

# Pet food microwave drying oven

## Specifications :

Price	10000-100000USD
Brand Name	LOYAL
Model Number	LY
Place of Origin	JINAN,CHINA
Min.Order Quantity	1 SET
Payment Terms	T/T, L/C...
Supply Ability	1 ?onth 5 sets
Delivery Detail	30-35 working days
Packaging Details	Film wrapping/wooden box packaging

## Detail Introduction :

### Pet food microwave drying oven

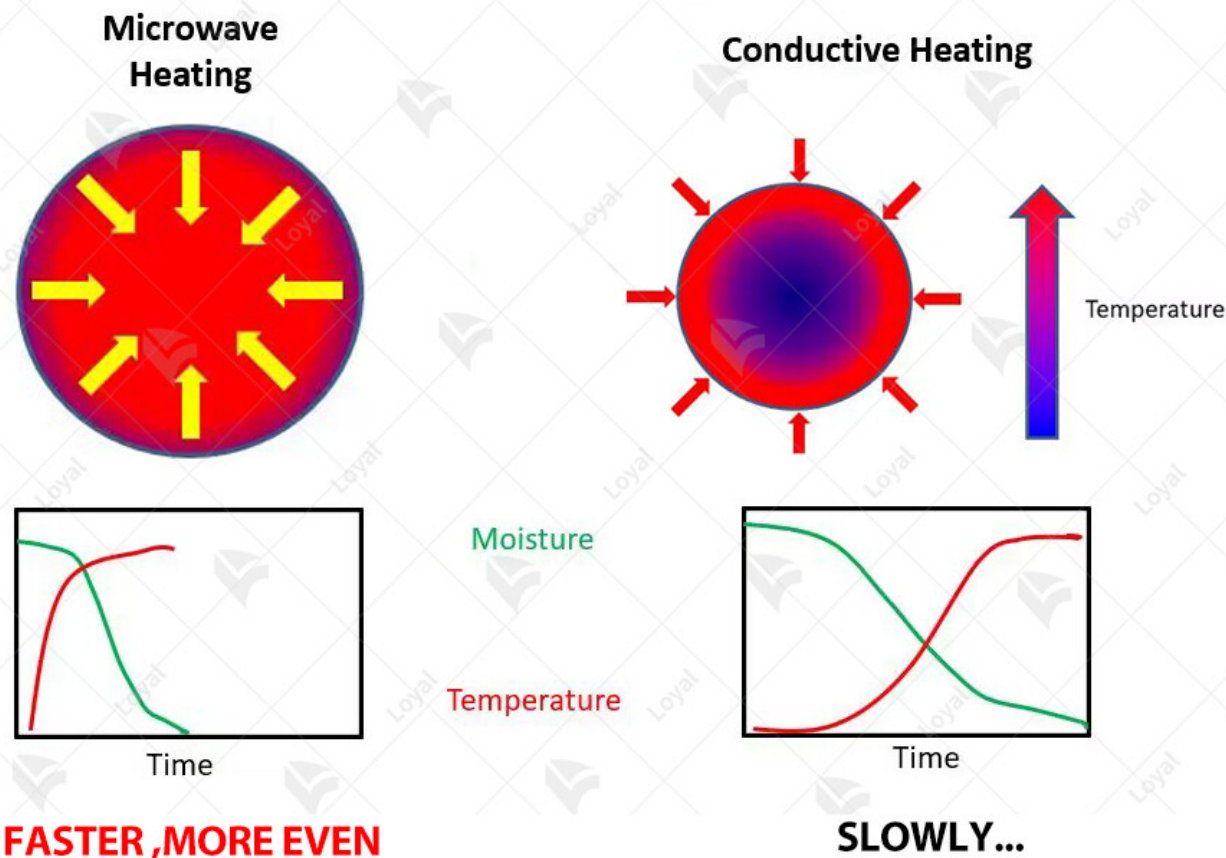
As one professional Pet food microwave drying oven manufacturer, we can offer small, medium and large Pet food industrial microwave dryer for sale. The Pet food microwave drying equipment has reasonable price, reliable quality and professional service! Our company provides customers full set service. Cost accounting, dryer design, raw material recipes, machine installation and debugging, design molds according to customer requirements.



## Working Principle of Pet Food Microwave Drying Oven

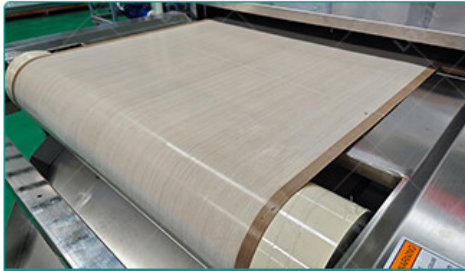
The Pet food microwave drying oven utilizes advanced microwave technology to efficiently dry pet food products. Within the oven's chamber, industrial microwaves are generated and evenly distributed, penetrating the pet food material. As the microwaves interact with the water molecules present in the food, they cause rapid oscillation, generating heat. This heat effectively removes moisture from the pet food, resulting in rapid and uniform drying.

