Instructions manual

Automatic mini turntable with the multifunction bottling, pumping and creaming machine

Przedsiębiorstwo Pszczelarskie Łysoń
Spółka z o.o.
34-124 Klecza Górna, st.Pszczela 2, Poland
www.lyson.eu, e-mail; lyson@lyson.com.pl
Tel. +48 33/875-99-40, +48 33/870-64-02

The manual covers following devices (codes):

W204013

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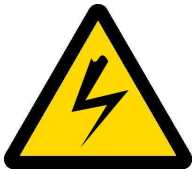
1. General safety instructions

Before first use read the manual carefully and follow the instructions contained therein. The manufacturer is not liable for damage caused by equipment used inappropriately or by incorrect handling.

1.1. Intended use

1. The device is designed to automatically fill the honey into the jars.
2. Before first use and after finishing work the equipment must be thoroughly cleaned and dried. Use cleaning agents approved for food industry.



1.2. Electrical safety

1. The electrical supply system must be fitted with a residual-current circuit breaker with rated tripping current not higher than 30mA. Performance of the circuit breaker should be checked periodically**.**
2. Do not use the device if the power cord is damaged!
3. Make sure that the main switch is in „0" position before plugging the unit in.
4. Carefully insert the plug into the mains socket. Make sure your hands and the floor surface in the room are dry!
5. Do not move the working device.
6. Protect the motor and the control unit from moisture (also during storage).
7. Do not pull the power cord.
Keep the power cord away from heat sources and sharp edges to ensure its good condition.

1.3. Operation safety

1. The device is not intended for use by persons (including children) with limited physical, sensory or mental abilities, or by inexperienced users, unless under supervision or with instructions given by an accountable party.
This device is not a toy, and shouldn't be used as one. Children should not to play with it.
2. In the event of damage to the device, to avoid any health and safety risks, repairs should be carried out only by qualified personnel.
3. Never carry out any maintenance or repairs during operation or if the device is plugged in!
4. Do not use or store the device at the ambient temperature below freezing. If the device has been moved from a cold room to a room with a higher temperature, before switching on wait until it reaches room temperature.

Never carry out any repairs during operation

Do not remove covers during operation

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2.Instructions of use

2.1 General instructions – preparation for use

1. Set the device up in a designated, clean, dry and well lit room.
2. Level the top surface of the table using appropriate tools.

2.2 Operation instructions

1. The device is designed to automatically fill the honey into the jars.
2. The device has to be cleaned before the first use and after finishing work according to the instructions in the **"Cleaning and Maintenance"** section.
3. Before start:

- plug the power cord into the socket and switch the main switch from position "0" to "1",

– check if the safety switch is released by turning it slightly in clockwise direction

3. Product description

3.1. Device

Elements:

1) Turntable's controller unit
2) Emergency „STOP" button
3) Table base
4) 600mm diameter turntable
5) bottling machine mounting posts

Technical specifications:

- power supply 230V

- power rating 90W

- diameter 600mm.

- base width 500mm.

- height 635mm.

3.2. Controller

The controller controls the operation of the rotating table. It is designed to cooperate with the honey dispenser/bottling machine. The controller allows for precise adjustment of rotational speed of the table, and the service mode enables precise adjustment of positioning.

Control panel – Fig.1

Elements:

1- speed control dial

2- service mode START button

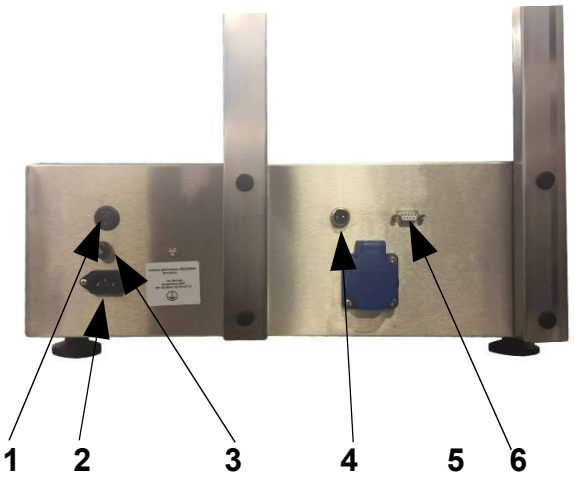
3- bottling process indicator

4- STOP button

5- power indicator

6- bottling mode START button

Back panel – Fig.2



Elements:

