

# **GUANGZHOU SPARKLE TRADING CO. LTD**

# **Technology Agreement**

Party A:				
Party B:				
		(Party A) pu	irchases <u>high-speed fla</u>	t ear-band
full-automatic	mask	manufacturing	equipment	from
		(Party B). After f	ull negotiation betwee	n the two
parties, this technica	al agreement w	ill be used as an attachm	ent to the equipment	: purchase
contract (contract nu	mber:	) for mutual compli	ance.The details are as	follows:

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			Automatic Mask Making Machine				
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#### I Equipment Introduction

**1.1 Equipment overview:** This machine is mainly used for full-automatic forming of flat masks: After the whole roll of fabric is unrolled, it will be automatically folded and wrapped by the roller drive; The nose roll is pulled and unwound in its entirety. After cutting to a fixed length, it is introduced into the covered fabric. The two sides are welded to the seal by ultrasonic welding, and then cut by the cutter through the ultrasonic side seal. The mask is transported to the two welding ear welding stations of the mask through the assembly line, and the mask is finally formed by ultrasonic welding; After the mask is made, it is transported to the flat belt line for collection.

#### UV Sterilizer:

Ultraviolet disinfection technology is the latest disinfection technology emerging internationally in the late 1990s. It integrates optics, microbiology, electronics, fluid mechanics, and aerodynamics. It has the advantages of high efficiency, broad spectrum, low cost, long life, large water volume, and no secondary pollution, and is the internationally recognized mainstream consumer technology for the 21 st century. This technology is mainly adopted to sterilize cooked food and water. It is widely adopted in hospitals, food, Chinese herbal medicine, food and beverage processing, packaging equipment, health products factories, food factories, cosmetics factories, dairy factories, breweries, beverage factories, bakery and packaging products factories. The working principle of the device is: The ultraviolet sterilization band is mainly between 200-300nm, and when the wavelength is 253.7nm, the sterilization ability is the strongest. When various bacterial viruses in water or air pass through the ultraviolet (253.7nm wavelength) irradiation area, the ultraviolet rays will penetrate the cell membrane and nucleus of the microorganism to destroy the molecular bonds of nucleic acid (DNA or RNA), causing them incapable of replication or inactivation and die and killing all bacterial viruses without using any chemicals. The germicidal lamp does not need to be converted into visible light. The wavelength of 100-200nm can play a good bactericidal effect, which is because the absorption spectrum of light waves by the cells shows a regular pattern:For the 100- 200nm UV, the absorption is the largest, and the absorbed UV actually acts on the cell genetic material (DNA). Through a photochemical action, the energy of ultraviolet photons is absorbed by the base pairs in the DNA, causing genetic material to mutate, causing the bacteria to die immediately or fail to reproduce offspring to achieve the purpose of sterilization.

#### The main performance characteristics of mask packaging machine

1. Double inverter control. After the bag length is set, cutting can be performed without adjustment, which saves time and materials.



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2. HMI makes parameter setting convenient and quick.

- 3. Fault self-diagnosis function. Faults are automatically displayed, simplifying operation.
- 4. High-sensitivity photoelectric eye color mark tracking, and digital input sealing and cutting position, make sealing and cutting position more accurate.
- 5. The temperature is independently controlled by PID, which is more suitable for various packaging materials.
  - 6. Positioning stop function: no sticking knife, no waste of film.

7. The transmission system is simple, the operation is more reliable, and the maintenance is more convenient.

# **1.2** Equipment Diagram(This picture is for reference only, the equipment is subject to the actual product)

1.2.1 Appearance



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**1.2.2** layout(This picture is for reference only, the equipment is subject to the actual product)



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#### **1.3** Equipment installation and parameters

#### Plane ear strap full automatic mask equipment:

- (1) Equipment size:6600mm(L) × 3600mm(W) × 2500mm(H);
- (2) Appearance color: off-white, when there is no special instruction, follow this standard;
- (3) Equipment weight:  $\leq$  2000kg, ground load  $\leq$  200KG/m2;
- (4) Working power: equipment 220VAC ± 5%, 50HZ, rated power about 9KW;
- (5) Compressed air: 0.5~0.7 MPa, using flow rate of about 300L/min

(6) Operating environment: temperature 10~352, humidity 5-35% HR, no flammable and corrosive gas, no dust (cleanness no less than 100,000).

