Instruction for Use of the Honey Extractor

Main components of the unit
1. separation barrel
2. inner part, rotary basket
3. frame holding basket (self-rotary), frame holding part
4. outlet cock
5. drive motor
6. motor regulating electronics
7. V-belt pulley
8. safety electromagnetic switch, door opening sensor

Installation of the machine
After removal of the transport packaging, please check the unit for any fastenings, wedging-up, and remove them, if any. If possible, place the machine on a smooth and flat surface. You can improve the stability of the machine during operation by fixing it to the floor (using screws through the holes on the foot bases) or by placing rubber pads under the bases.

Check the screws on the feet of the machine for tightness. Tighten any screw that fails to fasten the machine sufficiently.

Fastening the motor regulating electronics
Place the motor regulating the electronics onto the holder located on one of the feet of the machine. Suspension is provided by means of two holding lugs on the box of the motor regulator. The operating mode of the automatic motor regulators is factory-set for the specific type of extractor.

Checking the V-belt and the Power Supply
Check the V-pulley at the bottom of the unit for secure fastening on the axis. Adjust it using the screw on the V-pulley if necessary. Check V-pulleys for line run and the V-belt for tightness. If the V-belt is not on the pulley then place it.

Connect the machine to proper power supply (12V or 230V). For 230V power supply, make sure the power supply is grounded to protect persons and devices. Turn on the safety switch on the plug. The switch activates the unit after a few seconds delay.

Use only power supply suitable for the design of the machine. Improper use (overvoltage, low voltage) may damage the electronics. We recommend the use a battery charger distributed by us which is able to supply the power necessary for the 12V electronics. If you want to use your own battery charger, we suggest to connect our electronics to a battery, and to charge that battery with its own charger. Thus you can avoid damages to the electronics that may be caused by the fact that your own battery charger does not supply the necessary power.

On manually driven machines the driving arm is mounted in a reversed position to avoid damages during transportation. Return it into its proper direction by loosening the retaining screw and fasten it before putting into use.

Operation
With a tangential honey separator
These machines are suitable for the simultaneous separation of 3 or 4 complete frames, or 6 or 8 half frames. Place the frames onto the frame holding lugs mounted on the inner side of the grid, and perform separation. Please make sure to turn the frames at a low rate at the beginning (until all honey is separated) then you can gradually increase the rotation speed. These separators are able to separate honey only from one side of the frames in one run. Then stop the machine (by turning the driving arm in the opposite direction on units provided with manual driving arms, by means of a so-called coaster brake), reverse the frames, and separate honey also from the other sides.

With a radial honey extractor
The so-called frame holding lugs are mounted both at the bottom and at the top of the inner rotating part of the radial extractor. There is another inner holding ring mounted axially. Place the frames by inserting the lug part on the long batten of the frames into the lugs on the lower ring, and by tilting the upper batten of the frame between the lungs at the upper ring. The inner ring of the basket holds the lower part of the frame where the frame batten must be tilted between the lugs as well. After inserting the frames you can start the separation. Please make sure to turn the frames at a low rate at the beginning in order to have all the honey extracted, then you can gradually increase the rotation speed.
With a self-rotating honey separator
Place the frames steadily into the frame holding basket of the self-rotating separators. Then close the lid and start the program. During the operating time of the chosen program, no intervention is required and the unit may be left unattended and other tasks can be performed during this period. The self-rotating separators change direction of rotation three times by default. The system rotates at 70% of the rotation speed set on the regulating electronics in the first direction to separate some honey from one side of the frame carefully (to make the frame lighter). After changing the direction, the other side of the frame is fully separated by the machine with the rotation speed set automatically. After another change of direction, the first side of the frame is separated again at the set rotation speed. The set rotation speed can be modified during the operation of the machine.

The option of changing direction twice instead of three times is also available. The method is included in the instructions for use of the regulating electronics. The extractor indicates the end of the program by giving a beeping sound.

Machines with safety magnetic switches
Open the lid provided with the magnetic switch for a short time and then close it again when the first separation is started. The set of flashing LEDs of the regulating electronic unit enters into a stand-by state. The separation program can not be selected and started before reaching this state. The function of the magnetic switch is to stop the rotation automatically when the lid is opened. When the lid of the machine is opened while in operation, the switch interrupts the circuit and the motor immediately enters into the braking mode. The time necessary to stop the rotation depends on the speed of rotation at the opening of the lid and on the weight of the material in the separation basket. It can take several seconds.

Care and maintenance of the machine
No special preparation is required for general cleaning. After removal of the honey, clean the unit with warm water or use a jet washer after opening the lid of the unit. Always remove the lid before performing the annual cleaning of the honey extractor. It is fixed by three screws on opposite sides. After removing the screws, remove the V-pulley retained by a screw on the axis from the bottom of the machine. Then the honey extractor basket can be pulled from the barrel together with the axis. Before cleaning, remove the angular bearing (no. 7203 2RS or 6003 2RS) from the bearing house located at the bottom of the machine. Check its condition and lubricate it at least once a year, but if possible, every time when cleaning is performed. Since this bearing is exposed to an extreme load, it is recommended to replace it every second year. After washing use a soft cloth to wipe the interior of the machine.

Troubleshooting
1. **There is no change of direction:**
   Based on the instructions for use of the regulating electronics, check whether the electronics is set to self-rotating mode 1 or not. If not, modify it.

2. **The direction of rotation is changed, but the baskets do not reverse direction.**
   Switch off the machine and check if the frame holding baskets are centrally positioned towards the axis. If you look into the baskets from above, the rod under the baskets must be parallel with the position of the frame holding basket. If it is not the case, you must reach below the basket or baskets where the deviation is identified. Carefully rotate the retaining screw clockwise or anticlockwise – while pushing the frame holding basket into the opposite direction with the upper part of your palm – until the basket is correctly positioned. This defect can be caused by the different frame sizes due to the protrusion of the long batten.

3. **The motor regulating the electronics fails to enter into stand-by mode even after opening and closing of the lid.**
   Disconnect the two wires of the magnetic switch that are connected to the regulator. Connect the two connecting parts of the regulator using another wire (short circuit). Check if the unit operates. If it works, then the magnetic switch is malfunctioning. If it does not work, then the regulating electronics must be replaced. Please contact our company allowing us to send a spare part.

4. **The machine resonates, vibrates, the V-belt tissue starts fraying**
   This problem occurs if the V-pulley on the motor is not aligned with the V-pulley located on the axis. Please check and adjust the V-pulley on the axis to the adequate level. If the V-belt has been worn out as a result of the error, it should be replaced.

If you cannot solve the problem, contact us using our contact details. We are delighted to have your remarks on your experiences with the use of the machines. Your opinion is important for us, therefore we do our best to take it into consideration during production and product development. We hope that you will find the extraction process enjoyable. We wish you good luck for the job.

Königin-Trade Kft, H-5900 Orosháza, Szentesi út. 31.
Tel: (+36) 68 410 666; www.konigin-trade.com, info@konigin-trade.com