

MANUAL WAX EXTRACTORS



LYSON

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The following manual encompasses the devices
Bearing the following codes:

W4075, W4076, W4076O, W4072

Manual

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2. WORK WITH A GAS BURNER

STAINLESS STEEL WAX EXTRACTORS WITH GAS BURNER (PROPANE-BUTANE)

1. General safety principles for wax extractors with gas burners

Prior to operating the device please refer to the manual and act according to the guidelines contained therein. The manufacturer cannot be held accountable for the damages cause by misusing the device or its improper handling



1. Usage safety

2. The following equipment is not intended to be used by persons with limited physical, sensory or mental capabilities (including children) or persons inexperienced or unfamiliar with that type of equipment unless the usage occurs under supervision or in line with the equipment operating manual provided by safety supervising persons. One must make sure that children do not play with the wax extractor

3. In case of any damage to the wax extractor, in order to avoid the danger, the repairs may be performed solely by a specialist servicing centre or a qualified person

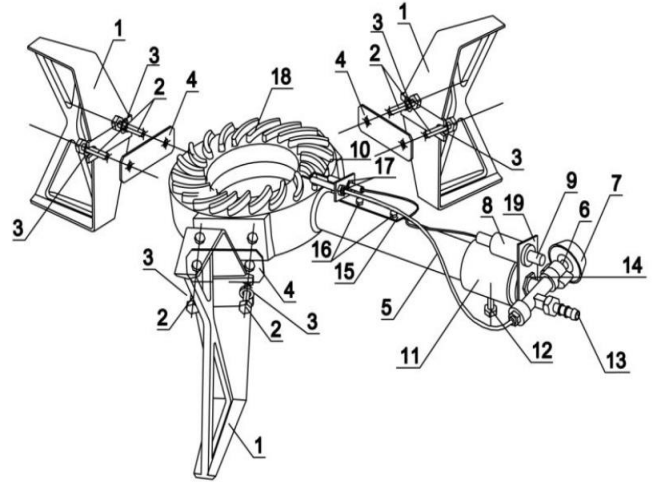
4. It is forbidden to perform any maintenance works when the device is in operation .

5. In case of any danger, the gas cylinder must be disconnected immediately and the operators must stay away from the device. Wax extractor will be restarted once the danger has been eliminated.



In case when the following warning has been ignored and the installation has been performed by a person devoid of the relevant qualifications, there is a risk of damage to the property, fire, explosion, suffocation or sustaining bodily injuries that might result in permanent disability!

• Once the device installation has been terminated the tightness of all connections must be checked with a tightness tester (electronic or in the form of soapsuds) *Under no circumstances must fire be used to test the tightness!*



2.1. BURNER ASSEMBLING

1. Legs
2. Screws to fix the legs
3. Washers to the screws fixing the legs
4. Gasket to fix the legs
5. Thermoelectric cable
6. Valve with thermoelectric protection
7. Valve hand wheel
8. Piezoelectric lighter
9. Piezoelectric lighter button
10. Lighting electrode
11. Hose tie to regulate the air flow
12. Screw to tighten the tie from point 11
13. Connector
14. Nut to control the valve
15. Support to fix the lighter and the thermoelectric cable
16. Screw to fix the lighting electrode and thermoelectric cable
17. Nuts to fix the lighting electrode and thermoelectric cable
18. Cast-iron burner
19. Support to fix the piezoelectric lighter
20. Inspection connector

2.2. CONNECTING THE CYLINDER TO THE BURNER

(A). Gas cylinder shall be placed vertically at the distance at least 1.5 meter from the device.

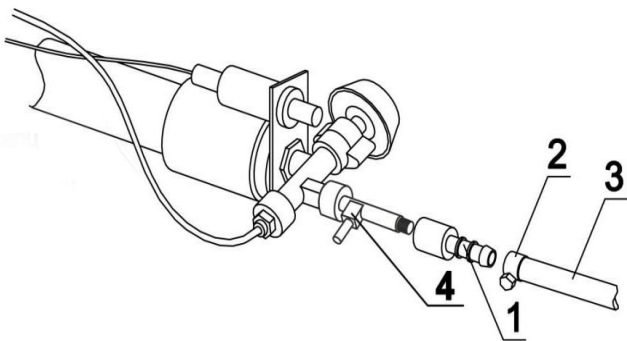
(B). Certified gas hose for propane-butane (item 3) shall be placed on the connector (item 1) as well as on gas reducing connector.

