

Specifications * Specifications and appearance are subject to change without prior notice.

Printer	High-Speed High-Precision High-End Printer YSP	
Printer	Model	YSP (Model : KHT-000)
	Applicable PCB (mm)	L50 x W50 to L510 x W460 * Applicable for printing L600
Printer	Printing line-lact	11.0sec (Normal printing) (Optimum conditions) * Optimum conditions : L180 x W130mm PCB size, Squeeze speed 100mm/sec, etc.
	Accuracy	Printing accuracy (3σ) : +/- 0.025mm Positioning repeatability (3σ) : +/- 0.005mm
Printer	Applicable stencil size (mm)	L750 x W750, L736 x W736, L750 x W650, L650 x W550, L600 x W550, L550 x W650
	External dimension (mm)	L1,640 x W1,640 x H1,400 (Normal conveyor) L1,973 x W1,640 x H1,400 (Exit extension conveyor)
Printer	Weight	Approx. 1,500kg
Mounter category	Compact Super-High-Speed Modular YS24 YS24X	
	Model	YS24 (Model : KKE-000/100/200) YS24X (Model : KKT-000/100/200)
Mounter category	Applicable PCB (mm)	L50 x W50 to L700 x W460 L50 x W50 to L700 x W460
	Mounting capability (optimum)	72k CPH -50k CPH (IPC 9850) 54k CPH - 30k CPH (IPC 9850)
Mounter category	Mounting accuracy	Absolute accuracy (μ+3σ) : +/- 0.05mm/CHIP(QFP) Repeatability (3σ) : +/- 0.03mm/CHIP(QFP)
	Applicable components	0402(Metric base) to 32 x 32mm, Max Height 6.5mm 0402(Metric base) to 45 x 45mm, Max Height 15mm, Ball type electrodes applicable
Mounter category	Number of component types	Tape reel : 120 types (Fixed plates, Max., 8mm width) Tape reel : 96 types (FES Carts, Max., 8mm width)
	External dimension (mm)	L1,254 x W1,687 x H1,445 L1,544 x W2,183 x H1,445 (Extension conveyor, FES Carts)
Mounter category	Weight	Approx. 1,700kg Approx. 1,700kg (Main unit only), Approx. 1,890kg (When sATSII installed)
Mounter category	Compact High-Speed Modular YS12 YS12F	
	Model	YS12 (Model : KHY-000) YS12F (Model : KKJ-100)
Mounter category	Applicable PCB (mm)	L50 x W50 to L640 x W460 L50 x W50 to L640 x W460 (W360 when ATS15 installed)
	Mounting capability	36k CPH -24k CPH (IPC 9850) 20kCPH - 14k CPH (IPC 9850)
Mounter category	Mounting accuracy	Absolute accuracy (μ+3σ) : +/- 0.05mm/CHIP(QFP) Repeatability (3σ) : +/- 0.03mm/CHIP(QFP)
	Applicable components	0402(Metric base) to 32 x 32mm, Max Height 6.5mm 0402(Metric base) to 45 x 100mm, Max Height 15mm, Ball type electrodes applicable
Mounter category	Number of component types	Tape reel : 120 types (Fixed plates, Max., 8mm width) Tape reel : 96 types (FES Carts, Max., 8mm width)
	External dimension (mm)	L1,254 x W1,440 x H1,445 L1,254 x W1,440 x H1,445 (Main unit only) L1,254 x W1,755 x H1,470 (When ATS15 installed)
Mounter category	Weight	Approx. 1,250kg Approx. 1,250kg (Main unit only), Approx. 1,370kg (When ATS15 is installed)
Mounter category	High-Speed General-purpose Modular YS100	
	Model	YS100 (Model : KJJ-000)
Mounter category	Applicable PCB (mm)	L50 x W50 to L700 x W460 (W410 When sATS installed)
