fastenings.
- When in doubt, request a detailed diagram of the supplied power from a qualified electrician.
- Before connecting the equipment, check if the data on the machine corresponds to your electrical power supply.
- The power supply must be provided with the following safety devices: efficient grounding connection; section of conductors suitable for absorption capacity; efficient grounding leakage protection circuit breaker.

## **Serie 70**

- Should the power cable be damaged, it has to be replaced by the manufacturer or by its technical service or by a person with equivalent qualification, in order to prevent any risks.
- Adaptors, multiple sockets and / or extensions must not be used.

### **1.9 Legal information**

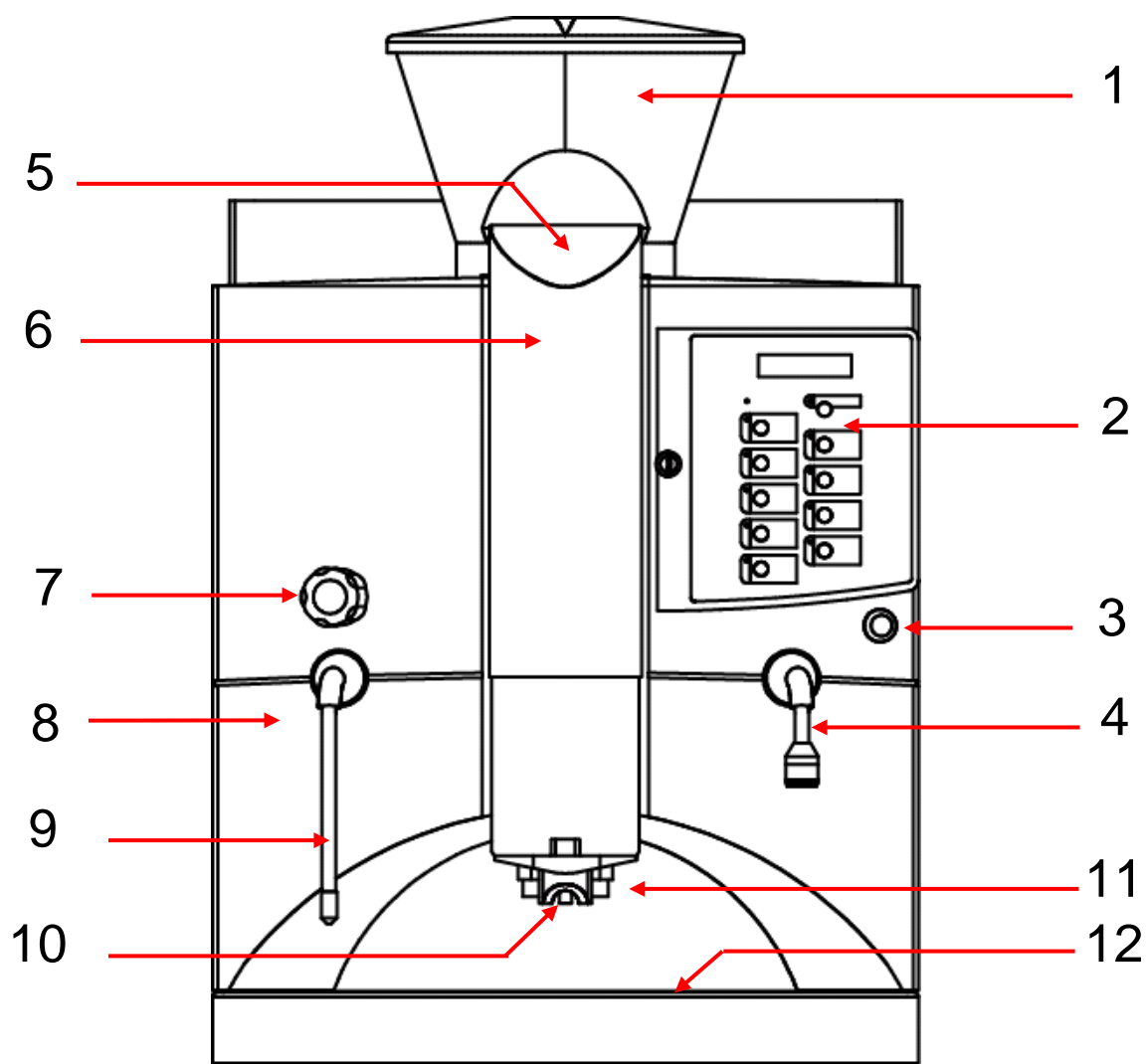
In accordance with the European guidelines for safety and EMC.

Treatment of waste from electric / electronic equipment. Dispose of the product in accordance with current local regulations concerning differentiated waste disposal in dedicated waste disposal areas. Do not treat as simple urban waste. For any information please contact the manufacturer at the address specified in the user manual. The product complies with the requirements of the new directives introduced for the environmental safeguard and must be properly disposed of at the end of its life cycle.

Improper installation can cause damage to people, animals and things for which the manufacturer cannot be considered responsible.

## 2 Control elements

### 2.1 Overall view



Pos.	Element	Pos.	Element
1	Bean hopper 2 x 1,25 kg	7	Steam adjustment valve (option)
2	Keypad	8	Waste container
3	Mode lock	9	Steam dispenser (option)
4	Tea dispenser	10	Coffee dispenser
5	Manual dosage (instant coffee / cleaning tablets)	11	Milk dispenser
6	Front cover	12	Drip grid



## Serie 70

### 2.2 Main switch

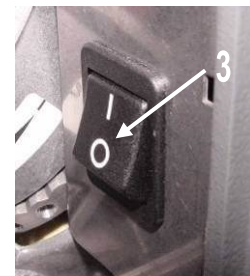
The main switch is located behind the lockable front cover.

1. Lock
2. Front cover
3. Main switch



**Positions:**

I	=	ON
O	=	OFF



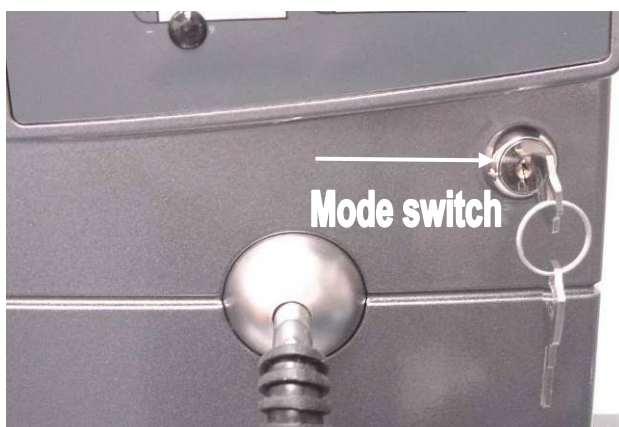
### 2.3 Main water tap

**Positions:**

Horizontal	=	closed
Vertical	=	open



### 2.4 Mode switch

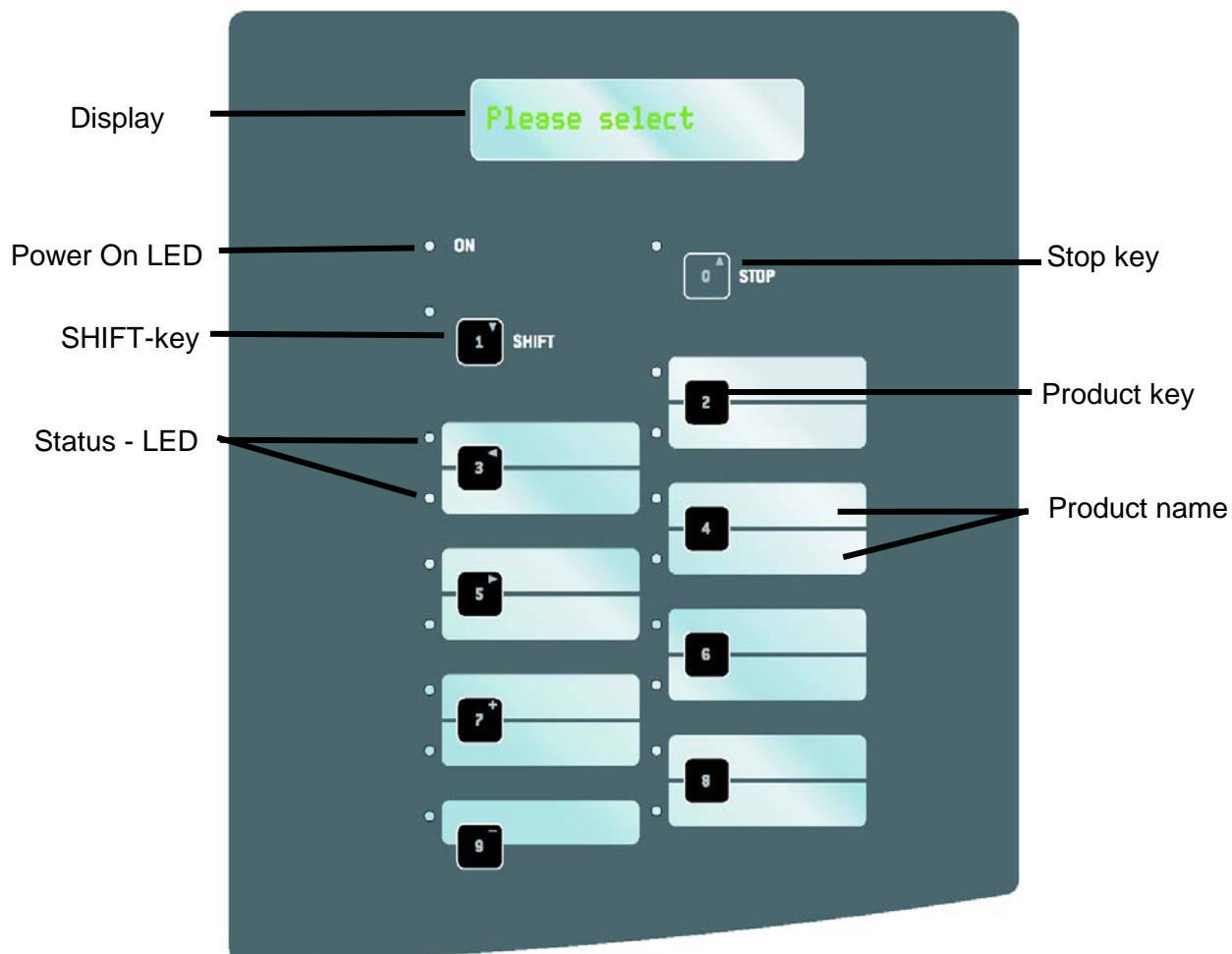


The key switch for changing the mode of the machine is located underneath the keypad.

