# **HES-02**



CASSETTE AND RADIAL
HONEY EXTRACTORS
WITH SEMI-AUTOMATIC CONTROLLER
USER'S MANUAL

Before using the machine, read the instructions for use and follow the instructions contained therein. The manufacturer cannot be held responsible for damage caused by improper use of or inappropriate handling.

### Terms of use

- 1. Honey extractor is designed to extract honey from frames.
- 2. Wash the honey extractor thoroughly before spin, with hot water and small amounts of detergent (for contact with food certified) or use a pressure washer. Make sure to protect electronic components and bearings from getting wet!



## **Electrical safety**

- Electric installation need to be equipped with a residual current device and is designed to trip on a leakage current of 30 mA. Overcurrent protection needs to be checked periodically.
- 2. If the supply cord or detachable connection cable is damaged and needs to be replaced, this operation should only be performed a by a qualified person in order to avoid danger. Do not use honey extractor if the cord or connection is broken.
- 3. Before switching on, make sure that the control is disabled. Switch "0/1" on the control panel should be set to "0".
- 4. Make sure that the power supply stays in line with power supply of the honey extractor.
- 5. Take special care whilst plugging a power cord. Hands have to be dry. Place on the dry surface only.
- 6. When switching the honey extractor on, the "EMERGENCY STOP" button should remain switched off (in order to switch it off, turn it so that it pops out) Pressing the "EMERGENCY STOP" button will result in the immediate stop of the honey extractor.
- 7. Honey extractor lid should be closed whilst spinning. Opening the lid during spinning is strictly forbidden.
- 8. Honey extractor cannot be moved during spinning.
- 9. Protect your engine and the controller against moisture (also during storage).
- 10. Do not pull the power cord, keep the power cord away from heat sources, sharp edges and maintain its good condition.



## Safety

- 1. The device is not designed to be used by persons (including children) with limited physical, sensual or psychological abilities or persons who do not have experience or knowledge of the device unless it is done under supervision and according to the user manual passed by persons responsible for their safety. Keep away from children!
- 2. In case of damage, in order to avoid hazard, repairs can only be undertaken by a special agent or a qualified person
- 3. Carrying out any maintenance works when honey extractor is in use is strictly forbidden.
- 4. All protective equipment must be securely affixed to the honey extractor.
- 5. In case of any emergency, use the safety switch immediately. Honey extractor rebooting may be required after the threat has been eliminated.
- 6. For indoors use only! The device is not designed to be used outdoors.
- 7. Honey extractors with a heated floor and / or drum is equipped with a digital temperature controller (in the range of 5-95 ° C). If you set the temperature above 60 ° C, there is a risk of getting burnt Pay extra care!
- 8. Do not switch the device and store it at temperatures below 0 ° C. Do not turn on when the ambient temperature is below 5 ° C. Prior to starting honey extractor, especially when moved from the premises of lower temperature to the room with a higher temperature, wait until it reaches the ambient temperature



Repairing while in operation is prohibited!



Do not remove covers while the device is in use

## **Work Place**

Work place needs to be provided with proper light and be kept clean and tidy

## **Storage**

After honey extracting has finished, the device should be cleaned thoroughly and dried.

Before every season the technical check-up needs to be performed. If any fault is found, contact the appriopate service.

### Maintenance of honey extractor



## Unplug the honey extractor from the power source prior to attempting any maintenance

Before first use and after the honey extracting has finished, honey extractor should be washed carefully with hot water and small amount of detergents (allowed for use in food industry) or by using a pressure washer. During washing pay special attention in order not to wet the motor and the controller (they may be covered with a water-proof cloth throughout the duration of cleaning). During washing make sure not to wet the bearings which are located under the drum. To avoid wetting the bearings cover the slot inside the drum where the axle of the basket is located.

Once completed, rinse it with clean water and dry it thoroughly.

### Utilization

The device needs to be disposed at the dedicated point. Customer has the right to return the used equipment to the distributors, free of charge and directly, if the device returned is of the same type and same purpose as the newly purchased one.

# HONEY EXTRACTOR USER'S MANUAL

## Getting the device ready

- 1. Place the honey extractor in the designated place.
- 2. Fix the honey extractor to the ground, to avoid unnecessary movement during honey extraction.

### Terms of use

- 1. Honey extractor is designed to extract honey from honey frames.
- Before first use and after honey extracting has finished honey extractor should be washed according to the rules included in **Honey Extractor Maintenance**.
  - 2)In the radial type of honey extractor, trabecular top boxes should rest on the lower and upper basket rod. Failing that (too short or too long) may result in the honey extractor or frame damage
- 3. Frames arrangement:Place the honey frames (prepared beforehand) in the basket of the honey extractor paying special attention to their correct arrangement. The type of honey extractor should be chosen in line with the frame type:
  - 1. In cassette honey extractor pay special attention to correct frame allignment, which should fit into the cassette. **Fig.1.**

- In radial honey extractor upper beams of frames should rest on the upper and lower basket rods
- 3. Frames in both types of honey extractors should be arranged in a special way that is trabecular toward the top of drum as shown in Fig.2

The exception is the Warsaw type of frame, which should be placed upside down

(WL, OS, D, LN. AP, ) Oznaczenia: WL-Wielkopolska, OS-Ostrowskiej, D-dadant, LN – Langstroth, AP – Apipol



Fig.1. Correct frame arrangement in Cassette Extractor



Fig.2. Correct frame arrangement in Radial Extractor.





