

# Selective Coating Machine SC-800

## Selective Coating Machine SC-800 Description:

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- Panasonic Servo motor and X,Y,Z,R axis driving system.
- 3 pattern coating valve .
- Automatic width adjusting mechanism
- CCD with fiducial mark positioning function(option).
- glue level detecting system (option).
- Industrial PC and windows operation system ,full English interface.
- Max 450\*450mm PCB width capable

Selective Coating Machine adopt high precision servo motor and it's driving system which ensure fast and stable run of system, Machine is equipped with 3 pattern coating valve which can meet different coating demands , the spray pattern can be changed without interruption so that the coating efficiency is significantly improved . The powerful process control capability can ensure that the coating will meet high quality and consistency.



## **Selective Coating Machine SC-800 Features :**

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- SC-800 adopt KURODA ball screw and SKF dual linear guide rail , ensure fast and stable run of system.
- Panasonic servo motor and driving system make the position repeatability can reach 0.05mm, high speed response and movement.
- Equipped with 3 pattern coating valve which can meet different coating demands.
- Automatic width adjustment mechanism.
- Optional CCD and it's mark positioning function which can automatically correct the coordinate.
- Glue level detecting system (Option)can automatically detect the glue volume ,avoid missing coating .
- The powerful process control capability can ensure that the coating will meet high quality and consistency.
- Industrial PC ,windows operation system , full english interface ,very easy to use.

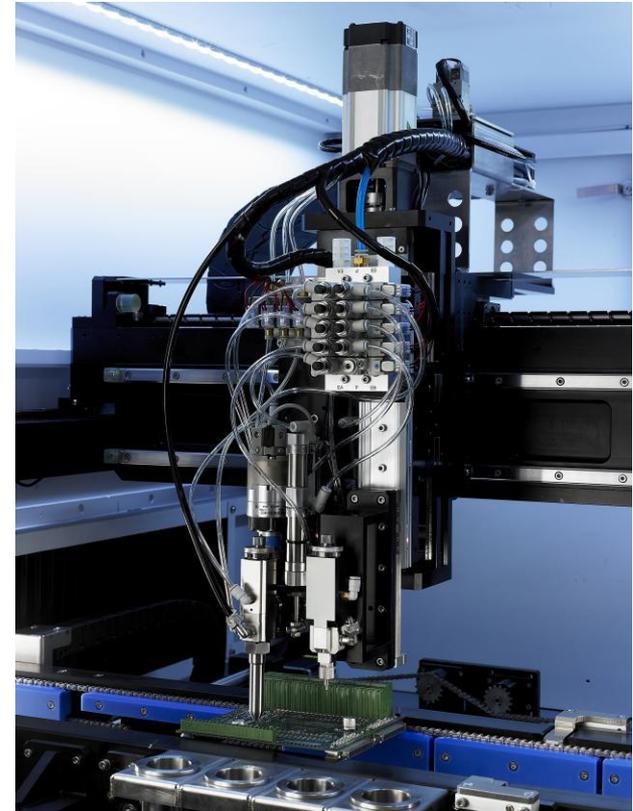
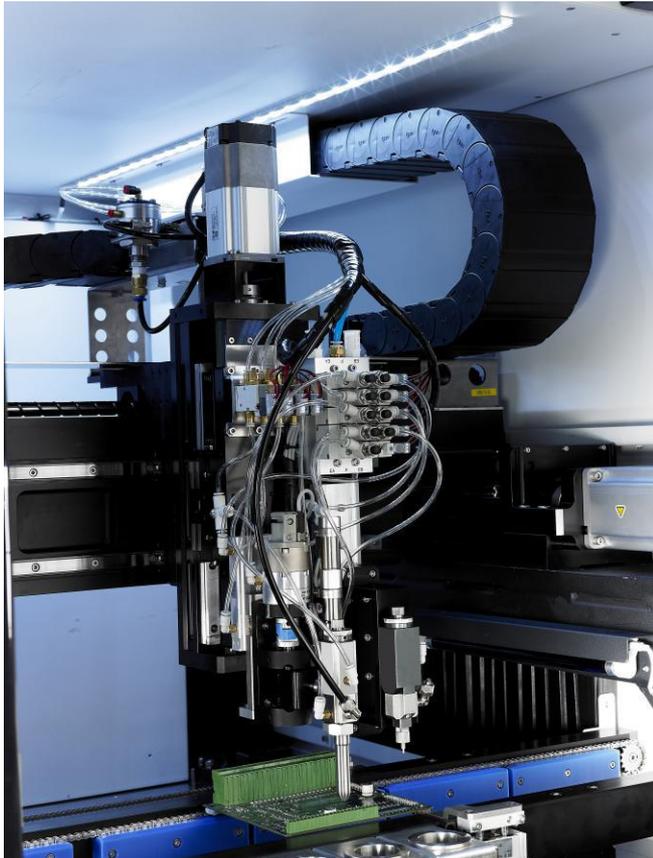
## Selective Coating Machine SC-800 specification :

