# **PMAXII**





## Perfect for long LED PCBs Print up to 1,220mm x 800mm







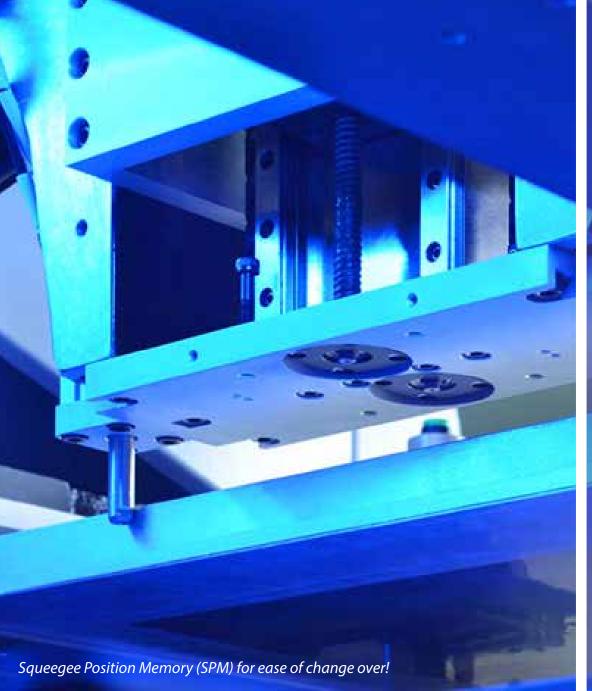














#### **Large Format Fully Automatic Screen Printer.**

The PMAXII printers utilize a patented mathematical calculating algorithm to ensure the machine's high accuracy print alignment that easily achieves 01005 (0402 metric) printing.



#### Feature 1: Precision

The PMAX-II printers utilize a patented mathematical calculating algorithm to ensure the machine's high accuracy print alignment that easily achieves 0201 (0603 metric) printing.

## Feature 2: Motorized Front and Rear Squeegees

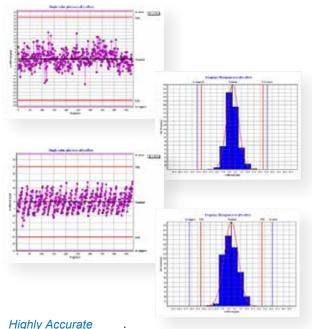
Designed to meet the need of different pressures on the front and rear squeegees, each can be programmed independently while the funtionality of self leveling prevents solder paste leakage. Various snap-off modes can also be selected to accommodate all types of PCB's and paste.

## Feature 3: Patented PCB "Flexible Auto Clamp" (FAC) System

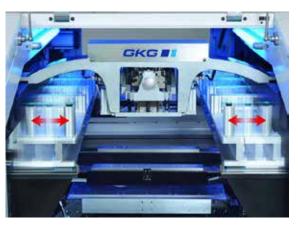
The conveyor system includes a built in PCB snugger (side clamp) and top clamp system. Changing between each requires no change of hardware and is controlled by a simple mouse click.

### Feature 4: 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.



Achieves +/- 0.0125 at 6 Sigma accuracy



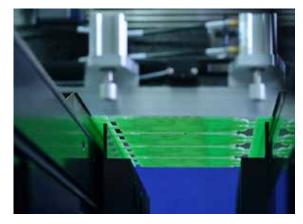
Simple quick adjustment for various stencil sizes

### Feature 5: 2D Solder Paste Inspection System

The 2D paste inspection system can detect excessive/insufficient, presence/absence, and bridging.

