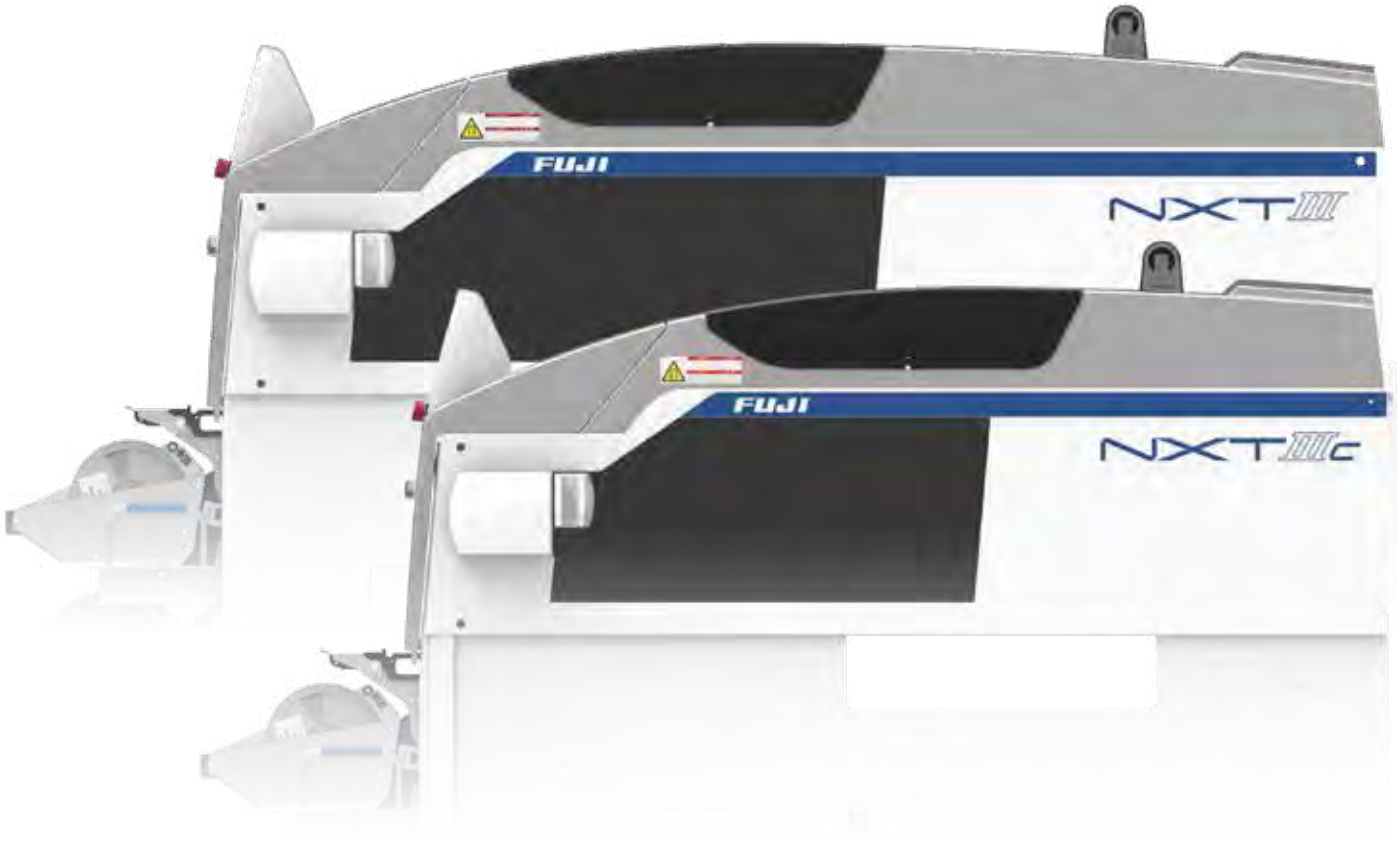
FUJI
innovative spirit

To cutting edge placing technology with continuing evolution



There are no means to reduce the part exchange times

Want to make it so anyone can handle errors

A good way to improve productivity

Leads to cost reduction?

Is there interchangeability?

Want to achieve high quality beyond all else

When you want to configure lines in a small area

Fuji has continued to meet our customers' calls.

The quantity of shipped modules for the NXT series,

exceeds 80,000 modules.

Since it first went on sale in 2003,
the NXT-series modular mounter hascontinued to
evolve while meeting customers' needs.

It is continuing to evolve further along with the
H24S head for which the speed has been
greatly increased.

