

G-SERIES

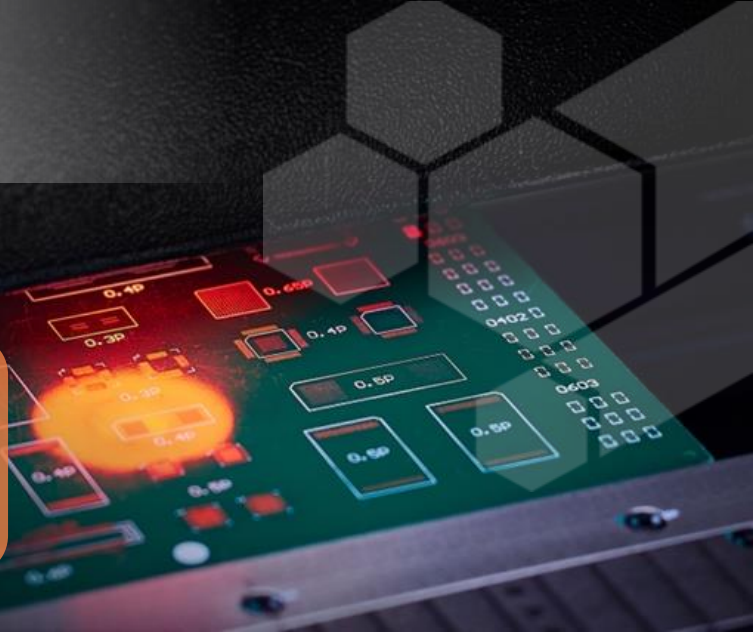
G-STAR

Fully automatic SMT Printer



DIGITAL CCD CAMERA

An upgraded CCD positioning camera with a 10 x 8 mm field of view, effectively capturing different types of fiducial marks. It is upgradable with a barcode scanner to provide seamless connectivity with users' MES systems, enhancing product traceability and maintenance needs.



STANDARD FEATURES



PCB CLAMPER

The combination of retractable top clamp and motor-controlled side clamp, uniquely designed by GKG (patented), securely clamps warped substrates to ensure highest quality of printing.



STENCIL Y-AXIS MEMORY

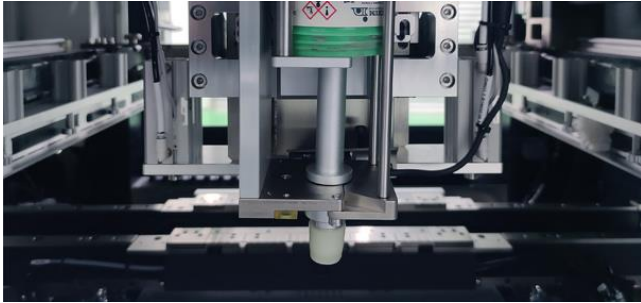
The stencil Y position is adjustable via user interface, and the settings can be saved and reapplied when replacing the stencil. This function significantly reduces human errors and saves time in readjusting stencil position.



PRINTABLE TABLE

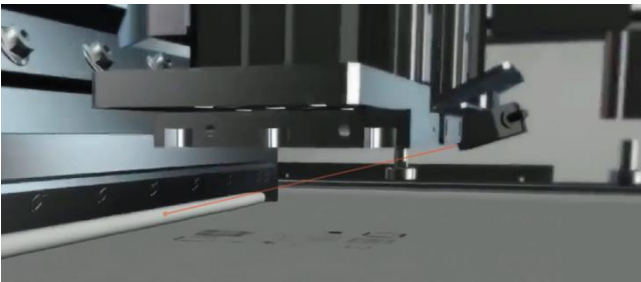
A stable and reliable printing table combined with a vacuum suction function, optional with different types of support block to eliminate substrate warping issue and enhance printing quality.

OPTIONAL FEATURES



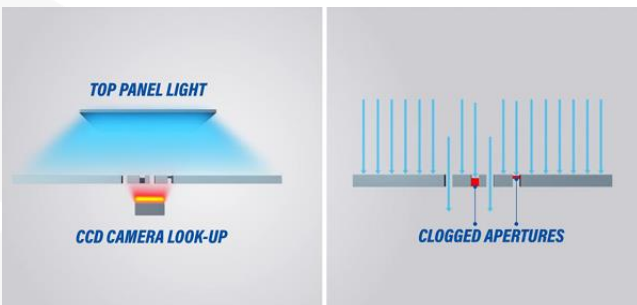
AUTO PASTE DISPENSING

Closed-loop with paste rolling diameter monitoring system to automatically replenish solder paste when insufficient paste is detected. The paste is automatically dispensed across the entire squeegee length, maintaining at 15 mm rolling diameter, adopting the common 500 grams' solder paste jar.



