

# Microwave Insect Earthworm Tunnel Dehydrator Drying Machine

## Specifications :

Price	Check with Microwave Drying Machine Team Saler
Brand Name	Loyal Microwave Drying Machine
Model Number	Insect Earthworm Dehydrator Drying Machine
Place of Origin	China
Min.Order Quantity	1set of Microwave Equipment
Payment Terms	TT
Supply Ability	20Days of Microwave Drying Sterilizing Machine
Team	Microwave Drying Sterilizing Machine Technical Team
Sales Team	Microwave Drying Sterilizing Machine Process Technology Engineer

## Detail Introduction :

### ***Microwave Insect Earthworm Tunnel Dehydrator Drying Machine***

*Drying Insect Earthworm with microwave drying equipment is an emerging drying technology. Since the heat directly comes from the inside of the drying material, the heat loss in the surrounding medium is very small. In addition, the microwave heating cavity itself does not absorb heat or microwaves, and it emits all the heat. Acting on the material, the thermal efficiency is high. Due to the advantages of fast drying speed and good quality, this technology has become the Insect Earthworm drying equipment for many Insect Earthworm farmers.*



*Application of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine in manufacturer*

***Introduction of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer***

*Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer adopts clean energy, high degree of automation, no need for manpower, and no pollution of drying medium, energy saving and environmental protection. The industrial microwave systems adopts pulsed through-flow air supply technology to greatly improve drying uniformity. Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer has short processing time, easy control, good product quality, high expansion, color and freshness can be maintained, less loss of moisture and nutrients, low bacterial content, high processing efficiency, suitable for various Drying and milling of insects, such as Tenebrio molitor, barley worm, black soldier flies, and earthworms.*





Customer Sample of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine

**What is the Price of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer?**

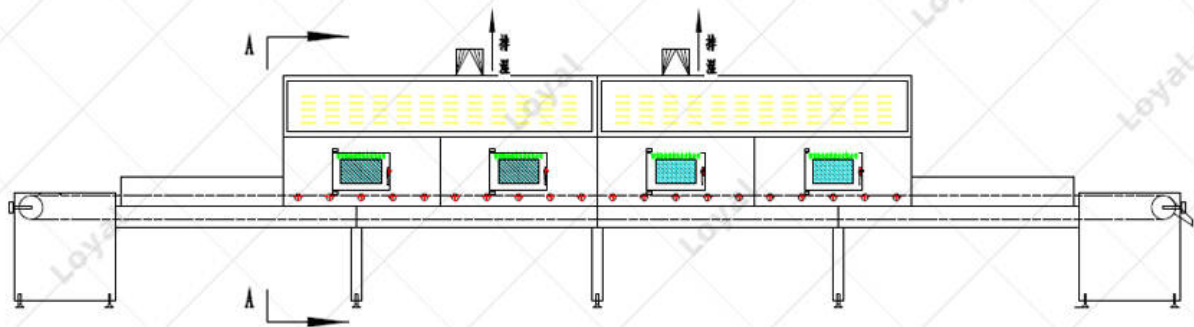
#### Industrial microwave systems

Model	Ly	Order number	3	Rotating speed
Article number	5	Brand	Loyal	Applicable materials
Structure type	Multilayer belt	Application field	Food agriculture	Heat transfer a
Price	20000usd	Power	13 (kw)	Dimension

#### Market application of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer

In addition to drying earthworms, what other products is this industrial microwave systems suitable for?

Microwave drying of *Tenebrio molitor*, drying of paper trays, drying of bread crumbs, drying of cat litter, drying of insects, drying of traditional Chinese medicine extract, microwave drying of black soldier flies, microwave drying of insulation board, drying of rope, yarn Line drying equipment, fly maggot microwave drying, glass fiber drying, epoxy resin curing, cotton drying.



*Layout of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine*

**How long does it take for insects to dry?**

Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer provides instant heat drying without preheating. Microwave is different from the traditional heating method (from the outside to the inside), the microwave has penetrability, and the principle of the heating method is different (from the inside to the outside).

**Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer**

Model	LY3-1.2-8	LY3-1.2-10	LY3-1.6-8	LY3-1.6-10	LY3-2-8	LY3-2-8
Number of units	4x3	5x3	4x3	5x3	4x3	5x3
Bandwidth (m)	1.2		1.6		2	
Drying section length (m)	8x3	10x3	8x3	10x3	8x3	10x3
Paving thickness (mm)	10-80					
Operating temperature (?)	50-140					
Steam pressure (mpa)	0.2-0.8					



Steam consumption (kg/h)	360-600	420-720	450-840	480-960	480-960	630-1350
Heat exchange area (m2)	816	1020	1056	1320	1344	1680
Drying strength kg water/h	150-450	220-550	240-600	280-750	280-750	350-900
Number of fans	14	17	14	17	14	17
Internal unit total power (kw)	30.8	37.4	42	51	56	68
Equipment total power (kw)	35.3	41.9	46.5	55.5	60.5	72.5
Dimensions (l×w×h)	9.77×2.2×4.5	11.77×2.2×4.5	9.77×2.6×4.7	11.77×2.6×4.7	9.77×3.06×4.9	11.77×3.06×4.9
Total weight kg	4800×3	5780×3	5400×3	6550×3	6350×3	7800×3

The amount of evaporated water shown in the figure depends on the drying temperature of the material, the thickness of the material and the residence time



Detail of Layout of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine in Workshop

## **Microwave Insect Earthworm Tunnel Dehydrator Processing**

1. Earthworm meal: The processing method of earthworm meal is simple. Fresh earthworms are air-dried or dried and then pulverized.

The protein content of dry earthworms is as high as 70%, which is comparable to imported fish meal and higher than domestic fish meal. The content of arginine is higher than that of fish meal. 2-3 times, rich in carotene, it is a high-protein health feed that animals need.

According to reports, earthworm meal is better than fish meal for raising chickens. Broiler chickens are added with 7.5% earthworm meal and 80% fish meal in the same diet.

In comparison, the weight gain increased by 13% in 5-6 days, and adding 4% earthworm meal to the laying hen feed increased the egg production by 20% compared with no addition.

2. Earthworm liquid:

There are more than 10 kinds of proteolytic enzymes and plasmin in the digestive tract of earthworms. These proteases have strong hydrolysis activity on proteins, and these enzymes are used to hydrolyze proteins and turn them into soluble small molecule active peptides and Amino acids, as additives, can be completely absorbed by farmed animals, exerting their anti-disease and growth-promoting effects.

Test results of aquaculture eel: After comparison of 5 groups of tests, the best formula is taught: fish meal 20%, earthworm liquid 11%, ESB yeast 9%, Cake meal 20%, energy feed 35%, MTS growth promoter 0.001%, additive 2%, adhesive 3%. Eel raising effect: weight gain 100.48%, bait coefficient 2.32, protein utilization rate 21.21%. Amino acid content in earthworm liquid High, rich in minerals and vitamins, is a new type of feed additive.

3. Antibacterial peptides:

The composition of protein amino acids in earthworms is similar to that of animals, which can be fully absorbed by animals, and glutamic acid accounts for 10% of its amino acids (the umami in MSG is glutamic acid).

The meat is tender and delicious, and the quality is improved. Studies have found that earthworms contain highly active phytase, which can significantly improve the digestion and absorption of mineral elements in animal feed.

It is also proved that earthworm body fluids contain broad-spectrum antibacterial substances-antibacterial peptides.

Using earthworms to create a new type of Antimicrobial peptide feed raw materials and additives that can replace antibiotics have been tested on laying hens and fattening pigs and have achieved good results.

Earthworms have such a remarkable effect as animal feed, especially earthworms and their extracts are green and pollution-free, so the development and application of earthworm feed products have great potential and development prospects.

