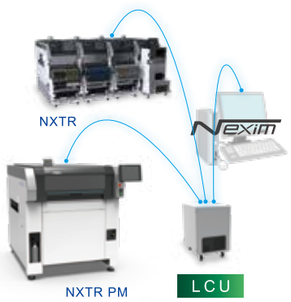
Non-stop production

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



LCU functions

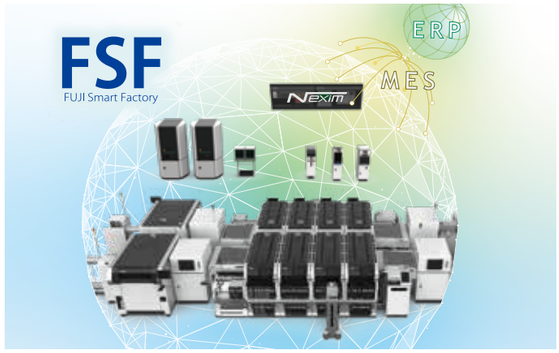
- Collects logs automatically
- Links to SPI inspection data
- Responds to network issues
- Acquires images for errors*
- Manages mask usage*

* Under development

Smart factory initiative

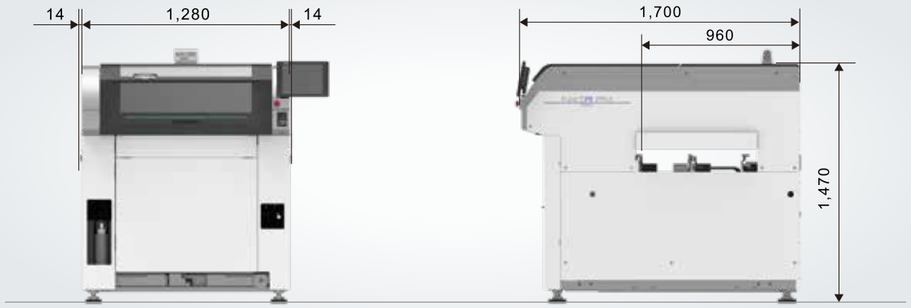
FUJI Smart Factory offers solutions for a wide range of challenges amidst various production types, which in turn improves factory productivity and flexibility in parallel with maximizing the QCD performance of manufacturing.

* Option



External dimensions

(mm)



Specifications NXTR PM

Repeated alignment accuracy *1			±0.010 mm @6σ (Cpk ≥ 2.0)
Printing accuracy *1			±0.020 mm @6σ (Cpk ≥ 2.0)
Printing speed			1 to 300 mm/sec
Panel size (L x W)	Single conveyor		48 x 48 mm to 610 x 610 mm
	Double conveyor	Single conveyance	48 x 48 mm to 610 x 510 mm
		Dual conveyance	48 x 48 mm to 330 x 280 mm
Screen frame (L x W)			650 x 550 mm, 29 x 29 inch, 750 x 750 mm, 750 x 810 mm
Weight			1,600 kg
Power			3-phase AC 200 to 230 V ±10 V (50/60 Hz)
Air			0.4 MPa

*1 Under optimum Fuji conditions.

FUJI innovative spirit

Create the Future

NXTR PM

FUJI Smart Factory Platform

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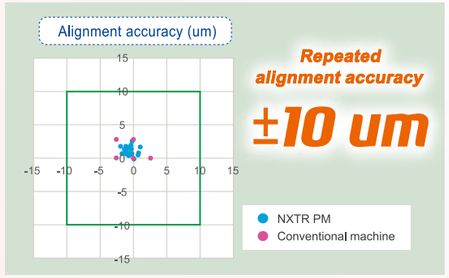
- The contents of this catalog are subject to change without notice due to constant product development.
- The information in this catalog is current as of August 2020.

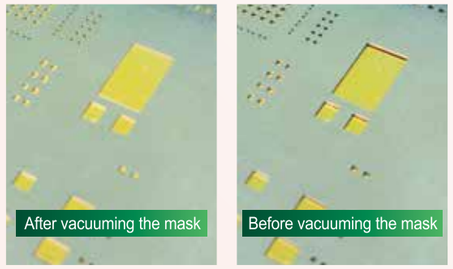
Repeated alignment accuracy ±10um(6σ)

Better responsiveness to positioning the mask 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.