Increase efficiency with simple traffic flow

Single side operation streamlines and optimizes the traffic flow of operators. This increases efficiency in supplying materials and performing maintenance work.

Operators can easily exchange heads

Fuji's original compact lightweight heads that can be easily exchanged without using tools. Operators on-site can perform maintenance and handle troubles.

The machine automatically performs calibration after heads are exchanged

The operator just pushes the START button after exchanging the head. The machine automatically performs calibration for the head and restarts production.

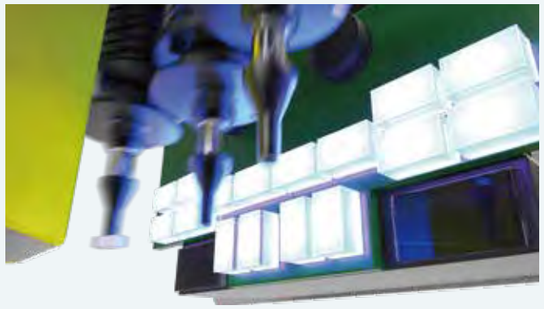
Reconfigure lines according to the purpose

Modules, heads, and supply units can be freely exchanged based on changes in the part types and production types. This is a unique mechanism that maximizes production in the given floor space.

Increase the capability of lines at a minimum cost

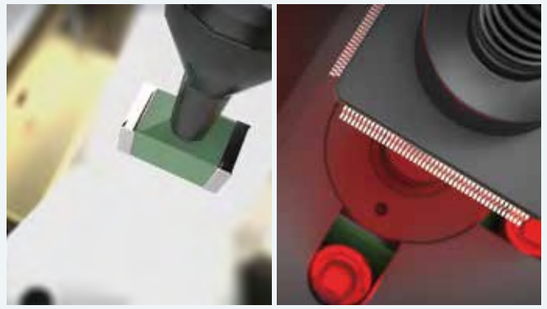
Increase the capability in minimum units of 645 mm and supports the latest placing processes by adding various units. Costs can be greatly reduced because adding new lines is not required.

When you want even higher quality



Checks tombstoned parts, missing parts, and up-side down parts

IPS can cater to a wide range of checks, from part pickup stance to parts remaining on nozzles, as well as upside-down checks for minimold parts. Placement defects caused by packaging, nozzles, and parts can be prevented.

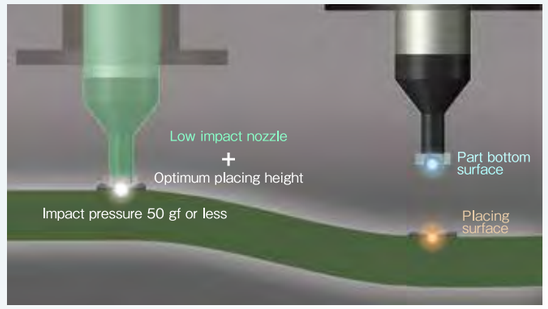


Checks for different constants, and checks for bent leads and missing bumps

Prevents placement defects caused by operation errors and defective parts by checking constants of chip parts with LCR check and checking leads on IC parts and bumps with coplanarity check.

Checks panel warp

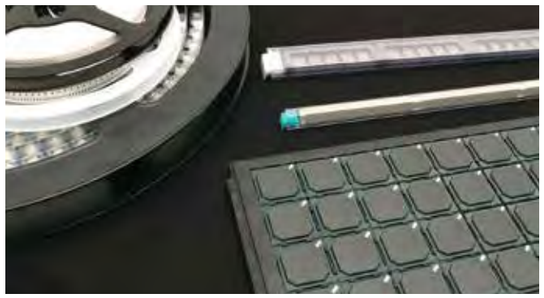
Automatically measures the panel warp by a laser sensor before placement. Production using defective panels can be prevented by using only panels within the permissible range.



Low impact placement

Excessive downward push and placing parts above the panel can be prevented by reflecting the part height measured by IPS to the placing surface obtained from the amount of panel warpage. Furthermore, the low impact nozzle of Fuji's original design can prevent collapse of solder and parts from being cracked.

When you want to support variable-mix variable-volume production

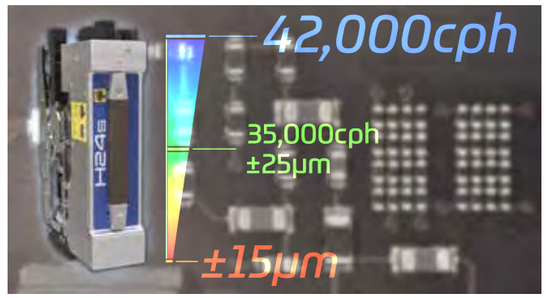


Full support for all types of packaging

From W4P1 tape to trays and sticks. Supports all types of part supply package required for a cutting-edge placing machine.