The key can be inserted and removed in vertical position only.

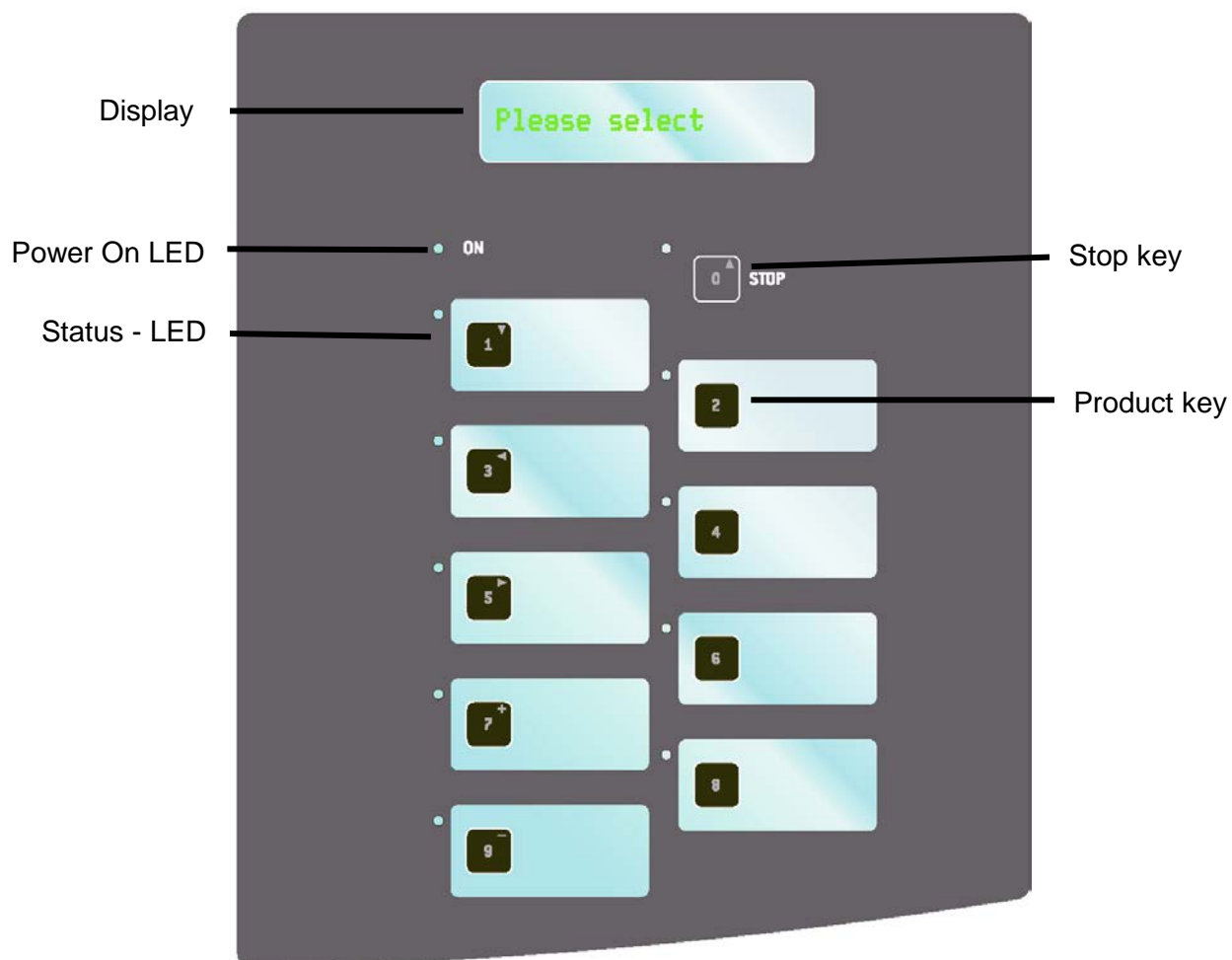
## 2.5 Keypad

### 2.5.1 Keypad 15 products

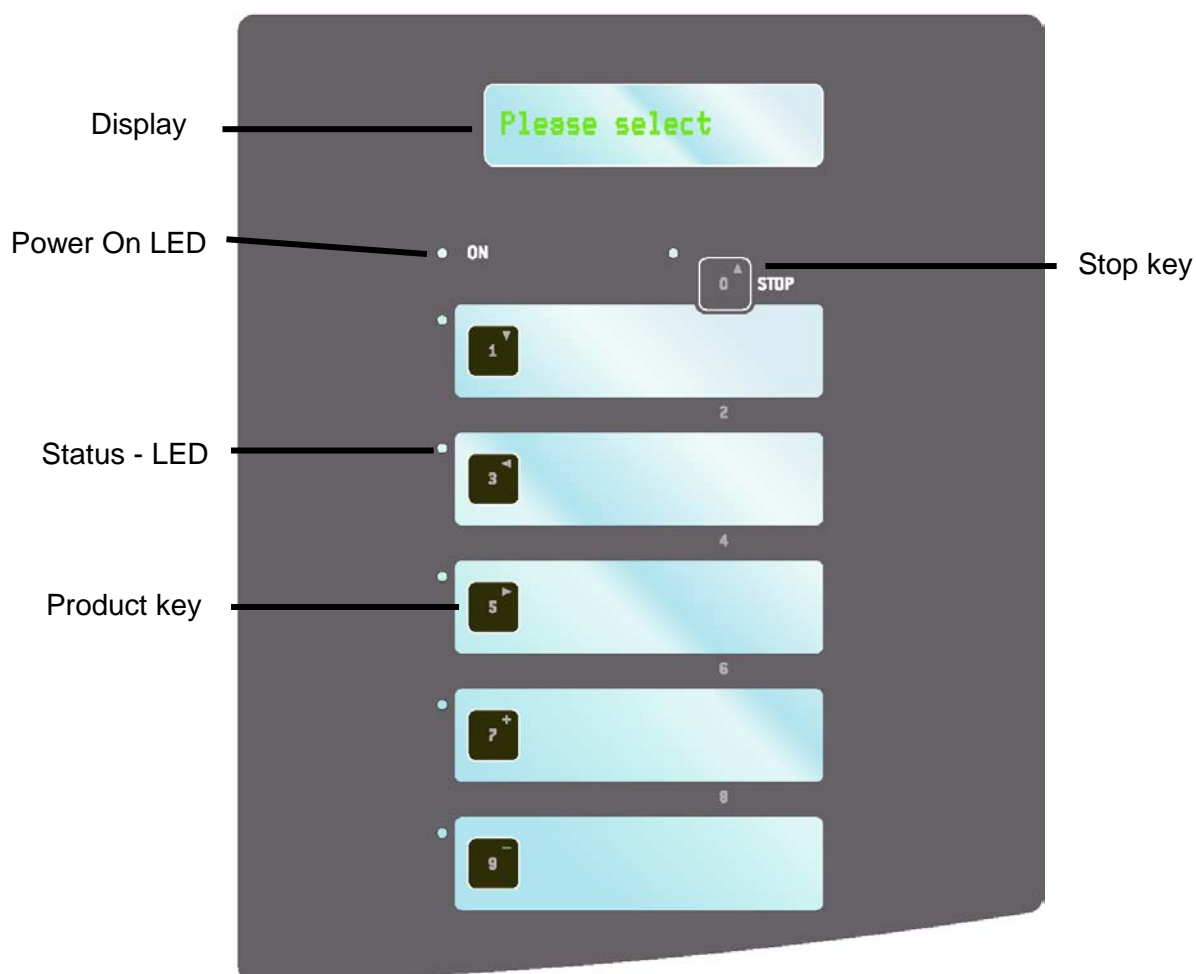


## Serie 70

### 2.5.2 Keypad 9 products



### Keypad 5 products



## 2.6 Keypad elements

### 2.6.1 Display

The display is the LCD-window on the right above the keypad. During operation texts and notes are displayed explaining the process flow. Also failures can be identified with the help of relevant messages.

Display texts and messages are displayed e.g. as follows

Example: **12:34 o'clock Machine is ready for operation**

### 2.6.2 Power On LED

**Off:** The machine has been switched off from the main switch or the power plug has been removed

**On:** The machine has been switched on (Display: **12:34 o'clock**) or it has been switched off from the key switch (Display: **Standby**)

## Serie 70

### 2.6.3 Stop key

The stop key is used for following functions

- Cancelling of a product being dispensed
- Deleting of a pre-selection or quitting the shift function
- Programming
- Starting of various cleaning programs

### 2.6.4 Product keys



Note

Every product key can be programmed individually. During installation the Egro service technician assigns every key a specific product according to your requirements and wishes.