### Selective Coating Machine SC-800 specification :

Model	SC-800
Coating Scope	50mm~450mm
Max Length of Coating Area	L450mm*W450mm
Control System	Industrial computer/motion control card
Axis number	X,Y,Z,R axis
Max Work Movement Speed	Max 800mm/s
tilting angle	0-30°
Max PCB Component Height	90mm
Programming Type	Camera teaching/CAD load
Positioning Accuracy	+/- 0.05mm
Repeatable Accuracy	+/- 0.05mm
Standard valve	3 pattern coating valve
Installable valve number	2 valves
Optional valve	SY-420 needle valve,SY-5400 film coating valve
Glue Tank Volume	Optional with 5L, 10L, 20L
Power Supply	AC220V 50~60Hz
Total Power	2.6KW
Air Requirement	0.6Mpa
Overall Size L*W*H	1055mm*1447mm*1650mm
Weight	1000KG

## Selective Coating Machine SC-800 Details:

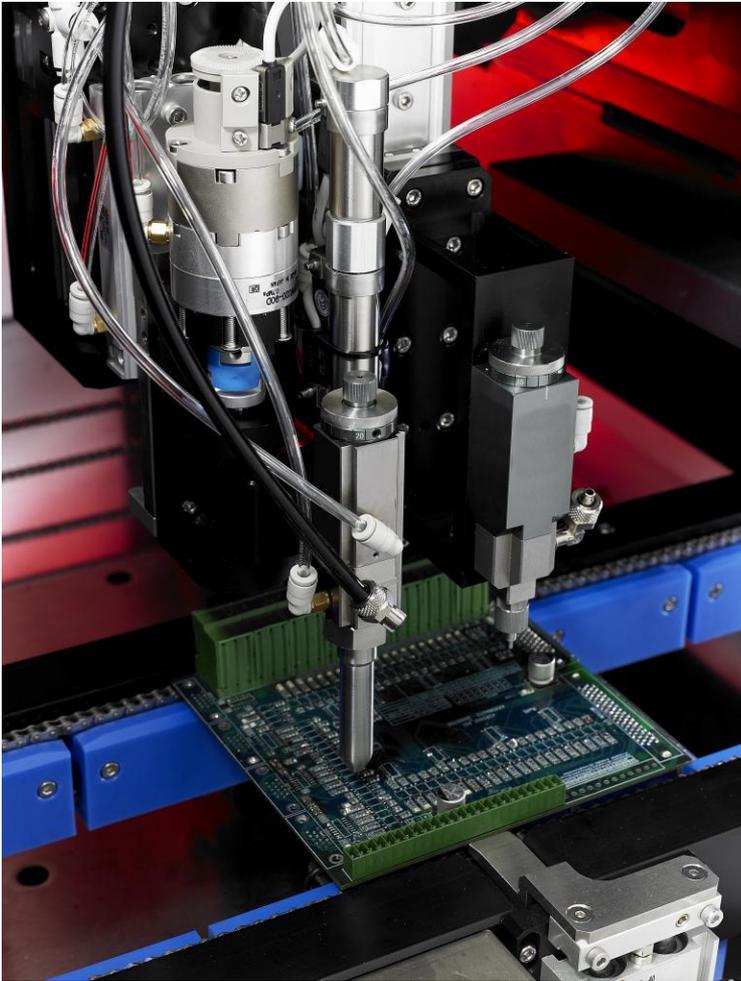
Solid platform reduce vibration of movement ,SC-800 adopt KURODA ball screw and SKF dual linear guide rail , ensure fast and stable run of system, ensures fast and stable run of system.



