FRUIT PROCESSING BOILER

INSTRUCTIONS FOR USE
SPARE PARTS LIST
WARRANTY CERTIFICATE

1.00 INTRODUCTION

These instructions are intended for persons who will be using or perform maintenance on the fruit processing boiler. The boiler is designed and intended (intended use) exclusively for extracting or distilling home-made spirits. The intended use also includes observing the manufacturer's instructions regarding the correct usage and maintenance of the device. Only properly trained persons who are instructed about any involved hazards can use, handle or repair the device/boiler. At work, the relevant general safety, occupational health and sanitary technical regulations must also be considered.
By following these instructions, we ensure proper operation and long service life of the product.

ONLY ADULTS ARE ALLOWED TO WORK WITH THE BOILER!

The manufacturer is not liable for damage resulting from incorrect or negligent work with the product.

2.00 MANUFACTURER AND PRODUCT TYPE

2.10 Product type:

FRUIT PROCESSING BOILER, "SUPER" TYPE: SUPER 80, SUPER 100, SUPER 120
SUPER 80-S, SUPER 100-S, SUPER 120-S
SUPER 30 mini

2.20 Product identification:

Each boiler is affixed with the corresponding nameplate:
– product name
– product model (type)
– serial No.
– year of manufacture

Upon receipt of the device, immediately check if any damage has occurred to the device during transport and if it corresponds to your order. Should you find any defects, please notify us within seven days of the receipt of the shipment.

3.00 INTENDED USE

A fruit processing boiler or distilling pot still is a distillation device for extracting alcohol from fermented fruit mash. It is a modern home spirit distiller.

3.10 Double-bottom boiler

A double-bottom or water jacket boiler is an integral part of the entire distillation appliance. In fact, it consists of two vessels that are laid one on top of the other. There is a space left between them that is filled with water. Water becomes the medium that transfers heat that is released around the outer boiler to the interior boiler which is in turn heated up. For this purpose, boiler fittings are installed on the boiler. (See image!) These consist of safety valves and a pressure gauge.

3.11 Double-bottom boiler, standard SUPER type

With this boiler design the interior part of the boiler is made of copper sheet, while the outer boiler is made of stainless steel sheet. The interior boiler is placed inside the outer boiler. The double-bottom boiler is set in a firebox or furnace. It is made of stainless steel sheet. The firebox is a two-piece component which means that the boiler can simply be emptied by tipping the upper part of the firebox to which the boiler mounted and pour out the mass. There is an opening at the bottom of the firebox – the firing door. A flue nozzle is installed at a higher position on the opposite side.
From the top, the boiler is closed or covered with a boiler hood. It is of utmost importance that the boiler and boiler hood are sealed tight. The thermometer on the boiler hood is used for measuring or controlling the temperature of alcoholic vapours.

3.12 Double-bottom boiler, SUPER –S type

The interior boiler is made copper; the outer boiler is made of stainless steel sheet. The interior boiler is placed inside the outer boiler. At the bottom of the inner boiler there is an outlet opening with a valve that is used to empty the boiler.
The double-bottom boiler is set in a firebox or furnace. It is made of stainless steel sheet. The firebox is made of a single piece – stable. There is an opening at the bottom of the firebox – the firing door. A flue nozzle is installed at a higher position on the opposite side.
From the top, the boiler is closed or covered with a boiler hood. There is a filling opening on the boiler hood. Therefore, the boiler can be emptied and filled without the need to disassemble the device.
It is of utmost importance that the boiler and boiler hood are sealed tight. The thermometer on the boiler hood is used for measuring or controlling the temperature of alcoholic vapours.

3.12 Double-bottom boiler, SUPER mini 30 type

The interior boiler is made copper; the outer boiler is made of stainless steel sheet. The interior boiler is placed inside the outer boiler. The design is such that the boiler cannot be disassembled.
The double-bottom boiler is set in a firebox or furnace. It is made of stainless steel sheet. The firebox is made of two parts; the upper part in which the boiler is mounted is attached to the lower part where fire is set and maintained. There is an opening at the bottom of the firebox – the firing door. A flue nozzle is installed at a higher position on the opposite side.
From the top, the boiler is closed or covered with a boiler hood. It is of utmost importance that the boiler and boiler hood are sealed tight. This is carried out with the help of a special rubber gasket and clamp screws.
The thermometer on the boiler hood is used for measuring or controlling the temperature of alcoholic vapours.

