

# Bean&Grain Microwave Drying Machine

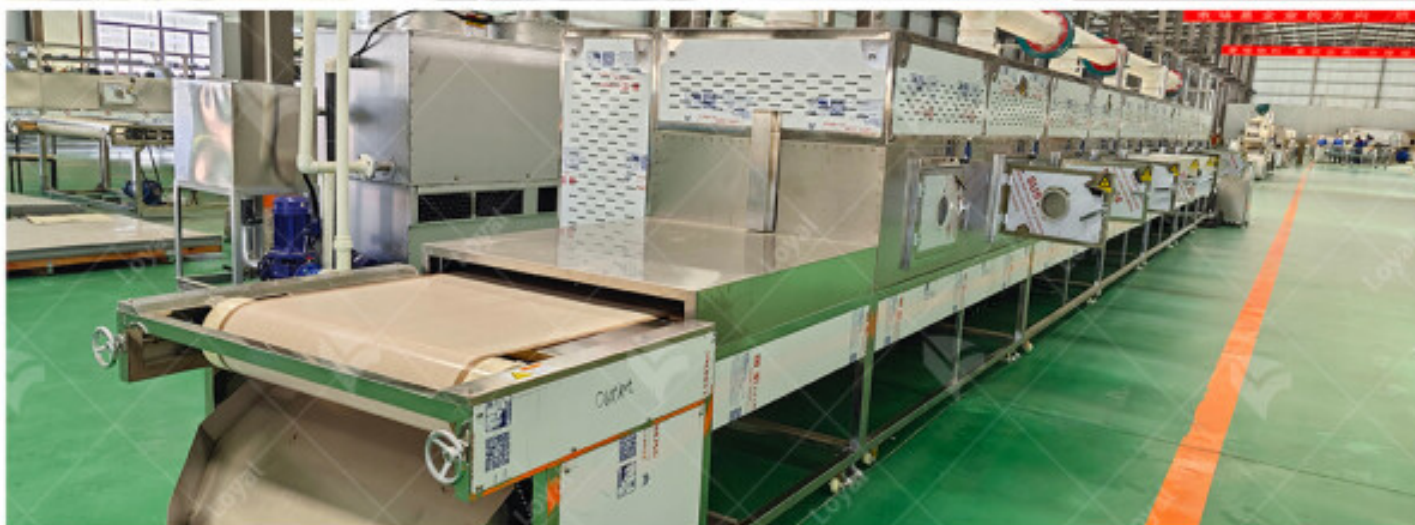
## Specifications :

Price	USD 8,800.00
Brand Name	LOYAL
Model Number	LY
Place of Origin	China
Min.Order Quantity	1
Payment Terms	T/T
Supply Ability	30 sets per month
Delivery Detail	25-30 working days
Packaging Details	Wooden packages

