

# Black Tea Powder Microwave Drying Sterilization Machine

## Specifications :

Price	10000-100000
Brand Name	Loyal
Place of Origin	Shandong,China
Min.Order Quantity	1 set
Payment Terms	T/T,LC
Supply Ability	50 sets per month
Delivery Detail	30-40 working days
Packaging Details	film,box
Condition:	new

## Detail Introduction :

### Introduction:

The Black Tea Powder Microwave Drying Sterilization Machine signifies a technological breakthrough in the tea processing industry, providing an efficient solution for both drying and sterilization processes. To prove that the black tea powder microwave drying and sterilizing machine is the most practical tea drying machine. This article explores the key components, including Ginger Tea powder Microwave Dryer, Black Tea powder Microwave Dryer, loose black tea Microwave Dryer, and Black Tea powder Microwave sterilizer. We will delve into the working principles, advantages of industrial microwave sterilisation, and address frequently asked questions (FAQs) related to this advanced microwave technology.

**Ginger Tea Powder Microwave Dryer:**

The Ginger Tea powder Microwave Dryer is an integral part of the machine, employing industrial microwave sterilisation for precise and efficient drying of ginger tea powder. This process involves the selective heating of water molecules within the powder, ensuring optimal drying while preserving the natural qualities of ginger tea. Ginger Tea powder Microwave Dryer is the most practical drying machine for Ginger Tea.

**Black Tea Powder Microwave Dryer:**

The Black Tea powder Microwave Dryer is designed to cater specifically to the unique characteristics of black tea. By utilizing industrial microwave technology, this dryer ensures a controlled and uniform drying process, preventing over-processing and preserving the rich flavor and aroma of black tea powder.

**Loose Black Tea Microwave Dryer:**

The Loose Black Tea Microwave Dryer is another essential component, tailored for loose black tea processing. Through the application of industrial microwave sterilisation, this dryer guarantees efficient drying while maintaining the loose structure of the tea leaves, resulting in a premium loose black tea product.

**Black Tea Powder Microwave Sterilizer:**

The Black Tea powder Microwave Sterilizer is responsible for the sterilization process, eliminating harmful microorganisms in the black tea powder. This component ensures product safety and hygiene while retaining the tea's essential characteristics through industrial microwave sterilisation.