3.20 Cooling device

3.21. SUPER and SUPER –S mini 30 L designs

The cooling device or condenser is a water tank. On the top there is a threaded connection for evaporated alcoholic vapour intake, and on the underside of the container there is a pipe outlet from which the alcoholic distillate pours during the distillation process.
For complete condensation, the water temperature in the container must not exceed 20 degrees Celsius. Therefore, it is necessary to refill it with cold water several times and at the same time discharge the warmed-up water. On the upper outer edge of the cooling tank, there is a hot-water outlet or discharge tube nozzle.
If the cooling water becomes too hot, the alcoholic distillate does not condense fully and is released into the air.

3.30 Connecting tube

The connecting tube connects the boiler with the cooling tank. It is joined with threaded sockets and tightening nuts that provides good sealing.

4.00 TECHNICAL SPECIFICATIONS

	SUPER Mini 30	SUPER 80 SUPER 80S	SUPER 100 SUPER 100S	SUPER 120 SUPER 120S
Boiler volume/litres/approx.:	25–30	70–80	90–100	110–120
Filling quantity/litres/	25	65	80	100
Cooling tank volume/litres/	28	200	200	200

5.00 INSTRUCTIONS FOR USE

5.10 Distillation device set-up

The following tasks must be performed before starting work with the boiler:

– First, place the firebox in a suitable location. Connect the flue connection with the chimney. Observe the applicable fire safety regulations for connecting the stove and other firing installations.
Before using it for the first time, we recommend that you place the firebox perpendicularly to the cooling tank.

– After installing the firebox, check the fittings. Open the filler valve (pos. 1a) and overflow/outlet valve (pos. 2a). Now start filling up the water jacket. Attach a plastic water hose to the filler valve socket and connect it to the water supply fixture. Open the water inflow and ***slowly drain the water into the water jacket***. Filling lasts until the water flows from the overflow valve. Now close the fill valve (pos. 1a) and wait for the water to drain from the overflow valve and then from the outlet valve (pos. 2a). Use only clean water from the water supply network.

– Before the first filling, clean all interior copper surfaces (boiler, hood, connecting tube, slat screen in the cooling container) with hot water. Fill the boiler with water and start boiling water in the boiler for at least 15 minutes. Before draining water or cooked mash, open the filler valve on the fittings to equalise the pressure between the boiler and the intermediate shell with the atmospheric pressure. Then pour out water or mash and rinse the parts of the boiler several times with cold water and wipe them.
– Now you can fill the boiler with fermented fruit mash. Fill the boiler to a suitable height of approx. 90% of the volume or approx. 5cm below the edge – never to the top.
– Place the boiler cover/hood on the boiler. Make sure that the edge of the boiler tightly fits the gasket groove that is located in the hood. The gasket must be clean. Attach the hood slightly and evenly over the entire circumference using turnbuckle nuts.
– Connect the boiler (1) to the cooling device (6) using the connecting tube (3). Make sure that the threaded sockets on the boiler hood (2) and on the cooling device (5) are securely attached. Screw the turnbuckle nuts tight to ensure effective sealing.
– Fill the cooling device (6) with water to the height of the overflow tube. Attach a suitable plastic hose on the overflow tube and connect its free end to the drain. Connect the ball valve (option) on the underside of the tank to the water supply fixture.

Some basic rules for spirit distilling:

– Observe the intensity of heating; although there is no danger of burn-on, a correct distillation process is highly dependent on the heating regime.
– Pay attention to possible evaporation of alcohol distillate product.
– The initial distillate that flows from the device is inedible (methyl alcohol); i.e. the socalled initial distillate stream that is recognised by its specific smell. You must separate the initial distillate stream.
– Now the edible distillate (ethyl alcohol) starts flowing from the device; i.e. the so-called second distillate stream.
This is top quality home-made spirits.
– Observe the intensity of the flow; if the flow is too strong, you are overheating the boiler; provide as much heat to get a steady stream inclined rearwards.
– We recommend that you constantly measure the alcohol content of the pouring distillate and when the alcohol content drops to an approx. 40–45% separate the second distillate stream.
– the remaining distillate is the so-called third distillate stream. It is a distillate of low quality that needs to be re-cooked.
– Stop the distillation when the alcohol content at the distillate outflow drops to 15%.