- Keys 1 to 16: Coffee drinks or hot water (tea) and shift



Note

The symbols on the left of product keys 0, 1, 3, 5, 7 and 9 refer to use of these keys in **mode 3** (programming). Please refer to section 7 "Programming".

### 2.6.5 Status LED

In normal mode the LEDs are burning. After pressing the shift key the second LEDs (second product level active) burn and "Shift" is displayed.

- **On:** Product can be selected
- **Off:** Product cannot be selected
- **Blinking:** Product is dispensed

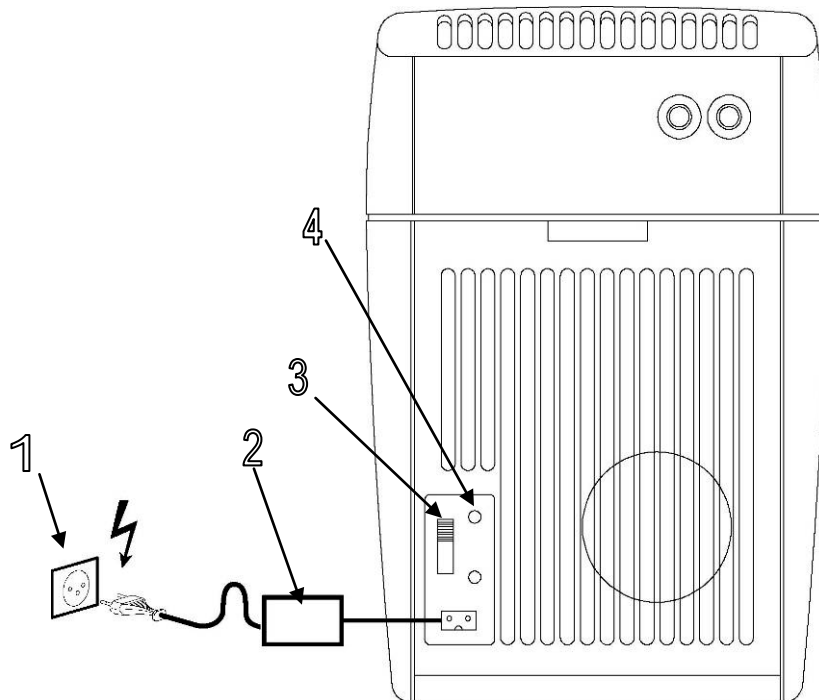
Availability of products is determined by programming and adjusted by the service technician.

### 2.6.6 Shift-Key (only by models 7021, 7025P, 7027P)

When pressing the shift key the second product level is reached that is indicated by LEDs. With the stop or shift key the first product level can be reached again.

### **3 Operation cooling units**

#### **3.1 Cooling box KB 3**



- 1 Cooling box On / Off only through power plug
- 2 Rectifier 230 V → 12 V
- 3 Switch for cooling is arrested!
- 4 Green LED burns during normal operation

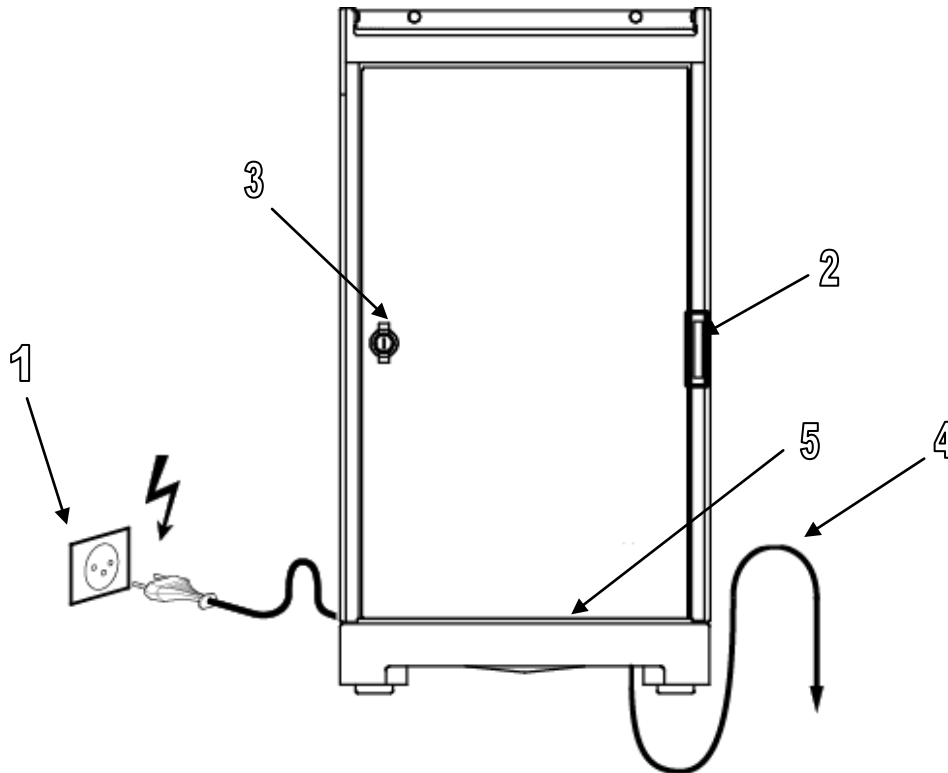


Note

In order to switch off the cooling box the power plug has to be removed from power supply (or from refrigerator).

## Serie 70

### 3.2 Refrigerator KS7



- 1 Power supply plug for refrigerator.
- 2 Switch for refrigerator and cup heater as far as provided  
Positions: I = On (lit up)  
0 = Off (off)
- 3 Refrigerator door latch
- 4 Outlet
- 5 Drip tray

## 4 Operation coffee machine

### 4.1 Preparations

- Open the local water stop valve and the one of the machine
- Switch on power supply
- Check the content of bean container

### 4.2 Filling the bean container



- Open locking
- Remove cover
- Fill up
- Close cover

### 4.3 Switching on

- Unlock and open the front cover
- Bring main switch in pos. I: Power on LED burns.
- Close and lock the front cover.
- The coffee machine starts the switch-on program during which the system is heated up. **Heating/Flushing** is displayed. Heating up takes about 5 minutes.
- As soon as the system has reached the necessary temperature the actual clock time (e.g. **12:34**) is displayed. The LEDs 1-9 (product keys) burn provided that relevant products are available.
- The coffee machine is now ready for operation.



Note

The service technician has adjusted the products available in mode 1 or mode 2.



Danger

After switching on hot water is dispensed from coffee or hot water dispenser nozzles.

**Danger of scalding!**



## Serie 70

### 4.4 Product delivery



Machine is ready for operation when **clock time** is displayed.

In order to obtain a drink (coffee, milk drink or tea) shortly press a relevant product key

#### 4.4.1 Bean coffee

- Place a cup(s) under the dispenser nozzle
- Shortly press the desired product key
- The relevant LED blinks, **Your selection** / „Espresso“ (product title) is displayed
- The beans are grinded, the coffee is brewed
- Product dispensing

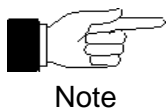
1 cup of coffee



2 cups of coffee



1 jug of coffee



Grinding and brewing times vary from product to product. Place cup(s) early under the dispenser nozzle!

#### **4.4.2 Grinded coffee (manual dosage)**

Alternatively the product keys may be programmed for use with grinded coffee (e.g. caffeine free). Such drinks can be obtained semi-automatically as follows:

- Press product key; the relevant LED blinks
- **Coffee dosage** is displayed
- Red LED (near STOP key) burns
- Open the flap; fill in grinded coffee
- Press the STOP key
- Coffee is brewed
- Product dispensing



#### **4.4.3 Milk products**

The machine enables to obtain various milk-coffee products. A precondition is a machine with relevant equipment.

We differ following products:

- Cold milk (available only by machines with refrigerator or IMS cooling box)
- Hot milk with and without coffee
- Milk foam with and without coffee
- Dispensing of milk foam by keystroke (manual)



**Use only milk (UHT or pasteurised milk) with a fat content of 1,5% to 3,5%.**

##### **4.4.3.1 Milk dispensing**

- Place a cup(s) or glasses under the milk dispensing nozzles
- Shortly press the desired product key, the relevant LED blinks
- Dispensing of cold or hot milk follows as required

## Serie 70

### 4.4.3.2 Dispensing of milk products

- Place a cup(s) or glasses under the milk dispensing nozzles
- Shortly press the desired product key, LED blinks
- The beans are grinded, the coffee is brewed
- The order of dispensing of milk and coffee can be programmed variously

1 cup of cappuccino



### 4.4.4 Tea (hot water)



- Place a tea cup under the hot water dispensing nozzle
- Press the relevant key, LED blinks
- **Your selection / Tea** is displayed
- Dispensing of tea (hot water)



If tea or steam has been obtained several times it may occur that the coffee machine has to warm up again. The LEDs of relevant keys are not burning. When pressing such product key **Warming up** is displayed. After warming up is finished the LEDs burn again and the product can be obtained.

#### **4.4.5 Steam** (if applicable)

- Immerse the steam nozzle in the container
- Obtaining: Turn the steam adjustment valve in anticlockwise direction (  $\frac{1}{4}$  rotation)
- Stopping: Turn the steam adjustment valve in clockwise direction

When heating up a liquid with steam make sure that the steam-dispensing nozzle is fully immersed in the liquid.