### UV Sterilizer:

- 1) Equipment full length: 2000mm
- 2) Working area: 1200mm
- 3) Infeed operation area: 450mm, Outfeed operation area: 450mm
- 4) Entrance height: 250mm
- 5) Conveyor width: 500mm
- 6) Distance from the conveyor belt to the ground:  $750 \pm 20$ mm
- 7) Sterilization parameters:

Species	Name	Time	Species	Name	Time
		required for 100%			required for 100%
		sterilization			sterilization
	Bacillus	90		flu virus	70
	Tetanus	83		Phage	53
Pactoria	Shigella	62	Virus	Rotavirus	86
Dacteria	E.coli	94		Hepatitis B	210
	salmonell	98		Aike virus	173
	Shigella	75		Blue-green	213
	Aspergilu	105	Algaa	Nematode	101
Mald	Macrofae	99	Algae	Parameciu	131
spores	Mucor fungus	89		Protozoa	126
	Aspergillus	78	Fish	White spot	205
	niger		disease	Viral bleedi	179

#### Mask packing machine:

1) model

SPK-1P2

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2) Film width	1	Max.250mm		·
3) Bag lengt	ו	120~280mm		
4) Bag width		30~110mm		
5) Product h	eight	Max.40mm		
6) Film roll d	iameter	Max.320mm		
7) Packing speed		30-180bag/minute		
8) Power Specifications		220V,50/60HZ,2.4KVA		
9) Machine size		(L)3770×(W)670×(H)1450		
10) Machine	weight	550Kg		

# II Equipment main structure

Structure of the main components of the device

No	Name of the part	Quantity	Note
1	Water filter cloth/filter cotton/water absorption	3 sets	Max 4 sets, random 3
	layer		sets
2	Nose bridge strip unwinding mechanism	1 set	
3	Nose bridge strip straightening mechanism	1 set	Width 3-7 mm
4	Nose bridge strip driving and cutting mechanism	1 set	Width 3-7 mm

5	Cloth hemming mechanism	1 set	
6	Roll welding edge sealing mechanism	1 set	bilateral
7	Cloth driving mechanism	2 sets	
8	Cloth fan folding mechanism	2 sets	
9	Roll welding side seam mechanism	1 set	
10	Roll-sealing mechanism	1	
11	Transfer line	3	
12	Shunt mechanism	2 sets	
13	Ear band welding machine mechanism	2 sets	
14	Cutting line	2	
15	Operating system	1 set	
16	Operating panel	1 set	
17	Tunnel sterilizer	1 set	
18	Bagging and packaging machine	1 set	

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# III Applicable incoming materials and product specifications

# **3.1** Material specifications:

	Number of		Coil outer	Inner diameter	
Item	hanging shafts	width (mm)	diameter	of barrel (mm)	weight
			(mm)		
Cloth	3	170~200	Ф600	Ф76.2	Max 15kg
Nose bridge bar	1	3-7	Ф400	Ф76.2	Max 25kg
Ear band	4 袋	3			

# **3.3** Production specification:

Standard type:175\*95mm

# VI Technical parameters of the equipment:

# 4.1 Equipment production capacity:

(1) Production efficiency: 80-110ppm;

(2) Qualification rate of equipment production: 99% (except when the incoming materials do not meet the requirements, or the employees improperly operate)

(3) Equipment failure rate: 2% (refers to the failure caused by the equipment itself)

# V General equipment configuration and standard requirements

# 5.1 Configuration list of main components

No	Item	Brand	Note
1	cylinder	CKD, SMC/Japan, Airtac, Chelic/Taiwan	
2	electromagnetic value	CKD, SMC/Japan, Yadeke	
3	servo motor	Delta/China, Mitsubishi, Panasonic/Japan	
4	PLC	Weimiao/China, Mitsubishi/Japan	

