

How do you sterilize things in the microwave?

Detail Introduction :

Food safety is a complex issue. The food itself or contaminated food is prone to bacteria growth due to spoilage, which leads to food safety issues, and Food Sterilization Machine comes into play.

Most manufacturers use Microwave Sterilization Equipment to sterilize food during processing to enhance shelf life and freshness of food, kill bacteria, and ensure food safety. So how does the Microwave Sterilization Process work?

How do you sterilize things in the microwave?

The microwave Sterilization Method kills microorganisms and spores using heat energy generated by microwave irradiation. This new technology is highly efficient, energy-saving, stable, and reliable. Frequency ranges from 300 MHz to 300 GHz of electromagnetic waves. Microwave direct interaction with the material, transform high-frequency electromagnetic waves into heat energy.

Microwave Sterilization results from the combined effect of microwave thermal and biological effects. The potential distribution of microwave on the bacterial membrane section affects the concentration of electrons and ions around the cell, thus changing the permeability of the cell membrane, and the bacteria are thus malnourished. They cannot metabolize normally, and their growth and development are hindered and eventually die, thus achieving the purpose of food sterilization and preservation.



Microwave Sterilization Technology has apparent advantages in sterilization temperature, time, quality, maintenance, product shelf life, and energy-saving. The microwave Sterilization Method is suitable for sterilizing liquid and solid materials and has a drying effect on solid materials.

The main features of Microwave Sterilization Equipment.

Microwave sterilizer features	
1	Food Sterilization Machine can carry out continuous production, using only electricity, no need to use other energy, no preheating, no energy consumption after shutdown, saving costs.
2	Microwave Sterilizers occupy a small area, have no pollution, a high degree of automation, advanced, less labor, and high product quality.
3	Food Sterilizer Machine sterilizes the material, the surface, and internal at the same time by the action, sterilization effect is uniform, thorough.
4	Microwave Sterilization operation is flexible and convenient; Microwave Frequency can be continuously adjustable from zero to rated power, transmission speed from zero to continuously adjust, easy to control.
5	Microwave Sterilization Process for low-temperature sterilization can retain more nutrients and color, fragrance, taste, shape, and other flavor materials and has a puffing effect.

Industrial Microwave Drying And Sterilization technical parameters.

1	Working voltage: three-phase 380V±10%	2	Working frequency: 2450MHz±50Hz
3	Input power: ≤ 48KVA	4	Output power: ≥ 30KW (adjustable)
5	Transmission speed: 0.5 ~ 5m / min	6	Relative humidity; ≤ 80%
7	Working environment: 5 40	8	Overall dimensions:13970×1310×1700mm
9	Implementation standards: microwave leakage in line with the national GB10436-89 standard in line with the national GB5226 electrical safety standards.		

Microwave Sterilization Machine is mainly used for powder, granular, flake, colloidal food, drugs, agricultural products, and local specialties, additives, spices, herbal materials, and other products that need sterilization, m

preservation. Specific products include Pastry Sterilization Equipment, Mooncake Sterilization Equipment. Mooncake industry is a pillar of the food industry, especially in the ten days before and after the Mid-Autumn Festival every year for the peak season of mooncake sales, to meet the market supply, manufacturers need to start 2 months in advance production, but in the production, storage and sales process is very easy to lead to mold, Zhang Mei and bacterial contamination.

Mooncake Microwave Sterilization Equipment is low cost, does not require high barrier material packaging, can automatically check for air leakage kill mold. At the same time, also Microwave Sterilization can effectively kill coliform bacteria, etc. And Sterilization Machine can be connected to the packaging line, easy to use for conveying, and Food Sterilizer Machine can also be used for other food sterilization.



Mooncakes and pastries use Microwave Sterilization Technology to preserve freshness, increasing the product's shelf life and allowing manufacturers to have more production cycles without worrying about product quality.

Food Sterilization Machine Powder Sterilization In the food industry, sterilization of powdered items has always been a complex problem for manufacturers. Especially the sterilization of some powdered nutrients, items heat-sensitive items. Too low-temperature sterilization is ineffective; the too high temperature

to the loss of nutrients in the product, reducing the grade.

The use of Microwave Equipment can achieve the desired effect, using Microwave Sterilization Process drying sterilization of food products, increasing the yield and extending the insurance period, reducing loss of goods, improving production and economic efficiency, the overall benefit of high profits; the social benefits of long-term benefits to people's health.

Microwave Heating Drying Sterilization compared with conventional methods, no thermal inertia, Microwave Sterilization Equipment ready to use, advanced technology, and no wastewater, waste gas, waste residue, safe and harmless high-tech.

Microwave Spice Drying Sterilization Equipment is mainly used in chicken essence, beef flavor, pork flavor, yeast essence, spices, spices, food additives, powder flavor, spices, and pepper, chili powder, and other products drying sterilization treatment, the use of Microwave Sterilization Technology to transform the traditional food processing technology to show desirable prospects.

The above is the Microwave Sterilization Machine equipment performance and operating characteristics. Microwave Sterilization Process can not only play the role of sterilization but also maximize the retention of the original flavor of the product so that the food tastes delicious so that the product shelf life is extended, expand the production of food, increasing sales.

After years of experience in manufacturing Industrial Microwave Drying And Sterilization, we have cooperated with domestic and foreign Microwave Sterilization Technology and manufacturers. Based on the experience, our company has professional knowledge of Microwave Sterilization Equipment Technology has a professional technical team. If you are interested in Microwave Sterilizer, please feel free to contact us, we will provide you with professional guidance and advice, and we look forward to working with you.