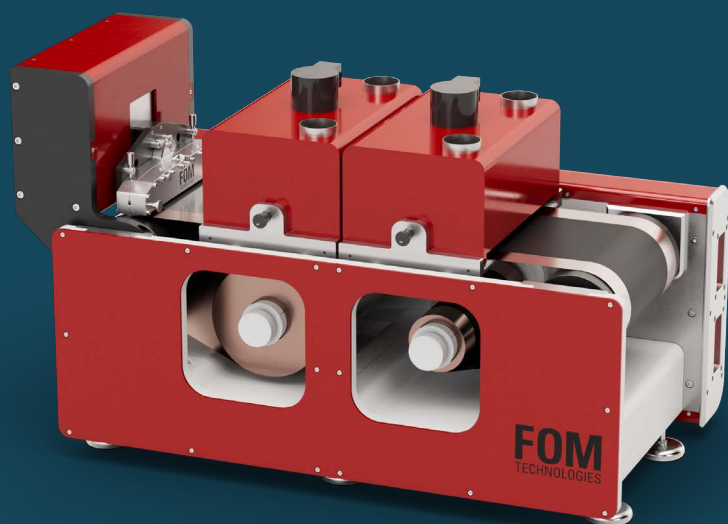


FOM omicronR2R



The FOM omicronR2R is a compact, versatile lab-scale roll-to-roll slot-die coater designed to mimic large-scale coating processes. Its modular design and multiple drying options enable seamless adaptation to evolving research needs to safeguard your investment.

The FOM omicronR2R enables researchers to accelerate and perfect their processes at lab-scale using formats common to pilot-scale, thereby de-risking the scaling exercise.

KEY FEATURES

- Small footprint roll-to-roll slot-die coater
- Seamless fume hood and glove box integration
- Fully motorized (x-y-z) coating bridge
- Non-contact coating with μm precision
- Coating width from 1 mm to 300 mm
- Upload or save coating recipe through cloud-based repository
- Modular oven system (Hot air, IR, UV, hot air/IR) - sections of 250 mm or 500 mm.
- Software-controlled syringe pump
- Excellent layer uniformity and repeatability
- Remote support & troubleshooting
- Broad viscosity range

MACHINE

- Model: FOM omicronR2R
- Standard dimensions: 671x600x1095 (HxWxL)
- Extension modules: 250 mm or 250 mm
- Weight: 150 kg (Standard configuration)
- Weight per module: 25 kg (250 mm) or 37 kg (500 mm)
- Software-controlled syringe pump (From 1 ml to 300 ml)
- Integrated PLC control system
- Roller with self-centering web alignment
- Speed control via active NIP
- Web tension 10-80N

MACHINE UTILITIES

Electrical power supply

- 3-phase Voltage: 3-phase+N+G 400 (V)
- Voltage frequency: 50 & 60 (Hz)
- Maximum current: 24 (A)

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 Ø6 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

COATING

- Motorized x-y-z slot-die head positioning with 1 µm precision
- Automated bridge angle movement from 0 to 90° angle
- Coating width: 1 mm to 300 mm
- Web width: Up to 320 mm
- Coating speed: 0.01 up to 3.0 m min⁻¹
- Slot-die head heating: Up to 80 °C
- Slot-die compatibility: FOM SD 25 – FOM SD 300

DRYING

Drying options (Max. 1 meter in total):

- FOM hot air oven section - 250/500 mm in length
- FOM IR oven section - 250/500 mm in length
- FOM combined hot air / IR oven section - 250/500 mm in length
- FOM UV oven section - 250/500 mm in length

Exhaust: Ø63 connection pipe

OPTIONS

Equipment:

- FOM Ionizing bar (Anti-static)
- FOM Blade coating system

Additional drying/curing:

- FOM Air knife system

Enclosure:

- FOM Enclosure

Pumps, syringes, and consumables:

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