	Mounting capability	25k CPH - 17k CPH (IPC 9850) (14,1k CPH IPC 9850 When 12mm feeder pitch interface installed)
Mounter category	Mounting accuracy	Absolute accuracy (μ+3σ) : +/- 0.05mm/CHIP(QFP) Repeatability (3σ) : +/- 0.03mm/CHIP(QFP)
	Applicable components	0402(Metric base) to 45x 100mm, Max Height 15mm, Ball type electrodes applicable
Mounter category	Number of component types	Tape reel : 96 / 126 types (Max., 8mm width), 72 / 87 types (When sATS installed) with 16 / 12mm pitch interface Tray : 30 types (When sATS installed), 60 types (When dYTF installed) Max., JEDEC
	External dimension (mm)	L1,655 x W1,562 x H1,445 L1,655 x W1,904 x H1,545 (When sATS installed) L2,859 x W1,689 x H1,445 (When dYTF installed)
Mounter category	Weight	Approx. 1,650kg (Main unit only), Approx. 150kg (sATS only), Approx. 450kg (dYTF only)
Mounter category	Multi-Functional Wide-Range Modular YS88	
	Model	YS88 (Model : KJH-000)
Mounter category	Applicable PCB (mm)	L50 x W50 to L700 x W460 (W410 when sATS installed)
	Mounting capability	8.4k CPH - 7.9k CPH (IPC 9850)
Mounter category	Mounting accuracy	Absolute accuracy (μ+3σ) : +/- 0.05mm/CHIP(QFP) Repeatability (3σ) : +/- 0.03mm/CHIP(QFP)
	Applicable components	0402(Metric base) to 55x 100mm, Max Height 25.5mm, Ball type electrodes applicable
Mounter category	Number of component types	Tape reel : 90 / 119 types (Max., 8mm width), 67 / 81 types (When sATS installed) with 16 / 12mm pitch interface Tray : 30 types (When sATS installed), 60 types (When dYTF installed) Max., JEDEC
	External dimension (mm)	L1,655 x W1,562 x H1,445 L1,655 x W1,904 x H1,545 (When sATS installed) L2,859 x W1,689 x H1,445 (When dYTF installed)
Mounter category	Weight	Approx. 1,650kg (Main unit only), Approx. 150kg (sATS only), Approx. 450kg (dYTF only)
Mounter category	High-Speed High-Precision Hybrid AOI YSi-12 YSi-S	
	Model	YSi-12 (In-line) YSi-S (Off-line)
Mounter category	Applicable PCB (mm)	L50 x W50 to L620 x W460 (Optical inspection area) Max L1,000 applicable L50 x W50 to L510 x W460 (Optical inspection area) Max L650 applicable
	Inspection speed	15 sec for L330 x W250 PCB (18msec/cm ² or 5,555mm ² /sec) *In case of resolution 19μm (44.6 x 37.4mm/view, 0.32sec/view) 25 sec for L330 x W250 PCB (29.5msec/cm ² or 3,390mm ² /sec) *In case of resolution 19μm (44.6 x 37.4mm/view, 0.42sec/view)
Mounter category	Resolution	Visible RGB / Intra-Red : 19μm / 10μm / 5μm / 0.7μm (Factory build options) Laser Height: 5μm Visible RGB / Intra-Red : 19μm / 10μm (Factory build options) Laser Height: 5μm
	Target items	Post Printing, Post Mounting, Post Reflow Post reflow
Mounter category	Camera	5M pixel color CCD 5M pixel color CCD
	External dimension (mm)	L1,254 x W1,440 x H1,445 L1,106 x W1,305 x H1,445
Mounter category	Weight	Approx. 1,250kg Approx. 750kg

