

MANUAL

**Multi-functional device for honey filling,
creaming and pumping with a countertop**



LYSON 

Przedsiębiorstwo Pszczelarskie Tomasz Łyson

Spółka z o.o. Spółka Komandytowa

34-125 Sułkowice, ul. Raclawicka 162, Polska

www.lyson.com.pl, email; lyson@lyson.com.pl

Copany based in: Klecza Dolna 148, 34-124 Klecza Górna

The following manual encompassed the device bearing the following coding:

W204001Z

Manual

1. General operating safety principles for the device
 - 1.1. Operating principles
 - 1.2. Electrical safety
 - 1.3. Operating safety
2. Manual
 - 2.1. Guidelines
 - 2.2. Description of the buttons
3. Handling and configuration
 - 3.1. Controller's elements
 - 3.2. Dozing
 - 3.3. Making up the weight
 - 3.4. Additional functions
 - 3.5. Controlling functions
 - 3.6. Filling up
4. Maintenance
5. Technical data
6. Error codes
7. Recycling
8. Guarantee

1.GENERAL SAFETY OPERATING PRINCIPLES FOR THE DEVICE

Prior to device usage initiation, refer to the following manual and act according the guidelines contained therein. The manufacturer shall not be held accountable for any damages caused by improper usage of the device or its improper handling

1.1.OPERATING PRINCIPLES

1.The device is intended for honey filling, pumping and creaming.

2.Prior to operations, the device ought to be washed thoroughly with hot water with a small quantity of agents permitted to come into contact with food.



1.2.ELECTRICAL SAFETY

- a) The device shall be connected to a plug with grounding with the voltage specified on the product nominal plate
- b) Power supply electric installation must be equipped with RCD with nominal tripping current In below 30 mA. Periodically check the power supply cable. If non-detachable power supply cable gets damaged and must be replaced, it must be performed at a guarantor's or by a specialised repair centre or by a qualified person in order to avoid any threat.
- c) Do not operate the device when the power supply cable is damaged.
- d) Periodically check the power supply cable. If a detachable power supply cable gets damaged, it must be replaced with the cable of the same type. Do not operate the device when the power supply cable is damaged



1.3.OPERATING SAFETY

- a) The following equipment is not intended to be used by persons with limited physical, sensory or mental capabilities (including children) or persons inexperienced or unfamiliar with that type of equipment unless the usage occurs under supervision or in line with the equipment operating manual provided by safety supervising persons. Make sure that children do not play with the device.
- b) If the device cable gets damaged, the repairs must be performed solely by a specialised repair centre or by a qualified person in order to avoid any threat
- c) Do not operate the device in the vicinity of flammable materials.

- d) It is forbidden to perform any maintenance works when the device is in operation.
- e) In case of any danger, switch the device off immediately.
- f) The device can be restarted once the Herat has been eliminated.
- g) The device can be activated indoors only. The device is not adjusted to be operated outdoors.
- h) Protect the controller against humidity; (also during the storage)
- i) It is forbidden to pull the supply cable.
- j) The supply cable ought to be kept away from the sources of heat, sharp edges and its good state must be taken care of.
- k) Any time prior to washing



2.MANUAL

NOTE!

Honey intended for dozing ought to be heated until the temp. of approximately 30°C.

PRIOR TO OPERATION, THE ROTOR MUST BE SUBMERGED IN HONEY.

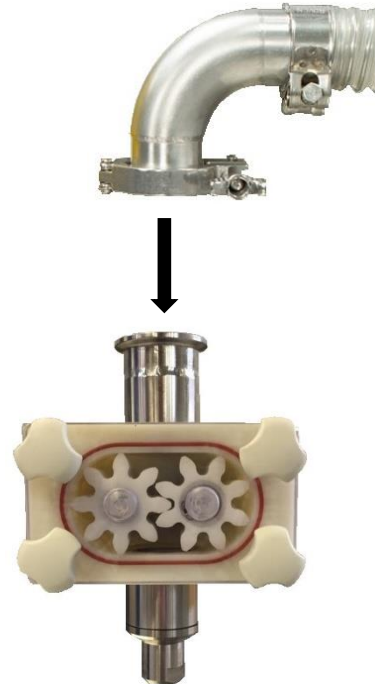



Photo.1

2.1.Guidelines:

1. Connect the rotor connection hose to the dispenser (Photo 1)., previously submerged with honey, by means of a clamp. Watch carefully the position of the gasket.
2. Afterwards, pour approximately 1 kg of honey from the other end (i.e. a jar of 0.95 kg).
3. Keep the connection hose upwards until the honey flows down to the (pump) rotor.

