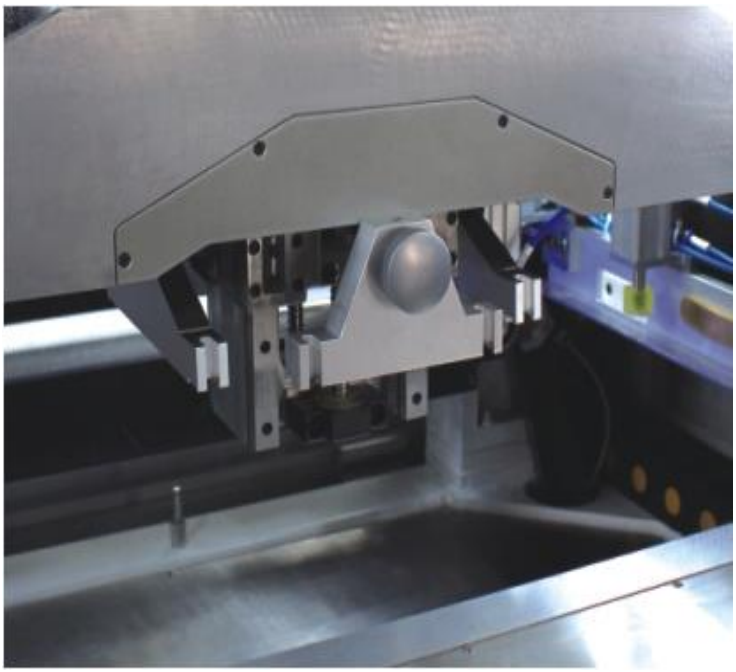
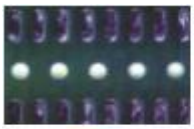
SHENZHEN HETIANGUDE AUTOMATION EQUIPMENT CO.,LTD.

Fully Automatic Printer Machines GD2000-GD510-GD610-GD1200

GD2000 with automatic recognition function of machine vision, using high-precision Servo drive system to achieve fast and accuracy alignment .The precision can reach +/- 0.01mm.It build in independent cleaning system, the cycle time less than 7s,ensure the high printing quality of solder paste and ultimate product efficiency. It also can print 0.3mm ultra fine pitch pad perfectly .This machine controlled by computer ,with Windows user interface and abundant software functions, it can set printing height, squeegee pressure, printing stroke, speed, and stencil automatic cleaning cycle etc. by software .It designed to keep the stability of printing quality, and greatly facilitate to users.

