

# USER'S GUIDE

# Alpha Plus Uncapping machine Ref. C1001/C1001C



Non contractual picture

### **THOMAS APICULTURE**

### French designer and manufacturer Of beekeeping equipment

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The Alpha Plus Uncapping machine uses 2 vibrating and heating blades for optimal uncapping.

Durable and easy to use, the machine uncaps both sides of the frame at once.

### **Technical Definition**

Stainless-steel

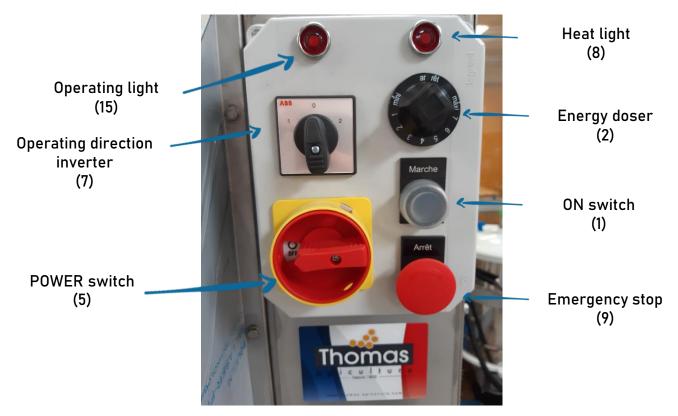
Height : 700 mm Width : 860 mm Depth : 600 mm Weight : 75 kg Single phase 220 V – 1570 W Motor : 370 W – 1500 Tr/mn

### SAFETY PRECAUTIONS

CAUTION : Before connecting the appliance to a power supply, make sure that your electric installations comply with current standards (differential circuit breaker protection, earth wire, etc.). Check the supply voltage.

Before using the unit for the first time, clean it to remove any residual metal shavings or filings.

Keep out of children's reach - Unplug after each use.



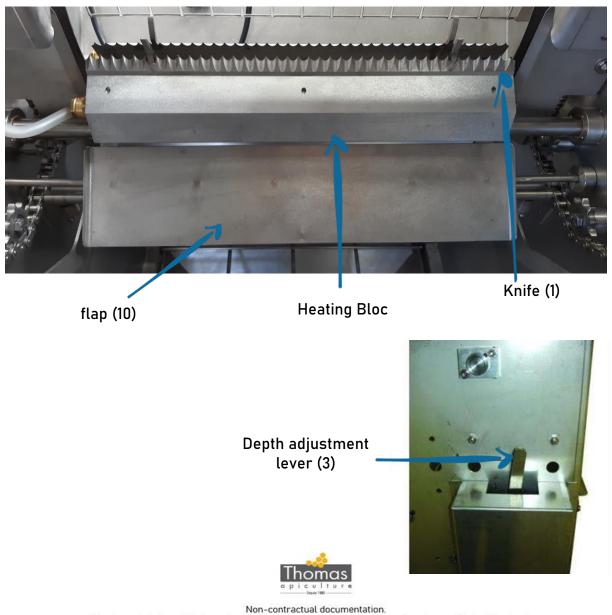


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## **USAGE GUIDE**

The Alpha Plus's uncapping process is largely based on its two notched inox knives (1). Sharp, vibrating and heated, they simultaneously treat both sides of each frame for optimum performance in a minimal amount of time. The temperature of the knives can be adjusted via an energy regulator (2) or a digital thermostat (18) (see the digital thermostat manual in the appendix). The Alpha Plus can be used to uncap various frame models such as the Dadant and Langstroth frames. It is also possible to process hollow frames simply by adjusting the knife spacing (3).

Once uncapped, the frames are automatically guided onto a storage conveyor and then can be fed to the extractor.

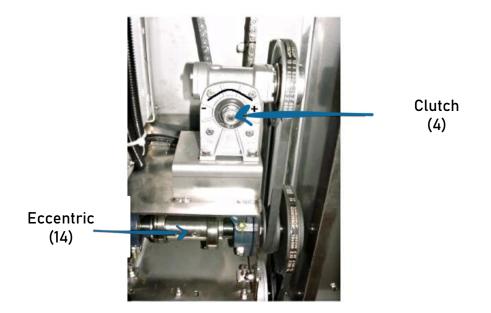


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## **SECURITY**

The Alpha Plus is equipped with a transparent cover to monitor the progress of the uncapping process and a protective grid to prevent any risk of injury, especially from knife contact. It is essential to keep them in place.

