Honey mixer 230L user manual

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Version 1.

These operating instructions are in English, the original is in Estonian.

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Manufacturer of honey mixers: Asteni Mesindus OÜ

Manufacturer 's address: Allikunurga, Türi-Alliku, Türi vald, 72232 Järvamaa
Name of product: honey mixer 230l / 230/380V
Phone no.: 5251236
www.asten.ee
info@asten.ee

1 Safety instructions and warnings

Read the instruction manual carefully before using honey mixer.

It contains important information on the use, safety, installation, cleaning and maintenance of the honey mixer.

This protects the device and ensures your safety.

Keep this manual for future reference.

Electrical safety is only ensured if honey mixer is connected to a grounded mains supply in accordance with the instructions and fitted with a fault current circuit breaker.

The mains to which the honey mixer is connected must be installed by competent persons and comply with all legal requirements and regulations.

The manufacturer and the distributor shall not be liable for any damage caused by incorrect connection and/or installation of the appliance or by the use of incorrect fuses.

Honey mixer meets the specified safety requirements.

Improper use may damage the honey mixer and endanger the user.

Only persons authorised by Asten Honey Production & Technology may carry out repairs and maintenance on the equipment.

1.1 Technical safety

Before installation, make sure there is no visible damage to the honey mixer.

Do not install and put into service the damaged honey mixer.

Do not install in a room where there is a risk of freezing.

Temperature fluctuations can have a negative impact on electronics.

Possible accessories and equipment may only be used with the machine if approved in writing by the manufacturer.

If non-authorised parts are fitted to and/or on the machine, the warranty will be invalidated.

Use only the spare parts provided or recommended by the manufacturer to avoid damage to the honey mixer and the associated risks.

Welding work on the honey mixer is only permitted after disconnection of the mains supply. The controller must be disconnected from the honey mixer.

The whisk of the honey mixer must not be started when the honey has hardened in the container, otherwise the safety bolt M6x30 may break on the whisk shaft to save the gear unit from overload.

The honey must be preheated to a soft state!

1.2 Notes

Asteni Mesindus OÜ has the right to modify the constructions and the firmware of the honey mixers.

This manual is the translated version of the original manual for honey mixer 230l.

2 Introduction

Thank you for purchasing honey mixer 230L.

To make the best use of the honey mixer, please first read the user manual carefully.

Keep this manual for future reference.

The honey mixer is fully automatic and heated.

It is possible to program different honey mixing times and cycles. 3,5 rotations per minute.

Power supply 380V / 230V. The blender is equipped with a lid safety mechanism, i.e. when the lid is lifted during the working process, the blades of the blender stop rotating. When the lid is closed, the process continues.

The instructions for use state:

- Brief description of the device and its components
- Instructions for starting work with the equipment
- Safety precautions

Dimensions of the device:

- Height of the container with motor1350mm
- Width of container with motor 637mm
- Elevation frame heights 400 or 600mm

0.25kw motor

1:400 reducer

Honey mixer control panel, program clock, temperature controller, lid safety switch

Power cable 380V / 230V / 1.5m

Double layer container with stainless steel heating cable and insulation

Stainless steel ball valve 1 ¼ with the possibility of adding a hose connection

Removable feet with height 400mm and 600mm

Equipped with spacers for transport with a manual forklift

2.1 Concept and purpose of the manual

The 230L honey mixer is made for the beekeeper for heating, melting, and mixing the honey and making creamy/spread honey. The product is not intended for any other use. The honey mixer is equipped with an ESM-3711-HN thermal controller, which can be controlled from a panel on top of the honey mixer.

The aim of the user manual is to make the user of the product aware of the functionalities and capabilities of the honey mixer.

The product comes with: honey mixer 230L, user and safety manual, ESM-3711-HN thermal controller user manual in English.

2.2 Overview of the work process

Be sure to read the instructions before using the product. Organise the workplace suitable for the job, make sure it is safe to start work and ensure that the equipment is not used by anyone who has not read the instructions.

3 First deployment and operational process

Honey mixer must be properly installed and connected before use. Honey mixer must be positioned in such a way that there is free space around the unit for working. Do not place the honey mixer motor fan against the wall, leave at least **5cm** free space, otherwise there is a risk of the motor overheating.

The workplace in which the honey mixer is installed must comply with the applicable safety rules and requirements.

It is also advisable to wash the inside of the product with warm water or, if necessary, with detergents authorised by the food industry.

Plug in the power supply to start work (**380V / 230V**)*.