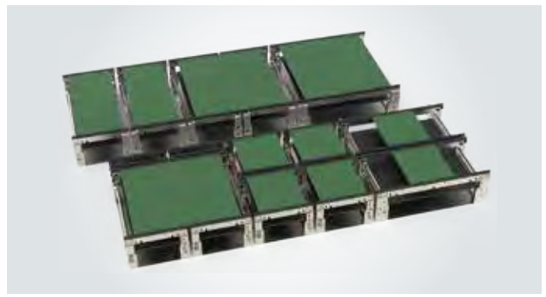
DX head supporting various types of part types

The DX head that automatically exchanges tools based on the part size from chips to large and odd-form parts can be loaded on M6 III modules. When production types are frequently changed and there are changes in the part type mixes, this aids in adjusting the line balance.



Shifts toward approaching head capability based on parts

The H24S enables more efficient production by shifting the balance of speed and accuracy. Suitable for when parts with a priority of placing speed and parts with a priority of placing accuracy are included on one pp cycle.



Conveyors supporting automatic backup pin allocation

A single conveyor dedicated for single conveyance of panels up to 610 x 610 mm. The double conveyor supports single conveyance of panels up to 610 x 510 mm, and dual conveyance of panels up to 610 x 280 mm.

When you want to facilitate management and maintenance

Stable maintenance quality

Automates maintenance for heads as well as nozzles and feeders. Performs uniform and stable maintenance.

Manages maintenance results for everything to one nozzle

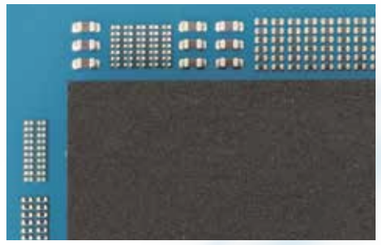
By automating maintenance, evaluation results are registered as numeric values in the maintenance results such as the air flow for nozzles and heads and the torque for feeder motors.

Offline maintenance maximizes the production time

Exchanges units that reach the maintenance limit with units for which maintenance has been finished. Operators can easily exchange units and this can greatly reduce downtime. Perform maintenance offline on the removed units while production is still running.

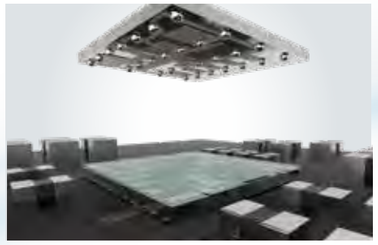
Perform maintenance easily and safely

Pull the module forward and easily access the inside from both sides. Maintenance can be performed in a safe and comfortable position.



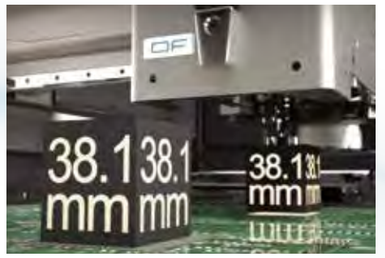
Supports high density placement for 0201 mm (008004") parts as standard

Using cameras and feeders with standard specifications, 0201 (008004") parts can be placed at a 90 um pitch in high density.



High speed placement of WLCSPs

WLCSPs can be placed at a high-speed of 18,500 cph using a combination of an H24S head and a dip flux unit (high speed type).
Using a blue-light camera supports a wider variety of CSPs.



Can support large parts up 38.1 mm in height

Can place large parts up to 38.1 mm in height using an OF head and a tray unit-LT2 supporting 1.5 inches.

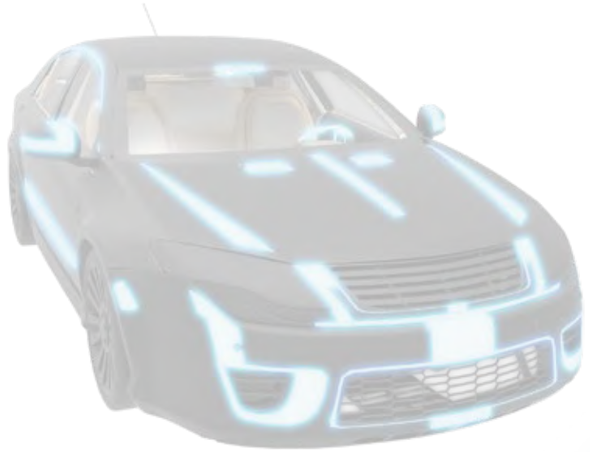
Supports large parts up to 32 x 180 mm

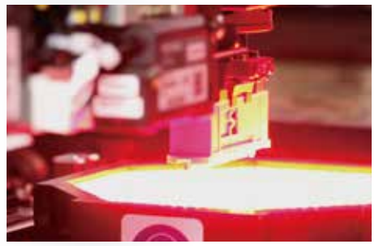
The H02F head that can handle large and odd-form parts using nozzles and mechanical chucks.
Parts part sizes up to 32 x 180 mm or 74 x 74 mm, and part heights up to 25.4 mm.

