NOMADES SWISS

GLOBAL DEVELOPMENT SOLUTIONS

Advanced technology and know-how for apiculture sector development

Creating added value with beeswax processing

Technology and knowledge for foundation sheets production

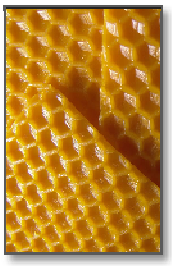
Beeswax cakes

Used foundations

Wax melting and filtering

Dipping Tank

Electric Embossing Machine



Commercial honeycomb foundations

This complete beeswax processing line is designed for intensive commercial operation and can be operated by 4-6 employees per working shift of 8 hours within only 25 m². Entirely manufactured by a European leading company in the apiary sector, the complete processing line is based on 75 years of experience and state-of-the-art technology and guarantees food safety, durability, easy operation and maintenance.

Wax Melting and Sterilizing Tank

Stainless steel, double-walled wax melting and sterilizing tank

This tank allows to quickly liquefy crude wax and keep it liquid for manufacturing wax foundations

With electric heating element and thermostat

Metal supported lid and gates

Electrically Heated Dipping Tank

Double walled dipping tank for the preparation of 4 mm thick wax sheets before embossing

Wooden panel to obtain sheets by dipping 4-5 times into tank

Incl. steel support for dipping and melting tank

Incl. knife for cutting and formatting sheets

Electric Embossing Machine

Made of extremely sturdy metal structure

For the production of wax foundations

With 220V- 250W single-phase electric motor

Gravity lubrication system

Diam. 85 mm cylinders

320 mm in length

790 cells per dm² accurately engraved

This turnkey project includes..

- ✓ complete processing equipment, working tools, personal protection equipment, connections, manuals
- ✓ turnkey solution containing planning the project, defining functionality and profitability, conducting risk analyses, organizing transportation, custom duties, delivery and installation of the system including operational start-up and know-how transfer
- ✓ intensive training courses held by technicians of the manufacturing company, first-hand knowledge about food-safe working methods, operation and maintenance of the processing line as well as of the most important technical specifications
- ✓ comprehensive after-sales services ensuring our customers all benefits of the installation during its entire life cycle. Best customer services including timely technical assistance, reliable product warranties and readily available wear- and spare parts

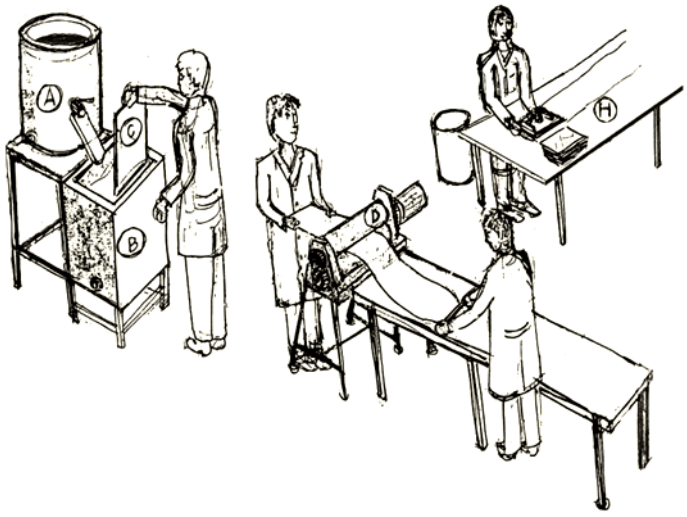
Instructions for Manual Beeswax Processing

Previous Preparation

(A) Liquefy the clean crude wax cake in the melting tank.

(B) Leave the wax flow through the gate into the dipping tank; important the wax temperature 80°C approx.

(C) Dip repeatedly two of the wooden boards into the wax contained in the dipping tank, holding one with the right hand and the other with the left hand. The wooden boards must be wet. When the thickness of the wax on each side of the wooden board is approximately 3-4 mm, cool the wax dipping the boards into cold water. Remove the wax with a knife around the edges and take away the two raw sheets obtained by each board.