The connection hose is transparent so it is visible when honey has reached the pump.

4. When the honey pump, Press the  has reached the **START** button

5. One must remember to put a honey jar under the pump (dispenser)
6. When the previously poured honey has been pumped entirely, stop the pump by pressing the **STOP** button 
7. Having completed the aforementioned activities, put the dispenser connecting hose to a barrel of honey, settler and start dozing or pumping.
8. A small quantity of honey must be pumped to remove the air that stayed in the hose.

For this purpose, press the **START** button, after venting press the **STOP** button.

9. The dispenser is read for operations at this stage.



PUMP HOSE

(the set does not include an additional hose nor additional connectors).

The device controller has a creaming function in its options. Creaming occurs by pumping inoculated honey.

2.2.DESCRPTION OF BUTTONS



By means of the buttons below, set the required parameters

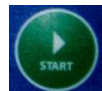
left

right



down

up



STOP

START

3.HANDLING AND CONFIGURATION

When starting to operate the device:

- Connect the dispenser power supply cable (230V) to the socket **no 1**
- Connect the dozing starting pedal (Photo 2) or limit switch placed on the lever screwed to the countertop of the dispenser (Photo.3)

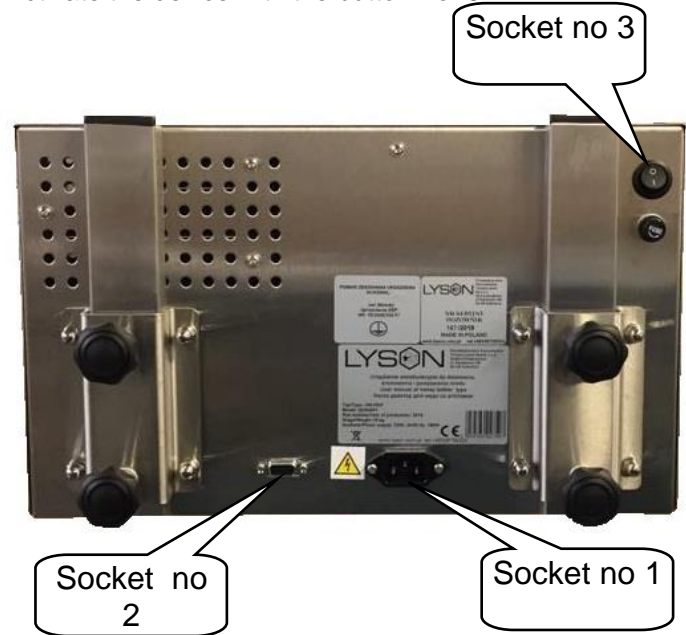


Photo.2



Photo.3

- Connect the dispenser to the mains, voltage 230V.
- Activate the device with the button **no 3**



Having activated the dispenser, 2 messages will be displayed, as can be seen in the photos below:



Photo.1. During the device start-up



Photo.2. When the device is running

3.1.ELEMENTS OF THE CONTROLLER

Device programming makes it possible to set up the dozing sequences precisely. Device handling is facilitated by an interactive and intuitive screen menu

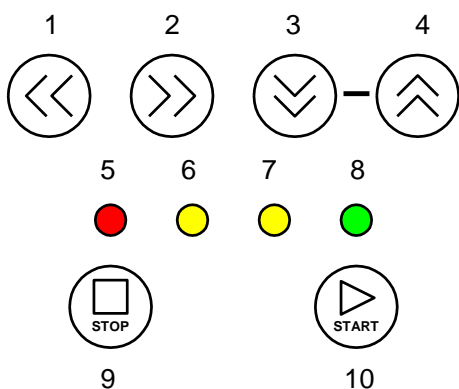


Fig.1. Elements of dispenser controller handling

| ELEMENT DESCRIPTION | FUNCTION |
|---------------------|---|
| 1 | Decreasing the value of selected parameter or parameter reset |
| 2 | Increasing the selected parameter or parameter reset |
| 3 | Switching through the parameters – setting the cursor on a parameter to be modified. Simultaneous pressing of buttons 3 and 4 switches between permanent mode and making up the weight. |
| 4 | |
| 5 | Signalling when STOP button is pressed |
| 6 | Signalling the work in the reversing direction |

