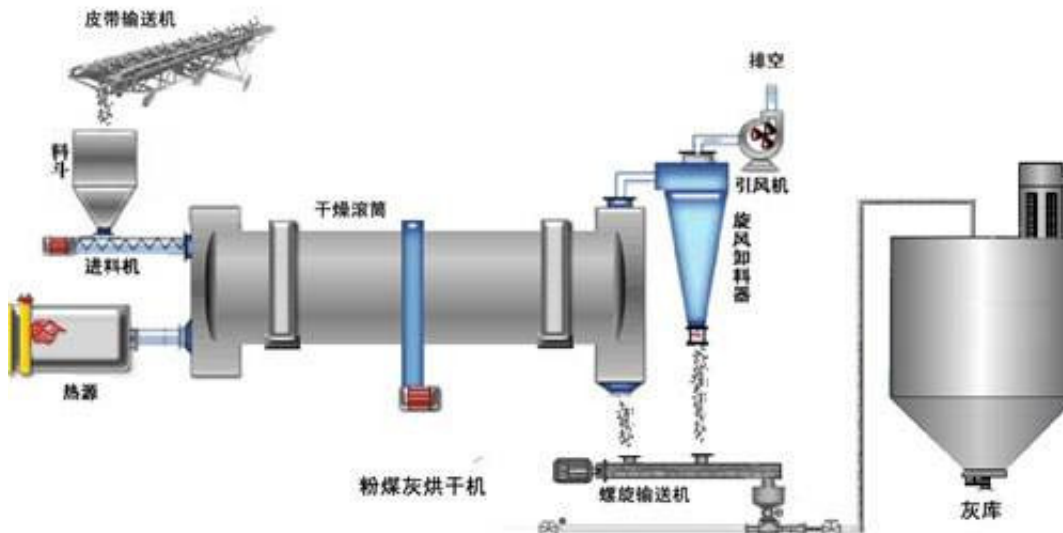


# Study on Microwave and Fresh Fruit Dryer



It is the advantage of Ningxia's agricultural products, with the same effect of medicine and food, nourishing yin and nourishing yang. The vitamin C content is 40 times that of apples, 28 times that of pears, and 6 times that of fresh peaches. It is even nearly three times higher than that of tomatoes rich in vitamin C; especially the content of carotene is more considerable. However, the fresh fruit is not easy to preserve and must be preserved.

The new mature wall is thin, easy to be broken and moldy, difficult to preserve, and it is necessary to make dried fruit in time. Fresh fruit dry sugar is easy to lose, easy to stick, knot, etc., affecting the appearance quality of dried fruit. If the drying temperature is too low, the speed will be slow, which will affect the picking and processing of the fresh fruit on the next day. If the temperature is too high, the nutrient content will be lost, and the fresh fruit will be burnt, which will affect the quality of the product.

[Microwave drying machinery](#) and equipment The [fresh fruit dryer](#) can dry grapes, mushrooms and various fruit, root, stem and leaf agricultural products in addition to dried fruits.

## 1 Microwave fresh fruit dryer structure features

Microwave fresh fruit dryer (composed of microwave drying room, hot air pipe, hot blast stove. The hot blast stove uses natural gas or gas as fuel, mainly provides heat source for dry room on cloudy day and night; hot air pipe outer insulation material is mainly used The hot air generated by the hot air furnace is introduced into

the dry room. The solar energy fresh fruit dryer is connected by a drying room through a hot air duct and a hot air stove.

The dried fruit is rugby-like, with extremely small ends at both ends. The length is 6.2 to 18.2 mm, the diameter is 6.2 to 8.4 mm, and about 4000 particles per kilogram. The color is dark red, the surface has irregular wrinkles, slightly shiny, with a raised stigma at the top and a white fruit stalk at the base. The air is slight, the taste is sweet, and the aftertaste is slightly bitter.

The peel is soft and thin but not rotten. The flesh is thick and not greasy, but it is sticky but not sticky. The light yellow seeds are about 24 to 48 in a flat rugby shape, which is as long as 2.4 mm and as wide as 1.8 mm.

The polysaccharide content in dried fruit was 0.039 mg/g, Betaine was about 0.1%, calcium was 107 mg/g, iron was 10.1 mg/g, phosphorus was 208 mg/g, and water content was less than 13%. , lipid 8.72%, reducing sugar 34.83%, total sugar 37.95%; containing vitamin A 277.06 IU / g, vitamin C 23.1%, thiamine 0.23 mg%, riboflavin 0.33 mg%, niacin 1.7 mg%, still contains a variety of amino acids: leucine, isoleucine, phenylalanine, valine, tyrosine, valine, alanine, glycine, lysine Acid and chlorous acid, also found Amine (Lyceamin) and trimethylglycine.

From the fruit,  $\beta$ -sitosterol, lanosterol and diosgenin were also isolated. The peel contains physin and jasmine. It is in full compliance with the basic standards for quality of dried hazelnuts: impurities should not exceed 1%, moisture should not exceed 13%, ash should not exceed 5.5%, acid-insoluble ash should not exceed 0.5%, and aqueous extracts should not be less than 38%.

The medicinal properties are: spindle-shaped dried fruit, slightly flat, with small convex-shaped stalk marks at the apex, white stalk marks at the base, 6 to 18 mm in length, bright red or dark red.