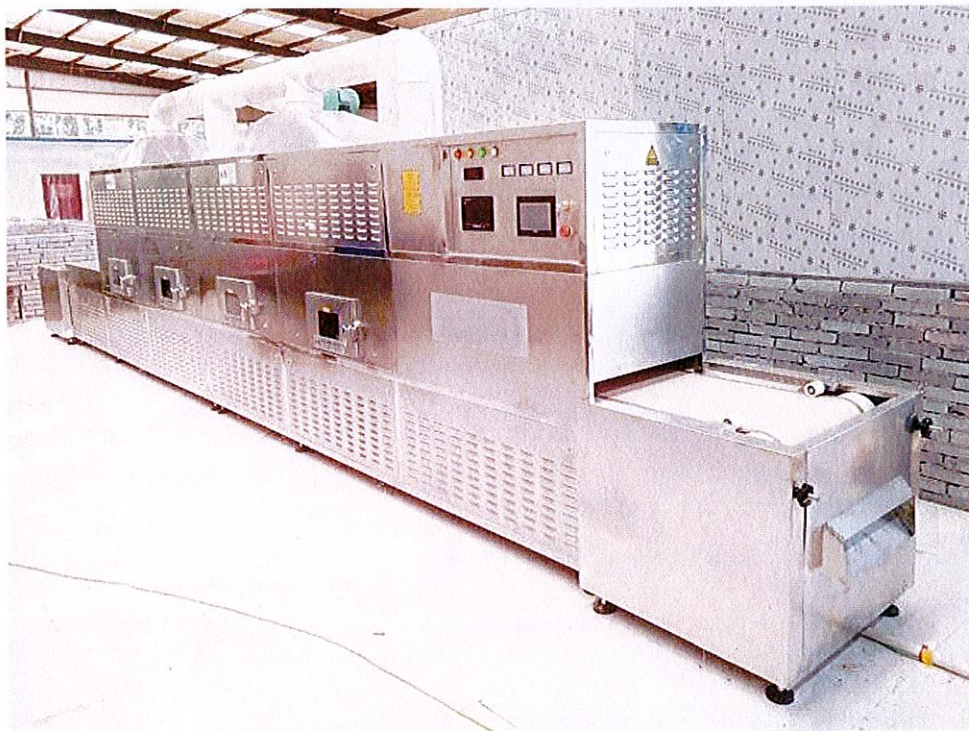


To: Amiguitos Pets and Life S.A.
Poligono Industrial Sapreiorcs, Avenida Segura,
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Lorca (Murica), Spain CIF: A-73721854
Attn Mr. Jose Luis Torregrosa

Quotation No. : ASQ18031088
Date: 19-Mar-18
Customer: AMI003

Chemical Products Tunnel Microwave Drying Equipment Solution

(Model No. SR-20H MV-4X)



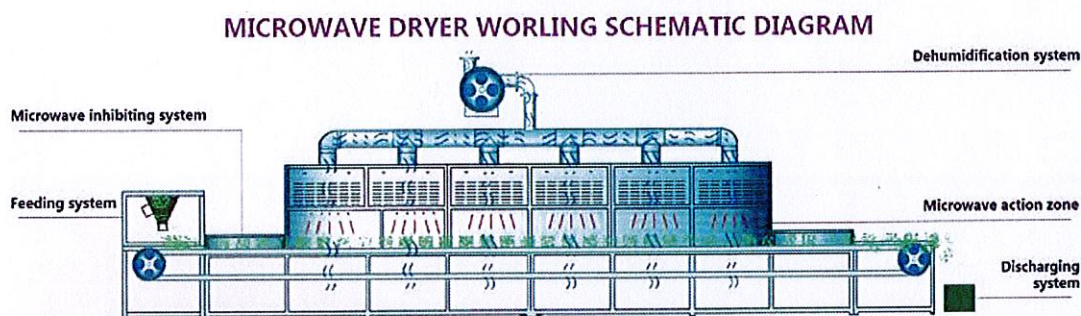
Alpha-Pack Enterprise Limited

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1. Microwave dryer brief introduction

Microwave dryer adopts microwave as energy source to dry, heat, cook, sterilize, unfreeze, dehydrate and inactivate materials. It is widely used in food & beverage industries, foodservice industries, chemical industries, pharmaceutical industries, architectural material industries and wood processing industries etc.