#### **Danger of scalding through spouting of hot liquids!**

**Correct**  
**Nozzle fully immersed**



**Wrong**  
**Nozzle not immersed**



Danger

## 5 Special functions

### 5.1 Pre-selection

During dispensing of a coffee drink other coffee products can be pre-selected on the selected level. The LED of a pre-selected product burns.

**Pre-selection 1 / Coffee** (first / second line) is displayed.

Pre-selection can be adjusted between 1 and 16 in the product menu, thereby pre-selection = 1 means that only one coffee per keystroke can be selected.

For self-service as well as for advance payment (e.g. coins) the pre-selection is set on 1.

### 5.2 Cancelling of a task

Product dispensing can be cancelled anytime through activation of the stop key.

When a coffee has been pre-selected the pre-selection is cancelled first and then after pressing the stop key one more time, the product being dispensed is deleted.

### 5.3 Switching off



Note

It is recommended to switch off the machine for longer operation pauses (nights, weekends etc.).

#### 5.3.1 Switching off the machine through main switch

- Set the main switch on "O".

#### 5.3.2 Switching off through keypad

- Insert key
- Turn the key in clockwise direction by  $\frac{1}{4}$  rotation
- Press key 0
- Turn the key back in anticlockwise direction by  $\frac{1}{4}$  rotation, **Standby** is displayed

### 5.4 Cleaning system for milk supply line (MLR)

An **automatic built-in cleaning system for milk supply line** flushes automatically the milk supply lines at a predefined interval after last dispensing of a milk product.



Note

**The cleaning system for milk supply line does not replace daily cleaning of the machine!**

## 6 Operation modes

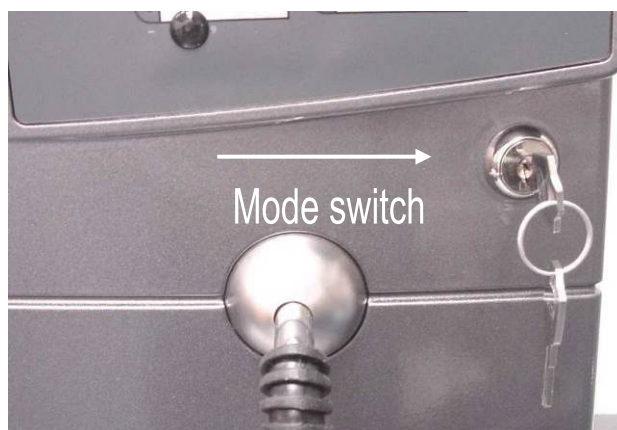
Mode is an operation mode of the machine. The machine behaves differently in every mode or has different functions.

The machine has 6 different modes; the modes 4 and 5 are available for the service technician only and protected by a PIN-code:

The actual mode is displayed when the key in mode switch is inserted and turned by  $\frac{1}{4}$  rotation in clockwise direction.

Mode	Meaning
0	Switched off / Standby
1	Normal operation
2	Registering / Slot operation
3	Programming
4	Reserved for Egro service technician
5	

### 6.1 Change mode



- Insert the key (vertically)
- Turn the key in clockwise direction by  $\frac{1}{4}$  rotation
- Press a relevant key (0, 1, 2, 3)
- Turn back the key in anticlockwise direction by  $\frac{1}{4}$  rotation

## Serie 70

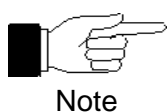
### 6.2 Modes 0 to 3

Boiler heating and display light is switched off. The machine is in standby mode			
Mode	Operation	What to do	Display messages
<b>0</b>	Switched off / Standby	Key in horizontal position	<b>Mode ...</b> (up-to-date mode)
		Press key 0:	<b>M_0: Standby</b>
		Key in vertical position	<b>Standby</b>

The machine is in normal operation mode.			
Mode	Operation	What to do	Display messages
<b>1</b>	Normal operation	Key in horizontal position	<b>Mode ...</b> (up-to-date mode)
		Press key 1:	<b>M_1: Normal</b>
		Key in vertical position	<b>12:34</b> (up-to-date clock time)

The machine is in pay – registering mode.			
Mode	Operation	What to do	Display message
<b>2</b>	Registering- / coin mode	Key in horizontal position	<b>Mode ...</b> (up-to-date mode)
		Press key 2:	<b>M_2:</b> (depending on the registering / coin device)
		Key in vertical position	(depending on the registering / coin device)

Programming mode: here the parameters can be changed or the counters read off.			
Mode	Operation	What to do	Display messages
<b>3</b>	Adjustments / Read off counters	Key in horizontal position	<b>Mode ...</b> (up-to-date mode)
		Press key 3:	<b>Products Total...</b>
		Key in vertical position	<b>12:34</b> (up-to-date clock time)



Turn back the key after finished adjustment or reading off!

Please refer to more precise notes on programming in chapter7 Programming.



## 7 Programming

In mode 3 (Programming) the following functions are available for the operator:

- Counter:
- Reading off the daily total data (pieces and amount)
  - Deleting daily total data
  - Reading off overall total (pieces and amount)



Note

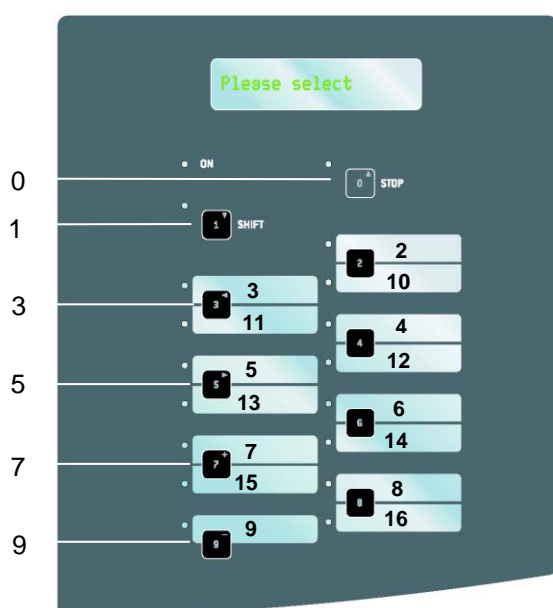
Deleting of counters cannot be undone!

- Adjustments:
- Switching between coffee - tea
  - Product price
  - Water volume (cup filling amount)
  - Grinded coffee amount
  - Milk or milk foam volume (applicable only provided that „Option“ Cappuccino is available)
  - Date and time.
  - Waiter pen assignment

### 7.1 Use of product keys for programming

In mode 3 (Programming) the key 0 (STOP as well as product keys 1, 3, 5, 7 and 9 are used for moving in menu tree and insertion of adjustments.

On the left of keys the symbols are located that refer to the functions of relevant keys in programming mode.



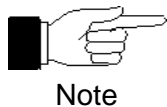
Meaning of product keys in programming mode

Key	Symbol	Function
0	↑	STOP: Cancelling, annulling, back to the next higher menu level
1	↓	ENTER: Confirmation of displayed value or access to the next lower menu level
3	←	Back to the previous parameter
5	→	To the next parameter
7	+	Raising the blinking value by one unit
9	-	Lowering the value of blinking value by one unit



## Serie 70

### 7.2 Adjustments



All procedures require selection of mode 3:  
Turn the key by ¼ rotation in clockwise direction, press key 3, **Daily total...** is displayed

- The following values (parameters) can be adjusted separately for every product. The product can be identified through product number that equals the key number. Products 1 to 9 are coffee, hot water, milk or milk products without shift (p.12). With shift 2 –16.
- In following examples the product number 4 is mentioned.
- Some parameters require different values for coffee and hot water. Such cases are referred to explicitly.



Changes in mode 3 will take effect only when the machine is in mode 1 (normal operation) or mode 2 (pay mode) (key in vertical position).

#### 7.2.1 Menu key programming coffee or tea

- **Menu:** Internal products
- **Parameter:** P.1 type (coffee or tea)
- **Function:** Here coffee or tea is programmed

Key		Display (example values)	Notes
➔	Press until	<b>Internal products</b>	Menu "Internal products" is reached
↓	Press	<u>P.1</u> type <b>Coffee</b>	Parameter ( <u>P.1</u> type) is for product 1: Product number blinks
+	Press 3 x	<u>P.4</u> type <b>Coffee</b>	"Type" for product 4
↓	Press	<b>P.4</b> type <u>Coffee</u>	Product type blinks and can be changed now, cursor moves from front to the back.
+/-	Press until	<b>P.4</b> type <u>Tea</u>	Desired product is reached
↓	Press	<u>P.4</u> type <b>Tea</b>	Desired product is saved
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: Turn back the key by ¼ rotation to return to normal operation.

### 7.2.2 Menu product price change

- **Menu:** Internal products
- **Parameter:** P.1 Price
- **Function:** Here the product price can be changed
- **Possible values:** 0,00 to 99,99

Key		Display (example values)	Notes
→	Press until	<b>Internal products</b>	Menu "Internal products" is reached
↓	Press	<b><u>P.1</u> type      Coffee</b>	Parameter "Type" for product 1: product number blinks
→	Press until	<b><u>P.1</u> price      3.20</b>	Parameter "Price" for product 1: product number blinks
+	Press 3 x	<b><u>P.4</u> price      3.20</b>	"Price" for product 4
↓	Press	<b>P.4 price      <u>3.20</u></b>	Product price blinks and can be changed now
+/-	Press until	<b>P.4 price      <u>3.60</u></b>	Desired price is reached
↓	Press	<b><u>P.4</u> price      3.60</b>	New price is saved
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

## Serie 70

### 7.2.3 Menu water volume change

- **Menu:** Internal products
- **Parameter:** FM-Imp.
- **Function:** Water volume (cup filling amount) can be changed here. The values are given in flow meter impulses. 100 FM pulses = ca 0,5 dl
- **Possible values:** 0 to 9999



Note

The cup filling volume can be changed only slightly. It is recommended to write down the original value before making any changes.