## Detail Introduction :

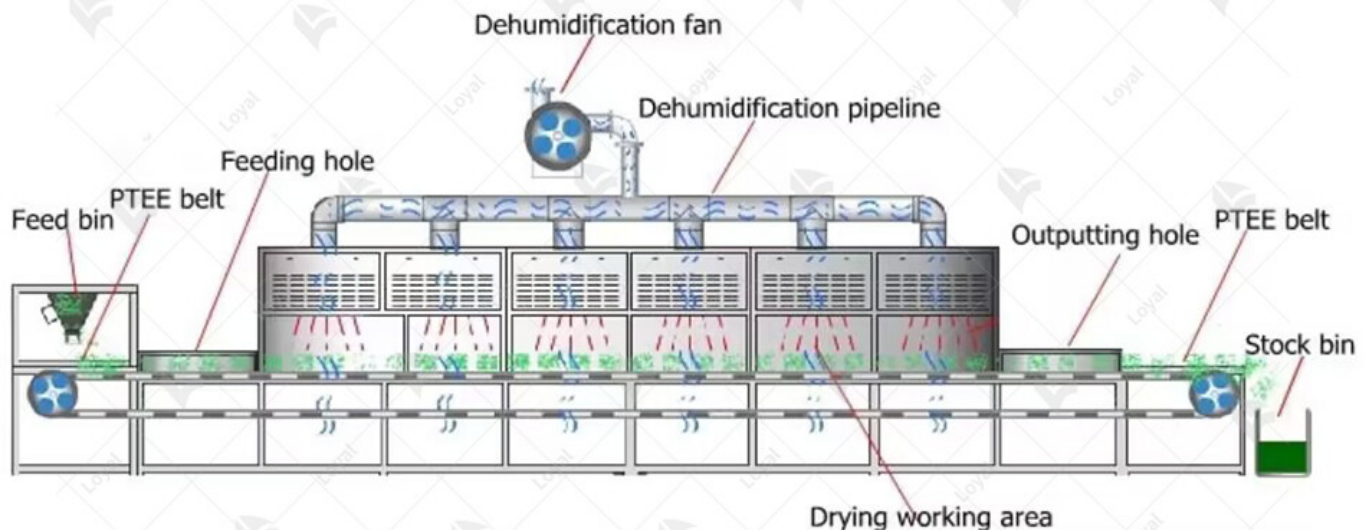
### Bean&Grain Microwave Drying Machine

In the realm of bean and grain processing, efficiency and quality are paramount. Shandong Loyal Industrial Co., Ltd. introduces cutting-edge Bean & Grain Industrial Microwave Dryer, powered by advanced Bean & Grain Microwave Drying Process, to revolutionize the drying process.



Our Bean & Grain Microwave Drying Machine utilizes Bean & Grain Industrial Microwave Dryer principles to achieve rapid and uniform drying. Unlike traditional drying methods, our equipment targets moisture molecules within the beans and grains, resulting in faster drying times and superior preservation of nutrients and flavor.

## Continuous Microwave Equipment Working Process



What Is The Principle Of Bean & Grain Industrial Microwave Dryer?

Microwave drying operates on the principle of utilizing microwave radiation to agitate water molecules within a material, causing them to rapidly oscillate and generate heat through friction. This localized heating accelerates the evaporation of moisture from the material, resulting in drying. The microwave energy penetrates the Bean & Grain and selectively heats the water molecules, allowing for efficient and uniform drying compared to conventional methods.

