

**JUKI**®

LOWEST COST OF OWNERSHIP

**GL** Fully Automatic Screen Printer

**K3-II** Fully Automatic Screen Printer

**PMAX-II** Large Format Fully Automatic Screen Printer



High Value Stencil Screen Printing Solutions from JUKI

[www.jukiamericas.com](http://www.jukiamericas.com)

# Partnership That You Can Count On – Sales and Service by JUKI in Partnership with GKG PTE LTD



Max. PCB size: 510mm (L) x 510mm (W)



Max. PCB size: 610mm (L) x 610mm (W)

## Included features on all JUKI printers are as follows:

- Very stable machined cast structure
- Adjustable width/thickness for stencil frames
- Auto conveyor width adjustment
- Patented PCB “Flexible Auto Clamp” (FAC) system
- Stencil Position Memory (SPM) function for easy and quick change-over
- Auto stencil cleaning (Dry/Wet/Vacuum)
- Automatic 2D paste inspection
- User friendly, Windows 7 OS, intuitive operation

### Available options:

- TUV/UL Certification
- Epoxy dispenser (not available on PMAX)
- Stencil inspection function
- Closed loop feed back with SPI systems (Check which vendors are supported)
- Closed loop squeegee pressure control (not available on PMAX)
- APR (automatic paste replenish) system
- Magna Print squeegee blades
- Larger FOV camera (21mm x 16mm)
- Automated underside PCB support



Max. PCB size: 1220mm (L) x 800mm (W)

### Precision

The GL, K3-II and PMAX-II printers utilize a patented mathematical calculating algorithm to ensure the machine’s high accuracy print alignment that easily achieves 01005 (0402 metric) printing (PMAX 0201 (0603 metric)).

### Motorized Front and Rear Squeegees

Designed to meet the need of different pressures on the front and rear squeegees, each can be programmed independently while the functionality of self leveling prevents solder paste leakage. Various snap-off modes can also be selected to accommodate all types of PCB’s and paste.

### Patented PCB “Flexible Auto Clamp” (FAC) System

The conveyor system includes a built in PCB snugger (side clamp) and top clamp system. Changing between each requires no change of hardware and is controlled by a simple mouse click.

### Wiper System

The stencil cleaning has 3 modes: Wet, Dry, Vacuum. Each mode can be programmed individually or combined in any way. If auto cleaning is not necessary, the system allows manual cleaning within its operation menu, which shortens cleaning time and improves production efficiency.

### 2D Solder Paste Inspection System

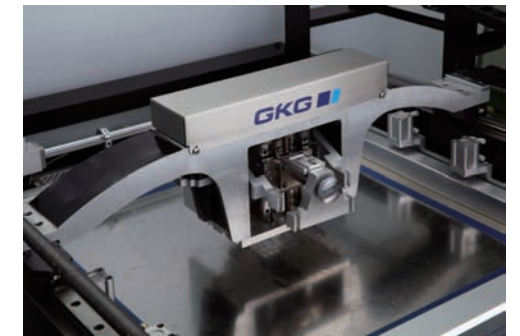
The 2D paste inspection system can detect excessive/insufficient, presence/absence, and bridging (Not meant to be used as 100% paste inspection. Primary use is for areas subject to defects e.g. Fine pitch, micro BGA).

### Automatic PCB Thickness Control

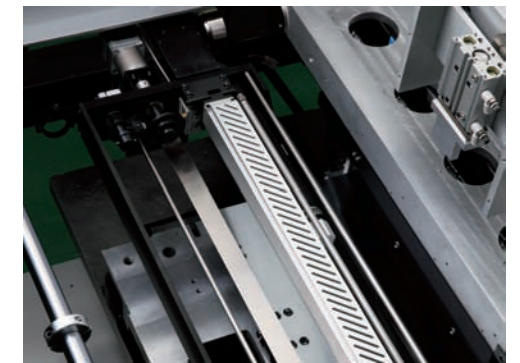
Uses linear motor drives to perform the dynamic adjustment of the lift table. This superfine motion and lock mechanism maintains higher precision during the printing process.

### Lift Table

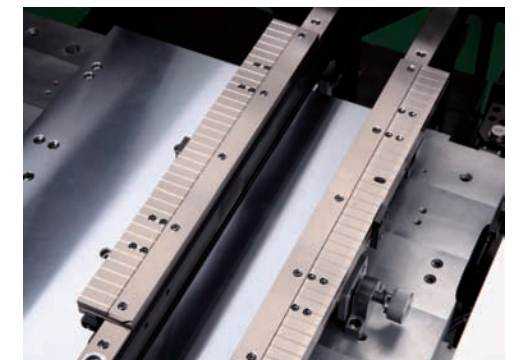
Solid Cast Lift Table designed to meet the rigors and demands of a 7x24 year round manufacturing environment.