1- main switch 0-1

2- power cord socket 230V

3- 10A fuse

4- position (limit) switch socket

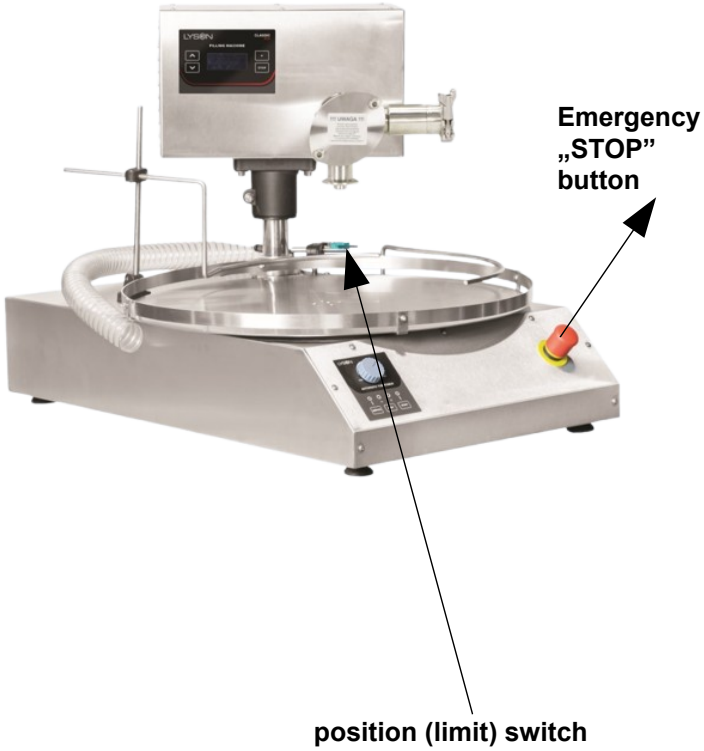
5- power cord socket 230V

6- bottling machine COM socket (DB9)

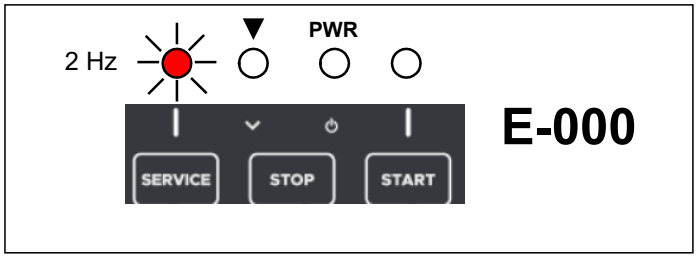
Service mode

The service mode (button 2, fig.1) is only used to adjust the limit switch (fig.3) - which stops the table when the jar/bottle is in the right position under the dispenser's nozzle. After pressing the START button of the service mode the table will start rotating at the speed determined by the speed dial (dial 1, fig.1). Detection of a jar in the stop position (signal from the limit switch, Fig.3) stops the movement of the table for approx. 1s. After the mentioned time has elapsed the table movement is resumed. To exit the service mode press the STOP button (button 4, fig.1)

