

# FOM nanoRC



The FOM nanoRC is the ideal entry point to begin the scalable coating of functional thin films and devices. The FOM nanoRC has been designed to replicate the complex coating processes achieved on large-scale roll-to-roll machines while requiring a fraction of the cost and physical footprint. By leveraging years of experience in materials research and slot-die coating, the FOM nanoRC provides users with a simple route for precise, reproducible, and scalable thin film production from any solution or slurry-based precursor.

## KEY FEATURES

- Non-contact coating within  $\mu\text{m}$  precision
- Uniform dry film thickness from nm to  $\mu\text{m}$
- Coating width from 1 mm to 100 mm
- Excellent layer uniformity and repeatability
- Designed for flexible substrates
- Semi-automated coating via intuitive touch panel
- Built-in hotplate for drying
- Integrated drying cartridges
- Seamless fume hood and glove box integration
- Plug and play installation



# Technical specifications

## MACHINE

- Model: FOM nanoRC
- Dimensions: 530 x 230 x 350 mm (L x W x H)
- Weight: 19 kg
- Substrate roller width: 110 mm
- Substrate holder heating: Up to 160 °C
- Recommended cable clearance: 100 mm
- External syringe reversible pump from 1 ml to 300 ml
- Pump operation is controlled via the start/stop coating function in the software
- Intuitive HMI touch panel interface
- Manual slot-die head height positioning with digital readout +/- 10 µm

## CERTIFICATIONS & STANDARDS

- Machine Standard: EN 60204-1 and ISO 13849-1 (CE)
- Compliant with Quality Directive 2006/42/EC Annex II B

## MACHINE UTILITIES

- Electrical power supply
- Voltage: Single-phase 230V, 50Hz or 110V, 60Hz
  - Maximum Current: 16 (A)
  - Power supply connection: IEC 14 connector

## COATING

- Coating width: 1 mm to 100 mm
- Coating length: Up to 500 mm
- Coating speed: 0.1 up to 2.0 m min<sup>-1</sup>
- Slot-die compatibility: FOM SD 25 – FOM SD 100

## OPTIONS

### Equipment:

- FOM Flexographic system

### Enclosure:

- FOM Enclosure

### Pumps, syringes, and consumables:

- External syringe pump - Standard viscosity
- External syringe pump - High viscosity
- Stainless steel syringe
- Glass syringe
- PP syringe
- Slot-die shims and guides for adjusting coating width and pattern