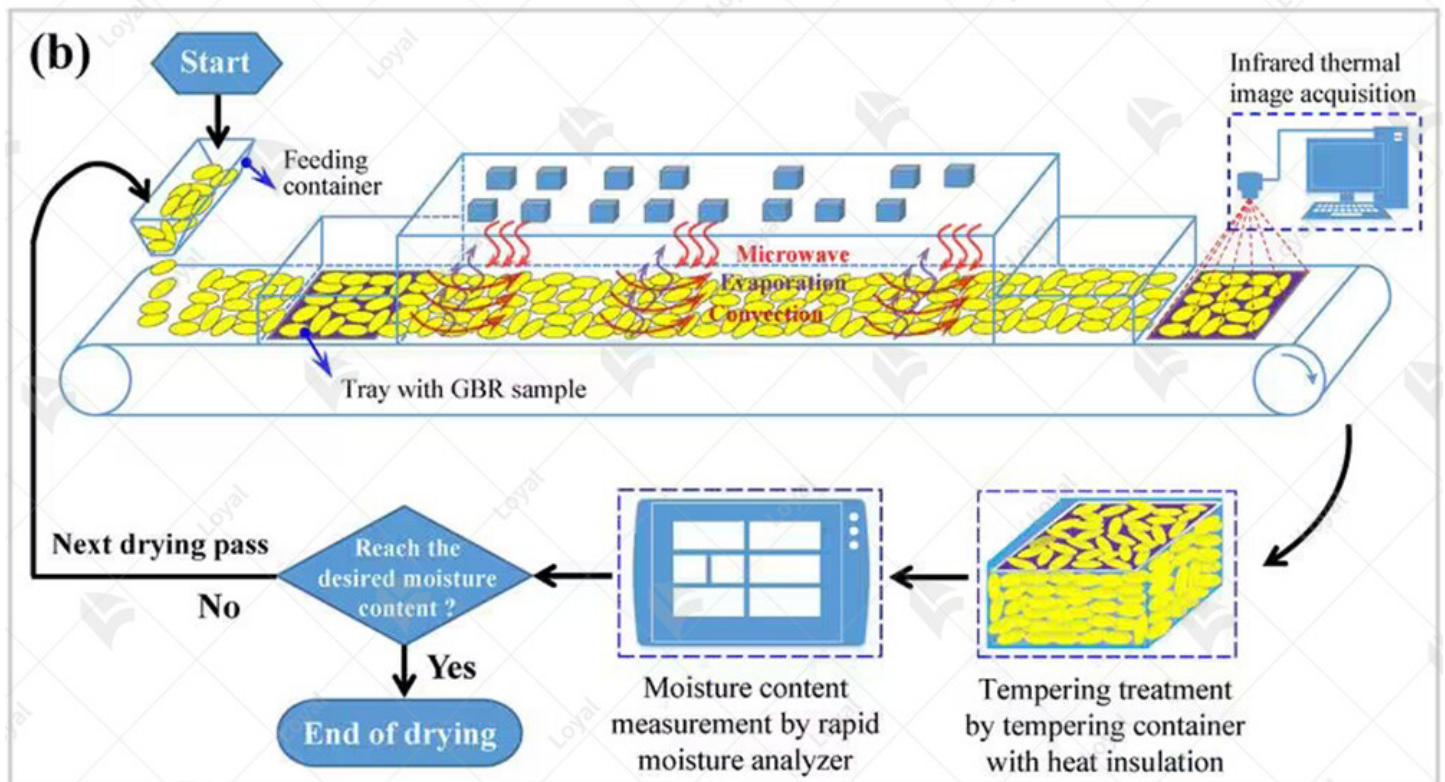
### Black Tea Microwave Dryer VS Gas Dryer Comparison

Operating Conditions	Industrial Microwave Dryer	Direct Fired Convection, Infrared
Energy Source	Electricity	Gas
Heat Penetration	Volumetric(Uniform Throughout)	Surface To Inside
Heating Rate	Nearly Instantaneous	Typically Slow
Chemical Changes To Black Tea Microwave Dryer	None	Carbonization
Dryness Control/Consistency	Precision ,<1% Possible	Non-Precision
Color Change To Black Tea Microwave Dryer	None	May Darken*
Nutrient loss inBlack Tea Microwave Dryer	None	Possible
Reliability	Very High	Poor To Moderate
Labor Requirements	Minimal, Fully Automatic	Usually Requires Operator
Fire/Explosion Hazard*	None	Possible
Energy Efficiency		
Overall Energy Efficiency	75%+	<50% **
Heat Energy Delivered To Load	95%+	<50%
Water Removal Energy	1000 - 1200 Btu/ Lb	1800-2400 Btu/ Lb
		4200-5600 Btu/ Lb
	2300-2800 Kj/Kg	Kj/Kg**
Emissions		
Control Equipment Required?	No	Yes

Generates Vocs ?	No	Yes
Generates Cox And Nox ?	No	Yes
Generates Particulates ?	No	Yes

### Working Principles Of Industrial Microwave Sterilisation:

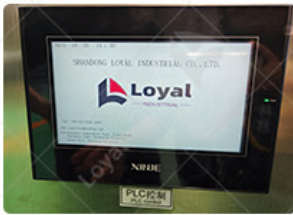
Industrial microwave sterilisation operates on the principle of selective energy absorption. Microwaves target water molecules in the tea powder, causing them to vibrate and generate heat. This selective heating leads to rapid and efficient sterilization, preserving the natural qualities of the tea.