Microwave dryer is mainly made up with microwave generation system, microwave restrain system, seal chamber, drive system, loading & unloading system, cooling system, dehumidification system and controlling system. Compared with traditional equipment, it has the advantages of fast heating speed, uniform heating, high energy efficiency, good environment protection, safe & harmless, small space occupying.



2. Machine description

2.1 Machine features

- 2.1.1 With the function drying, heating, cooking, sterilization, unfreezing, dehydration, inactivation etc.
- 2.1.2 PLC auto or button control system, support data saving, outputting, and printing
- 2.1.3 Microwave power stepless adjustable, temperature and humidity chain intelligent control
- 2.1.4 Speed can be adjusted.
- 2.1.5 The machine size can be adjusted according to users' workshop area.
- 2.1.6 Fast continuous production, which is uniform and thorough.
- 2.1.7 The perfect mechanical and electrical integration design, the real-time monitoring of multiple sensors, safe and reliable.
- 2.1.8 Adopt food-grade materials.
- 2.1.9 Production can be monitored, quantified and controlled.

2.2 Industrial microwave dryer advantages

- 2.2.1 Wide range applications.
- 2.2.2 Rapid speed.
- 2.2.3 High efficiency.
- 2.2.4 Saving energy.
- 2.2.5 Homogeneous action.
- 2.2.6 Easy to be operated
- 2.2.7 Small area.
- 2.2.8 Safe, clean and environmental protection.

2.3 Machine detailed description and parameters

2.3.1 Machines composition

- 2.3.1.1 Microwave dehydration chamber system
- 2.3.1.2 Microwave leakage suppression system
- 2.3.1.3 Heating chamber insulation heat isolation system
- 2.3.1.4 Conveying system
- 2.3.1.5 Independent control and detection system
- 2.3.1.6 Independent dehumidification system
- 2.3.1.7 Independent heat removal system

2.3.2 Total installment power: 25KVA

2.3.4 Working process temperature control: $\leq 150^{\circ}\text{C}$

2.3.5 Working environment requirement

- 2.3.5.1 Input power: Three-phase five-wire system, $415\text{V}\pm 10\%$, $50\text{Hz}\pm 1\%$, null line wire diameter should be the same as fire line.
- 2.3.5.2 Working ambient temperature : $-5 \sim 45^{\circ}\text{C}$
- 2.3.5.3 Working relative humidity: $\leq 80\%$
- 2.3.5.4 There is no corrosive gas, conductive dust or flammable & explosive gas around the machine.

2.3.6 Microwave generation system

- 2.3.6.1 Microwave frequency : $2450\pm 50\text{MHz}$
- 2.3.6.2 Microwave output power: $\geq 20\text{kw}$. It can be adjusted piecewise. Microwave power adjustment can be done automatically or manually.
- 2.3.6.3 Microwave drying boxes quantity: 4.
- 2.3.6.4 Conveying belt width: 550mm
- 2.3.6.5 Conveying belt specification: cloth belt (covered by Teflon, food grade, fire protection, bear 400°C , anti-corrosion)
- 2.3.6.6 Material: microwave boxes, frame and power box are all made from stainless steel (thickness is 1.5mm).
- 2.3.6.7 Microwave feed-in position: from the top to feed-in microwave.
- 2.3.6.8 Insulation rate between feed mouths: $> 20\text{db}$.
- 2.3.6.9 Microwave feed-in standing-wave ratio: ≤ 2 .
- 2.3.6.10 Cooling method: water cooling, cooling magnetron, special electronic power transformer (Samsung)
- 2.3.6.11 Conveying speed adjustment mode: by inverter.
- 2.3.6.12 Conveying system is equipped with metal detector.