WARNING!
The pressure gauge indicator must not **exceed 0.3** on the scale. If it approaches this value, immediately **reduce the intensity of heating** (the steam must not be released uncontrollably). There is a risk of burning accidents and deformations of the material, therefore you must use protective gloves and make sure that no people are nearby.

– After each refilling, check the water level in the water jacket (double bottom) and, if necessary, top up the water as you did in the beginning.
– Constantly observe the control fittings. Make sure it always works flawlessly. The ball must always be flexible. Before you empty the boiler, we recommend that you open the filler valve (1a).

WARNING!
All parts of the distillation device are hot to the touch during work and therefore pose a risk of burns. During work, be careful and use protective equipment. We recommend that you take a 20-minute break after finishing the distillation.

5.20 Measures to be undertaken after finishing work

After you have found that the distillate alcohol content has fallen below the minimum, stop distillation. Wait for the boiling mass in the boiler to settle. Water vapour in the water jacket is still under pressure.

WARNING!

Be careful when draining the distilling mash. There is a high risk of burning accidents because of the pressurised vapour release and hot water jetting outflow. Protect your hands and other body parts. Be careful not to expose your face and eyes. No other person should come in a 2-metre radius from the device.

Then empty the boiler and thoroughly rinse all parts with clean water. Be careful when draining the boiler.

WARNING!

Regardless of the fact that the distillation is finished, all parts of the boiler are hot to the touch and therefore pose a risk of burns. Use protective gloves and wear appropriate footwear and clothing when carrying out work.
The distillation sludge residue in the boiler is hot and because of this you must be careful when pouring it out. Pour the distillation sludge residue in a suitable container and do not pollute the environment.

Prepare the boiler for re-filling or wipe it and store it. Before the final storage of the boiler before winter, **water from the water jacket and the boiler chiller must also be drained**. To do this, open both valves; i.e. the filler and overflow valve. On the front side upper edge of the outer inox boiler, there is a screw plug for draining the double jacket. All devices have a built-in discharge valve or a final discharge opening.

6.00 SAFE WORK INSTRUCTIONS

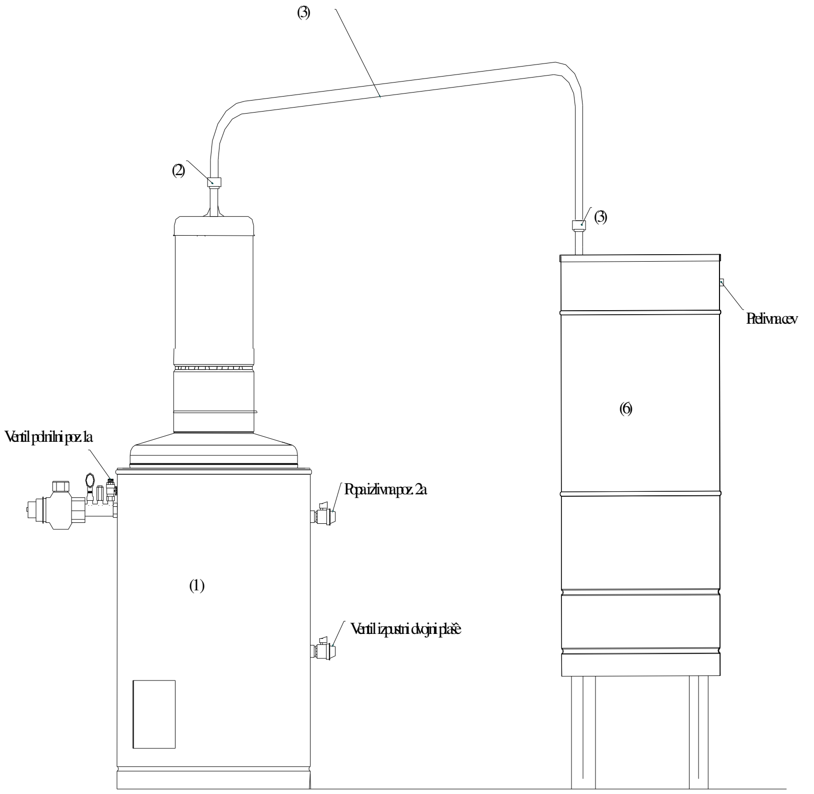
1**.** Only adult persons who are fully acquainted with the instructions for safe use of the device are permitted to work with the device.

