

# 5600 OFFLINE PCBA CLEANING MACHINE



## Features

5600 is an offline, compact, energy-saving, environmentally friendly, batch cleaning high-end PCBA cleaning machine. It can effectively clean rosin flux, water-soluble flux, no-clean flux, solder paste and other organic and inorganic pollutants on SMT/THT soldering PCBA.

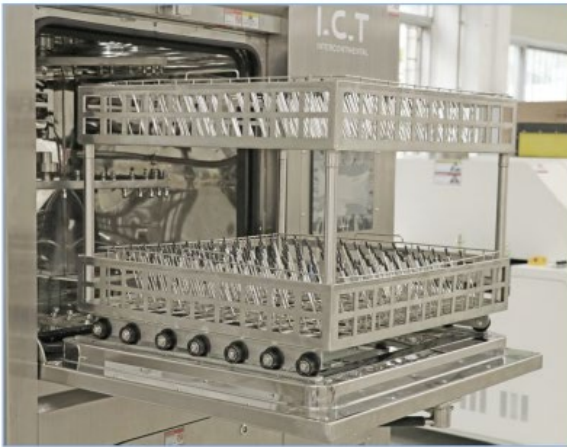
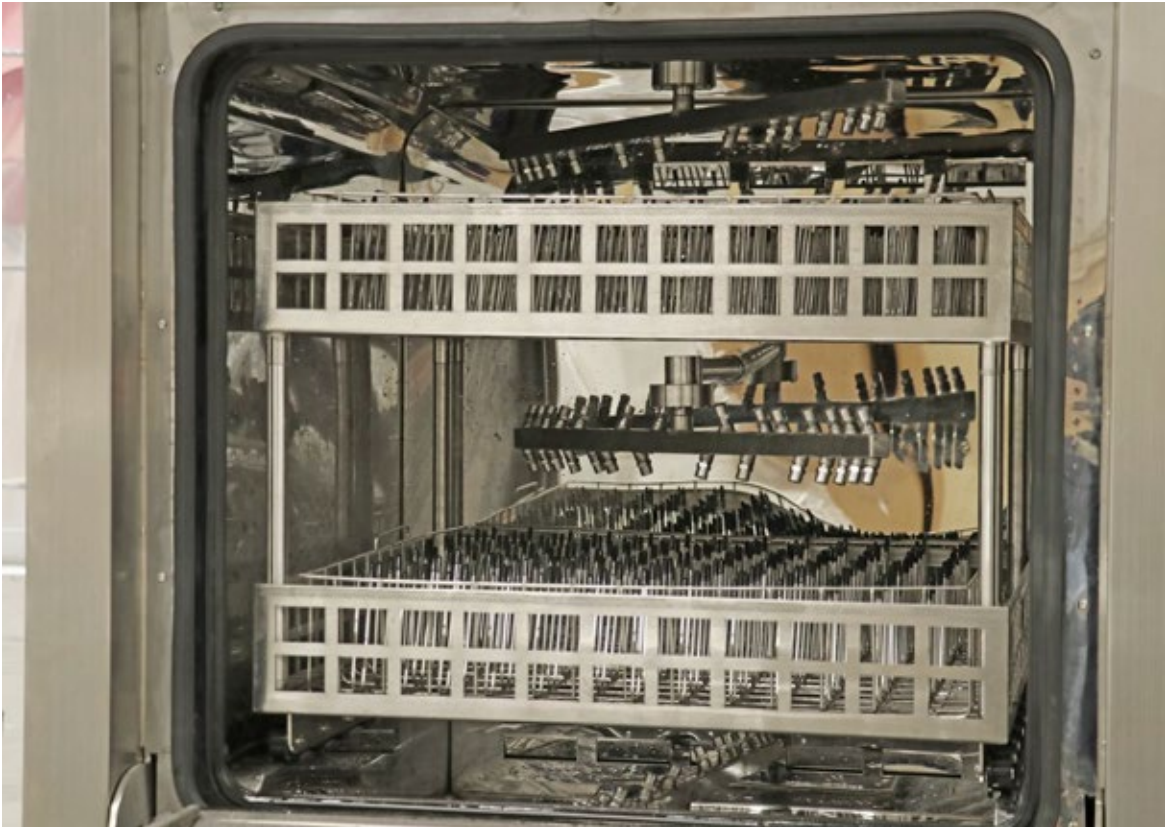
Mainly used in aviation, aerospace, medical, new energy, automotive electronics, instrumentation and other industries, especially suitable for small-scale, multi-variety PCBA cleaning.