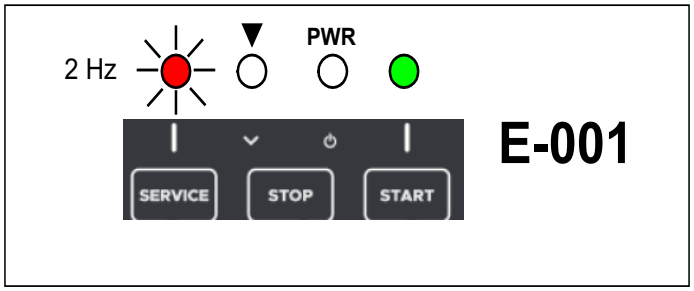
Fig.3



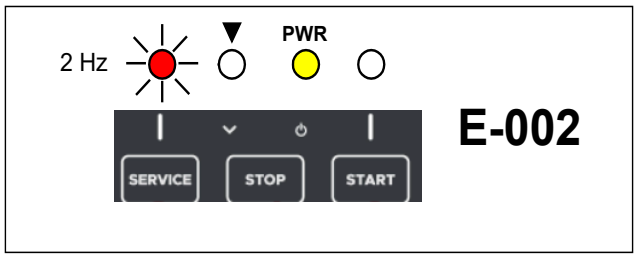
3.3 Error codes



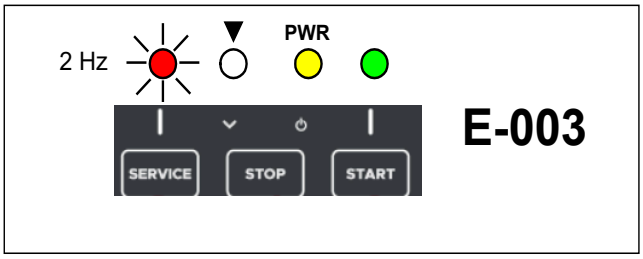
INTERNAL CONTROLLER FAULT



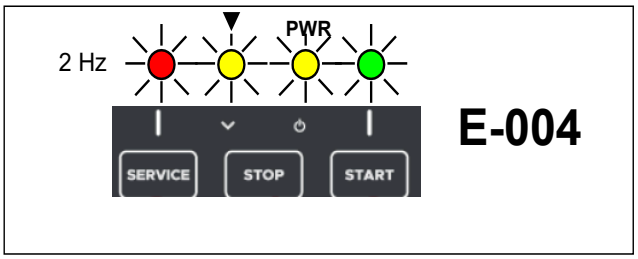
START (SERVICE MODE) BUTTON PRESSED / FAULTY



STOP BUTTON PRESSED / FAULTY



START (WORK MODE) BUTTON PRESSED / FAULTY



EMERGENCY STOP LOOP ERROR – EMERGENCY BUTTON ENGAGED – EMERGENCY CIRCUIT FAULT

4. Bottling machine

NOTE!

HONEY INTENDED FOR BOTTLING SHOULD BE WARMED UP TO 30°C.

POUR HONEY INTO THE PUMPING UNIT BEFORE USING THE DISPENSER.

Instructions:

1. Connect the hose to the dispenser pumping unit with a clamp, take care to seat the seal correctly.
2. Pour about 1 kg of honey (i.e. a 0.95 kg jar) into the other end of the tube.
3. Hold the hose up until the honey flows into the pump. The hose is transparent so you can see when the honey is flowing into the pump.
4. *When the honey has flowed into the pump, press the* ***„START" button*** START
5. Remember to put a container or a jar for honey under the pump's (dispenser) nozzle.
6. When the honey poured earlier into the pipe is pumped, stop the pump by pressing the button ***„STOP"***. STOP
7. Once this has been done, insert the hose into the honey barrel and start bottling or pumping.
8. Run a small amount of honey through to remove any air left in the tube. To do this, press the "START" button " after bleeding the air out the hose, press "STOP".
9. The machine is ready for operation.

4.1. Technical specifications:

- Power supply 230 V
- Rated power 200 W
- Filling range 50 g – 45 kg
- Bottling effectiveness 350 jars of 500g per hour (honey type dependant).
- Accuracy: in ranges up to 1200g. +/- 1%, over 1200g. +/- 1,5%
- computer-controlled device
- can also be used as a self-priming pump, slow speed pump with silicon impeller

All parts that come into contact with honey are made of stainless steel or food-grade plastic.

