

# MANUAL LABELLING MACHINE

## **Przedsiębiorstwo Pszczelarskie Tomasz Łyson**

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**The following manual includes the device bearing the following code:  
W4086**

1. General safety operational principles for the labelling machine
  - 1.1. Electrical safety
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Prior to operating the device please refer to the manual and act according to the guidelines contained therein. The manufacturer cannot be held accountable for the damages cause by misusing the device or its improper handling



## 1. ELECTRICAL SAFETY

- The device must be plugged in to the socket with the voltage specified on the product nominal plate
- Electric installation must be equipped with RCD having the nominal activation current below 30 mA. The operation of the over-current circuit breaker must be checked periodically.
- Periodically check the power supply cable. If power supply cable gets damaged, it must be replaced. Do not operate the device when the power supply cable is damaged.
- In case when the device has got damaged, in order to avoid any danger, it may be repaired by a specialist repair centre or a qualified person solely.
- It is forbidden to pull the power supply cable. The power supply cable must be kept away from any heat sources, sharp edges and its proper state must be secured



## 2. OPERATIONAL SAFETY

- The following device 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 children do not play with the device.
- The floor on which the device has been placed ought to be dry!
- Prior to starting the work with the device EMERGENCY STOP button must not be pressed. (it should be switched until it has popped out)
- Pressing the EMERGENCY STOP button make sit possible to stop the device immediately
- Do not displace the device while in operation.
- Protect the device against humidity (also during the storage)
- Do not operate the device in the vicinity of flammable materials.
- It is forbidden to make any maintenance works while the device is operation.
- All shields must be firmly attached to the device while it is in operation.
- In case of any danger, emergency stop button must be used at once. Device is restarted once the threat has been eliminated.
- The device may be started indoors only. The device is not adjusted for outdoors operations.



**It is forbidden to repair the device in operation**

***A jar subjected to labelling process must be clean.***

### • **Characteristics of a jar labelling machine**

A labelling machine – a device intended to label round jars with the volumes between 50-900 ml with a metal lids. The labelling machine remains an additional component for a honey bottling line.



**Photo no 1. Labelling machine**

## **2.1. Technical data of the labelling machine:**

- Jar transporter with adjustable speed
- Side guides with regulated spacing
- Stainless steel label guides – 4 pcs.
- Aluminium-polyurethane guides with bearings – 4 pcs.
- Step motor driving label feeder
- Working pressure for pneumatics 2-4 bars
- Microprocessor controller
- Jar sensor: inductive
- Label sensor: fork sensor - optical
- The Speed of jar transporter regulated with a knob
- External diameter of the roll 40 – 76 /300 mm, max width of the band 120 mm
- Self-adhesive labels on the rolls
- Power supply 230V/50 Hz
- Recommended oil compressor with the capacity of 50 l and the maximum pressure of 8

bars

## **2.2. Connecting the labelling machine to a honey bottling line.**

After preparation – placing and levelling of the transporter from a honey dozing line, connect the labelling machine with the line. For this purpose, one should:

- Approach belt feeder to the line transportation belt
- Set the level of the labelling machine with regards to the bottling line
- Level-off the entire line in order to make it possible for the jars to move freely
- Tighten 4 front bolts
- Tighten two rear screws
- The exit ramp of the labelling machine to be set at the proper height with regards to the rotation

table and tighten the fixing screws



**Photo no 2. Ramp of the labelling machine**

Having completed the aforementioned action, connect the labelling machine to 230V power supply and connect compressed air to the reducer (timer)  
Set the working pressure with a knob , 2 .5 atm



**Photo no 3. Reducer**

### **2.3. Placing the labels**

- The labelling machine will not operate when there is no lid on a jar
- Unscrew 2 bolts that fix the label pressing



- Place the required label size on the roller. Run the band through the rollers in line with the scheme attached on the labelling machine countertop.

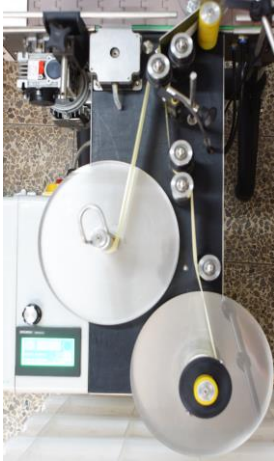


Fig.1. The scheme to place the band with labels

- Place the roll with labels at the proper height with regards to the jar volume (height )
- The label height is regulated with regards to the sensor by means of PMMA spacer plates
- Regulate the induction sensor – responsible for detecting a jar with metal lid
- The height from the detector to a lid shall be set within the range 1-5 mm – **erroneous set up of the sensor shall prevent it from detecting the lid**



***Photo no 4. Setting up the induction sensor***

- Actuator with two pressing rolls shall be set with regards to the centre of a jar (regulation front – back)

### 2.4.3. Placing a new roll with labels

In order to place a new roll, one must

- Loosen two screws fixing the label pressing
- Remove the label press
- Place a roll with labels and screw the press
- Run a band with labels through the label guides
- Lift the grip fixing the band (2)
- Wrap the beginning of the band around the guide with the grip (3) and place the band fixing grip



back

1

2

3

*Photo no 7. Placing the roll with labels*

### 3. Description of Mitsubishi GOT1000 controller

**An overview of the product features:**

- Full graphical operator's panel
- Data insertion through a touch screen and/or conventional keyboard

#### **BUTTON DESCRIPTION**

Start

**START** button starts operations of the labelling machine, label protrusion

bazuj

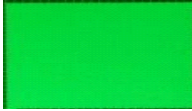
set a label with regards to a gap sensor to stop the label at a proper moment before its adhesion to a jar

czasy

Transfer to a panel that changes the value „jar delay” and „ roll delay”



Approaching the label band in order to scroll it



Swiching between the panels



Used at the end of operations or when there is a longer break in usage.