- Cleaning Basket Size: (610\*560\*100mm)\*2 layers:
- Diluent tank capacity: 60L
- Concentrate capacity: 30L
- Universal fixture: 2Pcs

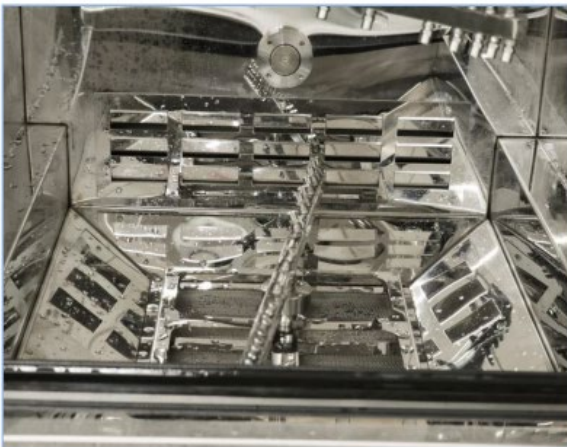
1. Through clean rosin flux, water-soluble flux, non-clean flux, solder paste and other organic and inorganic contamination.
2. 2-layers cleaning basket.
3. State of the process is visible through a large observation window.
4. Clean detergent heat system heat cleaning detergent to a certain temp, raise cleaning efficiency and reduce clean time.
5. Easy operation interface, quick setting clean parameters. Different passwords can be set.

## Cleaning room

1. The whole machine is designed with stainless steel, with long machine life and good sealing;
2. Multiple spray channels ensure uniform spraying of cleaning liquid;
3. Standard double-layer cleaning basket, universal fixture, flexible plastic sleeve to protect the tip of the fixture to avoid scratching PCBA;



4. The cleaning room door is opened to form a temporary working platform, waiting for the slide and multiple small wheels to facilitate the loading and placement of PCBA;

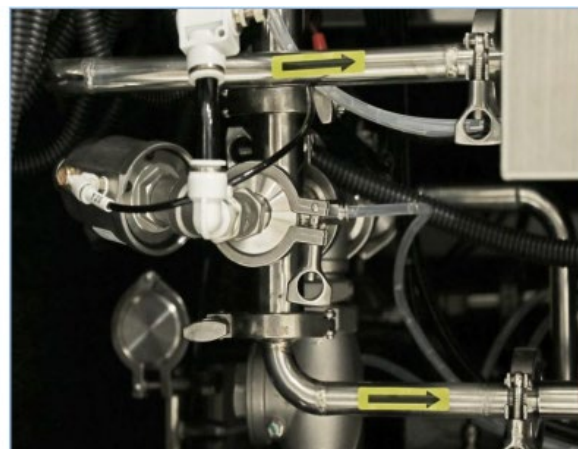
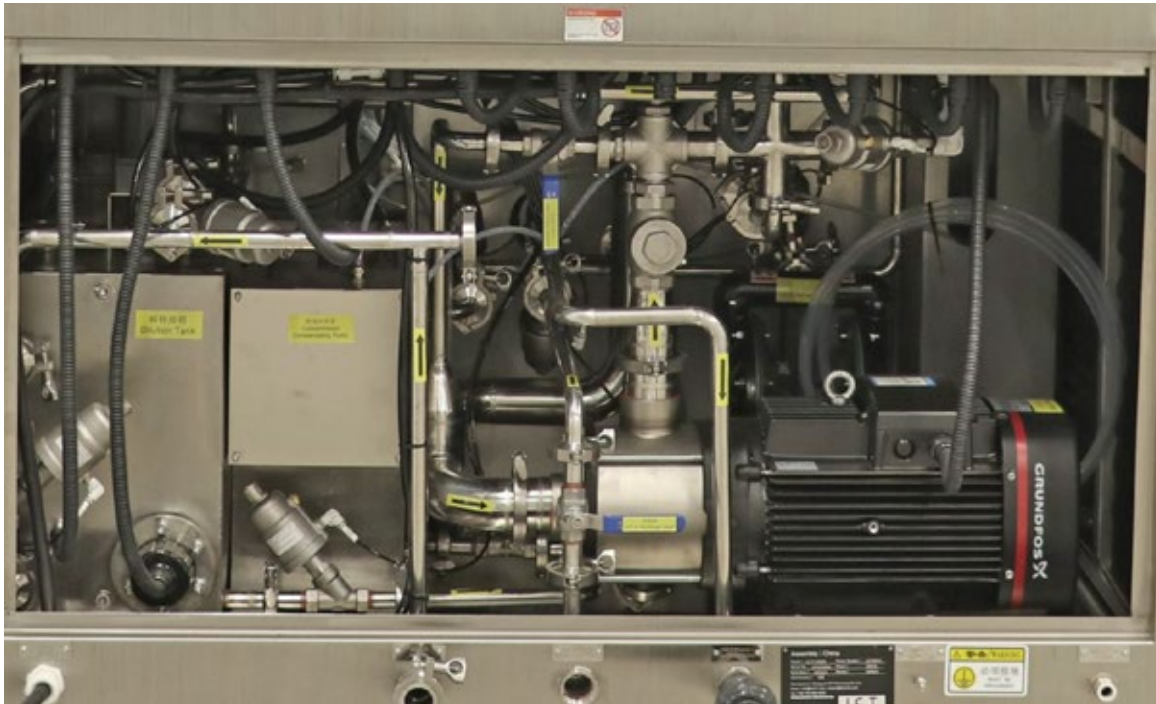