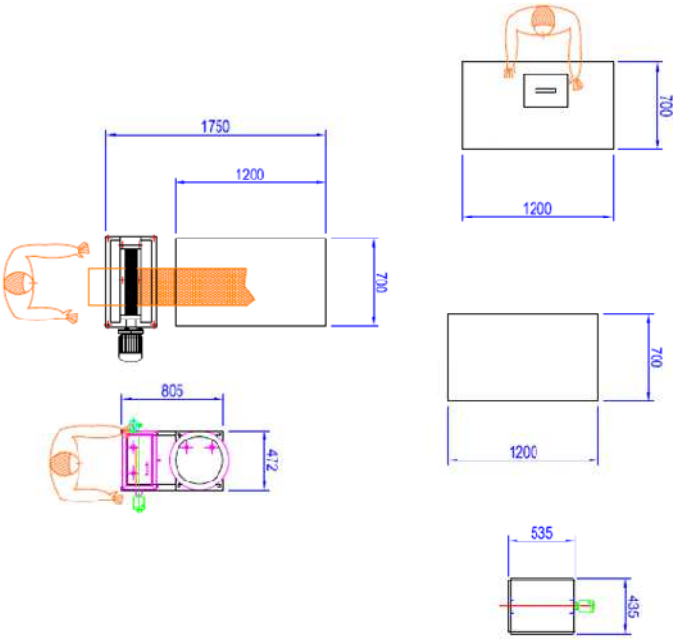


Engraving

Put the raw sheets in warm water (approx 40°C) in order to soften the wax before engraving.

Prepare a lubricating liquid to facilitate the coming off of the wax from the cylinders, using a neutral soap-powder dissolved in water (20 g for each liter of water).

Lubricate the surface of the cylinders of the rolling machine by means of a sponge or a brush.



(D) Drive the machine, introduce the softened sheet between the engraved cylinders and stop the machine when the wax foundation outstrips for some centimeters. Detach with the fingers this portion of wax, press it with the wooden grip, drive again the machine and engrave completely the sheet.

If removing some bits of wax from the engraved cylinders is necessary, use only wooden tools (i.e. toothpick).

Trimming

(H) The band obtained from the above operation must then be cut on the requested size. Display the band on the table 200 x 100 cm and, using the wooden mould, cut the wax foundation on the wanted size, cutting along the edges of the mould.

BACKGROUND INFORMATION

NOMADES Swiss has identified recurring problems affecting work in the apiary and in the honey-house with negative consequences like sub-optimal productivity, market-value loss due to honey crystallization and impurities or increased risk of illness for bee-colonies and health hazard for consumers.

Our fieldwork experience confirms the generally accepted view that apiculture is an extremely promising market, but currently poorly exploited. Our focus here is not primarily on the implementation of new bee colonies, but on the improvement of the existing local production chains which suffer from many shortcomings that can easily be amended (thus offering a maximal impact for the apicultural sector).

The main recurring problems that we have identified arise in the following fields:

- Colony management (selection, breeding, rearing as well as diseases, parasites, predators, etc.)
- Work in the apiary (quality of hives and frames, uncapping, handling of wax)
- Work in the honey-house (clarification, packaging)

Tools and know-how that we have observed in the field hinder both optimal harvesting and conditioning, thus generating a set of interrelated problems

- Important losses in terms of added-value (due to quality defects in the honey as marketed today)
- Far from optimal productivity (losses during the production process)
- Increased risks of illness for the bee colonies over the years (mostly due to lack of knowledge relative to wax handling)
- Health hazards for consumers due to problems in the conditioning process

In order to improve beeswax and honey production practices, NOMADES Swiss has developed tailor-made and extremely solid processing equipment for various production capacities. Our selection best fits local conditions of production in fragile contexts, such as power shortage or the expressed need for mobility.

Apiculture refers to the expertise and techniques for harvesting honey and other products from beehives. It is an activity perfectly suited for a philosophy of sustainable rural development at local and regional levels, which is a current top priority in developing countries today.

Some of the main assets of apiculture are

- provide rich and non-perishable nutritional additions to the rural diets, thus contributing to an improvement of basic public health
- generate products with an important added value, which can benefit different branches of the population
- consumers are extremely fond of honey and often the demand far exceeds the local production
- investments in the apicultural sector are safe and rapidly profitable, thus contributing to the reconstruction of the economy, needed for the welfare of the population and for political stability
- honey production is an activity that is complementary to other activities existing on the same agricultural lands. It allows diversification and optimization, with both direct consequences (sales of beekeeping products) and indirect ones improvement of other crops through better pollination)
- honey production can be undertaken by different people (landowner or not, men and women, etc.) and as a primary or a subsidiary activity

NOMADES Swiss has been active in the apicultural sector since the year 2000. We provide different health products for honeybees as well as state of the art apiary equipment. We are official partner of many apiary expert companies for our target countries. In close cooperation with the Provincial Federation of Apiculture (Neuchâtel, Switzerland) and selected other institutions for pathogenic agents identification, we also have experience in investigating new health problems affecting bees, beeswax or hives and can propose appropriate solutions.

NOMADES Swiss Ltd, Passage Marval 1, 2000 Neuchâtel, Switzerland
Office +41 32 725 91 10, contact@nomades-swiss.com, www.nomades-swiss.com