

Want to make it so anyone can handle errors

improve productivity

Leads to cost reduction?

Is there interchangeability?

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.

Reconfigure lines according to the purpose



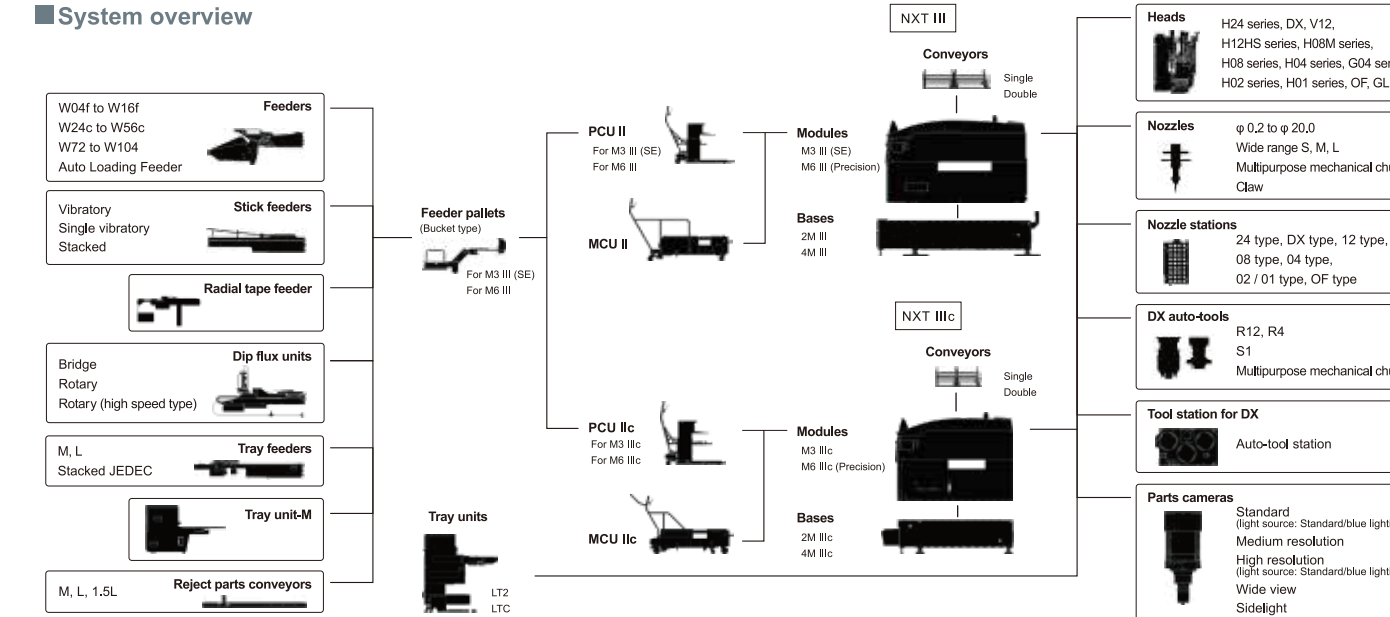
Modules, heads, and supply units can be freely exchanged based on changes in the part types and production types. This is a unique mechanism that maximizes production in the given floor space.