5. The bottom is tilted, with dense filter nets, and the reserved cleaning tank has a large capacity and will not accumulate water;
6. The retractable magnetic push rod supports the cleaning basket to move back and forth during the cleaning process, and the spraying is more thorough;
7. The unique nozzle design spacing ensures that the spray liquid fully covers every dead corner of the cleaning basket.

## Circulation pipe

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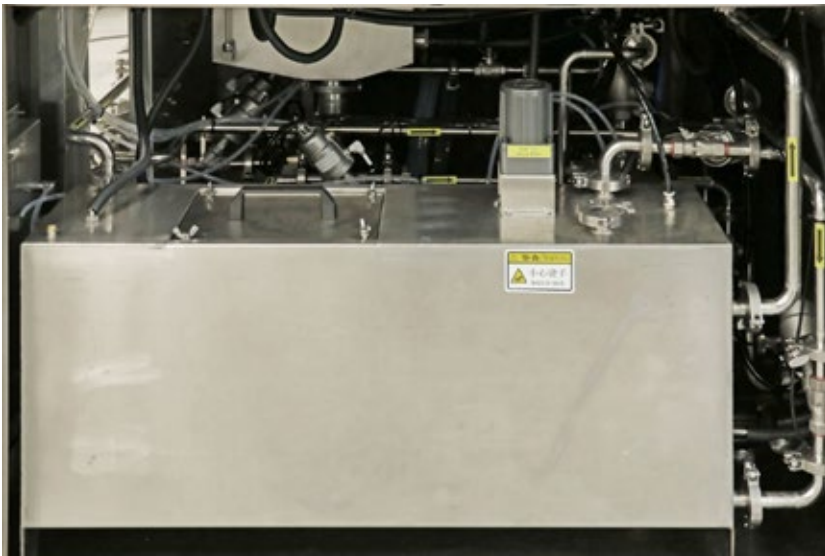
1. The independently developed cleaning, recycling and circulation pipeline route is efficient and space-saving;
2. The high-power diaphragm pump provides strong power and efficiency;



3. The double filter can filter and recycle the cleaning fluid after cleaning, and it can be recycled to save costs;
4. All pneumatic parts adopt quick-connect interfaces, which makes maintenance simple and fast;
5. The pipeline interfaces are all quick-release interfaces, which can be replaced at any time, simple and fast.

