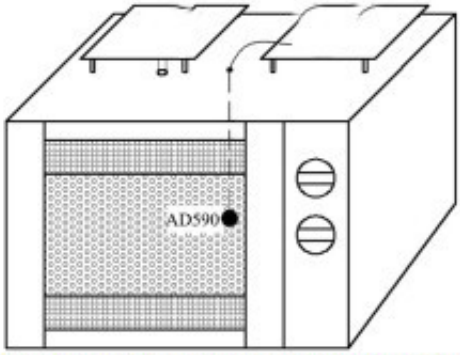
Research Progress on drying technology of green leafy vegetables

Abstract: spinach, coriander and celery are rich in green leafy vegetables, and are deeply loved by the masses. Taking the three kinds of green-leaved vegetables as examples, the working principle, technical characteristics, research status and development trend of green-leaved vegetable drying technology were introduced in order to provide reference for the development of green-leaved vegetable drying industry.

Key words: green leafy vegetables; drying technology; research status



Schematic diagram of microwave drying temperature control system

Green leafy vegetables are a kind of common fast-growing vegetables. There are more than 10 families and more than 30 kinds of green leafy vegetables cultivated in China. They are rich in various kinds of nutrients. They are rich in vitamins, beta-carotene, minerals and dietary fiber. They can promote gastrointestinal peristalsis, prevent osteoporosis, hypertension, coronary heart disease, diabetes and so on. . Chinese nutritionists pointed out that the daily intake of vegetables per person should be (400 ~ 500) g, of which more than 200 g should be green leafy vegetables, green leafy vegetables for human beings is essential.

However, green leafy vegetables are not tolerant of storage after harvesting, and the nitrate in green leafy vegetables stored for too long will be converted into nitrite, if not processed in time, not only harmful to human health, but also cause huge economic losses.

Microwave drying equipment is a commonly used food processing technology. It can reduce the moisture content of green leafy vegetables, increase the concentration of soluble substances in green leafy vegetables, inhibit microbial propagation and enzyme activity in green leafy vegetables, and make green leafy vegetables long-term preservation, and easy to transport and carry.

In this paper, the working principle, technical characteristics, research status and development trend of microwave drying of green leafy vegetables were reviewed in order to provide reference for the development of green leafy vegetable drying industry.