2. Due to a high temperature effect, work in the vicinity of flammable or explosive substances is prohibited due to the risk of their ignition or danger of explosion.

3. All parts of the distillation device are hot to the touch during work and therefore pose a risk of burns. Always wear protective gloves and wear appropriate clothes and footwear.

7.00 MAINTENANCE

There is almost no chance of burn-on occurring because of the water jacket, therefore the most important task in maintaining the device is its regular and thorough cleaning. This must be carried out by means and in a way that does not cause mechanical or chemical damage to the copper parts of the device.
During normal work, it is sufficient to wash the parts thoroughly with warm water.
Before each initial filling, check the condition of the safety and control elements on the boiler fittings.
The essential part of cooling is a spiral hose. It is very important that it is clean, therefore it is recommended to use a water vapour cleaner before the first use.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Ventil izpustni dvojni plašč

8.00 MANUFACTURER AND PRODUCT TYPE

8.10 Product type:

a) DISTILLING POT STILL WITH MIXER – BOSNA: BOSNA 100, BOSNA 120
BOSNA 150
b) DISTILLING POT STILL WITH MIXER – **BOSNA Lux:** BOSNA Lux 100, BOSNA Lux 120
BOSNA Lux 150

8.20 Product identification:

Each boiler is affixed with the corresponding nameplate:
– product name
– product model (type)
– serial No.
– year of manufacture

Upon receipt of the device, immediately check if any damage has occurred to the device during transport and if it corresponds to your order. Should you find any defects, please notify us within seven days of the receipt of the shipment.

9.00 INSTRUCTIONS FOR USE

The following tasks must be performed before starting work with the boiler:

– First, place the firebox in a suitable location. Connect the flue connection with the chimney. Observe the applicable fire safety regulations for connecting the stove and other firing installations.

It is recommended that you clad the firebox with firebrick before the first use.

– Before the first filling, clean all interior copper surfaces (boiler, hood, connecting tube, cooling container tube) with hot water to which you added a kitchen detergent. Let the water boil in the boiler for at least 15 minutes. Then drain the water and rinse the boiler parts several times with cold water and wipe them out.

– Now you can fill the boiler. The boiler has a special filler opening (2) – see figure 1. Fill the boiler with a mass for distilling spirits to a suitable height (never to the top), namely:

100-litre volume = 90-litre fill quantity
120-litre volume = 110-litre fill quantity
150-litre volume = 140-litre fill quantity

– Close the filler opening with the cap. Screw the cap tight. Before doing this, wash and wipe the rubber gasket with water. This ensures proper sealing of the cap.

– You need not disassemble the boiler cover (1) when filling or emptying it. If you have decided to do this for easier cleaning of the boiler, place the cover on the boiler and tighten the clamping screws. Before doing this, clean the gasket located at the boiler's mouth.

– Connect the boiler cover (1) to the cooling device (5) using the connecting tube (4). Turn the connecting tube so that its shorter end is joined with the boiler, while its longer end is joined with the cooling tank. Thus, the tube is slightly inclined towards the boiler. Place the gasket (6) on the threaded socket of the cooling tank (5) and the boiler cover (1) – only with the BOSNA design. Screw the turnbuckle nuts (7) tight to ensure effective sealing.

– Fill the cooling device (5) with water to the height of the overflow tube. Attach a suitable plastic hose on the overflow tube and connect its free end to the drain.

After you have found that the distillate alcohol content has fallen below the minimum, stop distillation. Wait for the boiling mass in the boiler to settle. Then empty the boiler. To do this, pull the drain flap lever of the boiler (3) – figure 1 gently and firmly into the position to release the drain opening. Place an appropriate container under the opening beforehand. When it is filled, you can close the opening and repeat the process until the boiler is fully emptied.
Proceed by washing the distillation device with lukewarm water. This way it is ready for refilling. If you have finished the distillation, it is recommended to disassemble the device and thoroughly clean it, wipe it out and store it.

