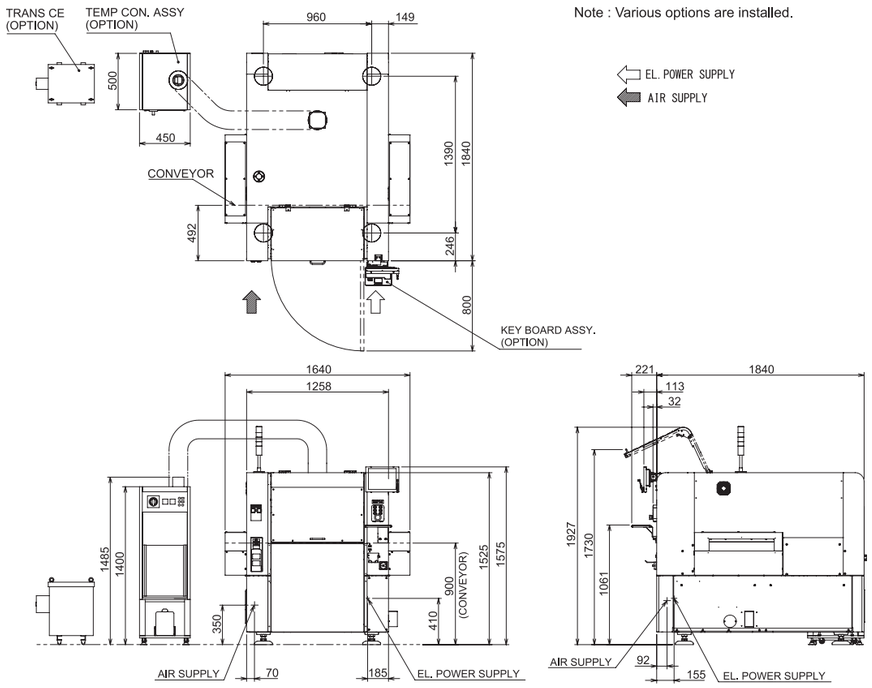
Specifications	YSP10
Applicable PCB	L 510 x W 510 mm to L 50 x W 50 mm (option : L 610 x W 510 mm)
Printing heads	3S head (3S : Swing Single Squeegee)
Printing accuracy	Positioning repeatability (6σ): ± 10 µm
Printing line tact	10 sec (Standard printing : under optimum condition, including board transfer time and printing time) 12 sec (Including cleaning : under optimum condition, including board transfer time and printing time)
Applicable stencil size	L 750 x W 750 mm L 736 x W 736 mm (29") L 750 x W 650 mm L 650 x W 550 mm L 584 x W 584 mm (23")
Power supply	Single-phase AC 200 to 230 V ± 20 V
Air supply source	0.45 MPa or more
External dimension (excluding projections)	L 1,640 x W 1,990 x H 1,525 mm (full range of options)
Weight	Approx. 1,700 kg



Note : Various options are installed.

EL. POWER SUPPLY
AIR SUPPLY

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Yamaha Motor Robotics division is a subsidiary of Yamaha Motor Company.
Version: January 2019.

YAMAHA
TRUSTED TECHNOLOGY

YSP10 NEW

SMT Innovation

Premium printer

World Class Speed and Performance!
Capable of fully autonomous changeover tasks!

Ultra-high-speed printing performance!
10 sec/cycle
12 sec/cycle incl. cleaning

Positioning repeatability
6σ: ± 10 µm

Handles large PCBs
L 510 x W 510 mm

Stencils size
Max. 750 x 750 mm

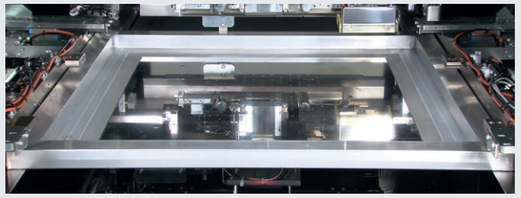
FEATURE 1 Ultra Fast Cycle Time

We achieved high productivity by totally redesigning the drive system to optimize the movement layout and cut the board transfer time to attain a cycle time including stencil cleaning of 12 seconds at the world's fastest level (optimal in-house conditions. Normal print time is 10 seconds.) reaching a speed 20 % faster than conventional operation.

FEATURE 2 Supports fully autonomous stencil exchange

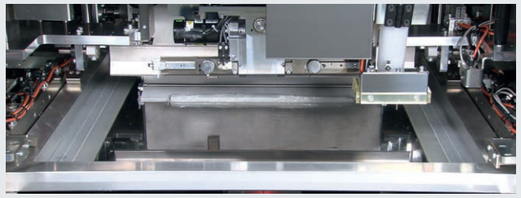
Automatic stencil exchange (Option)

The function presets the stencil needed for the next production task while the printer is operating and automatically makes setups-changeovers. Space-saving design with small footprint sets and recovers used stencils all in one batch at the machine rear. This slashes the time needed for stencil replacement since workers can do stencil presetting in advance whenever they have time available without having to stop the printer. The squeegee head is now equipped with a new solder receiver plate to prevent solder from falling onto the stencil during replacement.