### Feature 6: 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.



Top & Side clamping Flexible Auto Clamping System

#### Feature 7: Lift Table

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

### **Available Options**

- TUV/UL Certification
- Stencil inspection function
- Closed loop feed back with SPI systems
- APD (automatic paste replenish) system
- Magna Print squeegee blades
- Larger FOV camera (21mm x 16mm)
- Automated underside PCB support



Heavy duty cast steel frame





2D Paste Inspection Excessive, Insufficient, & Bridge Detection



Programmable, Flexible stencil cleaning system: bottom side, wet, dry vaccum

| Performance                   |   |  |
|-------------------------------|---|--|
| Machine Alignement capability | +/-25 microns                             |  |
| Core Cycle Time               | < 25 secs (Excluding printing & cleaning) |  |
| Product Changeover time       | 5 mins                                    |  |
| New Product Setup Time        | 10 mins                                   |  |

| Board Handling            |  |
|---------------------------|--|
| Maximum Size (L x W)      | 1220 mm x 800 mm   |
| Minimum Size (L x W)      | 100 mm x 65 mm   |
| Thickness                 | 0.4 mm to 10 mm  |
| PCB Thickness Adjustment  | Auto leveling  |
| PCB Support Methods       | Magnetic pins, support blocks, auto table adjustment                           |
| PCB Clamping Methods      | Retractable top clamp & motor controlled side clamp                            |
| PCB Max. Weight           | 10 kg  |
| PCB Edge Clearance        | 3.5 mm   |
| PCB Bottom Clearance      | 23 mm  |
| PCB Warpage               | Max. 1% diagonally   |
| Conveyor Direction        | L > R, R > L, R > R, L > L (Software controlled)                               |
| Conveyor Height           | Standard is 900mm +/-20mm (If need any higher need to include footage support) |
| Conveyor Speed            | Max. 1500 mm/sec   |
| Conveyor Width Adjustment | Auto   |

| Printing Parameters        |   |
|----------------------------|---|
| Stencil Frame Size (L x W) | Adjustable, 737 mm x 737 mm to 1500 mm x 1250 mm                      |
| Print Head                 | Arc shape beam with 2 independent double linear guide motorized heads |

| Print Mode        |   |
|-------------------|---|
| Printing Table    | Single / Double (Software select)           |
| Adjustment Range  | X: ±20 mm; Y: ±20 mm; Θ: ±2°                |
| Squeegee Size     | Metal: Two pair = 850mm & 1,250mm           |
| Squeegee Pressure | 0 - 30 kgs (Programmable)                   |
| Squeegee Speed    | 5 - 150 mm/sec                              |
| Squeegee Angle    | Std. 60°, Option 45°, 50°, 55°              |
| Cleaning System   | Auto wet/dry/vacuum combination (User edit) |

| Optical System      |   |
|---------------------|---|
| Vision Method       | Single camera simultaneously Look Up/Look Down      |
| Field of View (FOV) | 8 mm x 6 mm   |
| Fiducial Type       | Circle, triangle, square, diamond, cross            |
| Fiducial Size       | 0.5 ~ 4.0 mm  |
| 20 Inspection       | 100 windows to inspect missing, insufficient (Std.) |

| Operator Interface    |                               |  |
|-----------------------|-------------------------------|--|
| Hardware              | LCD Monitor, Mouse & keyboard |  |
| Operating System (OS) | Window 10 or higher           |  |
| Control Method        | Industrial PC controlled      |  |
| I/O Interface         | SMEMA Standard                |  |

| Facilities Requirement          |                                       |  |
|---------------------------------|---------------------------------------|--|
| Power Supply                    | AC 220 V ±10%, 50/60 Hz, single phase |  |
| Air Supply                      | 4 ~ 6 kgf/cm²                         |  |
| Power Consumption               | 3 KW                                  |  |
| Dimension (Exclude signal lamp) | 2020 (W) x 1740 (D) x 1524 (H) mm     |  |
| Machine Weight                  | Approximately 1800 kg                 |  |



JUKI CORPORATION HEAD OFFICE
The activities of research, development, design, sales, distribution, and maintenance services of industrial sewing, machines, household sewing machines and industrial robots, et including sales and maintenance services of data entry systems.

\*Please refer to the product specifications for details.
■ JUKI Specifications and appearance may be changed without notice.

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