Industrial Dryer for Rose Drying and De-enzym

Microwave rose de-enzyme equipment is a cutting edge de-enzyme equipment at present, de-enzyme speed is fast, sound effect.
1.The process of de-enzyme in a closed chamber, static state, no need to turn over, will not loose, and clean and sanitary, equipment electricity will not have any waste generation, environmental protection, and energy-saving.
2.The purpose of de-enzyme rose is to destroy and passivate the oxidase activity in petals at high temperature, inhibit the enzymatic oxidation of tea polyphenols in fresh leaves, and evaporate part of the water in petals, and to promote the formation of pleasant aroma.
3.Through high temperature or other methods, the rose petal microwave de-enzyme equipment can inhibit its fermentation, destroy and passivate the activity of oxidase in the fresh leaves.
It also can hinder the tea polyphenols in the new leaves, prevent the discoloration in the drying process, keep the inherent green.
At the same time, it can reduce the leaves' water, make the leaves soft, facilitate further processing, and promote the formation of product aroma.

The microwave de-enzyme equipment adopts the unique technology of microwave.
It uses the thermal effect and biological effect of microwave to rapidly passivate the oxidase activity in the low temperature (60-80 ?) so that the material components can not be destroyed due to the high heat, which is fast and efficient.
Because of its fast de-enzyme speed, high efficiency, and good effect, about 10% water can be removed at the same time as de-enzyme, and the de-enzyme impact is much better than the traditional de-enzyme effect.
Microwave de-enzyme, and then combined with 95 ? hot air drying: take 2kg of material, h = 5cm, hot air 95 ?, microwave 3kw, 9.5min, infrared temperature rise to 85 ?, residual weight 1336g weight loss 33%.
After finishing the de-enzyme, the finished product is dried by the hot air drying equipment at one time. The dried flowers are uniform in dryness and green in color. The nutrient composition of the material is not damaged or changed at all.
1.At the time of 186min, the hot bellow timer was transferred into the hot air of the electric oven at 65?.
2.At the time of 374min, the temperature was adjusted to 75?.
3.At the time of 700min, the drying was completed, with the remaining weight of 624g and weight loss of 68.8%.
The total time was 8 hours and 43 minutes. The hot air drying box should be designed with a large opening at the top, eliminating the traditional dehumidification fan and the high-power supply fan, which is conducive to the rapid evaporation of a large amount of water.

If you want high-quality products, you can use vacuum microwave drying.

1.The rose was qualitatively treated by a microwave vacuum for 7 minutes, and the flower temperature rose to 85? for 11 hours.
2.The color of the inner and outer layers of the petals of this sample is very bright, the color of the stamens is kept very well, the part of the receptors is yellow-green, and the drying quality is the highest.

Microwave vacuum qualitative treatment:

1.Because the microwave heating speed is fast, under the negative pressure of the bud surface water vapor emission, is quick.

2.The bud internal active enzyme oxidation time is concise.

So the bud can maintain a good phase, and the high-quality rose dew can be extracted at the same time as vacuum microwave drying.

3.However, due to the high cost of microwave vacuum equipment, which is not suitable for large-scale production, it can be considered as the follow-up development and use of rose.

Rose drying and de-enzyme equipments are new and efficient drying and deep processing equipment. It can use microwave equipment to dry rosebuds. It can be used for both de-enzyme and drying!
Rose drying and de-enzyme equipment are to use the moisture of the material itself to form a steam environment. In addition to the vibration effect of the high-frequency microwave, the de-enzyme's impact is good, and the color of the material is bright.
At the same time, part of the moisture is lost in the process of de-enzyme, it can save labor cost and has the function of sterilization. The bacteria content of rose dried by microwave can meet the requirements of QS food certification.