

# GL

Fully Automatic Screen Printer

# P MAX II

Large Format Fully Automatic Screen Printer



High Value Stencil Screen Printing Solutions from JUKI



leads to

LOWEST COST  
**OF OWNERSHIP**

# JUKI®

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

## GL Fully Automatic Screen Printer

- Max. PCB size: 510 x 510 mm (L x W)
- Rigid and stable machine body structure (weight: 1,200 kg)
- Adjustable stencil frame size (min. 480 x 500 mm, max. 737 x 737 mm)
- 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 software running on Window XP operating system



## P MAX II Large Format Fully Automatic Screen Printer

- Max. PCB size: 1220 x 800 mm (L x W)
- Rigid and stable machine body structure (weight: 1,800 kg)
- Adjustable stencil frame size (min. 737 x 737 mm, max. 1300 x 850 mm)
- 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 software running on Window XP operating system



## Precision

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The GL and PMAXII printers utilize a patented mathematical calculating algorithm to ensure the machine's high accuracy print alignment that easily achieves 01005 printing.

## Individually adjustable squeegee pressure on front and rear floating print heads

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Squeegee pressure can be independently programmed. This provides a stable leveling of the squeegees for precise solder paste transfer. All key functions of the printer are fully programmable allowing for ultimate printing flexibility.

## PCB top and side clamping

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The unique PCB top and side clamping methods are completely adjustable to optimize printing speed and quality. Customers can select from many snap-off modes to accommodate all types of PCB's. This provides customers an excellent print control platform.

## Wiper System

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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.

## 2D Solder Paste Inspection System

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The 2D inspection system immediately detects solder paste deposition defects at critical locations such as Micro BGA.

## Automatic PCB thickness control

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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.

## Squeegee System

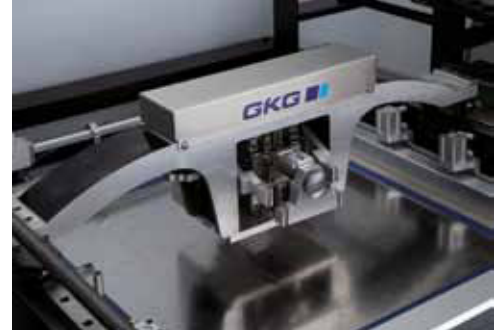
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Dual motors with dual linear guides enhance the squeegee's performance and increases the squeegee's overall life. A special squeegee blade with built in touch sensors enable closed-loop squeegee pressure control (optional).

## Lift Table

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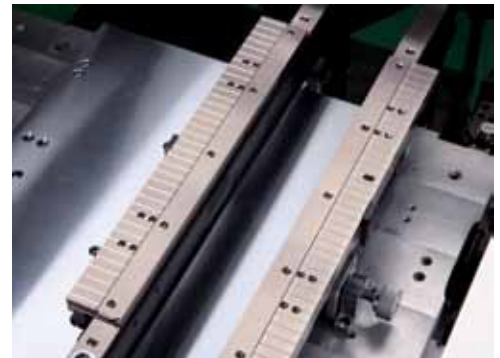
Solid Cast Lift Table designed to meet the rigors and demands of a 7x24 year round manufacturing environment.



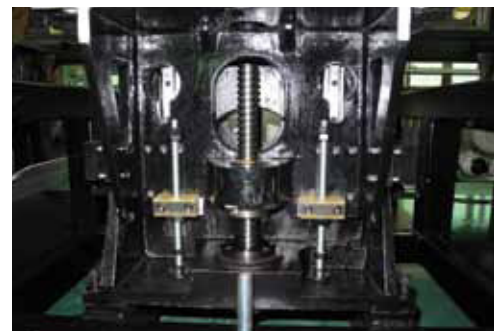
*Solid cast arch beam support*



*2 way wet/dry/vacuum system*



*Automatic PCB thickness control with top and side clamping*



*Solid cast lift table*

# GL & PMAXII Specification

## Printing

Item/ Model		GL	PMAXII
Stencil Frame	min. size	480 x 500 mm	737 x 737 mm
	max. size	737 x 737 mm	1500 x 1250 mm
PCB	min. size	50 x 50 mm	100 x 65 mm
	max. size	510 x 510 mm	1220 x 800 mm
PCB Thickness		0.4–6 mm	0.4–10 mm
PCB Warpage		max. 1% (diagonal)	max. 1% (diagonal)
PCB Edge Clearance		3 mm	5mm
PCB Weight (Max)		5 kg	10 kg
PCB Bottom Clearance		23 mm	23 mm
GAP (snap off)		0 – 10 mm	0 – 10 mm
Conveyor Height		950 ±20 mm	950 ±20 mm
Conveyor Direction		L>R, R>L, R>R, L>L (software controlled)	L>R, R>L, R>R, L>L (software controlled)
Conveyor Speed		max. 1500 mm/s	max. 1500 mm/s
Conveyor Width Adjustment		auto	auto
PCB Thickness Adjustment		auto	auto
I/O Interface		SMEMA	SMEMA
Board Location PCB	Support System	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
Print Head		2 independent motorized printheads	2 independent motorized printheads
Squeegee Type		2 pairs of squeegee set (520 mm and 350 mm) (or sizes of choice)	2 pairs of squeegee set (1250 mm and 850 mm) (or sizes of choice)
Squeegee Pressure (programmable)		0 – 10 kg	0 – 30 kg
Print Speed		10 – 200 mm/s	5 – 150 mm/s
Print Mode		programmable (multiple)	programmable (multiple)
Cleaning System		auto wet/dry with vacuum (2 way)	auto wet/dry with vacuum (2 way)
CCD FOV		8 x 6 mm	8 x 6mm
Fiducial Alignment		auto	auto
Paste Inspection		2D	2D
Table Adjustment		X = ±10 mm, Y = ±10 mm, Rotate =±2°	X = ±10 mm, Y = ±10 mm, Rotate =±2°
Vision		look up/down system	look up/down system

## Machine Performance

Repeat Position Accuracy	±0.01 mm	±0.01 mm
Printing Accuracy	±0.025 mm	±0.025 mm
Cycle Time	< 8.5 s (exclude printing & cleaning time and camera)	< 25 s (exclude printing & cleaning time and camera)

## Machine Operating Requirements

Air Supply	4 – 6 bar	4 – 6 bar
Power Supply	AC, 220 V ± 10%, 50/60 HZ, single phase	AC, 220 V ± 10%, 50/60 HZ, single phase
Power Consumption	3 kW	3 kW
Operating Temperature	5 – 40 °C	5 – 40 °C
Operating Humidity	20 – 65 %	20 – 65 %
Printer Control	PC controlled	PC controlled
Machine Dimensions	1200 x 1685 x 1510 mm (L x W x H)	2020 x 1740 x 1528 mm (L x W x H)
Operating System	Windows XP or higher	Windows XP or higher
Machine Weight	approx. 1200 kg	approx. 1800 kg



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JUKI Specifications and appearance may be changed without prior notice.

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

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