

# Specifications

Item		Model	Multitask Platform JM-10		Multitask Platform JM-20	
			M-size board	L-size board	L-sized board	X L-sized board
Board Size	Single Clamp		410×250mm	410×360mm	410×360mm	410×560mm
	Double Clamp		-	-	800×360mm	800×560mm
PCB Weight			Max. 2kg		Max. 4kg	
Component Height	28mm		○		○	
	55mm		-		○	
Component Size	Laser recognition		0603~□3.5mm		0603~□5.0mm	
	Vision recognition ※1	54mm view camera	□3mm~□3.5mm		□3mm~□5.0mm	
		27mm view camera	1005~□2.4mm		1005~□2.4mm	
Insertion Speed	Vacuum (JUKI Condition) ※2		0.8 sec/part ※3		0.8 sec/part ※3※4	
Placement Speed (SMT)	Chip (Optimal)		17,500 CPH ※3		15,500 CPH ※3※4	
	IC		4,100 CPH ※3		4,200 CPH ※3※4	
Placement Accuracy (SMT)	Laser recognition		±0.05mm (3σ)		±0.05mm (±3σ)	
	Vision recognition ※1		±0.04mm		±0.04mm	
Power supply			200 to 415 VAC 3-phase		200 to 415 VAC 3-phase	
Apparent power			1.8kVA		2.0kVA	
Circuit breaker			○		○	
Operation air pressure			0.5±0.05 Mpa		0.5±0.05 Mpa	
Air consumption			5.0 L/min		5.0 L/min	
Vacuum pump			○		○	
950mm conveyor height ※1			○		○	
Machine dimension (W×D×H) ※5			1,455×1,295×1,460mm		1,500×1,657×1,550mm	1,500×1,892×1,550mm
Mass (Approximately)			1,000kg		1,760kg	1,985kg

※1 Optional specification.  
 ※2 Under JUKI condition (Component type: aluminum electrolytic capacitor (φ8mm), Supply device: MRF-S x 2; Two points simultaneous pick x 3 times/cycle (6 nozzles), Axis speed: Default value for component type "Insertion component" "INS electrolytic capacitor (JM-20 only)".  
 ※3 Excludes time for PWB conveyance and mark recognition.  
 ※4 For component height 28mm.  
 ※5 Dimensions of machine described are for conveyor height 900mm.

## Options

	Multitask Platform JM-10		Multitask Platform JM-20	
	M-size board	L-size board	L-sized board	X L-sized board
Check nozzle base ※1	-	-	●	●
C-ATC (ATC for Chuck nozzle)	-	-	●	●
Rear side operation unit	-	-	●	●
Conveyor extension 250mm	-	-	●	●
Conveyor guide 100mm	●	●	-	-
Main line filter	●	●	●	●
Conveyor height 950mm	●	●	●	●
Placement Force Control	-	-	●	●
Vision centering System(5.4mm view camera)	●	●	●	●
Vision centering System(27mm view camera)	●	●	●	●
SMT feeder version bank(Selectable Front and/or Rear)	-	-	●	●
SMT connector bracket	-	-	●	●
MI Line Optimizer ※2	●	●	●	●
Lead correction jig ※3	●	●	●	●
DFFP camera	●	●	●	●
Production management information output function	●	●	●	●

※1 For using chuck nozzle, separate custom parts will be required.  
 ※2 This option is available for line control optimization.  
 ※3 Please contact us for detailed specifications

## Feeder capacity ※3

	Tape feeder in case of 8mm tape	Radial feeder		Axial Feeder		Stick Feeder	Bowl Feeder	Tray ※2 ※4		
		MRF-S	MRF-L	MAF-S	MAF-L			Tray Holder (full)	MTS (TRS) ※5	MTS (TR7DN)
JM-10	60	20	14	16	12	12	2	1	1	-
JM-20	80	26	20	22	16	16	2	2	1	1

※1 Customization possible.  
 ※2 Please contact our sales person for tray specification detail.  
 ※3 Max applicable number of same feeders (Front & Rear total).  
 ※4 Applicable only on rear side.  
 ※5 For M-size board only.

**JUKI ECO PRODUCTS**

The JM-20 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.

● The machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.

For details of JUKI ECO PRODUCTS, refer to: <http://www.juki.co.jp/eco/index.html>

※ The RoHS Directive is an EU Directive limiting the use of hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the environment.

