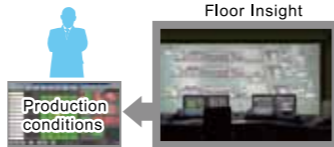


Fuji solutions for automation and labor saving



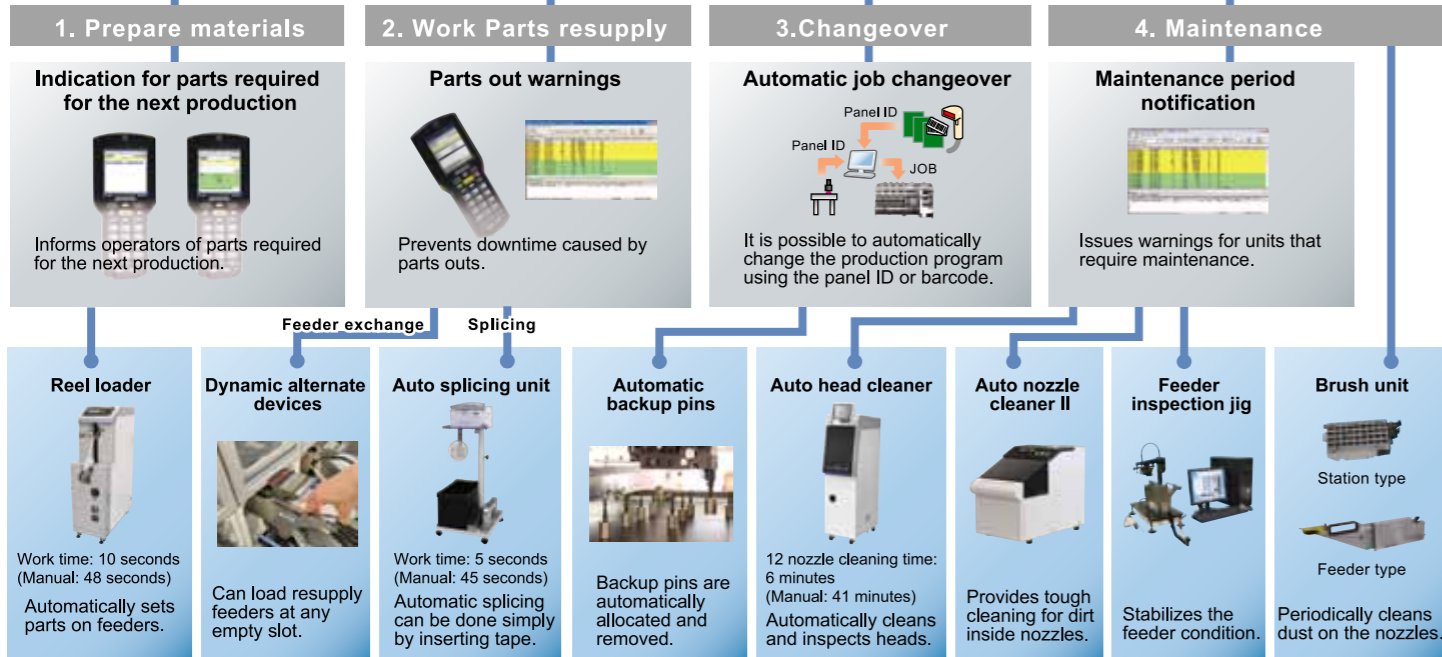
Work
Production Process Management System
Tools

The NXT III uses a production administration system with automation and labor saving tools to eliminate the cause of lower production rates.



Constant remote monitoring of the production state

Managers can check the production status and issue timely work instructions anywhere.