Increase the capability of lines at a minimum cost

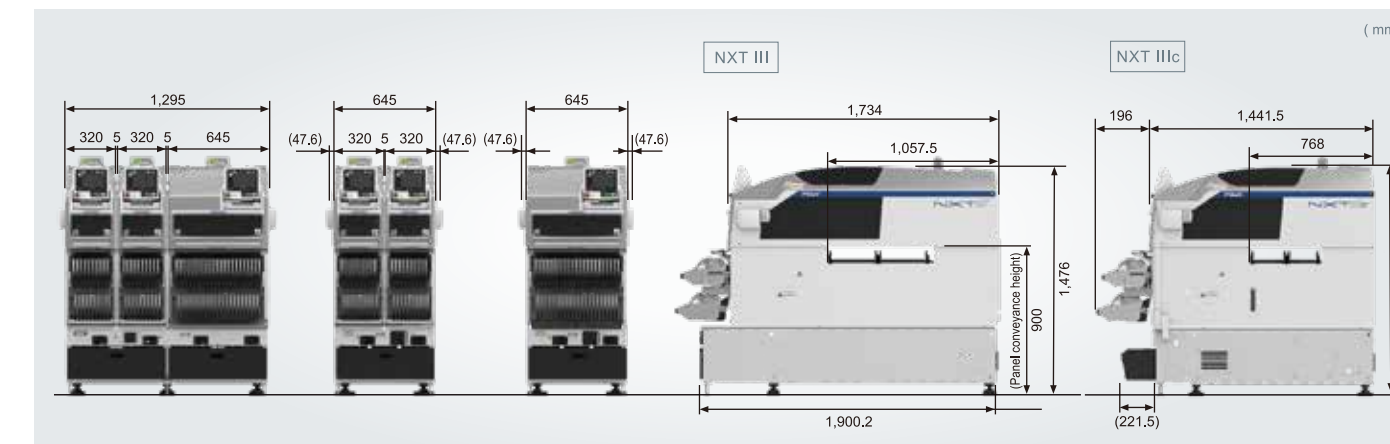


Increase the capability in minimum units of 645 mm and supports the latest placing processes by adding various units. Costs can be greatly reduced because adding new lines is not required.

System overview



External dimensions



Specifications

Module	NXT III			NXT IIIc	
	M3 III	M3 IIISE	M6 III	M3 IIIc	M6 IIIc
Feeder slot quantity	20			20	45
Panel sizes (L×W)	Single conveyor	48 × 48 to 305 × 610 mm ^{*1}		48 × 48 to 610 × 610 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 610 × 290 mm ³
Weight	415 kg		413 kg	615 kg	365 kg
	415 kg		413 kg	615 kg	365 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 , DX ⁵ , V12 ⁴ , H12HS(Q) ⁶ , H08M(Q) ⁷ , H08(Q) ⁷ , H04SF ⁸ , H04, G04F(Q) ⁸ , H02F ⁸ , H01(V), OF ⁸ , GL				
Throughput ⁷	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 ^{*)}		14,000 cph	7,400 cph
Placing accuracy ⁷	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 3σ		-	±0.010 mm ⁸ 3σ
	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 IIISE. ^{*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 IIISE modules. ^{*5}, Available on M6 III and M6 IIIc. ^{*6}, To use heightened accuracy mode, M6 III/M6 IIIc precision modules are required. ^{*7}, Under optimum Fuji conditions. ^{*8}, This is the throughput when loaded in an M3 IIISE module.

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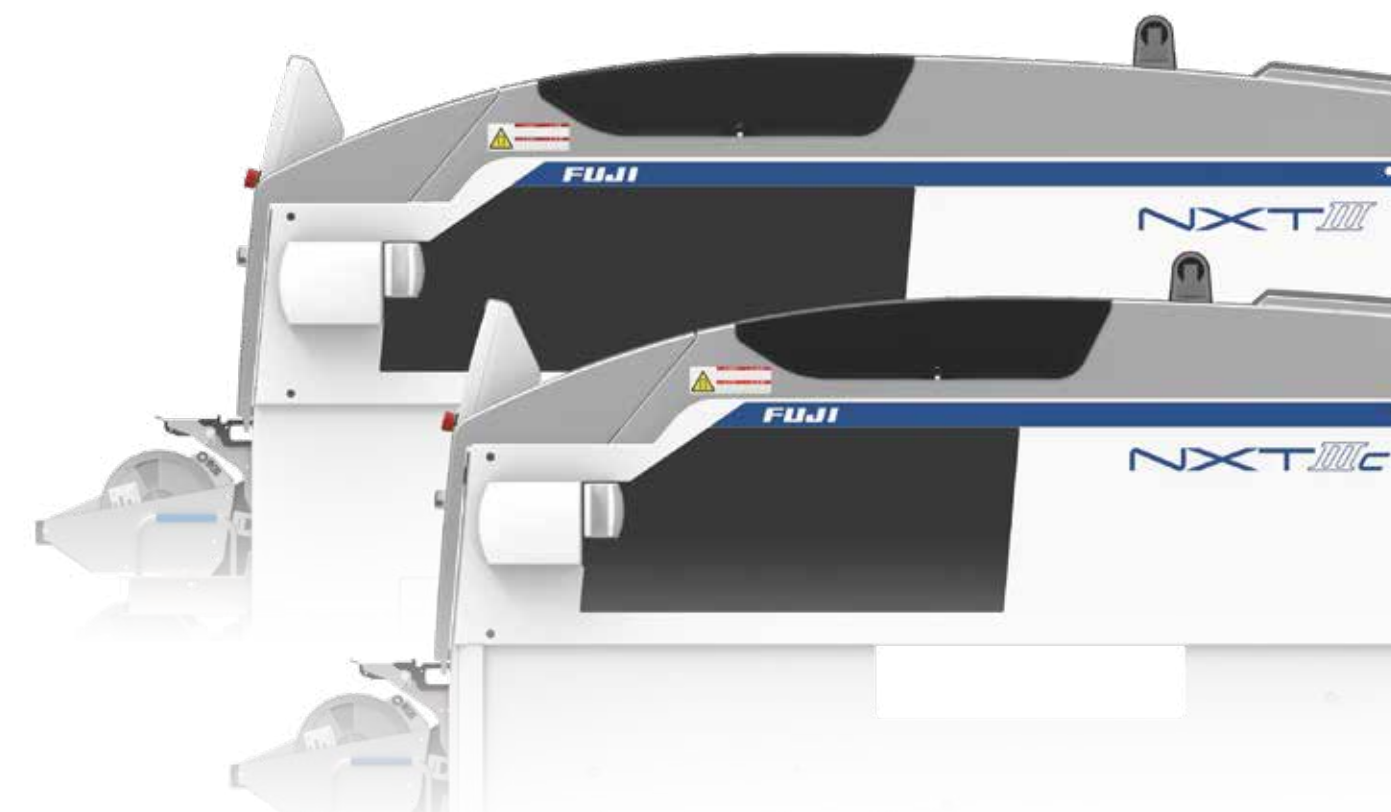
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- Details in this document are subject to change without notice due to constant product development.
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To cutting edge placing technology with continuing evolution



