

n.jet evo

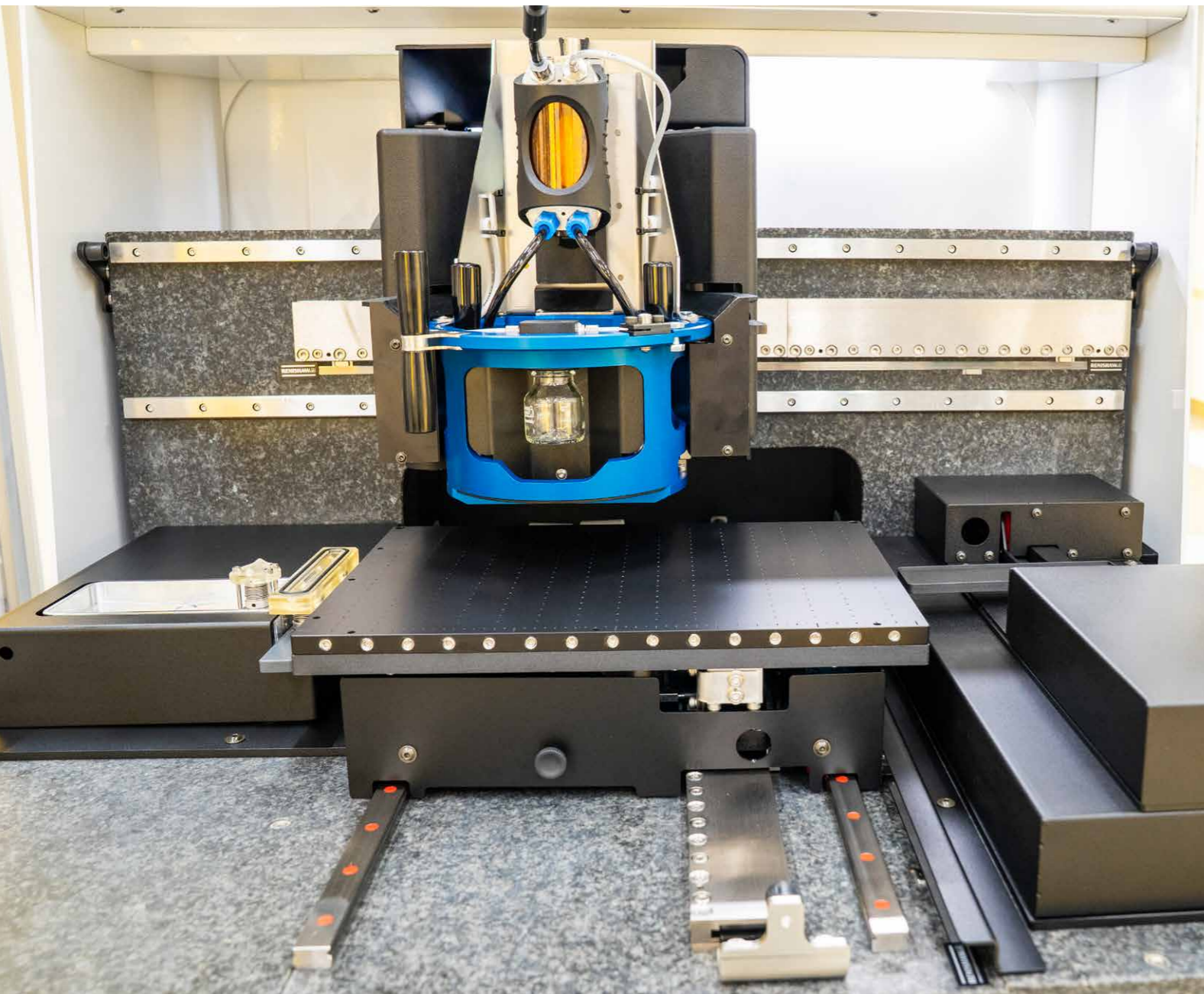
NOTION
SYSTEMS



DESKTOP INKJET PRINTER FOR PROCESS DEVELOPMENT

n.jet evo - MOST MODERN INKJET DESKTOP PRINTER FOR FUNCTIONAL MATERIALS DEVELOPMENT

The n.jet evo is the most precise inkjet printer designed specifically for the development of new applications in the field of functional materials and offering the latest state-of-the-art industrial inkjet printing technology. It is primarily used by material developers, in research and development, as well as at universities and other research institutions. Its applications enable the advancement of innovative solutions in areas such as semiconductor packaging, printed circuit boards, printed electronics, photovoltaics, display technology, and biomedicine.



