INSTALLATION AND USAGE GUIDE

L’Intégrale Extraction Line

Non contractual picture

THOMAS APICULTURE
French designer and manufacturer
Of beekeeping equipment

ZA de l’Évangile
321, rue Bernard de la Rochefoucauld
45450 Fay-aux-Loges – France
Tél: +33 (0)2 38 46 88 00
Fax: +33 (0)2 38 59 28 28
E-mail: contact@thomas-apiculture.com

www.thomas-apiculture.com
The « Intégrale » extraction line is an effective and ideal tool for important beekeeping farms.

It allows uncapping, filtering and extraction of honey from frames. Entirely made of stainless-steel, and needing no direct frame manipulation, the extraction line offers great working comfort for a production of 2 to 3 tons of honey per day.

The extraction line typically has the seven following items:

The different references are given for the 44 Dadant frame Extramel extrator (many different size available).

- Delta Plus uncapping machine (Ref. A1000 / A1002)
  Uncapping machine with heated delta shaped knives and a system to uncap the hollow parts.

- Entry conveyor from the uncapping machine to the extractor (Ref. A1003)
  Allows to unload easily the uncapping machine and to load the extractor with a crank cart and no direct frame manipulation.

- Extramel extractor (Ref. A1001)
  Horizontal axle extractor allowing quick extraction. Double-face cage for optimal loading time and space economy.

- Extracted frames exit conveyor (Ref. A1004 (simple) / A1025 (double))
  Conveyor stocking the extracting frames exiting the extractor with a simple unloading action into the supers. The conveyor can be simple or double, to save space.

- Opermiel honey and cappings transfer unit (Ref. A1008)
  Honey and capping transfer unit with no emulsion.

- Spinomel filtering centrifuge (Ref. 7215/3326)
  Centrifuge to separate of honey from cappings as well as continuous honey filtration.

- Loader and deboxer (Ref. A1042/A1043) (optionnal)
  Deboxer to push the frames from the supers and install them onto the uncapping machine. Loader for automatic input into the uncapping machine.
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.

→ Install the « Intégrale » on a clean, level floor. (provide wedges if the floor is not flat).

→ Read the entire guide before starting the installation.

→ Before starting the installation:

Space positionning :
- Define the orientation and the operating direction of the line (opening of the extractor to the right or to the left).
- Provide sufficient space in front of the line to be able to work comfortably.
- Allow sufficient space behind the line (between the wall and the line) for full opening of the extractor hood (minimum 50 cm).
- Allow at least one meter at the start and end of the line to be able to handle full and empty supers comfortably.

In the honey house :
- Make sure that the electrical panels are close to the electric boards to connect the different housings.
- Locate the opening side of the extractor (right or left) previously.

Before installing the various machines, make sure that you accurately mark the overall dimensions of the machines on the ground so that they can be pre-positioned in the best possible way.

See the annex for installation examples (with informative lengths).
EXTRACTION LINE INSTALLATION

For each machine, check the specific guide.

1. Extramel extractor installation

After locating the layout of the entire extraction line, position the extractor. 
Caution: Once the line is completely mounted, it will be very difficult to move it. It is therefore necessary to pay attention to the positioning of the extractor. 
The floor must be flat, horizontal and clean.

Check the horizontality on both sides of the extractor.

Switch on the extractor (for safety reasons, the lid cannot be opened while the unit is switched off or running). Check that the lid opens fully without being obstructed.

Rotate the Extramel cage manually by releasing the brake with the foot pedal. Position one of the sides on top, horizontally.

2. Exit conveyor installation

The assembly is identical for a single or double conveyor.

The exit conveyor is supported by one (or more) stand(s). 
It is fixed to the extractor by 2 bolts (diameter 8; wrench 13). 
Screw the conveyor to the extractor with the handle towards the extractor. Do not completely tighten the bolts.

Adjust the height with the nuts of the feet, the conveyor must be slightly inclined backwards.

Lower the handles of the conveyor and check that they are well positioned.

Turn the extractor cage 180 degrees and check that the handles are also in the correct position for the second face.
Frame direction and height adjustment (entry conveyor view). The idea is the same for the exit conveyor.
Check that when the conveyor handles are lowered, the frames slide smoothly (see pictures above). If necessary, try with an empty frame. The outlet of the extractor should be a few millimetres higher at the entrance of the conveyor to make a "tile" effect and not block the frames passing over it.

If the frames "hang" at the entrance of the conveyor, its height must be adjusted with the nuts. Make sure the conveyor is horizontal.

Once the conveyor is properly positioned, tighten all bolts.

Connect the control box to the extractor with the Harting plug and place it in its stainless steel frame (for single conveyors) or screw it to the holding plate (for double conveyors).
3. Uncapping machine and entry conveyor installation

Screw the conveyor loosely to the extractor with the handle toward the extractor. Position the uncapping machine at the other end of the conveyor to check the correct alignment of the whole unit.

Screw the conveyor to the uncapping machine. As for the exit conveyor, adjust the height of the conveyor at the entry of the extractor with the foot screws. Adjust the frame entry height with the bolt.

Screw the chute at the outlet of the extractor and at the Opermiel. Install a food grade silicone gasket.

Place the metal sheet with strong inclination on the inlet conveyor (metal sheet that goes into the Opermiel).
Place on each side of the Extramel, lid open, the 2 stainless-steel plates which are held by the extractors tranversal bar.

Adapt the hose at the end of the Opermiel and bring it to the Spinomel.

The installation is now complete, you are ready to extract.
Starting up the « Integral » extraction line:

→ Plug the different machines to the power supply (check the 220V or 400V tension) and check that each machine works individually.

Operating:

The extraction line is used in several steps.
First, the frames must be fed through the uncapping machine (see instructions). The uncapped frames are stored on the entry conveyor. The cappings fall into the Opermiel. The dripping honey is collected by the flap and returned to the Opermiel. Once the entry conveyor is full of frames, lower the handles and push all the frames into the extractor, taking care to keep a space at the beginning and end of the series. Press the brake pedal, turn the cage and fill the second side. Close the hood of the extractor and start the extraction cycle.
The extracted honey passes through the chute and arrives in the Opermiel which sends the honey-capping mixture into the Spinomel.
When the cycle is completed, open the extractor hood and load the freshly uncapped frames. They push the empty frames onto the exit conveyor.
The honey is decanted, filtered by the tank and sucked by the pump to the storage place.

The extraction cycle is automatic. So the uncapping process can be continued during this time.

Maintenance

→ Clean each machine separately, see each guide.

→ Cleaning of the conveyors: Wash with hot water or use a high pressure hot water hose (Kärcher type), taking care to protect the electrical parts and having disconnected the equipment from the mains.
Make sure that the electrical parts of the appliance are protected during cleaning.
ANNEXE 1 : Installation standard sortie simple
ANNEXE 2 : Installation compacte: Sortie double
Technical Help:

High season 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