radial honey extractor

cassette honey extractor

### **ATTENTION!**

## Incorrect frame positiong may result in damage not covered under warranty!

- 4. Before switching the honey extractor on, you must:
  - check if the safety button is not pressed
  - make sure that the frames have been correctly inserted into the basket in order to eliminate the risk of damage.
  - plug the honey extractor to the appriopate power supply or battery, and turn the switch on the control panel from "0" to "1".
  - Follow the instructions of how to start the honey extractor.
  - The first phase of spinning should be performed at low speed to prevent the cappings from breaking.
  - Rotating basket should not be blocked by the raising level of extracted honey. If this situation occurs, stop the extractor, to prevent its damage. Once the honey has dripped onto the cointaners, the whole spinning process can be resumed.
  - Honey containers should be placed under the drain nozzle.
  - Drain valves should be left open during the spin so that the extracted honey could flow freely

# INSTRUCTIONS FOR SEMI-AUTOMATIC CONTROLLER



Fig. 3.

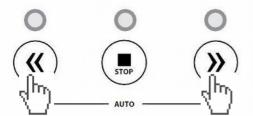
Before turning the honey extractor on, make sure that the switch "0/1" on the controller housing is set to "0".

### Semi-automatic control (inverter) -

Honey extractor with this controller allows the extractor to work both in manual and automatic mode.

### **AUTOMATIC PROGRAM**

The controller has one factory pre-set automatic program



To start the automatic mode press two arrow buttons simultaneously **Fig. 4.** 

### Fig. 4. Automatic mode

### MANUAL PROGRAM

Before working in manual mode, set the speed controll knob to "min" as in the **Fig. 5.** 



Fig. 5. Speed controll knob

Start the extractor by pressing the left (Fig.4) or right arrow (**Fig.4**)

Use the speed controlknob to adjust the rotation speed of the basket.

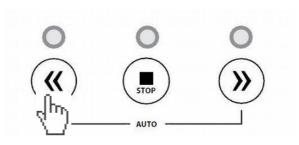


Fig. 6. Counterclockwise basket rotation direction.

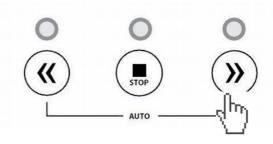


Fig. 7. Clockwise basket rotation direction.

To change the direction, press "STOP" and choose the direction of rotation using the buttons as shown in **Fig. 6 and Fig. 7**.

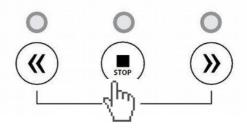


Fig. 8. Use "STOP" button to stop the basket spinning.

### **ROTATION DIRECTION SETTING**

HES-02 Semi-Automatic controller allows the user to choose between two modes; "clockwise rotation" only or "both directions"

1. Set the speed controll knob to "max". (Fig.9).



Fot.9.

2. Turn the controller on "0/1". Press and hold "STOP" button when LED diodes start flashing (Fig.9) until one or both green LED's light up (Fig.10)



Fig.10. Cassette mode (A), Radial mode (B)

- 3. To change rotation direction press "**left arrow**" button untill the green LED lights up, showing desired configuration:
- One green LED (right hand side) indicates the radial mode (Fig.11)
- both green LED indicate Cassette mode. (Fig. 12.)



Fig. 11. Radial mode (clockwise direction only)



Fot. 12. Cassette mode (both rotation directions)

4. To confirm mode choice, press "**right arrow**" button. (**Fig. 13**)



Fig. 13. Mode choice confirmation (right arrow)

### **TECHNICAL SPECIFICATIONS**

#### Drum:

- Stainless steel, acid-resistant 0H18N9,

### Basket:

- Made of stainless steel rods, acid-resistant mesh with dimensions of 20x40 mm,
- ball bearings on the top and bottom housings-
- Drain outlet:
  - -1x6/4 (from Ø 720 to Ø 900)
  - 2x 2" (from Ø 1000 to Ø 1200)
- Transparent cover, made of acrylic
- Time lock
- Buttom of honey extractor cone-shaped, reinforced,
- Stand is stable and easily removable, powder painted to increase the durability
- Type of gear: Worm gear

Number of cassettes in the cassette honey extractors :

Cassette honey extractors - the amount of cassette on the diameter of the drum

Diameter of the drum Ø	Drain		, Ostrowskiej, stroth	Dadant, Warszawska Extended		
		The number of cassette	Height of the drum	The number of cassette	Height of the drum	
800	1x6/4"	6	600/700	-	700	
1000	2x2"	8/12*	600/700	6	700	
1200	2x2"	12*/16*/20*	700	8/12*/16*	750	

<sup>\*</sup>concerns honey extractors with partitions of metal

### Number of frames in the radial honey extractors :

Radial honey extractors - number of different types of frames - beam 25 mm

	Diameter of the drum	Height of the drum	Drain	The number of frames					Notes
				OS/LN	WL/1/ <sub>2</sub>	D/½	WZ	WP	
	Ø 720	600	1x6/4"	18	-	-/18	-	-	6 sectors
	Ø 800	600	1x6/4"	30	18/30	-/30	18*	-	6 sectors
	Ø 900	600	1x6/4"	42	30/42	24/42	30*	18*	6 sectors
	Ø 1000	600	1x6/4"	42	42/42	36/42	36*	24*	6 sectors
	Ø 1200	600	1x6/4"	56	56/56	56/56	48*	48*	8 sectors

\* rotate the upper part of the frame down
Frames: WL-wielkopolska, WP-warszawska extended, D-Dadant, OS-Ostrowskiej, WZwarszawska ordinary