There are no means to reduce the part exchange times

Fuji has continued to meet our customers' calls.

The quantity of shipped modules for the NXT series, exceeds 106,000 modules.

Since it first went on sale in 2003, the NXT-series modular mounter has continued 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.

A good way to



Want to achieve high quality beyond all else

Operators can easily exchange heads



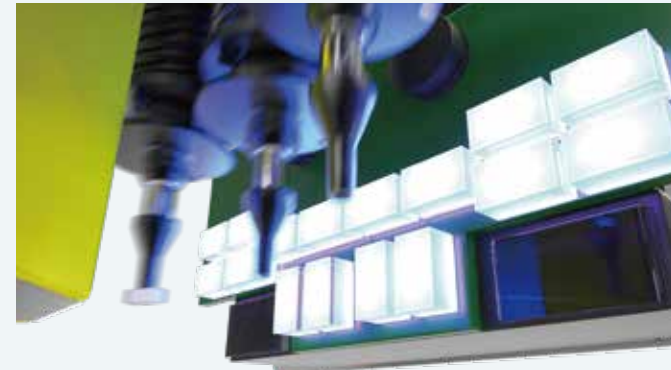
Fuji's original compact lightweight heads that can be easily exchanged without using tools. Operators on-site can perform maintenance and handle troubles.

The machine automatically performs calibration after heads are exchanged

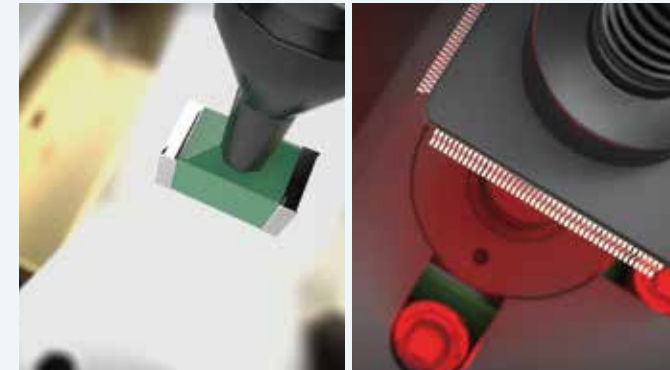


The operator just pushes the START button after exchanging the head. The machine automatically performs calibration for the head and restarts production.