NXT
3rd generation

NXT III

Fuji Scalable Placement Platform

Constant Evolution, Inherited DNA



	M3III	M6III	
Panel size (L x W)	48 x 48 mm to 534 x 510 mm (double conveyor) 48 x 48 mm to 534 x 610 mm (single conveyor)	*W is 280 mm when using double conveyance. Single conveyance must be used for panels exceeding 280 mm.	
Reel capacity	Up to 20 (when using 8 mm tape)	Up to 45 (when using 8 mm tape)	
PCB loading time	Double conveyor: 0 sec (continuous operation); Single conveyor: 2.5 sec (transport between M3 III modules), 3.4 sec (transport between M6 III modules)		
Placing heads	H24G, V12, H12HS (Q), H08 (Q), H04S (F), H04, H02F, H01, G04 (Q)(F), GL, IH1	H24G, V12, H12HS (Q), H08M (Q), H08 (Q), H04S (F), H04, H02F, H01, DX, OF, G04 (Q)(F), GL, IH1	
Placement accuracy (Fiducial mark reference)	H24G / H02F / G04 (Q)(F): ±0.025 (±0.034) mm (3σ) cpk ≥ 1.00* (H24G productivity priority mode ±0.038* mm) V12 / H12HS (Q) / DX (R12): ±0.038 (±0.050) mm (3σ) cpk ≥ 1.00* H08M (Q) / H04SF / H04S / DX (R4): ±0.040 mm (3σ) cpk ≥ 1.00 H08 (Q) / H04 / OF: ±0.050 mm (3σ) cpk ≥ 1.00 H01 / G04 (Q) / DX (S1): ±0.030 mm (3σ) cpk ≥ 1.00 GL: ±0.100 mm (3σ) cpk ≥ 1.00 *Based on optimal conditions at Fuji placing rectangular chips (high-accuracy tuning).		
Productivity	H24G: 35,000 cph (Productivity priority mode 37,500 cph) H08M (Q): 13,000 cph H04S: 9,500 cph H01: 4,200 cph GL: 16,363 dph (0.22 sec / dot) DX (R12): 25,000 cph	V12: 26,000 cph H08 (Q): 11,500 cph H04: 6,500 cph OF: 3,000 cph DX (R4): 11,000 cph	H12HS (Q): 24,500 cph H04SF: 10,500 cph H02F: 6,700 cph G04 (Q) / G04 (Q)(F): 7,500 cph DX (S1): 4,700 cph
Parts	H24G: 0201 (008004") to 5.0 x 5.0 mm V12 / H12HS (Q) / DX (R12): 0402 (01005") to 7.5 x 7.5 mm H08M (Q): 0603 (0201") to 45 x 45 mm H08 (Q): 0402 (01005") to 12 x 12 mm H04S (F) / H04: 1608 (0603") to 38 x 38 mm H02F: 1608 (0603") to 74 x 74 mm (32 x 180 mm) H01 / OF: 1608 (0603") to 74 x 74 mm (32 x 162 mm) G04 (Q)(F): 0402 (01005") to 15 x 15 mm DX (R4): 1608 (0603") to 15 x 15 mm DX (S1): 1608 (0603") to 74 x 74 mm (32 x 100 mm)	Height: Up to 2.0 mm Height: Up to 3.0 mm Height: Up to 13.0 mm Height: Up to 6.5 mm Height: Up to 6.5 / 9.5 mm Height: Up to 25.4 mm Height: Up to 25.4 mm Height: Up to 6.5 mm Height: Up to 6.5 mm Height: Up to 25.4 mm	
Power supply	3 phase 200 ~ 230 V ±10 % (50 / 60 HZ)		
air consumption	4M III base machine: 90 L / min (ANR) / 2M III base machine: 45 L / min (ANR)		
Weight	4M III base: 700 kg, 2M III base: 400 kg, M3 III module: 415 kg (double conveyor specification), M6 III module: 615 kg (double conveyor specification)		
Machine dimensions	L: 1295 mm (M3 III x 4, M6 III x 2) / L: 645 mm (M3 III x 2, M6 III) / L: 320 mm (M3 III x 1) W: 1900.2 mm H: 1476 mm		

Parts supply system	
Intelligent feeders	4·8·12·16·24·32·44·56·72·88·104 mm wide tape
Stick feeders	4 ≤ Part width ≤ 15 mm (6 ≤ Stick width ≤ 18 mm), 15 ≤ Part width ≤ 32 mm (18 ≤ Stick width ≤ 36 mm)
Trays	Support for 135.9 x 322.6 mm (JEDEC standards) (tray unit-M), 276 x 330 mm (tray unit-LT), and 143 x 330 mm (tray unit-LTC) trays

FUJI MACHINE MFG. CO., LTD.
19 Chausuyama Yamamachi Chiryu-shi Aichi-ken 472-8686 Japan
Tel: +81 566 81 2110 Fax: +81 566 83 1140

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Cat. No. NXTIII_2015.Sep_E

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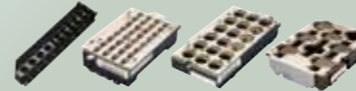
Flexible support for all parts and production types

Amazing performance from the latest version of Fuji's Scalable Placement Platform

Heads



Nozzle stations



Cameras



Non-stop vision processing with the flying vision system

Conveyors

You can select single or double conveyors.

Single conveyor



Maximum panel size:
534(L) x 610(W) mm

Double conveyor



Maximum panel size:
534(L) x 280(W) mm
(double conveyance)
534(L) x 510(W) mm
(single conveyance)

The NXT III has impressive versatility acquired from its wide range of units



Module configuration for high speed placement



Module configuration from small chips to large and odd-form parts



Placing small chips - Placement inspection - Support for placing large odd-form parts All-in-one module configuration

Package-on-Package (PoP)



PoP placement can be supported simply by loading the dedicated units.