In order to change the settings, the labelling machine shall be stopped by means of a knob placed over the control panel.

### 3.1. Controller setting

Each device has got factory settings from the manufacturer. They can be changed according to the needs, depending on the labels and jar sizes.

By pressing the “BAZUJ” (basing) button, place the labelling machine with regards to the gap sensor.



Photo no 8. Main controlling panel

While pressing the basing speed, 500 in this case, a numerical table appears . It is used to change the speed with which a label moves (rolls out)

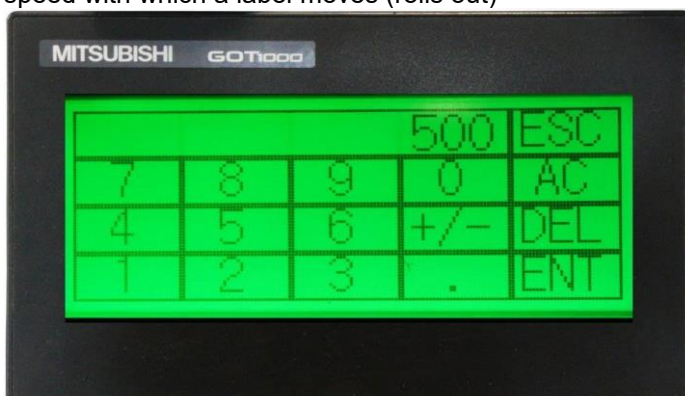


Photo no 9. Numerical panel

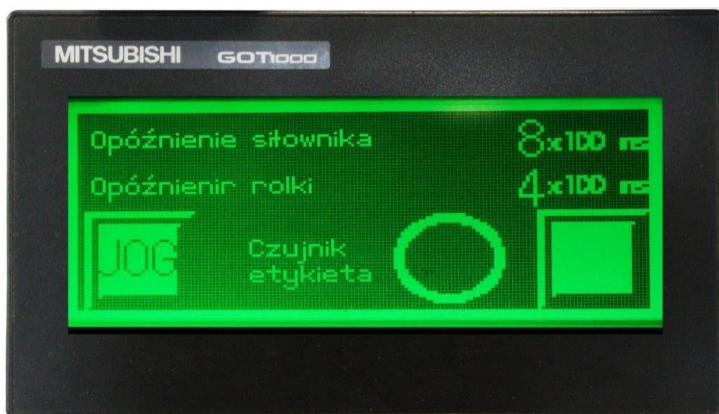
By pressing the adhesion speed (1600 ms) we change the speed with which the labels will be adhered on the jars. Selected value is confirmed by ENTER button.



Once the ENTER button is pressed, the panel switches to the main panel.



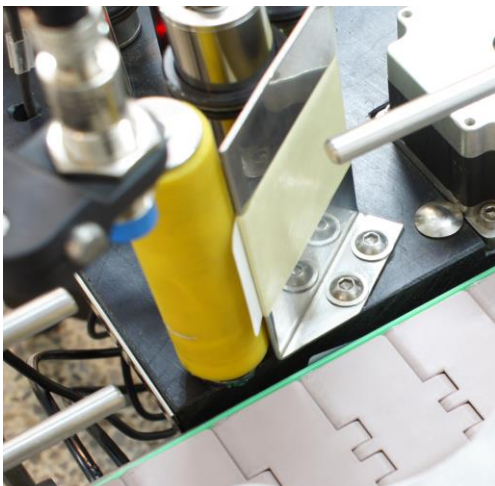
**Photo no 10. Main panel II**



**Photo no 11. Setting up the delays for a roll and an actuator**

Press the roll delay (photo) , a numerical table appears on the screen by means of which we select the required value, e.g. 6, press Enter to confirm.

Place a metal lid or a metal item under the induction sensor for 1 second. Observe whether a label protrudes entirely or several millimetres are missing for a full protrusion.



**Photo no 12. Setting the roll delay I**

If several millimetres are missing, press the actuator delay value and change the value again, i.e. 5, selected value is confirmed by pressing the ENTER button. Changes in the settings must be introduced until the label has protruded fully





**Photo no 13. Setting the roll delay II**

Actuator delay – this parameter is set when we see that pneumatic actuator (with two rolls – see photo) presses a jar too early or too late. By pressing the parameter “actuator delay” we select the required value and press ENTER.



**Photo no 13. Numerical panel**

Once ENTER has been pressed, the panel returns to the main panel option. Pressing the STOP button causes the device to stop operation



**Photo no 14. Main panel II**

#### **4. Storing the jar labelling machine**

Once the operating actions have terminated, clean the device thoroughly and cover it to prevent the dust from penetrating.

Once the operation terminates, the device must be cleaned and dried thoroughly.  
Prior to the device start-up, in case when it has been transferred from a room with a lower ambient temperature to a room with a higher one, one must wait until the device has reached the ambient temperature.

The device is to be stored in dry rooms with the temperature above 0° C.

**Prior to every season, an additional technical check-up must be performed and if any defects have been detected, contact the service centre.**

## 5. Cleaning and maintenance



Prior to starting the maintenance, the plug must be taken out!  
Prior to the first usage, device must be cleaned and dried thoroughly.

## 6. 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

## 7. Guarantee

Products purchased from “Łyson” company are encompassed by the manufacturer’s guarantee.

The guarantee duration equals 24 months

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

Details on the guarantee, see [www.lyson.com.pl](http://www.lyson.com.pl)