nsm
technologies for functional printing

explorer 750

The explorer 750 is a modular, multi-functional Roll-to-Roll printing, coating, and laminating system, ideal for ambitious R&D and pilot production across a wide range of industries.

750
explorer

Modular Roll-to-Roll Printing, Coating, and Laminating System

The explorer 750 ensures precise and reproducible printing on flexible materials. Its modular design supports future expansions, making it highly adaptable for various printing, coating, and laminating applications.

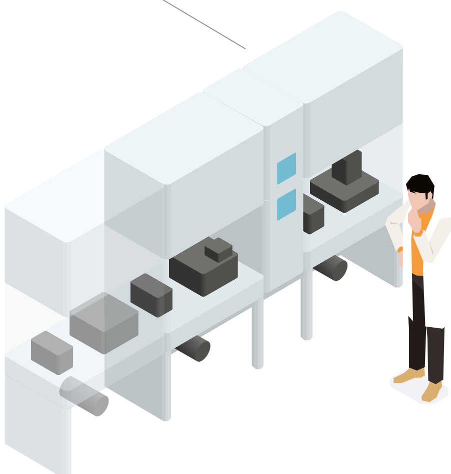
Applications

- Testing and development of inks and substrates
- Pilot production of flexible packaging
- Functional device development on flexible substrates
- Research and development of printed electronics

Versatility

Printing and Coating Technologies	Drying, Curing and Pretreatment
Slot Die	Photonic Curing
Rotary Screen	Hot Air
Flexo	UV
Rotogravure	IR
Inkjet	NIR
Lamination	Corona
and more	and more

Variable module composition



Technical Data

Printing/Coating technologies:	Slot Die Coating, Rotary Screen, Flexo, Rotogravure, Inkjet, Lamination
Drying methods:	UV, IR, NIR, Hot Air, Photonic Curing
Substrate pre-treatment:	Corona treatment, Web cleaning, De-ionizing web solution
Web handling & control system:	Electronic web tension control with force measuring system, Web edge guide control, Register control
Optional features:	Electrostatic print assist
Substrate size:	Up to 300 mm web width
Substrate compatibility:	Flexible materials (Paper, PET, Aluminium)
Process speed:	Up to 100 m/min.
Dimension (L x W x H):	Configuration dependent (varies by number of modules)
Weight:	Configuration dependent (varies by number of modules)

Technologies & Options

- **Modular Design & Interchangeable Printing Units:** The explorer 750 supports interchangeable Rotogravure, Flexographic, and Rotary Screen printing units, with future expandability for additional technologies as needed. This flexibility ensures smooth integration of new processes.
- **Substrate Flexibility & Treatment:** The explorer 750 is designed to print and coat a wide range of flexible substrates, including paper, PET, and aluminum, and includes substrate pre-treatment options such as corona treatment and de-ionizing web solutions.
- **Advanced Process Control & Web Handling:** Featuring electronic web tension control with force measuring systems, web edge guide control, and register control, the system ensures precise handling and positioning of flexible substrates.
- **Drying & Curing Technologies:** The system can be equipped with UV curing, IR, NIR, hot air drying, photonic curing, and other available technologies for various applications.
- **Low Ink Consumption & Flexible Ink Management:** The system minimizes ink use with open doctor blade systems for small volumes. For larger applications, the explorer 750 supports ink trays, chamber doctor blades, and ink pumps, allowing continuous printing with higher ink demands.
- **Integrated Automation & Control Systems:** The explorer 750 can be equipped with advanced automation features, such as recipe control and automated process adjustments, ensuring optimized production efficiency and consistent quality.

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