

Continuous steam distillation and essence condensation.

Low energy consumption.

High essence purity and quality.

PROCESS SYSTEM

This system allows the essential oil extraction from plants by steam distillation.

It consists in a 2-floor structure. In the top floor the essence distillator and condenser are placed together with the water supply tank for the boiler. In the bottom floor the boiler, the decalcification and the decanting units are placed. There is a pulley block system that allows handling the load in the load and discharge operations.

The working principle is as follows:

First, the plants to extract are charged into an auxiliary basket, this basket is moved to the distillation tank by means of the pulley block and discharged. Once the distillation tank is filled, it is closed and steam is driven through the bed of plants upwards. The outlet stream containing the essence together with steam is then condensed and collected into the decanting unit. The decantation allows the separation of essential oils from water. When extraction is totally fulfilled the vessel is opened and discharged in order to load a new charge and start over again.

As auxiliary equipment, it is provided a decalcification unit, a boiler and water and fuel supply tanks.

All the set of elements make a flexible, versatile and easy to use installation capable to use different feedstock, providing a modern solution to a traditional system for obtaining essential oils.

It is convenient to dry the herbs so it decreases the total weight and allow a larger load, but in the case that the herbs contain volatile essences (i.e. lavender, anise, fennel, rosemary, thyme...) it is not recommended to do so, to avoid losses of oils.