The rotation of the honey mixer can be controlled from the program clock next to the control panel - the clock face on the left of the program clock means that the manifold will only rotate according to the parameters set by the user.

Clock parameters can be set according to the 'bars' on the top of the program clock - one bar represents **15 minutes**.

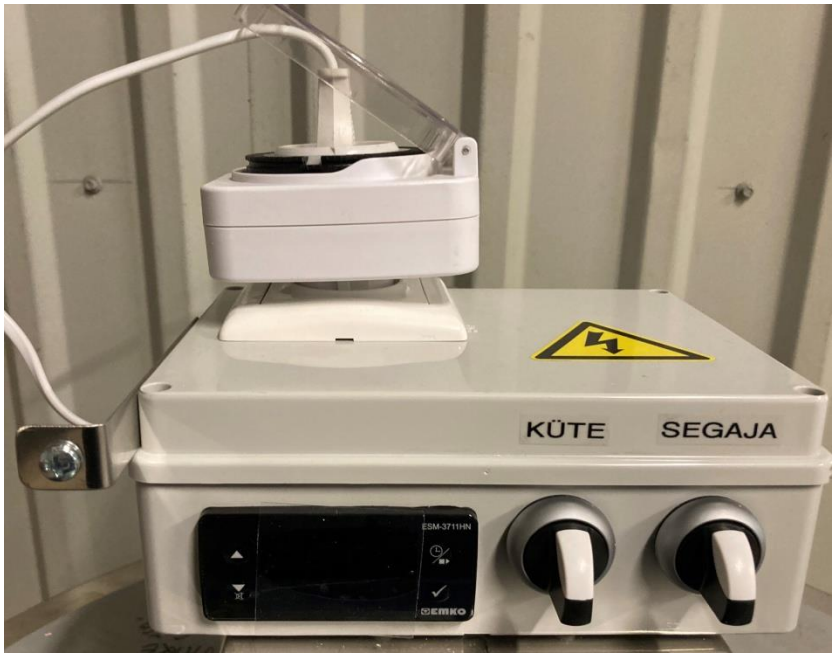
By pressing down on the bar, it becomes active and the honey mixer starts to rotate during this period. If you select the image on the right, the honey mixer will rotate indefinitely. A clock image is shown on the left - in this position the device only works according to the clock settings. In the right position, it works stably all the time.

Figure 1: Program clock

Turn the **"KÜTE"** switch to the left to switch on the heating of the honey mixer. Then the heating of the honey mixer starts. Adjust the temperature from the temp controller (See Chapter 4).

Turn the **“SEGAJA”** switch to the left to turn on the mixing whisk. Then the whisk of the honey mixer starts working.

Use the **24h** timer on the shield to adjust the whisk cycles.



Cycles suitable for making creamy honey would be**: 4-5x 30 minutes** of mixing cycle during **24h**, the best honey for making creamy honey would be honey with a fine crystal in nature.

Depending on the variety and condition of the honey, the preparation process takes **2 to 3 weeks**. The fastest crystallisation temperature is **+15C**.

Do not set the temperature below +15C!

The honey becomes tough and there is a risk of overloading the appliance. Mixing cycles must be continuously on to keep the honey in a stable flowing/liquid state.

If we have deactivated the mixing cycle and the honey has been left unmixed in the appliance for more than 24H, do not start the mixing cycle until the honey in the appliance has warmed up to +30C´ within 24H!

Once we have achieved a homogeneous crystalline honey mass, we preheat the creamy honey to **+30C** for packaging - this ensures a uniform and stable honey flow for packaging.

It is recommended to keep **10-20%** of creamy honey in the barrel, it is called yeast, which promotes faster ripening of the next batch.

When melting the honey, adjust the temperature to **40- 45C** and turn the mixer on to stir continuously. Depending on the nature and condition of the honey, we achieve a uniform level of honey melting within approx. **24 hours**.

Then adjust the temperature down (to the normal temperature of about 28C`) and leave the mixer on to cool the honey as quickly as possible.

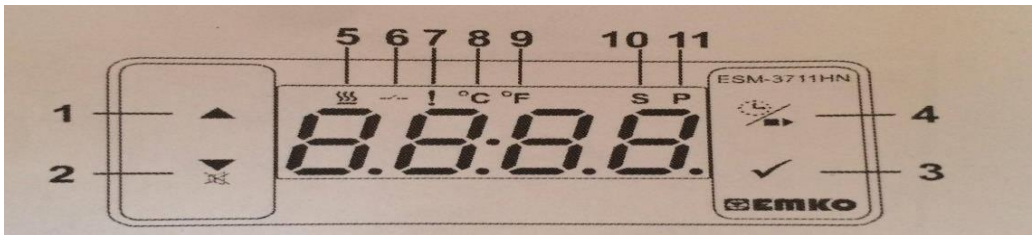
Temperature regulation is done by means of a temperature sensor and a regulator. The temperature sensor is located in the lower third of the barrel.

