

SMT Innovation

YSM10

High-Speed Compact Modular



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YSM10

YSM series entry model mouter that achieved both the world's fastest speed and versatility in its class worldwide!

Note: Comparison of chip mounting performance (CPH) under optimal conditions in 1-beam 1-head class surface mounters (In-house company research as of January 2017)

The 1-head solution!

Handles components from tiny 03015 chips to 55mm × 100mm sizes without requiring head replacement

No.1 mounting speed in its class!

46,000CPH (under optimum conditions as defined by Yamaha Motor)

Single Platform

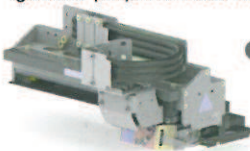
Integrates three YS12 model types into 1 unit!



Feature ① Ultimate basic machine featuring the three "1"

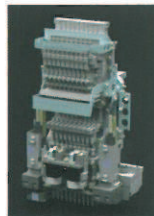
The 1-head solution!

Handles a wide range of components from 03015 (0.3mm × 0.15mm) ultra-micro-chips to large parts 55mm × 100mm and 15mm in height and needs no head replacement since it uses high-speed general-purpose heads the same as high-end models.



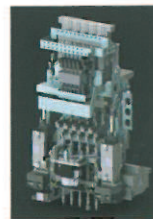
● New scan camera

Improves scan camera performance that expands the size of high-speed mounting parts to 12mm.



● HM (High-speed Multi) head

Standard type with 10 nozzle specifications for a compact body, light-weight, high-speed and versatility.



● HM 5 head

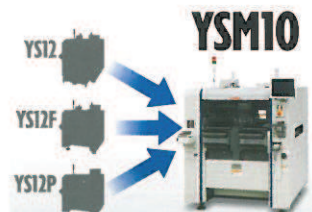
Economy type having 5 nozzles with HM head functions unchanged, it is selectable according to productivity and budget needs.

Mounting speed making it No. 1 in its class!

By adopting a new-generation servo system from upper-ranked models and utilizing a lightweight and compact universal type head we have speeded up mounting more than 25% compared to conventional models to achieve the world's fastest mounting speed in its class of 46,000 CPH (this number)

Single Platform

Here, 3 models or namely the YS12 with flexibility and mobility, YS12P with some simpler specifications, and YS12F with superb component handling compatibility are integrated into one type of platform. This is a super-entry model combining high parts compatibility and versatility along with the usual small size body, high speed, and space saving space



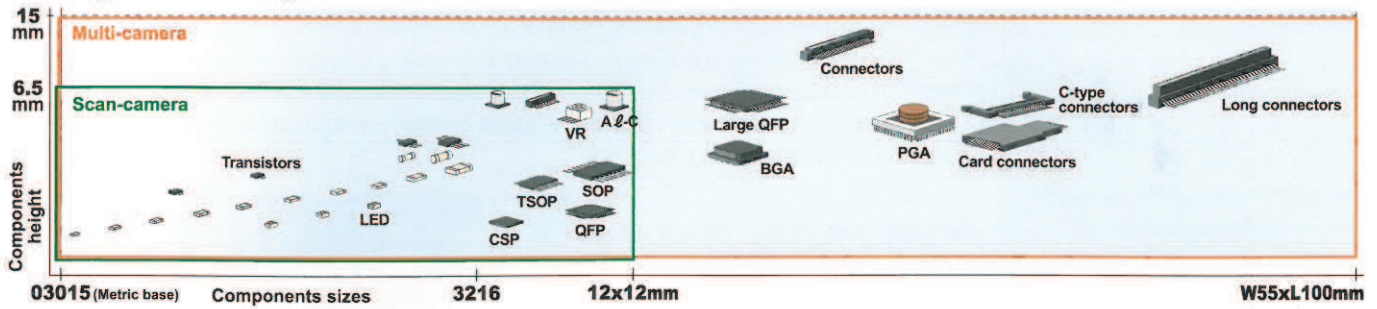
Feature ② Flexible response for different production configurations!

