
















I.C.T PCBA Coating Line Solution




Contents

A、 I.C.T Coating Line	2
B、 Coating Value Type	3
C、 PCBA Selective Coating Machine	5
D、 PCBA Coating Lift	7
E、 PCBA Coating Flipper	9
F、 PCBA Coating Conveyor	10
G、 IR Curing Oven	11
G、 UV Curing Oven	13

Coating Line Solution

Online Coating Line						
Online Coating Line with Return plate						
Online Coating Line						
Online Coating Line with Return plate						
Double-side Online Coating Line						
Double-side Online Coating Line with Return plate						
Double-side Online Coating Line						
Double-side Online Coating Line with Return plate						
 Coating	 Lift	 Conveyor	 UV Conveyor	 IR Oven	 UV Oven	 Flipper
<p>Select appropriate solutions according to different products.</p>						

Coating Value Type

Valve	Photo	Describe
C-0101 Water curtain spray valve		<p>Features and advantages: a non atomized water curtain coating valve for low viscosity solvent materials, which is coated in the form of water curtain. The sprayed products have no splash and flash point, and the edges are neat and perfect.</p> <p>Application scope: such as three proofing coating, UV glue, adhesive, solvent / volatile materials and other surface coating materials, which are widely used in electronic packaging industry, lighting industry, automobile industry, packaging industry, medical industry and energy industry.</p> <p>Dimension: L28*W28*H200mm Rotation angle: 0° or 90° Drive air pressure: 0.5-1.0Mpa Spraying width: 6-15mm Spraying thickness: 100um-350um Optimal viscosity range: 10-90Cps Weight: 500g</p>
C-L101 Rotary water curtain spray valve		<p>Features and advantages: a non atomized water curtain coating valve for low viscosity solvent materials, which is coated in the form of water curtain. The sprayed products have no splash and flash point, and the edges are neat and perfect.</p> <p>Application scope: such as three proofing coating, UV glue, adhesive, solvent / volatile materials and other surface coating materials, which are widely used in electronic packaging industry, lighting industry, automobile industry, packaging industry, medical industry and energy industry.</p> <p>Dimension: L28*W28*H200mm Rotation angle: 0° or 90° Drive air pressure: 0.5-1.0Mpa Spraying width: 6-15mm Spraying thickness: 100um-350um Optimal viscosity range: 10-90Cps Weight: 500g</p>
PJ-01 Injection valve (without plastic bucket)		<p>PJ-01 is used in electronic packaging industry, lighting industry, energy industry, life technology and other applications requiring high precision, high efficiency and space constraints.</p> <p>It is suitable for dispensing or spraying with high precision. Thanks to the high precision dispensing, it can be dispensed on the complex circuit board. The glue coating operation can point red glue, solder paste and other liquid and paste materials.</p> <p>Overall dimension: L60*W26*H120mm Weight: 0.3Kg Driving pressure: 0.5-1.0Mpa Maximum operating frequency: 200 beats per second Optimum feeding pressure: 0-03MPA Minimum point diameter: 0.4mm Optimum viscosity range: 1-20000Cps Minimum driving pressure: 70Psi Valve body heating: 24V room temperature -150°C Open valve inlet pipe specifications: 6mm tube Matching: Optional glue nozzle</p>

<p>C-0100 Non-rotating film valves</p>		<p>No air pressure involved relative to air pressure atomizing valve, can provide more accurate edge clarity. The width of the film can be selected by controlling the feeding pressure of the pressure barrel. To solve the problem of atomizing valve atomizing drifting and quick drying glue, glue flocculant. Dimensions: L25*W25*H219.5mm Driving pressure: 0.3Mpa Optimum viscosity range: 100-200Cps Weight: 0.3Kg Spraying width: 6-12mm Spraying thickness: 250-450um Atomizing width: 10-15mm</p>
<p>D-0100 Precision valve</p>		<p>D-0100 firing pin dispensing valve is driven by compressed air and has a special fluid sealing structure, which reduces the frequency of sealing ring replacement and has the characteristics of long life and quick maintenance. Suitable for a variety of liquid fluid spraying: UV glue, bottom filling glue, silicone, epoxy glue, surface coating glue, etc. Glue needle nozzle specification: 0.2-2mm Driving pressure: 0.3Mpa Optimum viscosity range: 30-6500Cps Weight: 0.26Kg Minimum line width: 1mm Minimum dispensing diameter: 1.5um The minimum dispensing space is up to 1.2mm</p>
<p>D-0300 Dispensing valve</p>		<p>Protruding needle design, achieve zero residue. Easy to clean without disassembly. Liquid volume and air pressure can be adjusted. It can meet the atomizing effect of various coatings. Driving pressure: 0.3Mpa Fluid pressure: 0-0.5Mpa Optimum viscosity range: 0-3500Cps Weight: 0.28Kg Applicable fluid: Acrylic acid, silicon, epoxy, UV glue Spraying thickness: 50-200um Atomizing width: 3-6mm</p>