## Washer fluid tank

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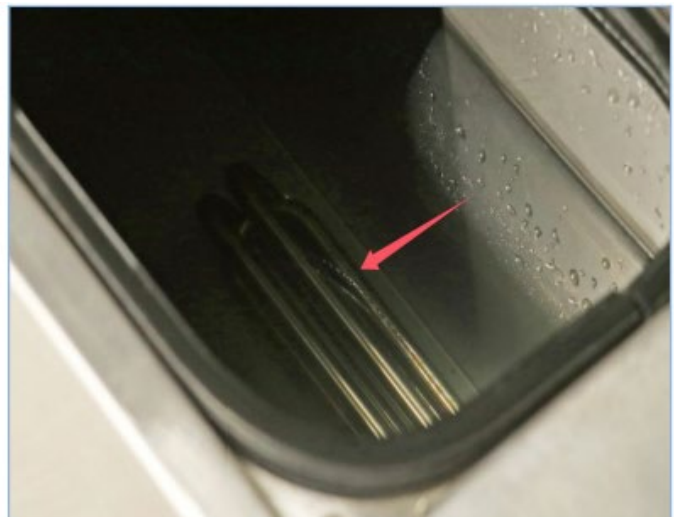
1. Extra-large cleaning liquid tank, saving a lot of time for adding cleaning liquid before cleaning;

2. Standard stirring motor, fully mix cleaning agent and pure water;

3. Built-in cleaning liquid heating component, heats the cleaning liquid to achieve the best cleaning effect (alcohol-based cleaning liquid is prohibited to avoid safety accidents);

4. Customized high-precision liquid level sensor, monitor the use of cleaning liquid tank at any time;

5. External display window to check the cleaning liquid level.

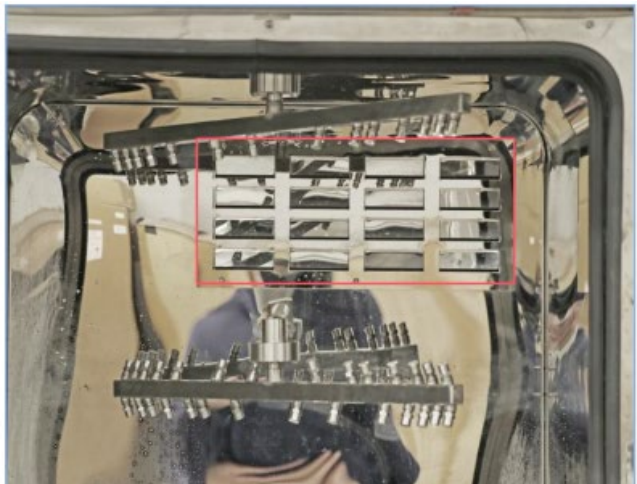


## Drying module

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1. Powerful dry blower fully dries the cleaned PCBA;
2. The air inlet has a filter to filter dust and floating debris;
3. Multiple rows of dense air outlets dry the entire cleaning room in all directions.



# Control System

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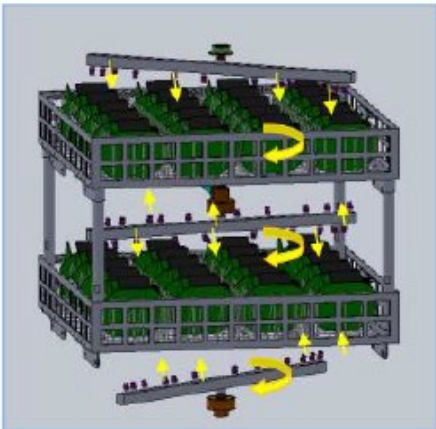
1. Imported big brand PLC control, stable and long life;
2. Reasonable layout, in line with CE, UL standards, simple and convenient maintenance;
3. The main components are all imported brand components;



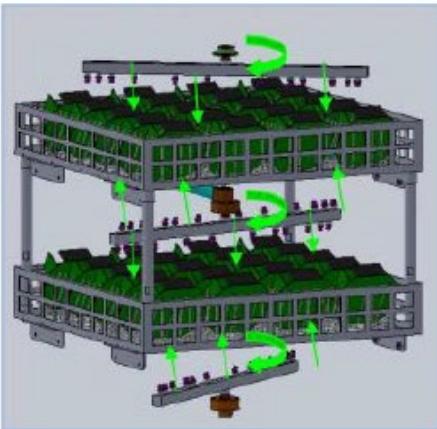
4. The electrical control box and pneumatic control box are separated independently and do not interfere with each other;
5. The human-computer interaction interface is simple and easy to operate.

