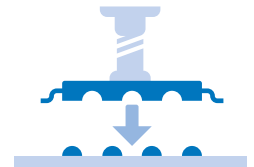




## PLACEMENT SOLUTION

**JM-100**

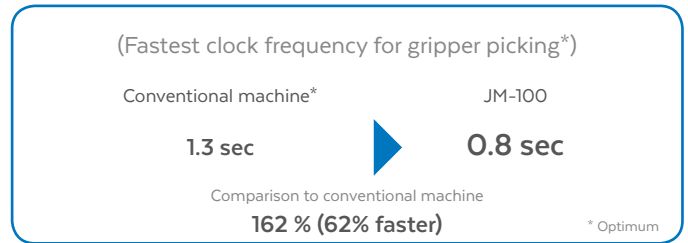
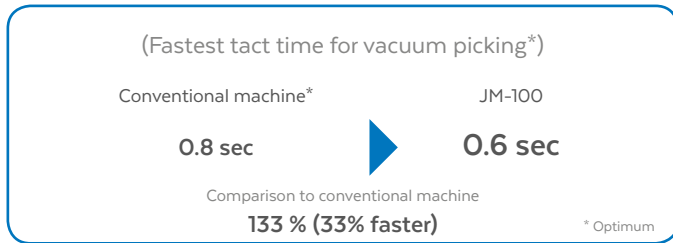
Multi Task Platform



# ADVANCED MI SOLUTION

## FEATURE 1: FAST INSERTION

Best speed in this category. Significant speed increase over previous generation. Component insertion time down to 0.6 seconds for vacuum nozzle and 0.8 seconds for gripper nozzle.



## FEATURE 2: NEW „TAKUMI HEAD“ WITH MULTIPLE RECOGNITION HEIGHTS

The new “Takumi head” has 8 nozzles and is equipped with a height-adjusting laser to optimize speed. This head can handle a wide range of components while maintaining the maximum speed.

### Variable height laser sensor

The laser sensor changes its height automatically according to the component height, in order to minimize the movement and to optimize speed.

The height can change according to height of component between 4 different settings.

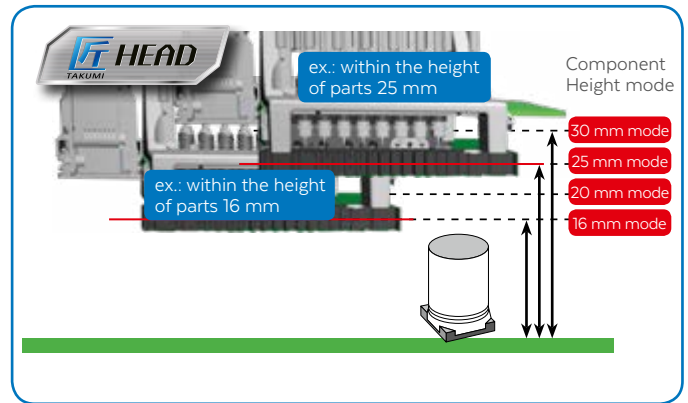
### Improved productivity with 8 nozzles

The JM-100 uses 8 nozzles compared to the previous generation’s 6 nozzles.

This increases the number of parts which the machine is able to pick during each cycle and reduces overall cycle time.

### Wide component range from small to large and heavy

Components from metric O603 up to 50 mm square with a weight of up to 200 g. Maximum insertion force of up to 50 N.



### 16 mm height



DIP switch



Ceramic capacitor



Connector



DIP IC



Axial resistance



3P connector



7-segment indicator

### 20 mm / 25 mm height



DC Jack



Coil



PIN Jack



Coil



PIN Jack

and others

### 30 mm height



AL electrolysis



Aluminium Electrolysis

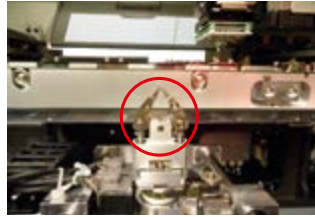
and others

# IMPROVED VERSATILITY, QUALITY AND SPEED

## FEATURE 3: ACTIVE CLINCHING

Option

New active clinch unit supports bend in, bend out, and N bend to prevent components from lifting during reflow.

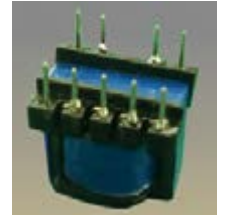


Clinch unit

## FEATURE 4: 3D IMAGE RECOGNITION

Option

A revolutionary new 3D image sensor measures the entire component bottom with greater accuracy. Even odd-shaped parts and multi-pin insert parts without specular surface leads can be inserted.



Recognition image

## FEATURE 5: COMPONENT FEEDING\*

Option

\* Customized according to package requirements

Feeders are available for many different supply methods including tape, stick, tray, and bulk. Custom-designed feeders are also available.