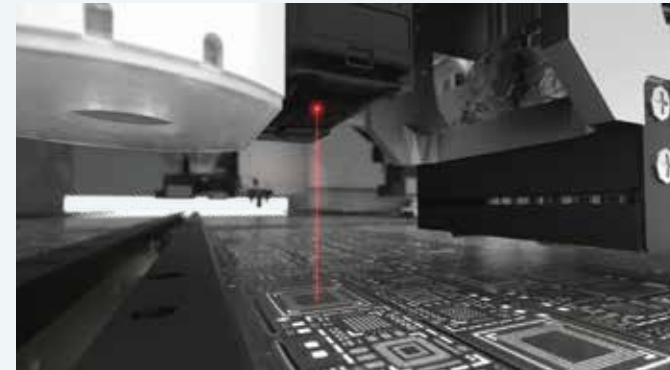
When you want even higher quality



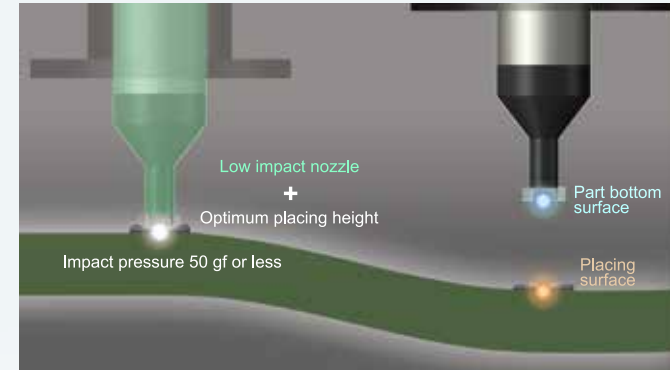
Checks tombstoned parts, missing parts, and up-side down parts
IPS can cater to a wide range of checks, from part pickup stance to parts remaining on nozzles, as well as upside-down checks for minimold parts. Placement defects caused by packaging, nozzles, and parts can be prevented. (Option)



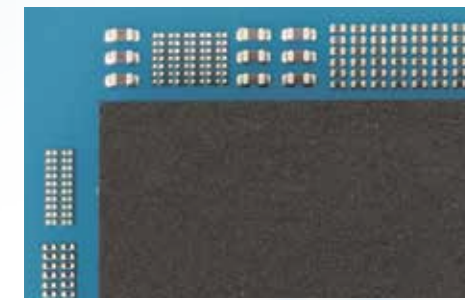
Checks for different constants, and checks for bent leads and missing bumps
Prevents placement defects caused by operation errors and defective parts by checking constants of chip parts with LCR check and checking leads on IC parts and bumps with coplanarity check. (Option)



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. (This is an option for M3 IIISE modules.)



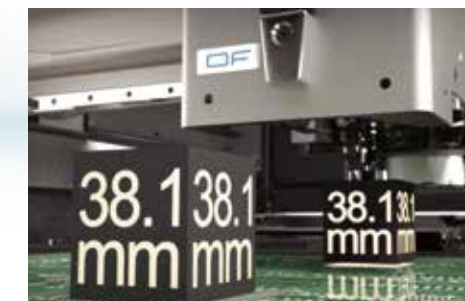
Low impact placement
Excessive downward push and placing parts above the panel can be prevented by reflecting the part height measured by IPS to the placing surface obtained from the amount of panel warpage. Furthermore, the low impact nozzle of Fujii's original design can prevent collapse of solder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



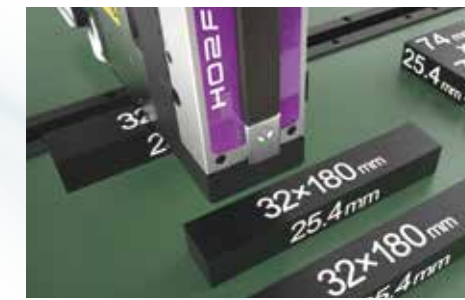
Supports high density placement for 0201 mm (008004*) parts as standard
Using cameras and feeders with standard specifications, 0201 (008004*) parts can be placed at fine pitches.



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.

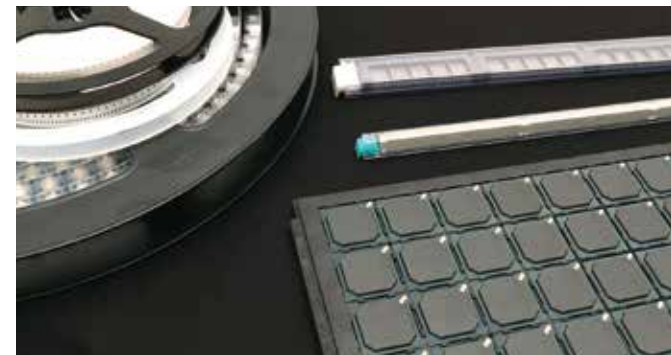


Can support large parts up to 38.1 mm in height
Can place large parts up to 38.1 mm in height using an OF head and a tray unit-LT2 supporting 1.5 inches. (Option)



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.

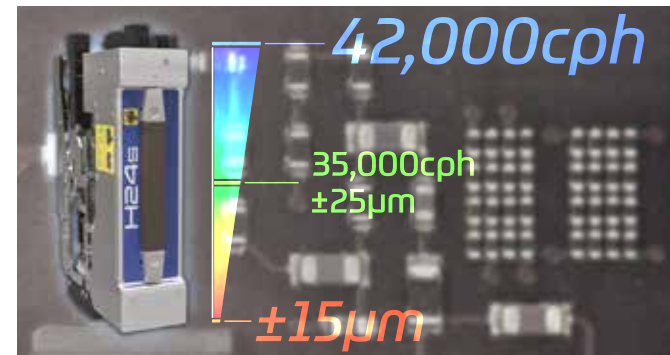
When you want to support variable-mix variable-volume production