**MS JAB CM001**

**JSA**

**EMIS ISO 14001 JSAE399**

**UKAS**

**JUKI CORPORATION HEAD OFFICE**

The activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines, household sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.

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※Please refer to the product specifications for details.  
 JUKI Specifications and appearance may be changed without notice.  
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**80th**  
 Global & Innovative

Multi Task Platform

**JM-10**  
**JM-20**

Auto Insertion (AI) | Surface Mount Technology (SMT) | Manual Insertion (MI)

**JM-10**

**JM-20**

Ultra flexible machine for everything from SMT to odd form through hole

**Multi Task Platform**

# Higher quality and labor savings by automating manual insertion

Multitask Platform

## JM-10



Compact model for applications with smaller components

## JM-20



Advanced model for larger/heavier components and larger boards

### Wide variety of feeder types<sup>※1</sup>

Feeders for tape, stick, radial, axial, tray, and bulk components. A wide variety of custom feeders are also available

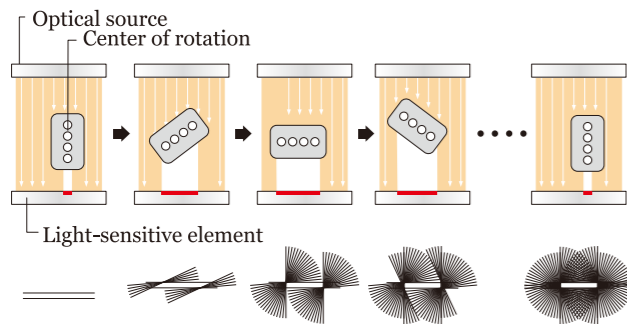
※ Feeders can be customized for specific components

Taped parts			Stick parts	
Bulk parts			Tray	

※ Available for JM-20 only

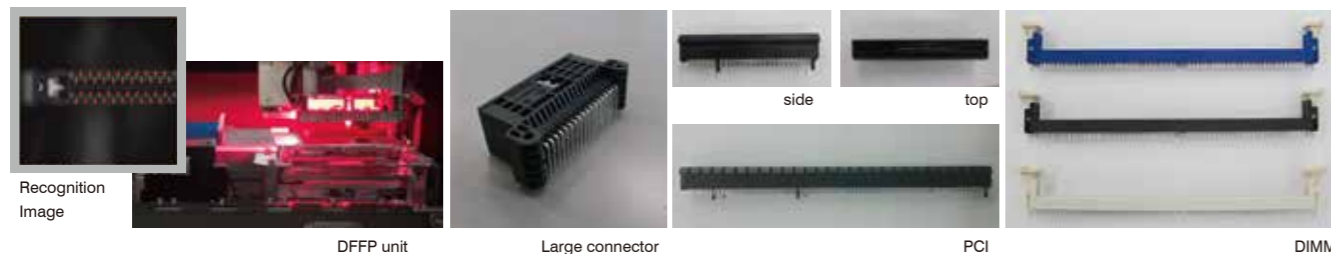
### Laser sensor for lead detection

● The laser sensor is ideal for lead tip detection leading to improved insertion process. Components are rotated 360 degrees in the laser. The entire outline of the component is measured accurately by a high resolution CCD sensor. The exact component position and angle are obtained in a fraction of a second without a side trip to a camera. After measuring the component body, the lead tips are measured to ensure accurate insertion.



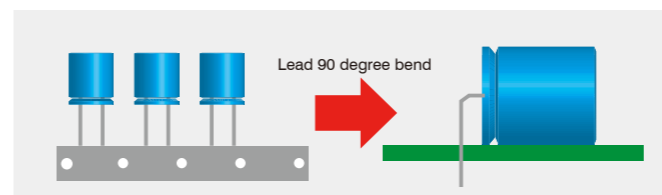
Recognizing component	Recognition result (body)	Recognition result (lead)	Recognition image	component image

● New vision recognition method called DFFP can precisely recognize lead tips for greater flexibility. Component such as DIMM and PCI connectors, and large automotive parts are supported.



### Lead 90 degree bend function Option

Aluminum capacitors in radial tape can be cut and formed for a 90 degree lead bend, saving manual labor.



### Lead Correction Unit Option

Leads that are not within tolerance to be inserted can be corrected using the Lead Correction Unit to prevent wasted component.