5	bearing	NSK/Japan, SAMICK/Korea	
6	line rail	STAF, PMI, CPC/Taiwan	
7	optical fiber, amplifier	Omron, Keyence, Panasonic/Japan	
8	touch screen	Weinview/Kunluntongtai/Mitsubishi	
9	relay	Omron/Izumi	

# 5.2 List of specification parts, wearing parts and random spare parts

No	ltem	Specification	Quantity	Note

#### 6、 Equipment Acceptance

1. After the installation and commissioning is completed, the supplier needs to notify the buyer 7 days before shipment. Qualified materials shall be provided by the purchaser, and technical personnel shall be arranged on the supplier's site for inspection and acceptance in accordance with the technical agreement. If the acceptance is qualified, both parties sign a qualification report, and the supplier will ship the goods;

2. The materials used for the acceptance test machine shall meet the requirements of this agreement;

3. Both parties appointed engineering and technical personnel to participate in the acceptance process and jointly sign the acceptance report.

### VII Installation and training

1. After the equipment is shipped to Party A's factory, Party B is responsible for completing the installation and commissioning of the equipment; if problems occur during commissioning, Party B is responsible for solving the problem; Party A must abide by the relevant regulations of Party B's installation site;

2. After the equipment is shipped to Party A, the equipment is placed by Party A in the designated area, and then adjusted by Party B staff to make it level with the ground. With the commissioning materials provided by Party A, the installation and commissioning shall be completed within two weeks;

3. After the equipment installation and commissioning is completed, Party B provides technical handover and operation maintenance training to Party A's operators and equipment maintenance personnel. After passing the training, the operator can operate the equipment;

4. The seller provides free training for relevant personnel of the buyer, including:

(1) Mechanical assembly training: training of mechanical personnel for equipment assembly and maintenance. Usually when the machine is being assembled, the buyer sends an engineer to the manufacturer to grasp the basic specifications, composition and characteristics of the equipment; (2) Variety conversion training: Corresponding training for rapid variety conversion; (3) Mass production training: training on handling various issues during mass production. Usually, the seller's personnel perform one-week follow-up training for operation at the buyer's site, including the normal use of equipment, maintenance and maintenance, analysis and troubleshooting of failures, operating safety and emergency procedures.

#### VIII Quality Assurance and After Sales Service

1. The warranty period of the equipment is 12 months from the date of the official production of

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the equipment. In the event of a failure caused by our company's responsibility, our company will be responsible for the repair and delivery of the component at no cost (For conditions not explicitly stated in the specification, this restriction is not applicable).

2. Within five years after the warranty period expires, the seller shall still be responsible for repairing and maintaining the equipment, but only charge reasonable working hours and transportation costs. When it comes to replacement and purchase of equipment- related accessories, the seller only charges the cost of the accessories. After receiving the failure notification from Party A, Party B shall implement the warranty obligation, respond within 8 hours, and provide a solution within 24 hours to reduce the losses caused to Party A. Party B shall assist in the procurement and installation of other accessories required for maintenance, and the problem shall be solved within 48 hours (except outside Guangdong Province).

3. In order to ensure the capability and quality of the device, please follow the requirements for the use specifications of parts and materials.

4. In the event of a performance or function failure due to unpredictable contents described in this specification, the two parties shall negotiate to determine the disposal method.

5. During maintenance and troubleshooting, when touching the device with your hand, be sure to turn off the power and cover the blade and protrusions before performing.

#### IX Other Instructions

1. Party A and Party B are obliged to keep any technical documents provided confidential. Without the permission of the other party, the documents may not be transmitted or leaked to third parties in any way.

2. This technical agreement and its attachments serve as the basis for equipment manufacturing and acceptance, and are equally valid as the sales contract.

3. This technical agreement is made in two copies, with each party holding one copy, which will take effect after being signed and sealed by both parties.

4. The matters not covered in this technical agreement shall be negotiated and resolved by both parties.

Party A (seal):	Party B (seal):
Tel:	Tel:
Fax:	Fax:

Signing Representative (Signature):

Signing Representative (Signature):

Date:

Date: