Microwave drying has the effect of disinfection and sterilization

There are many kinds of dryers, such as medicinal material dryer, wax product dryer, day lily dryer, bamboo shoot dryer, fruit and vegetable dryer, etc., microwave dryer with high efficiency, no energy consumption, heating Uniform, clean production and other strengths are widely used in the pharmaceutical industry. The useful ingredients of the microwave medicine dryer in the maximum limit of the preservation of the medicine, can also kill various molds and eggs in the medicine, to avoid mold and insects in the storage process.

It is understood that microwave heating is to make the object to be heated itself a heating element, which is called an overall heating method, and does not require a heat conduction process, so that uniform heating can be achieved in a short time. This feature allows the material with poor heat conduction to be heated and boring in a short period of time, and the utilization of energy is improved, and the size of the heating furnace can be made smaller than that of the conventional heating furnace. Together, when the material is under the action of microwave electromagnetic field, the temperature of the whole material rises. At this moment, due to the transpiration of the surface of the material, the surface temperature drops; then a temperature gradient of internal high and low is formed, and the direction of this gradient is exactly the same as the direction of water transpiration. Therefore, the efficiency is high and the effect is good!

Dry sterilization is an essential procedure in pharmaceutical production. However, the traditional sterilizing and sterilizing, the boiler has been selected for high temperature and sterilized. This method takes up a lot of manpower, can't complete automated production, is relatively time consuming, and is laborious. The waste gas waste pollutes the environment, and the medicine after high temperature treatment cannot adhere to the original ingredients. Microwave dryers have been used to deal with this series of problems. Microwave's unique penetration and water quality have determined many advantages of microwave drying.

After years of efforts, the development level of microwave dryers in China has made great progress, planning is more and more reasonable, quality is improving, costs are gradually decreasing, and automation and after-sales service are improving. Users who use microwave drying equipment have accelerated their growth in recent years. For example, the microwave dryer developed by Shandong Liwei Microwave Equipment Co., Ltd. has high efficiency, no energy consumption, uniform heating, fast drying speed, safety and environmental protection, small floor space, simple operation and easy control.

The microwave drying and sterilizing equipment belongs to the non-standard custom-made machinery. The planning of the microwave equipment produced by Liwei Company is based on the shape of the material, the material scale, the water content (initial moisture content, the final moisture content) or the bacteria-containing rate (initial bacteria). The rate, after all, the rate of bacteria) and the temperature resistance of the product, the moisture gradient of the material and the microwave properties of the material, ie its dielectric constant, are planned. The chief company technicians conduct parameter simulation tests in their own test centers to determine

process parameters, select reasonable structural methods, calculate microwave power dispersion, and determine the exclusion of moisture flow. Ensure that microwave energy is optimally used to produce high quality products.

Compared with the traditional boring method, the microwave dryer has the advantages of large boring rate, energy saving, high production efficiency, boring uniformity, clean production, easy completion of automatic control and improvement of product quality, and thus more and more attention is paid to various categories of dryness. As early as in the 1960s, foreign countries have conducted extensive research on the use and theory of microwave boring skills, and have been further developed in recent decades. China's microwave boring skills research started late, and there is still a certain gap compared with foreign countries. However, with the continuous improvement of China's skills and the continuous efforts of related enterprises, the microwave dryer category has also achieved good results. More research and use results began to appear.

Taking Chinese medicinal materials as an example, the traditional medicinal material dryer is set with coal as fuel for incineration, and clean hot air is generated as a boring medium to absorb the moisture in the traditional Chinese medicine, drain the humid air that reaches a certain moisture, reciprocate circulation, and reach the Chinese medicine office. Required moisture. The characteristics are time-consuming, laborious, unable to reach the requirements of drying the medicinal materials, poor sterilization, and pollution with coal as fuel. Therefore, the presentation of new craft skills is necessary. The presentation of microwave skills is just as satisfying as the requirements for drying and boring of medicinal materials, and it is also a popular theme of environmental protection.

Microwave drying skills have certain sterilization skills that can be used in our medical treatment, so drying skills are not limited to the function of drying, but also the function of sterilization and sterilization!