| | |
|----|---|
| 7 | Signalling work towards pumping direction |
| 8 | LED on - work in permanent mode LED off – making up the weight by 1g |
| 9 | STOP button |
| 10 | START button for permanent mode of making up the weight |

3.2.DOZING

| PARAMETER | FUNCTION |
|-----------|---|
| m1 | Parameter to regulate the quantity of pumped agent in one dozing cycle. The range of changes is 50[g]-5000[g]. The value displayed equals the mass of the agent subject to dozing – calibrated for a precise density and temperature of the agent pumped. The parameter setting does not disappear once the power supply is switched off. |
| v1 | The parameter to regulate the speed of the agent dozing. The range of changes is 70[%] – 100[%]. The parameter setting does not disappear once the power supply is switched off. |
| t1 | The parameter to regulate the speed of reverse motion – cutting off the leakage of the dozing agent . The range of changes between 10-990[ms]. Parameter setting does not disappear once the power supply is switched off. |

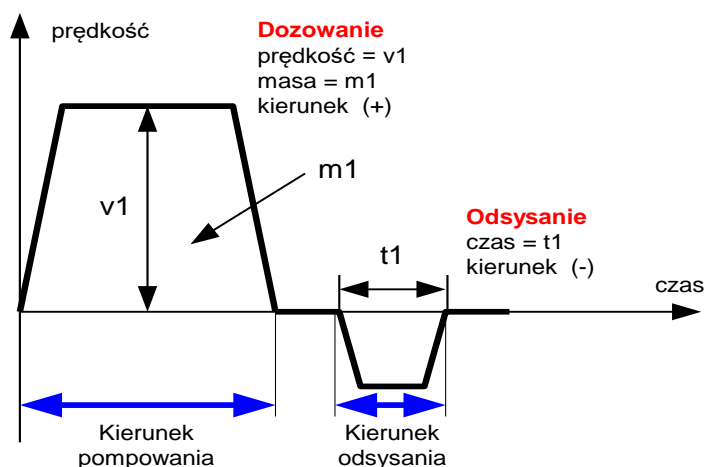


Fig 2. The course of dozing for the pre-determined mass

Setting up the parameters

Having activated the device, the following shall appear on the display:

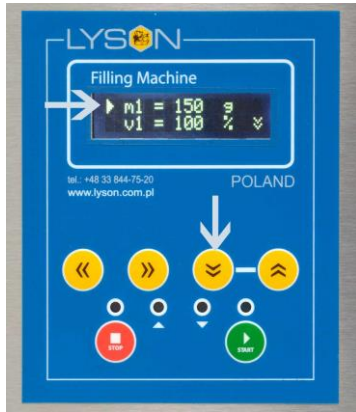


Photo. 3

Parameters to be set in turn.

In order to set a given parameter, the cursor arrow must be placed at the relevant parameter, as in Photo 3

Cursor placing is changed by means of the buttons: arrows „UP” and „DOWN”



Photo 4

Increasing or decreasing the value of a given parameter

When the cursor arrow is placed at a required parameter, we can set its properties by pressing the arrow LEFT to decrease its value or RIGHT to increase it.

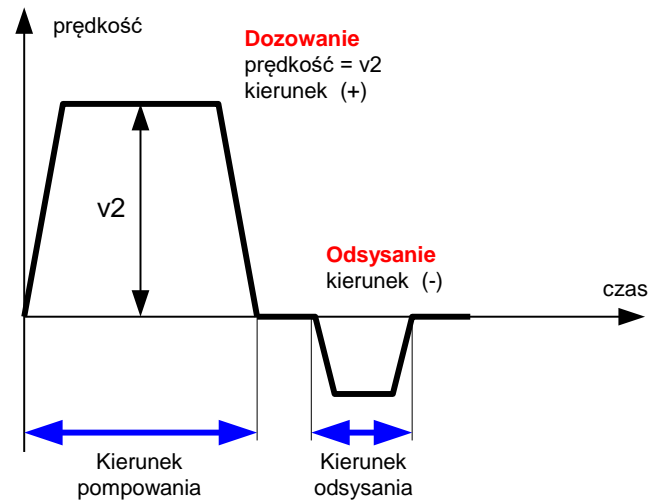
m1 – weight of the honey to be dozed in grams. Select the proper value by pressing the buttons LEFT or RIGHT, the range of filling is given in grams (from 50 g to 5500 g). This parameter sets the required quantity of honey, proper for a container placed underneath.