Key		Display (example values)	Notes
→	Press until	<b>Internal products</b>	Menu "Internal products" is reached
↓	Press	<b>P.1 type Coffee</b>	Parameter "Type" for product 1: product number blinks
→	Press until	<b>P.1 FM-Imp 200</b>	Submenu "FM-Impulse", Parameter for product 1. Product number blinks.
+	Press until	<b>P.4 FM-Imp 200</b>	"FM-Impulse" for product 4
↓	Press	<b>P.4 FM-Imp 200</b>	Number of impulses blinks and can be changed now
+/-	Press until	<b>P.4 FM-Imp 300</b>	The desired number of impulses is reached
↓	Press	<b>P.4 FM-Imp 300</b>	The new volume is saved
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: Turn back the key by ¼ rotation to return to normal operation.

### 7.2.4 Menu grinded coffee amount adjustment

#### Recommendation:

- One cup coffee or espresso = 8 to 10 grams
- Two cups of coffee or espresso = 14 to 16 grams



Note

The amount of grinded coffee can be changed only slightly. It is recommended to write down the original value before making any changes.

- **Menu:** Internal products
- **Parameter:** Gram
- **Function:** Amount of grinded coffee can be changed for every product separately. The values are presented in grams.
- **Possible values:** 0,1 – 16,0 g

Key		Display (example values)	Notes
→	Press until	<b>Internal products</b>	Menu „Internal products" is reached
↓	Press	<b><u>P.1</u> type      Coffee</b>	Parameter "Type" for product 1: product number blinks
→	Press until	<b>P.<u>1</u> gram      8.0</b>	Submenu "Gram", parameter for product 1. Product number blinks.
+	Press until	<b>P.<u>4</u> gram      8.0</b>	"Gram" for product 4
↓	Press	<b>P.4 gram      <u>8.0</u></b>	The number gram blinks and can be changed now
+/-	Press until	<b>P.4 gram      <u>8.5</u></b>	The desired number gram is reached
↓	Press	<b>P.<u>4</u> gram      8.5</b>	The new amount of grinded coffee is saved
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

### 7.2.5 Menu milk or milk foam volume adjustment

Applicable only when option „Cappuccino" is available.



Milk or milk foam volume can be changed only slightly. It is recommended to write down the original value before making any changes.

- **Menu:** Internal products
- **Parameter:** MilkTime
- **Function:** Milk or milk foam volume can be changed here.
- **Possible values:** 0.0 – 99.9 seconds  
0.0 by this value no milk foam is dispensed.  
0.1 pulse operation: Milk foam is dispensed as long as the relevant button is pressed.

Key		Display (Example values)	Notes
→	Press until	<b>Internal products</b>	Menu " Internal products" is reached
↓	Press	<b><u>P.1</u> type      Coffee</b>	Parameter "Type" for product 1: product number blinks
→	Press until	<b>P.<u>1</u> MilkTime    6.0</b>	Submenu "MilkTime", parameter for product 1. Product number blinks.
+	Press until	<b>P.<u>4</u> MilkTime    6.0</b>	"MilkTime" for product 4
↓	Press	<b>P.4 MilkTime    <u>6.0</u></b>	The number of seconds blinks and can be changed now
+/-	Press until	<b>P.4 MilkTime    <u>7.5</u></b>	The desired number of seconds is reached
↓	Press	<b>P.<u>4</u> MilkTime    7.5</b>	The new time is saved
<b>Stop</b>	Press until	<b>Daily total ...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

## Serie 70

### 7.2.6 Date and time adjustment

- **Menu:** Config 1
- **Parameter:** Time
- **Function:** Here the internal clock of the machine can be adjusted (year, date and time).
- **Possible values:** Date, time, hours and minutes

Key		Display (Example values)	Notes
➔	Press until	<b>Config 1</b>	Menu Config 1 is reached
↓	Press	<b>Time</b>	1. Submenu „Time“
↓	Press	<b>Year: 2003</b>	2. Submenu „Year“ is reached.
↓	Press until	<b>Year: <u>2003</u></b>	Year number blinks.
+/-	Press until	<b>Year: <u>2004</u></b>	Until the desired year number is reached
↓	Press	<b>Year: 2004</b>	Until the desired year number is saved.
➔	Press until	<b>Month: 04</b>	Parameter „Month“ is reached
Change: same procedure as by year, start with ↓			
➔	Press until	<b>Day: 09</b>	Parameter „Day“ is reached
Change: same procedure as by „Month“, start with ↓			
➔	Press until	<b>Hour: 11</b>	Parameter „Hour“ is reached
Change: same procedure as by „Day“, start with ↓			
➔	Press until	<b>Min.: 05</b>	Parameter „Minute“ is reached
Change: same procedure as by „Hour“, start with ↓			
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

### 7.2.6.1 Switching winter time – summer time example



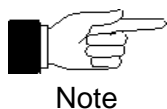
Note

This function is carried out for switching between summertime – wintertime.

Key		Display (Example values)	Notes
→	Press until	<b>Config 1</b>	Menu Config 1 is reached
↓	Press	<b>Time</b>	1. Submenu „Time“
↓	Press	<b>Year: 2003</b>	2. Submenu „Year“ is reached.
→	Press until	<b>Hour: 11</b>	Parameter „Hour“ is reached
↓	Press until	<b>Hour: <u>11</u></b>	Parameter „Hour“ blinks.
+/-	Adjust time	<b>Hour: <u>10</u></b>	The desired time is adjusted
↓	Press	<b><u>Hour:</u> 10</b>	The desired time is saved.
<b>Stop</b>	Press until	<b>Daily total ...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

## Serie 70

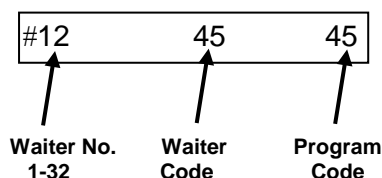
### 7.2.7 Programming waiter pens



This function is needed when using or making amendments waiter pens.

Turn the key by  $\frac{1}{4}$  rotation to the right, press key 3, **Daily total** is displayed

- **Menu:** Config 1
- **Parameter:** # 1
- **Function:** Here the waiter number (the number on the waiter pen) and the code of waiter pen can be inserted or amended. Programming is made for every single pen.
- **Possible values:**



Key		Display (Example values)	Notes
➔	Press until	<b>Config 1</b>	Menu Config 1 is reached
⬇	Press	<b>Time</b>	1. Submenu „Time“
➔	Press	<b># 1 0 0</b>	2. Submenu „Waiter pen“ is reached. Insert the waiter pen in the lock!
+/-	Press until	<b># 5 0 0</b>	On the left side the relevant waiter number is reached.
⬇	Press	<b># 5 5 0</b>	The number of program code blinks.
+/-	Press until	<b># 5 5 5</b>	Until the middle number of the waiter pen is reached.
⬇	Press	<b># 5 5 5</b>	The desired program code is saved.
Repeat the above procedure with every single waiter pen			
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: Turn back the key by $\frac{1}{4}$ rotation to return to normal operation.

### 7.3 Counters

- There are two integrated software counters in the machine. Both of them save number of items and total sum for every single product.
- The **daily counter** saves the number of items and the total sum for every day separately provided that it is reset after reading out. Operator can do this anytime: at the end of a day, once per week or at irregular intervals.
- The **total counter** is a permanent counter that can be reset (deleted) by a service technician only. Reading out the data of the total counter is possible anytime.
- When using **waiter pen** (when this option is available) the total sums of every single waiter pen are saved. These can be read out separately.

#### 7.3.1 Menu reading out daily counter

- **Menu:** Read out daily total
- **Parameter:** Daily total
- **Function:** Reading out daily total for every single product and in total is possible. The accumulated values (numbers of items and total sums) since last reset are displayed.

Key		Display (Example values)	Notes
		<b>DAILY TOTAL...</b>	Menu „ <b>Daily total</b> “ is displayed
↓	Press	<b>TTS K. 184</b>	Total number of items coffee
→	Press	<b>TTS T. 56</b>	Total number of items tea
→	Press	<b>TTS I. * 240</b>	Total number of pieces all products
+	Press until	<b>TTS I.7 8</b>	Desired product number (e.g. product 7) is displayed. Number of items of product 7 is displayed.
Repeat the described procedure for every single product.			
→	Press	<b>TTB K. 662.40</b>	Total sum coffee
→	Press	<b>TTB T. 163.40</b>	Total sum tea
→	Press	<b>TTB I. * 825.80</b>	Total sum all products
+	Press until	<b>TTB I.7 25.80</b>	Desired product number (e.g. product No 7) is displayed. Total sum of product 7 is displayed.
Repeat the described procedure for every single product.			
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.



## Serie 70

### 7.3.1.1 Reading out and deleting daily sums of waiter pens

Key		Display (Example values)	Notes
		<b>DAILY TOTAL...</b>	Menu „ <b>Daily total...</b> “ is displayed
↓	Press	<b>TTS K. 184</b>	Total number of items coffee
→	Press until	<b># 1 TOT 5 0.00</b>	Displayed sum waiter No 1
+ / -	Press until	<b># 5 TOT 5 0.00</b>	Desired waiter No (e.g. No 5) is displayed
Repeat the described procedure for every single waiter pen. After that delete the sums of waiter pens in order to be able to read out actual daily sums.			
→	Press	<b>Waiter.T.delete?</b>	Confirm
↓	Press	<b>Waiter.T.delete?</b>	Daily counters are deleted.
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

### 7.3.2 Menu deleting daily counters

- **Menu:** Daily total
- **Parameter:** Delete product total
- **Function:** Resetting product total. A new period is started.