WARNING!

Regardless of the fact that the distillation is finished, all parts of the boiler are hot to the touch and therefore pose a risk of burns. Use protective gloves and wear appropriate footwear and clothing when carrying out work.
The distillation sludge residue in the boiler is hot and because of this you must be careful when pouring it out. There is a risk of burning accidents due to uncontrolled spillage or spraying with hot mass particles. Ensure safety of third parties.
Pour the distillation sludge residue in a suitable container and do not pollute the environment.

10.00 SAFE WORK INSTRUCTIONS

1. Only adult persons who are fully acquainted with the instructions for safe use of the device are permitted to work with the device. Untrained individuals or third parties should not be present during the distillation process due to the risk of burning injuries.
2. In addition to the guidance in these instructions, observe all generally applicable safety regulations. Pay special attention to the safety warnings in these instructions marked “WARNING” and strictly adhere to them for sake of your own safety and safety of others.
3. Do not touch the parts of the boiler during work (firebox, copper parts of the boiler and hood, connecting tube, etc.). They have a very high temperature and therefore they pose a risk of burns.
4. If the device malfunctions during work, you must not immediately disassemble it or try to repair it in any other way. There is a risk of burns due to contact and the evaporation of hot alcohol or water vapours. Extinguish the combustibles in the firebox with water and make sure to wait until the whole device cools down.
5. Due to a high temperature effect, work in the vicinity of flammable or explosive substances is prohibited due to the risk of their ignition or danger of explosion. The base under the firebox must be fireproof. Ash and burning particles can enter through the grill inside the firebox and cause a fire. We recommend that you have a dry fire extinguisher in the immediate vicinity.
6. All parts of the distillation device are hot to the touch during work and therefore pose a risk of burns. During work, use protective gloves and wear appropriate clothes and footwear.
7. Set up the distillation device in a suitable place. It should be stable. In the case of overturning of the device, there is a great danger of burns caused due to the spillage of hot mass from the boiler and due to the burning parts of the heating material in the boiler firebox. There is also a high risk of fire.

11.00 MAINTENANCE

Regular and thorough cleaning is a task of utmost importance during maintenance. This must be carried out by means and in a way that does not cause mechanical or chemical damage to the copper parts of the device and that the device remains sound from the sanitary and hygienic aspect after cleaning.
During normal work, it is sufficient that the parts coming into contact with the distillate are washed at least twice with warm, clean water.
If you find that, despite carefulness the mash has burned on the boiler, you must thoroughly clean the boiler before the next filling. To do this, rub the copper parts with a cloth on which you have applied some ash or fine sand (river sand). Be careful not to damage the copper bottom of the boiler; rub gently and for a longer time. Cleaning with a wire brush is prohibited.

When you have cleaned the boiler to a high shine, wipe it with a cloth soaked with citric acid solution and thus remove any impurities from the fine pores of the copper sheet.

The distillation device consists of a copper pot still, in which the alcohol is evaporated by warming, a cooling tank in which the alcohol is condensed, and a connecting tube which connects the two devices.

All parts of the distillation device that come into contact with the alcoholic distillate during distillation are made of pure copper. During the process of distillation, copper binds or neutralises most of the acid content and other perishable chemical substances that are formed during alcoholic fermentation of fruit or during the distillation.