### Taped parts



Radial Feeder  
MRF-S/MRF-L /SNAP IN

Axial Feeder  
MAF-S/MAF-L

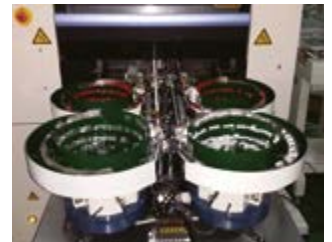
Tape feeder  
(SMT) CTFR

### Stick parts



Stick feeder

### Bulk parts



Bowl feeder

### Spare trolley

Quickly exchangeable feeder trolley for radial and axial feeders. Ideal for lower volume, higher mix production.



### Tray



Tray Holder



Matrix tray server  
TR5SNK

## FEATURE 6: LINE CONTROL USING JANETS SOFTWARE

Option

The JaNets software allows centralized programming and control of the entire line. Management data is available to monitor productivity and quality.

### Line Manager

Production programs are created, edited and downloaded from the client PC to the production line. After completion of production, all management data is available for review. Using the optional External Output function, the data can be shared with MES software.

### IFS-NX

Traceability function for full quality tracking.



Juki Advanced Network System

JaNets

Intelligent Feeder System

IFS-NX

## SPECIFICATIONS

		Multi Task Platform JM-100		
		Standard specification (Lsize PWB)	Cinch specification (Lsize PWB)	
			With using Cinch unit	Without using Cinch unit
	1 time clumping	50 mm × 50 mm ~ 410mm × 360 mm	80 mm × 100 mm ~ 410 mm × 360 mm	80 mm × 100 mm ~ 410 mm × 360 mm
	2 times clumping	50 mm × 50 mm ~ 800 mm × 360 mm	80 mm × 100 mm ~ 800 mm × 360 mm	80 mm × 100 mm ~ 800 mm × 360 mm
PCB Weight		max. 4 kg		
Component Height		max. 30 mm		
Component Size	Laser recognition	0603 ~ 50 mm		
	Vision recognition	3 mm ~ 50 mm		
Insertion Speed (In- sertion components)	Vacuum	0.6 sec / part <sup>*1 *3 *4</sup>		
	Grip	0.8 sec / part <sup>*2 *3 *4</sup>		
Placement Accuracy (SMT)	Laser recognition	± 0.05 mm (3σ)		
	Vision recognition	± 0.04 mm		
Power supply		200 to 415 V AC 3-phase		
Apparent power		1.8 kVA		
Circuit breaker		standard		
Operation air pressure		0.5 ± 0.05 MPa		
Keyboard		standard		
Air consumption (standard)		75 L / min		
950 mm conveyor height		950 mm ± 20 mm		
Machine dimension (W × D × H) <sup>*5</sup>		1,500 × 1,500 × 1,450 mm		
Mass (Approximately)		1,300 kg		

04/2019\_Rev01

<sup>\*1</sup> Specification conditions (Applicable part: Aluminum electrolytic capacitor (φ 8 mm), Feeder: two MRF-S, Placement conditions: Simultaneous pick, sequential insertions using 2 nozzles) <sup>\*2</sup> Specification conditions (Applicable part: Connector (4 pin), Insertion conditions: 2 sequential picks and insertions using 2 nozzles) <sup>\*3</sup> Board transfer and mark recognition time not included <sup>\*4</sup> When the part height is 16 mm <sup>\*5</sup> Conveyor height 900 mm

## OPTIONS

Multi Task Platform JM-100	
Multi Task Platform JM-100	Check nozzle base <sup>*1</sup> / Automatic board width adjustment (when cinch specification, standard) / Rear side operation unit / Conveyor extension 250 mm / Conveyor height 900 mm ± 20 mm / 3D image recognition <sup>*1</sup> / JaNets / IFS-NX / Conveyor cover / Production information output / Spare trolley / Main line filter / Lightning unit for solder recognition / Super foot / Feeder float sensor (for SMT) / Drive cylinders (for SMT) / Multi-code reader

<sup>\*1</sup> Availability TBD

## FEEDER CAPACITY<sup>\*1</sup>

Tape feeder in case of 8mm tape	Radial feeder		Axial feeder		Stick feeder	Tray <sup>*2 *3</sup>	
	MRF-S	MRF-L	MAF-S	MAF-L		Tray Holder (full)	MTS
56	18	14	14	10	10	1	1

<sup>\*1</sup> Max applicable number of same feeders (Front & Rear total) <sup>\*2</sup> Please contact our sales person for tray specification detail. <sup>\*3</sup> Applicable only on rear side

Specifications and design subject to change without notice.

European Headquarters:  
JUKI Automation Systems GmbH  
Neuburger Str. 41, 90451 Nuremberg, Germany

phone: +49 911 93 62 66 0  
fax: +49 911 93 62 66 26  
email: info@juki-smt.com

**JUKI**  
www.juki-smt.com