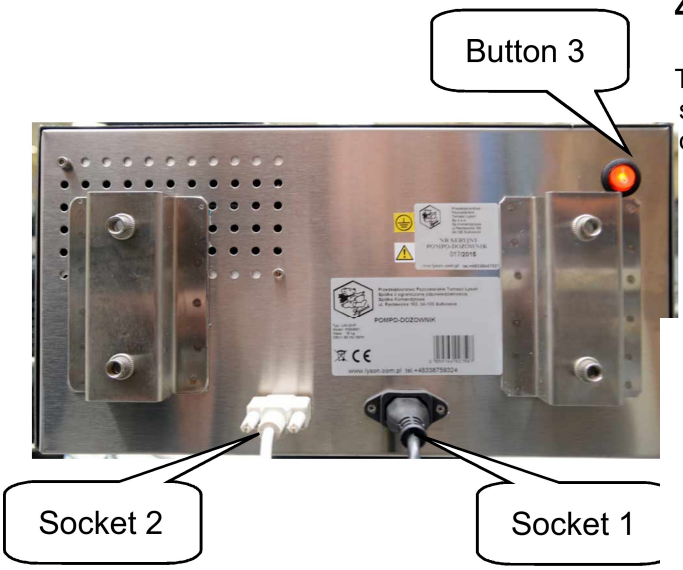
The small dimensions make it possible to use the machine in various ways, even where space is limited.
The machine employs the latest generation technology. It ensures comfortable, professional work with honey.

4.2. SETTING UP AND OPERATION

When preparing to work:

- Plug the power cord (230V) of the dispenser into socket No 1
- Connect the dosing actuation pedal or the plug connecting the turntable with the bottling unit to socket No 2 at the back of the bottling unit and the other end of the cable to socket 2a at the back of the table controller.
- Place the limit switch under the dispenser and plug it into socket 4.

- Plug the power cord (230V) of the turntable into socket NR 5
- Connect the bottling unit and turntable to the 230V mains sockets.
- Switch on the appliance using button 3



When the dispenser is switched on, 2 messages appear one after the other as in the attached pictures:

Fig.1. Controller starting up

Fig.2. Controller in stand-by mode

4.3. CONTROLLER

The programming of the device allows to precisely set the dosing sequence. An interactive and intuitive on-screen menu facilitates the operation of the unit.

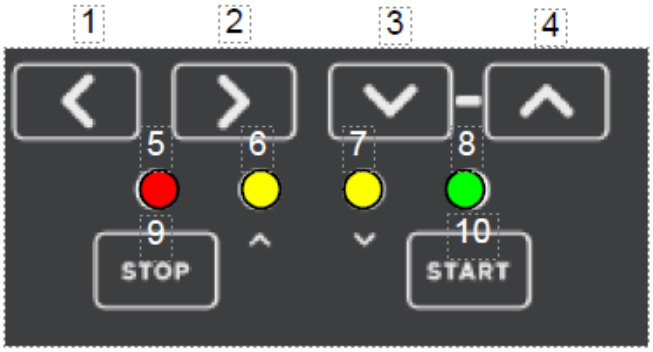


Fig.1. Control panel layout

#	FUNCTION
1	Decreasing the value of a selected parameter or resetting the parameter
2	Increasing the value of the selected parameter or resetting the parameter
3	Navigating through the parameters – placing the cursor on the parameter to be modified and pressing the buttons 3 and 4 at the same time will switch between the continuous and the additional weighting modes
4	
5	Indication of a pressed button STOP
6	Reverse direction indicator
7	Pumping mode indicator
8	LED on – continuous operation LED not on – operation in 1g additional weighing mode
9	STOP button
10	START button for continuous or additional weighting mode

4.4. Dosing

PARAMETER	FUNCTION
m1	Parameter regulating the amount of pumped honey in one dosing cycle. Adjustment range: 50[g] -5000[g]. The displayed value corresponds to the weight of the dispensed honey* - calibrated for the specific density and temperature of the pumped honey*. The parameter setting is stored in the device's memory.
v1	Parameter regulating the speed of dosing. Adjustment range: 70[%] - 100[%]. The parameter setting is stored in the device's memory.
t1	Parameter regulating the time of reverse movement of the pump rotor – cutting off dripping of the dispensed honey. Adjustment range: 10-990[ms]. The parameter setting is stored in the device's memory.

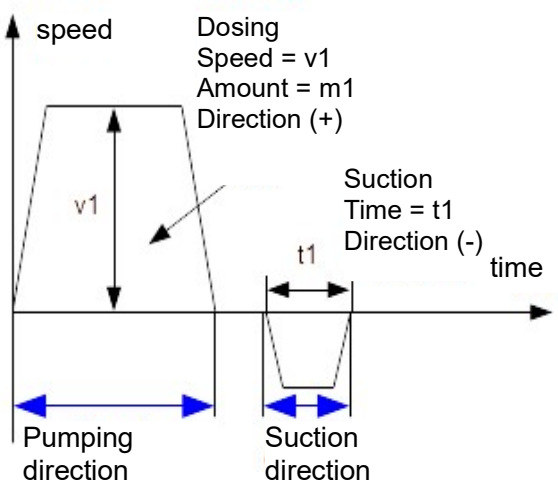


Fig 2. Process flow of dosing the set amount of honey

Fig 3

Parameter setting

After switching the device on, the display will show parameters, which are to be set one by one.
In order to set a given parameter, the cursor arrow must be placed next to the parameter as in Fig. 3.
The cursor position is changed using the buttons: "**DOWN**" and "**UP**".

Fig 4

Increasing or decreasing the value of a parameter

When the cursor arrow is at the desired parameter, we set its value by pressing the "**LEFT**" arrow to decrease or by pressing the "**RIGHT**" arrow to increase.

m1 – The weight of the dosed honey in grams. Select the appropriate option with the "LEFT" or "RIGHT" buttons.
The filling range is given in grams (from 50 g to 5500g).
With this parameter, we set the required amount of honey, appropriate for the used container.

v1 – The speed of honey dosing can be selected with the "**LEFT**" or "**RIGHT**" buttons
The dosing speed range is given in percent (from 70% to 100%)
This parameter is used to set the rate of filling jars with honey or the pumping speed.
t1 – Reverse mode time. Select the appropriate option with the "LEFT" or "RIGHT" buttons.
The reverse time range is given in ms (10ms to 200ms)
This mode prevents dripping of honey from the dosing nozzle when filling jars with honey.

2. Additional weighing 1[g]

PARAMETER	FUNCTION
V2	Parameter regulating the speed of the pump during additional weighing (one dose of 1[g]). If the operation time in the pumping direction remains constant, the change of speed results in the change of the dosed amount of the honey. Increasing the speed increases the dosed amount. Adjustment range: 40[%] - 100[%]. The parameter setting is stored in the device's memory.

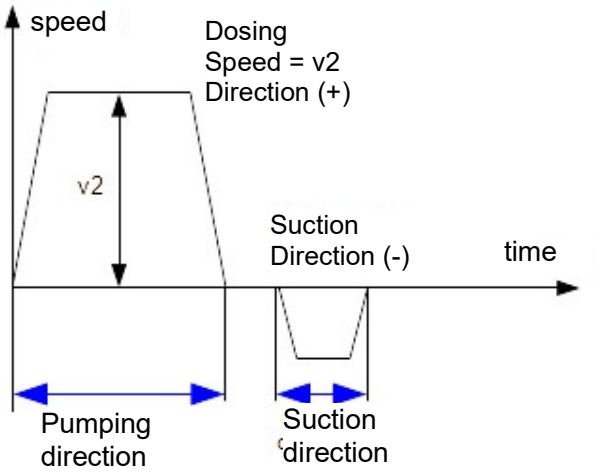


Fig 3. 1[g] additional weighing process

v2 – Depending on the density and temperature of the honey, 1g of honey may fill at different rates. Therefore the filling of 1g can be calibrated with the pump speed.
The parameter **v2** is adjusted using the buttons **"LEFT" or "RIGHT".**
To add 1 gram of honey, press the **"START"** button.

If the green diode above the "**START**" button is lit, it means that the dispenser is set to continuous pumping mode.
If the green diode is not lit, it means that the dispenser is set for additional weighing.
The parameter setting range from 40% - 100% is the speed at which 1 g of honey is dispensed.

4.5. Additional features

– Creaming and pumping

NOTE!

Remove the dispensing nozzle before starting the creaming or pumping process!!!

step 1

step 2

step 3

step 4

The nozzle is ready for pumping or creaming.