(C). One must check precisely whether the fixed hose has the proper diameter.

(D). Make sure that the hose has been fixed tightly.

(E). Subsequently, the hose ties (item 2) must be placed in order to fix the hose to the connector and gas reducing connector, next they must be tighten with a screw-driver or a wrench.

(F). Having completed the installation, the tightness test must be performed with soapsuds or an electronic gas tester.

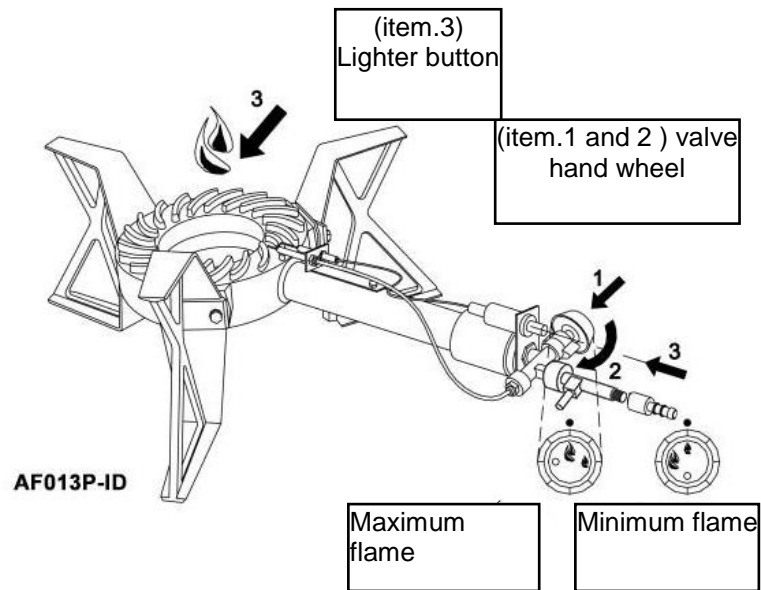


- PROPANE-BUTANE**
1. Connector fi 100 mm
 2. Hose ties
 3. Certified gas hose for propane-butane
 4. Connector to check the pressure

immediately and the burner must be reignited after approximately 2 minutes.

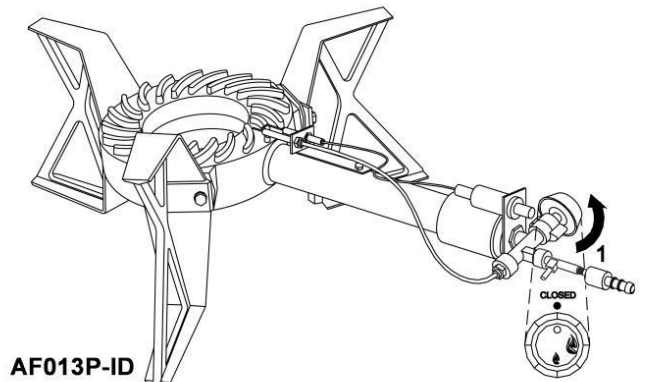
2.3. DEVICE ACTIVATION after the burner has been properly connected with the cylinder, the following activities must be performed:

Press the valve hand wheel, turn slowly anticlockwise by approximately ¼ turn (item 2). Ignite the gas with the piezoelectric lighter by pressing the lighter button (item 3) Holding the valve hand wheel as pressed. After ignition, wait 30 seconds until the thermoelectric cable starts to operate, release the hand wheel and regulate the flame for intended size.

