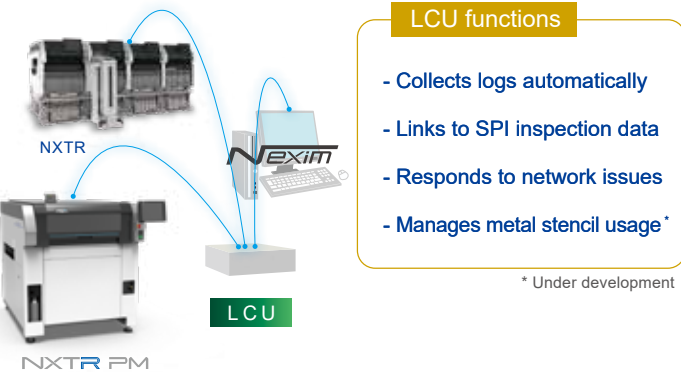


Non-stop production

By automatically saving logs and image data, issues that may cause machine stops and information that can be used for problem solving are not missed, for faster recovery times. Furthermore, network conditions are constantly monitored to prevent production stops associated with network issues from occurring.

* Option



Smart factory initiative

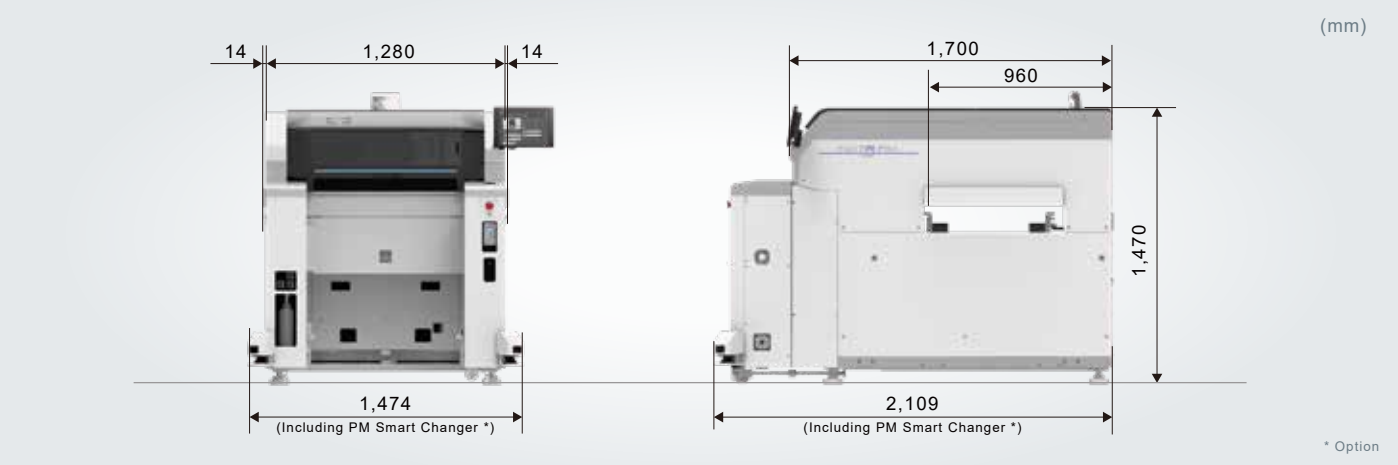
FUJI Smart Factory offers solutions for a wide range of challenges amidst various production types, which in turn improves factory productivity and flexibility in parallel with maximizing the QCD performance of manufacturing.



Create the Future

NXTR PM
FUJI Smart Factory Platform

External dimensions



Specifications

			NXTR PM	NXTR PM with PM Smart Changer ^{*1,2}
Panel size (L x W)	Single conveyor		48 x 48 mm to 610 x 610 mm	
		Single conveyance	48 x 48 mm to 610 x 510 mm	
	Double conveyor	Dual conveyance	48 x 48 mm to 330 x 280 mm	
Squeegee speed			1 to 300 mm/sec	
Repeated alignment accuracy ^{*3}			±0.010 mm Cpk ≥ 2.0 (6σ)	
Printing accuracy ^{*3}			±0.018 mm Cpk ≥ 2.0 (6σ)	
Metal stencil frame size (L x W)			650 x 550 mm, 29 x 29 inch, 750 x 750 mm, 750 x 810 mm, 600 x 550 mm ^{*4} , 550 x 650 mm ^{*4}	
Power			3-phase AC 200 to 230 V ±10 V (50/60 Hz)	
Air			0.4 MPa	
Air consumption			37 L/min (ANR)	
Weight			1,600 kg	1,800 kg

^{*1} Option
^{*2} Conditions apply for automatically exchanging metal stencils and backup blocks.
^{*3} Under optimum Fuji conditions.
^{*4} Contact your Fuji representative in advance.