SYSTEM FEATURES

The n.jet evo is a stand-alone desktop inkjet printer which is designed to operate with industrial inkjet printheads and specially developed cartridges with the following features:

Basic system	Fully integrated inkjet printer with high accurate motion system, mounted on a solid granite base
Substrate size	210 mm x 297 mm (A4)
Substrate chuck	Vacuum clamping with integrated vacuum generator
Substrate heating	Up to 60 °C
Substrate rotation	+/- 3°
Printhead module	Rotatable (90°), for different industrial print heads
Alignment camera	For fiducial recognition, substrate alignment and measurement
Ink supply system	Fast exchangeable ink tank system (30 - 100 ml)
Inline printhead cleaning	Manual or fully automated (optional)
Control	PC-controlled (Windows 11)
Data processing	Notion data conversion software Transfer via network connection (e.g. image data or job recipe)
Supported data formats	TIFF, Gerber, BMP, PNG
Dimensions	810 mm x 700 mm x 630 mm
Power supply	230 V / 50 / 60 Hz
Weight	130 kg
Exhaust	Two outlets on the rear for external exhaust connection
Enclosure	Housing with transparent plastic cover for optimal access

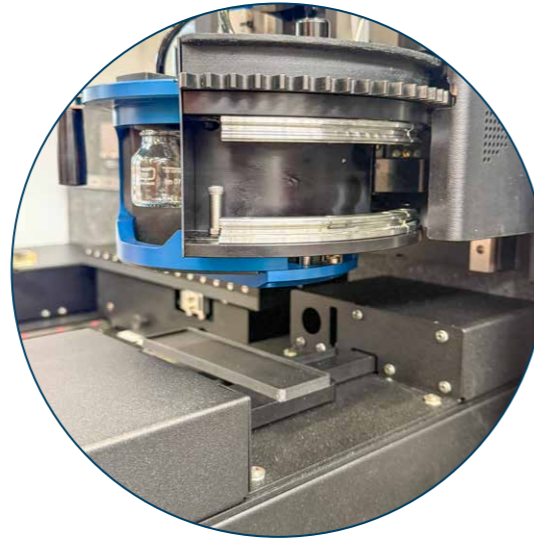
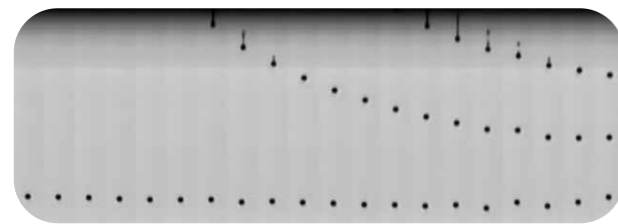
Options

Drop watcher	Inline drop watch system
Working table	Special designed table, including vibration insulators and drawers
Additional printhead module	For different printheads (printhead type upon request)
Printhead module holder	Protect the printhead during the non-use phase
Printhead cleaning	Automated printhead cleaning and capping with waste container
UV Curing unit	Fully integrated in print head module, with external control systems
UV protection	UV protective foil

OPTIONAL MODULES

Notion Drop watcher

Our advanced Notion drop watch system provides real-time insights of the n.jet evo inkjet printer. Analyze drop uniformity, nozzle consistency, satellite formation, and wetting dynamics to identify issues quickly and drive measurable improvements for the printing process.



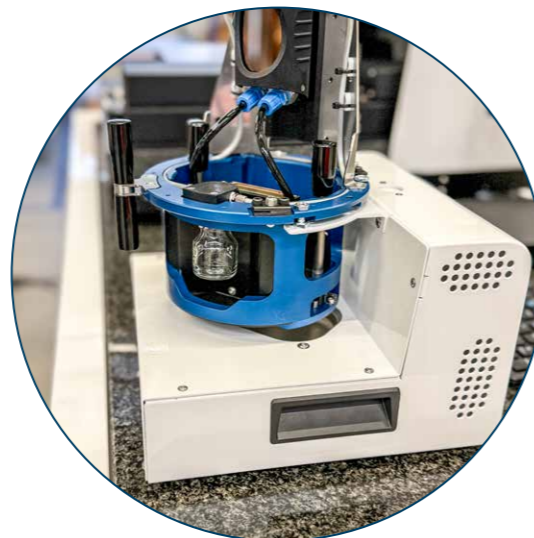
Inline printhead cleaning and capping module

The automated inline printhead cleaning module employs a non-contact suction cleaning process. By avoiding direct mechanical contact, the system minimizes stress on the nozzle plate, reduces the risk of surface damage, and maintains long-term nozzle integrity. This method enhances reliability while lowering maintenance requirements.