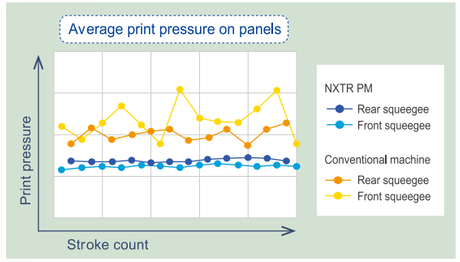
Reducing print deviations caused by stretched masks

The renewed vacuuming mechanism improves the panel and mask adhesion. This eliminates print defects caused by stretched masks.



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.

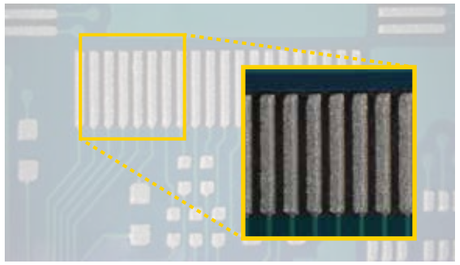


Preventing solder from escaping

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.

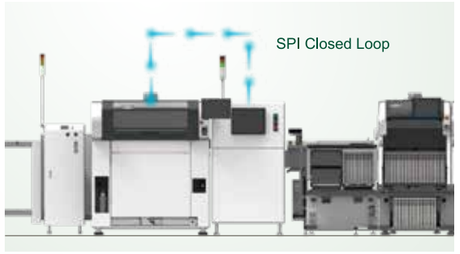


No line stops for quality-related errors

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.

* Option

- Automatic mask positioning adjustment
- Mask condition visualization by mark camera
- Solder supply instructions
- Automatic cleaning
- Automatic production stops

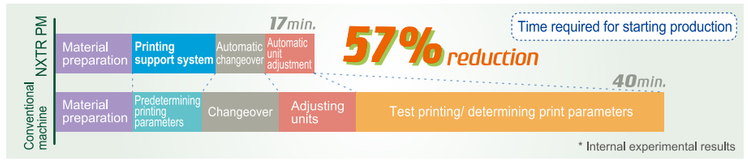


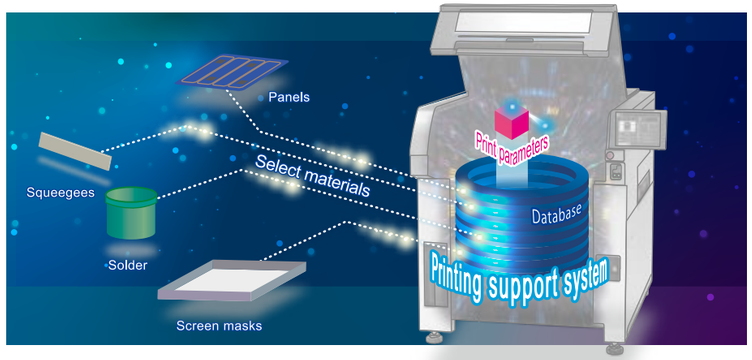
High quality printing

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

No need for test printing

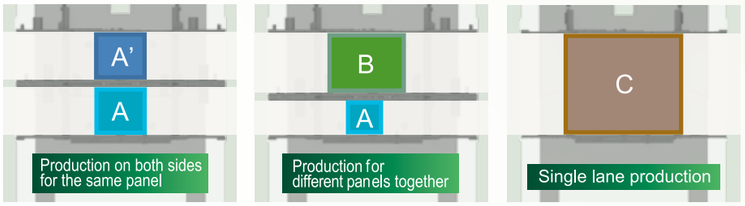
Automatic extraction of print parameters from the database makes it possible to quickly determine printing conditions and start production without test printing. It is no longer necessary to look for past performance records and adjust parameters from experience. This helps to minimize the time until 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.





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.
Dual lane production support on NXTR PM enables production along a straight line without the installation of shuttle conveyors.



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

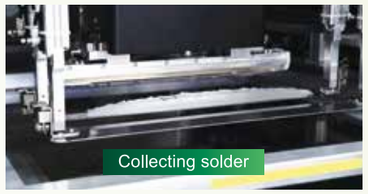
Support for various production types

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

Making changeover work hands free

In addition to collecting and supplying solder when exchanging screen masks, automatic changeover also covers from exchanging backup blocks and screen masks, to changing the conveyor widths when switching programs.

* All are optional other than conveyor width adjustment. Exchanging backup blocks and screen masks is under development.



Automatic solder supply

Solder amount detection triggers automatic solder supply from solder cups. In addition to the advantage of hands-free solder supply, printing is kept stable throughout production with the solder volume always at the optimal amount.

* Option