Creaming is done by the continuous pumping of honey..
Honey is taken from one container and pumped into another container. When all the honey has been pumped, the pipe is transferred to a full container and the pumping process is repeated. Maintain an appropriate pauses between creaming phases.
The creaming of honey is an effect of pumping – that is, during repeated pumping the honey acquires a creamy texture.

PARAMETER	FUNCTION
p1	Dosing cycles counter. It is possible to enter any starting value. The counter range is 0-999.
p2	Filling progress indicator. The displayed value represents the percentage of filling completion in relation to the value set by parameter m1. The indication varies from 0[%] to 100[%]. The indication resolution is 5[%].
p3	Positive correction factor. The factor enabling precise increase of dosed amount m1 – in case when the dosed amount is smaller than the set value and the 10g step is too big to precisely set the required dose. Increase of the factor value increases the dosed amount of the honey. Range of adjustment: 0-50. The factor is not related to the current amount of dosing value setting, i.e. it adds the same value (mass) to the setting of 50[g] as to 1500[g]. The parameter setting is stored in the device's memory.
p4	Negative correction factor. The factor enabling precise decrease of dosed amount m1 – in case when the dosed amount is larger than the set value and the 10g step is too big to precisely set the required dose. Decrease of the factor value decreases the dosed amount of the honey. Range of adjustment: 0-20. The factor is not related to the current amount of dosing value setting, i.e. it reduces the same value (mass) to the setting of 50[g] as to 1500[g]. The parameter setting is stored in the device's memory.

After switching the controller on, the CREAMING function is selected by pressing the "DOWN" button several times until CREAMING appears on the controller's display.
To start the creaming process press "**START**"

Honey Creaming:
Creaming is a quick and simple method for producing creamy honey. It involves adding crystallised honey to freshly extracted, clear, liquid honey in order to initiate controlled, fine-grained (creamy) crystallisation. The creaming process using a pump dispenser is done on the principle of pumping the honey from one container to another.

The device makes it possible to conduct the recrystallisation process, after which the honey obtains a texture similar to chocolate creams.
This process consists of cyclical pumping of honey over several days until the appropriate consistency is achieved. When stored at a constant temperature, this honey retains the texture for many months.

Pump (cream) the honey several times a day.
To ease the process crystallized honey may be added to the at the beginning.
"**Creaming**" is aimed at creating many small particles of crystallisation and preventing the growth of already existing honey crystals.
It is a mechanical "grinding of the crystals" of honey.

THE DISPENSER CAN BE USED AS A PUMP.

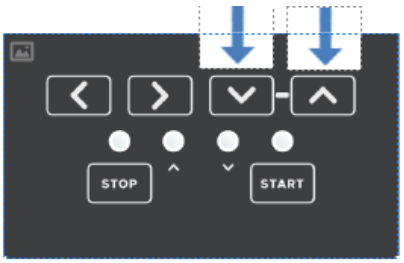


Fig. 5

Fig. 6

The continuous pumping function is activated by pressing the "**UP**" and "**DOWN**" buttons simultaneously and holding them down briefly. The green LED lights up. The dispenser is then set in the continuous pumping mode. Pressing both buttons again and holding them down briefly switches the device back into the dosing mode.

*Press **„START"*** to start pumping
*Press **„STOP"*** to stop pumping

4.6. FUNCTIONS

Parameters p3 and **p4 –** are intended for calibration of the weight of pumped honey. If, after weighing a filled container of honey, it is found that an underweight has occurred, increase parameter **p3** by the missing weight of honey until the correct weight is obtained. If, after weighing a jar of honey, it is found to be too heavy, decrease parameter **p4** until the correct weight is obtained.

4.7. Bottling

After switching on the dispenser, the display shows the values that were set during the last filling.

