# Instructions manual Manual vertical uncapping machine





### Przedsiębiorstwo Pszczelarskie Łysoń

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#### The manual covers following devices (codes):

#### W2091, W2091S

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Product images are for illustrative purposes only and may sometimes differ from the actual appearance of the item. However, this does not change their basic properties.

#### 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

The uncapping machine is a device which allows to mechanically prepare sealed off bee combs for the honey extractions process.

#### 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. Periodically check the condition of the power cord. Replace the power cord if damaged. Replacing the power cord can only be performed by the manufacturer or by qualified personnel.

Do not use the device if the power cord is damaged!

- 3. Make sure that the main switch (8) is in "0" position before plugging the unit in.
- 4. Connect the device to a socket with voltage specified on the rating plate of the product.
- 5. Carefully connect the plug into the mains socket. Make sure your hands and the floor surface in the room are dry!
- 6. Do not move the device during operation.
- 7. Protect the motor and the control unit against moisture (also during storage).
- 8. 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. All covers must be firmly attached to the device during operation.
- 5. In case of any unexpected event, use the safety switch immediately. The device can be restarted after any possible hazard has been eliminated.
- 6. For indoor use only. The device is not suitable for outdoor use.
- 7. 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.
- 8. Be aware of hot and sharp blades of the device.



#### Do not remove covers during operation



# HOT! Do not touch the blades during or immediately after the work



OSTRE ELEMENTY

**WARNING - SHARP EDGES!** 

#### 2. Instructions for use

# 2.1 General instructions – preparation for use

- 1. Set the device up in a designated, clean, dry and well lit room.
- 2. Keep a free space around the device for better handling.
  - 3. Provide easy access to the power source.
  - 4. Closely follow the instructions of use.

#### NOTE!

#### Do not process frames WITH SPACERS

#### 2.2 Operation instructions

- 1. The uncapping machine is a device which allows to mechanically prepare sealed off bee combs for the honey extractions process.
- 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:
  - make sure that the device is firmly attached to the table,
  - loosen bolts (8) using an allen key 4,
  - adjust the gap between the back blade assembly (11) and the front blade assembly (12),
  - the gap between the blades (14) should be appropriate for the specific type of frames,
  - when the gap has been set, tighten the bolts
    (8) using an allen key 4,
  - turn on the controller (4) using main switch
     (9),
  - set the desired work temperature (10) (instructions in section 4)
- turn on the temperature controller (10) and wait until it reaches work temperature,
- uncap the frames holding the ends of the top bar and pushing down through the device
- after uncapping, the frames rest on the bottom rails of the uncapper,
- move the uncapped frames to the extractor or hang them on the uncapping table's rails.



Do not adjust any work parameters while the machine is running.

#### 3. Product description

The mechanical uncapping machine is designed to work with 230V power supply

The blades of the machine are heated up by built in heating elements with combined power of 1000W. The adjustable knifes allow to optimise the operation of the device and to properly uncap the frame surface. The device is compatible with standard and Hoffman type frames

#### 3.1.Product design

1-power supply cord

2-temperature controller wire

3-knife heating system sockets

4-controller

5-fuse

6-front knife cover

7-table mounting guide

8-knife gap adjustment bolts

9-main switch 0-1

10-HC-01 temperature controller

11-back knife assembly

12-front knife assembly

13-back knife cover

14-uncapping knives

Fig.1



Fig.2





#### 3.2. Technical specifications

#### **Frame**

-Made of 0H18N9 acid resistant stainless steel

#### **Heated knives:**

-two oposing knives are heated by two built in heating elements of 500W heat output each. The temperature is controlled by the HC-01 temperature controller with the range of adjustment of 30-95°C.

#### **Power Supply**

-230V/AC

# Available uncapping table compatible with the machine are 750, 1000 i 1500mm.

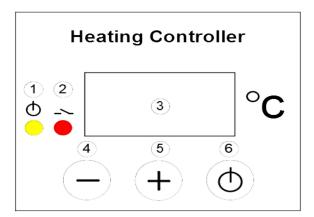
Tables with a conical shaped bottom are made of 0H18N9 acid-resistant stainless steel, 0.8 mm thick. The table legs are powder coated and height adjustable. The tables are equipped with stainless sieves covering the entire length of the bottom. They are equipped with a 6/4 "flap" design drain valve.

#### Dimensions:

- uncapper
- height -500mm.
- length -600mm.
- Width frame type dependant
- weight 17,5 kg

#### 4. HC-01 controller





#### 4.1. Setting up the controller

- The controller can be programmed according to your own needs.
- 2. Press and holding the ON / OFF button and then release it to activate the working time setting mode, which is signaled by the displayed message (Pro.). In this mode, use the "+" and "-" buttons, to define the time after which the controller will automatically turn off. To exit from this mode and to confirm settings short press the "ON / OFF" button.

# 4.2. Controller's features 1 – status indication

The indicator light on - the temperature controller is on, the indicator light off - the temperature controller is off (the controller works as a regular thermometer), the indicator light blinking - the temperature controller is on and the pre-heating process is in progress

#### 2 - heating relay status indicator

Indicator on - relay engaged (heating is on), indicator off - disengaged (heating off)

#### 3 - display

**Operation mode** - the default mode, automatically selected when the controller is powered on. The display shows the measured temperature. Indications are shown in °C.

**Setting mode** - selected after pressing the "+" or "-" button. The display shows the set temperature. Indications are shown in °C. The display flashes and after a while it returns to the measured temperature (operation mode).

Work time setting mode (Pro.) - started after holding down the "ON / OFF" button. The display shows the working time (counting from the moment of switching on), after which the thermostat switches off automatically. The indication are shown in hours.

