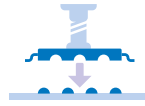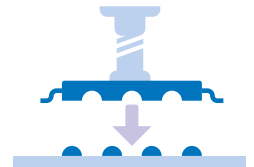JUKI
smart.fast.modular.

PLACEMENT *SOLUTION*

RS-1
Fast Smart Modular Mounter

HARDWARE OPTIONS FOR RS-1

RS-1 PLACEMENT
Fast Smart Modular Mounter

Placement speed:	42,000 CPH (optimum)
Board size:	650 × 370 mm (standard configuration)
Component size:	0201* (metric) ~ 74 mm / 50 × 150 mm

*Please contact us for availability.

Up to 112 feeders

Rated 42,000 CPH

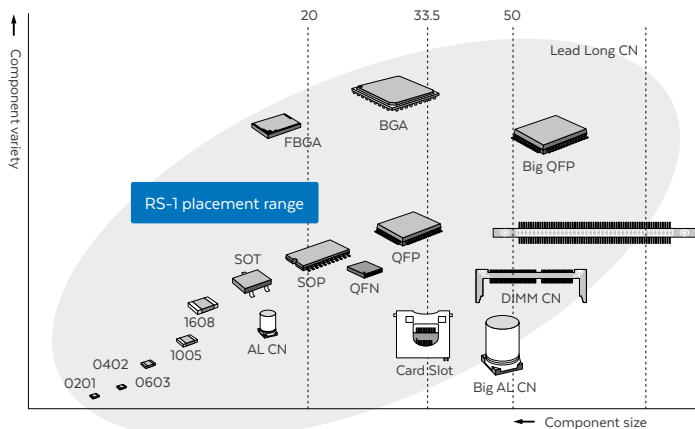## SMART MACHINE 1
For High Speed Chip Placement

Class leading speed, up to 42,000 CPH
Maximum speed of up to 42,000 CPH*. This is possible due to a revolutionary head design that reduces travel time and distance for every placement.

New RF feeders are smaller, thinner and lighter
The new RF feeders are 17 % smaller and 50 % lighter, but still maintain the same high degree of positional accuracy. The thinner width allows up to 112 feeder inputs.*

*Total for front and rear

SMART MACHINE 2
For High Flexibility

Wide component range
RS-1 supports components from 0201* (metric) up to 74 mm square or 50 × 150 mm rectangular parts. The RS-1 component height goes up to 25 mm.
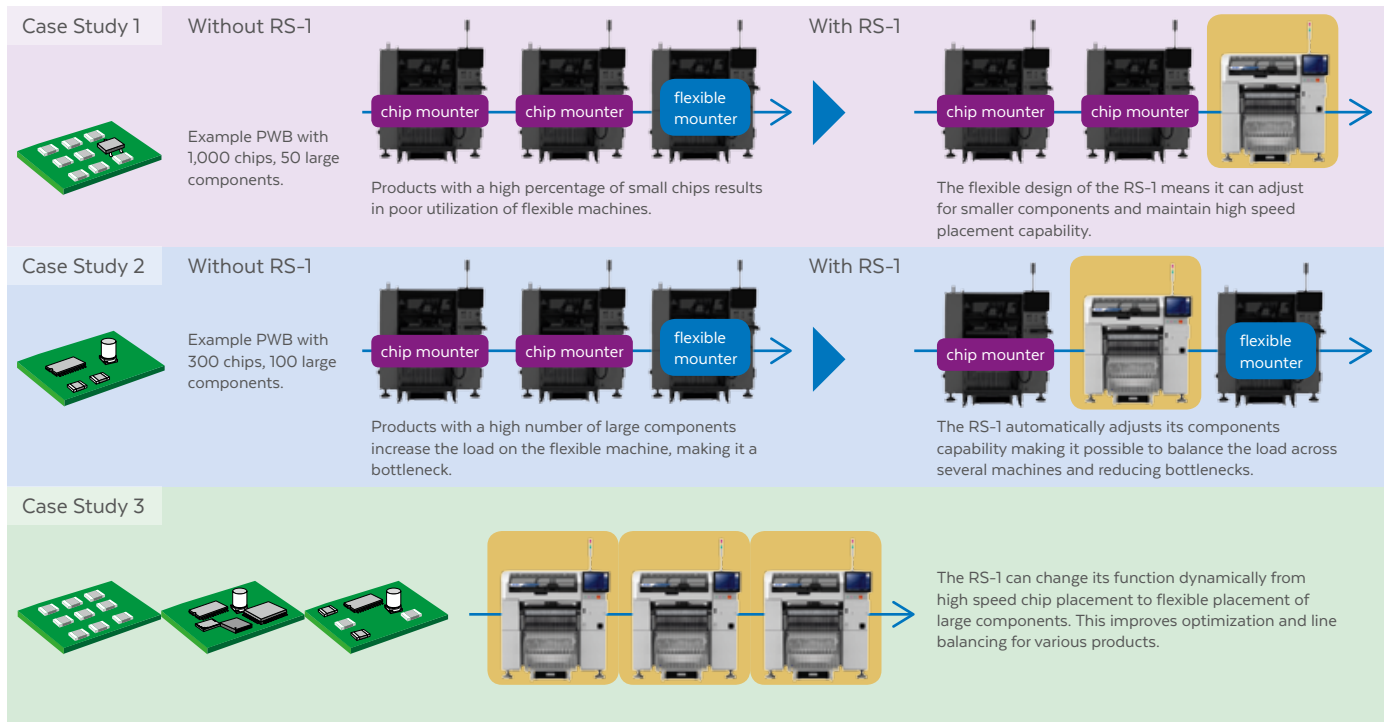
0201* (metric) 74 mm or 50 × 150 mm

*Please contact us for availability.