Key		Display (Example values)	Notes
		<b>Daily total ...</b>	Menu „ <b>Daily total...</b> “ is reached
↓	Press	<b>TTS K. 184</b>	Submenu "Read out daily total"
→	Press until	<b>TT delete ...</b>	Submenu "Delete daily total" is reached
↓	Press	<b>TT delete?</b>	Confirm
↓	Press	<b>TT deleted</b>	Daily counters are deleted.
<b>Stop</b>	Press until	<b>Daily total...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

### 7.3.3 Menu reading out total counter

- **Menu:** Read out daily total
- **Parameter:** Overall total
- **Function:** Reading out overall total for every single product and all together.  
The accumulated values (number of items and sums) are displayed.

Key		Display (Example values)	Notes
		<b>Daily total ...</b>	Menu „Daily total...“ is reached
➔	Press	<b>Overall total</b>	Menu „Overall total“ is reached
⬇	Press	<b>GTS K.            3520</b>	Total number of items coffee
➔	Press	<b>GTS T.            489</b>	Total number of items tea
➔	Press until	<b>GTS I. *        4009</b>	Total number of pieces all products
+	Press until	<b>GTS I.7        259</b>	Desired product number (e.g. product No 7) is displayed. Number of items of displayed product No 7 is displayed.
Repeat the described procedure for every single product.			
➔	Press	<b>GTB K.        13595.20</b>	Total sum coffee
➔	Press	<b>GTB T.        1418.10</b>	Total sum tea
➔	Press	<b>GTB I. *       15013.30</b>	Total sum all product
+	Press until	<b>GTB I.7       2789.10</b>	The desired product number (e.g. product No7) is displayed. Total sum for product No 7 is displayed.
Repeat the described procedure for every single product.			
<b>Stop</b>	Press until	<b>Daily total ...</b>	Leaving: turn back the key by ¼ rotation to return to normal operation.

## Serie 70

# 8 Maintenance

In order to meet the hygiene requirements of the coffee machine as well as the food regulation the Swiss Egro Series 70 must be cleaned in accordance with the following instruction.

## 8.1 Daily cleaning

The daily cleaning comprises following items:

- Coffee cleaning
- Milk cleaning
- Cleaning of cappuccino nozzles
- Bean container
- Waste container
- Drip grid
- Drip tray
- Housing
- Cooling device

## 8.2 Cleaning demand

The coffee machine Swiss Egro Series 70 requires from its operator daily cleaning provided that the automatic cleaning demand is active. This demand occurs every 24 h if a coffee or milk product has been obtained. You can determine the time after consultation with an Egro service technician. One hour prior to the adjusted time the request **Coffee + Milk Cleaning** is displayed. Now you have one hour to carry out this procedure. After expiry of this time limit the products will be disabled and can be obtained again after cleaning. This cleaning request can be supported by an acoustic message.

### Recommendation:

We recommend to set the cleaning time to 30 minutes prior to end of operation.

### **E.g. End of operation 24.00 o'clock, cleaning time 23.30 o'clock**

The cleaning request will be made at 23.30 o'clock. Now you have time, without cancelling operation, to carry out cleaning directly before the end of operation.

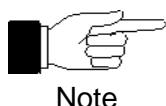
If cleaning is not carried out due to lack of time it should be made in the morning, otherwise no products will be dispensed.

### 8.3 Automatic cleaning program:

Swiss Egro Series 70 has following cleaning programs:

- 0: Cleaning stop                      stops the cleaning menu
- 1: Milk cleaning                      starts milk cleaning
- 2: Coffee cleaning                      starts coffee cleaning
- 3: Autom. Flushing                      starts automatic flushing of milk supply lines
- 4: Milk & Coffee                      starts milk and coffee cleaning simultaneously

The menu items are displayed one after the other. Selection can be made with a relevant key, e.g. the key 4 starts simultaneous milk and coffee cleaning.



If a cleaning process is cancelled by switching off the machine or by stop key the cleaning process will be repeated after restart. This guarantees that there will remain no cleaning agents in the machine that could degrade the quality of products.

#### 8.3.1 Automatic coffee cleaning program Swiss Egro Series 70

For cleaning the inside of coffee machine (brewing chamber, sieves, hoses) an automatic cleaning program is used. The cleaning tablet is inserted in the manual dosage flap.



The automatic coffee cleaning program must be activated once a day at the minimum. For cleaning Egro cleaning tablets can be used only

#### Procedure:

The cleaning program is activated through the stop key. Depending on the model the procedure differs slightly. For machines with only one brewing chamber one cleaning tablet is needed. Demand for another cleaning tablet becomes inapplicable.

	Key		Display	Notes
1	<b>Stop</b>	Press for 5 sec	<b>Cleaning 0: Stop</b> <b>1: Milk cleaning</b> <b>2: Coffee cleaning</b> <b>3: Autom. Flushing</b> <b>4: Milk &amp; Coffee</b>	Selection through relevant key: Key 1 = Milk cleaning program Key 2 = Coffee cleaning program Key 3 = Autom. Milk cleaning system (MSL) Key 4 = Milk & Coffee cleaning program
2	<b>2</b>	Press	<b>Insert 1 cl. tab.</b>	Request to insert the first cleaning tablet.
3	<b>Stop</b>	Press	<b>Insert 2 cl. tab.</b>	Request to insert the second cleaning tablet.
4	<b>Stop</b>	Press	<b>Cleaning</b>	The automatic cleaning program is active. Duration: approx. 5 minutes.
5			<b>12:34</b>	Cleaning completed. The time is displayed; the machine is ready for operation.

## Serie 70

### 8.3.2 Automatic milk cleaning

Components in contact with milk must be cleaned once a day at the minimum. During the flushing program **no other functions of the machine can be activated**. The cleaning program with cleaning agent cleans the milk supply lines such as pumps and hoses.

### 8.3.3 Procedure

The cleaning program is activated through the stop key.

	Key		Display	Notes
1	<b>Stop</b>	Press for 5 sec	<b>Cleaning 0: Stop</b> <b>1: Milk cleaning</b> <b>2: Coffee cleaning</b> <b>3: Autom. Flushing</b> <b>4: Milk &amp; Coffee</b>	Selection through relevant key: Key 1 = Milk cleaning program Key 2 = Coffee cleaning program Key 3 = Autom. Milk cleaning system (MSL) Key 4 = Milk & Coffee cleaning program
2	<b>1</b>	Press	<b>Cleaning agent</b>	Immerse the milk hose in the container filled with cleaning agent.
3	<b>Stop</b>	Press	<b>Cleaning 99</b>	Cleaning is active until the displayed value is zero.
4			<b>Fresh water</b>	Fill in fresh water in the container and immerse the milk hose in it.
5	<b>Stop</b>	Press	<b>Flushing 99</b>	Flushing is active until the displayed value is zero.
6			<b>12:34</b>	Cleaning and flushing is stopped. Time is displayed. Machine is ready for operation.

Depending on the model the procedure differs slightly. For machines with only one brewing chamber one cleaning tablet is needed. Demand for another cleaning tablet becomes inapplicable.

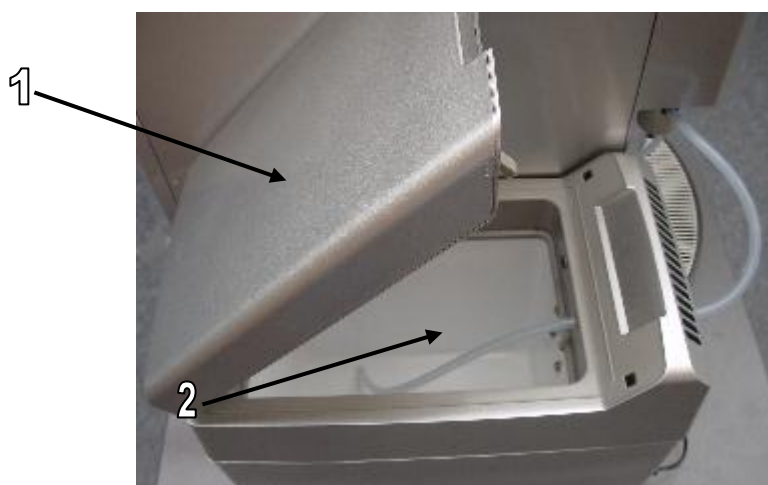
### 8.3.3.1 Cooling box KB 3

1. Prepare the cleaning agent as directed in instructions on the package.
2. Open the cooling box cover (1)
3. Remove the suction hoses (2) from the milk container. Beware of milk splashes!
4. Clean the milk container with cleaning agent and rinse thoroughly with warm water.
5. Place the container with the prepared cleaning agent in the cooling box.
6. Immerse the milk suction hose in the container with the cleaning agent.
7. Close the cooling box. The suction hose must not be folded.
8. Use the keyboard on the coffee machine to start the cleaning program.