Compatible components

Note: For parts sizes larger the width 45mm, recognition of parts is divided into sections.

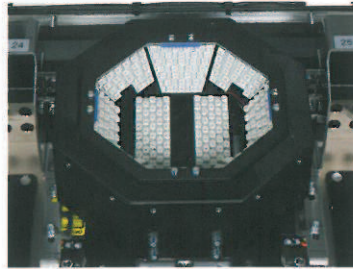
Multi-camera

Scan-camera



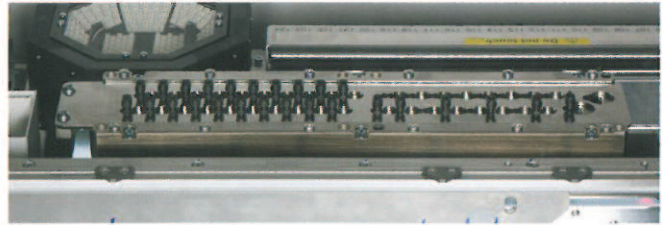
Multi-camera

High-speed and high-accuracy parts recognition to sizes exceeding 12mm or heights exceeding 6.5mm.



Nozzle station

Automatic replacement of spare nozzles and special order nozzles available.



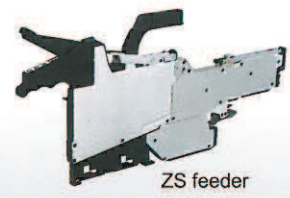
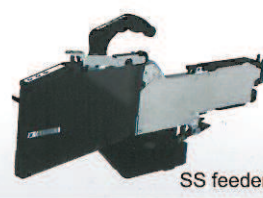
Automatic replacement tray supply unit "sATS15"

A maximum of 15 parts trays can be loaded. (at tray pitch of 12.5mm)



Tape feeder

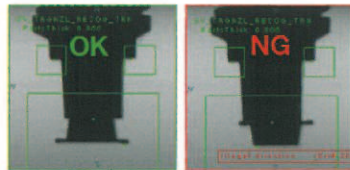
Electric-drive intelligent feeders "SS feeder" and "ZS feeder" fully compatible with all YS series models.



Feature ③ Functions that ensure stable production

Side view function

Eliminates mounting errors by detecting parts, missing parts, and part pickup status with no time loss.



Automatic recognition optimizer function

Prevents pickup and recognition errors by applying a function (smart recognition) that does easy data generation for parts having complex shapes and also a recognition data auto-generator & tracking function. (e-Vision)

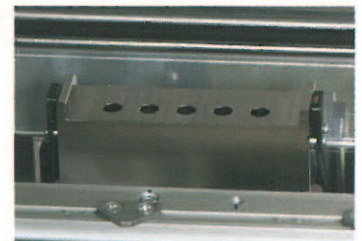


Highly stable & reliable pickup system

Maintains superb part pickup performance by way of a pickup height auto-teach function and pickup position auto compensator function.

Blow station

Nozzle shafts are automatically cleaned to keep the nozzle in good condition for long periods of time. A nozzle health check function applies automatic recovery processes such as nozzle blow and a protect function to prevent use of abnormal nozzles.



Conforms to CE marking standards

Worldwide operability with equipment design that gives safety number one priority.