PASTE ROLLING DIAMETER MONITORING SYSTEM

Tracing solder paste rolling diameter in real-time and trigger the auto dispensing if the paste diameter falls below 10 mm. Eliminate insufficient solder paste on stencil and keep the paste rolling speed with optimum range to achieve best printing result.



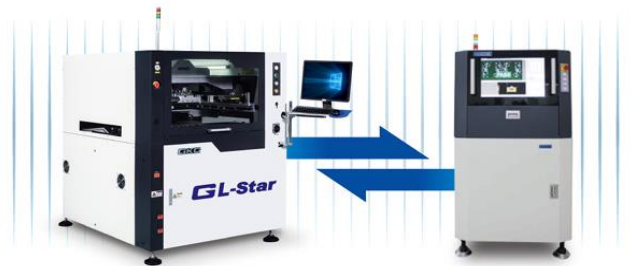
STENCIL APERTURES INSPECTION SYSTEM

A panel light is installed at the top, with a CCD camera positioned below to inspect stencil apertures. It automatically detects any clogging of stencil apertures, eliminating the use of poor-quality stencils and ensuring quality printing right from the start.



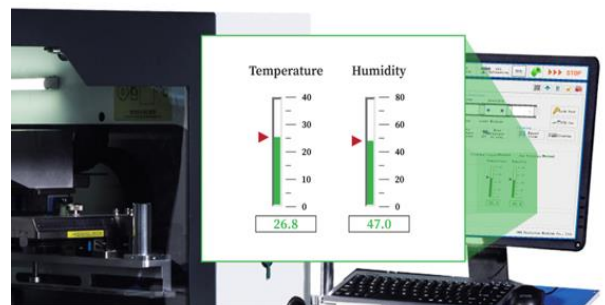
MES SYSTEM

Customization for Industry 4.0. MES keeps track of all manufacturing information in real-time, receiving up-to-the-minute data from robots, machines and employees.



SPI CLOSED-LOOP CONNECTION

With SPI closed-loop system, machine will automatically adjust and correct the print deposits based on the feedback given with regards to poor printing quality. This will facilitate improved print quality and production efficiency, by forming a complete printing feedback system.



TEMPERATURE & HUMIDITY DISPLAY SYSTEM

The temperature and humidity display system provides real-time monitoring of internal temperature and humidity status of the equipment. This system is beneficial for monitoring and extending the lifespan of solder paste to ensures printing quality.

PERFORMANCE

Machine alignment capability	2 Cmk @ $\pm 12.5 \mu\text{m}$ @ 6 sigma
Process alignment capability	2 Cpk @ $\pm 10 \mu\text{m}$ @ 6 sigma
Core cycle time (excluding printing & cleaning time)	< 8.5 secs
Product changeover time	< 3 mins
New product set-up time	< 5 mins

BOARD HANDLING

Max. Size (L x W)	400 mm x 340 mm
Min. Size (L x W)	50 mm x 50 mm
Thickness	0.4 ~ 6 mm
PCB thickness adjustment	manual (optional for automatic. PCB max width reduce to 310 mm)
PCB max weight	3 Kg
PCB edge clearance	3 mm
PCB bottom clearance	15 mm (7 mm with optional auto PCB thickness adjustment)
PCB warpage	Max. 1 % diagonally
Clamping method	Top clamp (manual), motor-controlled side clamp
Support method	Magnetic support pins, bars, blocks, vacuum suction
Conveyor direction	L to R, R to L, R to R, L to L (software control)
Conveyor height	900 $\pm$ 40 mm
Conveyor speed	1,500 mm/s
Conveyor with adjustment	automatic