If there is 1/3 or less honey in the honey mixer, there is a risk of overheating the honey as the temperature sensor does not fix the exact temperature.

Depending on the modifications of the product, it is possible to connect the product to 380 V or 230 V mains.

During the honey processing process, large, sharp, strong honey crystals can form on the bottom of the machine or on the mixing blades. After each batch of honey, we recommend emptying the appliance from honey and washing the crystals from the bottom and blades of the appliance with water. It is a phenomenon specific to honey.

4 Operating instructions for the temperature controller ESM-3711 HN



Definitions of buttons:

Figure 2. Illustrative photo of temperature controller buttons
1 Increase value button. This button is used to increase the value of the preset value.
2 Decrease value button. This button is used to decrease the value.
3 Change value button. Pressing this button will display the parameter change mode. Once the parameters have been changed, it will be necessary to press this button again to save the set parameters. Press and hold this button for 5 seconds to enter programming mode. Attention! In programming mode, there is a very high risk of confusing the settings and therefore disturbing the regular operation of the temperature controller. Only use the programming mode if you have fully understood the operation of the temperature controller and are able to change the settings!
4 Heat button.
LED definitions:
5 Cooking LED. Indicates that the heating mode is on.
6 Output LED.
7 Alarm LED
8 Celcius LED. Indicates that the device is operating in C mode.
9 Fahrenheit LED. Indicates that the device is operating in F mode.
10 Change mode. Indicates that the device is in parameter change mode.
11 Program LED. Flashes when the device is in programming mode.

If the temperature controller is not switched on, no lights are on or flashing:

Figure 3. Temperature controller switched off

When the controller is switched on, numbers will appear on the display indicating the current temperature:

Figure 4. Temperature controller switched on

From the picture we can see that the current temperature is 27 degrees, and to see what temperature we want the controller to reach, or if we want to change the existing parameters, we click on the tick sign in the bottom right corner. The set parameters will then appear on the screen (usually set by the manufacturer to 40c in the factory settings), and next to the 'C' symbol on the top of the screen, an 'S' will appear next to the word 'Set', indicating that the device is in parameter change mode:

Figure 5.

Parameter change mode, also indicated by the "S" on the top bar.

From the figure, we can conclude that the currently set temperature/parameter is 40c.

To increase the parameters, press the upper arrow (top left corner of the temp. controller) and to decrease the parameters, press the lower arrow (bottom left corner).

Press the tick sign again to confirm the changes.

Once you have set the parameters and clicked the tick again, the current temperature will reappear on the screen. If you want to make sure that the parameters you have set are still correct, press the tick again and the display will return to the parameter change mode.

If you have any questions or problems, please contact the manufacturer – Asteni Mesindus OÜ / +372 525 1236 / info@asten.ee

5 Technical specifications

- Power supply 380V / 230V*
- Power cable length 3m
- Container layers of AISI304 stainless steel
- Insulation layer
- Possibility to program different mixing times and cycles
- 3,5 rpm
- Temp controller ESM-3711-HN
- Temp sensor PT100
- Timer 24h
- Heating up to 55C`
- Heater power 520w
- Plastic lid
- With lid stop mechanism
- Stainless steel 1 ¼" ball valve
- Height of nozzle above ground 400mm / 600mm
- Motor power 0.25kw
- Motor overload protection
- Weight 60kg
- Noise level 30dB

6 Transporting the device

Do not transport hot, working device. Allow the device to cool down beforehand. Disconnect the power cord from the mains. The honey-filled appliance must not be transported, it must be drained of honey beforehand.

If the device is to be transported over long distances, it must be secured by safety straps. Avoid contact of the straps with electrical shields, as this may cause damage to electrical systems.

The device must not be transported in a sideways position. The device must stand on the bottom. The support legs must be removed to ensure the stability of the appliance.

DO NOT lift the appliance from the tap!

7 Maintenance and cleaning of the device

It is also advisable to wash the inside of the product with warm water or, if necessary, with detergents approved for use in the food industry before use, as dust or other dirt may be present in the appliance container. Care should be taken to ensure that moisture does not get into the electrical components – remote control on the honey mixer and motor.

