

SCREENPRINTERS



AC-590010
PCB Size: 450(L) x 300(W)mm



AC-590020
PCB Size: 610(L) x 420(W)mm



AC-590030
PCB Size: 850(L) x 550(W)mm



AC-590040
PCB Size: 1200(L) x 500(W)mm



AC-590050
PCB Size: 1200(L) x 500(W)mm
Advanced high precision



AC-590060
PCB Size: 1550(L) x 560(W)mm
High accuracy



AC-590070
PCB Size: 610(L) x 420(W)mm
Dual Track



AC-590080
PCB Size: 330(L) x 250(W)mm
X-printing Dual Track

6 SIGMA LEVEL HIGH ACCURACY PRINTING

High stability rigid casting structure ensures the minimum deformation of boards while printing. Deformation below 0.01mm at 20kg.

SPI Printing Feedback System

After receiving bad printing data from SPI, the machine can inspect and clean the mask holes automatically, thus improving the printing quality and production rate.



Newly developed solder pump head is now available; recommended for placement of 0201 chips.



Automatic Solder Paste Supply Device
A common solder paste container is used for SPI, so there is no need for a special container. Convenient and cost-effective.



Air Conditioning System
Automatically controls and adjusts the internal temperature and humidity.



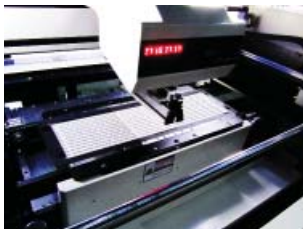
Highly Rigid Casting Squeegee
Displays temperature and humidity.

X-Axis Printing & Cleaning System

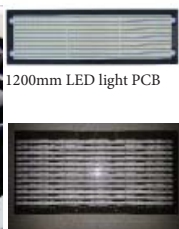
The long Y-axis squeegee will consume 1000g of solder paste on the first pass. The shorter X-axis squeegee will consume 200g on the first pass. This saves on solder waste.

A too-long squeegee will lead to unevenly distributed solder paste, affecting printing quality. Solder paste is evenly-distributed and provides high-quality printing in the X-axis.

Compared to cleaning the Y-axis, the X-axis can be cleaned with shorter width cleaning paper, saving on paper.

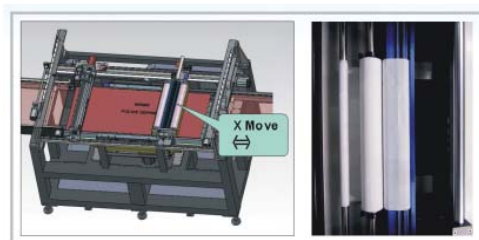


X-axis Moving Squeegee

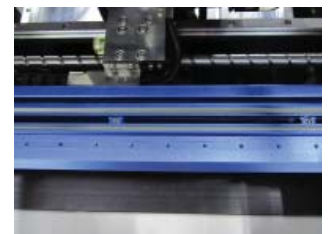


1200mm LED light PCB

TV BLU



X-axis Cleaning System

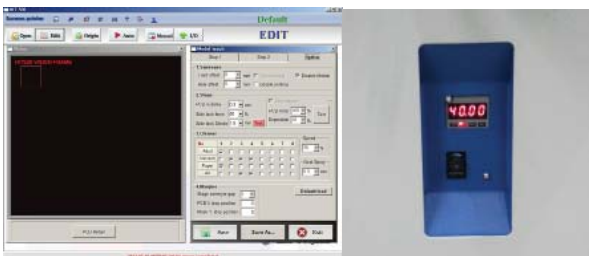


Silicon Pads Inlaid in Cleaner

Perfect Solder Separation System

When printing tiny chips, the Fan Blower generates a vacuum under the PCB to improve the solder separation.

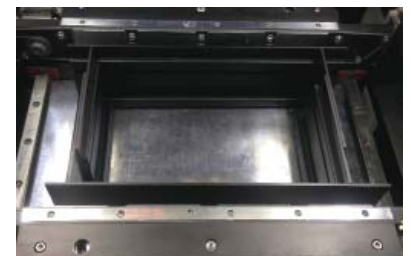
Using three, or four, Fiducial Marks can ensure more accurate printing, while using only two fiducial marks would result in more deviation.



Vacuum volume can be setup and displayed on the monitor.



Vacuum absorption & Fan Blower for 0603mm and 0401mm chips.



Fixture vacuum blocks & curtains provide excellent fixing for various types of PCBs.