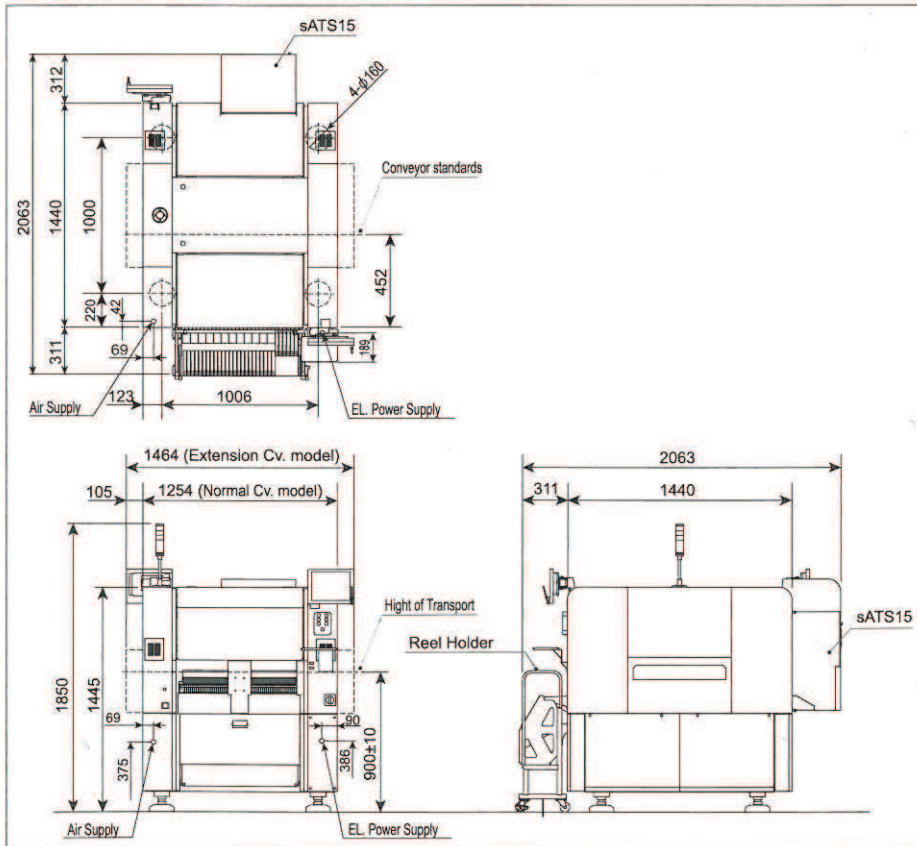
Note: This name signifies a safety standard required for equipment for install and usage in Europe.

YSM10 Specifications

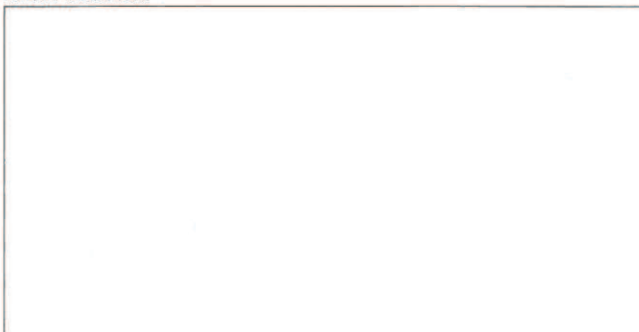
Note: Specifications and appearance are subject to change without prior notice.

Model	YSM10
Applicable PCB	L510 x W460mm to L50 x W50mm Note: Available in lengths up to L610mm as an option
Applicable components	03015 to W55 x L100mm (For parts sizes larger the width 45mm, recognition of parts is divided into sections.), Height 15mm or less Note: A multi camera (option) is required for part heights exceeding 6.5mm or part sizes exceeding 12mm
Mounting capability	HM head (10 nozzle) specification : 46,000CPH (under optimum conditions as defined by Yamaha Motor) HM 5 head (5 nozzle) specification : 31,000CPH (under optimum conditions as defined by Yamaha Motor)
Mounting accuracy (Under optimum conditions as defined by Yamaha Motor when standard evaluation materials are used)	$\pm 0.035\text{mm}$ ($\pm 0.025\text{mm}$) $Cpk \geq 1.0$ (3σ)
Number of component types	Fixed plate : Max.96 types (conversion for 8mm tape feeder) Tray: 15 types (maximum when equipped with sATS 15, JEDEC)
Power supply	3-Phase AC 200/208/220/240/380/400/416V +/- 10% 50/60Hz
Air supply source	0.45MPa or more, in clean, dry state
External dimension	L1,254 x W1,440 x H1,445mm
Weight	Approx. 1,270kg

YSM10 External dimension



DISTRIBUTOR



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