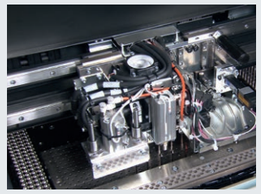
Automatic solder transfer function (Option)

This function completely removes remaining solder paste automatically from the production stencil, and transfers it to the new stencil after exchange. This not only reduces the amount of wasted solder, but allows for continued use of pre-conditioned paste for the next print program. Using this function along with automatic stencil replacement will drastically reduce time lost due to operator errors during set-ups and changeovers.



Automatic push-up pin exchange function (Option)

Automatically places push-up pins to support the board during the print process. The magnetic pins are automatically placed at optimal positions matching the shape and pattern of the circuit board, avoiding pre-placed components. This achieves stable and repeatable printing support for every program.



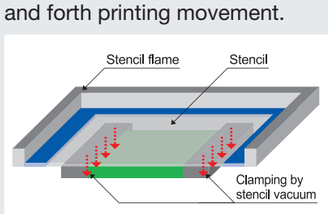
FEATURE 3 Delivers both high quality & super-accurate printing!

YAMAHA's original 3S head [3S: Swing Single Squeegee]

Program change squeegee attack angle and speed to an ideal setting to provide optimal printing conditions that match the solder being used.

Stencil vacuum

A stencil vacuum mechanism delivers consistent high accuracy printing with no effects from stencil droop. Also drastically cuts the setup time since no off-set entry is needed during back and forth printing movement.



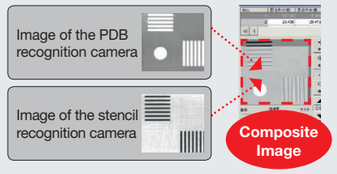
Auto cleaning system

High efficiency cleaning system as standard equipment. New cleaner head ensures a huge reduction in cleaning cloth consumption.

YAMAHA
YSP10
Premium printer

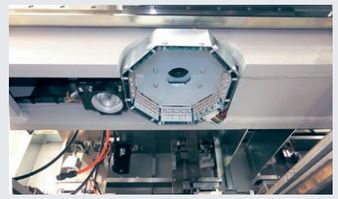
Composite image alignment function

By images from two cameras are combined in layer, thereby operation of the PCB to printing stencil relative positioning can be performed simply and accurately.



2D Print inspection function (Option)

Supports full-on pro-level inspections with a dedicated camera. Feedback from inspection results allow over-printing and stencil cleaning.



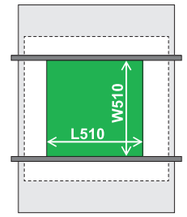
PSC System (Option) [PSC: Print Stability Control]

The PSC system stabilizes the rolling diameter of the cream solder that affects print quality. This system shortens the setup-changeover time and reduces the amount of solder loss in the process. PSC is available in syringe type (6 or 12 oz./173 or 346 cc) or as POT type.

FEATURE 4 Supports extra-large boards & large-size stencils

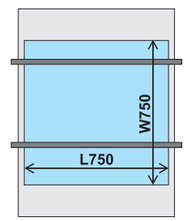
Supports extra-large boards

Expands large-size board support range from L510 x W460 mm on up to L510 x W510 mm boards. Also extends support range to include large-size mother boards including multiple smaller boards, large-size liquid crystal panel lighting boards and large-size industrial boards. Coverage of extra-large L610 x W510 mm boards is available as an option.



Large stencil sizes

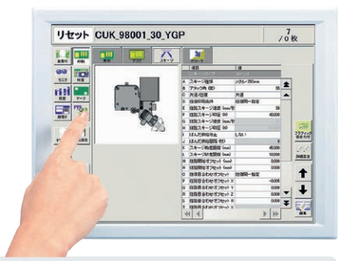
Supports L or large stencil sizes to maximum dimensions of L750 x W750 mm. Instantly handles up to 5 stencil types sizes with just one touch.



Full range of options

Touch panel

An easy-to-use and understand interface ensures smooth and sure operation. Display is switchable between 5 languages (Japanese, English, Chinese, Korean, German).



- **2D Inspection camera**
- **PSC (Auto Solder Replenishment)**
- **Right to Left transport**
- **PCB vacuum system**
- **Temperature control unit**
- **Control unit**
- **Solder remaining quantity detection**
- **UPS system**
- **IT option**