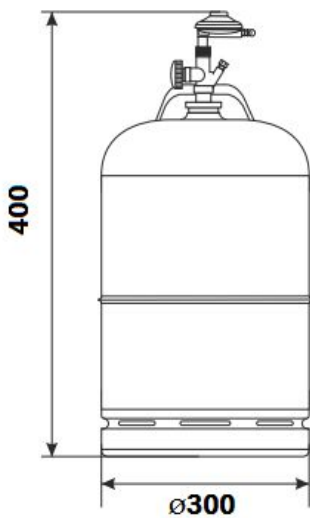


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2.4. DEVICE DEACTIVATION After operation has terminated, turn the valve into position „●” – see the figure below



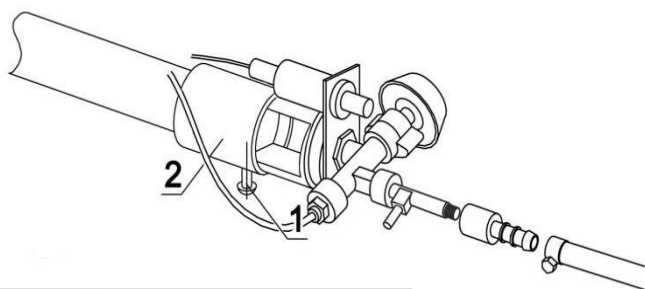
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Assembly mode for propane-butane gas regulator

Due to a high power of the device, all operations with a valve, e.g. decreasing, increasing, cutting off the gas flow, shall be performed slowly. Otherwise, there exists the threat of the flame getting back to the nozzle. If such a situation occurs, the gas flow must be closed

Air flow regulation



1. lock screw
2. hose tie to regulate the air flow

1. Slightly release the lock screw (item 1).
2. Slightly move the tie (item 2) and set up the primary air flow in such a way to achieve blue flame optimally (yellow or red flame indicates wrong settings)
3. Slightly tighten the lock screw (item 1) .
4. After every gas cylinder replacement, the primary air flow must be regulated again.

Properly performed regulation should provide: quick and proper burner ignition, re-ignition and mild flame transfer, non-explosion flame dispersion at all flame orifices within 5 second at the utmost, slight flame lit-off is permissible, however after 1 minute the flame should be stable, non-extinguishing and not getting back into the nozzle when the thermal power of the burner is changed along the entire range of anticipated power regulation and while the hand wheel of the gas cock is turned from maximum to minimum position with normal speed (the normal speed , i.e. turning the gas cock hand wheel from maximum to minimum power lasting approximately 1 s)

WARNING! After each usage the device must always be cleaned. Prior to cleaning, one must make sure that gas stool has cooled down - high risk of scalding. Gas flow must be closed by closing the cocks. In case when the device is to be rotated during cleaning, it is necessary to disconnect the gas supplying hose.

- (A). Prior to starting the maintenance, device must be switched off and gas supplying hose disconnected.
- (B). Make sure that the device has cooled down.
- (C). In order to prevent the damages to the device surface, it must be cleaned regularly.
- (D). Remains of fat or food inside the device may bring about fire.
- (E). The device is to be cleaned with a wet cloth.
- (F). Use the neutral cleaning agents only. Never use the abrasive agents, agents containing caustic substances, bleaches or acids to clean the gas stool. Using acidic or

alkaline substances must be avoided (lemon juice, vinegar, etc) .

- (G). Do not clean the device with steam washers.
- (H). Once the device has been cleaned, it must be dried.

3. PERIODICAL INSPECTIONS

After the guarantee period has expired, the device must be inspected at least once a year. Periodical inspections must be performed by the persons qualified for repairs and maintenance of gas devices. The minimum inspection range shall include the control for proper operation, gas valve maintenance and the tightness tests. Outside the guarantee period periodical inspections are not included into the costs of purchasing the device.

Properly prepared burner with the regulator to be connected to the gas cylinder.



4. OPERATION DESCRIPTION OF A WAX EXTRACTOR WITH A GAS BURNER

1. Fill the tank with water until the level of the discharge pipe, as in the figure (Fig. 1). Water losses must be completed (take special precautions not to get burnt).
2. Fill the basket with frames or dried honey. .
3. Cover the device with a lid.
4. Place the burner under the device in such a way to make the flame heat the entire surface of the device bottom.
5. Wait until steam is formulated and melted wax flows out.
6. After the batch has been melted, check the water level and make up for the potential losses.
7. Add the frames or dried honey in the basket.
8. Steps 6 and 7 to be repeated until extraction has been terminated
9. **Once the process has ended, the burner must be switched off and the gas cylinder closed.**
10. Remove the marc wax from the basket and prepare it for reuse. .
11. The following equipment is not intended to be used by persons with limited physical, sensory or mental

capabilities (including children) or persons inexperienced or unfamiliar with that type of equipment unless the usage occurs under supervision or in line with the equipment operating manual provided by safety supervising persons.