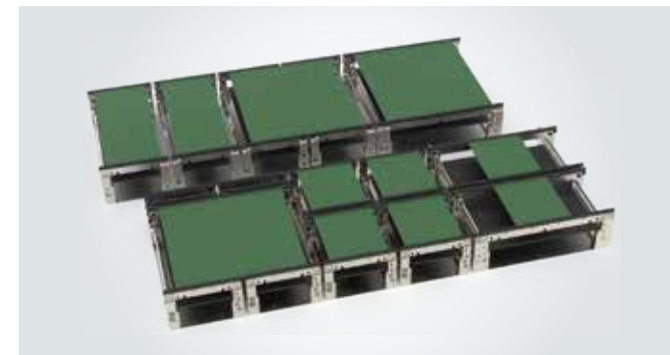
Full support for all types of packaging
From W4P1 tape to trays and sticks. Supports all types of part supply package required for a cutting-edge placing machine.



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.

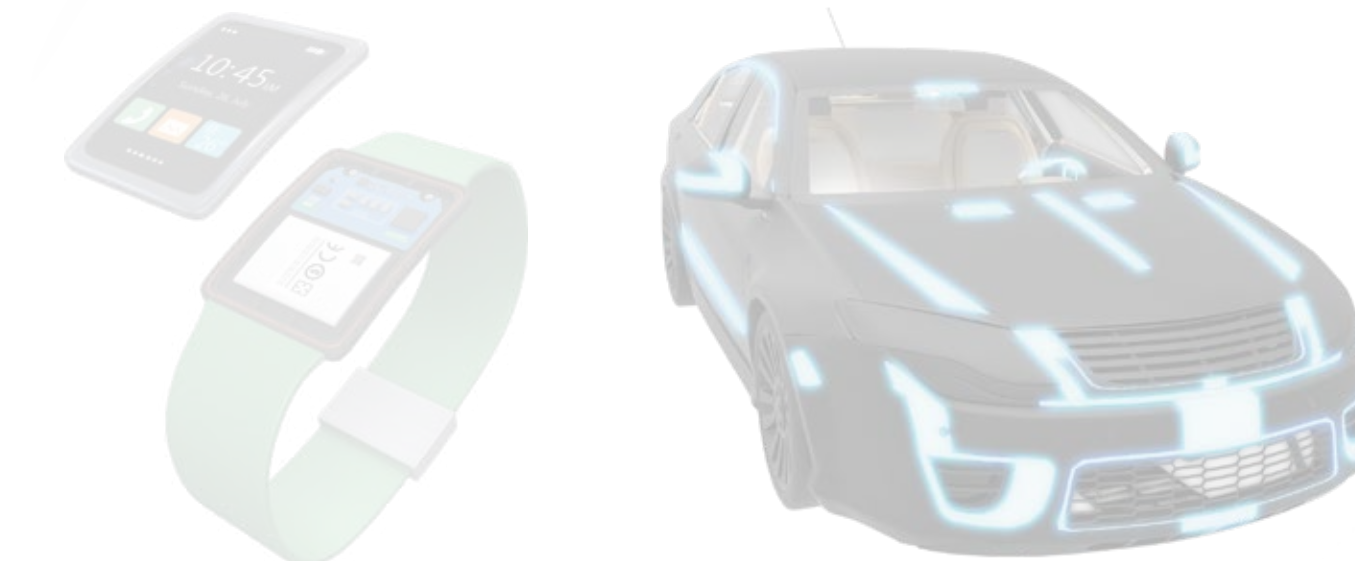


Conveyors supporting automatic backup pin allocation
A single conveyor dedicated for single conveyance of panels up to 610 x 610 mm. The double conveyor supports single conveyance of panels up to 610 x 510 mm, and dual conveyance of panels up to 610 x 280 mm.



Optimum for high density placement at high speeds
M3 IIISE 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 approximately 17% compared to an M3 III module.

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



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.

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.



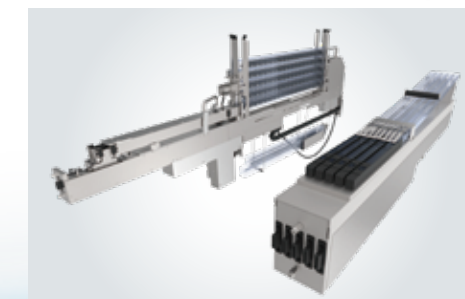
Perform maintenance easily and safely
Pull the module forward and easily access the inside from both sides. Maintenance can be performed in a safe and comfortable position.



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.