v1 – Honey dozing speed may be selected by pressing the buttons LEFT or RIGHT. dozing range is given in percentages (from 70% to 100%). This parameter serves for setting up the pace for jar filling with honey or pumping speed.

t1 – reversing speed. The relevant option may be selected by pressing the LEFT or RIGHT button. The reversing range is given in ms (10 ms to 200 ms). The parameter prevents honey dripping during filling the jars with honey.

3.3. MAKING UP THE WEIGHT 1[g]

| PARAMETER | FUNCTION |
|-----------|--|
| V2 | The parameter to regulate the pump operating speed while making up the weight of agent (single-time weight making up by 1[g]). With maintained constant operating time towards pumping, change of speed causes the change in the quantity of the agent made up. Increasing the speed shall increase the quantity dosed. The range of changes is 40[%] – 100[%]. Parameter setting does not disappear after power supply is switched off. |



Rys 3. The course of making up the weight by 1[g]

v2 – depending on the honey temperature and density, 1 g of honey may be filled with different time duration. Hence, filling of 1 g can be calibrated by pump operating speed. V2 parameter may be changed by pressing RIGHT or LEFT button. In order to make up the weight by 1 g of honey, Press the START button.

If a green diode over the START button is on, the dispenser is set in continuous pumping mode.

When the green diode of off, the dispenser is set to make up the weight.

Range of parameter set-ups 40% – 100% , i.e. the speed with which 1 g of honey is measured.

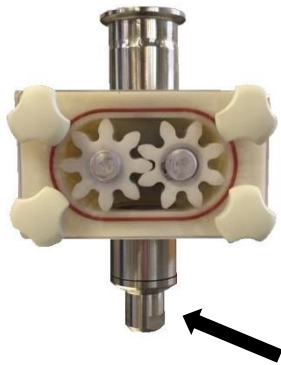
3.4. ADDITIONAL FUNCTIONS

- **Creaming, pumping**

ATTENTION!

Prior to starting the creaming or pumping process, exchange the dozing nozzle immediately!

Step 1- unscrew the dosing nozzle




Step 2- replace the dosing nozzle, screw up the nozzle for pumping , creaming



The nozzle prepared in that manner is ready for pumping or creaming.

Creaming is performed in line with the overpumping principle. Honey is taken from one container and pumped through into another one. When the entire quantity is pumped, we reposition the hose to the full container and the entire process is repeated. Stoppage time must be maintained between the creaming.

Honey creaming result from the overpumping – i.e. during repeated overpumping honey gains creamy consistency. Having activated the controller, CREAMING function must be selected by the button arrow DOWN pressed several time until creaming means appears on the screen. In order to start creaming, press the START button 

HONEY CREAMING:

Creaming (joining) remains a quick and simple method to produce creamy honey. It is based on adding freshly extracted, clear and liquid honey into crystallized one in order to start controlled creamy crystallization. The process is based on honey overpumping taking place for several days. Honey is pumped through until the proper consistency has been achieved. When honey is stored in constant temperature, it maintains the required consistency for many months.

Overpumping (creamng) is performed several times a day. At the beginning, crystallized honey may be addend to a liquid one. This is a mechanical honey crystal grinding.

DISPENSER MAY BE USED AS A PUMP. Photo 5



Photo 6

Activation of a permanent pumping function occurs through simultaneous pressing of UP and DOWN buttons and keeping them pressed for a short time.

