# Industrial Microwave Powder Drying Technology

## **Introduction Of Microwave Powder Drying Machine:**

Microwave Powder Drying Machine is a high-tech equipment used in the food processing industry to dry powders, granules, and other forms of food materials. Microwave Powder Drying Machine uses microwave energy to dry the materials and remove all the moisture from them. This method of drying is quicker and more efficient than conventional drying methods, and it also helps preserve the nutritional value of the product. The Microwave Powder Drying Machine is made up of a stainless-steel chamber with a conveyor belt that moves the product through the machine. The product is exposed to microwave energy, which causes the moisture to evaporate from the material. The machine can be adjusted to control the temperature, microwave power, and the conveyor belt speed, allowing the operator to achieve the desired drying results. The machine is widely used in the food industry for drying a variety of products such as spices, herbs, teas, fruits, vegetables, and more. It can also be used to dry non-food materials such as pharmaceuticals, chemicals, and ceramics. The Microwave Powder Drying Machine has many advantages over traditional drying methods, including a faster drying time, improved product quality, and reduced energy consumption.



#### Parameter Of Microwave Powder Drying Machine?

Equipment Model

LY-100 Industrial Microwave Drying

|                            | Machine For 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 Powder Drying Machine:**

1.**Faster Drying Time:** One of the main advantages of the Microwave Powder Drying Machine is its ability to dry materials quickly. This is due to the fact that microwaves penetrate the material and heat it from the inside out, resulting in a more efficient and faster drying process compared to traditional methods.

2. **Improved Quality:** Microwave Powder Drying Machines help retain the product's natural color, aroma, and flavor better than traditional drying methods. This is because the drying process is gentler and does not subject the material to high temperatures, which can result in a loss of nutrients, color, and flavor.

3. **Energy Efficient:** Microwave Powder Drying Machines use less energy than traditional drying methods, resulting in lower operating costs. The machines also feature energy-saving features such as automatic shut-off and power adjustment control.

4. **Easy to Operate:** The machines are designed to be user-friendly and simple to operate. They usually come with a touchscreen display and an intuitive interface that allows users to adjust the drying time, temperature, and power levels.

5. **Safe to Use:** The machines are designed with safety features such as automatic shut-off and emergency stop to prevent accidents. They are also built with high-quality materials and undergo rigorous testing to ensure their safety and reliability.

#### **Details Displays Of Microwave Powder Drying Machine:**



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

1.Food Industry: Microwave Powder Drying Machines are used to dry food products such as

herbs, spices, fruits, vegetables, and powders. They help retain the flavor and nutrients of the products, resulting in higher quality and more appealing products for consumers.

2. **Pharmaceuticals:** In the pharmaceutical industry, Microwave Powder Drying Machines are used to dry powders and granules, such as active pharmaceutical ingredients. They offer better control over the drying process, resulting in consistent and high-quality products.

3. **Chemicals:** Microwave Powder Drying Machines are used to dry chemicals and other materials in the chemical industry. They help reduce drying time and energy requirements, resulting in cost savings and increased productivity.

4. **Cosmetics:** The machines are also used to dry cosmetic products such as powders and gels. They help improve the quality and consistency of the products, resulting in higher customer satisfaction.

5. **Agriculture:** In the agricultural industry, Microwave Powder Drying Machines are used to dry crops such as grains, seeds, and flowers. They help preserve the quality of the products, reduce spoilage, and increase shelf life.

Overall, Microwave Powder Drying Machines offer a range of benefits and applications across 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 costeffective investment for food manufacturing companies looking to improve efficiency, quality, and safety.