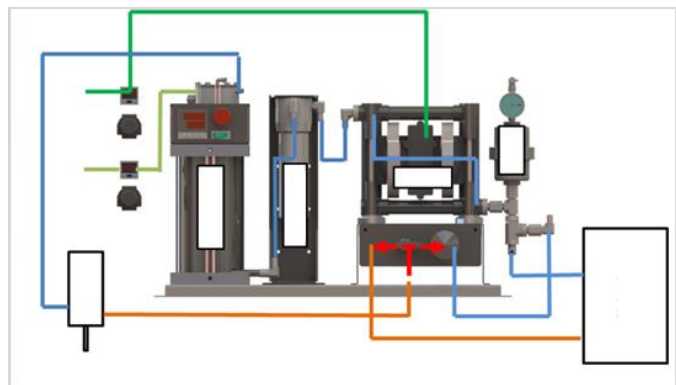
<p>W-0300 Small atomization valve</p>		<p>Protruding needle design, achieve zero residue. Easy to clean without disassembly. Liquid volume and air pressure can be adjusted. It can meet the atomizing effect of various coatings. Driving pressure: 0.3Mpa Fluid pressure: 0-0.5Mpa Optimum viscosity range: 0-3500Cps Weight: 0.28Kg Applicable fluid: acrylic acid, silicon, epoxy, UV glue Spraying thickness: 50-200um Atomizing width: 3-5mm</p>
<p>W-1500 Small atomization valve</p>		<p>Protruding needle design, achieve zero residue. Easy to clean without disassembly. Liquid volume and air pressure can be adjusted. It can meet the atomizing effect of various coatings. Driving pressure: 0.3Mpa Fluid pressure: 0-0.5Mpa Optimum viscosity range: 0-3500Cps Weight: 0.28Kg Applicable fluid: acrylic acid, silicon, epoxy, UV glue Spraying thickness: 50-200um Atomizing width: 5-15mm</p>
<p>W-3000 Large atomization glue</p>		<p>Protruding needle design, achieve zero residue. Easy to clean without disassembly. Liquid volume and air pressure can be adjusted. It can meet the atomizing effect of various coatings. Driving pressure: 0.3Mpa Fluid pressure: 0-0.5Mpa Optimum viscosity range: 0-3500Cps Weight: 0.28Kg Applicable fluid: acrylic acid, silicon, epoxy, UV glue Spraying thickness: 100-200um Atomizing width: 10-30mm</p>

PCBA Selective Coating Machine



Introduce:

1. PLC+PC control, fault acoustic-optic alarm and menu display.
2. Continuous surface spraying, automatic detecting initial distance and coated width.
3. Servo motor reciprocating coating, can be arbitrary set about PCB before and after the offset.
4. Digital parameter air pressure regulation, precision pressure regulating valve, and configure digital pressure gauge.
5. Overall molding of the base plate, and the independent pure steel gantry is used to ensure that the conveyor is parallel and vertical to each axis.
6. The three axis linkage adjustment system has superb dynamic characteristics and quickly realizes the adjustment. Drive by direct connection motor, fast and ensure high precision.
7. The unique conveyor system can effectively prevent stuck PCB. The motor controls the speed and the stop position is precise.
8. Dust prevention design: the conveyor inlet and outlet are equipped with wind screens to prevent exhaust gas from leaking out, and independent exhaust gas outlets are equipped.
9. Anti blocking glue function, the glue valve will automatically move to the soaking area to prevent the glue valve mouth from curing and affecting the coating effect.
10. Windows 10, friendly MMI interface, teaching and navigation function. Operation log, fault record analysis and other diagnostic functions. New program is controlled within 5-10 minutes.
11. Complete alarm prompt and production statistics report.
12. Function options (Diaphragm pump feeding system):