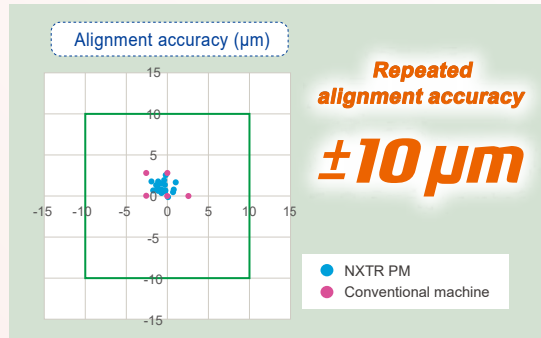
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- The information in this catalog is current as of April 2025.
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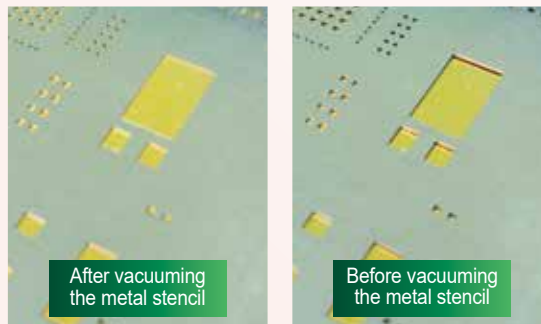
Repeated alignment accuracy $\pm 10\mu\text{m}(6\sigma)$

Better responsiveness to positioning the metal stencil results from the lighter-weight offsetting mechanism with reduced sliding resistance in addition to advanced image recognition accuracy for fine marks that is driven by the high resolution camera. This brings a high level of alignment performance with stable printing quality.



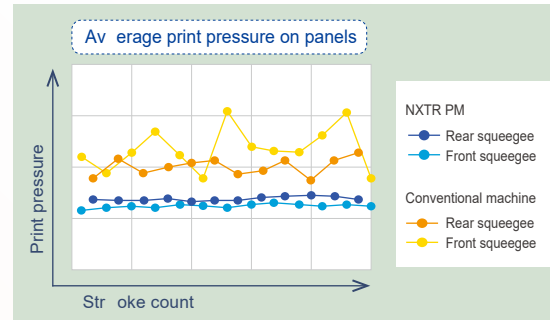
Reducing print deviations caused by stretched metal stencils

The renewed vacuuming mechanism improves the panel and metal stencil adhesion. This eliminates print defects caused by stretched metal stencils.



Using the appropriate print pressure

It is essential to apply the appropriate pressure to print the correct volume of solder. Our real-time print pressure feedback control and newly developed squeegee head stabilize the print pressure at all times and maintain the angle of the squeegee edge. This ensures the correct volume of solder.



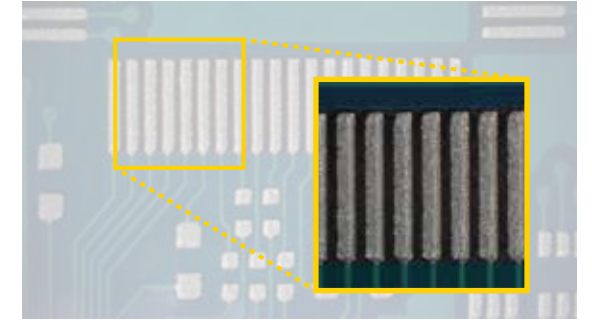
Preventing solder from escaping

The mechanism to reduce the amount of solder escaping from the printing squeegee lowers the volume of escaped solder substantially. This leads to a higher rate of utilization of solder. While this results in using fresh solder which furthers the stability of print quality, it also reduces solder collection and cleaning work.



Printing shapes with sharp outlines

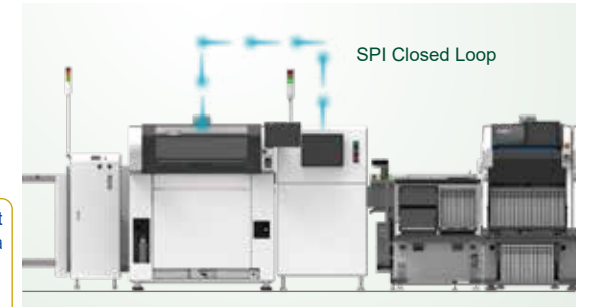
Taking into account the solder fluidity during snap-off, snap-off operation has optimized acceleration control. This makes solder deposits in apertures transfer onto panels in the correct shape.