# LOYAL'S MICROWAVE ADVANTAGES

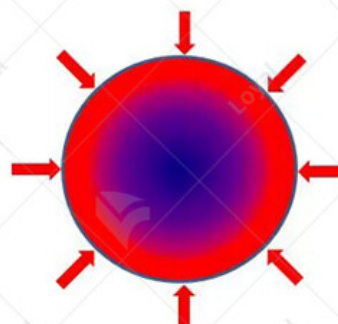
**Microwave Heating**



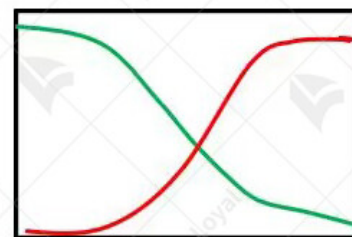
Time

**FASTER, MORE EVEN**

**Conductive Heating**



Temperature



Time

**SLOWLY...**

## Bean & Grain Industrial Microwave Dryer VS Gas Dryer Comparison

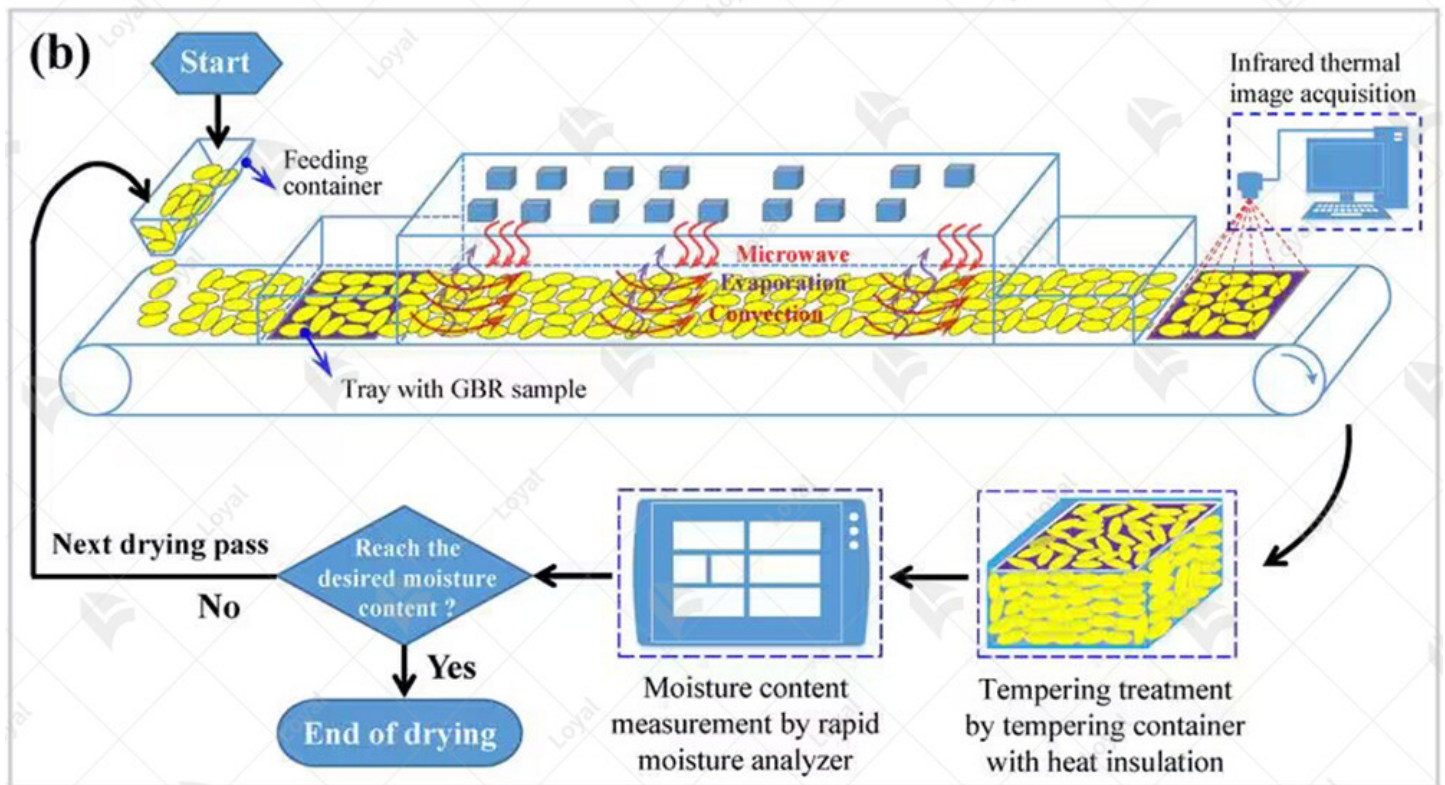
Operating Conditions	Bean & Grain Industrial Microwave Dryer	Direct Fired Gas Dryer (Flash Types)
Energy Source	Electricity	Gas
Heat Penetration	Volumetric (Uniform Throughout)	Surface To Interior Conduction
Heating Rate	Nearly Instantaneous	Typically Slow
Chemical Changes To Bean & Grain	None	Carbonization, Maillard Reaction
Dryness Control/Consistency	Precision, <1% Possible	Non-Precision, 3-5% Typical
Color Change To Bean & Grain	None	May Darken*
Nutrient loss in Bean & Grain	None	Possible
Reliability	Very High	Poor To Moderate
Labor Requirements	Minimal, Fully Automatic	Usually Requires Dedicated Labor
Fire/Explosion Hazard*	None	Possible
Overall Energy Efficiency	75%+	<50%**
Heat Energy Delivered To Load	95%+	<50%
Water Removal Energy	1000 - 1200 Btu/ Lb	1800-2400 Btu/b**
	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





## Why Is Bean & Grain Microwave Drying Machine So Efficient?

Feature Of Bean & Grain Industrial Microwave Dryer	
1	High Quality Magnetrons Are Being Used
2	Pid Indicator/Controller For Easy To Understand And Operate User Control
3	Rf/Mw Choke/Timer Provision For Automatic Power Control
4	Stainless Steel Chamber Designed To Avoid Any Kind Of Radiations.
5	Required Electrical & Thermal Safety Features For Microwave Generator
6	Variable Frequency (Belt Speed Control)
7	Variable Power Output (Selectable) Up To 100%
8	Temperature Control



At the core of our technology lies the Bean & Grain Microwave Drying Equipment, which offers precise control over the drying process. Whether it's beans, grains, or legumes, our equipment ensures consistent and reliable results batch after batch.