2.3.7 Dehumidification system

When this machine works, it generates vapour. On the top of this machine, there are some dehumidification holes. This machine is equipped with centrifugal blower to collect the vapour and discharge it through PVC tube, which improves dehumidification capacity. Vapour will be discharged outdoor.

2.3.8 Microwave inhibiting system

2.3.8.1 This machine adopts double suppressor structure. It adopts 2 microwave suppressors.

2.3.8.2 Microwave leakproof method: impedance type pectination slices + microwave absorption material

2.3.8.3 Microwave suppressor materials: high purity aluminum (thickness: 3mm), inhibiting slice (thickness: 1mm)

2.3.8.4 Microwave leakproof counter vane: about 800 pieces

2.3.8.5 Microwave suppressor length: 1250mm

2.3.8.6 Microwave leakage standard: test microwave leakage quantity 5cm to this machine, it is less than $5\text{mw}/\text{cm}^2$ (standard: GB10436-89).

2.3.9 Safety devices

2.3.9.1 On magnetrons, we equip temperature controlled switches to prevent to be burned. They can be open and off 100,000 times at the temperature 130°C - 160°C .

2.3.9.2 We equip emergency stop switch on control cabinet to close the machine under improper circumstance.

2.3.10 Controlling system

2.3.10.1 This machine is equipped with a control cabinet to control microwave power, conveying speed, temperature etc.

2.3.10.2 Central control system: this machine adopts PLC (programmable logic controller) and touch graphic display operation terminal. It adjusts microwave power according to temperature setting value automatically. Its property is stable.

2.3.10.3 This controlling system inspects magnetrons and electric circuit working situation at any time. If any damage, it will give an alarm.

2.3.10.4 This machine is equipped with infrared temperature measuring devices to control and adjust temperature automatically.

2.3.10.5 7-inch color LCD monitoring device monitors microwave boxes internal situation.

2.3.11 Maintenance door

For ease of observation, maintenance and cleaning, we equip some observation doors on both sides of microwave boxes. There are lighting devices inside of microwave boxes. All maintenance doors are supported by 3.0mm stainless steel reinforced frame, which makes sure there is on microwave leakage.

2.3.12 Conveying system

This machine adopts Delta inverter to adjust conveying speed. Conveying speed can be adjusted from 0 to 5 meter per minute.

2.3.13 Temperature measurement and control system

This machine is equipped with Raytek brand infrared radiation thermometers to collect temperature signal. Matched up with programmed microwave source, it monitors and controls temperature distribution, prevent too high temperature.

2.3.14 Operator quantity: 1 person

2.3.15 Size and weight

2.3.15.1 Size: 8500×1100×1800mm

2.3.15.2 Weight: about 1200kg

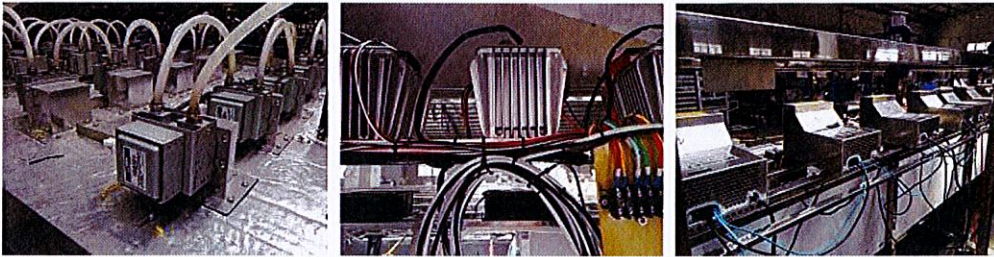
2.3.15.3 Microwave action size: 4000x780x518mm