3.5. CONTROLLING FUNCTIONS

| PARAMETER | FUNCTION |
|-----------|--|
| p1 | The counter of dosing cycles counting up. It is possible to enter any value as the basis for calculations. The range of the counter reading 0-999 |
| p2 | The parameter for filling up progress. The value displayed shows the percentage of filling-up process completion with relation to the value pre-set by parameter m1. Readings change within the range 0[%] to 100[%]. Reading raster is 5[%]. |
| p3 | Positive correcting factor. It allows to increase precisely the mass m1 to be dosed – in case when the mass to be dosed is below the pre-set value and the change raster 10 g is too big to set up the dose precisely. Increasing the value f the factor increases the quantity of the agent to be dosed. Possible range of setting 0-50. The factor does not refer to the current mass setting, i.e. adds the same value (mass) to the setting 50[g] as to the setting 1500[g]. The parameter setting does not disappear once the power supply is switched off. |
| p4 | Negative correcting factor. It allows to decrease precisely the mass m1 to be dosed – in case when the mass to be dosed is below the pre-set value and the change raster 10 g is too big to set up the dose precisely. Increasing the value f the factor decreases the quantity of the agent to be dosed. Possible range of setting 0-50. The factor does not refer to the current mass setting, i.e. adds the same value (mass) to the setting 50[g] as to the setting 1500[g]. The parameter setting does not disappear once the power supply is switched off |

Parameters p3 and p4 - are intended to calibrate the pumped honey. If having weighed a container with honey it turns out that insufficient weight has occurred, p3 parameter must be increased by the missing quantity of the honey. If a jar containing honey appears to be too heavy after weighing, p4 parameter must be decreased until the proper weight has been achieved.

3.6. FILLING

Once the device has been activated, the display show the value that have been set during the previous filling. A dispenser it to set up in Line with the parameters determined in the manual.

Filling the jars with honey is done by pressing the pedal after each replacement of the jar. The dispenser fills the previously determined quantity of honey.



(Photo 1, 2, 3)

Having been connected to the mains, the display show two first parameters **m1** and **v1**, which are set by pressing the arrow button RIGHT or LEFT, depending which values are needed. In order to switch to the next parameter, press the arrow button DOWN, return by pressing the button arrow UP.

Controller is ready for operations just after activation and changes in the parameters can be entered – which means that you do not have to enter the menu to make any required corrections in the parameters.

After set-up, the dispenser remembers automatically the changed parameters:

- **m1** – the number of grams which we set between 50g – 45000 g

- **v1** – filling speed – e.g. 100% , if honey is pumped too quickly and gets aerated too much, the speed is to be decreased between 70 % and 100%

- **t1** – reversing time determined in ms (0-990 ms) – this parameter is to be better set after the first attempt to fill honey into the jars as it will turn out whether the dispenser reverses the honey enough to avoid dripping.

- **v2** – speed for making up the weight by 1 g (manual option used during filling the jars by means of a pedal)

- **p1** – do not set this parameter up – the counter of the jars filled

- **p2** – do not set this parameter – it determines the degree of a jar being filled with honey in percentage

- **p3** – positive correctional factor (1g), allows to increase precisely the mass dozed, $m1$ – in case when $m1$, e.g. 500 g, is not sufficient, i.e. the dispenser fills 480 g instead of 500 g. Set the required doze by parameter $p3$, i.e. add 20 g. After the dispenser restarting, the weight set-ups are added and 500 g precisely are dozed to a jar. Possible range of set-ups 0-50. Parameter set-up do not disappear after deactivation.

- **p4** – Negative correctional factor (1g), allowing to decrease mass $m1$ precisely in case when dozed mass $m1$ equals, for example, 500 g is too big with relation to the pre-set value, e.g. the dispenser fills 505 g instead of 500 g. Set the require doze by means of $p4$ parameter, decreasing by – 5 g. After the restart, weight set-ups are added up and a jar is filled precisely with 500 g of honey. Possible set-up range 0-20. Parameter set-up does not disappear after disconnection from the mains.

d) Having completed the aforementioned actions, the rotor must be submerged with honey and the dispenser ought to be set in the pumping function, by simultaneous pressing of buttons UP and DOWN.

This procedure allows to fill the honey supply hose with honey and we will avoid irregular filling of the first jars.

When the hose is filled up with honey, activate the dispenser by pressing the START button.