PRINTING PARAMETERS

Stencil frame size (L x W)	Adjustable, 370 mm x 370 mm to 737 mm x 737 mm
Print gap (snap-off)	0 ~ 20 mm
Printing table adjustment range	X: $\pm 3 \text{ mm}$, Y: $\pm 7 \text{ mm}$, $\Theta \pm 2^\circ$
Print speed	10 ~ 200 mm/s
Squeegee pressure	0.5 ~ 10 Kg (program control)
Squeegee type	Standard: metal squeegee 280 mm, 350 mm Option: rubber
Squeegee angle	Standard: 60°, Option: 45°, 50°, 55°
Cleaning system	Auto wet, dry, vacuum, (software select)

OPTICAL SYSTEM

Field of view (FOV)	10 mm x 8 mm
Fiducial types	Circle, triangle, square, diamond, cross
Fiducial size	0.5 ~ 4 mm
Vision methodology	Digital CCD camera look up & down
2D inspection	Max. 500 win dows to inspect missing & insufficient (standard)

FACILITIES REQUIREMENT

Power supply	AC220V $\pm$ 10 %, 50 / 60 Hz
Power consumption	2.5 kW
Air supply	4 ~ 6 Kg/cm ²
Air consumption	5 L/min
Dimension (excl. signal tower)	1,150 mm (L) x 1,362 mm (W) x 1,463 mm (H)
Machine weight	1,000 Kg

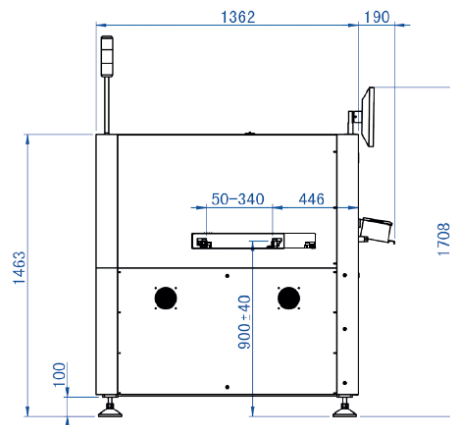
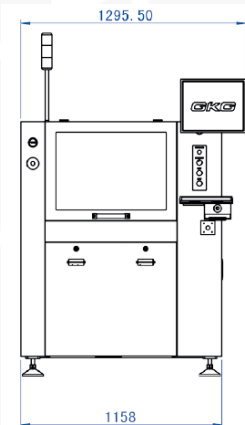
OPERATOR INTERFACE

Hardware	LCD monitor, mouse, keyboard
Operating system	Windows 10
Control method	Industrial PC controlled
I/O interface	SMEMA standard

OPTIONS

Auto glue dispensing
Auto paste replenishment
Auto Table Adjustment for PCB thickness
Handheld barcode scanner for stencil, solder paste, Squeegee traceability
Internal / external barcode scanner for PCB traceability
MES system integration (for Industry 4.0)
Pasting rolling diameter monitoring system
SPI closed-loop
Stencil aperture inspection system
Temperature, humidity monitoring & display
Uninterrupted power supply (UPS)
2 machines in series for higher output

EXTERNAL DIMENSIONS [mm]



WHAT SETS US APART:



FAIR, TRANSPARENT PRICING – NO HIDDEN TRICKS:

Our offers are clearly calculated – with no markups for brand prestige. Benefit from the advantages we pass directly on to you.



UNDERSTANDING INSTEAD OF JUST SELLING:

We listen and aim to understand what you truly need – today, in six months, and in the long run. Plus, you get everything from a single source.



AVAILABLE WHEN IT MATTERS:

ONE dedicated contact person. No waiting loops. No endless e-mail ping-pong. We also value short decision-making paths and fast, high-quality solutions.



INSTALLATION AND SERVICE WITH A SYSTEM:

Our technicians don't just show up – they think ahead, offer solutions, and get your line up to speed. We also train you and your team – either on-site or through our eAcademy.



MORE FLEXIBLE THAN CORPORATIONS – MORE RELIABLE THAN START-UPS:

We're no dinosaur – but we're not a question mark either. Smartlink-SMT is agile, dependable, and direct – combining fresh thinking with over 20 years of industry experience.

Smartlink-SMT GmbH

Donaustraße 31
90451 Nuremberg
Germany

+49 911 377 350-13
info@smartlink-smt.com

Understanding Technology. Shaping Solutions. Empowering Production
simple – smart – linked

Website



Scan
or click

LinkedIn



Follow us