Programmable system of scraper

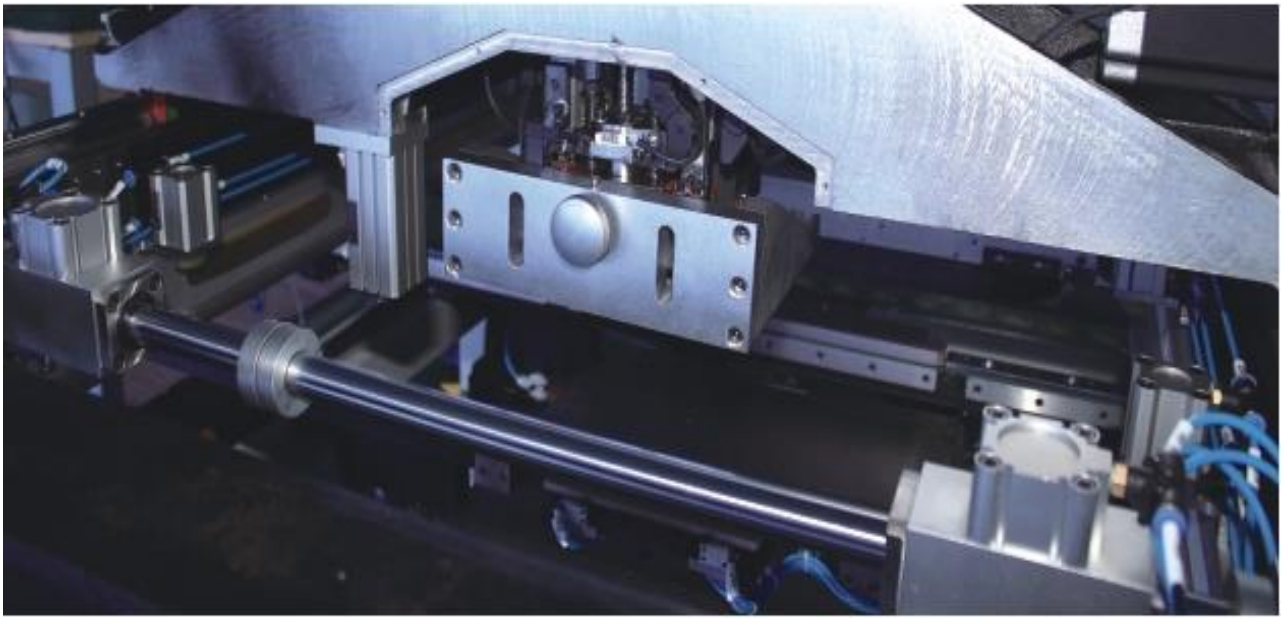




Independent, direct driven motor squeegee .Built-in accurate pressure control system. Can accurately determine the scraper the pressure value. Don't need to hang the blade type. The change of the length or thickness.

Steel mesh automatic positioning system

Simply enter the stencil MARK point location without adapter can automatically locate the stencil clamping system, User-friendly, flexible replacement of different sizes steel net.

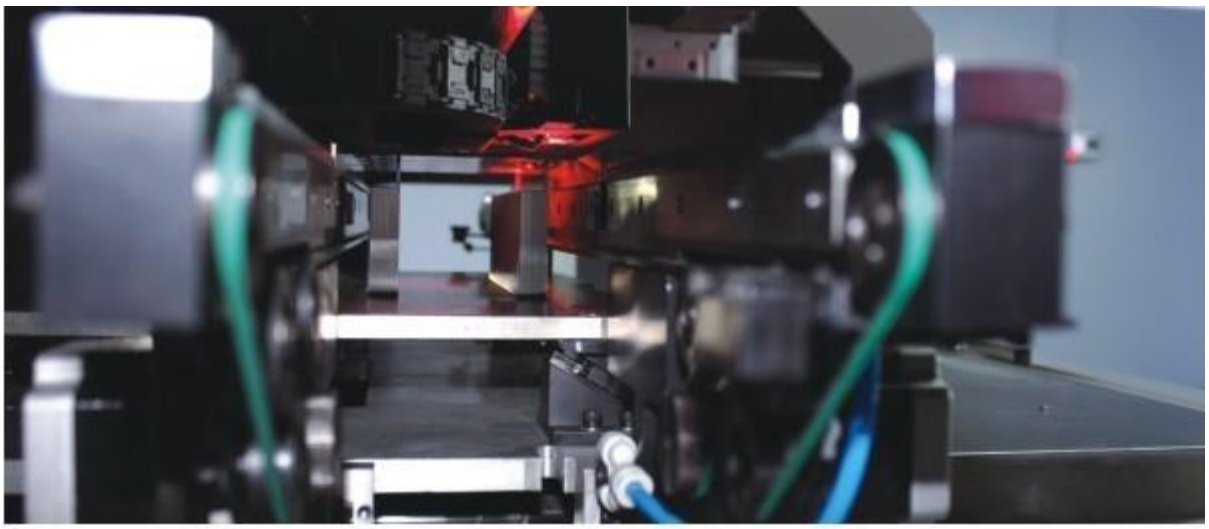


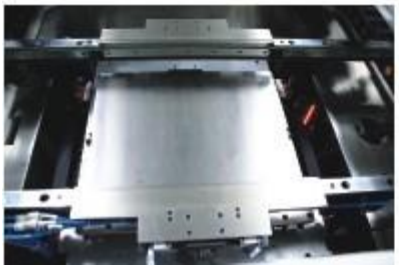
Strong base

High stiffness of steel frame,
Precise machining after casting
For the machine base and working platform
Provide reliability and repetition
Precision can keep consistent for years.

