

USER MANUAL

Automatic small turntable for the multifunctional device for honey dosing, creaming and pumping



LYSON  **N**

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This manual covers the devices with the following codes: W204013Z

User manual

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1. GENERAL SAFETY RULES

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. Operational rules

1. The turntable is intended for dispensing honey into jars.
2. Before starting work, the turntable should be thoroughly washed with hot water and a small amount of detergent approved for cleaning devices intended for contact with food.



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 table with the power cord or connection cable is damaged!
3. Before connecting the device to the mains, make sure that the controller is turned off. The switch on the control panel should be in position „0“ (Fig.2, pos.1)
4. Be careful when connecting the device to the mains.
Hands must be dry!
The surface on which the turntable stands should be dry!
5. Do not move the turntable while working.
6. Protect the motor and 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. Operational 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. Make sure that children do not play with the device.
2. In the event of damage to the turntable, to avoid any risks, repair should be carried out only by a specialist repair service or qualified person.
3. Never carry out any maintenance or repair during turntable operation or when the it is connected to the mains!
4. The device must not be turned on and stored at temperatures below 0°C. In the case the device has been moved from a cold room to a room with higher temperature, before switching on wait until it reaches the ambient temperature and all the condensation water evaporates.



Never carry out any repairs during operation



It is forbidden to remove covers while the device is operating

2. INSTRUCTIONS FOR USE

2.1 General rules – preparation for use

1. Set the turntable up in a designated, clean and dry room.
2. If necessary, level the turntable plate.

2.2 Operational rules

1. The turntable is intended for filling jars with honey.
2. The turntable has to be cleaned before the first use and after finishing work according to the instructions in the "Maintenance and Cleaning" section.
3. Before start:
 - plug the power cord into the socket and switch the button on the control panel from position "0" to "1"



- check that the "STOP" safety switch is unlocked by turning it clockwise



1. turntable controller
2. "STOP" safety switch
3. table base
4. fi-600mm rotary plate
5. jar sensor

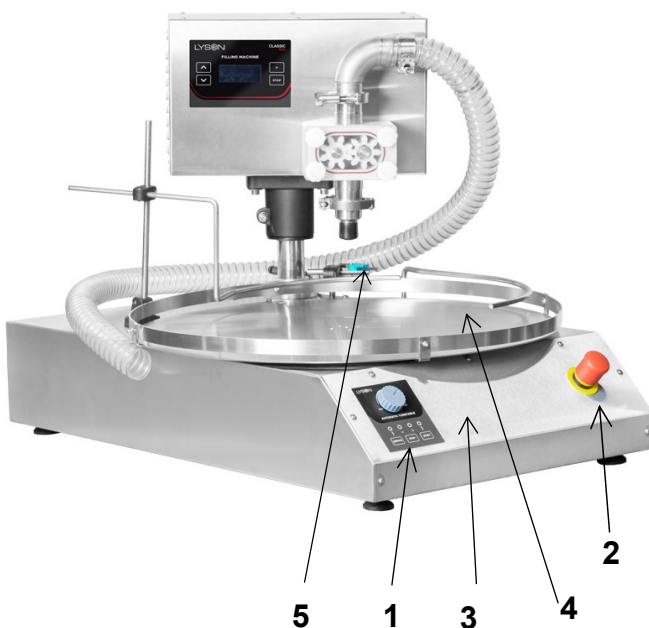
Technical data:

- 230V power supply
- 90W power
- 900mm plate diameter
- base width 500mm
- height 635mm.

3.CHARACTERISTICS OF THE MACHINE

3.1. Device description

Photo 1.



Device components:

3.2. Controller description

The controller controls the work of the turntable. It is designed to work with a honey dispensing device. The controller enables precise selection of the rotational speed of the table, and the service mode enables precise positioning adjustment.

Front of the table – photo 2.