# Application Cases

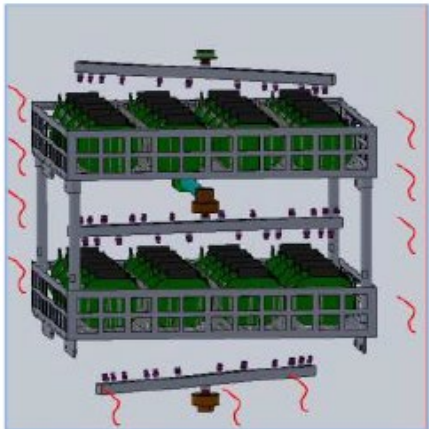
## Cleaning process



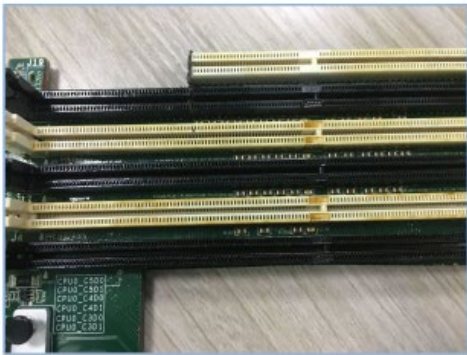


Cleaning



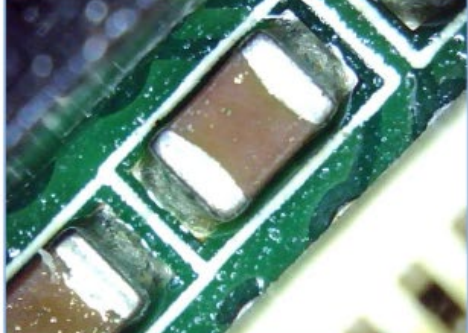
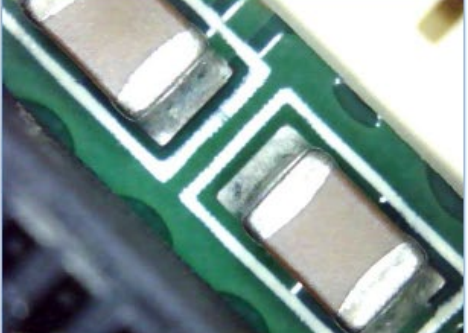
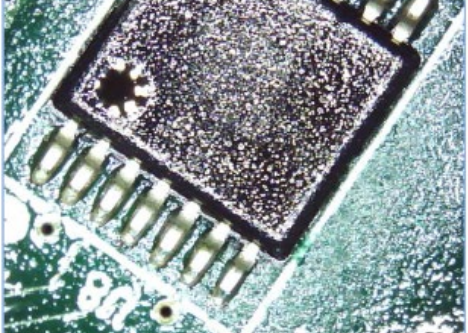
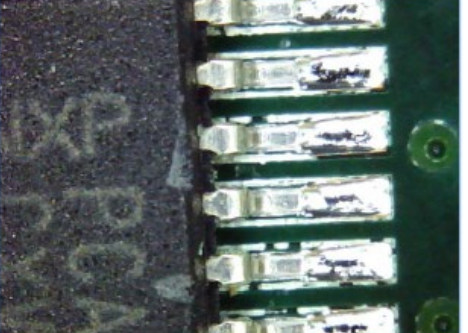
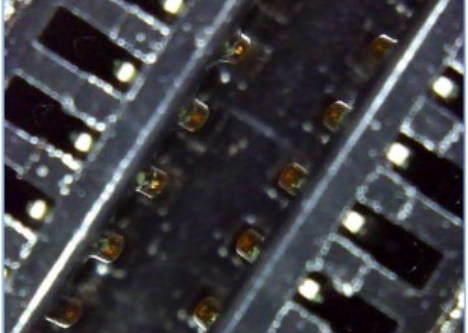
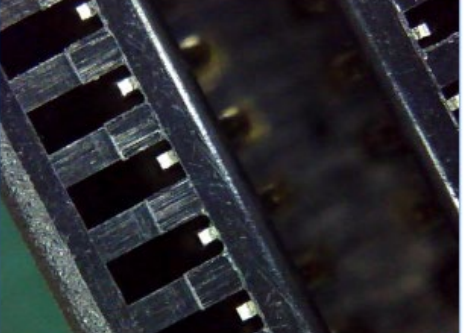

