

MFO

Model No. NM-EJS6B



Digital transformation of mounting to innovate manufacturing processes

Marking the end of an era of cut-and-try methods for production plans, MFO, the "next innovation" manufacturing operations optimizer for SMT production lines is ready to help you optimize your production efficiency.



Another set of
mounting floor in
cyber space

Reflecting optimized production
plan in production floor
(Optimization)

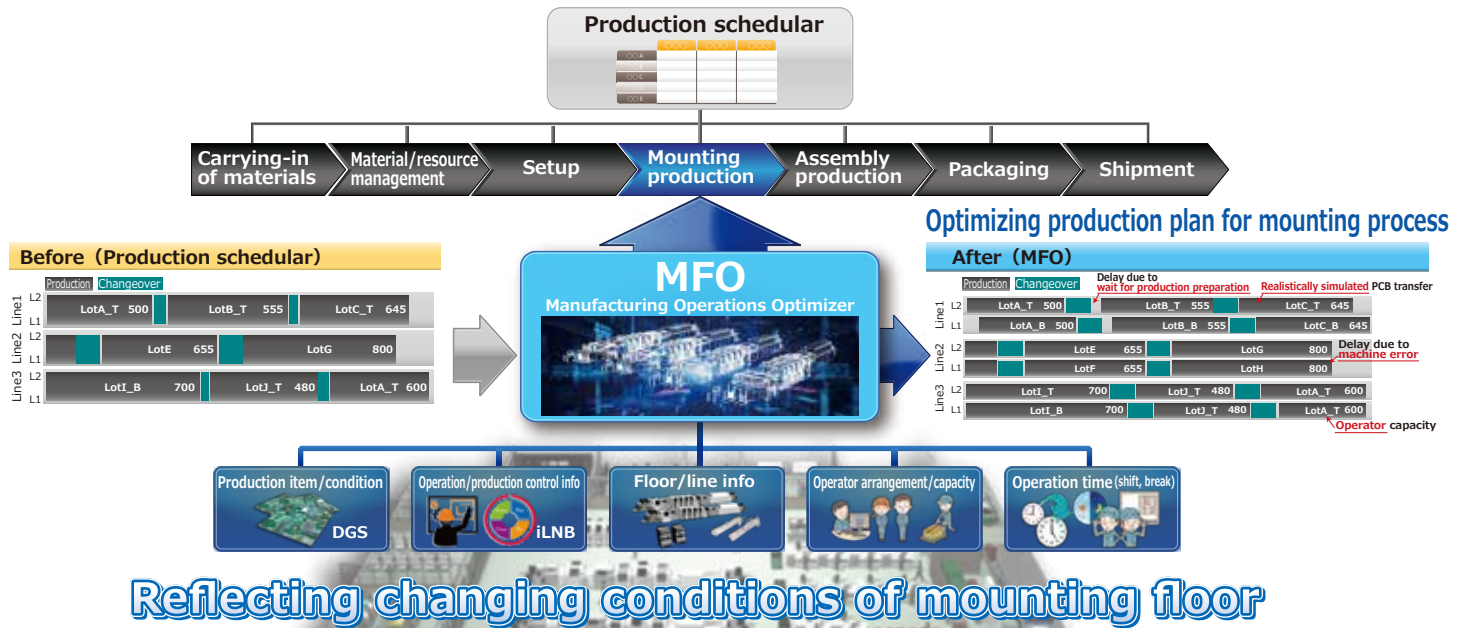
Entirely virtualizing
mounting floor (Modeling)



Actual mounting floor

- For those who have trouble finding means to verify their shop floor production capacity.
- For those who have trouble creating production plans or data very often.
- For those who have trouble doing dual-lane production or setup changes frequently.
- For those who have trouble loading or allocating resources into or among lines

Image of the system



Function list

Function	Description
① Mounting process simulation	In consideration of "error occurrence in production machines," "parts exchange by operators" and "operators' travel time," it models a mounting floor, and simulates production conditions including multiple mounting lines and off-line setup processes.
② Production plan optimization	In consideration of multiple production lines, it optimizes a production plan based on the production conditions set up in [mounting process simulation]. This allows the "production line" and "production order" of each PCB to be calculated / provided automatically.
③ Setup plan optimization	It optimizes "off-line setup" sequence according to the production plan developed in [production plan optimization]. This allows automatic calculation / provision of "priorities for setups in multiple lines," "a setup plan that takes into account the shed use of carts" and "effects of an increase / decrease in the setup number of operators on the production plan."
④ Number of operators optimization	Based on the production conditions set up in [Mounting process simulation], it optimizes the number of operators required for each line and setup, allowing you to automatically calculate / provide "the number of the operators required."
⑤ Auto generation of optimized mounting data	Based on approximate / detailed production plans developed by "production scheduler," it works together with NPM-DGS to prepare mounting production data without operator intervention. At that time, it also determines a production line for relevant product and the setup groups in the line that share common sequence.

Applicable machine

Machine series	Model	Machine info entry
NPM-X/NPM/VM/AM series	NPM-DX, NPM-WX/WXS, NPM, NPM-D/D2/D3/D3A, NPM-TT/TT2, NPM-W/W2/W2S, AM100, VM101/102	○*
CM/DT series	CM602-L, CM232-M/212-M, CM101-D, CM402-L/M, CM401-L/M, CM400-M, DT401-F/M, DT400-M	
Screen printer	SP60/70/80/18, SPG/SPD/SPV/SPV-DC	
NPM-VF series	NPM-VF	
Panasonic's former machine	Machines not included in the ones mentioned above	—
Competitor's machine	Competitors' machines (loader, screen printer, SPI, placement machine, AOI, reflow, etc.)	

*Because machine information is registered during installation, you will be able to easily configure settings such as registration of the floor configuration of your mounting production lines.
 ※For details, contact us. ※The current version is limited to the mounting process. ※Prepare PC on your own.

⚠ Safety Cautions

- Please read the User's Manual carefully to familiarize yourself with safe and effective usage procedures.
- To ensure safety when using this equipment, all work should be performed according to that as stated in the supplied Operating Instructions. Read your operating instruction manual thoroughly.

Panasonic Group products are built with the environment in mind.

Please check the homepage for the details.
panasonic.com/global/corporate/sustainability

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