Microwave Meal Replacement Powder Sterilizing 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:

Microwave meal replacement powder sterilizing machine is a cutting-edge solution in the food processing industry, ensuring the safety and quality of products like Protein Powder Sterilization Machine, Bean Powder Sterilization Machine, and Nutrition Powder Sterilization Machine. This innovative technology leverages the principles of industrial microwave sterilization, offering numerous advantages for the efficient and effective treatment of meal replacement powders.

Protein Powder Sterilization Machine:

The Protein Powder Sterilization Machine plays a pivotal role in ensuring the purity of protein-based meal replacement powders. This advanced system utilizes industrial microwave sterilization, a process based on the principle of targeted energy absorption. The microwaves penetrate the powder, causing the water molecules to vibrate and generate heat, effectively sterilizing the product. This technique ofThe Protein Powder Sterilization Machine not only eliminates harmful microorganisms but also maintains the nutritional integrity of the protein powder.

Bean Powder Sterilization Machine:

In the realm of bean-based meal replacement powders, the Bean Powder Sterilization Machine stands out as a reliable solution. Its industrial microwave sterilization process ensures the elimination of pathogens without compromising the essential nutrients present in the bean powder. The microwave technology of Bean Powder Sterilization Machine excels in providing uniform and rapid heat distribution, making it an ideal choice for maintaining the safety and quality of bean-derived meal replacement products.

Nutrition Powder Sterilization Machine:

For nutrition powder sterilization, the Nutrition Powder Sterilization Machine harnesses the power of industrial microwave technology. This method preserves the nutritional value of the powder while effectively eradicating harmful bacteria and contaminants. The controlled application of Nutrition Powder Sterilization Machine ensures that the sterilization process is not only efficient but also environmentally friendly, contributing to sustainable food processing practices.

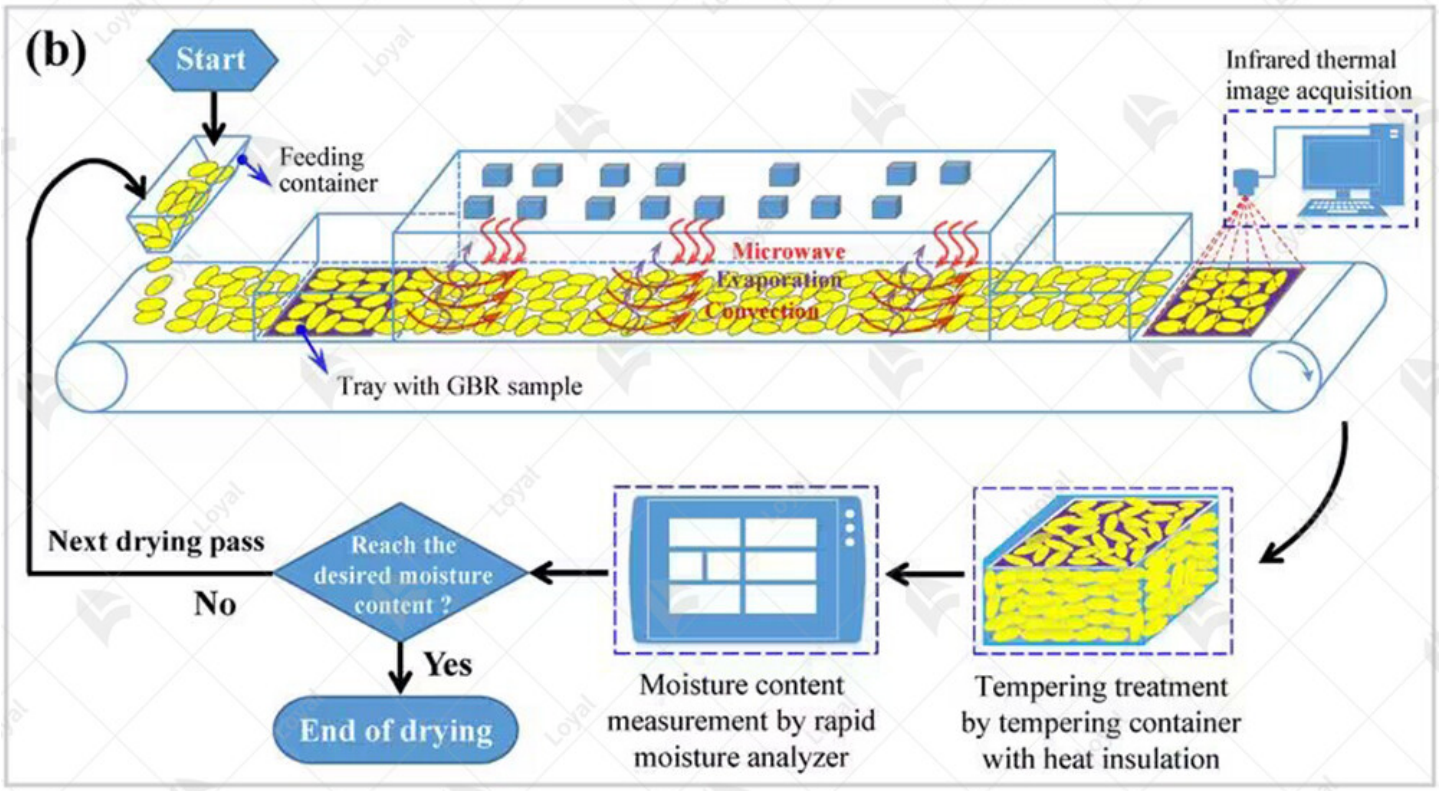
Application of microwave sterilisation technology in the field of meal replacement powder

The application of microwave sterilisation technology in the field of meal replacement powder can achieve rapid, uniform, low-temperature processing of the product, improve product quality and safety, and at the same time reduce the production cost and energy consumption, which has a wide range of application prospects.