**Display brightness setting mode** (d.br.) - activated after holding down the "ON / OFF" button. The display shows the currently set brightness. Reaching the setting limit is signaled by flickering.

## The following modes are available only after entering the access code.

When starting up the controller (displayed controller name, software version and settings) press and hold the "-" and "+" buttons. After the display shows "- - -" the buttons can be released and the code entered. Confirm the code with the "ON / OFF" button.

CODE	ACCESS LEVEL
random	L-0
157	L-1
314	L-2
628	L-3
942	L-4

Working time setting mode (L-0)
Display brightness setting mode (L-0)
Calibration mode (L-1)
Preheating time setting mode (L-2)
Preheating temperature setting mode (L-3)
Preset temperature limit setting mode (L-4)

**Calibration mode (CAL.) L-1** - activated after holding down the "ON / OFF" button. The display shows the calibrated value of temperature. Display unit: °C.

Preheating time setting mode (P.tl.) L-2 - activated after holding down the "ON / OFF" button. The display shows the preheating time, counting from the moment of switching on, during which the controller performs initial heating and maintains the initial heating temperature programmed by the manufacturer. The indication "OFF" means the preheating function is not active.

Display unit: minutes. When pre-heating is activated, the controller displays "HC2" during startup.

Preheating temperature setting mode (P.tE.) L-3 - activated after long pressing the "ON / OFF" button. The display shows the value of the preset preheating temperature. Display unit:  $^{\circ}$ C.

Preset temperature limit setting mode (L.t.h.) L-4 - activated after long pressing the "ON / OFF" button. The display shows the maximum value of the set temperature that can be set. Display unit: °C.

**Operation mode** - Pressing the button decreases the preset temperature value. During preheating, the possibility of changing the preset temperature setting is blocked.

**Working time setting mode** - pressing the button decreases the time after which the thermostat is automatically turned off.

**Display brightness setting mode** - pressing the button decreases the display brightness.

**Calibration mode** - pressing the button decreases the value of the indicated (calibrated) temperature.

**Preheating time setting mode** - pressing the button reduces the time after which the thermostat automatically switches from the preliminary heating phase to the work heating phase.

**Preheating temperature setting mode -** pressing the button decreases the value of the preset temperature that is maintained during preliminary heating.

**Preset temperature limit setting mode** - pressing the button decreases the value of the maximum preset temperature that can be set.

#### <u>5 – plus "+" button</u>

**Operation mode** - Pressing the button increases the preset temperature value. During preheating, the possibility of changing the preset temperature setting is blocked.

Working time setting mode - pressing the button increases the time after which the thermostat is automatically turned off.

**Display brightness setting mode** - pressing the button increases the display brightness.

**Calibration mode** - pressing the button increases the value of the indicated (calibrated) temperature.

**Preheating time setting mode** - pressing the button increases the time after which the thermostat automatically switches from the preliminary heating phase to the work heating phase.

**Preheating temperature setting mode** - pressing the button increases the value of the preset temperature that is maintained during preliminary heating.

**Preset temperature limit setting mode** - pressing the button increases the value of the maximum preset temperature that can be set.

#### 6 - "ON/OFF" button

Pressing the button alternately turns the controller ON and OFF. In the OFF state, the controller behaves like a thermometer. In the ON state, the controller enables and disables the heater control relay to maintain the temperature set by the user.

Longer pressing and holding the button and then releasing the button activates the working time setting mode, indicated by the displayed message (Pro.). In this mode, using the "+" and "-" buttons adjust the time after which the controller will automatically turn off. To exit from this mode and to confirm settings short press the "ON / OFF" button. Press and hold and then release the button to enter the display brightness setting mode — which is indicated by (d.br.) message. In this mode, use the "+" and "-" buttons, to set the brightness of the display. To exit this mode and to confirmo settings short press the "ON / OFF" button.

Press and hold and then release the button to enter the calibration mode, which is indicated by the displayed message (CAL.). In this mode, use the "+" and "-" buttons, to adjust the displayed temperature value. To exit this mode and to confirm the calibration settings short press the "ON / OFF" button. Note - the controller is factory calibrated.

heating time setting mode, which is indicated by the displayed message (P.tl.). In this mode, use the "+" and "-" buttons, to define the time after which the controller automatically switches from the preheating phase to the work heating phase. Message "OFF" means that the pre-heating function is inactive. To exit this mode and to confirm settings short press of the "ON / OFF" button.

Press and hold and then release the button to activate the pre-heating temperature setting mode, which is indicated by the displayed message (P.tE.). In this mode, by use the "+" and "-" buttons to define the temperature that will be maintained during the preliminary heating. To exit this mode and to confirm settings short press the "ON / OFF" button.

Press and hold and then release the button to activate the preset temperature limit setting mode, which is indicated by the displayed message (L.t.h.). In this mode, use the "+" and "-" buttons to set the upper limit of the preset temperature setting. To exit this mode and to confirm setting short press the "ON / OFF" button.

Note - all settings and the controller operation status (on or off) are stored in the permament memory.

#### 4.3. Troubleshooting

The HC1 controller is equipped with advanced error detection algorithms. Detection of any error engages the emergency stop function and the error report screen is displayed. To remove the error report screen turn off the power, remove the source of the error and turn on the controller again.

ERROR CODE	DESCRIPTION
(E-0) CPU	Main processor fault.
STATUS	
(E-3) T < Tmin	T1 temperature too low.
(E-4) T > Tmax	T1 temperature.
(E-5) Przycisk -	"-" button fault (or stuck)
(E-6) Przycisk +	"+" button fault (or stuck)
(E-7) Przycisk ON/	"ON/OFF" button fault
OFF	(or stuck)

#### 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 5°C.

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 from the power supply outlet before performing any maintenance!

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).

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.

#### 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