Panasonic servo motor and driving system make the position repeatability can reach 0.05mm, high speed response and movement.

## Selective Coating Machine SC-800 Conveyor system:

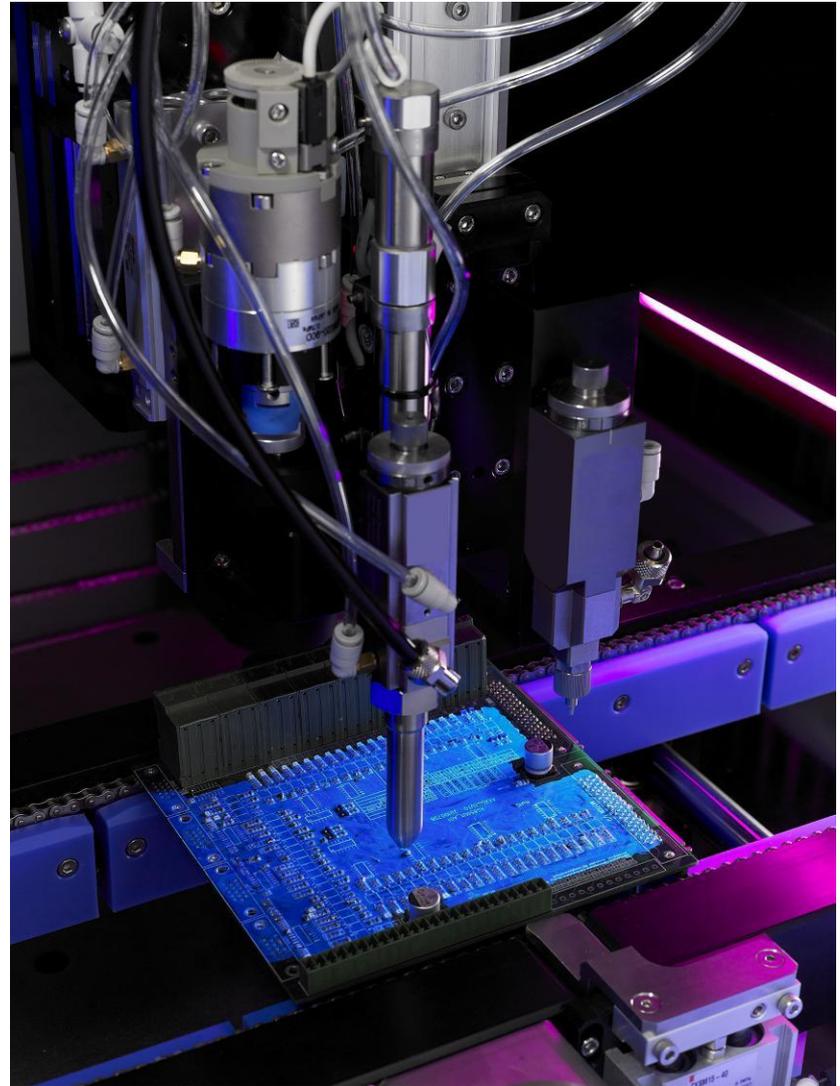
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Stand equipped with stainless steel chain conveyor and automatic width adjustment mechanism.