### The Details for Black Tea Powder Microwave Drying Sterilization Machine:



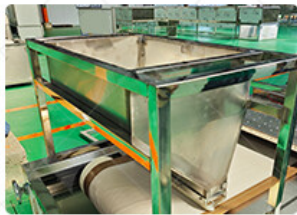
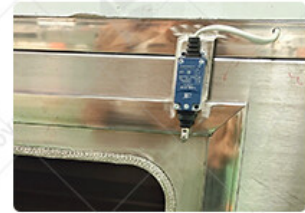
1. PLC control system



6. Machine Material : 304 stainless steel



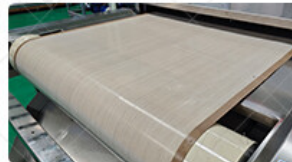
5. The observation window is equipped with a travel switch to prevent microwave leakage and improve safety.



2. Material Feeder : Customizable according to your materials, both Liquid & Powder & Pellet available



3. Belt: Customizable mesh belts of various materials



4. Control cabinet: Add a control box, neat and easy to clean.



## The application for Black Tea powder Microwave Sterilizer:

The application of microwave sterilisation in tea mainly includes sterilisation, insecticide and drying. The thermal and non-thermal effects of microwave can kill the microorganisms in tea and prolong the shelf life. For insects in tea, microwave treatment has the same good effect, which is conducive to improving the safety of tea. In addition, microwave drying technology can be uniformly heated to improve the drying speed and thermal efficiency, which in turn improves the quality of tea. With the technological progress and the depth of application research, the application of microwave sterilisation in tea will be more mature and extensive.



### Features of Industrial Black Tea Powder Microwave Drying Sterilization Machine:

Features of Black Tea Powder Microwave Drying Sterilization Machine	
Microwave output frequency	2450±50MHz
Microwave input apparent power	<70KVA
Microwave output power	>50KW
Microwave power adjustment range	10-200KW(adjustable)
Temperature	0~200C(adjustable)
Transmisison speed	0~10m/min(adjustable)
Microwave leakage limit	(mW/cm2):<1





## Technical Parameters And Price Of Industrial Tunnel Microwave Food Power Drying Sterilization Machine

Technical Parameters And Price Of Industrial Tunnel Microwave Food Power Drying Sterilization Machine			
Type?	Drying Oven	Application:	Low-Temperature Roasting Of Whole Grains
Condition:	New	Place Of Origin:	Shandong, China
Brand Name:	Loyal	Voltage:	380v/440v Customized
Power:	20-200kw	Dimension(L*W*H):	8640 *1200* 2200mm

### Advantages of Microwave Sterilization Machine:





**3-5min  
Extremely  
Fast Drying**



**Simultaneous  
Heating Inside  
And Outside**



**Temperature  
Sensing  
Prevents  
Overheating**



**Synchronous  
Sterilization &  
Disinfection  
Function**



**Cooling System  
Has Long  
Service Life**



**Microwave  
Anti-Leak**

The Black Tea Powder Microwave Drying Sterilization Machine offers several advantages. Firstly, it significantly reduces processing time, enhancing overall efficiency. The controlled application of microwave energy ensures uniform drying and sterilization, preventing over-processing and maintaining the natural characteristics of tea. Additionally, this technology contributes to energy savings, aligning with sustainable practices in the tea processing industry.

#### FAQs: Black Tea Powder Microwave Drying Sterilization Machine

**Q1: How does the Black Tea Powder Microwave Sterilizer work?**

**A1:** The sterilizer employs industrial microwave technology, selectively heating water molecules in black tea powder to eliminate harmful microorganisms, ensuring product safety and hygiene.

**Q2: What distinguishes the Ginger Tea powder Microwave Dryer from traditional drying methods?**

**A2:** The dryer utilizes industrial microwave sterilisation, providing precise and efficient drying while preserving the natural qualities of ginger tea powder.

**Q3: Is the Black Tea Powder Microwave Drying Sterilization Machine suitable for small-scale tea processing businesses?**

**A3:** Yes, the machine is designed for versatility, making it suitable for both small-scale and large-scale tea processing, ensuring consistent quality.