Note

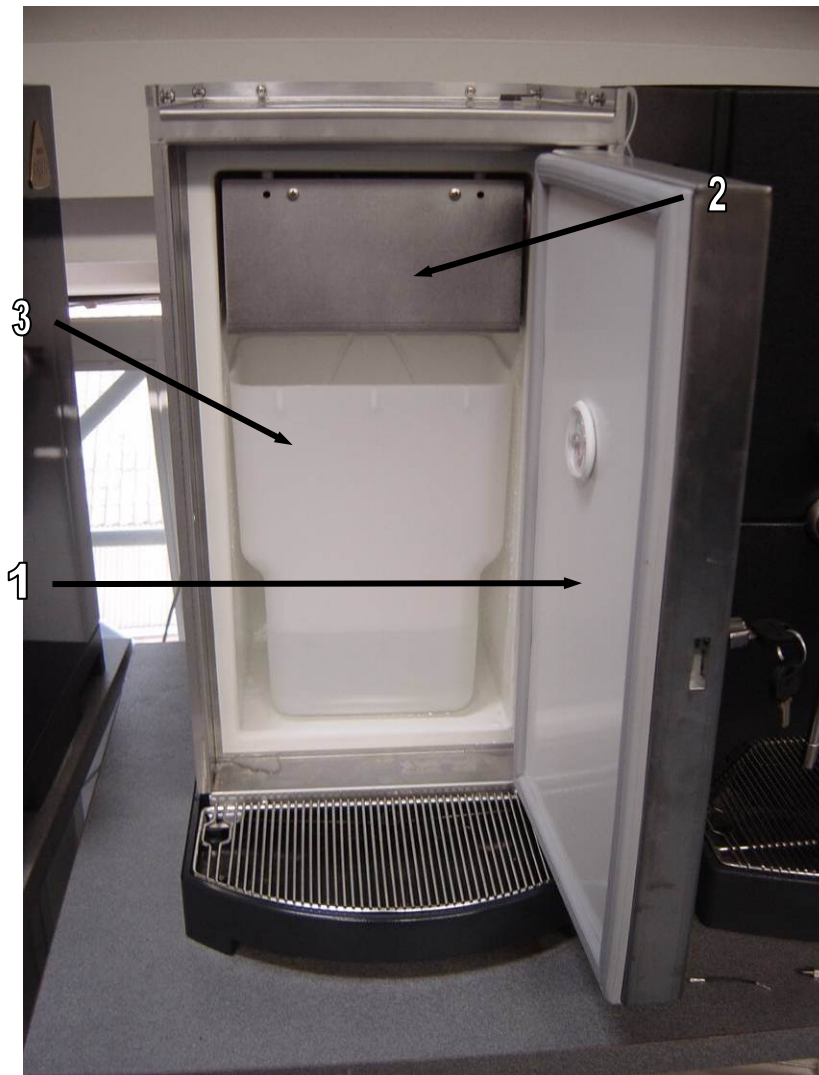
No fluids must be poured directly into the cooling box.



## Serie 70

### 8.3.3.2 Refrigerator KS7

1. Prepare the cleaning agent as directed in instructions on the package.
2. Open the door of the refrigerator (1)
3. Remove the milk container (3). Beware of milk splashes!
4. Clean the milk container with cleaning agent and rinse thoroughly with warm water.
5. Place the container with the prepared cleaning agent in the refrigerator.
6. Immerse all milk suction hoses in the container with the cleaning agent.
7. Close the doors of the refrigerator.
8. Use the keyboard on the coffee machine to start the cleaning program.



### 8.3.4 Manual cleaning of cappuccino heads

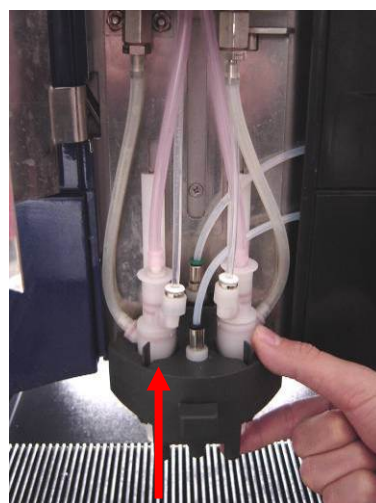
1. Turn the key
2. Open the front cover



3. Pull the bottom front cover forward and then upward to remove it.



4. Push the foam heads from beneath up through the coffee delivery spouts and free them from the delivery assembly

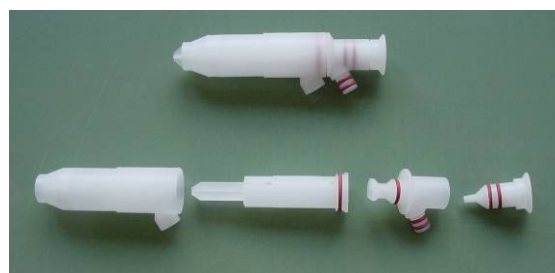




5. Remove the flexible tubing and take apart the foam heads

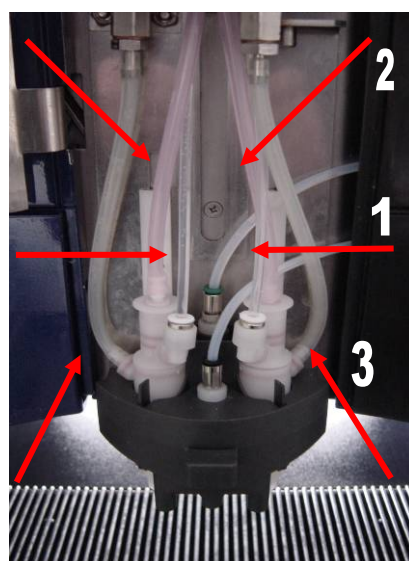


6. Take the foam heads apart as shown and put them into the cleaning detergent, wash them and rinse them thoroughly with hot water (all parts are dish washer resistant)



7. Place back the milk dispensing nozzles in the dispensing holder and connect the milk and steam hoses as shown in the picture

8. 1. Steam hose  
2. Milk hose  
3. Air hose



### 8.3.5 Manual cleaning of milk suction hoses and cooling units

External panels, drip grid and drip tray as well as the cooling box with container can be cleaned with regular cleaning agents.



Note

Storage and dispensing of milk sets highest requirements to hygiene. A first-class quality of drinks can only be achieved when strict cleanliness is kept.

**The device must be cleaned on a daily basis!**



Attention

**The device must never be immersed in water! Do not clean by a water hose, pressure air or steam!**

Damages to the machine, danger of electric shock or short circuit is possible when installing the machine.

### 8.3.6 Cleaning of bean container

Due to hygiene requirements the bean container and the cover must be cleaned with a regular cleaning agent inside and outside on a daily basis.



Note

No solvents, acidic or scraping agents must be used!

### 8.3.7 Cleaning of waste container, drip grid and drip tray

Due to hygiene requirements the waste container, drip grid and drip tray must be thoroughly cleaned several times a day with a regular cleaning agent.

First of all the milk residues should be fully removed from drip grid and drip tray.



Note

No solvents, acidic or scraping agents must be used!

### 8.3.8 Cleaning of housing

Due to hygiene requirements the housing must be cleaned once a day with a regular cleaning agent.



Note

No solvents, acidic or scraping agents must be used!

## Serie 70

### 9 Service-messages

The following display messages refer to maintenance activities.

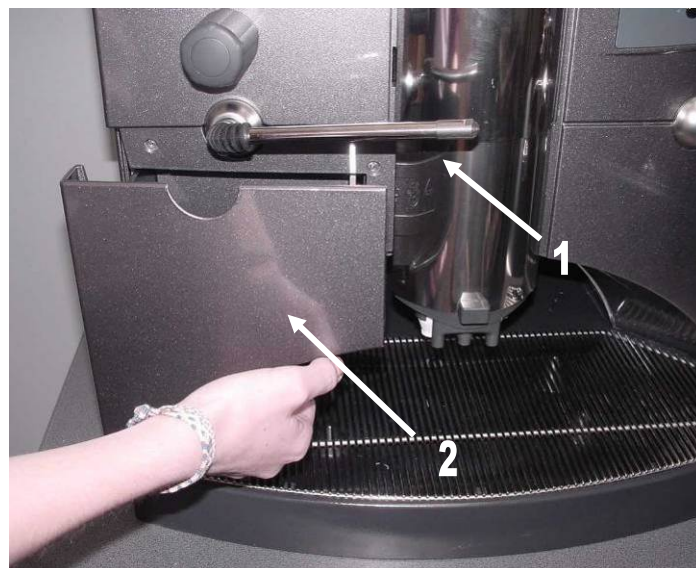
#### 9.1 Display message waste container full

The waste container is full. Therefore, all coffee functions are disabled temporarily. Empty and clean the waste container. When pulling out the waste container **Container 5** is displayed. The number is counted backwards by seconds. After successful counting the message **Container full** is reset. The message **No container** is displayed.

**The waste container can be inserted only if emptied (danger of congestion).**

After the waste container is put back the message is deleted. The coffee functions are enabled again. This message does not apply for machines with an integrated waste removal.

##### 9.1.1 Removal of waste container



1. Turn the steam dispenser by 90° ↶ to the left or to the right (steam dispensing is disabled)
2. Pull out the waste container and empty, clean and put back the container.



Danger

The steam dispenser may be hot if steam has been dispensed previously.

**Danger of scalding!**

## **9.2 Display message water service**

Possibly the Egro service technician has programmed the maximum water volume that is in accordance with the usage time of softening device. If it is so the message **Water service** is displayed when switching on the coffee machine and until obtaining the first drink. Please inform your Egro service centre.

This message has no impact to the functions of the machine and will be displayed until the service technician resets it.

## **9.3 Display message Coffee service**

Possibly the Egro service technician has programmed a maximum number of brewing cycles that is in accordance with the intervals for maintenance of brewing chambers. If it is so the message **Coffee service** is displayed when switching on the machine and until obtaining the first drink. Please inform your Egro service centre.

This message has no impact to the functions of the machine and will be displayed until the service technician resets it.

## Serie 70

### 10 What to do when...

Often malfunction is connected external reasons. Check your machine on the basis of the list below before contacting the Egro customer service.