PCB transport and positioning system

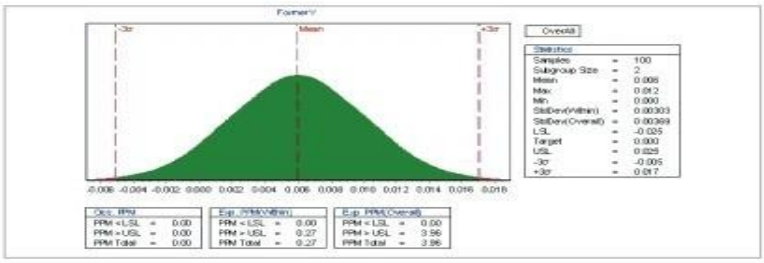
Flat belt transmission, enhance the guide rail transport capacity, transport speed
Stepper motor drives, programmable implement different transportation speed and action
Base board edge clamping system will substrate disposition raise to a higher level,
To get the best base powder hold power, edge clamping system using software to control the pressure,
Adjusted to match the programmed substrate thickness,
The solution with the top clamping system firmly clamping base board,
Provide the best template or between substrate,
Realize effective precipitation of solder paste,
Improve the printing quality.

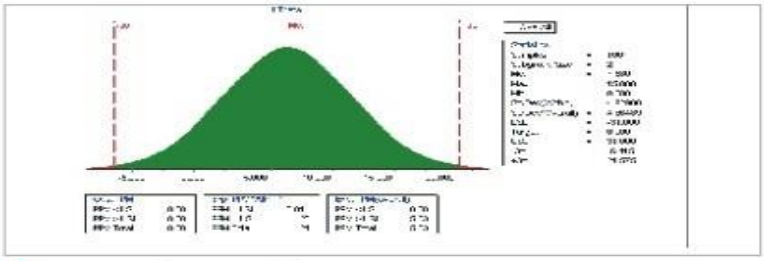




Close to + level of process capability indices

Unparalleled process capability indices to make product set,
Consumable products transformation, complement,
Maintenance and repair to link such as the length of time is reduced to a minimum,
For the processing of more qualified board machine in a unit time for laying the groundwork.





easy to learn and easy to use

Easy to learn and easy to use operating system makes the equipment performance is more outstanding, independent development of operating software based on the familiar Windows
Operating system, provides a convenient graphical user interface, the built-in self-test device provides all of the machine function application and errors Repair instructions.

GD2000 Technical Specifications	
PCB Parameters PCB	
Maximum PCB Size (X x Y)	450mm x 320mm
Minimum PCB Size (X x Y)	50mm x 50mm
PCB Thickness	0.4mm~6mm
PCB Warpage	Max. PCB Diagonal 1%
Maximum PCB Weight	6Kg
Plate Edge Clearance	Up to 3mm
Maximum Bottom Clearance	16mm
Speed of Transmission	1500mm/Second(Max)
Apart from the Ground Transmission Height	900±40mm
Transfer Orbit Direction	Left-Right, Right-Left, Left-Left, Right-Right
Transmission Mode	One Stage Conveyor(three Stage Conveyor :option)
Clamping Direction of PCB	Top parallelogram plate institutions flatten software adjustable elastic pressure side pressure, the bottom of the overall multi-point partial vacuum or suction vacuum
Board Support Method	Magnetic Pin/Contour Blocks/Special Work piece Fixture
Printing Parameters	
Print Head	Two Single Direct Connection Motor Drive
Form Work Frame Size	370mm x 470mm~737 mm x 737 mm
Maximum Printing Area (X x Y)	450mm x 320mm
Squeegee Type	Steel/Rubber Squeegee Blade(Angle:45/55/60 or according to actual effect to set the angle)
Length of Squeegee	220mm~500mm
Height of Squeegee	65±1mm
Thickness of Squeegee	0.25mm Diamond-like carbon
Printing Mode	Single or Double Squeegee Printing
Stripping Length	0.02 mm - 12 mm
Printing Speed	6 mm/sec - 200 mm/sec
Printing Pressure	0.5kg - 10Kg
Printing Stroke	±200 mm(from central)
Image Parameters	
Imaging Horizon (FOV)	6.4mm x 4.8mm
Adjustment Range	X,Y:±7.0mm,θ:±2.0°.
Benchmark Type	Standard Shapes (Refer to SMEMA SPEC) PAD and Opening
Camera System	Single camera ,up/down single imaging visual system, geometric matching orientation
Performance Parameters	
Calibration Repeat Precision	±12.5micron/ (±0.0005") @6 σ，Cp≥2.0
Printing Repeat Precision	±25 micron/ (±0.001") @6 σ，Cp ≥ 2.0
Cycle Time	≤7.5s
Changeover Time	≤5mins
Equipment	
Power Requirement	AC220V±10%,50/60HZ,15A
Compressed Air Requirement	4~6Kg/cm2, 10.0 Diameter of Tube
Outline Dimension	1140mm x 1400mm x 1480mm
Weight of Printer	1000Kg