SMART MACHINE 3
Line Balancer

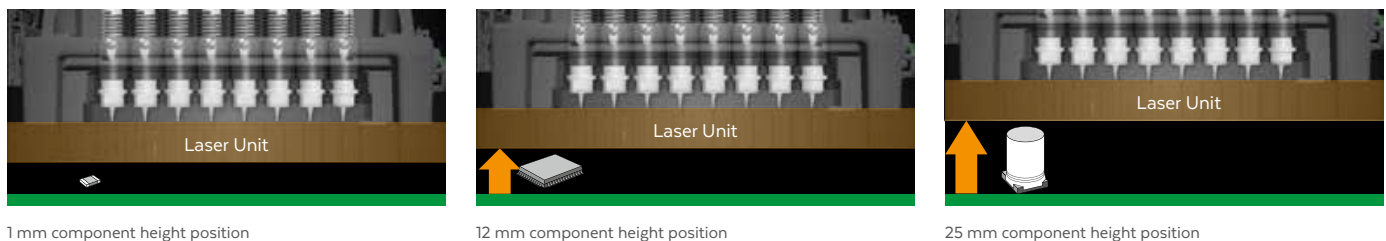**Optimum line balance and highest throughput on any product**

Changing the RS-1 functionality does not require a head replacement. The revolutionary head design adjusts automatically to the production requirements. It can be used in-line with high speed chip placement machines to improve overall line productivity or to make the line more flexible for complex PCBs with a high number of large components.

Case Study 1

Without RS-1

Example PWB with 1,000 chips, 50 large components.

chip mounter → chip mounter → flexible mounter

Products with a high percentage of small chips results in poor utilization of flexible machines.

With RS-1

chip mounter → chip mounter →

The flexible design of the RS-1 means it can adjust for smaller components and maintain high speed placement capability.

Case Study 2

Without RS-1

Example PWB with 300 chips, 100 large components.

chip mounter → chip mounter → flexible mounter

Products with a high number of large components increase the load on the flexible machine, making it a bottleneck.

With RS-1

chip mounter → → flexible mounter

The RS-1 automatically adjusts its components capability making it possible to balance the load across several machines and reducing bottlenecks.

Case Study 3

The RS-1 can change its function dynamically from high speed chip placement to flexible placement of large components. This improves optimization and line balancing for various products.

SMART TECHNOLOGY 1
New Head Design

The RS-1 new head design automatically adjusts the height according to the height of components to be placed next.
This technology reduces the Z travel distance to the required minimum, allowing an increase of throughput to a maximum regardless of the product.
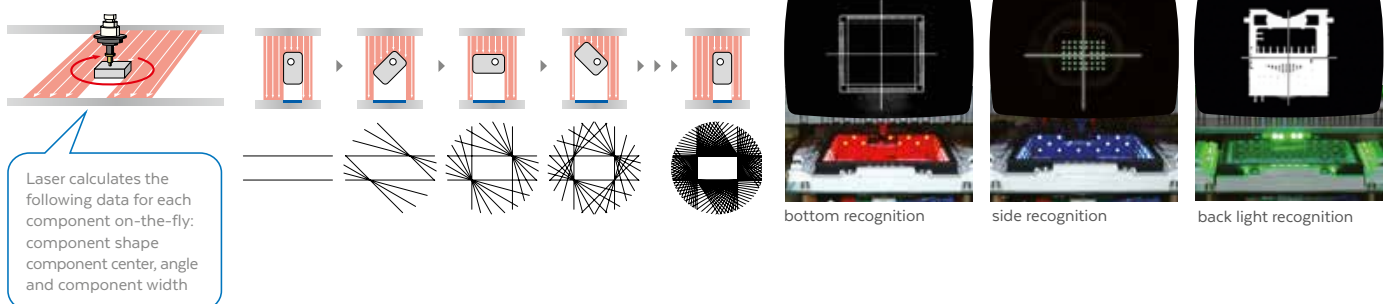
Laser Unit

Laser Unit

Laser Unit

1 mm component height position

12 mm component height position

25 mm component height position

SMART TECHNOLOGY 2
JUKI Technology

JUKI´s On-The-Fly centering technology is fast, accurate and reliable for a wide range of components.
Wide range of supported components including PLCC, SOP, QFP, BGA and many more. Size from 0201* (metric) to 50 mm square.

Recognition algorithm

Please contact us for availability.

Laser calculates the following data for each component on-the-fly: component shape component center, angle and component width

bottom recognition

side recognition

back light recognition

SPECIFICATIONS

		Technical Data RS-1
Board Size		max. 650 × 370 mm (single clamping)
		max. 950 × 370 mm (double clamping)[*1]
		max. 1,200 × 370 mm (double clamping)[*2]
Component height		25 mm
Component size		0201[*3] (metric) ~ 74 mm / 50 × 150 mm
Placement Speed	Optimum	42,000 CPH
	IPC9850	29,000 CPH
Placement accuracy		± 0.035 mm (Cpk ≥ 1)
Feeder inputs		max. 112[*4]
Power supply		200 ~ 415 VAC, 3-phase
Apparent power		2,2 kVA
Operating air pressure		0.5 ± 0.05 MPa
Air consumption		max. 50L / min
Machine dimensions (W × D × H)		1,500 × 1,810 × 1,440 mm
Mass (approximately)		1,700 kg

[*1] Software-Option required.
[*2] 250 mm conveyer extension required.
[*3] Please contact us for availability.
[*4] When using RF Feeder Series on front and rear.
Please refer to product specifications for details.

Specifications and design subject to change without notice.

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