* All Mounter Power supply is [3-Phase AC 200/208/220/240/380/400/416V +/-10% 50/60Hz]

* All AOI Power supply is [Single-Phase AC 200/208/220/230V +/-10% 50/60Hz]

* All Mounter machines Air supply source is [0.45MPa], AOI machines [0.4MPa or more, in clean, dry state] (Only when marker unit installed)

Official Yamaha IM Partner :



JUST FIT SOLUTION No.1

YS SERIES

YAMAHA INTELLIGENT SMT ASSEMBLY SYSTEM

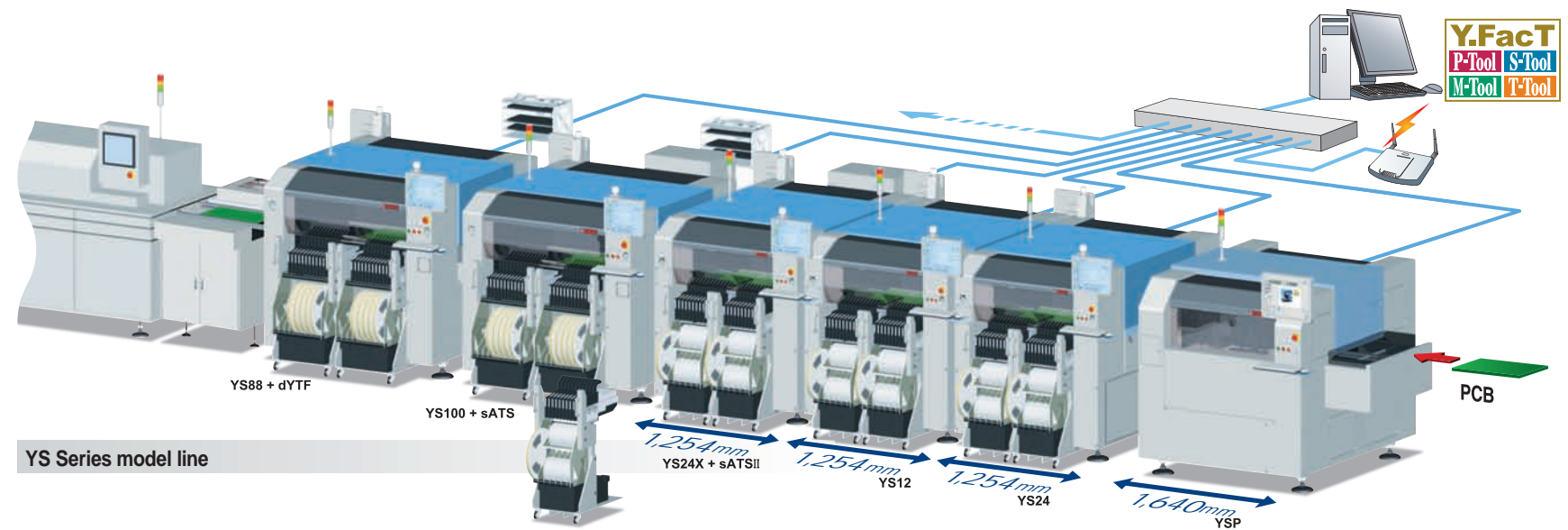


JUST FIT SOLUTION No.1

Value 1 Electric powered "ES feeder" with thin / light / compact body



- Quick and accurate position control by servo-motor drive. By control of variable speed and changeable interval, the components feeding achieves wide flexibility and high-speed stable supply.
- Excellent setup handling by single lane design.
- Effective intelligent functions by micro-computer. ID verification, LED indicator, Splicing-sensor application, maintenance history, ...etc.
- For tape reels from 4mm to 88mm width, made for each tape widths & small strips.
- Low maintenance cost.

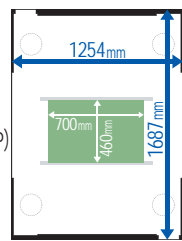


Value 2 Superb Area-Productivity

Area-productivity, Top class in the world!

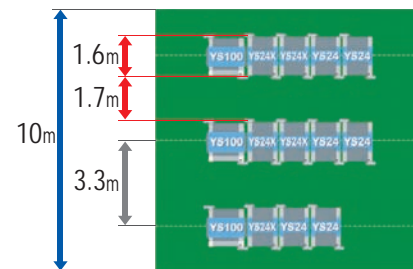
YS24

72k CPH (0.05 sec/CHIP)
34k CPH/m²
120 Types (Max.)

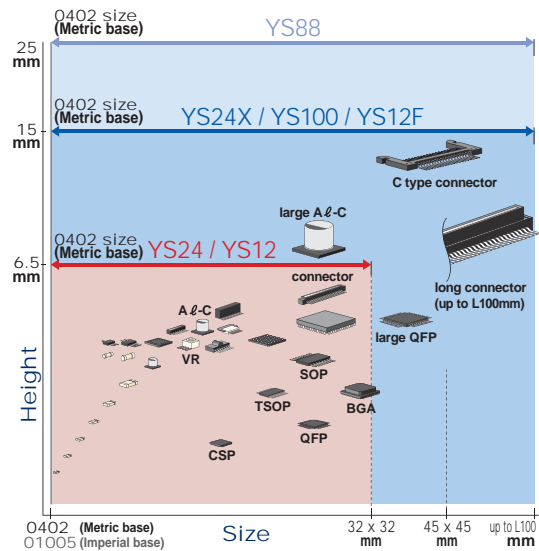


A compact platform design contributes to a free line formation.

- The limited floor space can be used to its maximum.
- The line formation can be easily re-arranged.
- Enough work space can be secured.