GD510 Technical Specifications	
PCB Parameters PCB	
Maximum PCB Size (X x Y)	510mm x 510mm
Minimum PCB Size (X x Y)	50mm x 50mm
PCB Thickness PCB	0.4mm~14mm
PCB Warpage	Max. PCB Diagonal 1%
Maximum PCB Weight	6.0Kg
Plate Edge Clearance	Up to 1.5mm
Maximum Bottom Clearance	25mm
Speed of Transmission	1500mm/ Second(Max)
Apart from the Ground Transmission Height	900±40mm
Transfer Orbit Direction	Left-Right, Right-Left, Left-Left, Right-Right
Transmission Mode	One Stage (Option: Three Stages)
Clamping Direction of PCB	Flatten the top automatic tablet, software adjustable pressure elastic side edges lock bottom suction vacuum chamber
Board Support Method	Magnetic Pin/Contour Blocks/Special Workpiece Fixture
Printing Parameters	
Print Head	Two independent motorised printheads Gas-electric driving head(Option) Closed-loop print head(Option)
Form Work Frame Size	370mm x 470mm~737 mm x 864 mm
Maximum Printing Area (X x Y)	510mm x 510mm
Squeegee Type	Steel/Rubber Squeegee Blade(Angle:45/55/60 or according to actual effect to set the angle)
Length of Squeegee	220mm~500mm
Height of Squeegee	65±1mm
Thickness of Squeegee	0.25mm Diamond-like carbon
Printing Mode	Single or Double Squeegee Printing
Stripping Length	0.02 mm - 12 mm
Printing Speed	6 mm/sec - 200 mm/sec
Printing Pressure	0.5kg - 10Kg
Printing Stroke	±270 mm(from central)
Image Parameters	
Imaging Horizon (FOV)	10.24mm x 6.4mm – speed 1 second for FOV
Adjustment Range	X,Y:±10.0mm, θ :±2.0° .
Benchmark Type	Standard Shapes (Refer to SMEMA SPEC) PAD and Opening
Camera System	Single camera ,up/down single imaging visual system, geometric matching orientation
Performance Parameters	
Calibration Repeat Precision	±12.5micron/(±0.0005") @6 σ , Cp≥2.0
Printing Repeat Precision	±25 micron/ (±0.001") @6 σ , Cp ≥ 2.0
Cycle Time	≤7.5sec

Changeover Time	≤5mins
Equipment	
Power Requirement	AC220V±10%,50/60HZ,15A
Compressed Air Requirement	4~6Kg/cm2, 10.0 Diameter of Tube
Operating System	Windows XP
Outline Dimension	1220mm x 1660mm x 1435mm
Weight of Printer	1230Kg