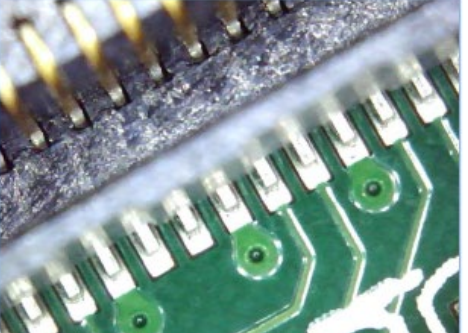


Rinsing



Drying

Comparison	Before cleaning	After cleaning
1		
2		
3		

Comparison	Before cleaning	After cleaning
4	 A photograph of a green printed circuit board (PCB) with several integrated circuits (chips) mounted on it. The board is resting on a wooden surface. A blue circular sticker is visible on the bottom right of the board.	 The same PCB as in the 'Before cleaning' image, but now the surface is significantly cleaner and more reflective, showing the underlying components more clearly.
5	 A microscopic view of a square integrated circuit (chip) on a green PCB. The chip is covered in a thick, dark, granular layer of contamination.	 The same chip as in the 'Before cleaning' image, but the dark contamination has been removed, revealing the clean, metallic surface of the chip.
6	 A microscopic view of a square integrated circuit (chip) on a green PCB. The chip is covered in a thick, dark, granular layer of contamination.	 The same chip as in the 'Before cleaning' image, but the dark contamination has been removed, revealing the clean, metallic surface of the chip.
7	 A microscopic view of a square integrated circuit (chip) on a green PCB. The chip is covered in a thick, dark, granular layer of contamination.	 The same chip as in the 'Before cleaning' image, but the dark contamination has been removed, revealing the clean, metallic surface of the chip.
8	 A microscopic view of a square integrated circuit (chip) on a green PCB. The chip is covered in a thick, dark, granular layer of contamination.	 The same chip as in the 'Before cleaning' image, but the dark contamination has been removed, revealing the clean, metallic surface of the chip.

## Materials List

No.	Item	Brand	Original
1	Ball screw	KURODA, REXROTH	Japan, Germany
2	Linear Guideway	IKO, REXROTH	Japan, Germany
3	Servomotor&driver	Panasonic	Japan
4	Sensor	OMRON, LEUCE, KEYENCE	Japan
5	Stepper motor	SANYO, Leadshine	Japan, China
6	Cylinder	SMC, FESTO	Japan, Germany
7	CCD Camera	SENTECH	Japan
8	Software	I.C.T	China
9	Motor	BPMC	Japan
10	Switch	SMC, IDEC	Japan
11	Bearing	NSK	Japan
12	Soft Cable	IGUS	Germany
13	Tanks chain	IGUS	Germany
14	PC	LENOVO,DELL	China, America

## Specification

No.	Item	5600	5600L
1	Cleaning basket size	L610*W560*H100(mm)*2 layers	L700*W700*H150(mm)*2 layers
2	Spray tank capacity	18L	
3	Concentrate capacity	30L	
4	Diluent tank capacity	60L	
5	Clean time	0~99min	
6	Rinse time	0~10min/times	
7	Rinse times	1~59times	
8	Hot air dry time	0~60min	
9	Detergent heat temp	Room temp~75°C	
10	PCB hot air dry temp	Room temp~99°C	
11	Resistivity range	0~18MΩ	
12	Detergent filter	0.22um	1um
13	Rinse water pipe out filter	0.22um	1um

No.	Item	5600	5600L
14	Air filter	10um	
15	DI water supply	30~65L/Min	
16	DI water pressure	0.2~0.4Mpa	
17	Vent size	Φ100*H30(mm)	
18	Power/Air supply	AC380V/3 Phase/50HZ, 30KW, /0.5~0.7Mpa	
19	Air pressure	4.5~6Kg/cm2, 200~400L/Min	
20	Dimension	L1300*W1200*H1850mm	L1400*W1400*H1960mm
21	Weight	600KG	700KG

## Standard Accessories

No.	Item	Qty
1	Testing Report	1 packet
2	Power start key	1Pcs
3	Trachea	1Pcs
4	Filter element	2Pcs
5	Cleaning basket	1Pcs
6	PCBA cleaning fixture	2Pcs

## Consumables Spare Parts

No.	Item	Replacement Cycle
1	Filter element	15-30 days
2	Door seal	2 year
3	Liquid level sensor	5 year
4	Heater	5 year
5	Temperature measuring probe	5 year