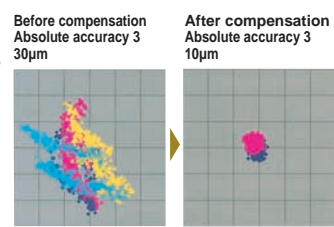


Value 3 Wide flexibility & Excellent mounting quality



Multiple Accuracy Compensation System : MACS

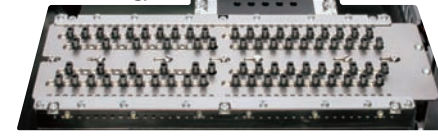
In order to achieve high accuracy mounting, MACS is adopted. This system has a function to grasp the elements of the machine that affect the mounting accuracy organically and make overall and multiple adjustment for compensation. It is fully usable in the heat cycle environment. The automatic feedback function serves to maintain the initial accuracy against the secular change.



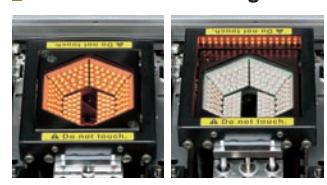
Side-view recognition system



Nozzle station (ANC : Auto Nozzle Change) & Nozzle cleaning station (for executing nozzle self-cleaning)



Multi-camera & Side light



Value 4 Improving Productivity & Reliability! "Y.FacT" & "IT-Option"

P-Tool [Y.FacT]'s Data Programming Package

- Program data creation / conversion / optimization

M-Tool [Y.FacT]'s Line Monitoring (control) Package

- Components remainder centralized monitor

T-Tool [Y.FacT]'s Traceability (Lot Trace) Package

- Production lot / product ID record management

S-Tool [Y.FacT]'s Setup Navigation Package

- Setup verification (IT-Option)

- Automatic setup change (IT-Option)

- Remaining components counter (IT-Option)

Value 5 High-speed! Excellent printing! the YSP printer

Line-tact 11.0 sec/cycle*

- High-speed printing capability * L180 x W130mm PCB, Squeegee speed 100mm/sec, etc.

Positioning repeatability (3σ) ±0.005mm

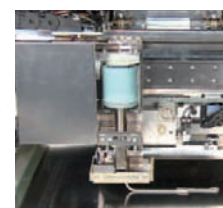
3S Head (3S : Swing Single Squeegee)

- Variable printing attack angle
- Useless solder paste reduction
- Easy cleaning

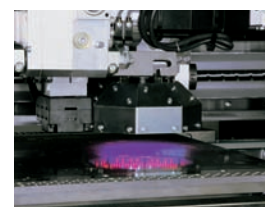


PSC : Print Stability Control

- Stability of printing quality
- Shortening of setup time
- Decrease of loss solder paste



Print inspection camera



Value 6 Quick! Easy! No-mistake! Operation & Setup

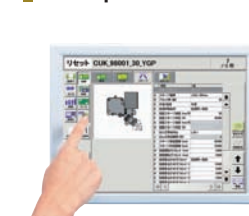
Compact & Easy handling, Feeder Exchange Carriage



ES setup station (on machine)

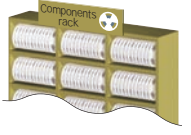
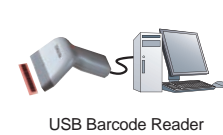


Touch panel function



S-Tool [Y.FacT]'s Setup Navigation Package

- Everyone can understand and execute the setup, without any mistake.



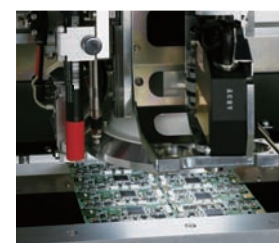
Value 7 Cooperation with YSi AOI

One click conversion / creation, AOI program data

- PCB / CAD mount program data → [YSi-12 / YSi-S]'s inspection program data

QA Option

- True close loop inspection process

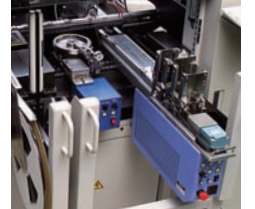
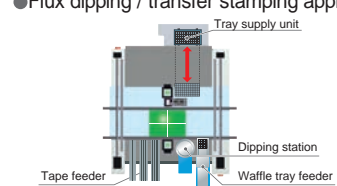


Value 8 Customizing Flexibility

PoP / SIP* application *

- Flux dipping / transfer stamping application

Package on Package / System in Package



Special carrier application

Shield-case application

Solder-tape cutting and mounting application