When...	Check whether...
<ul style="list-style-type: none"> <li>nothing is functioning anymore</li> </ul>	⇒ the power supply is functioning ⇒ the fuses are in order ⇒ the power plug is inserted correctly ⇒ the main switch is switched on
<ul style="list-style-type: none"> <li>instead of coffee hot water is dispensed only</li> <li>no coffee products are functioning</li> </ul>	⇒ the bean containers are filled ⇒ the sliders of bean container are open
<ul style="list-style-type: none"> <li>instead of milk foam only steam is dispensed</li> </ul>	⇒ the milk container is not empty ⇒ the milk hose is fully immersed in the milk container ⇒ the milk foam nozzle is not dirty d (cleaning according to the instruction)
<ul style="list-style-type: none"> <li>the message <b>Water check</b> is displayed for a short time</li> </ul>	⇒ the stopcock of water supply is open ⇒ there is no obstacle in the water supply of the house ⇒ the malfunction message is still displayed when you switch off and on the machine from the main switch
<ul style="list-style-type: none"> <li>the green LED next to the stop key blinks and the following message is displayed</li> <li>Error ** (*a number)</li> </ul>	⇒ The stopcock of water supply is open ⇒ there is no obstacle in the water supply of the house ⇒ the malfunction message is still displayed when you switch off and on the machine from the main switch

If the malfunction cannot be removed write down the **Error\*\*** number and contact the Egro customer service.



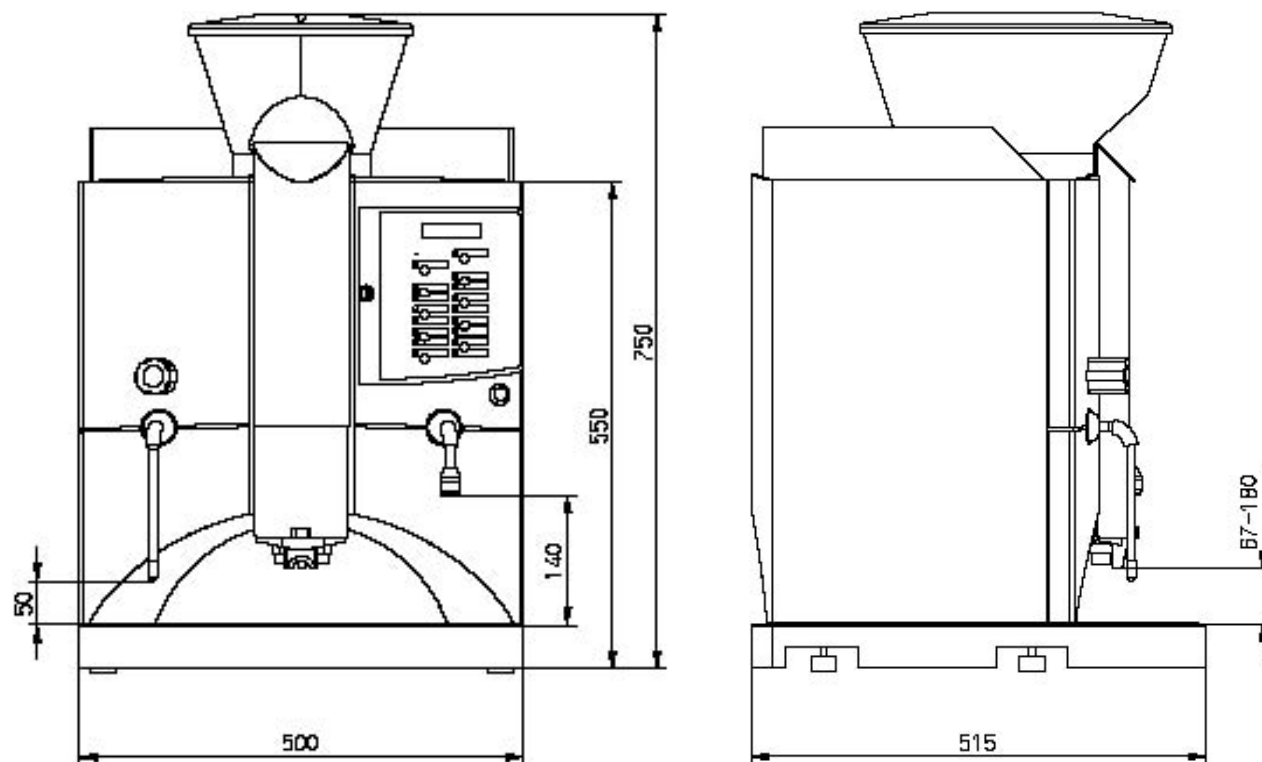
Danger

Do not open the machine! There are no components inside the machine that can be adjusted by the user.

**Danger of life through electric shock, scalding and squeezing danger!**

## 11 Technical data

### 11.1 Dimensions



### 11.2 Weight and working temperature

Swiss Egro Series 70	70xx	70xxP	Refrigerator
Weight (empty)	57 kg	57 kg	25 kg
Ambient temperature during operation	+5 bis +35°C		

### 11.3 Noise level of the appliance

The A-weighted sound pressure level is below 70 dB (A)

### 11.4 Boiler Data

Swiss Egro Series 70	Boiler No. 1	Boiler No. 2	*Boiler No. 3
Heating Power	3000 W	3000 W	3000 W
Working Pressure	9.5bar / 950 kPa	9.5bar / 950 kPa	1.4bar / 140 kPa
Security Valve	11bar / 1100 kPa	11bar / 1100 kPa	3bar / 300 kPa
Test Pressure	24bar / 2400 kPa	24bar / 2400 kPa	24bar / 2400 kPa
Working Temperature	95°C	95°C	125°C
Total Capacity	1 l	1 l	1 l
Boiler No. 3 only in the models of Series 70 P			

## Serie 70

### 11.5 Connection values

Swiss Egro Series 70	70xx	70xxP	Refrigerator
Power supply	230V~ 50 – 60 Hz	400V 3N~ 50 – 60 Hz	230V~ 50 – 60 Hz
Fuse protection	16 A	16 A	10 A
Nominal power	3,7 kW	9,7 kW	0,1 kW

### 11.6 Performance data

Swiss Egro Series 70	70xx	70xxP
Content bean glass	2 x 1.25 kg	2 x 1.25 kg
Capacity coffee (100 ml)	210 c/h	210 c/h
Capacity espresso (40 ml)	300c/h	300 c/h
Hot water	30 l/h	55 l/h
Coffee-milk drinks (100 ml)	160 c/h	270 c/h
Latte Macchiato (300 ml)	70 c/h	120 c/h

### 11.7 Water connection

Min. pressure of flow	1 bar (15 PSI) 100 kPa
Max. static pressure	4 bar (58 PSI) 400 kPa
Min. flow rate	5 l/min

## 12 Installation and commissioning



Danger

Installation and startup must only be carried out by an Egro service technician or trained Egro representative with due regard to all local installation regulations.

### 12.1 Installation

- The Swiss Egro Series 70 must not be installed rooms where water hose or high pressure cleaning equipment is used!
- The distance between the Swiss Egro Series 70 and the nearest wall must be at least 4 cm (air circulation). There must be sufficient space left above the machine to allow the bean hoppers to be filled.
- Do not install near heat sources, keep enough distance (heat distortion from coverings of devices).
- Do not close louvers!
- Place the Swiss Egro Series 70 on a stable basis! Screw feet can adjust unevenness.
- Make water supply connections
- A water supply faucet and a non-return valve must be fitted, readily accessible, at the front end (building side) of the water supply tube.
- Should the water supply tube need to be lengthened, a neutrally coloured web wound pressure tube must be used. The internal diameter of the extension tube must not be smaller than the one supplied on machine.
- The tubes must be rinsed out before being connected so that no dirt particles get into the Swiss Egro Series 70.
- It is forbidden to use an old water mains hose as spare part. If water mains hose needs to be replaced, a brand new hose shall be used.
- Test all connections for leaks.

### 12.2 Water preparation



Note

By water hardness of more 5°dKH or. 9°fKH (German or French carbonate hardness degree) water softener must be used. After water softener the residual hardness of water should be approx 5° dKH or 9°fKH.



Note

Water softeners regenerated by cooking salt are not suitable for coffee machines with steam boiler! Especially connection of such machines to house water softening device should be avoided.



Attention

**No warranty will be assumed for water leading components if these instructions are not followed.**



## **Serie 70**

### **12.3 Connection of water drain**

- The drain hose should slope towards drain.
- The supply and drain hoses must not be deviated or squeezed.

### **12.4 Electrical connection**

- A qualified electrician must make all electrical connections.
- An electrical switch (mains switch) and / or an electrical socket must be connected, and readily accessible, near the machine.
- The electrical mains switch must isolate the Swiss Egro Series 70 completely from the electrical mains supply. The gap between the contacts must be at least 3mm.
- For the electricity supply, the data listed on the type plate must be carefully consulted!
- If the electrical supply cables to the machine are damaged the manufacturer or his service personnel, or an authorized electrician, to avoid any danger, must replace them.

## 13 Consumable supplies



Note

Spare parts and reparation works are delivered and carried out by your Egro service technician only. Consumable supplies can be directly ordered on the basis of the list below. Always indicate the order number!

Article	Order No.
Coffee cleaning tablets (box à 100 pcs)	005990
Cleaning Liquid (Milkclean)	055452
Milk foam head	100064.001
Bean container	039325
Cover for bean container	039083
Dosage spoon 8g	004775



Attention

**Egro Suisse AG original spare parts must be used only.**



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## Contacts

### *Ansprechpartner*

### *Contacts*

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