4.MAINTENANCE

Prior to the maintenance, unplug from the mains.

Important!

The dispenser must be washed thoroughly after operation.

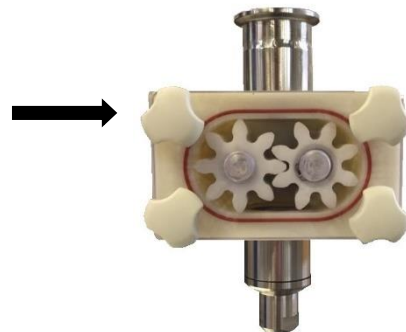
The devices shall be washed in two phases: preliminary one and the final (disinfecting) one

Preliminary phase – serves to rinse the honey from the nozzle and dozing module. Once the filling has terminated, the device is not dismantled. The suction hose is to be placed into a container with warm water and approximately 40 litres of warm water must be pumped in order to rinse the pump module or a dispenser.

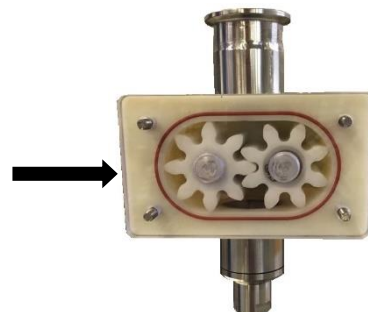
For this purpose approximately 40 l of warm water, heated till the temperature of 50 -60 degrees C, must be provided. The process prevents the device against damage caused potentially by crystallized honey (i.e. bursting a gasket and honey spilling). In case of inappropriate device rinsing, the sealing on the honey roller can burst. The damage caused by inappropriate honey rinsing is excluded from the guarantee terms and conditions. .

Final phase (disinfecting) – the nozzle and the rotor must be dismantled, in line with the photos below. Rinse carefully and dry, afterwards assemble. Use the washing agents intended to come into contact with food, later rinse with big quantities of water, dry and assemble again.

Step 1- Unscrew the rotor casing (4 plastic nuts)



Step 2- Remove the rotor casing



Step 3- Remove the left gear



Step 4- Remove the dosing module from the dispenser casing



Step 5- Unscrew the nozzle (open end wrench „22”)



A-Creaming nozzle, B- Dosing nozzle for pumping

5. TECHNICAL DATA:

- Power supply 230 V
- Power 180 W
- Filling range 50 g – 45 kg
- Fills approximately 350 jars of 500 g/h (depending on the type and density of the honey).
- Filling accuracy:
until 1200g. +/- 1% , over 1200g. +/- 1,5%
- Computer-controlled device
- To be used as a pump or a creaming device
- Self-priming, low speed pump with a silicone rotor

All components coming into contact with honey are made of stainless steel or plastic admissible to come into contact with food. The device provides comfortable and professional work with honey.

6. ERROR CODES

| FAILURE CODE | FAILURE DESCRIPTION |
|--------------|--|
| E-100 | INTERNAL DEFECT OF MICROPROCESSOR CONTROLLER |
| E-200 | PRESSED/BLOCKED/ „ FILLING START ” BUTTON |
| E-201 | PRESSED/BLOCKED „ STOP ” BUTTON |
| E-202 | PRESSED/BLOCKED “ START ” BUTTON |
| E-203 | PRESSED/BLOCKED ARROW DOWN BUTTON |
| E-204 | PRESSED/BLOCKED ARROW DOWN BUTTON |
| E-205 | PRESSED / BLOCKED ARROW LEFT BUTTON |
| E-206 | PRESSED/BLOCKED ARROW RIGHT BUTTON |

If the aforementioned codes are displayed, contact the service of ŁYSON company

7. RECYCLING

Worn-out product must be removed as waste only within selective waste collection organised by the Network of Communal Electric and Electronic Waste Collecting Points. A customer is entitled to return the used equipment to the electrical equipment distributor network, at least free of charge and directly, if the device to be returned is of proper type and serves the same purpose as the newly purchased device

8. GUARANTEE

The products purchased in “Łyson” company are encompassed by the manufacturer’s guarantee.

The guarantee period equals 2 years

A receipt or a VAT invoice is issued for each product purchased.

Guarantee terms details, see www.lyson.com.pl