Diaphragm pump feeding system

This system is mainly used to solve the problems such as too high viscosity of glue, too many bubbles, and glue solidification.

1. Glue circulates automatically.
2. Automatic filtering of glue.
3. This set of system is controlled independently. Be responsible for feeding the coating machine.

Specification:

Model	I.C.T-T550	I.C.T-T550U	I.C.T-T600	I.C.T-T650
Number of valves	2 (atomization valve 1 head, precision valve 1 head)	2 (atomization valve 1 head, precision valve 1 head)	2 (atomization valve 2 head)	4 (atomization valve 2 head, precision valve 2 head)
Control Method	IPC + Motion Control Card			
Number of Spindles	X, Y, Z	X, Y, Z, U	X, Y, Z	X, Y, Z
Valve Rotation Angle	N/A	±180°	N/A	N/A
Valve Bevel	N/A	0~35°	N/A	N/A
PCB Size	50*50~450*460mm			
Spindle Drive	Imported servo motor + ball screw module			
Gantry Structure	Steel + independent gantry			
Work Itinerary	X=450mm, Y=450mm, Z=100mm			
Repetition Accuracy	±0.02mm			
Movement Speed (optimum)	800mm/s			
Actual Movement Speed	400mm/s (The max speed can be adjusted according to the glue viscosity.)			
Fogging Air Pressure Adjustment	Imported precision regulator + digital display meter			
Spray Edge Definition	±1mm			
Working Height	900±20mm			
Max Height of Components	90mm above and below the conveying surface			
Transport Direction	Left to Right; Right to Left			
Conveying Speed	2~13m/min			
Conveyor Track	Special aluminum alloy track + stainless steel chain			
Width Adjustment Method	Push-button electric amplitude adjustment			
Widening Speed	250mm/min			
PCB Edge Space	≥5mm			
Transmission Motor Power	DC24V 69W*2			
Single Coating Width	2~30mm			
Equipment Air Pressure	0.4Mpa			
Exhaust Air Volume Requirements	15m ³ /min			
Coating Capacity	10L			
Automatic Cleaning of Valves	with 5L Pressure Tank			
Power Supply	AC: 220±10%, 50/60HZ, 2.2KW			
Operator System	Windows 10			
Dimension	L900*W1300*H1675mm			

Net Weight	650KG
------------	-------

Option List:

No.	Standard Function
1	LED UV Light Detection Lamp
2	LED Lighting
3	Waste Liquid Recovery
No.	Option Function
1	PCBA Bottom Return
2	UPS
3	Voltage Stabilizer
4	Industrial Barcode Scanner
5	Smart Paint Volume Monitoring

Materials List:

No.	Item	Brand	Original
1	Motion Control Cards	Goodco	China
2	LCD Monitors	Asus	China
3	Industrial Control Machine	Advantech	China
4	Servo Motor	Fuji	Japan
5	Servo Drives	Fuji	Japan
6	Ball Screws	TBI	United States
7	Linear Slide Rail	PMI	China
8	Cylinder	SMC/xinch	China
9	Photoelectric Sensors	Omron	Japan
10	Microswitch	Omron	Japan
11	LED Light Bar	Huitronics	China
12	Deep Groove Ball Bearings	NSK	Japan
13	Ceramic Fuse	Zhengtai	China

PCBA Coating Lift



1. Strong, firm and stable design.
2. PCBA width 50 to 460mm.
3. Special aluminum profile convey rail.
4. Touch screen operation be selected.
5. Automatically diagnosing fault code display function.
6. Wear-resistant cable and have long service life.
7. Compatible SMEMA interface.
8. Use to lift the front and rear fixture.
9. The lifting height can be adjusted arbitrarily within 350-900mm.
10. The machine is covered with a transparent window to view the internal operation of the machine.
11. 100mm above and below the conveyor.