2.3.16 Main materials and parts description

Item	Description
Microwave box	£ 1.5mm frosted stainless steel
Microwave suppressor	£ 3 mm high purity aluminum plate
Conveying belt	Food grade cloth belt
Dehumidification plate	£ 1.0mm stainless steel
Frame	£ 1.5mm stainless steel
Maintenance door	£ 1.5mm frosted stainless steel
Secure interlock protection	Samsung
Control cabinet	£ 1.5mm stainless steel
Magnetron	Water cooling type, Samsung OM75P
Electronic power transformer	1000V
Circuit interrupter	Siemens
AC contactor	Siemens
PLC	Wecon
Conveying motor	Siemens 750W
Touch screen	Wecon
Infrared temperature control system	Raytek
Cable	High temperature-resistant cable
Inverter	Delta

2.4 Details pictures

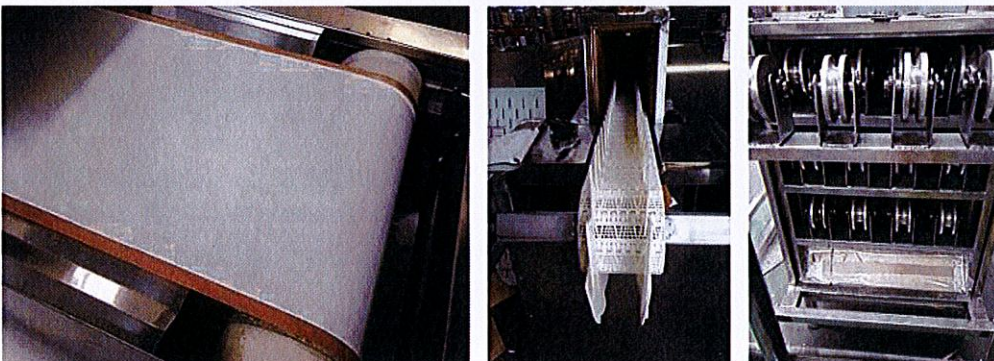
2.4.1 Microwave generation parts



2.4.2 Control parts



2.4.3 Conveying parts





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Attn Mr. Jose Luis Torregrosa

Quotation No. : ASQ18031090
Date: 19-Mar-18
Customer: AMI003

Tunnel Microwave Dryer (Model No.: KLD-30H MV-6X)

According to the material conditions requirements

The technical parameters are as below

I.Design and manufacturing conditions and technical specifications:

1. Control Mode Automatic PLC control and touch-screen LCD display image
2. Total Power:37KVA
3. Temperature during the operation: $\leq 80^{\circ}\text{C}$
4. Consumption:30KWH*0.8CNY=24CNY/H
5. Total Capacity: $\geq 100\text{kg/h}$
6. Worker:1
7. Equipment weight: About 1500kg
8. Equipment system components
 - The microwave heating chamber system
 - Microwave leakage suppression system
 - Heating chamber heat preservation and heat insulation system
 - Material transport system
 - Independent control and detection systems
 - Independent exhaust systems
 - Independent heat system
 - Automatic feeding system
 - Material cooling system.
9. Operating environment :
 - 1.) Input power: Three-phase and five-wire $380\text{V}\pm 10\%$ $50\text{Hz}\pm 1\%$
The zero line and the line thickness with the same specifications.
 - 2.) Surrounding non-corrosive gases, conductive dust and explosive gases.
 - 3.) Environment temperature $5-45^{\circ}\text{C}$
 - 4.) Relative humidity: $\leq 80\%$