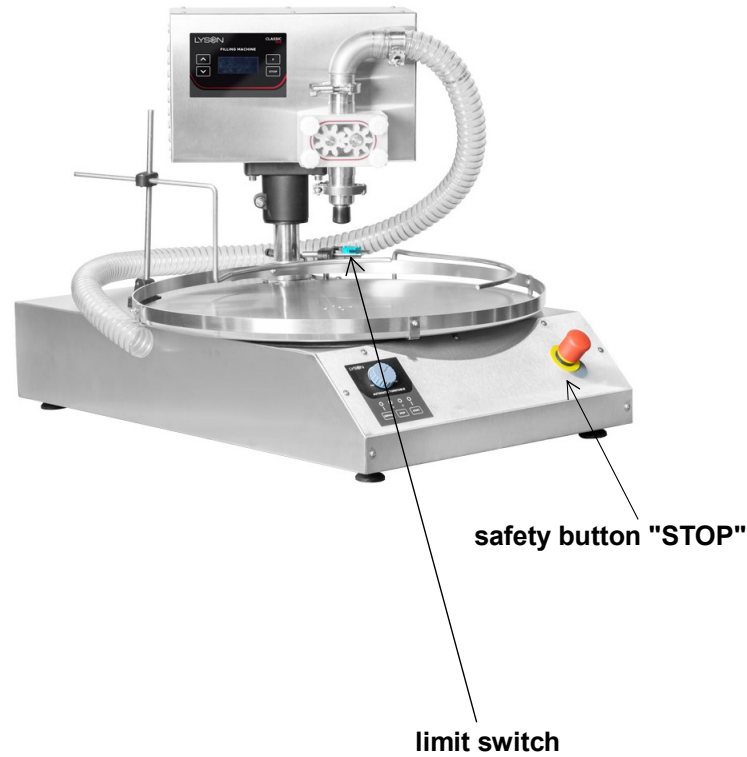
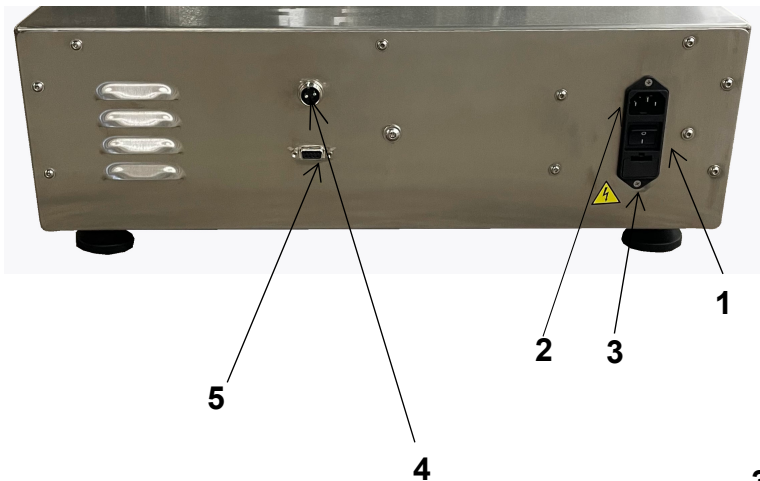


Description of the buttons – photo 2:

1- table rotation adjustment potentiometer

- 2 - START button to the service mode
- 3 - signaling of the filling process
- 4 - STOP button
- 5 - controller power supply signaling
- 6 - START button for working mode

Back of the table – photo 3.