## Selective Coating Machine SC-800 Details:

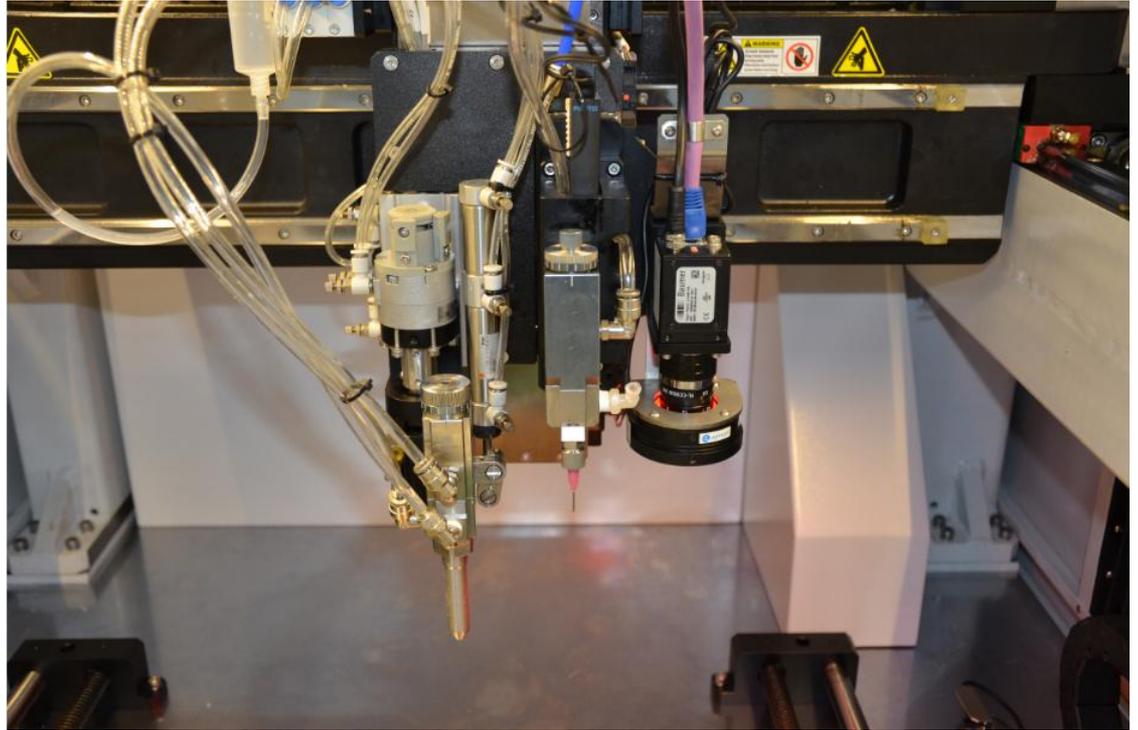
Equipped with UV light .