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10. Microwave system

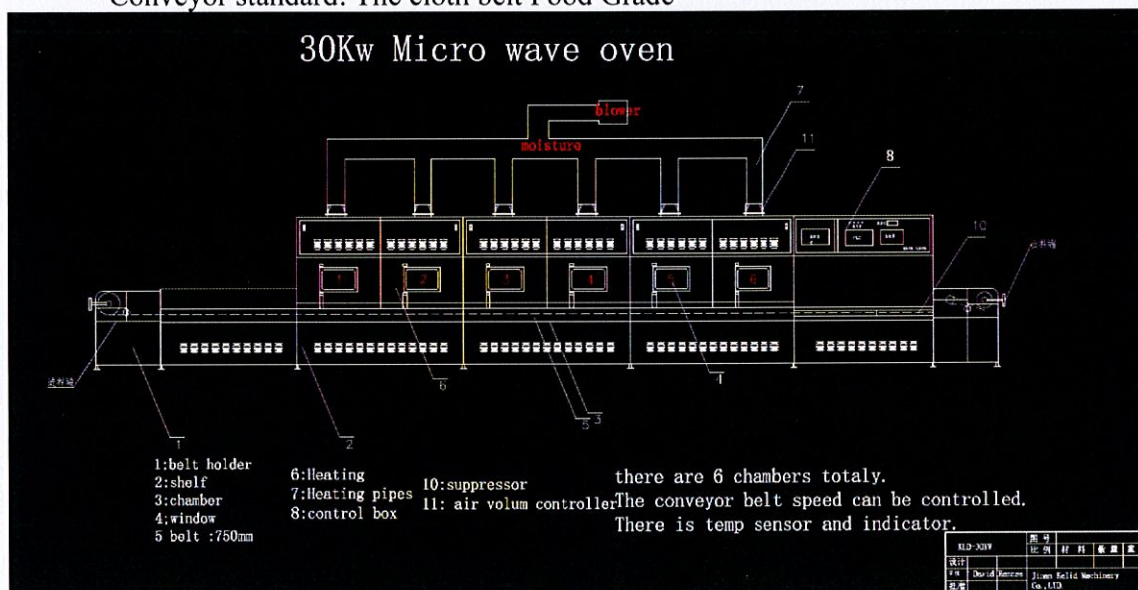
- Microwave frequency: 2450±50MHz
- Microwave output power : ≥30kw.

Segment adjustable, microwave power can be manual and automatic adjustment

- Microwave heating chambers quantity: 6
- Microwave heating equipment dimension LxWxH 10920×1480×2150mm

Conveyor width: 750mm

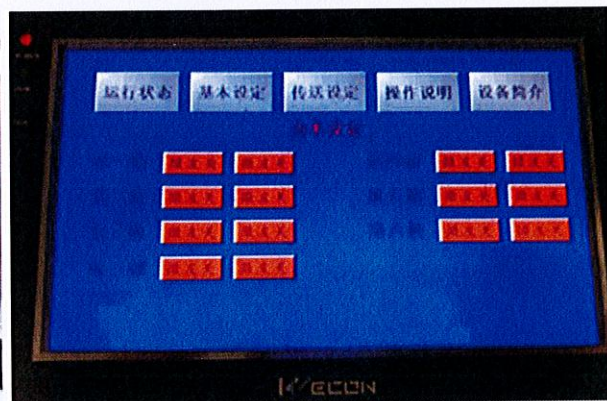
Conveyor standard: The cloth belt Food Grade



- Microwave heating chamber is made of 2.0mm thick stainless steel plate, Equipment racks, and power supply box are designed and manufactured of 1.5mm stainless steel skeleton.
- Microwave fed parts: the top of the feed-in °
- Minimum isolation between the feed ports: more than 20db
- Bobby settled microwave feed: less than 2 (at rated load)
- Microwave feeding and discharging opening height : 40mm
- Cooling type: imported air-cooling magnetron, special electronic power transformer.
- Microwave operating modes: standard rectangular waveguide.
- Delivery forms: conveyor + Frequency
- Equipment delivery system installed metal detector function.