12. Water is to be added through the inlet, see Fig no 1.



Fig. 1

Water level is completed until the height of the outlet (pipe)
 When the device is operational water is to be added.
 Pour into an inspection hole with a funnel so as not lose heat inside the extractor and avoid being burnt with hot steam

5. Characteristics of the wax extractors

Devices intended to extract wax from beehive frames or dried honey by means of steam method. They consist of external tank, containing water, and the basket holding the frames or dried honey. Additional equipment includes a gas stool, owing to which steam is formulated by heating the water tank.

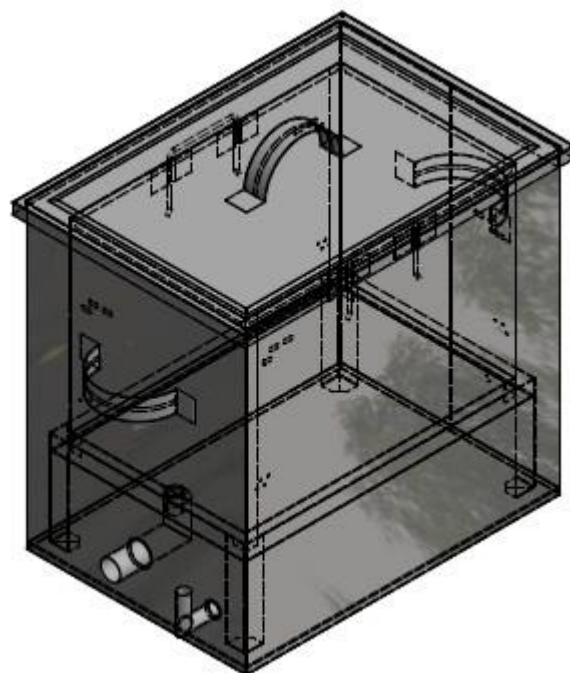
5.1. Wax extractor - small

5.2. Wax extractor - big

5.3. Wax extractor – big and insulated

5.4. Wax extractor – big – 100 frames

5.1. Wax extractor - small



Device parameters:

- material– stainless steel

Tank external dimensions:

- length - 515 mm
- width - 360 mm
- height - 495 mm

External dimensions of the frame basket

- length – 445 mm
- width - 290 mm
- height – 330 mm
- discharge diameter - 1”

Additional equipment:

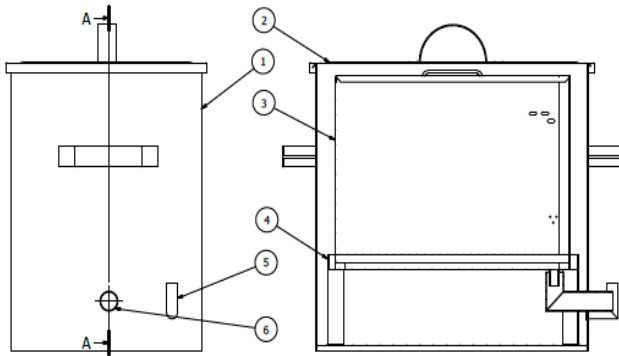
- gas stool, power 7,5KW with thermocouple
 - power supply – propane-butane gas
- The set does not contain the gas cylinder regulator**

Capacity for entire frames:

- 7 - 10 frames – type: Wielkopolska, Ostrowska’s
- 7 - 10 frames – type: Warsaw ordinary
- 7 - 10 Dadant frames
- **Extended Warsaw frame DOES NOT FIT INTO a small wax extractor**

Small wax extractor does not have legs, it is to be placed on the gas stool directly!!!