## Selective Coating Machine SC-800 Details:

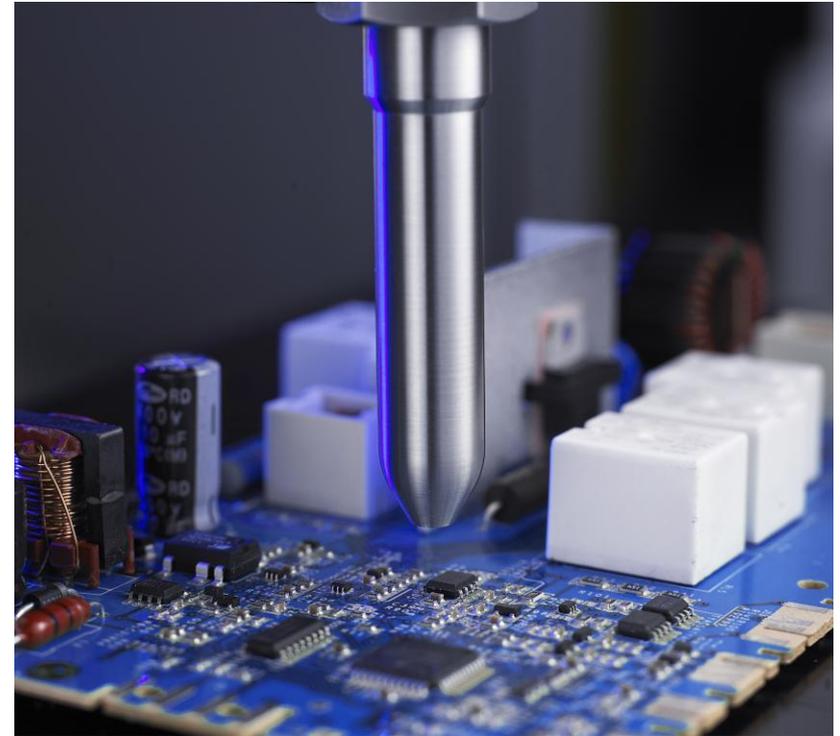
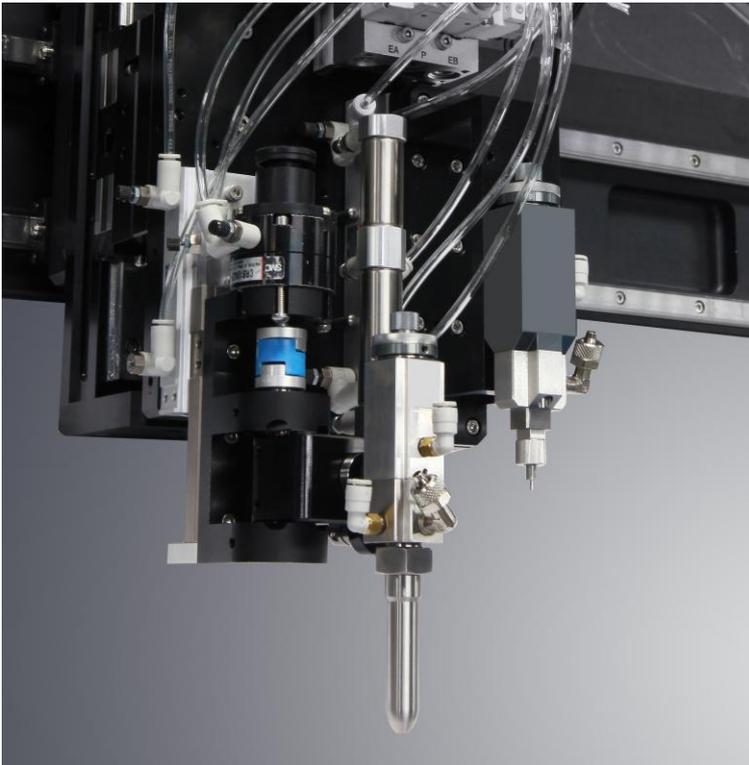
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CCD programming and fiducial mark positioning system(option).



## Selective Coating Machine SC-800 Valve:

3 pattern valve with 3 spray pattern can be changed without interruption ,it can meet complicated coating demands, and greatly improve efficiency.



equipped with rotatable R axis , it can deal with complex process, and the it can fit another precision dispensing valve .

## Selective Coating Machine SC-800 Valve :

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Bead mode:

Form a none-atomized stream, which is applied to areas where:

1. components are close to keep-out areas .
2. tall component require support.
3. extra glue is required.
4. glue is needed on the edge or under a component.



monofilament mode:

Material is dispensed in a looping pattern, the circles flow together, creating a uniform film .

1. Atomization film thickness can be adjusted by air pressure and moving speed .
2. film width can be adjusted by changing air pressure.



swirl mode:

Creates a conical ,swirling pattern of material.

Provides excellent control of pattern width.