Description of the buttons – photo 3:

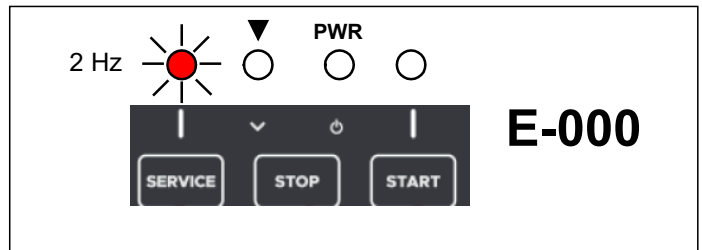
- 1 - main switch 0-1
- 2 - 230V power socket
- 3 - 10A fuse socket
- 4 - limit switch socket
- 5 - communication connector with the dispenser (DB9)

Service mode

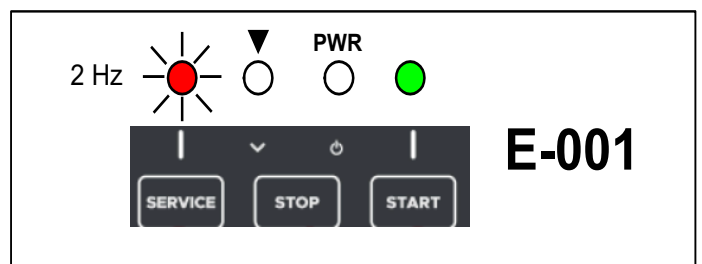
The service mode (button 2, photo 2) serves only to adjust the limit switch (photo 4) - setting the stop position of the table under the dosing device. After pressing the START button of the service mode, the turntable will start to rotate at the speed set by the potentiometer (button 1, photo 2). Detection of the jar in the stop position (signal from the limit switch photo 4) stops the table rotation for about 1 second. After this time table rotation resumes. The service rotation is stopped by pressing the STOP button (button 4, photo 2)

Photo 4.

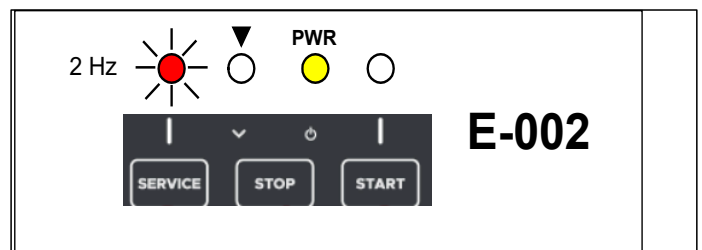
3.3 Error codes



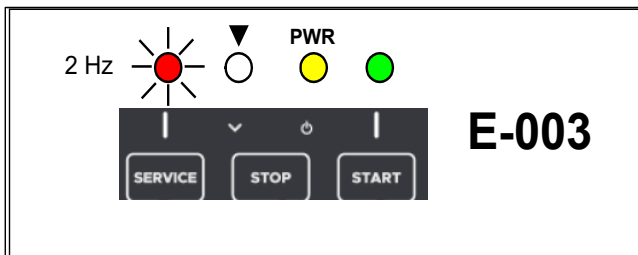
INTERNAL MALFUNCTION OF THE MICROPROCESSOR CONTROLLER



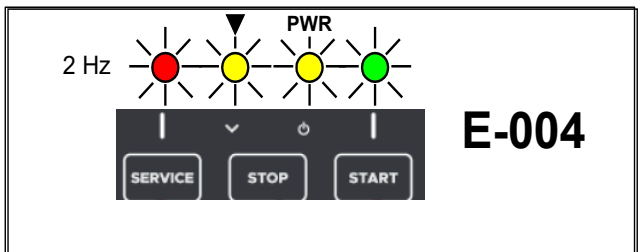
SERVICE MODE START BUTTON PRESSED / BLOCKED



STOP BUTTON PRESSED / LOCKED



**OPERATING MODE START BUTTON
PRESSED / LOCKED**



**ALARM LOOP FAILURE - DAMAGED
CABLE, SERVICE PLUG, OR
EMERGENCY BUTTON PRESSED**

4. Honey dosing device - operation



WARNING!

HONEY TO BE DOSED MUST BE WARMED UP TO 30°C.

