

OPERATIONAL BOOK





MODELS:

- MW EKO 1
- MW EKO 1 LR
- MW EKO 2
- MW STD 2
- MW STD 3
- MW STD 4



THE MACHINE WORKS WITH HIGH TEMPERATURE WATER. TO INSERT OR REMOVE THE UTENSILS FROM THE TANK DURING THE OPERATING CYCLE, WEAR SUITABLE PROTECTIVE EQUIPMENT (GLOVES AND GLASSES) TO AVOID BURNS.

IT IS COMPULSORY TO HAVE WATER IN THE TANK BEFORE TURNING ON THE MACHINE (ON / OFF button)

THE MACHINE COMES OUT OF THE MANUFACTURER WITH THE PARAMETERS OF TEMPERATURE AND DURATION ALREADY PROGRAMMED AND SET





INDEX

1	STARTING UP THE MACHINE	3
1.1	SYSTEM PREPARATION	
	START-UP	
	1.2.1 START UP FOR MODEL EKO	
	1.2.2 START UP FOR MODEL STD	
1.3	MULTIWASH USE	
	END OF WASHING CYCLE	
2	PROGRAMMING THE MULTI WASH EKO SYSTEM	8
2.1	USER INTERFACE	8
	DISPLAY ICONS	
	SYSTEM PROGRAMMING	
2.0	2.3.1 OPERATION	

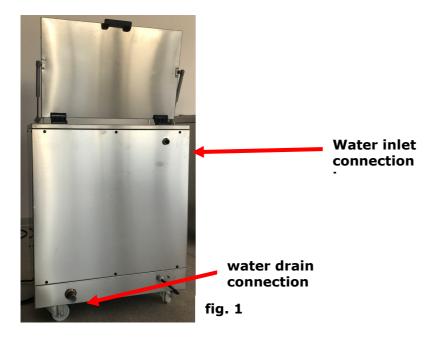
2.3.2 DISPLAY AND WASHING CYCLE MODIFICATION	
2.3.3 END OF PROGRAM AND WATER DRAIN MANAGEMENT	
2.3.3.1 Water drain in presence of the optional accessory 'dain pump'	11
2.3.4 LACK OF VOLTAGE	11
2.3.5 SIGNALS AND ALARMS	
2.3.5.1 High temperature controller	



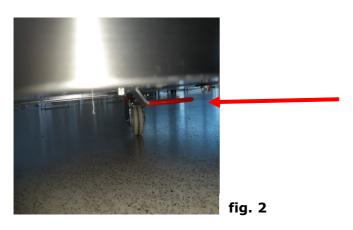


1.1 SYSTEM PREPARATION

A - Connect the water supply and drain (to the ground). (fig. 1)



- **B** Connect to the single phase mains
- C Check that the unloading handle, located under the machine, is in the "closed" (fig. 2)





1.2 STARTING THE MACHINE

1.2.1 START UP MODEL EKO

1 Put the water in the tank, opening the tap of the water network connected to the machine. Fill the tank up to the recommended level 2 cm below the overflow hole. (see fig. 3)



fig. 3

2 Press ON/OFF button to switch on the machine. (see fig. 4)





3 Press button 0 to turn on the display and activate water heating up to 75 °C. The water heating starts automatically by activating the display and the temperature to be reached is already pre-set. There are therefore no other buttons to click.

The flashing of the GREEN LED indicates the heating phase. (see fig. 5)

The GREEN LED turning off indicates the end of the water-heating phase.

The waiting time varies depending on the machine model from a minimum of 2 hours to a maximum of 6 hours.





4 When the water temperature is reached, the detergent can be poured into the tank. The amount of product needed by the system varies by model:

MW EKO 1:	2 cartons of 2 kg
MW EKO 1 LR:	2 cartons of 2 kg
MW EKO 2:	3 cartons of 2 kg



The detergent has to be inserted by pouring one box at a time and waiting 15 minutes from each other.

The detergent must be poured by spreading it slowly inside the tub along the perimeter and at the end of the pouring it is recommended to raise and lower the basket a couple of times.

