



# High-Performance Compact Printer

Printing quality similar to flagship models. Compatible with large PCBs and a wide variety of stencil frames.

High-speed printing 8 sec/cycle

Position repeatability  $6\delta: \pm 10 \text{ micron}$ 

Handles large PCBs L 510 x W 460 mm

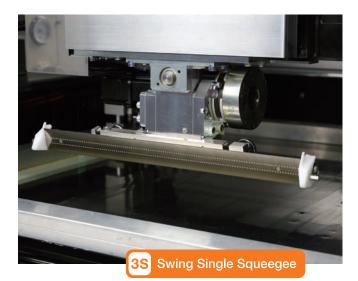
Accepts stencils up to: max. L 750 x W 750 mm



# Built-in high-end features deliver top print accuracy and quality!

#### Yamaha's original 3S head

Automatically adjusts squeegee angle (1 degree units between 45 to 65 degrees) and speed to optimize settings for best print results with selected solder-paste type and volume.



●0.25 ●0.35 ●0.5 ●0.8 ■1.5 ■2.5 H0.2X2 V0.2X2 Stencil hole shape

45

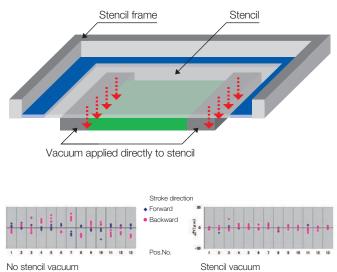
50

55

3S head: adjusts squeegee angle with paste volume

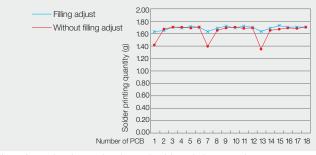
#### Stencil vacuum

Stencil clamping enhanced by vacuum ensures rock-solid stability for consistent high-accuracy printing stencil droop. Also drastically cuts the setup time since no offset entry is needed during back and forth printing movement.



## Filling adjust

Convenient function corrects for change in aperture filling immediately after stencil cleaning, and in this way cuts down on solder print irregularities.



Effects from cleaning and estimated solder printing quantity: Better solder printing via filling adjust function

# Yamaha SMT Production Line Network for highly efficient production

■ 65°
 ■ 55°

45°

%

Volume

000

...

004

## ID barcode monitoring

3S head ensures optimum printing

for pin-in-paste. (rear side view)

Monitoring solder, stencil and squeegee identities via barcodes prevents data-entry errors during setups and changeovers by matching PCB data with actual work task. This also lets the operator check solder expiration dates (humidity, moisture expiry period, service life management).

## Bad-mark transfer (option)

YCP10 automatically transfers any bad-mark data to the mounter to drastically cut total line loss and boost productivity.





# Multiple functions and extreme versatility - all inside one compact unit!

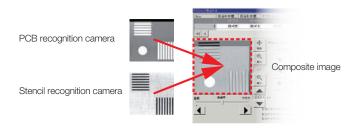
## Compact but spacious

Though housed in a compact body, YCP10 handles large PCBs of L 510  $\times$  W 460 mm as well as a variety of stencil sizes to boost line productivity to the max!

Applicable stencils	Standard	Option
	• L 750 x W 750 mm	• L 600 x W 550 mm
	• L 736 x W 736 mm	• L 550 x W 650 mm
	• L 750 x W 650 mm	• L 584 x W 584 mm
	• L 650 x W 550 mm	

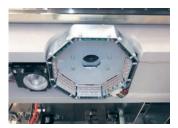
## Two-layer graphical base-alignment

Advanced feature, superimposes PCB and stencil images on the monitor, so position alignment can be checked at a glance. Now even a beginner can instantly make fine adjustments for print position alignment.

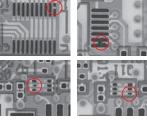


## Printing inspection function (option)

Make detailed print inspections with a dedicated inspection camera offering a wide field of view and excellent resolution.



Optional printing inspection unit



Example NGs

#### Advanced cleaning features

The **auto cleaning system** determines settings such as cleaning mode, speed and suction to suit the working conditions.

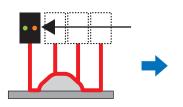


Cleaner fluid is easily replaceable during production from a large capacity bottle mounted on the front side of the machine. The fluid remaining in the bottle can be checked at a glance.

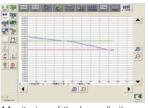


## Remaining solder quantity detection

This optional function periodically measures the solder paste-roll width during squeegee excursion. An alarm notifies the operator when re-supply is needed, to ensure paste volume is always adequate and help maintain regular re-supply timing.



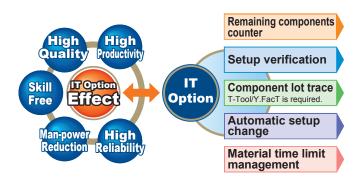
Measures rolling width of solder



Monitoring of the lower limit

## Highly reliable SMT products

Yamaha delivers the maximum value for customers through its position as a "full-line manufacturer" of mounting equipment including printers, dispensers, surface mounters, and inspectors as well as a complete family of software tools spanning the entire production line to achieve highest efficiency and quality.





P10

L 50 x W 50 up to L 510 x W 460 mm

3S head (3S: Swing Single Squeegee)

+/- 25 ı	micron
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+/- 10 micron

8 sec (standard printing: under optimum condition, except for printing time)

L 750 x W 750 mm, L 736 X W 736 mm, L 750 x W 650 mm, L 650 x W 550 mm, L 600 x W 550 mm (option),

L 550 x W 650 mm (option), L 584 x W 584 mm (option)

Power supply Air supply source

PCB size range

Printing heads

Printing line tact

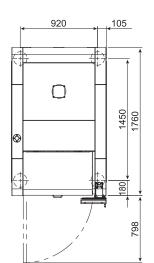
Printing accuracy (6δ)

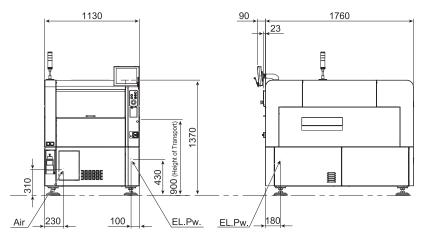
Applicable stencil size

positioning repeatability ( $6\delta$ )

External dimension Weight Single-phase AC 200/208/220/230 V +/– 20 V 50/60 Hz 0.45 MPa or more in clean, dry state

L 1,130 x W 1,760 x H 1,370 mm Approx. 1,100 kg





# Full range of options

- Print inspection camera
- Temperature control unit
- UPS system
- PCB vacuum system
- Solder paste-roll
  volume measurement
- Setup verification
- Automatic program changeover
- Bad-mark transfer

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