Precision Scan Camera

2D inspection

FOV: 8.5mmx 8mm

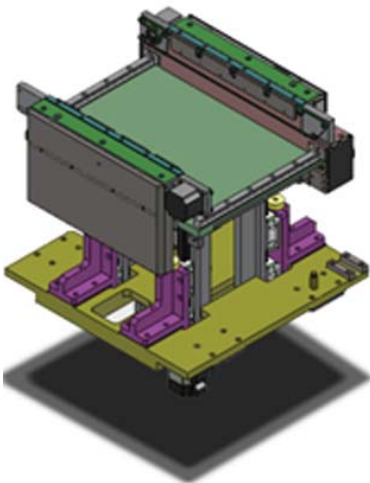
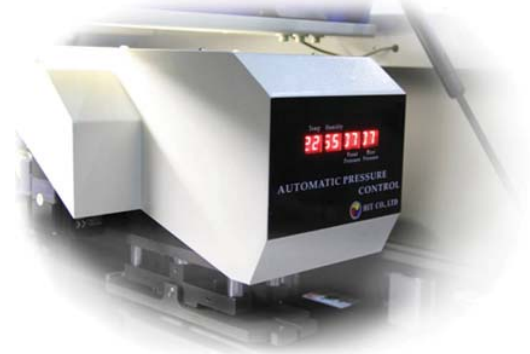
Size: 0.3mm above

Maximum 500 Teaching windows available

Driven by Panasonic servo motor & ball screw

Unique Squeegee System

Rigid cast squeegee with printing temperature and humidity indicated by LED displays.

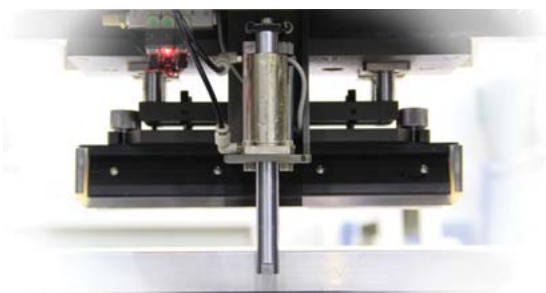
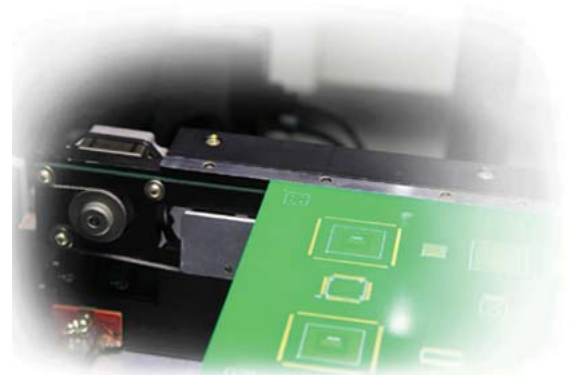


High Accuracy Printing

Direct connection structure ensures repeated accuracy $\pm 12.5\mu\text{m}$ at 6σ

Auto-adjust PCB Thickness

The PCB thickness can be set in the program and the machine will automatically adjust. Controlled by a high-precision stepper motor.



Automatic Mask Movement

A new stencil automatically moves into printing position



Various Blocks and Pins
Magnetic-bottom blocks and pins can hold many types of PCBs and Jigs.

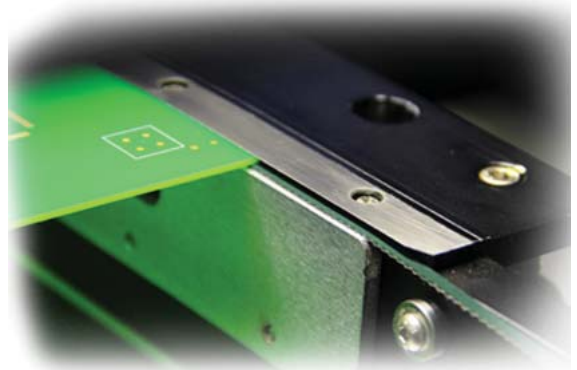


Teaching Control Box



Vacuum Pump

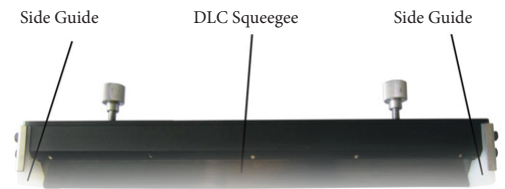
Side Clamping



OPTIONS



DLC COATED SQUEEGEE has a longer lifespan than the standard squeegees. After printing there will be less solder on the squeegee and



SOLDER PUMP HEAD

Squeegee pressure is automatically controlled by servo motors, and detected by pressure sensor. Produces best results for 0201 chips. There is no residual on the mask after printing. Supplies 10% - 15% more solder paste on the PCB, but overall uses less paste.