**BEFORE THE WORK WITH THE DOSING
DEVICE STARTS, THE IMPELLER MUST BE
IMMERSED IN HONEY.**

Tips:

1. Connect the hose to the dosing impeller using a clamp and make sure that the gasket is properly seated.
2. Then pour about 1 kg of honey (ie 0.95 kg jar) to the other end of the hose.
3. Hold the hose upwards until the honey flows into the impeller (pump). The hose is transparent so you can see when the honey has reached the pump.
4. When the honey has reached the pump, press the **START** button „**START**“.
5. Remember to place a container or a jar for honey under the pump (dispenser).
6. When the honey previously poured into the hose is pumped out stop the pump by pressing the **STOP** button „**STOP**“.
7. After the above steps are completed, insert the hose from the pump into the barrel with honey and start dosing or pumping.
8. A small amount of honey should be passed through to remove any air that is left in the hose. To do this, press the "START" button and after bleeding the hose press "STOP".

Thus prepared, the dispensing device is ready for operation.

4.1. TECHNICAL DATA:

- 230V power supply
- power 200W
- filling range 50g - 45kg
- fills about 350 jars of 500 g per hour (depending on the type and density of honey)
- computer controlled device
- can also be used as a pump
- self-priming, slow-running pump with silicone impeller

All parts that the honey comes into contact with are made of stainless steel or food-safe material.

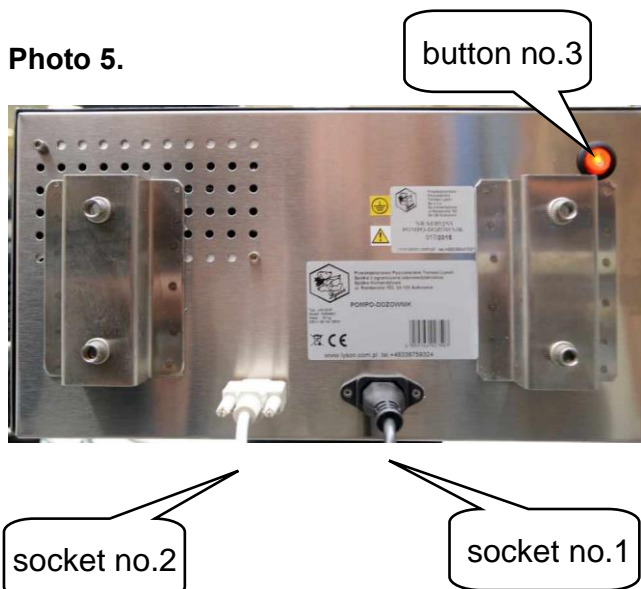
Small dimensions enable various positioning of the machine even with limited working space. From the technical side, the machine is the latest generation device. This device ensures comfortable and professional work with honey.

4.2. OPERATION AND CONFIGURATION

Before start it is required to:

- connect the power cable (230V) of the dosing unit to the socket no. 1 (photo 5)
- connect the pedal that controls dosing or the plug connecting the turntable with the dosing unit to the socket no. 2 (photo 5) at the rear of the dosing device and the other end of the cable to the socket 6 at the rear of the table controller (photo 3).
- place the limit switch under the dosing unit and plug it into socket no.4 (photo 3)
- connect the power cable (230V) of the turntable to socket no.5 (photo 3)
- connect the dosing unit and the turntable to the 230V mains
- turn on the device with the button no.3 (photo 5)

Photo 5.



After starting the dispenser, two messages will be displayed, one after another, as in the pictures below:



Photo 6. When starting the device



Photo 7. When the device is running

4.3. CONTROLLER ELEMENTS

The device programming enables precise setting of the dosing sequence. The operation of the device is facilitated by an interactive and intuitive on-screen menu.