5 Now the system is running, you do not have to touch any buttons, just turn the system on or off.

1.2.2 START-UP FOR STD MODEL

- 1. Open the tap of the water network connected to the machine.
- 2. Press the ON / OFF button to power up the machine (see fig. 4

1.2.2 START – UP MODEL STD

- 1. Open the tap of the water network connected to the machine.
- 2. Press button ON/OFF to power the unit (see fig. 4)



3. Press button to turn on the display. The water filling in the tank will start automatically and will always stop automatically thanks to the internal level switch.



Once the water has reached the recommended level, the heating element and the recirculation pump will be activated, always autonomously without the need to press other buttons. The water heating will stop when the preset temperature of 75 $^{\circ}$ C is reached.

The heating phase is indicated by the flashing of the GREEN LED. (see fig. 5) The end of the water heating phase is indicated by the GREEN LED turning off. The waiting time varies depending on the machine model from a minimum of 2 hours to a maximum of 6 hours



4. When the water temperature is reached, the detergent can be poured into the tank. The amount of product needed by the system varies by model::

MW STD 2:	2 cartons of 2 kg
MW STD 3:	4 cartons of 2 kg
MW STD 4:	4 cartons of 2 kg



The detergent has to be inserted by pouring one box at a time and waiting 15 minutes from each other.

The detergent must be poured by spreading it slowly inside the tub along the perimeter and at the end of the pouring it is recommended to raise and lower the basket a couple of times

5. Now the system is running, you will not have to touch any buttons, turn the system off or on.

1.3 MULTI WASH USE

- Remove food residues from utensils before immersing them in the System
- Soak the materials
- Variable immersion time based on the type of encrustation
- Take out the materials
- Rinse under running water with the necessary pressure to remove the emulsified residues



IT

Rev.: 00 / 11 - 2020

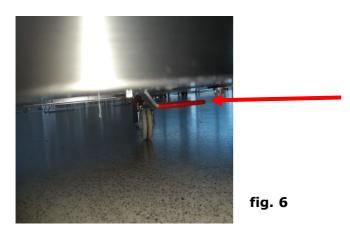
1.4 END OF WASHING CYCLE

N.B. The washing operating cycle set by default on the machine is 14 days but this parameter can be modified as desired between 14 - 21 - 28 days.

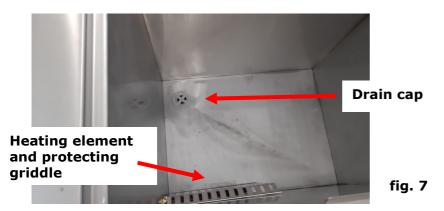
The end of the washing cycle will be signaled by the appearance of the message "END" on the display, whether the control unit is switched on (ON) or off (OFF).

At the end of the washing cycle switch if off by pressing on

- 1. Remove power to the system by turning to OFF the button ON/OFF.
- 2. Open the drain handle under the machine. (see fig. 6)



Start now the manual cleaning : use the little shower (optional) to wash away the inner part of the tank by residual food. Take out the basket and the drain cap to wash them separately. (see fig. 7) Clean the inner tank and the heating element as well as the protecting griddle.



At the end of this operation mount back the drain cap, basket and close the manual handle below the machine. Now the unit is ready to start a new washing cycle.



By switching on the display, heating elements will activate the water heating





Before pressing button U make sure water is loaded in the tank and reaching

IT

2. Setting system MULTI WASH EKO

2.1 **INTERFACE OPERATOR**



SWITCH ON - OFF (STAND-BY) Ø RESET Þ PROGRAMS °C SET POINT TEMPERATURE DECREASE





2.2 ICONS DIPLAY

SYMBOL	NAME
°C	°C
۴	°F
GREEN LED	Heating
RED LED	Power Failure
Timer	Icon Timer

GREEN LED ON during heating. Flashing during working set-point modification OFF with achieved set-point.

RED LED

Flashing in case of power failure

Button ON/STAND-BY

With OFF: single pressure puts ON the controller *With ON:* single pressure puts STAND-BY the controller.