From very small parts to large odd-form parts. NXT caters to a wide range of needs

Optimum for high density placement at high speeds

M3 IIIS modules offer faster processing with emphasis on the most often head operations used in actual production. Because of this, the actual throughput is improved by 9%.





Large connectors can be reliably inserted at one time

A head supporting pressure insertion can insert parts with a force up to 98 N.
Parts with insertion pins such as odd-form parts and large connectors for automotive products can be reliably inserted at one time.

Fits in a small scale floor NXT IIIc

This machine has the highest class in the industry in area productivity by shortening the depth of the NXT III with the target of producing small panels. This unit inherits the same basic functions of the NXT III and various units as well as production programs can be shared.

Various tray supply units

The tray feeder is easy to use for trial production and small production lot. The tray unit-M is capable of storing up to 10 JEDEC size trays. The tray unit-LT2 / LTC is equipped with a non-stop parts supply mechanism and feeder slots can be selected.

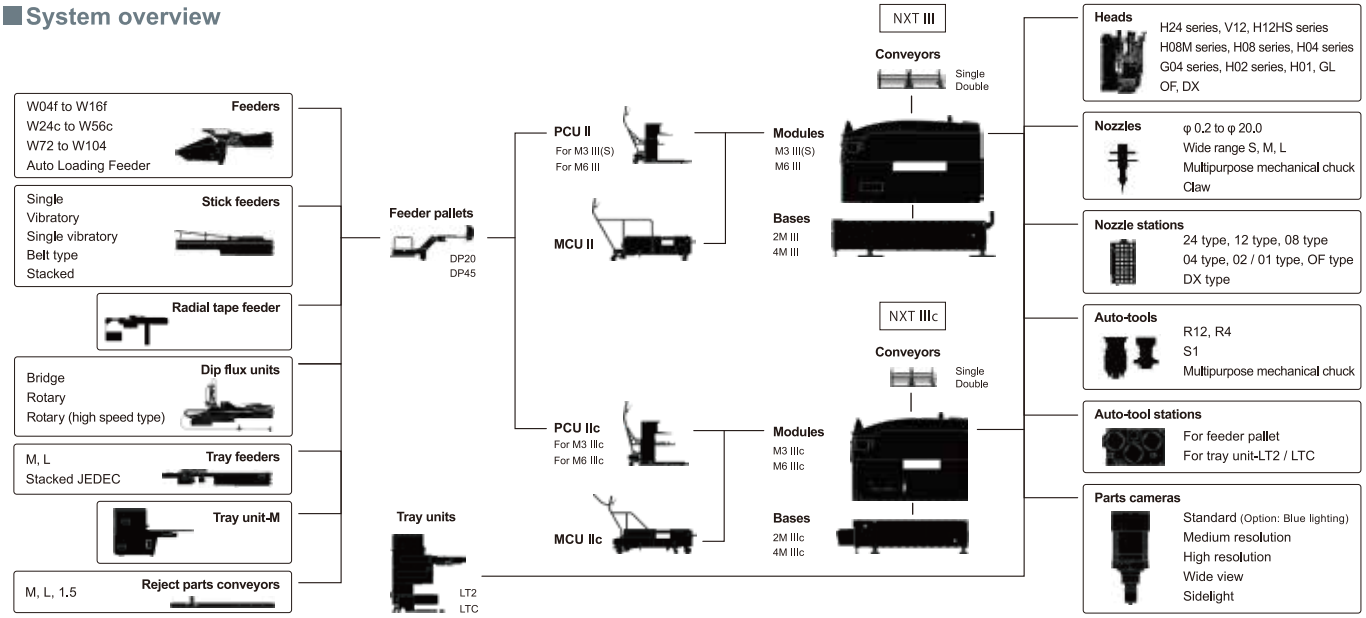
Stick feeders selectable based on operation

Select from the available units such as the vibratory stick feeder that supplies five types of stick parts in one unit, or the stacked stick feeder that greatly reduces the part resupply frequency.