5.1.1. Diagram for a small wax extractor



Legend

1. Wax extractor tank
2. Wax extractor lid
3. Frame basket
4. Basket base
5. Pipe for water level
6. Wax discharging pipe

- width - 335 mm
- height – 440 mm
- discharge diameter - 1”

Total height of the device 820 mm

Additional equipment:

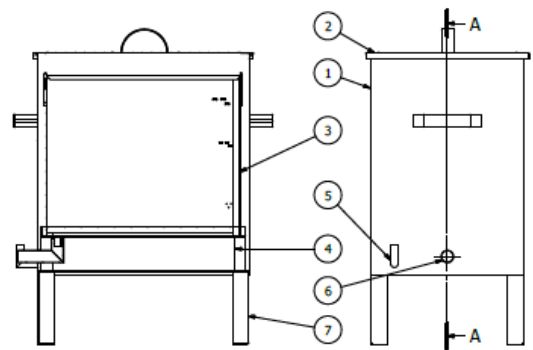
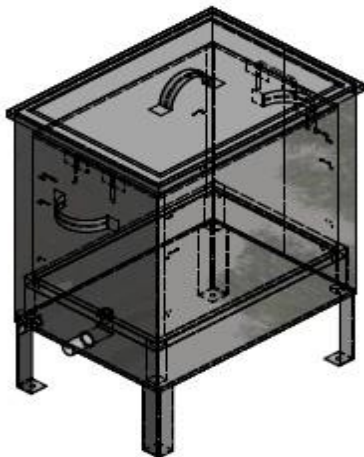
- gas stool, power 7,5Kw
 - power supply – propane-butane gas
- The set does not contain the gas cylinder regulator**

5.2.1. Diagram for a big wax extractor

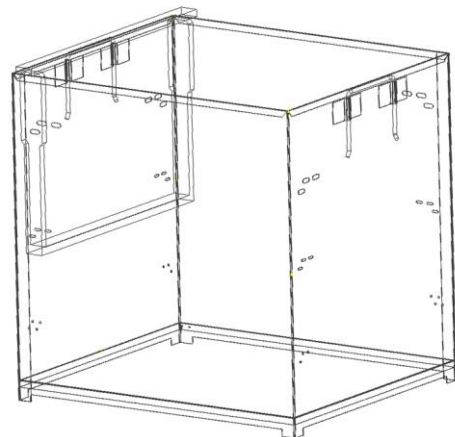
Legend

1. Wax extractor tank
2. Wax extractor lid
3. Frame basket
4. Basket base
5. Water level pipe
6. Wax discharging pipe
7. Wax extractor legs

5.2. WAX EXTRACTOR – BIG



5.2.2. Placing the frames in the basket with selected arrangement



Device parameters:

- material – stainless steel

Tank external dimensions:

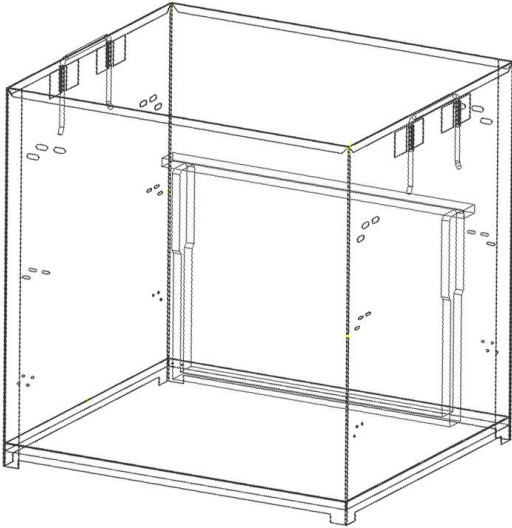
- length - 580 mm
- width - 420 mm
- height - 610 mm

External dimensions of the frame basket:

- length – 530 mm

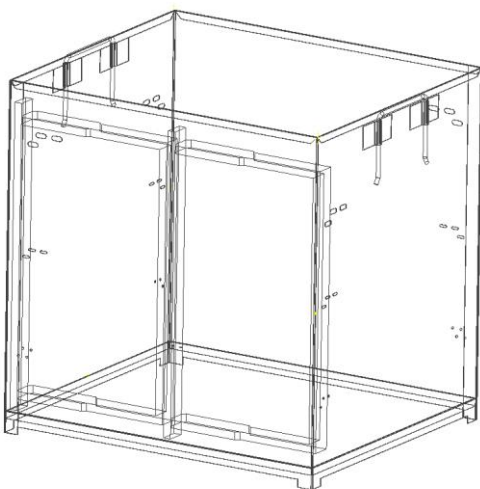
Arrangement 1.

