SYSTEM OVERVIEW

Machine features and characteristics:

- Advance technology of upward; downward looking vision system, independently control and adjust lighting system, high speed camera shuttle, accurately align the PCB and stencil to achieve a printing accuracy of +- 0.025mm.
- Highly accurate servo motor control and PC control system giving the assurance of printing stability and accuracy, unlimited image processing recognition technology can achieve positioning repeatability of +-0.01mm.
- Floating squeegee assembly is specially designed with rigidity and elegant look. Squeegee blade pressure, speed and distance are all controlled by PC servo system, maintaining the highest printing stability.
- Manual or auto stencil cleaning function is selectable. Auto stencil cleaning features come with wet, dry and vacuum functions and user could select any combination with different duration. Thorough cleaning of metal stencil aperture ensuring high quality printing.
- Combination vacuum jigs and support pins can be set up according to PCB's design and size thus reduce set up and change model time.
- PCB auto clamping device can hold PCB with different size and thickness firmly. Removable magnetic support pins, vacuum jigs and blocks, effectively overcome PCB warp problem.
- Window 2000 operating system couple with user friendly software. Easy to operate, to use and to learn.
- Self diagnostic trouble alarm with error message to indicate machine trouble.
- Applicable to both single sided and double sided PCB.
- No problem for 0.3mm lead pitch QFP.

Technical Specifications

Printing Specifications

Frame Size	Min.	520×420 mm
	Max.	736×736 mm
PCB Size	Min. PCB Size	50×50 mm
	Max. PCB Size	400×330 mm
PCB Thickness	Thickness range	0.4~4 mm
PCB Warpage	PCB Warp Degree	＜1%(Diagonal)
Support System	Method	Magnetic pin, vacuum block
Clamp System	Method	Vacuum suction, side clamp
Table Adjustment Ranges-		X:±5mm; Y:±5mm; Q:±2°
Conveyor Speed		Max 1500mm/s, user edit
Conveyor Height		900±20mm
Conveyor Direction		User set（L→R or R→L）
Squeegee Pressure		0.5~5Kgf/cm^2(Air pressure)
Squeegee Speed		6~110mm/s
Squeegee Angle		60°
Squeegee Type		Metal
Cleaning System		Dry/ Wet/ Vacuum（User edit）

Main Machine Specifications

Repeat Positioning Accuracy	±0.01mm
Printing Accuracy	±0.025mm
Cycle Time	＜10s(exclude printing & Cleaning time)
Air Required	4.5~6Kgf/cm^2
Power Input	AC 220/230V±10% 50/60Hz, Single phase,TN System
Power Consumption	3KW
Control Method	PC control
Machine Dimensions	1146(L)×1364(W)×1440(H)mm
Weight	Approximately 1000kg

Image Processing System（Fiducial mark alignment）

Fiducial Mark Detection		Using a CCD camera to detect 2 reference marks on PCB and metal stencil
Alignment Mode		After camera recognition of the marks location of PCB and stencil, auto correction is done by the software through the printing table moving X—Y—Q directions for matching compensation.
Fiducial Mark Shape		Any kind of shape
Fiducial Mark Size		Any shape with diameter or side length to be 1mm~2mm, with tolerance of 10%
Fiducial Mark Type		Through holes： with thin copper circumference Half etched： centre coated with green copper.
Fiducial Mark Requirement	-	Mark coating should be even and smooth