Application of microwave sterilisation technology in the field of meal replacement powder	
1. Sterilisation	Microwave sterilisation technology can effectively kill bacteria, moulds and other microorganisms in meal replacement powder, improve the hygienic quality of the product and ensure food safety.
2. Drying	Microwave technology can not only sterilise, but also achieve rapid drying of meal replacement powder, shorten production time and improve production efficiency.
3.uniform heating	Microwave technology can achieve uniform heating of meal replacement powder, avoiding the problems of scorching and caking that occur in traditional heating methods, and improving product quality.
4.Low temperature processing	Microwave technology can achieve sterilisation and drying of meal replacement powders at lower temperatures, avoiding the destruction of the nutrients of the product by high temperatures and maintaining the nutritional value of the product.
5. Environmental protection and energy saving	The high energy utilisation of microwave technology can significantly reduce energy consumption and production costs compared to traditional heating methods, as well as reduce pollution to the environment.

Features ofIndustrial Meal Replacement Powder Sterilizing Machine:

Features ofMeal Replacement Powder Sterilizing 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



How to choose between industrial microwave sterilisation or pasteurisation?

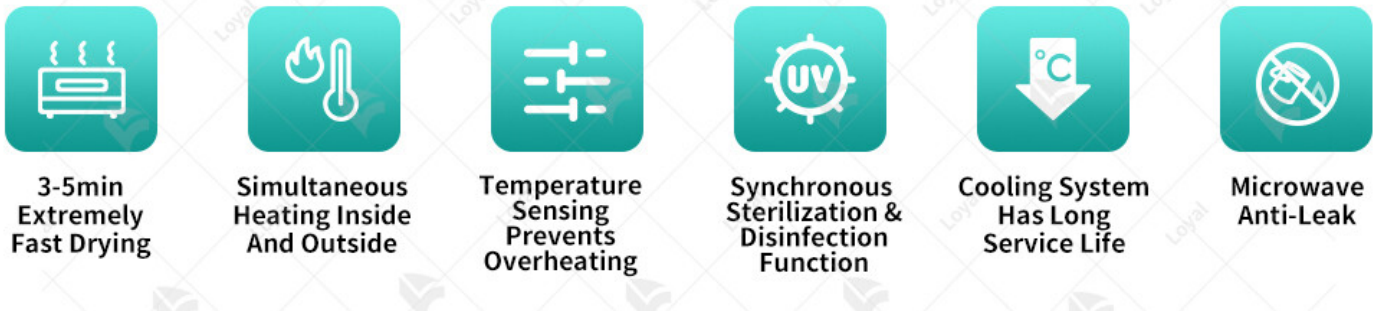
Industrial microwave sterilisation	Batch pasteurization (batch sterilization):

Industrial Microwave Sterilisation: Industrial microwave sterilisation operates on the principle of selective energy absorption. In this process, microwaves are employed to target specific water molecules within the food product. The microwaves cause these molecules to vibrate, generating heat. This selective heating effect is particularly effective in eliminating harmful microorganisms, such as bacteria and pathogens, while minimizing the impact on the overall quality of the food. Industrial microwave sterilisation offers a rapid and efficient means of achieving microbial reduction, contributing to increased efficiency in the food processing industry. The advantages of microwave sterilisation machines lie in their precision and speed. These machines allow for controlled and uniform heat distribution, preventing over-processing and ensuring the preservation of the food's sensory and nutritional attributes. Moreover, industrial microwave sterilisation is energy-efficient, aligning with sustainable practices in the food processing sector.	Batch Pasteurization (Batch Sterilization): On the other hand, batch pasteurization, commonly known as batch sterilization, is a traditional method that involves heating a specific quantity of food to a predetermined temperature for a set period. This approach aims to reduce microbial activity, extending the shelf life of the food product. Unlike microwave sterilisation, which is a continuous process, batch pasteurization is intermittent, typically used for heat-sensitive products, like dairy. One of the primary distinctions lies in the duration of the process. While pasteurization may require a longer time to achieve the desired reduction in microorganisms, microwave sterilisation accomplishes rapid and targeted sterilization. Additionally, batch pasteurization may have a more noticeable impact on the taste and nutritional content of the food due to the prolonged exposure to heat.

The Details for Microwave meal replacement powder Sterilizing Machine:

Microwave Meal Replacement Powder Sterilizing Machine Advantages:

Industrial microwave sterilization offers several key advantages for meal replacement powder processing. Firstly, it significantly reduces processing time, enhancing overall efficiency. Additionally, this method allows for precise temperature control, preventing overcooking and preserving the sensory attributes of the powders. The uniform heat distribution ensures thorough sterilization, meeting the highest quality standards. Moreover, microwave sterilization contributes to energy savings, making it a sustainable choice for food processing industries.



FAQs: Microwave Meal Replacement Powder Sterilizing Machine

Q1: How does industrial microwave sterilisation work?
A1: Industrial microwave sterilisation relies on the absorption of microwave energy by water molecules within the meal replacement powder. This energy generates heat, effectively sterilizing the product without compromising its nutritional content.

Q2: What are the advantages of using a Microwave Meal Replacement Powder Sterilizing Machine?
A2: The key advantages include reduced processing time, precise temperature control, uniform heat distribution, and energy savings. This technology ensures efficient sterilization while preserving the quality of meal replacement powders.

Q3: Is industrial microwave sterilisation environmentally friendly?
A3: Yes, industrial microwave sterilisation is environmentally friendly as it minimizes energy consumption and reduces the overall carbon footprint in the food processing industry.