

# Industrial Microwave Chilli Powder Drying Technology

## Detail Introduction :

### Introduction Of Microwave Chilli Powder Drying Machine?

Microwave chilli powder drying machine is a specialized equipment used for drying and sterilizing chilli powder using microwave energy. The microwave chilli powder drying machine uses high-frequency electromagnetic waves to generate heat and dehydrate the chilli powder evenly, resulting in a more uniform and faster drying process compared to traditional drying methods. The machine is made up of a microwave generator, a cavity structure, a conveying system, and a control system. The chilli powder is placed on a conveyor belt, which passes through the microwave cavity structure where it is exposed to the high-frequency electromagnetic waves for a specific duration of time. The control system regulates the temperature, time, and power to ensure effective drying and sterilization of the chilli powder. The microwave chilli powder drying machine is widely used in the food processing industry due to its advantages, such as improved product quality, reduced drying time, and increased efficiency. It is also environmentally friendly as it consumes less energy, generates less heat, and produces minimal waste compared to conventional drying methods.



### Parameter Of Microwave Chilli Powder Drying Machine:

Equipment Model	LY-100 Industrial Microwave Drying Machine For Chilli Powder
Rated Input Apparent Power	Customization
Height Of Conveyor	600-1000mm
Inlet And Outlet Height	40-100mm
Width Of Conveyor Belt	750±100mm(Custom-Made)
Microwave Leakage Standard	ISO?5mw/Cm <sup>2</sup>
Operating Frequency	2450±50Hmz
Transmission Speed	0~10m/Min(Adjustable Frequency)

## Feature Of Microwave Chilli Powder Drying Machine:

- 1. Fast and efficient drying:** The machine uses electromagnetic waves to dehydrate and dry the chilli powder in a few minutes, thus reducing the drying time significantly.
- 2. Uniform and thorough drying:** The microwave energy penetrates deep into the chilli powder, resulting in an even and complete drying process.
- 3. Improved product quality:** The fast and uniform drying process ensures that the chilli powder retains its color, flavor, and nutritional value, resulting in a high-quality end product.
- 4. Energy-efficient:** The machine consumes less energy compared to traditional drying methods, thereby reducing production costs.
- 5. Environmentally friendly:** The machine does not use any harmful chemicals or emit any pollutants, thus making it an eco-friendly option.
- 6. Easy to operate:** The machine is easy to operate and requires minimal training, making it suitable for both small and large-scale production.
- 7. Sterilization:** The high-frequency electromagnetic waves also have a sterilizing effect, which helps to eliminate harmful microorganisms from the chilli powder, thus promoting food safety.

## Details Displays Of Microwave Chilli Powder Drying Machine:







### **Applications Of Microwave Chilli Powder Drying Machine:**

- 1. Food processing industry:** The machine is commonly used in the food processing industry to dry chilli powder, spices, herbs, and other food products.
- 2. Pharmaceutical industry:** The machine is suitable for drying medicinal herbs and plants, which are often used in the production of pharmaceutical products.
- 3. Chemical industry:** The machine can be used to dry various chemical substances and powders, including industrial chemicals, pigments, and metal powders.
- 4. Agriculture industry:** The machine is useful for drying crops, such as grains, fruits, and vegetables, which often require drying before storage or transportation.
- 5. Laboratory research:** The machine can be used in research laboratories to dry and sterilize samples, especially for microbiology and biotechnology experiments.
- 6. Home use:** The machine is also suitable for home use, especially for drying herbs, fruits, and vegetables, which are often used in cooking and baking.

Overall, the microwave chilli powder drying machine is a versatile and efficient tool for drying various products, making it a valuable addition to various industries.

### **Advantages Of Loyal Microwave Drying And Sterilization Equipment:**

- 1. Energy Efficient:** The equipment uses less energy compared to traditional drying and sterilization methods, reducing energy costs and contributing to a more sustainable food manufacturing process.
- 2. Improved Product Quality:** Microwave drying preserves the natural flavors, colors, and nutritional benefits of the food, resulting in a higher quality end product.
- 3. Uniform Drying and Sterilization:** Microwave technology allows for even and consistent drying and sterilization, ensuring that all parts of the food are treated equally.
- 4. Reduced Microbial Load:** Microwave sterilization can effectively eliminate harmful bacteria and pathogens from the surface of the food, ensuring that it is safe for consumption.
- 5. Increased Shelf Life:** The reduction in moisture and microbial load can result in an extended shelf life of the food, reducing waste and enhancing food safety.
- 6. Versatility:** Microwave drying and sterilization equipment can be used for a wide range of food products, including fruits, vegetables, meats, and grains, making it a more versatile tool in the food processing industry.

Overall, the benefits of microwave drying and sterilization equipment make it a valuable and cost-



effective investment for food manufacturing companies looking to improve efficiency, quality, and safety.