Main Material:

Controller	I.C.T	Japan
Touch Screen	Samkoon	China
Motor	JSCC	Taiwan
Bearing	NSK	Japan
Ball Screw	HIWIN,TBI	Taiwan
Electromagnetic Valve	AirTAC	Taiwan
Power	MW	Taiwan

Specification:

Model	CLD(for front)	CULD(for rear)
Dimension	700*950*1200mm	
PCBA Size	50*50-500*460mm, H90mm	
PCBA edge	≥5mm	
Lift Time	90mm/s	
Power	Max 400 VA	
Air Supply	4-6bar, 10ltr/min Max	
Lift Height	350 - 900±20mm	
Transport Height	900±20mm(or Customer Specified)	
PCBA Direction	L to R or R to L	
Communication	SMEMA for In & Out	
Power Supply	1 PH AC 220V 50/60Hz (Option: 110V to 380V)	
Weight	220Kg	220Kg

PCBA Coating Flipper



1. This unit is used to invert PCBA(180°) for "double-sided".
2. PCBA width 50 to 460mm.
3. Special aluminum profile convey rail.
4. Touch screen operation be selected.
5. Automatically diagnosing fault code display function.
6. Wear-resistant cable and have long service life.
7. Compatible SMEMA interface.
8. Enclosed design with built-in torque limiter ensures highest level of safety.
9. 100mm above and below the conveyor.

Main Material:

Controller	I.C.T	Japan
Touch Screen	Samkoon	China
Motor	JSCC	Taiwan
Bearing	NSK	Japan
Ball Screw	HIWIN,TBI	Taiwan
Electromagnetic Valve	AirTAC/SMC	Taiwan,Japan
Power	MW	Taiwan

Specification:

Model	CFD
Dimension	700*900*1200mm
PCBA Size	50*50-500*460mm, H90mm
PCBA Edge	≥5mm
Power	Max 400 VA
Air Supply	4-6bar, 10ltr/min Max
Transport Height	900±20mm(or Customer Specified)
PCBA Direction	L to R or R to L
Communication	SMEMA for In & Out
Power Supply	1 PH AC 220V 50/60Hz (Option: 110V to 380V)
Weight	220Kg

PCBA Coating Conveyor



1. Modular design, optional assembly as per client's requirement.
2. Rugged steel design, improves equipment stability.
3. Smooth stainless steel screw to adjust the width of the rail.
4. Variable speed control.
5. Using a dedicated aluminum slot for transfer orbit to prevent PCB stuck.
6. Heavier bottom design, not easily shift.

Main Material:

Controller	I.C.T	Japan
Motor	JSCC	Taiwan
Bearing	NSK	Japan
Ball Screw	HIWIN,TBI	Taiwan
Power	MW	Taiwan

Specification:

Model	CC-800 Conveyor	CC-800U(Seal UV Inspection Conveyor)
Dimension	800*700*1100mm	800*870*1200mm
Weight	220Kg	220Kg
UV Light	N/A	Standard
Sealing Cover	N/A	Standard
Sealing Curtain	N/A	Standard
PCBA Size	50*50-500*460mm, H90mm	
PCBA Edge	≥5mm	
Power	Max 100 VA	
Air Supply	4-6bar, 10ltr/min Max	
Transport Height	900±20mm(or Customer Specified)	
PCBA Direction	L to R or R to L	
Communication	SMEMA for In & Out	
Power Supply	1 PH AC 220V 50/60Hz (Option: 110V to 380V)	

IR Curing Oven



1. Control system: PLC+touch screen make sure machine working steadily;
2. Top zones IR heating, good heater compensatory, high thermal efficiency, energy saving, speedy heating;
3. Use imported big current solid relay, without touch point output, safe, reliable, improve thermal efficiency and lifetime;
4. Transmission system use imported motors, speed adjuster, smoothly running, adjustable speed at 100~3000mm/min;
5. I.C.T design makes temperature from each zone is not influenced by neighbour to ensure accurate temperature curve, to achieve high adaptability;
6. Using zero gas source design, furnace cover with motor lifting, providing security;
7. I.C.T using third-party over-temperature protection, multiple layers protection to ensure safe operation;
8. Products comply with CE, CCC, UL and other standard;
9. Can be equipped with bottom return line, heating under the track, and return line heating.