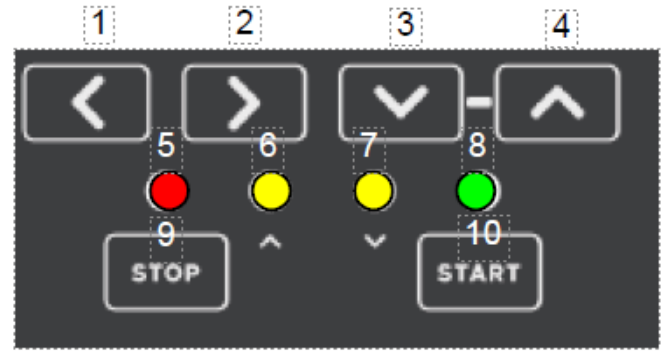
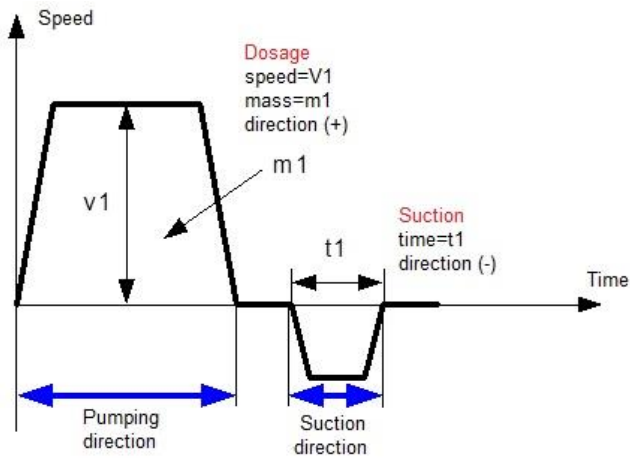


Fig.1. Operating elements of the dosing unit controller

ELEMENT NUMBER	FUNCTION
1	Decreasing the value of the selected parameter or resetting the parameter
2	Increasing the value of the selected parameter or resetting the parameter
3	Navigating parameters - placing the cursor on the parameter to be modified. Pressing buttons 3 and 4 simultaneously will cause alternating switching between continuous and checkweighing modes.
4	
5	Signaling of the pressed STOP button
6	Reverse operation signaling
7	Pumping operation signaling
8	LED is on - continuous operation LED is off - operation in the 1g checkweighing mode
9	STOP button
10	START button for continuous or checkweighing mode

4.4. DOSING

RPARAMETE	FUNCTION



m1	Parameter regulating the amount of pumped medium in one dosing cycle. The range of changes is 50 [g] -5000 [g]. The displayed value corresponds to the mass of the dosed medium * - scaled for the specific density and temperature of the pumped medium *. The parameter setting does not disappear after turning off the power.
v1	Parameter regulating the rate of dosing of medium. The range of changes is 70 [%] - 100 [%]. The parameter setting does not disappear after turning off the power.
t1	Parameter regulating the time of the reverse rotation of the pump impeller - which cuts off the leakage of the dosing medium. The range of changes is 10-990 [ms]. The parameter setting does not disappear after turning off the power.

Photo 8. Graph of the dosing process for a given mass of the medium



Photo 9. Parameters setting

After turning the device on the parameters will appear on the display that need to be set in order. To set a given parameter, the cursor arrow must be next to the appropriate parameter, as on the photo 7.

The cursor position can be changed using the buttons:

"DOWN" and "UP"



arrows

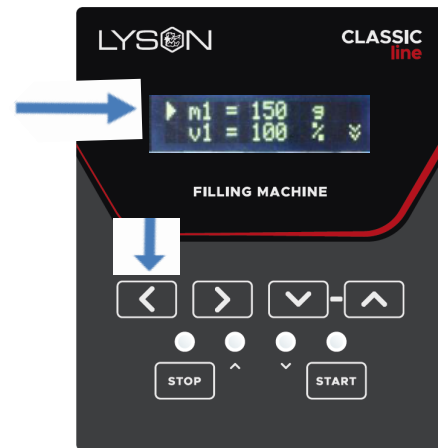


Photo 10. Increasing or decreasing the value of a given parameter

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

m1 - Weight of the dosed honey in grams. Choose a convenient option by pressing the "LEFT" or "RIGHT" buttons; the filling range is given in grams from 50 g to 5500 g. With this parameter, we set the required amount of honey, appropriate to the container underneath.