General washing of the appliance can be carried out as required.

8 Safety precautions

Before using the product, carefully read the safety precautions below to ensure correct and safe use of the product and to prevent damage and injury to you or others.

It is the responsibility of the person in charge of the equipment to ensure that all users understand and comply with this manual.

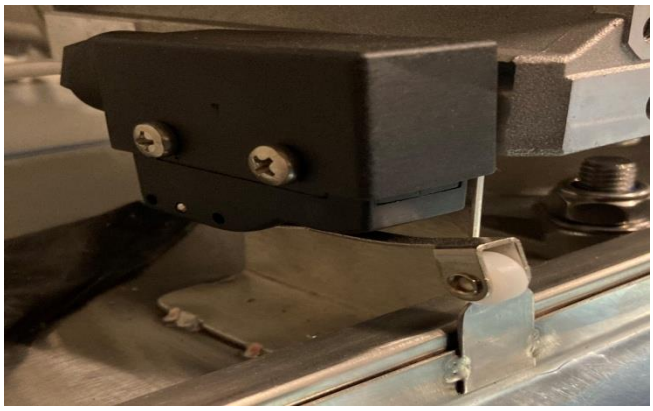
Keep children and unauthorised persons away from the equipment. Do not allow unauthorised persons or children to touch the equipment in operation.

To ensure that users of the product can consult the instructions quickly, keep the instructions close to the product.

Use the product only in the place where it is intended. Indoors, at a stable temperature and level surface.

Place the device in a safe place where there is no risk of tipping over and safe access to the device.

The honey mixer is equipped with an automatic mixing blade stop mechanism - if the honey mixer lid is opened during the mixing process, the blades stop rotating. If the lid is closed again, the blades will continue rotating.



Lid safety switch

It is forbidden to modify or remove the lid securing mechanism.

Use the honey mixer only for storing, blending and heating honey.

Only honey or hot water for washing the product may be introduced into the honey mixer.

If the creamy honey has been left in the machine for an extended period of time without using the mixing cycle, the honey must be warmed up to at least +25°C for 24 to 48 hours before starting the mixing cycle.

If the liquid honey has been left standing in the mixer and is in a crystallised state, the honey must be heated to 40C before starting the mixer, after which the mixing cycle can be started.

Do not start the mixer whisk once the honey in the container has started to solidify. Before doing so, start the heating of the container and allow the honey to warm up. Otherwise, the safety bolt M6x30 of the whisk shaft may break to save the reducer from overloading.

Figure 6. Whisk shaft overload protection bolt M6x30 stainless steel bolt and M6 nut.

If there is an overload on the whisk and the bolt is broken, the Customer is allowed to replace it himself. A **stainless steel bolt M6x30** of the specified dimensions must be used and the holes must be aligned. After inserting the bolt, tighten the bolt with the stopper nut. In the event of a honey mixer malfunction, we recommend covering the honey with a piece of cardboard, for example, to prevent foreign objects from getting into the honey.

In the event of a fault or malfunction, stop operation, disconnect the appliance from the mains and only then determine the cause of the fault.

In the event of a serious product fault, contact the manufacturer.

It is forbidden to use the appliance without first reading the instruction manual.

Producer responsibility

Asteni Mesindus OÜ is responsible for ensuring that the honey mixer 230L is completely safe when used correctly and that it is accompanied by instructions for use and safety.

8.1 Safety symbols

Rotating parts / risk of being trapped

Electrical risk / electrical components

Rotating parts / risk of being trapped – The sign indicates that there are rapidly rotating parts of the appliance which, if touched, may present a risk to parts of the body which may be caught in the impeller.

Electrical risk / electrical components – sign refers to the control panel and the engine which contains a considerable amount of electronics. Any dismantling/assembly of the control unit/motor while the unit is connected to the mains is strictly prohibited!

The guide plate is not waterproof, so pay strict attention that the plate is not exposed to moisture or direct water!

9. WARRANTY

Asteni Mesindus OÜ warrants the equipment it manufactures and sells against possible defects in construction, workmanship and mechanical defects. After the expiry of the warranty period, no reference to a defect during the warranty period shall be valid unless made in writing.

9.1 DURATION AND START OF THE WARRANTY

The guarantee is given for the following period;

- Electronics inside the control panel (frequency converters, contactors, temperature controllers) - 2 years (24 months)
- Motors and reducers on the device – 2 years (24 months)
- Device construction details and welds - 5 years (60 months)

The guarantee starts from the moment the goods are handed over to the customer and the instrument of delivery and receipt is signed.