The multi-function AIR CONDITIONING SYSTEM provides refrigerating, heating, and de-humidifying. It automatically adjusts the temperature and humidity inside the screenprinter.



Temperature Sensor



SPECIALIZED SQUEEGEE CONTROL SYSTEM is a precision regulator that results in improved print quality.

AUTOMATIC SOLDER SUPPLY automatically adds paste at fixed times, according to actual production. It uses the standard solder paste container; no special container required. Improves production efficiency and product



Screenprinters Specifications

MODEL NUMBER		AC-590010	AC-590020	AC-590030	AC-590040	AC-590050	AC-590060	AC-590070	AC-590080	
MASK	Minimum Size (mm)	650 x 550	450 x 450	650 x 550	650 x 550	736 x 550	736 x 550	736 x 736	650 x 550	
	Maximum Size (mm)	650 x 650	736 x 736	736 x 736	1200 x 736	1500 x 736	1500 x 736	1850 x 736	650 x 650	
	Mask clamp	Air Cylinder								
	Mask Positioning	Automatic								
PCB	Minimum Size (L x W mm)	50 x 50			80 x 80				50 x 50	
	Maximum Size (L x W mm)	450 x 300	610 x 420	610 x 420	850 x 550	1200 x 500	1200 x 500	1550 x 560	330 x 250	
	Thickness (mm)	0.4 ~ 6								
	Maximum Weight	4kg	4kg	4kg	10kg	10kg	10kg	10kg	10kg	
	Clearance under PCB	17mm				14mm				17mm
	Clamp Type	Top Clamp, Side Clamp, Vacuum								
	PCB Support	Magnetic Support Pin, Support Block, Vacuum Block, Vacuum Curtain								
Transport	Flow Direction	Left-to-Right (Right-to-Left optional; specify when ordering)								
	Width Adjustment	Stage: Automatic In/Out: Manual								
Squeegee	Type	Metal Squeegee, (solder pump head optional)								
	Automatic Pressure Control	4 ~ 20kg (vacuum valve regulator optional)								
	Length	L = 250mm, 350mm, 420mm, 460mm, 600mm, user defined								
	Speed	10 ~ 300mm/sec								
	Direction	Y-axis moving				X-axis moving				
Accuracy	Repeatability	±12.5µm @ 6σ								
Printing Time	Standard PCB 200 x 200mm Cycle Time (excluding printing time)	8s	9s	8s	14s	14s	14s	16s	8s	
Fiducial Mark	Type	User-defined images								
	Size	0.5 ~ 3mm								
	Mark Number	Three or four fiducial marks alignment system								
	Mark Searching	Automatic								
Separation	Type	Normal / Vacuum							Decompression	
	Speed	0.5 ~ 30mm/s								
	Distance	0 ~ 5mm								
Cleaning System	Type	Dry, Wet, Vacuum, Air								
	Head	Silicone Pad								
	Direction	Y-axis moving				X-axis moving				
2D Inspection	FOV Camera	8.5mm x 8mm, CIS640 x 480 JAPAN								
	Inspection	Solder Small or Miss								
	Inspection Size	Over 0.3mm								
	Maximum Teaching Windows	500 Windows								
SPI Docking Communication	SPI Close Loops	Automatic Anti-shake, Auto-cleaning function standard								
Fan Blower	Snap-off & PCB Fixing	Vacuum Separation Standard								
Air Conditioning System	Automatic T&H Control	Air conditioning system / Automatic temperature & humidity control (optionsl)								
Product Changeover Time	Changeover	2 minutes								
	New Product Set-up	5 minutes								
Other	Operating System	Windows XP, Flash memory type HDD								
	Air Supply	4 ~ 6kgf/cm ²								
	Power Supply	220V ±20V single phase, 2KW 50/60Hz								
	Weight	800kg	900kg	850kg/1700kg	1000kg	1200kg	1200kg	1500kg	800kg / 1600kg	
	Single Size (mm)	1610 x 1605 x 1430	2000 x 1755 x 1430	1716 x 1365 x 1430	2580 x 1755 x 1430	3824 x 1582 x 1430	3824 x 1582 x 1430	2350 x 1582 x 1430	1330 x 1375 x 1490	
	Splicing Size (mm)			1716 x 2730 x 1430					1330 x 2750 x 1490	