Main Material:

PLC	Panasonic	Japan
Touch Screen	Samkoon	China
Motor	JSCC	Taiwan
Bearing	NSK	Japan
IR Tube	SANYUE	Taiwan
Power	MW	Taiwan

Specification:

Model	IR3	IR4
Number of Heating Zones	Up3 / Bottom0	Up4 / Bottom0
Length of Heating Zones	2200mm	2800mm
Power for Warm Up	15Kw	18Kw
Power Consumption	6Kw	8Kw
Bottom Heating	Optional	
Transport	Rail	
Control System	Touch screen+PLC	
Heating Mode	IR (Hot air Optional)	
Conveyor Speed	100~3000mm/min	
Warming Time	Approx.15 minute	
Temperature Deviation	±1.5℃	

Transport High	900±20mm	
Max PCBA Height	±100mm	
Max Width of PCBA	460mm	
Conveyor Direction	L→R (Option: R→L)	
Exhaust Volume	10M ³ /min*2 Exhausts	
Electric Supply	3phase, 380V 50/60Hz	
Dimension (L*W*H)	3000*1150*1200mm	4000*1150*1200mm
Weight	Approx.650KG	Approx.850KG

UV Curing Oven



1. Control system: PLC+touch screen control,make sure machine working steadily.
2. UV lamp lifetime can reach 1000-1200 hour, the energy of UV is higher and the penetration ability of the coating is stronger abnormal lamp protection device.
3. Conveyor belt mate by Teflon materials, has no pole speed regulation, and speed is stable and adjustable.
4. Focus design, import high light reflector lamp shade, instant drying, fast speed.
5. Independent cooling area ensures the low temperature when PCB comes out.
6. Transmission system use imported motors,speed adjuster, smoothly running, adjustable speed at 0-2000mm/min.
7. Stainless steel chain transportation, the effective width is 50-450mm, the width can be adjusted.
8. The equipment has the function of in and out board detection, which can observe the number and transportation of the boards in the equipment.
9. It is equipped with transformer, reflector, lamp tube, trigger, UV reflective device and reflector at the bottom, which greatly improves the utilization rate of UV light. Each group of UV lamps can be controlled separately, and the height can be adjusted up and down.

Main Material:

PLC	Panasonic	Japan
Touch Screen	Samkoon	China
UV Tube	Import	USA
Motor	JSCC	Taiwan
Bearing	NSK	Japan
Power	MW	Taiwan

Specification:

Model	U1	U2
		
Transport	Stainless steel chain	Stainless steel chain
Control System	Instrument	PLC+touch screen
UV Light Quantity	2 set	1 set
UV Light Power	5Kw/set	6Kw/set
UV Light Source	UVA band	UVA band
Main Wave Length	365nm	365nm
UV Light Height Adjustment	Adjustable	Adjustable
Transport Height	910+25mm	900±20mm
Max PCBA Height	±100mm	±100mm
Max Width of PCBA	500mm	460mm
Cooling Method	Fan	Forced-Air
Electric Supply	3Phase, 380V 50/60Hz	3phase, 380V, 50/60Hz
Power Consumption	12KW	7KW
Conveyor Speed	500~5000mm/min	300~3000mm/min
Conveyor Direction	L→R (Option: R→L)	L→R (Option: R→L)
Exhaust Volume	35M ³ /min*1 Exhausts	15M ³ /min*2 Exhausts
Dimension (L*W*H)	1800*970*1835mm	1500*1100*1620mm
Weight	Approx.350KG	Approx.450KG

* I.C.T keeps working on quality and performance, specifications and appearance may be updated without particular notice.

YouTube Video Link: https://youtu.be/DDioIS_WMYg

Thanks for choosing I.C.T.

I.C.T looks forward to win-win cooperation.

Thank you.