No line stops for quality-related errors

Based on inspection result feedback from SPI machines, automatic offsetting is implemented in the printing conditions based on a prediction of future printing problems such as solder volume deviations, misalignment, and smearing. This helps maintain high quality printing.

- Automatic metal stencil positioning adjustment
- Metal stencil condition visualization by mark camera
- Solder supply instructions
- Automatic cleaning
- Automatic production stops



High quality printing

Printing at the correct position, with the correct amount, in the correct shape



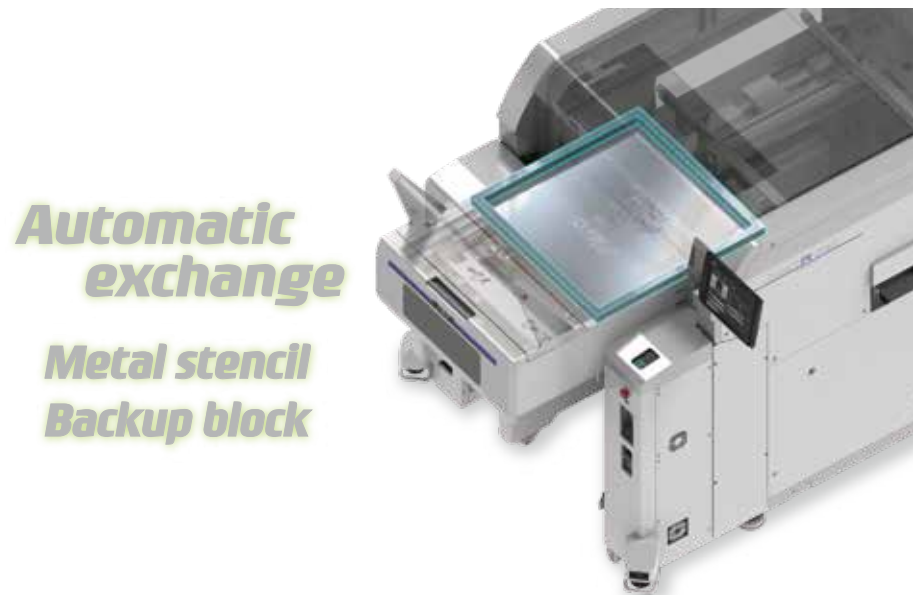
Support for various production types

Building production lines with the flexibility to handle various types of production

Making changeover work hands free

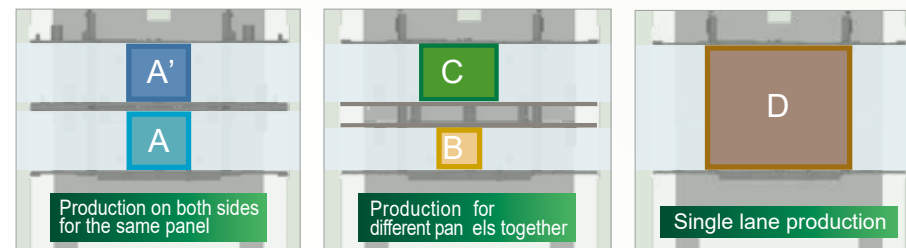
It is possible to automatically exchange metal stencils and backup blocks by using PM Smart Changer. Setting materials in the PM Smart Changer rack in advance makes it possible to automatically change the materials when changing the production model. Changeover work such as collecting and supplying solder when exchanging metal stencils, changing the conveyor width, and positioning backup blocks can be automated. This reduces the workload on operators and eliminates reworking that may result from human error.

* All are optional other than conveyor width adjustment.



Flexible support for a wide variety of production

Single lane and dual lane production is supported by a single machine accordingly to fit any situation. All kinds of production are flexibly covered; from producing small panels for smartphones to large panels associated with automotive electronics and network infrastructure. The NXTR PM supports dual lane production and is highly compatible in line configurations with the NXTR.



Supplying materials without stopping production

Solder cups and cleaning paper are accessible from the machine front during production for easy exchange. Equipped with the solder transport mechanism*, the machine transports solder to printing positions during dual lane production. These features ensure non-stop production in good harmony with material supply.

* Option



No need to adjust printing parameters

By automatically extracting printing parameters from the database and setting them, the need for printing tests to tailor print parameters is greatly reduced. It is no longer necessary to look for past performance records and adjust parameters from experience. This helps to minimize the time until the start of production. This system is also designed for referencing past quality records from SPI machines, to provide the option of selecting more suitable printing conditions.