Dip flux unit



High accuracy placing head

PoP is a special process in which several sub-packages are stacked in layers on the panel.

Supply units

A variety of supply unit types are available to support various production needs.

Tape parts



Tape feeders

Tray parts



Tray units

Tray feeders

Stick parts



Stacked stick feeder

Belt type stick feeder

Radial parts



Radial parts feeder (under development)

Bulk parts



Segment feeder (under development)

Achieves a throughput of 35,000 cph

High-speed placing head H24G



LED strobe light source



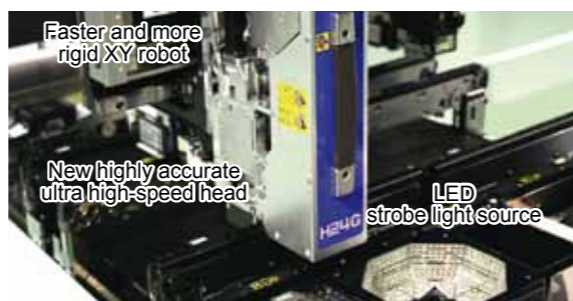
High speed feeders (W08f)



Newly developed high speed head
Newly developed LED strobe light source
Newly developed high speed feeder
↓
35,000 cph
(Productivity priority mode: 37,500 cph)

Better placing accuracy

The NXT III has improved placing accuracy further with 3 approaches.



Faster and more rigid XY robot
New highly accurate ultra high-speed head

LED strobe light source

Newly developed high speed head
Newly developed LED strobe light source
Newly developed high rigidity XY-robot
↓
Accuracy of ±0.025 mm (3σ, Cpk ≥1.0)

Reduces operator workload



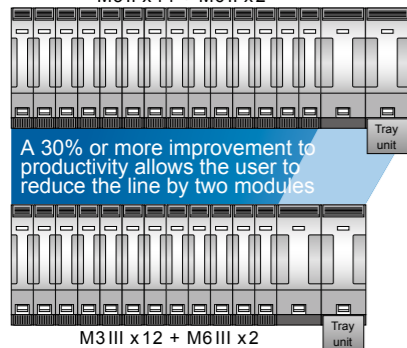
Intuitive operation

The touchscreen operation panel features intuitive operation which does not depend on language skills. The NXT III has a large 8.4-inch touchscreen display for easy operation.

Improved line productivity

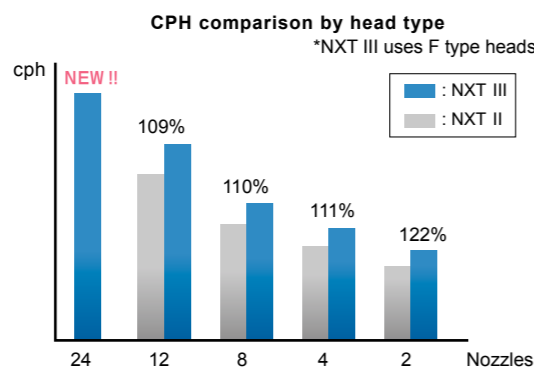
Example: Smartphone production line

M3II x 14 + M6II x 2



A 30% or more improvement to productivity allows the user to reduce the line by two modules

The same scale production can be handled by fewer modules due to improvements in the actual throughput.



High accuracy placement of 0201 mm (008004") parts

Placement accuracy: ±0.025 mm (3σ) is possible so 0201 mm parts can be placed at high density.



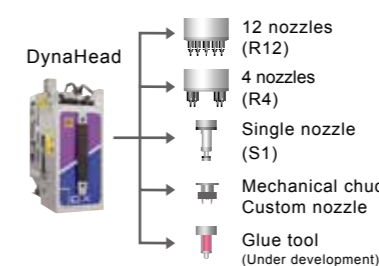
Distance between pads:
X=0.17 mm Y=0.13 mm
Placing area: 10.3 mm²

Distance between pads:
X=0.09 mm Y=0.07 mm
Placing area: 3.7 mm²

Extremely small parts can be placed exactly and not have to rely on the self-alignment effect. This contributes to making panels even more compact.

Innovative dynamic head exchange

The newly developed DynaHead (DX) can place various types of parts with just a single head.



12 nozzles (R12)	4 nozzles (R4)	1 nozzle (S1)
Placeable part size		
0402 (01005") to 7.5 x 7.5 mm Height: 3 mm * IPS support is for 12 nozzles only	1608 (0603") to 15 x 15mm Height: 6.5 mm	1608 (0603") to 74 x 74 mm (32 x 100) Height: 25.4 mm
Premounted part height		
3 mm	6.5 mm	25.4 mm

NXT III Fuji Scalable Placement Platform

NXT 3rd generation