

FOM vectorSC



The FOM vectorSC has been designed from the ground up to allow easy control over coating on rigid and flexible substrates. By integrating industry-grade components and user-friendly recipe features, the FOM vectorSC provides a seamless, accelerated user workflow and excellent control for coating various active materials. It is an ideal solution for users aiming to bridge the gap between fundamental research and pilot-scale production, emphasizing versatility and compatibility for various substrates and coatings.

KEY FEATURES

- Non-contact coating within μm precision
- Uniform dry film thickness from nm to μm
- Coating width from 1 mm to 200 mm
- Microporous vacuum substrate holder
- Automated coating via intuitive GUI
- Remote access from PC or Tablet
- Coating protocol saving in cloud
- Quick action buttons
- Designed for rigid and flexible substrates
- Integrated Pump with SW controlled wet film thickness
- Designed for fluids up to 20,000 cPs
- Built-in hotplate for drying
- Simple scaling from sheet coating to R2R coating
- Excellent layer uniformity and repeatability
- Seamless fume hood and glove box integration
- Remote support and troubleshooting
- Motorized slot-die head positioning (Option)



Technical specifications

MACHINE

- Model: FOM vectorSC
- Dimensions: 530 x 870 x 500 mm (L x W x H)
- Weight: 71 kg
- Substrate holder dimensions: 255 mm x 355 mm
- Substrate holder heating: Up to 200 °C
- Microporous vacuum dimensions: 210 mm x 306 mm
- Recommended cable clearance: 200mm
- Integrated syringe pump from 1 ml to 300 ml
- Integrated PLC control system

ELECTRICAL PANEL

- Panel dimensions: 1000 x 300 x 950 mm (L x W x H)
- Weight: 90 kg
- Material: Carbon steel
- Cable length to machine: 4,5 m (Standard)

COATING

- Coating width: 1 mm to 200 mm
- Coating length: Up to 300 mm
- Coating speed: 0.01 up to 5.0 m min⁻¹
- Slot-die head heating: Up to 80 °C
- Slot-die compatibility: FOM SD 25 – FOM SD 200

MACHINE UTILITIES

Electrical power supply

- 3 – phase Voltage: 3-PHASE+N+G 200-230 (V) OR 3-PHASE+N+G 380-415 (V)
- Voltage frequency: 50 & 60 (Hz)
- Maximum current: 24 (A)
- Electrical panel plug connection: FOM provides a CEE plug for connection to the electrical panel
- Cable length from electrical panel to machine: Fixed at 4.5 m
- Power connection: Connection cable from the main power supply to the electrical panel not included
- Recommended power connection cable: 12AWG / 4 mm²

Compressed air

- Compressed air information: Spec list 5-7 bar. Clean and dry, non-lubricated. ISO 8573-1:2010 Class 1.2.3 or better
- Connection and tubing type: To be fitted to Ø8 mm Festo push-fit connection

Internet connection

- Ethernet cable via RJ45 connector

CERTIFICATIONS & STANDARDS

- Machine Standard: EN 60204-1 and ISO 13849-1 (CE)
- Compliant with Quality Directive 2006/42/EC Annex II B
- Electrical panel standard: UL508A

OPTIONS

Equipment:

- Laptop
- FOM Ionizing system (Anti-static)
- FOM Flexographic system
- FOM Positioning sheet
- FOM Blade coating system
- FOM Slot-die height laser system
- FOM Slot-die height & alignment laser system
- FOM Equipment mounting system (For multiple options)
- Motorized slot-die head positioning (Option)

Electrical panel:

- Extension cable (from electrical panel to machine): Intervals of 5 m

Glove box integration:

- FOM Glove box adapter cables – 5m

Pumps, syringes, and consumables:

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

Additional drying:

- FOM Air knife system
- FOM IR drying system

Enclosure:

- FOM Enclosure