Ideal for achieving moderately selective coating and thin film builds(0.25-3mils)



## Selective Coating Machine SC-800 Valve Specification:

3 pattern valve		SY-V5000
Min operating air pressure		70 psi
Max inlet fluid pressure		300 psi
Max operating frequency		400 cycle/min
Max flowrate		2L/min
Suitable viscosity/CPS		500-3000cps
Atomation pressure		1-80psi
Valve structure		firing pin type
Material of driving parts	Body	stainless steel
	Piston	stainless steel
	Sealing ring	UPE
Materail of fluid chamber	Fluid slot	stainless steel
	Firing pin	stainless steel
	Sealing ring	PTFE
Dimension/mm		165*25*25mm
Weight		220g

### Selective Coating Machine SC-800 Valve Specification:

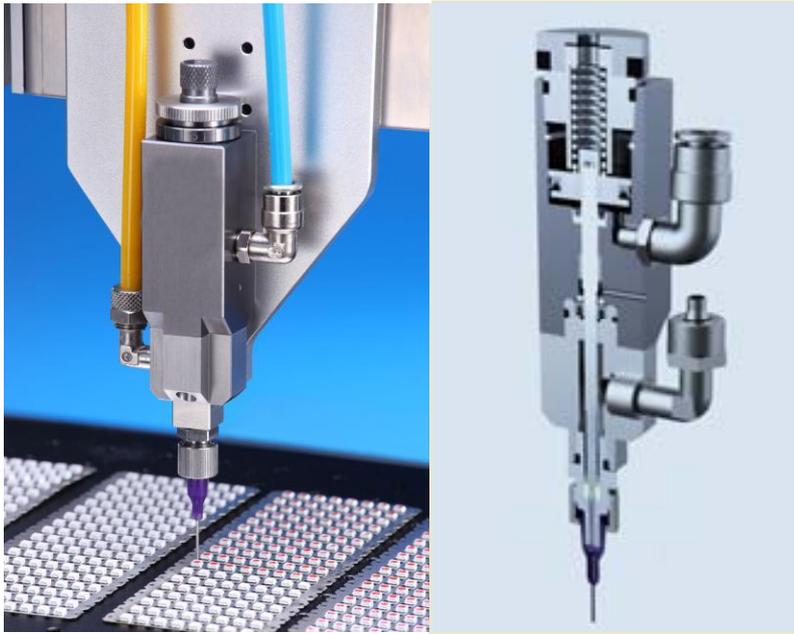
Spray Mode	Bead	Monofilament	Swirl
Spray pressure(psi)	1.0-60	1.0-60	10-25
Air pressure	none	low	high
Material viscosity(CPS)	1-3000	500—3000	1-3000
Film width(mm)	1-5	4—10	4—10
Film thickness( $\mu\text{m}$ )	125-500	100—300	20—100
Edge definitipn(mm)	$\pm 1.0$	$\pm 1.5$	$\pm 2.0$
Transfer efficiency	100%	95%	90%
Coating speed(mm/sec)	200~600	100~250	100~400

Note: filme thickness, edge definition, and coating speed vary according to different fluid, application and material also affect above specification。

## Optional SY-420 Microdot needle valve:

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### SY-420 Microdot needle valve (option)



Microdot needle valve SY-420 is designed for precise dispensing of mid and low viscosity fluid, such as silicone oils and UV-cure adhesives. It is a kind of pneumatic and flow adjustable needle valve, which used in precise microdot dispensing. It's septum made from High molecular weight polyethylene (UHMW PE), departs fluid slot and operation components. So it is elaborate and durable. Shut off the tip inside the stainless steel needle, which guarantees no remains.