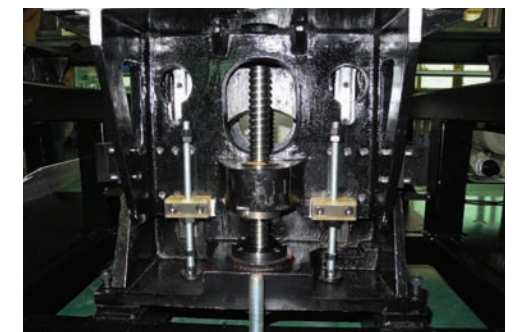
Solid CAST Arch Beam Support



2 Way Wet/Dry Vacuum System



Automatic PCB Thickness Control with Top and Side Clamping



Solid Cast Lift Table

# GL, K3-II & PMAX-II Specification

## Printing

Item/ Model		GL	K3-II	PMAX-II
Stencil Frame	Min Size	480mm x 500mm	650mm x 650mm	737mm x 737mm
	Max Size	737mm x 737mm	850mm x 850mm	1500mm x 1250mm
PCB	Min Size	50mm x 50mm	80mm x 50mm	100mm x 65mm
	Max Size	510mm x 510mm	610mm x 610mm	1220mm x 800mm
PCB Thickness		0.4-6mm	0.4-6mm	0.4-10mm
PCB Warpage		Max 1% (Diagonal)	Max 1% (Diagonal)	Max 1% (Diagonal)
PCB Edge Clearance		3mm	3mm	5mm
PCB Weight (Max)		5Kg	5Kg	10Kg
PCB Bottom Clearance		23mm	23mm	23mm
GAP (snap off)		0-10mm	0-10mm	0-10mm
Conveyor Height		950±20mm	950±20mm	950±20mm
Conveyor Direction		L>R, R>L, R>R, L>L (Software controlled)	L>R, R>L, R>R, L>L (Software controlled)	L>R, R>L, R>R, L>L (Software controlled)
Conveyor Speed		Max 1500mm/sec	Max 1500mm/sec	Max 1500mm/sec
Conveyor Width Adjustment		Auto	Auto	Auto
PCB Thickness Adjustment		Auto	Auto	Auto
I/O Interface		SMEMA	SMEMA	SMEMA
Board Location PCB	Support System	Magnetic pin, support block, and vacuum	Magnetic pin, support block, and vacuum	Magnetic pin, support block, and vacuum
	Clamping System	Over the top and side clamping	Over the top and side clamping	Over the top and side clamping
Print Head		2 independent motorized printheads	2 independent motorized printheads	2 independent motorized printheads
Squeegee Type		3 squeegee sets (210mm, 350mm, and 520mm) (or sizes of choice)	3 squeegee sets (280mm, 420mm, and 620mm) (or sizes of choice)	3 squeegee sets (850mm and 1250mm) (or sizes of choice)
Squeegee Pressure (Programmable)		0-10Kg	0-10Kg	0-30Kg
Print Speed		10-200mm/sec	10-200mm/sec	5-150mm/sec
Print Mode		Programmable (Multiple)	Programmable (Multiple)	Programmable (Multiple)
Cleaning System		Auto wet/dry with vacuum (2 way)	Auto wet/dry with vacuum (2 way)	Auto wet/dry with vacuum (2 way)
CCD FOV		Standard CCD FOV	Standard CCD FOV	Standard CCD FOV
Fiducial Alignment		Auto	Auto	Auto
Paste Inspection		2D	2D	2D
Table Adjustment		X=±10mm, Y=±10mm, Rotate=±2°	X=±10mm, Y=±10mm, Rotate=±2°	X=±10mm, Y=±10mm, Rotate=±2°
Vision		Look Up/Down System	Look Up/Down System	Look Up/Down System

## Machine Performance

Axis Repeatability/Accuracy	±0.0125mm (CPK>2), 6 Sigma*	±0.0125mm (CPK>2), 6 Sigma*	±0.0125mm
Printing Repeatability/Accuracy	±0.025mm (CPK>2), 6 Sigma*	±0.025mm (CPK>2), 6 Sigma*	±0.025mm
Cycle Time	<8.5 sec (exclude printing & cleaning time and camera)	<9.5 sec (exclude printing & cleaning time and camera)	<25 sec (exclude printing & cleaning time and camera)

## Machine Operating Requirements

Air Supply	4-6 bar	4-6 bar	4-6 bar
Power Supply	AC, 220± 10%, 50/60HZ, Single phase	AC, 220± 10%, 50/60HZ, Single phase	AC, 220± 10%, 50/60HZ, Single phase
Power Consumption	3KW	3KW	3KW
Operating Temperature	5°-40°C	5°-40°C	5°-40°C
Operating Humidity	20%-65%	20%-65%	20%-65%
Control Method	PC Control	PC Control	PC Control
Machine Dimensions	1200 x 1685 x 1510mm (LxWxH)	1350 x 1800 x 1540mm (LxWxH)	2020 x 1740 x 1528mm (LxWxH)
Operating System	Windows 7	Windows 7	Windows 7
Machine Weight	Approx. 1200Kg	Approx. 1200Kg	Approx. 1800Kg

\*Certification by CeTaQ, equipment using high accuracy glass plate (MPL09).

# JUKI®

## JUKI CORPORATION

Electronic Assembly & Test Systems Division

2-11-1, Tsurumaki, Tama-shi, Tokyo 206-8551, JAPAN  
TEL.81-42-357-2293 FAX.81-42-357-2285

### North America Headquarters:

Juki Automation Systems  
507 Airport Blvd.  
Morrisville, NC 27560  
Phone: 919-460-0111  
Email: sales@jas-smt.com  
www.jukiamericas.com

### North America Sales Office:

Juki Automation Systems  
47102 Mission Falls Court  
Suite 101  
Fremont, CA 94539  
Phone: 510-249-6700

<http://www.juki.co.jp>

JUKI Specifications and appearance may be changed without notice.

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