v1 - The speed of honey dispensing can be selected by pressing the "LEFT" or "RIGHT" buttons; the dosing range is given in percent from 70% to 100%. This parameter is used to set the speed at which the jars are filled with honey or the pumping speed.

t1 - Reverse speed. Choose a convenient option by pressing the "LEFT" or "RIGHT" buttons; the reversing range is given in ms from 10ms to 200ms. This parameter prevents the honey from dripping while filling the jars with honey.

2. CHECKWEIGHING 1[g]

PARAMETER	FUNCTION
v2	The parameter regulating the speed of the pump's work during medium checkweighing (single checkweighing dose 1[g]). With a constant operating time in the pumping direction, a change in speed causes a change in the amount of dosed medium. Increasing

the speed increases the dosing amount. The range of changes is 40 [%] - 100 [%]. The parameter setting does not disappear after turning off the power.

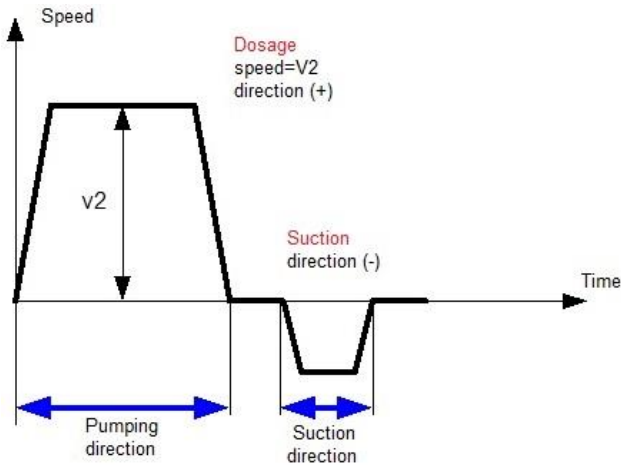


Photo 11. Graph of the checkweighing process for 1g mass

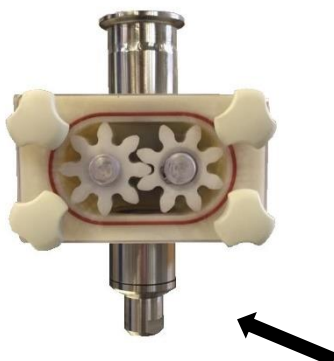
v2 – Depending on the density and temperature of the honey, 1g of honey may be refilled at different times. Therefore, the 1g filling can be calibrated with the pump speed. The **v2** parameter is changed by pressing the "LEFT" or "RIGHT" buttons. To checkweigh 1 gram of honey, press the "START" button. If the green diode is lit above the "START" button, it means that the dispenser is in the continuous pumping mode. When the green diode is off, it means that the dispenser is set to checkweighing. **The range of parameter settings from 40% - 100% is the speed with which 1g of honey is measured.**

4.5. ADDITIONAL FUNCTIONS – creaming, pumping

WARNING!

Before starting the creaming or pumping process, immediately unscrew the dosing nozzle !!!

step 1 - unscrew the dosing nozzle





step 2 - replace the dosing nozzle with a pumping or creaming nozzle



Thus prepared, the nozzle is ready for pumping or creaming.

Creaming is performed by pumping. Honey is taken from one tank and pumped to the other one. When everything has been pumped over, place the hose into a full tank and repeat the pumping process. There should be a downtime period between creaming. Honey creaming is a result pumping- this means that the honey acquires creamy consistency when it is pumped repeatedly.