The machine is equipped with a safety device (clutch) (4) to automatically stop mechanism if frames are broken or jammed. This adjustable system prevents damage to the machine and to the operator.





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# **USAGE GUIDE**

CAUTION : In the standard version, this unit is equipped with an energy dosing unit (2). It is not a thermostat; the values serve as a reference and do not indicate the temperature in any way (the operating temperature must be between 1 and 2).

It is recommended to turn off or adjust the heating to the minimum setting each time the machine is switched off.

Plug the machine to the power supply. Press the power switch and set to "On" (5). Before unlocking, manually adjust the knife gap using the lever on the left side of the machine (3).

• Machines with an energy dosing unit:

Turn the dozer to 1 or 2 (2).

Wait about 10 minutes for the knives to warm up before putting your first frame.

• Machines with a digital screen thermostat.

Press for 2 seconds the SET switch

Choose the knife temperature with the arrows (around 70 °C).

The frame driving crossbars (6) must come in front of you, from top to bottom.

Place the frame horizontally in the slots provided for this purpose (on each side) and then release it onto the driving bar: the next bar pushes the frame through the knives. If necessary, adjust the distance between the knives to make it easier for the frame to pass through.

The frame is then raised and stored on the conveyor.

Continue this operation until the conveyor is fully loaded.

In case of jammed or broken frames, press the emergency stop button and then the reversing button (7).

The indicator lamp (8) lights up to indicate the heating periods.

To stop the machine, press the STOP button (9). To restart the machine, unlock the STOP button (9) and press ON (1).

The machine is equipped with a flap (10) to prevent the wax from resting on the frame after uncapping

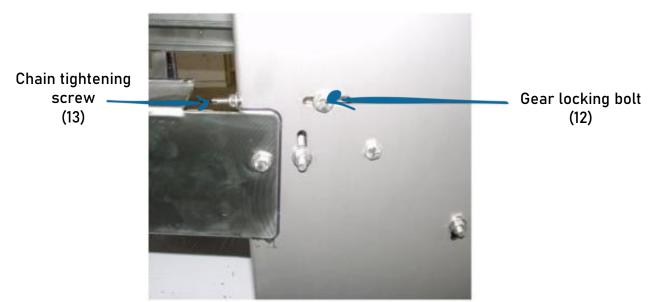


# MAINTENANCE

**CAUTION** : Unplug the machine before any maintenance operation. Protect the electric parts when washing.

Chain tension

The chain (11) may slacken after several hours of use. To tighten the chain, loosen the bolts (12) holding the gears on both sides of the machine and then tighten the two nuts (13) at the rear on both sides until the chain is sufficiently taut. Make sure to keep the same tension on each chain by tightening the bolts by making the same number of turns on each bolt.



• Greasing

Clean with hot water: made entirely of stainless steel (including chains and sprockets), the Alpha Plus is easy to clean. It is also made up of self-lubricating rings (replacing ordinary bearings) that cannot rust. Store in a dry room. Grease the eccentric (14) regularly (mechanism driving the knives). Grease chains and sprockets with food grade grease. Wash them very regularly with hot water.



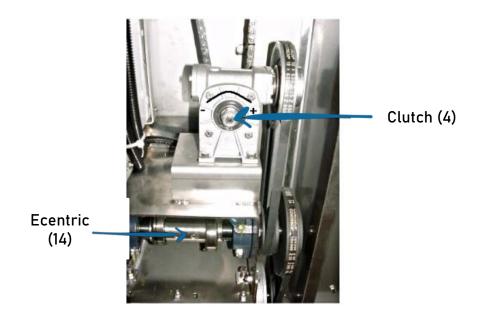
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• Adjusting the clutch

It may also be necessary to adjust the torque that the motor exerts on the chain: if the uncapping machine pushes the frames onto a complete chain, the force to be applied to the frames will be higher.

Caution: The higher the torque, the less effective the safety will be: the motor will disengage with less speed when jamming.