GD610 Technical Specifications

PCB Parameters PCB	
Maximum PCB Size (X x Y)	610mm x 610mm
Minimum PCB Size (Y x X)	50mm x 50mm
PCB Thickness	0.4mm~14mm
PCB Warpage	Max. PCB Diagonal 1%
Maximum PCB Weight	6.0Kg
Plate Edge Clearance	Up to 1.5mm
Maximum Bottom Clearance	25mm
Speed of Transmission	1500mm/Second(Max)
Apart from the Ground Transmission Height	900±40mm
Transfer Orbit Direction	Left-Right, Right-Left, Left-Left, Right-Right
Transmission Mode	One Stage (Option: Three Stages)
Clamping Direction of PCB	Flatten the top automatic tablet, software adjustable pressure elastic side edges lock bottom suction vacuum chamber
Board Support Method	Magnetic Pin/Contour Blocks/Special Work piece Fixture
Printing Parameters	
Print Head	Two independent motor drivers to drive print heads Gas-electric driving head(Option) Closed-loop print head(Option)
Form Work Frame Size	370mm x 470mm~737 mm x 864 mm
Maximum Printing Area (X x Y)	610mm x 610mm
Squeegee Type	Steel/Rubber Squeegee Blade(Angle:45/55/60 or according to actual effect to set the angle)
Length of Squeegee	220mm~650mm
Height of Squeegee	65±1mm
Thickness of Squeegee	0.25mm Diamond-like carbon
Printing Mode	Single or Double Squeegee Printing
Stripping Length	0.02 mm - 12 mm
Printing Speed	6 mm/sec - 200 mm/sec
Printing Pressure	0.5kg - 10Kg
Printing Stroke	±320 mm(from central)
Image Parameters	
Imaging Horizon (FOV)	10.24mm x 6.4mm
Adjustment Range	X,Y:±10.0mm,θ:±2.0°.
Benchmark Type	Standard Shapes (Refer to SMEMA SPEC) PAD and Opening

Camera System	Single camera ,up/down single imaging visual system, geometric matching orientation
Performance Parameters	
Calibration Repeat Precision	±12.5micron/ (±0.0005") @6 σ，Cp≥2.0
Printing Repeat Precision	±25 micron/ (±0.001") @6 σ，Cp ≥ 2.0
Cycle Time	≤7.5sec
Changeover Time	≤5mins
Equipment	
Power Requirement	AC220V±10%,50/60HZ,15A
Compressed Air Requirement	4~6Kg/cm2, 10.0 Diameter of Tube
Operating System	Windows XP
Outline Dimension	1220mm x 1660mm x 1435mm
Weight of Printer	1320Kg

GD1200	**Technical Specifications**
PCB Parameters PCB	
Maximum PCB Size (X x Y)	1200mm x 400mm
Minimum PCB Size (X x Y)	80mm x 80mm
PCB Thickness	0.4mm~14mm
PCB Warpage	Max. PCB Diagonal 1%
Maximum PCB Weight	12Kg
Plate Edge Clearance	Up to 3.0mm
Maximum Bottom Clearance	25mm
Transport Speed	1500mm/ Second(Max)
Transport Height	900±40mm
Transport Direction	Left-Right, Right-Left, Left-Left, Right-Right
Transmission Mode	One Stage/ Three stages (option)
Clamping System	Flatten the top automatic tablet, software adjustable pressure elastic side edges lock bottom suction vacuum chamber
Support System	Magnetic Pin/Contour Blocks/Special Workpiece Fixture
Cycle Time	≤10sec
Changeover Time	≤10mins
Equipment	
Power Supply	AC220V±10%,50/60HZ,15A
Air Supply	4~6Kg/cm2, 10.0 Diameter of Tube
Operating System	Windows XP
Machine Dimensions	1910mm x 1660mm x 1435mm
Machine Weight	1320Kg

Printing Parameters	
Print Head	Two independent motorised and Closed-loop print head
Frame Size	Max：1500mm x 737mm；Min：500 mm x 737 mm
Maximum Printing Area (X x Y)	1200mm x 400mm
Squeegee Type	Steel/Rubber Squeegee Blade (Angle:45/55/60 or according to actual effect to set the angle)
Printing Mode	Single or Double Squeegee Printing
Stripping Snap-off	0.02 mm - 12 mm
Printing Speed	0 mm/sec - 200 mm/sec
Printing Pressure	0.5kg - 10Kg
Image Parameters	
Imaging Horizon (FOV)	10.24mm x 6.4mm
Adjustment Range	X,Y:±10.0mm,θ:±2.0°.
Benchmark Type	Standard Shapes (Refer to SMEMA SPEC) PAD and Opening
Vision System	Look Up/Down Optics Structure/CCD/Geometry Pattern-match
Performance Parameters	
Calibration Repeat Precision	±12.5micron/ (±0.0005") @6 σ，Cp≥2.0
Printing Repeat Precision	±25 micron/(±0.001") @6 σ，Cp ≥ 2.0