Set the dispenser according to the parameters specified in instructions
Filling jars with honey is done by pressing the pedal

after each jar replacement. The dispenser fills in the preset amount of honey

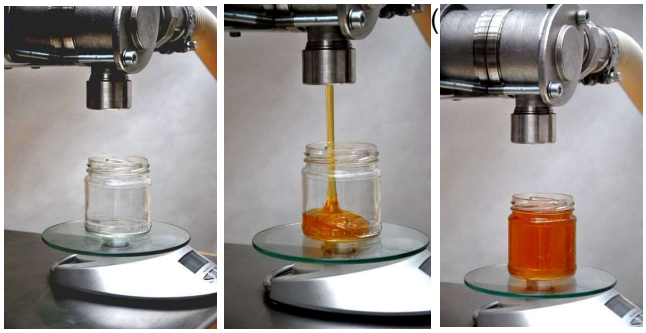


Fig. **1, 2, 3**

Replace the full jar with an empty one and press the pedal again.
The device is very accurate (+/- 1 g).
This accuracy prevents overfilling.

4.8. ERROR CODES

CODE	DESCRIPTION
E-100	INTERNAL CONTROLLER FAULT
E-200	PRESSED/FAULTY „**START DOSING**” BUTTON
E-201	PRESSED/FAULTY „**STOP**” BUTTON
E-202	PRESSED/FAULTY **“START”** BUTTON
E-203	PRESSED/FAULTY “**DOWN**” BUTTON
E-204	PRESSED/FAULTY “**UP**” BUTTON
E-205	PRESSED/FAULTY **“LEFT”** BUTTON
E-206	PRESSED/FAULTY “**RIGHT**” BUTTON

If these errors are displayed, please contact the service department of „ŁYSOŃ”

5. Storage

Clean and dry the unit thoroughly after use.
If the device has been moved from a cold room to a room with a higher temperature, before switching on wait until it reaches the ambient temperature and all condensation water evaporates.
Store the device in a dry and frost-free room.
Do not use the device when the ambient temperature is below 5ºC.
An additional technical check should be carried out periodically, and if any defects are found, please contact the manufacturer.

6. Cleaning and maintenance

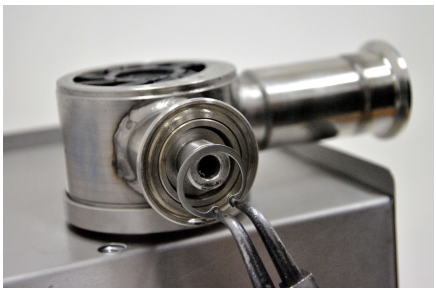
Unplug the device before cleaning

Before first use and after finishing work the equipment must be thoroughly cleaned and dried.
While cleaning ensure the safety of all electrical components like motors and controller panels (for the time of washing cover them with waterproof fabric or plastic film).
No parts of the device require chemical conservation.
An additional technical check should be carried out before the start of the pollen harvesting season, and if any defects are found, please contact the manufacturer.
Clean the device in two phases: preliminary and final (disinfecting).
Preliminary phase – rinsing out the honey from the nozzle and dosing module. **Do not dismantle the dispenser after the bottling process is finished. Immediately after working with the device**, place the suction hose into a container with warm water and pump 40 l of warm water to rinse out the pump or dosing module.
For this operation, prepare approx. 40 l of water heated up to 50°C – 60°C. This process protects the dispenser from damage that may be caused by crystallised honey (i.e.: breaking the seal and leaking honey). If the unit is improperly rinsed, the seal on the pump module shaft will break. Damage resulting from improper cleaning of the module is not subject to warranty.
Disinfecting final phase – dismantle the nozzle and rotor as shown in the photographs below. Thoroughly wash, dry and assembly together again.
For cleaning use agents designated for disinfection of the equipment intended for contact with food, then rinse thoroughly, dry and re-assemble.

Step 1
Unscrew the rotor cover bolts.

Step 2
Remove the cover.

Step 3
Remove the set ring



Step 4
Remove the dispensing nozzle

Step 5
Remove the pumping module

7. Waste disposal and environmental protection

The used product must be disposed in accordance with the local regulations. Return the device to a collection point from where it can be submitted for environmentally compatible recycling.
The consumer has the right to return used equipment directly to the manufacturer's distribution network, free of charge, while replacing it with a new unit as long as the used device is of the same kind and same application as the newly purchased device.

8. Warranty

The product purchased from the Lyson Company is covered by a manufacturer's warranty. The warranty period is 24 months from the date of purchase.

All purchased products come with receipts or VAT invoices.

Warranty details at:

www.lyson.com.pl