Frame type	The number of frames fitting into the basket
Dadant	14 Hoffman-type frames
Extended Warsaw type	14 Hoffman-type frames
Warsaw ordinary type	14 Hoffman-type frames
Wielkopolska, Ostrowska's	14 Hoffman-type frames



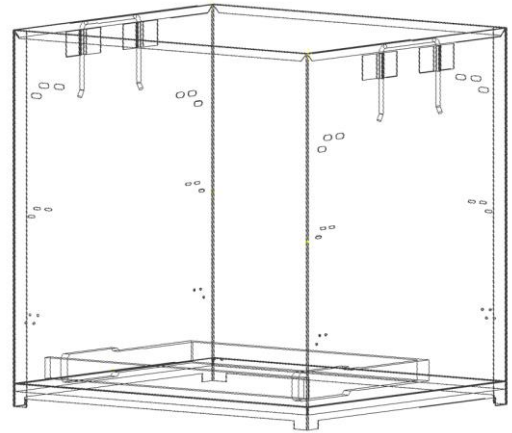
Arrangement 2.

Frame type	The number of frames fitting into the basket
Dadant	14 Hoffman-type frames
Extended Warsaw type	14 Hoffman-type frames
Warsaw ordinary type	14 Hoffman-type frames
Wielkopolska, Ostrowska's	14 Hoffman-type frames



Arrangement 3.

Frame type	The number of frames fitting into the basket
Wielkopolska, Ostrowska's	20 Hoffman-type frames

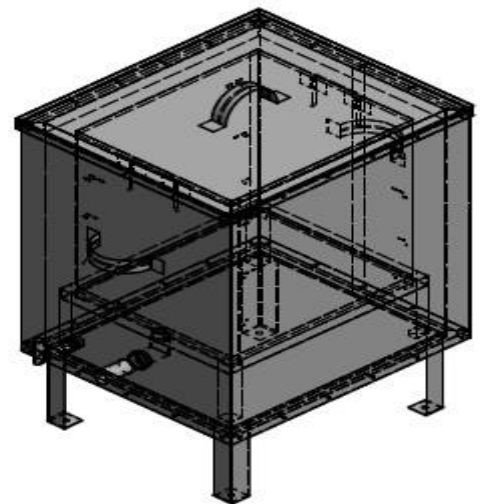


Arrangement 4.

Frame type	The number of frames fitting into the basket
Dadant	12 Hoffman-type frames
Extended Warsaw type	12 Hoffman-type frames
Warsaw ordinary type	12 Hoffman-type frames
Wielkopolska, Ostrowska's	12 Hoffman-type frames

5.3.Wax extractor – big and insulated

The sides of the device are thermally insulated with mineral wool, which increases the device's operational efficiency.



Device parameters:

- material – stainless steel

External dimensions of the tank:

- length - 585 mm
- width - 520 mm
- height - 620 mm

Dimensions of the frame basket:

- length – 440 mm
- width - 380 mm
- height – 435 mm
- discharge diameter - 1”

External dimensions

- length - 520 mm
- width - 455mm
- height - 610 mm

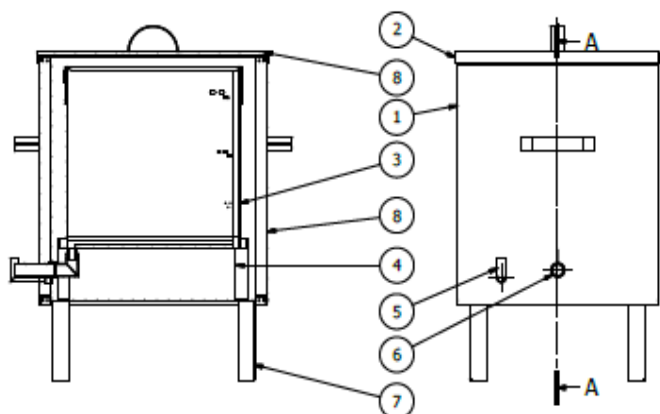
Depending on the frame types, the wax extractor can hold between 10 and 2- frames

