# High Efficiency Microwave Drying Kaolin Sterilization Machine

#### **Detail Introduction:**



## Introduction

Kaolin is a specie of clay that's been used in China for centuries. It's a versatile material that can be used for a variety of purposes, including pharmaceuticals and food additives. But what many people don't know is that kaolin is also an excellent candidate for drying food. In fact, it has high efficiency when it comes to microwave drying, which makes it an ideal material for this type of drying process. This blog post will explore the application of high efficiency microwave drying kaolin sterilization machine and how it can help you achieve optimal results when it comes to food sterilization.

# Types of Microwave Drying

There are basically three types of microwave drying: the atmospheric pressure, magnetron, and laser. Atmospheric pressure microwave drying is the oldest and most common method. It uses a large volume of air to heat the material until it vaporizes. The high temperature and pressure cause gas molecules to break down into atoms and molecules, lifting water vapor from the material. This process is called sublimation. Magnetron microwave drying uses a high-frequency electric field (magnetism) to create an intense heat within the microwave generating tube. This heat vaporizes the water molecules, leaving behind dry granules or powder. Laser-produced microwaves use light energy instead of electricity to vaporize materials. This type of heating causes atoms and molecules in matter to break down into smaller pieces that escape as vaporized gases.

# **Application of High Efficiency Microwave Drying in Pharmaceuticals and Food Processing**

High efficiency microwave drying is a highly sensitive and selective process that can be used to dry various pharmaceuticals and food products. The technology has been applied in the past to sterilize various medical devices, but the application of high efficiency microwave drying in pharmaceutics and food processing has only recently been recognized.

The principle behind high efficiency microwave drying is that microwaves induce physical changes in molecules, which can result in reduced water content and improved stability. Microwave heating also leads to microvibrations, which can break down water molecules into hydrophobic fragments. This process is known as molecular excitation heat treatment (MEHT).

There are a number of advantages to using high efficiency microwave drying in pharmaceutics and food processing. First, it is a sensitive process that can be used to sterilize a wide range of materials. Second, it is a selective process that can be used to dry both wet and dry materials. Third, it is an efficient process that can produce large amounts of dried material with low energy consumption. Finally, high efficiency microwave drying has relatively low environmental impact compared to other sterilization technologies .

### Conclusion

High efficiency microwave drying kaolin sterilization machine is the latest and most advanced equipment in sterilization field. It has good performance, reasonable price and easy operation. In addition, it has high capacity, short-time dryness and low noise level, which makes it a preferred equipment for food industry.