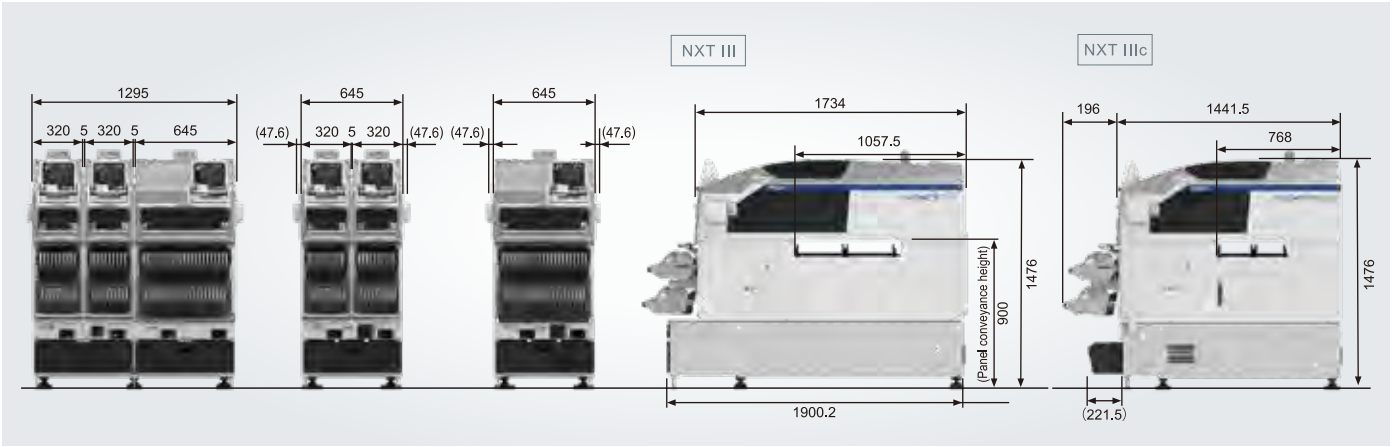
Function to push parts to reduce the manual insertion process

Parts such as large connectors with many leads and shield cases that are difficult to be inserted at one time can be reliably inserted by pushing multiple locations.

System overview



External dimensions



Specifications

			NXT III			NXT IIIc	
Module			M3 III	M3 IIIS	M6 III	M3 IIIc	M6 IIIc
Feeder slot quantity			20		45	20	45
Panel sizes (L×W)		Single conveyor	48 × 48 to 305 × 610 mm *1		48 × 48 to 610 × 610 mm	48 × 48 to 305 × 380 mm	48 × 48 to 610 × 380 mm
		Double conveyor	48 × 48 to 305 × 510 mm *1, 2		48 × 48 to 610 × 510 mm *2	48 × 48 to 305 × 290 mm *3	48 × 48 to 610 × 290 mm *3
Weight		Double conveyor	415 kg	410 kg	615 kg	365 kg	570 kg
Base			2M III		4M III	2M IIIc	4M IIIc
Air consumption			45 L/min (ANR)		90 L/min (ANR)	60 L/min (ANR)	120 L/min (ANR)
Weight			400 kg		700 kg	420 kg	800 kg

Heads		H24S *4, H24A *4, V12 *4, H12HS(Q), H08M(Q) *5, H08(Q) *4, H04SF, H04, H02F, H01, DX *5, OF *5, G04F(Q), GL		
Throughput *6	Head type	H24S / H24A	H08M(Q)	H02F
	Standard mode	35,000 cph	13,000 cph	6,700 cph
	Productivity priority mode	42,000 cph (43,000 cph *7)	14,000 cph	7,400 cph
Placing accuracy *6	Standard mode	±0.025 mm Cpk ≥ 1.00	±0.040 mm Cpk ≥ 1.00	±0.025 mm Cpk ≥ 1.00
	Heightened accuracy mode	±0.015 mm Cpk ≥ 1.00	-	-

Power source	3-phase 200 to 230V ±10% (50/60 Hz)
Air	0.5 MPa

*1. The possible placement range is different between the M3 III and M3 IIIS. *2. W is 280 mm when using dual conveyance. *3. W is 170 mm when using dual conveyance.
*4. These can be loaded on M3 IIIS modules. *5. Available on M6 III and M6 IIIc. *6. Under optimum Fuji conditions. *7. This is the throughput when loaded in an M3 IIIS module.

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- Details in this document are subject to change without notice due to constant product development.
- Information in this catalog is current as of August 2019.