Additional equipment:

- gas stool, power 7,5Kw
- power supply – propane-butane gas
-

The set does not include the gas cylinder regulator

5.3.1. Diagram for wax extractor – big , insulated

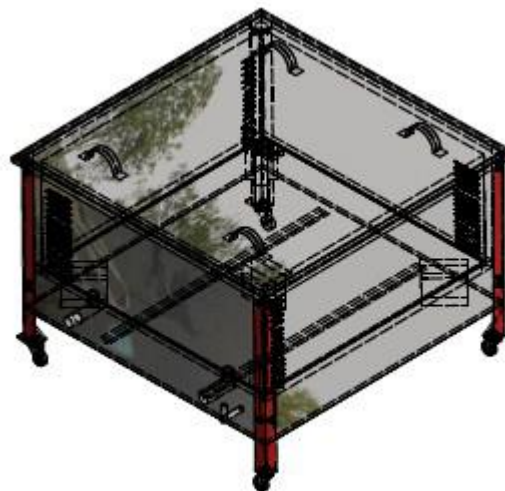


Legend:

1. Wax extractor tank
2. Wax extractor lid
3. Frame basket
4. Basket base
5. Water level pipe
6. Wax discharging pipe
7. Wax extractor legs
8. Wax extractor insulation

5.4.1. Diagram for wax extractor – big, 100 Dadant frames

The device is intended to extract wax from the beehive frames or dried honey by means of a steam method. It is recommended for big apiaries.



Device parameters :

- material – stainless steel
- power supply – propane-butane gas
- discharge diameter – 40 mm – 2 pcs
- water inlet diameter- 25 mm

Water tank dimensions:

- tank external height 830 mm
- tank external width 1154x1154 mm

Dimensions of the frame basket:

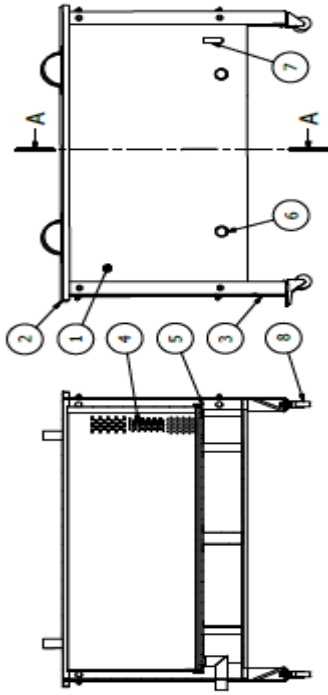
- height 430 mm
- width 990 x 990 mm

Additional equipment – at extra charge :

- second gas stool
- wheels

Included in the set – one gas stool for free!

5.4.2. Diagram for wax extractor – 100 Dadant frames



Legend:

1. Wax extractor tank
2. Wax extractor lid
3. Wax extractor legs
4. Frame basket
5. Basket base
6. Was discharging pipe
7. Water level pipe
8. Wheels

Additional options for wax extractors

- Sealing ring – prevents from steam losses
- Furnace made of furnace steel

6. Cleaning and maintenance

Prior to every season, an additional inspection must be performed for technical issues and in case any fault has been detected, a service point must be contacted

Wax extractor must be cleaned thoroughly after use with hot water containing slight quantities of agents permitted to be used for cleaning the devices coming in contact with food, or by means of a pressure washer.

7. Recycling

Worn-out product must be removed as waste only within selective waste collection organised by the Network of Communal Electric and Electronic Waste Collecting Points. A customer is entitled to return the used equipment to the electrical equipment distributor network, at least free of charge and directly, if the device to be returned is of proper type and serves the same purpose as the newly purchased device

8. Gwarancja

Product purchased from "Łysoń" company are encompassed by the manufacturer's guarantee.

The guarantee duration equals 24 months.

A receipt or a VAT invoice is issued for each product purchased.

Detailed guarantee terms and conditions, see www.lyson.com.pl