PARAMETER	FUNCTION
p1	A dosing cycle counter that counts up. It is possible to enter any value constituting the basis for calculation. The counter range is 0-999.
p2	Filling progress indicator. The displayed value shows the percentage of filling completed in relation to the value set by the parameter m1. The indications vary from 0 [%] to 100 [%]. The raster of indications is 5 [%].
p3	Positive correction factor. Coefficient enabling the precise increase of the dosed mass m1 - in the case when the dosed mass is lower than the set value and the 10 g change step is too large to precisely set the required dose. Increasing the value of the factor increases the amount of the dosed factor. The possible setting range is 0-50. The factor is not related to the current mass setting, ie it adds the same value (mass) to the 50 [g] setting and 1500 [g]. The parameter setting does not disappear after turning off the power.
p4	Negative correction factor. Coefficient enabling precise reduction of the dosed mass m1 - in the case when the dosed mass is greater than the set value and the 10g change step is too large to precisely set the required dose. Increasing the value of the factor decreases the amount of dosed medium. The possible setting range is 0-20. The factor is not related to the current mass setting, ie it subtracts the same value (mass) for the 50 [g] setting and 1500 [g]. The parameter setting does not disappear after turning off the power.

After switching the controller on, select the CREAMING function by pressing the button  the "DOWN" arrow pressing several times until CREAMING appears on the controller. To turn on creaming, press "START" button 

HONEY CREAMING:

Creaming (nucleating) is a quick and simple method of production of creamed honey. It consists in adding to freshly centrifuged, clear, liquid honey a portion of crystallized (set) honey in order to initiate a controlled, fine-grained (creamed) crystallization. The creaming process with a pump-dispenser is based on the principle of pumping honey from one container to another.

The device allows to carry out the recrystallization process, after which the honey will obtain a consistency similar to chocolate creams. This process consists in pumping honey cyclically for several days until the appropriate consistency is achieved. When stored at a constant temperature, this honey retains its consistency for many months.

Pumping (creaming) is carried out several times a day. It is also possible, for example, to add crystallized (set) honey to the liquid honey at the beginning. "Creaming" aims to produce many small nuclei of crystallization and prevent the growth of already existing honey crystals. It is a mechanical grinding of honey crystals.

THE DISPENSER CAN BE USED AS A PUMP

Parameters **p3** and **p4** are designed to calibrate the weight of pumped honey. If, after weighing the filled container with honey, it turns out that there is an underweight, the parameter **p3** should be increased by the missing amount of honey until the appropriate weight is obtained. If, after weighing the jar with honey, it turns out that it is too heavy, the **p4** parameter should be decreased until the appropriate weight is obtained.

4.7. FILLING

After switching on the device, the display shows the values that were set during the last filling. Set the dispenser according to the parameters given in the manual. Filling the jars with honey is done by pressing the jar on the tip of the sensor located under the dosing nozzle. The dispenser fills the preset amount of honey. Check several jars in a row to correctly calibrate the dosage.

4.8. ERROR CODES

ERROR CODE	DESCRIPTION OF THE PROBLEM
E-100	INTERNAL MALFUNCTION OF THE MICROPROCESSOR CONTROLLER
E-200	"START FILLING" BUTTON PRESSED / LOCKED
E-201	"STOP" BUTTON PRESSED / LOCKED
E-202	"START" BUTTON PRESSED / LOCKED
E-203	"DOWN ARROW" BUTTON PRESSED / LOCKED
E-204	"UP ARROW" BUTTON PRESSED / LOCKED
E-205	"LEFT ARROW" BUTTON PRESSED / LOCKED
E-206	"RIGHT ARROW" BUTTON PRESSED / LOCKED

If the above errors are displayed, please contact the service in the "LYSON" company.

5. Turntable storage

Clean and dry the turntable thoroughly after use. In the case the device has been moved from a cold room to a room with higher temperature, before switching on wait until it reaches the ambient temperature. Store the device in a dry room at the temperature above 0°C. Do not use the device when the ambient temperature is below 5°C.