#### Features:

- Compact size
- Adjustable fluid flow control
- Cycle rate exceeds 400 per minute
- Affected slightly from fluid bubbles
- Positive shutoff
- No dead fluid volume in the valve
- Easy maintenance

## SY-420 Microdot needle valve specification:

Dispensing valve		SY-420
Image		
Min operating air pressure		60 psi
Max inlet fluid pressure		100 psi
Max operating frequency		400 cycle/min
Max flowrate		0.5L/min
Suitable viscosity/CPS		1-5000
Valve structure		Firing pin type
Material of driving parts	Body	aluminium alloy
	Piston	stainless steel
	Sealing ring	UPE
Material of fluid chamber	Fluid slot	stainless steel
	Firing pin	stainless steel
	Sealing ring	UPE
Fluid inlet thread		Rc 1/8
Mounting bolt		4-M3
Dimension/mm		130*26*26mm
Weight		240g

## **SY-420 Microdot needle valve application:**

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### **Available fluids**

- Silicones
- UV-cure adhesives
- Activators
- Marking inks
- Solvents

### **Applications:**

Medical instruments

Electrical & electronics

Communication equipments

Mechanical and electrical  
equipments

Automobile components



## Selective Coating Machine SC-800 Valve Software :

User-friendly interface is easy for the beginners to use.

2015/7/14 15:23:33

Program Teach CAD Import Mask Teach Init Parameter Pattern Offset

Pattern: Main Program: cba

1 Line1:Start(120.000,220.000)ToEnd(200.000,140.000) Left Valve:Disable  
2 D01:Mark1(110.233,234.001,27.060),One Point  
.End

Item	Value
StartX	120.000
StartY	220.000
Midl_X	200.000
Midl_Y	220.000
EndX	200.000
EndY	140.000
Z	27.060
Dispense Mode	Spray
Valve Type	Left Valve
Teach Mode	By Camera
Valve Tilt Angle	0 Deg
Valve Rotation Angle	0 Deg
Speed	130.000
Pre-Spray	0.200
Valve Pre-On	0.100
Valve On Delay	0.000
Spray Gap	10.000
Full Back Distance	20.000
Stay Time	0.000
ShutOff Distance	0.000
Start Distance	0.000
End Distance	0.000
Spray Off Delay	0.000
Mask	On

Model Code

条形码扫描没有启用!

Rest Run Stop Dry Run Clean Purge Front Z Home

停止 D:\AC-800程序\140916\Software data\cba English 手动模式 当前用户: a

开始 Axson Coating 1 - 画图 15:23

## Selective Coating Machine SC-800 Valve Software :

The powerful process control capability can ensure that the coating will meet high quality and consistency.

2015/7/14 15:24:08

Facility  
IO Setting  
Calibration  
System Setting  
Program Teaching

Model Code

条形码扫描没有启用!

Rest Run Stop Dry Run Clean Purge Front Z Home

停止 D:\AC-800程序\140916\Software data\coba English 手动模式 当前用户: a 15:24

**Calibration Settings:**

- Vision Calibration:**  
Pixel Ratio(Pixel/mm): 101.148
- Simple Calibration:**
  - Left Valve Calibration:**  
Left Valve Offset: X=121.684, Y=53.61, Z=80.176  
Left Valve travel distance: 121.446
  - Right Valve Calibration:**  
Right Valve Offset: X=63.796, Y=58.826, Z=87.85  
Right Valve travel distance: 113.938
- Expertise Calibration:**
  - Left Expertise Calibration:**  
左阀精准偏差: X=-1.326, Y=2.382, Z=0
  - Right Expertise Calibration:**  
右阀精准偏差: X=1.202, Y=0, Z=0

Save

## **Selective Coating Machine SC-800 Configuration:**

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### **Selective Coating Machine SC-800 Standard configuration:(Include below item)**

- ▶ Selective Coating Machine SC-800.
- ▶ 3 Color alarm light.
- ▶ Industrial PC ,monitor, Keyboard,mouse .
- ▶ Cleaning cup(double cleaning position , double soaking positon)
- ▶ Ventilation system (bottom ventilation mode)
- ▶ Security door chain control
- ▶ UV light detection device
- ▶ 3 pattern valve .
- ▶1 year parts warranty

### **Selective Coating Machine SC-800 Optional configuration:**

- ▶ Visual teaching system (CCD programming and fiducial mark positioning system )
- ▶ Glue level in tank detecting system
- ▶Dispensing valve SY-420
- ▶10L stablized pressure material tank

## 4 Axis Selective Coating Machine :

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