

Specifications

		Multitask Platform		
		JM-10	JM-20	
		M-size board	L-sized board	XL-sized board
Board Size	Single Clamp	410×250mm	410×360mm	410×560mm
	Double Clamp	-	800×360mm ^{※1}	800×560mm
PCB Weight		Max. 2kg	Max. 4kg	
Component Height	28mm	○	○	
	55mm	-	○	
Component Size	Laser recognition	0603~□33.5mm	0603~□50mm	
	Vision recognition ^{※2}	54mm view camera	□3mm~□33.5mm	□3mm~□50mm
		27mm view camera	1005~□24mm	1005~□24mm
Insertion Speed	Vacuum (JUKI Condition)	0.8 sec/part	0.8 sec/part ^{※3}	
	Gripper (JUKI Condition)	1.3 sec/part	1.3 sec/part ^{※3}	
Placement Accuracy (SMD)	Chip (Optimal)	17,500 CPH	15,500 CPH ^{※3}	
	IC	4,100 CPH	4,200 CPH ^{※3}	
Placement Accuracy (SMD)	Laser recognition	±0.05mm (3σ)	±0.05mm (±3σ)	
	Vision recognition ^{※2}	±0.04mm	±0.04mm	
Residual number of components control ^{※2}		○	○	
Power supply		200 to 415 VAC 3-phase		200 to 415 VAC 3-phase
Apparent power		1.8KVA		2.0kVA
Circuit breaker ^{※2}		○		○
Operation air pressure		0.5±0.05 Mpa		0.5±0.05 MPa
Air consumption		345 L/min 50L/min in case with vacuum pump		50 L/min
Vacuum pump		○ ^{※2}		○
950mm conveyor height ^{※2}		○		○
Machine dimension (W×D×H) ^{※4}		1,445×1,295×1,460mm	1,500×1,657×1,550mm	1,500×1,892×1,550mm
Mass (Approximately)		1,000kg	1,760kg	1,985kg

※1 Requires long PWB option (indexes PWB twice)
 ※2 Optional specification.

※3 For component height 28mm.
 ※4 Dimensions of machine described are for conveyor height 900mm.

Options

	Multitask Platform		
	JM-10	JM-20	
	M-size board	L-sized board	XL-sized board
ATC 6-6	●	-	-
ATC 10-12	-	-	●
Check nozzle base ^{※1}	-	-	●
C-ATC (ATC for Chuck nozzle)	-	-	●
Rear side operation unit	-	-	●
Conveyor extension 150mm	-	-	●
Conveyor extension 250mm	-	-	●
Conveyor guide 100mm	●	-	-
Three-color signal light (with buzzer)	●	-	●
Vacuum pump	●	-	(Standard)
Main line filter	●	-	●
Circuit breaker	●	-	●
Conveyor height 950mm	●	-	●
Placement Force Control	-	-	●
Long board support	-	●	(Standard)
Vision centering System(54mm view camera)	●	-	●
Vision centering System(27mm view camera)	●	-	●
SMT feeder version bank(Selectable Front and/or Rear)	-	-	●
SMT connector bracket	-	-	●
MI Line Optimizer ^{※2}	●	-	●
Residual number of components control	●	-	●

※1 For using chuck nozzle, separate custom parts will be required.
 ※2 This option is available for line control optimization.

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_e/index.html

※The RoHS Directive is an EU Directive limiting the use of 6 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

EMS ISO 14001 JSAE389

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.

※Please refer to the product specifications for details.



MANUFACTURER : JUKI CORPORATION
 INQUIRY : JUKI AUTOMATION SYSTEMS CORPORATION
 2-11-1, Tsurumaki, Tama-shi, Tokyo 206-8551, JAPAN
 TEL.81-42-357-2321 FAX.81-42-357-2297