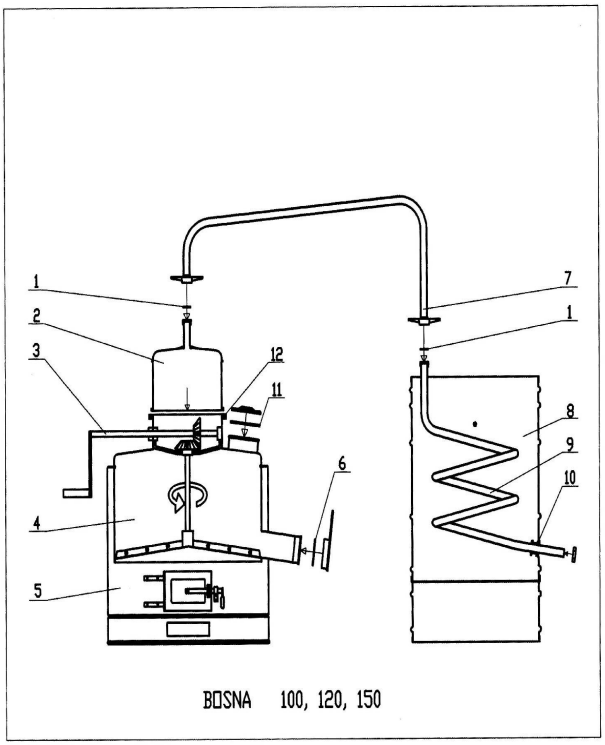
12.00 TECHNICAL SPECIFICATIONS

	BOSNA 100/ BOSNA Lux 100	BOSNA 120/ BOSNA Lux 120	BOSNA 150/ BOSNA Lux 150
Boiler volume/litres/	100/100	120/120	150/150
Useful volume/litres/	90	110	140
Cooling vat volume/litres	200	200	200
Weight/kg/	75/80	80/87	110/120

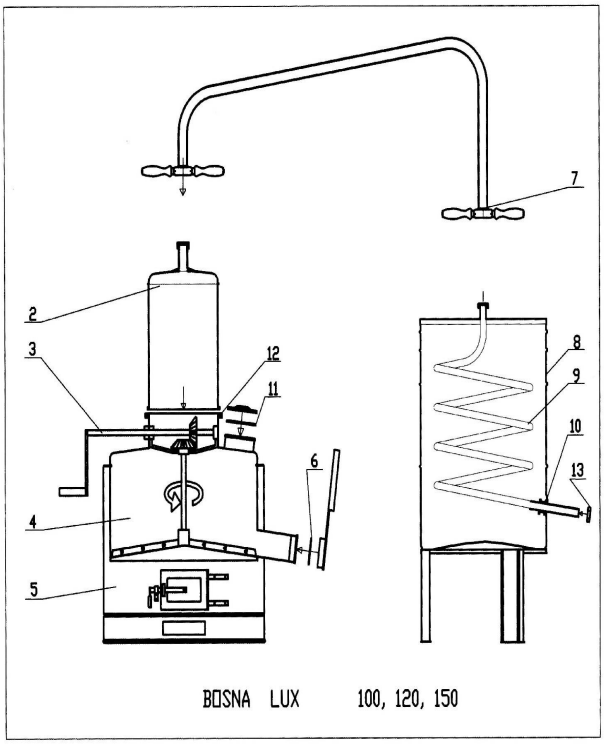
13.00 SPARE PARTS AND SERVICE LIFE

Each spare part has its own name and is assigned a catalogue number. When ordering parts, it is obligatory that
you indicate the following:
– name of the part and number of pieces
– part (catalogue) number
– year of manufacture

The product's service life is 7 (seven) years.
The manufacturer reserves the right to carry out structural modifications without prior notice.



BOSNA 100, 120, 150



BOSNA LUX 100, 120, 150

Dear customer,

Important WARNINGS regarding the operation of the boiler models SUPER

- **Place the firebox perpendicularly to the cooling tank. The distilling boiler should stand on a flat surface and at the same height as the chiller. Connect the flue connection with the chimney. Observe the applicable fire safety regulations for connecting the stove and other firing installations.**
- **Due to the risk of material deformation, you MUST open the filler valve and overflow valve before starting to fill the water jacket.**
- **Before first use you must clean the boiler with boiling water and connect the connecting tube with the chiller with an empty cooling tank.**
- **Due to water tightness, check that the boiler firebox and distilling tank are standing perpendicularly (flat) with regard to the cover fitting position.**
- **The boiler fitting pressure gauge indicates intensity of heating of the boiler (water boiling point at 0.3 bar = 100 degrees Celsius) that should not exceed 0.3 bar.**
- **After finishing the distillation, you should take a 20-minute break so that the mash settles and then open the filler valve before emptying the interior boiler tank.**
- **After each filling, refill the water between the water jackets and make sure that both valves are open (air = atmosphere).**
- **Fully empty the system after distilling has finished and wipe the cooling tank dry.**
- **Take into account that all parts of the boiler are hot and safety comes first when handling the device.**
- **Before the first use, it is necessary to remove all protective film.**

YOU SHOULD READ THE INSTRUCTIONS FOR USE CAREFULLY!