To adjust the motor clutch, turn the clutch screw (4), to the right to increase the torque and to the left to decrease it. In both cases, tighten very gradually, testing to ensure proper operation.



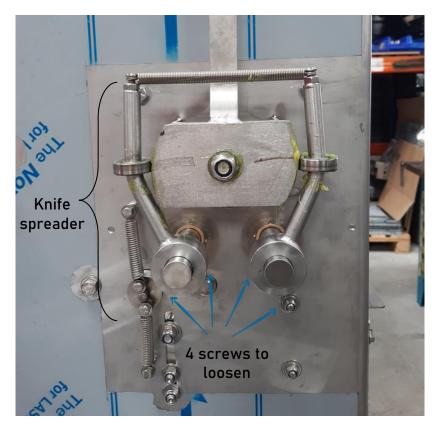
• Adjusting the depth

It is also possible to adjust the uncapping depth of the vibrating knives (their cutting angle).

Remove the right-hand housing and remove the left-hand housing cover.



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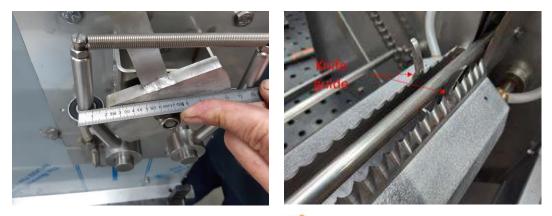
Move the knife gauge adjustment bar to the minimum (to the left).

- Bring a bar in front of the guides on the knives by turning the high pulley.

- Position the teeth of the two knives opposite each other. The ends of the left-handed outgoing pins must be at the same level. Turn the knives so that the guides touch the bar.

- Align the knife spacers on the sides of the plate (see photo above).

- Tighten the screws of the knife spacers.

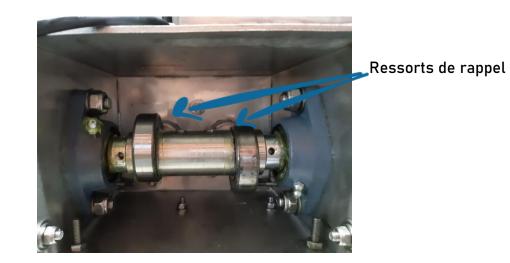




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• Knife springs

To check that the return springs are in good condition, remove the left crankcase cover. The springs are located behind the eccentric axis. If the axes of the knives are not permanently in contact with the bearings, then the springs are damaged and they must be changed.



Anti-return springs

If this spring breaks, unscrew the bolt circled in red, remove the screw and replace it. Pay attention to the orientation of the spring (the springs are not identical).







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# **Frequent questions**

**CAUTION** : Unplug the machine before any maintenance operation.

Problem	Possible solution
The machine will not start	<ul> <li>-Check that the device is plugged onto a suitable power source.</li> <li>- Check that the STOP (9) switch is not blocked.</li> <li>- Check that the circuit-breaker, inside the electrical box (15), is ON.</li> <li>- Check the state of the motor protection circuit breaker, inside the electric box (15).</li> </ul>
The knives vibrate but the chain won't turn	- Check that there is no stuck frame. If not, adapt the motor clutch (see Maintenance Part).
The cappings are not cut cleanly or are ripped off	<ul> <li>Check that the thermostat or energy regulator is not set on 0, and that the knives are hot enough.</li> <li>Check the depth of uncapping.</li> <li>Check that the knives have enough travel when vibrating.</li> </ul>
The knives vibrate with just a small travel	- Check the state of the knife springs. If needed, change them. (see Maintenance Part)
The frames are not correctly pushed by the machine	- Check the springs in the lower part of the device. (see Maintenance part)



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# If the problems are still there, please contact us :

### Technical Help: 08 99 25 66 20 (cost: 0,05€/min)

<u>High season</u> 12H/24 and 6 days /7 (Monday - Saturday 8:00 am - 8:00 pm)

Off season 8H/24 et 5 days /7 (Monday – Friday from 8:00 to 12:00 And from 1:30 pm to 6:00 pm) assistance-technique@thomas-apiculture.com



### **Customer Service :**

02 38 46 88 00 From 8:00 am to 12:00 am And from 2:00 pm to 5:30 pm From Monday to Friday contact@thomas-apiculture.com