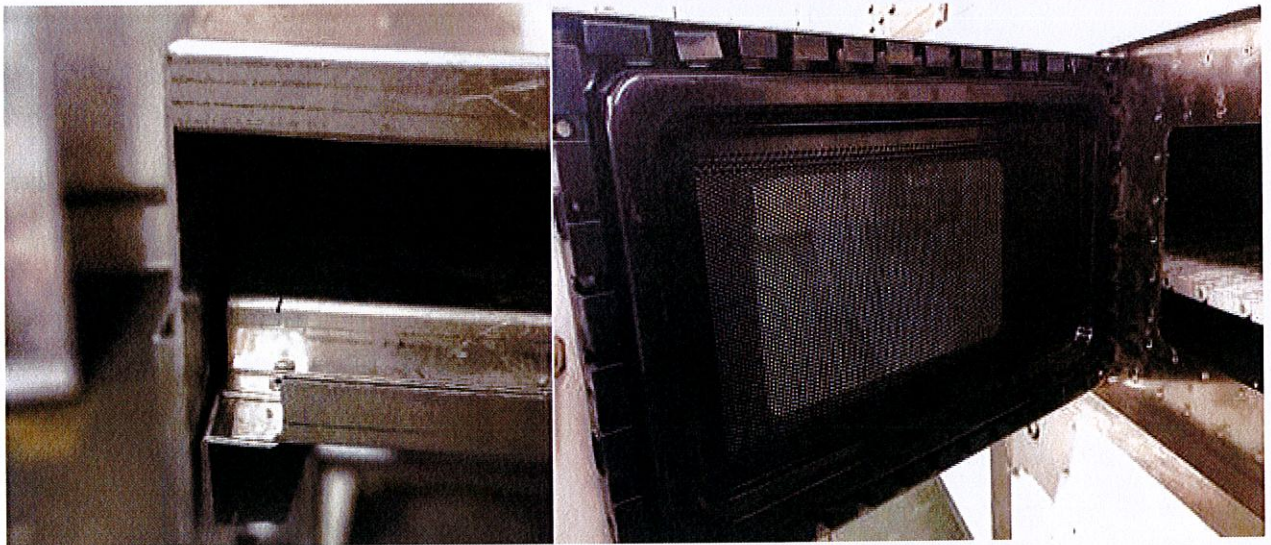
graphics display terminal (HMI), stable performance, automatically adjust the microwave power to produce the highest yield depending on the setting temperature parameter values, and can be forced by the man-machine interface control.

- ii. Ready to detect the working conditions of the magnetron and associated circuitry, damage alarm for timely troubleshooting.
- iii. Far infrared temperature measuring device provided with temperature adjustment, can set the desired temperature and automatic temperature control mediation.
- iv. 7-inch color LCD monitor can be set up to monitor the operation of materials directly observed, and presence or absence of the microwave heater ignition, material shortages, transport cassette tape, broken belt and so on anomalies.