Button INCREASE

With ON: single pressure let you increase of one unit the value of the active field Extended pressure let you increase quickly the active field value

Button DECREASE

With ON: single pressure let you decrease of one unit the active field value Extended pressure let you decrease quickly the active field value

SET POINT TEMPERATURE BUTTON

With ON: single pressure let you enable set-point temperature modification *With STAND-BY*: works only if simultaneously pressed DECREASE button to enter into configuration settings

PROGRAMMS button

With ON: single pressure let you enable the program in use display and modification *With* OFF: its pressure let you display the program in use

RESET Button

With ON or OFF and washing program ended: single pressure let you enable machine recovery functioning. With ON or OFF and program in use still working: its pressure gives no effects. IT





2.3 SYSTEM SCHEDULE

Procedure to SCHEDULE MULTI WASH EKO.

We remind the unit comes out the factory with recorded setting to let end use operate immediately. During the installation, it is not necessary to set any parameters unless needed to vary days and working cycle.

SETTED SCHEDULE :

working temperature : 75°C working cycle : 28 days .

2.3.1 FUNCTIONING

Unit can be in 2 positions :

- OFF adjustments are not enabled
- ON adjustment is enabled

When the controller is ON:

- pressure of TEMPERATURE SETPOINT button let you enable the modification for working set point.
- pressure RESET button enable the reset procedure for the functioning time.
- pressure PROGRAMS button enable the possibility to choose the program schedule.
- pressure ON/OFF button puts on stand by the control and the thermoregulation is disabled.

With controller powered (no matters if ON or OFF):

• the count of ignition time is always active and the icon Timer is on.

To switch on Multi Wash by pressing button ON

You will have on display the temperature the probe is detecting in that precise moment and the flashing green led.

We remind working temperature has been already set, by default, at 75 $^\circ\!\!\mathrm{C}.$

Once the probe will detect to have achieved the temperature set point, green led will end to flash.



2.3.2 DISPLAY AND MODIFICATION SCHEDULE OF WASHING CYCLE

With controller ON, press two times on button PROGRAMS to enable the schedule modification. It displays days of the program in use, equivalent to 28 days.

Press on button OINCREASE or ODECREASE to modify, at choice, 14 or 21 days (depending by quantity and intensive use of the machine, differing from customer to customer)

Confirm the selected days by pressing again button PROGRAMS.

Note 1: programs are 3 and you can display according to lasting

Note 2: if changing program in use the days counting will not reset but starts since the same day the modification is done (for ex. if I make the modification on the 6th day, new counter starts from the 6th day and not from the 1st)

2.3.3 WATER DRAIN AND END OF PROGRAM RUN

At the end of the working program (no matters if controller ON or OFF), it displays label "END". All the output are disabled and icon "TIMER" will flash.

To recover the working, press button O RESET. Confirm by pressing again button O RESET. After 5 seconds, it displays all what previously set before RESET.

Water drain with optional "drain pump" 2.3.3.1

If the unit is equipped with drain pump (optional to be expressly ordered)

At the end of the working program (no matters if controller is ON or OFF), it displays label "END". All outputs are disabled and icon "TIMER" will flash.

To recover the functioning, press button ORESET. Confirm by pressing again button RESET.



Now the drain pump is activated and it displays label "DRN" (drain). Pump will work for 6 minutes. At the end of 6 minutes (or by pressing button ON/STD-BY), it displays programs days and counter is started.

Icon "Timer" will light on and keep steady.

After 5 seconds, it displays all what previously set before RESET

2.3.4 POWER FAILURE

After a power failure the controller returns to the same position it was. RED LED will flash until the pressure of any button.

Counting, if active, will start since last memorized value.

2.3.5 ALARMS AND SIGNALS

STRING	CAUSE	CONSEQUENCE
	High Temperature Controller	Output disable





Each alarm will have acoustic buzzer (a beep of three seconds every 10). The pressure of any button cannot silence buzzer.

2.3.5.1 High Temperature Controller

High temperature controller alarm is enabled with parameter P5. You have this when controller probe a detects a higher temperature in comparison to parameter P6. It displays a flashing label "H-t". All outputs get disabled. The acoustic buzzer will last 3 seconds every 10. Pressure button DECREASE let you display controller temperature value. At the end of the alarm the control starts to work from the point it was stopped.





ZERNIKE S.R.L.

Via del Progresso, 15 47030- San Mauro Pascoli (FC) - Italy Telephone:+39 0541 810270 FAX:+39 0541 937456 E-mail: <u>export@zernike.it</u>