

# FOM scalarSC

The FOM scalarSC is the ideal entry point to begin scalable coating of functional thin films and devices. The FOM scalarSC has been designed to allow easy control over coating on rigid and flexible substrates while requiring a fraction of the cost and physical footprint. By leveraging years of experience in materials research and slot-die coating, the FOM scalarSC provides the necessary freedom through a simplified design for everyday experimental runs. The FOM scalarSC offers excellent precision and reproducibility for a wide spectrum of lab-scale materials and coating processes relevant to industry and academia.



## 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 200 mm
- Designed for fluids up to 20,000 cPs
- Excellent Substrate flatness design
- Semi-automated coating via intuitive touch panel
- Designed for rigid and flexible substrates
- Built-in hotplate for drying
- Excellent layer uniformity and repeatability
- Seamless fume hood and glove box integration
- Plug-and-play installation
- Semi-automated coating via intuitive touch panel
- Integrated stand-alone syringe pump



# Technical specifications

## MACHINE

- Model: FOM scalarSC
- Dimensions: 870 x 485 x 470 mm (L x W x H)
- Weight: 50 kg
- Substrate holder dimensions: 255 mm x 355 mm
- Substrate holder heating: Up to 200 °C
- External syringe reversible pump from 1 ml to 300 ml
- Intuitive HMI touch panel interface

## COATING

- Coating width: 1 mm to 200 mm
- Coating length: Up to 300 mm
- Coating speed: 0.05 up to 2.0 m min<sup>-1</sup>
- Slot-die compatibility: FOM SD 25 - FOM SD 200

## MACHINE UTILITIES

### Electrical Power supply

- Voltage: Single phase 230V or 110V
- Voltage frequency: 50 & 60 (Hz)
- Maximum Current: 16 (A)
- Power connection: ICE connector

### Machine connection

- Remote Access: Via IXON switch (not provided by FOM)
- Local Connection: PC connection via Ethernet cable with RJ45 connector

## CERTIFICATIONS & STANDARDS

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

## OPTIONS

### Equipment:

- FOM Ionizing system (Anti-static)
- FOM Flexographic system
- FOM Blade coating system
- Slot-die heating
- Microporous vacuum chuck

### Additional drying:

- FOM Air knife system
- FOM IR drying system

### Enclosure:

- FOM Enclosure
- FOM Glovebox

### Pumps, syringes, and consumables:

- Syringe pump - Standard viscosity
- Syringe pump - High viscosity
- Stainless steel syringe
- Glass syringe
- PPTT syringe
- Syringe heating up to 80 °C
- Slot-die shims and guides for adjusting coating width and pattern