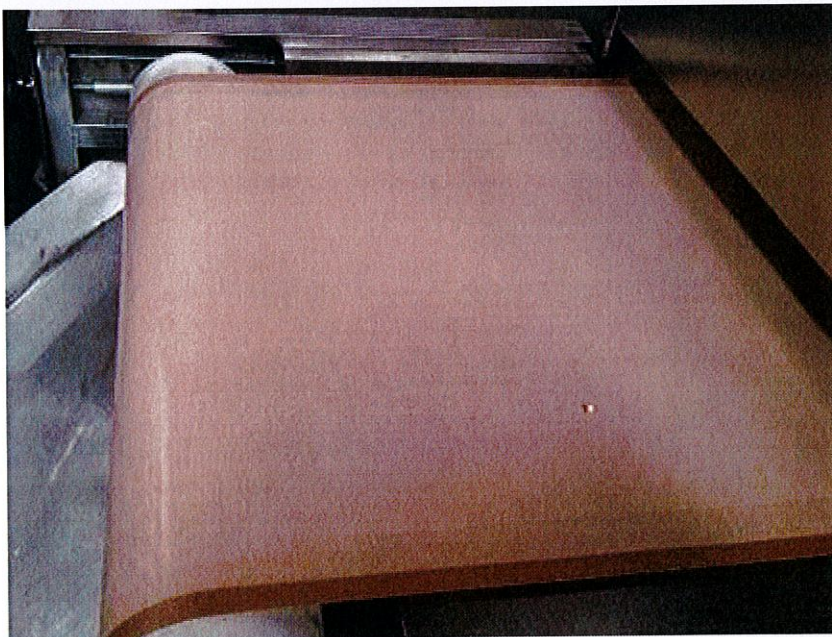
6、Maintenance material taking door：

In order to facilitate observation and the heating chamber materials cleaning or drag roller conveyors and maintenance, we fixed observation in the box with the side door, also lights in cabinets. The door opening plus casing reinforcement frame, the opening portion of the entire device to a thickness of 3.0mm, to ensure that the box is not deformed with prolonged use of the device, no microwave leakage.



7、Material transport system

Inverter using Delta inverter, material conveyor belt driven by mobile transmission frequency conversion motor and gear mechanism. Moving speed in the range of 0-9 m / min in continuously adjustable, with stable microwave power is adjusted to achieve the desired output.



8、Temperature Measurement and Control System

The Raytek infrared thermometer is imported from the United States on the rational distribution of the microwave heating cabinet, the temperature signal acquired with a combination of programmable microwave source constitute automatic temperature control

system and real-time machine control along the whole of the material temperature monitoring to ensure control of the material needs the processing temperature distribution and prevent over-temperature materials.

9. Dust Protection cover.

We add cover on the input and output of the dryer to keep the material clean during production.



IV Price, terms of payment and delivery time

- 1) 、 Price including design, production, testing but the following terms are not including they need to be prepared by buyers, the supplier can assist to help 。
 - 1.Total power and equipment into the line of work.
 - 2.Equipment installation ground preparation work.
 - 3.Materials preparation during the installation and commissioning work.
 - 4.Hot air and heat exhaust pipe connection work.
- 2) 、 Delivery location and method: 1*20GP.
- 3) 、 Warranty:
 - a) We solemn promise machine equipment long warranty period of one year.
 - b) For any damage caused by external factors not covered under warranty, such as earthquakes.
 - c) Due to the operator's failure caused by misuse is not covered under warranty.

Insecticidal microwave sterilization equipment
Section (main) Material Description

Terms	Description	Origin	Note
1. Microwave heating chamber	1.5mmSS Scrub	KLD	Food Grade
2. Microwave heating system host	1.5mmSS	KLD	Food Grade
3. Microwave Suppressor system	High purity aluminum plate	KLD	Food Grade
4. Microwave generator cabinet	1.5mm thick SS Scrub	KLD	Food Grade
5. Transmission system		KLD	Food Grade
6. Exhaust moisture & heat system	1.0mmSS	KLD	Food Grade
7. Frame system	1.5mm SS	KLD	Food Grade
8. Safety chain protection system		Sumsung	
9. Control table	1.5mmSS	KLD	Food Grade
10. <input type="checkbox"/> Microwave <input type="checkbox"/> Incentive cavity	High purity aluminum plate	Shanghai	
11. Magnetron <input type="checkbox"/> Purpose Made <input type="checkbox"/>	OM75P-11	Korea	Sumsung
12. Electronic power transformer	1000V	KLD	
13. Breaker	DZ47D16	Delixi	
14. A.c. contactor	CJX2-0910	Delixi	
15. PLC	vinylon	Taiwan	
16. 2500w Motor	Beder	Shanghai	
17. Touch Screen	WECON	Taiwan	
18. Infrared temperature control system	Raytek	USA	
19. Transport tape	The cloth belt	Jiangsu	Food Grade
20. All kinds of special cables and wires	High temperature/high pressure	Yanggu	
21. Microwave oven door (window)	1.5mm SS scrub	LG	
22. Inverter	Delta	Taiwan	