Warranty applies to the first buyer/user of the equipment sold.

The customer ordering the warranty repair must prove the validity of the warranty period of the appliance (by means of an acceptance report or the serial number on the CE marking).

9.2 WARRANTY INCLUDES

The warranty covers the costs incurred during the warranty period for the repair of structural, manufacturing and mechanical defects in the equipment identified by Asteni Mesindus OÜ.

The aforementioned faults will be corrected by a person authorised by Asteni Mesindus OÜ or by an authorised maintenance company by putting the equipment back into working order.

Parts and components replaced under warranty are the property of Asteni Mesindus OÜ and are subject to return.

9.3 CARRYING OUT WARRANTY WORK

The fixed equipment is repaired at the customer's premises on working days at. 8.00 - 16.30. If the customer requests the warranty repair to be carried out outside normal working hours, the customer shall reimburse the additional costs incurred.

In the case of equipment expertise, easily transportable and easily disconnectable equipment must be delivered by the Buyer at his own expense to the Asteni Mesindus OÜ factory (e.g. containers and wheeled equipment).

In the case of larger and more technically complex equipment, the transport and disconnection of the equipment must be agreed in writing in advance with Asteni Mesindus OÜ (e.g. line parts and sealing machines).

When the technician arrives on site, free access to the equipment must be prepared for the technician.

Repaired equipment is collected by the customer or returned to the customer at the customer's expense.

9.4 LIABILITY AND LIMITATIONS OF THE WARRANTY

This warranty is valid provided that the equipment has been used under normal conditions and that the instructions for use have been carefully followed. If the above conditions are fulfilled, Asteni Mesindus OÜ is responsible.

The warranty does not cover losses that may be caused by a defect in the equipment, including damage to property, personal injury, damage to other objects, loss of profit, damaged output and other consequential losses.

Warranty repair does not include routine maintenance of the equipment and does not reimburse the costs arising from non-compliance with the instructions for use and maintenance of the equipment.

9.5 WARRANTY DOES NOT COVER DEFECTS CAUSED BY:

Incorrect transportation, improper lifting or moving of the equipment and failure to comply with the installation instructions for the equipment (unless carried out by persons authorised by Asteni Mesindus OÜ).

Due to the user's negligence or non-compliance with the instructions or handling conditions.

Overloading of the equipment.

Use of the equipment for purposes other than those for which it is intended.

Insertion of unsuitable frames into the equipment.

Conditions independent of Asteni Mesindus OÜ:

- +-5% of voltage fluctuations, at 230V
- Lightning strikes
- Fire
- Flooding
- Vandalism
- Incorrect connections between the appliance and the power cable
- Defective fuses
- Excessively long and inadequate extension leads
- High water hardness
- Damage caused by repairs, maintenance or structural modifications to the equipment carried out by unauthorised maintenance companies.

- Improper installation or placement of the equipment at the place of use, not in accordance with the instructions for installation and use or otherwise incorrect.
- Improper storage conditions of equipment by the user (excessive humidity and negative temperature in the storage room)

9.6 MINOR FAULTS, ADJUSTMENTS, OPERATING INSTRUCTIONS AND EQUIPMENT ACCESSORIES

Warranty does not cover:

Repairing surface scratches that are insignificant to the operation of the device,

Adjustments mentioned in the normal instructions for use of the equipment, on-site instruction, cleaning and maintenance measures.

Work resulting from the non-observance of, or failure to explain, precautionary or installation rules at the place of installation.

Parts that are likely to break as a result of use or normal wear and tear are not covered by the normal warranty:

- warning lights
- switches
- moving plastic parts
- heating elements
- seals
- clamps
- springs
- hose fittings
- bearings
- bearing supports
- hoses
- plastic lids

9.7 ACTION TO BE TAKEN IN THE EVENT OF AN ERROR

In the event of a defect occurring during the warranty period, the customer must immediately notify Asteni Mesindus OÜ IN WRITING.

When reporting a fault, you must specify the type of equipment (make, model). Proof of the validity of the guarantee (acceptance of delivery, model code on the CE marking) must be provided.

Describe, as precisely as possible, the nature of the error and the conditions in which and/or under which it occurs.

For its part, Asteni Mesindus OÜ will clarify whether the device and the described defect are covered by the warranty and will provide the customer with feedback on the repair method and time within 2 (two) working days.

9.8 DATA PROTECTION

Personal data will be used only for the purposes of contractual procedures and possible warranty operations in accordance with the requirements of the Data Protection Act of the Republic of Estonia.