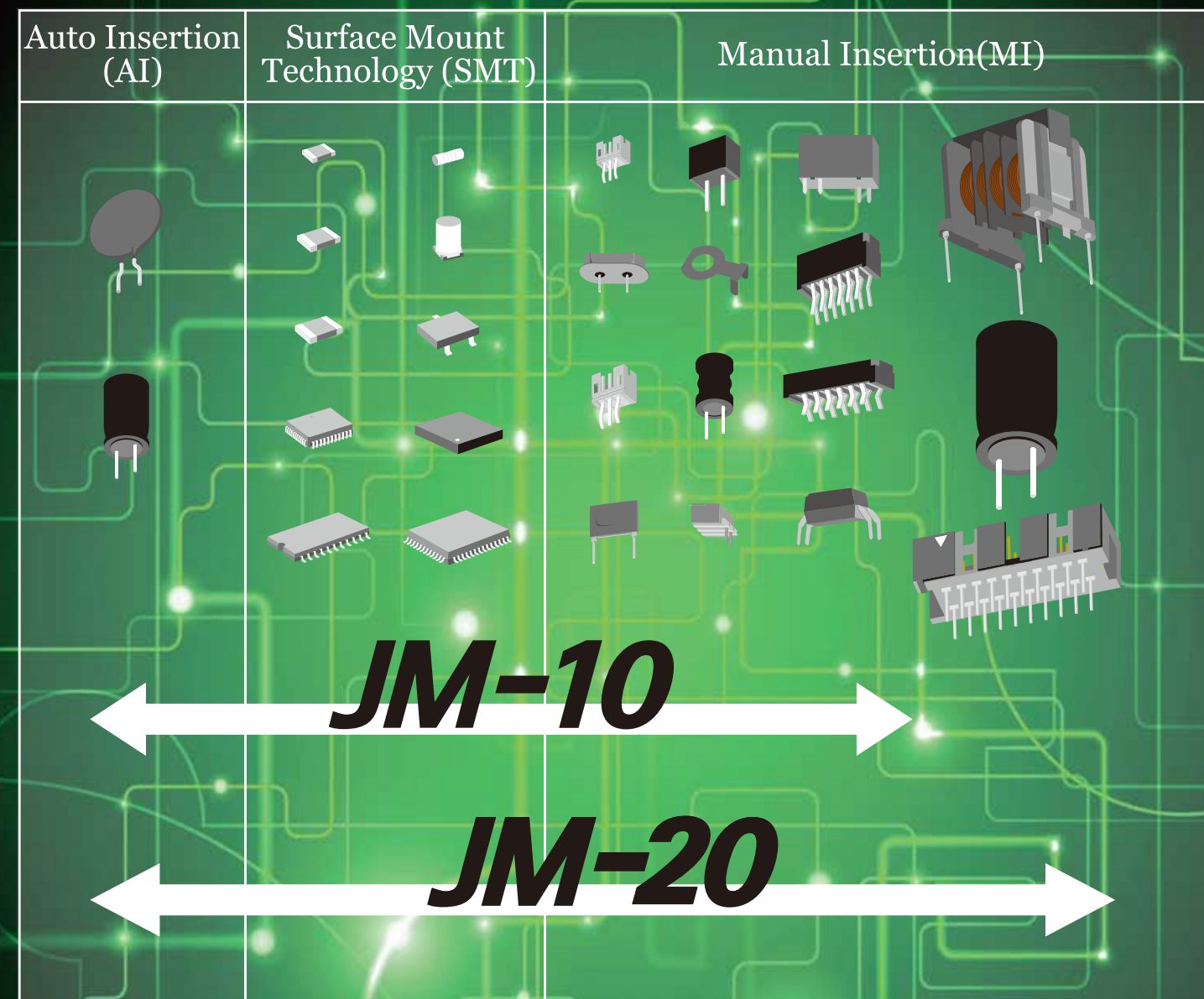
<http://www.juki.co.jp>

JUKI Specifications and appearance may be changed without notice.
 Aug-2013/Rev.02



JUKI's Latest Technology

Introducing the JM Series - Automating the Manual Insertion Process



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

Laser sensor for lead detection

The laser sensor is ideal for lead tip detection leading to improved insertion process

Optical source
Center of rotation

Light-sensitive element

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.

Laser sensor integrated into placement head

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

Improved placement quality with component detection function
Laser detects component presence from pick to placement, reducing defects.

Component dimension check	Component fall check	Release check
Compare the dimensions of the part picked to the component data to ensure the right part is picked.	Laser checks if the component falls before placement.	Laser checks if the component is properly released on the board after placement.

Wide variety of feeder types^{※1}

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

Tape feeder types				
Radial Feeder (MRF-S/MRF-L)	Radial Feeder for snap-in MRF-LF	Axial Feeder MAF-S	Axial Feeder MAF-L	Tape Feeder (SMT) CTR
Stick feeder		Bulk and tray feeders		
Stick Feeder	Bowl Feeder MBF (fixed) MBF-C (tolley)	Bowl Feeder for large component MBF-L (tolley)	Tray Holder	Matrix Tray server TR5

Feeder capacity^{※3}

	Tape feeder in case of 8mm tape	Radial feeder		Axial Feeder		Stick Feeder	Bowl Feeder			Tray ^{※2※6}	
		MRF-S	MRF-L	MAF-S	MAF-L		MBF ^{※5}	MBF-C ^{※5}	MBF-L	Tray Holder (full)	MTS
JM-10	60	20	14	16	12	12	1-2 ^{※4}	1	2	1	1
JM-20	80	26	20	22	16	16	-	2	2	2	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 Max 2 units for MBF bank, max 1 unit for mechanical bank.
 ※5 Applicable only on front side.
 ※6 Applicable only on rear side.

Nozzle types

JUKI has many years of experience making specialty nozzles for a wide variety of applications.



Global network to support automatization

We provide world wide support for our multi-national customers.



Our global network enables quick response for your customization request.