## **Advantages of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer**

### **Industrial sized microwave Earthworm Tunnel Dehydrator Drying Machine**

1	Including feeding device, drying box, scraper, the feeding device is equipped with a gate, and the drying box is equipped with a gate, which can adjust the feeding amount
2	There are more heaters in the front half of the drying box, which can quickly kill the earthworms. The conveyor belt for conveying materials is arranged in the drying box. Both ends of the conveyor belt are at the right ends of the drying box. A support beam is arranged under the conveyor belt in the drying box to prevent earthworms from being too heavy to sag the conveyor belt; and equipped with baffles to prevent earthworms from falling.
3	The right end of the drying box is provided with a drive motor for driving the conveyor belt, a support beam is arranged in the middle of the conveyor belt in the drying box, and there is a moisture outlet in the middle of the conveyor belt to the position above the conveyor belt.
4	The moisture exhaust port is connected with a moisture exhaust fan through a pipeline.



5	The scraper includes a blanking plate, a scraper and a support arm. The left end of the scraper is connected to the right end of the conveyor belt, and the scraper can hang the earthworms stuck on the conveyor belt.
6	The right end of the scraper is connected to the right end of the support arm through the blanking plate. The support arm is fixed on the drying box.
7	A receiving box is set under the scraper. To collect earthworms

### Features of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer

Although Insect Earthworm is an agricultural and sideline product, it has high requirements for microwave equipment, because the following indicators need to be met during the drying process.

#### Industrial microwave for sale

1. High degree of puffing	If the puffing degree does not meet the requirements, the dried tenebrio molitor cannot meet the requirements of the outlet. To achieve the ideal puffing degree, the microwave cavity must have a high power density, which increases the difficulty of design. And improve the parameter of the microwave components.
2. Beautiful color	The mealworms dried by good microwave drying equipment should be yellow, or close to the color of the insects themselves. The first requirement for designers is to have an understanding of microwave design experience to be able to remove the mealworms. The processing technology must be introduced into the design.
3. High dryness	The microwave drying equipment uses microwaves to penetratingly heat the material on the conveyor belt. Increase the temperature of the material in a short period of time, allowing the moisture in the material to evaporate naturally



Test Process of Detail of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine in Workshop

### Quality parameters for Microwave Insect Earthworm Tunnel Dehydrator Drying Machine

Quality parameters for fresh and dried BSFL

Quality parameters	Unit	Fresh larvae <sup>1</sup>	Dried larvae <sup>1</sup>
Protein (with conversion factor 6.25)	%	10.2±1	36.4±5
Fat	%	7.2±2	36.2±5
Fibre	%	3.2±1	13.5±4
Ash	%	1.8±0.5	7.0±4
Carbohydrates	%	1.4±1	6.2±2
Moisture content	%	76.5±3	2.6±0.8
Water activity	-	0.9±0	0.4±0.1

### Customer Purchase Case Of Microwave Insect Earthworm Tunnel Dehydrator Drying Machine Dryer

Customer cases for industrial sized microwave for factory in 2021	
1	1t/h cost of microwave drying equipment sold in russia
2	1t/h industrial microwave price for factory for sale in puerto rico
3	1t/h industrial microwave price for sale in bolivia
4	Senegal 1t/h industrial fully automatic industrial sized microwave
5	1t/h industrial sized Insect Earthworm microwave for sale in côte d'ivoire
6	China 300t/year industrial fully automatic industrial sized microwave
Customer case of microwave Insect Earthworm drying equipment at 2021	
7	1t/h microwave drying equipment for factory in uzbekistan
8	1000kg/h industrial microwave drying equipment for sale in senegal
9	Mozambique 1t/h fully automatic microwave drying equipment
10	Bangladesh 2t/h fully automatic microwave drying equipment
Dealed customer have technology of microwave drying equipment at 2021	
11	1t/h thai microwave Insect Earthworm drying equipment for factory
12	Uzbekistan 1t/h fully automatic industrial microwave price
13	Usa 1t/h microwave drying equipment
14	800kg/h industrial microwave Insect Earthworm drying equipment for sale in nigeria

### Microwave Insect Earthworm Tunnel Dehydrator Drying Machine video