6. Maintenance and cleaning



Before performing any maintenance disconnect the device from the power supply outlet.

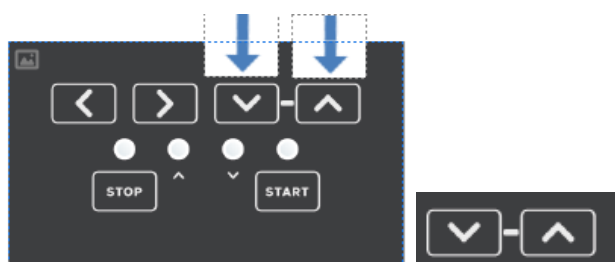


Photo 12.

Photo 13.

The continuous pumping function is turned on by simultaneous pressing and briefly holding of the "UP" and "DOWN" buttons. The green LED lights up and the dispenser is then set to continuous pumping. Pressing both buttons and briefly holding them again switches the device to dispensing mode. After pressing the "START" button, pumping is turned on. Pressing the "STOP" button stops pumping.

4.6. FUNCTIONING

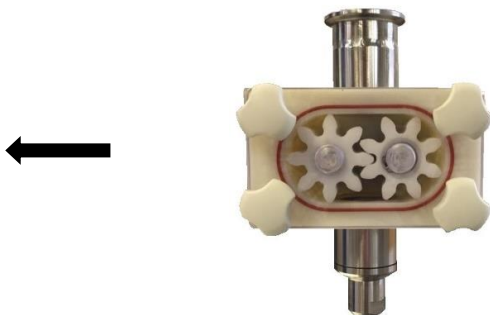
Before the first running and after the work is finished, wash the turntable thoroughly. During washing, take particular care to prevent the motor and control from getting wet - they can be covered with waterproof material during washing. After washing, dry the device thoroughly. An additional technical check should be carried out periodically and if any defects are found, please contact the service.

We clean the device in two phases: preliminary and final (disinfecting). **Initial phase** - it is used to rinse the honey from the nozzle and the dosing module. After finishing bottling, do not dismantle the device. Immediately after working with the device, put the suction hose into a container with warm water (50°C-60°C) and pump 40l to rinse the pump module or dispenser. This process protects the device against damage that may be caused by crystallized honey (i.e. breaking the seal and leakage of honey). In case of improper rinsing of the device, the seal on the shaft of the pumping module will get damaged. Damage resulting from improper cleaning of the module is not covered by the warranty.

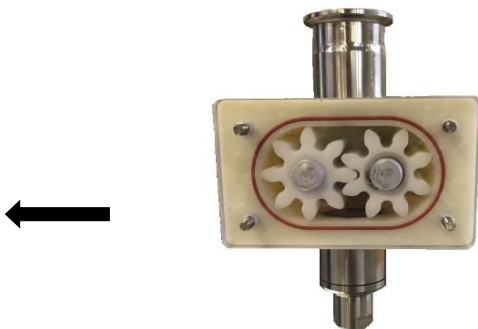
Final disinfecting phase - disassemble the nozzle and impeller according to the photos below. Wash thoroughly, dry and screw again.

For cleaning, you can use warm water or agents intended for disinfecting equipment intended for contact with food, then rinse thoroughly, dry and reassemble.

Step 1 - Unscrew the impeller cover (plastic nuts)



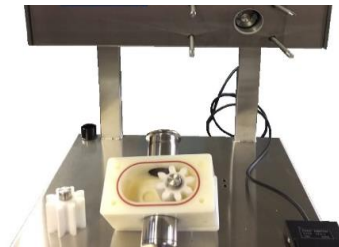
Step 2 - Remove the impeller cover



Step 3 - Remove left sprocket



Step 4 - Remove the dispensing module from the dispenser housing



Step 5 - Unscrew the nozzle ("22" flat wrench)



A - Creaming nozzle B - Pumping dosing nozzle

7. Recycling

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