## LOYAL'S MICROWAVE ADVANTAGES



### What Are Features Of Pet food industrial microwave dryer?

Features Of Pet food industrial microwave drying equipment	
1	Short drying time and high efficiency.
2	The drying temperature is low and uniform, and the composition of the raw material can be maintained.
3	Selective heating, uniform and thorough. Because water molecules absorb microwaves well, the part with high water content absorbs more microwave power than the part with lower water content. This is the feature of selective heating, which can be used to achieve uniform heating and uniform drying.
4	Energy saving and high efficiency. The microwave directly acts on the material, so there is no additional heat loss. Compared with the energy saving of more than 30%, no waste is generated in the whole drying process.
5	The Pet food microwave drying equipment adopts tunnel structure, PLC automatic control, automatic temperature control system, video monitoring system, conveyor belt automatic deviation correction system, transmission frequency conversion speed regulation system, etc., real-time monitoring, - - key setting automatic system, operation Simple and low labor intensity; the equipment is mainly made of stainless steel plate, which has strong thermal insulation performance and corrosion resistance, saves energy consumption, provides a good working environment and long service life of the equipment.



**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.

## The application of a Pet Food Microwave Drying Oven

**Pet Food Manufacturing Facilities:** Pet food manufacturing facilities utilize Pet food industrial microwave dryers as an integral part of their production process. These ovens efficiently dry different types of pet food products, including dry kibble, treats, and snacks, ensuring optimal moisture content and quality.

**Pet Food Research and Development:** In the pet food industry, ongoing research and development efforts focus on improving the quality, nutritional value, and palatability of pet food products. Pet Food Microwave Drying Ovens are used in research laboratories to test and refine new formulations, as well as to develop innovative pet food products.

**Custom Pet Food Production:** Some pet food manufacturers specialize in producing custom or specialty pet food products tailored to specific dietary requirements or preferences. Pet Food Microwave Drying Ovens enable these manufacturers to efficiently dry small batches of custom pet food formulations while maintaining product quality and consistency.

**Pet Food Packaging and Distribution:** Once pet food products are dried using Pet food industrial microwave dryer, they undergo packaging and distribution processes. Properly dried pet food products have an extended shelf life and are less susceptible to spoilage during storage and transportation.

**Pet Food Quality Control:** Quality control is essential in the pet food industry to ensure that products meet safety, nutritional, and quality standards. Pet food industrial microwave dryer play a crucial role in quality control processes by ensuring that pet food products are dried to the desired moisture content and meet specified quality criteria.

**Sustainable Pet Food Production:** With a growing focus on sustainability in the pet food industry, manufacturers are increasingly adopting energy-efficient and eco-friendly production methods. Pet Food Microwave Drying Ovens contribute to sustainability efforts by reducing energy consumption and minimizing waste compared to traditional drying methods.



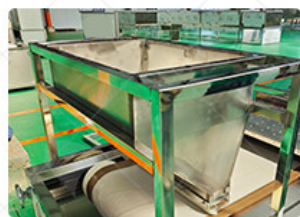
1. PLC control system



6. Machine Material : 304 stainless steel



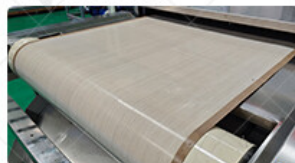
5. The observation window is equipped with a travel switch to prevent microwave leakage and improve safety.



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.



## Technical Parameters Of Pet food microwave tunnel dryer

	Technical Parameters OfPet food microwave tunnel dryer				
	Model	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	400KG/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	200KW	200KG/Hour	2000KG/Hour
	LY-300KW	32000mm*1850mm*1750mm	300KW	300KG/Hour	3000KG/Hour
	Power Supply		380V±10% 50Hz±1% Three-phase		
	Microwave Output Frequency		2450±50MHz		
	Microwave Input Apparent Power		168Kva		
	Microwave Output Power		120Kw		
	Microwave Power Adjustment Range		0-30Kw(Adjustable)		
	Ambient Temperature		-5-40℃		

	Relative Humidity	780%, Surrounding Environment:No Corrosive Gas
	Transmission Speed	0-10m/Min(Adjustable)

#### Industrial Microwave Dryer VS Gas Dryer Comparison

Operating Conditions	Industrial Microwave Dryer	Direct Fired Gas Dryer
Energy Source	Electricity	Gas
Heat Penetration	Volumetric(Uniform Throughout)	Surface To Interior
Heating Rate	Nearly Instantaneous	Typically Slow
Chemical Changes To Product	None	Carbonization, Moisture Loss
Dryness Control/Consistency	Precision ,<1% Possible	Non-Precision,3-5% Variation
Color Change To Product	None	May Darken*
Nutrient loss in product	None	Possible
Reliability	Very High	Poor To Moderate
Labor Requirements	Minimal, Fully Automatic	Usually Requires 2-3 Operators
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
	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



#### FAQs: Pet Food Microwave Drying Oven

Q1: Is the Pet food microwave drying oven suitable for all types of pet food products?

A1: Yes, Shandong Loyal's Pet food microwave drying oven is designed to accommodate various types of pet food, including dry kibble, treats, and snacks. Its adjustable settings allow for precise control over drying parameters to ensure optimal results for different products.

Q2: How does the drying process in the Pet food microwave tunnel dryer preserve the nutritional value of pet food?

A2: The Pet food microwave drying oven utilizes advanced microwave technology to remove moisture from pet food quickly and efficiently. This rapid drying process helps preserve the integrity of vitamins, minerals, and other essential nutrients, ensuring that pets receive high-quality, nutritious food .

In conclusion, the Pet food microwave drying oven offered by Shandong Loyal Industrial Co., Ltd. represents a state-of-the-art solution for efficiently drying pet food products. With its advanced technology, efficiency, and versatility, this innovative equipment sets the standard for pet food manufacturing. Whether producing dry

kibble, treats, or snacks, the Pet food microwave drying oven delivers consistent quality while preserving the nutritional value of pet food.