External printhead module holder

The external module holder supports a clean procedure during printhead module exchange and helps to cap and protect the printhead during the non-use phase.

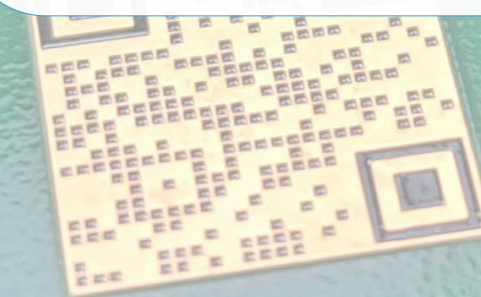


INKJET MATERIALS

Inkjet printing of functional materials is entering a new era of innovation, where precision, flexibility, and efficiency are more important than ever. Inkjet printing technologies are redefining how functional materials can be deposited, patterned, and integrated into advanced devices. By enabling additive, maskless, and digitally controlled processes, inkjet materials open the door to faster prototyping, cost-effective manufacturing, and entirely new design possibilities.

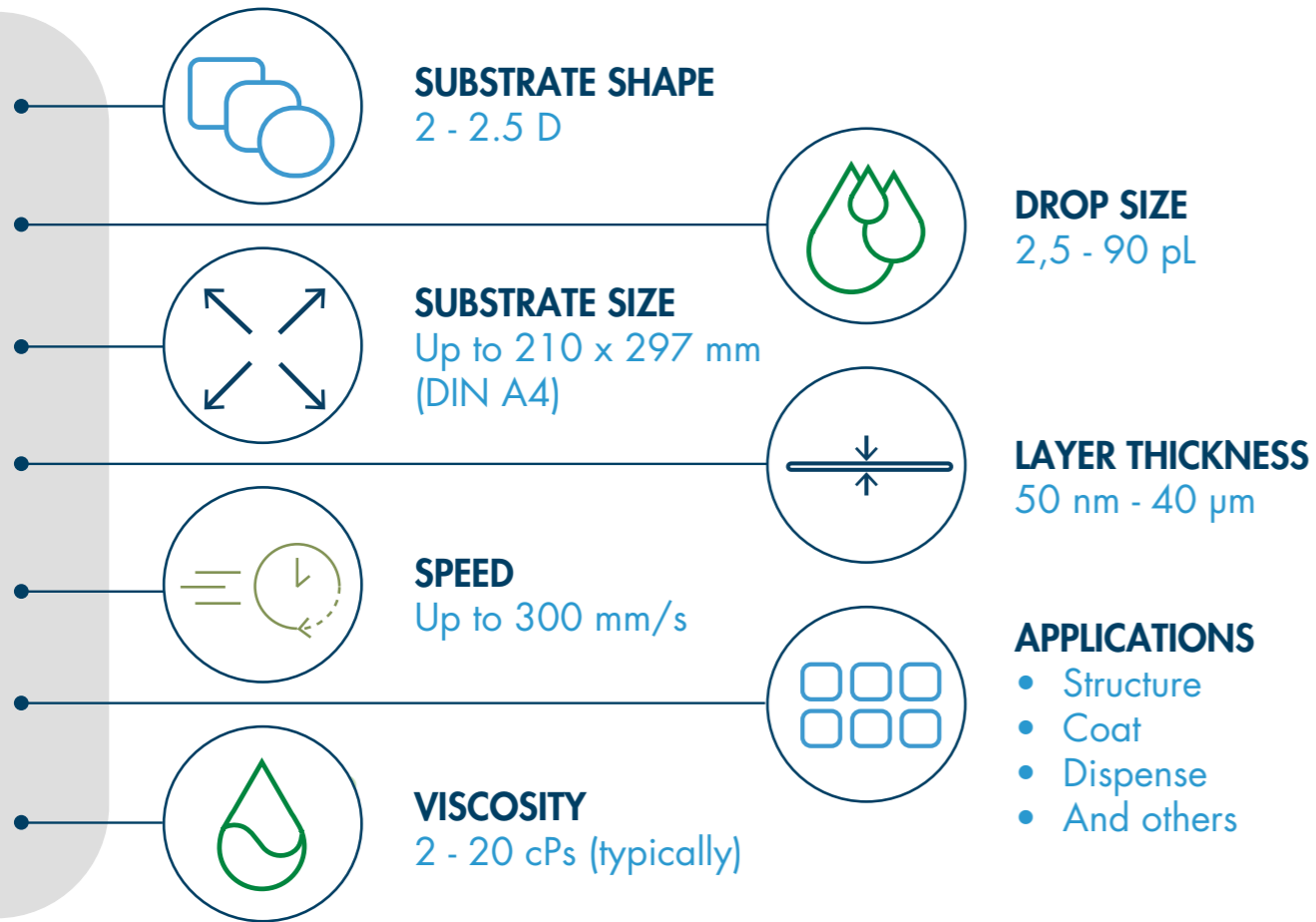
MATERIALS

CATEGORY	EXAMPLES	APPLICATIONS
Photoresist	Positive resists Negative resists Nano-imprint resist (NIL)	Masking for etching Lift-off processes NIL
Etch resists	UV-curable resists Hotmelt	Power electronics Deep silicon etching
Conductive inks	Silver-nanoparticle inks, MOD inks	Printed interconnects Antennas EMI shielding
Semiconducting inks	Perovskite inks	Solar cells
Dielectric inks	Polyimide (PI) Solder mask	Gate dielectrics Printed capacitors
Functional Polymers	3D inks UV-curable polymers	Wafer thinning Encapsulation MEMS packaging SiC power electronics



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WHAT CAN INKJET DO?



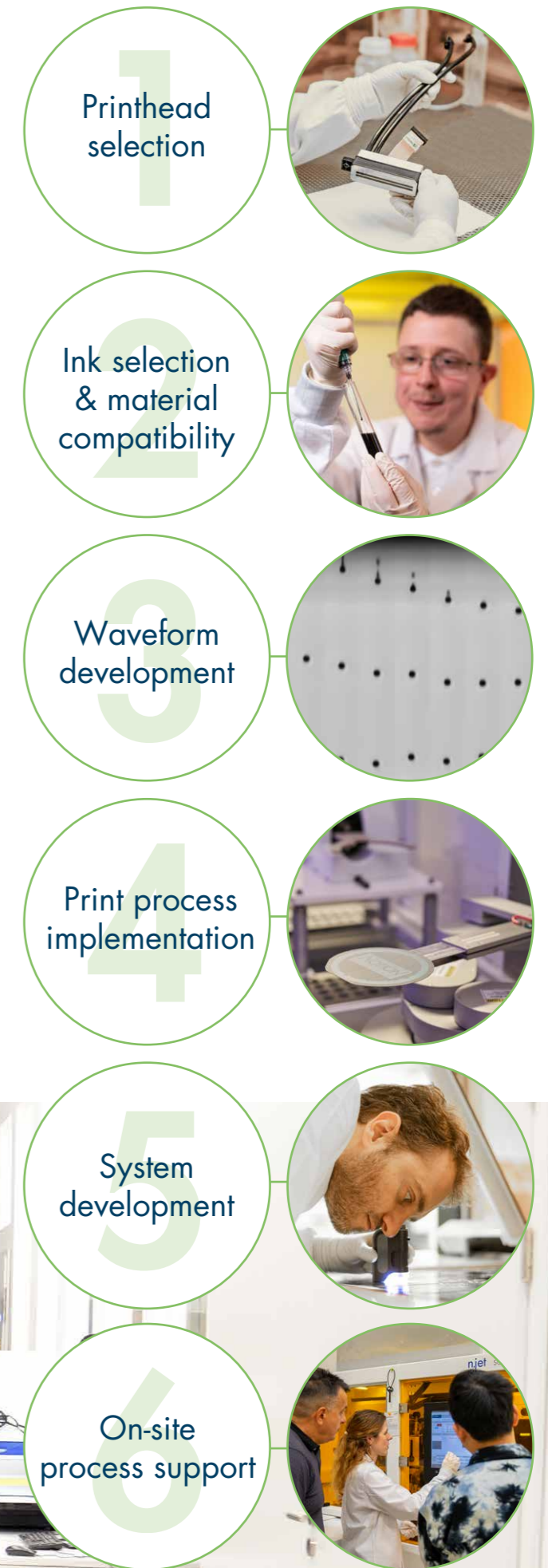
PROCESS DEVELOPMENT

Process development helps optimize various parameters such as

- Ink formulation,
- Printhead selection,
- Substrate choice,
- Substrate preparation,
- Printing speed, and
- Image resolution.

By systematically adjusting these parameters, process development can enhance the **printing quality, efficiency, and reliability of inkjet printing.**

This is particularly important for industrial applications, where consistent and high-quality printing is required for mass production. Additionally, process development can help **minimize the environmental impact of inkjet printing** by reducing ink and energy consumption and waste generation.



NOTION

S Y S T E M S



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