The Bean & Grain Microwave Drying Process is designed to optimize efficiency and minimize energy consumption. With our Bean & Grain continuous microwave dryer, producers can achieve high throughput while maintaining product quality.

Technical Parameters Of Bean&Grain continuous microwave dryer

Model Of Bean&Grain industrial microwave dryer	Size L*W*H (Can be customized according to the customer's requirements)	Output power	Dewaterability	Sterilization capacity
LY-10KW	5000mm*825mm*1750mm	?10KW	10KG/Hour	100KG/Hour
LY-20KW	8000mm*825mm*1750mm	?20KW	20KG/Hour	200KG/Hour
LY-30KW	8500mm*1160mm*1750mm	?30KW	30KG/Hour	300KG/Hour
LY-40KW	10000mm*1160mm*1750mm	?40KW	40KG/Hour	40KG/Hour
LY-50KW	12500mm*1160mm*1750mm	?50KW	50KG/Hour	500KG/Hour
LY-60KW	13500mm*1450mm*1750mm	?60KW	60KG/Hour	600KG/Hour
LY-70KW	13500mm*1500mm*1750mm	?70KW	70KG/Hour	700KG/Hour
LY-80KW	13500mm*1650mm*1750mm	?80KW	80KG/Hour	800KG/Hour



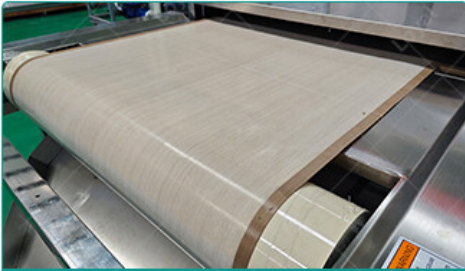
LY-100KW	16800mm*1650mm*1750mm	?100KW	100KG/Hour	1000KG/Hour
LY-150KW	22400mm*1850mm*1750mm	?150KW	150KG/Hour	1500KG/Hour
LY-200KW	27000mm*1850mm*1750mm	?250KW	250KG/Hour	2500KG/Hour
LY-300KW	32000mm*1850mm*1750mm	?300KW	300KG/Hour	3000KG/Hour
Power Supply		380V±10% 50Hz±1% Three-Phase		
Bean & Grain Microwave Drying Equipments Output Frequency		2450±50Mhz		
Microwave Input Apparent Power		?168Kva		
Microwave Output Power		?120Kw		
Microwave Power Adjustment Range		0-30Kw(Adjustable)		
Ambient Temperature		-5-40°C		
Relative Humidity		?80%, Surrounding Environment: No Corrosive Gas,		
Transmission Speed		0-10m/Min(Adjustable)		



Experience the benefits of Bean & Grain Microwave Drying Equipments from Shandong Loyal Industrial Co., Ltd. Our equipment is designed to streamline the drying process, reducing production time and costs while maximizing yield and quality.

What's the Advantage of the Bean & Grain Microwave Drying Equipments?

The Advantage Of The Bean & Grain Industrial Microwave Dryer:	
1	Microwave Heating Process Is Clean.
2	Microwave Heat Penetrates Both On The Surface As Well As Internally Within The Object Placed For The Treatment.
3	High Speed Of Heating Reduces Total Time Of Processing.
4	Microwave Heating Process Is Highly Controllable
5	Spontaneous On/Off Control



**1** Rapid heating, safe and environmentally friendly, sterilization time period, fast Save energy and heat evenly and thoroughly.



**2** Timely heat control, sensitive response, strong microwave heating penetration ability.



**3** High voltage power supply for microwave oil cooling Suitable for any environment long lasting Energy saving and environmental protection.



**4** Use the dedicated high-voltage power supply for microwave air cooling in a dust-free environment long lasting Energy saving and environmental protection.



**5** Microwave waveguide has long corrosion resistance and long service life.



**6** Cooling fan, good heat dissipation effect.

Trust Shandong Loyal Industrial Co., Ltd. to deliver innovative solutions that elevate efficiency and quality in bean and grain processing. With our Bean & Grain Industrial Microwave Dryer, you can optimize your production operations and meet the demands of the market with ease.



**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**