

FOM SD 25 to SD 200



FOM Technologies Slot-die heads are meticulously designed to deliver exceptional flow properties and ease of assembly within FOM coating machines. Engineered for a diverse range of film applications, FOM slot-die heads offer an array of sizes, mass flow ratings, shim thicknesses, and stripe patterning options, providing an accessible, user-friendly platform for high-quality coatings. With a commitment to innovation, FOM slot-die heads feature a meticulously crafted lightweight design, ensuring exceptional functionality and ease of handling and installation in various industrial settings.

KEY FEATURES

- Outstanding precise and consistent flow control
- Designed for quick and easy installation
- Available in diverse sizes and mass flow ratings
- Flexibility with varied shim thicknesses and stripe patterning options, facilitating different film applications
- Lightweight yet durable design without compromising structural integrity or performance
- Minimizes material waste with a low dead-volume design
- Provides uniform coatings and easily customizable coating patterns with tailored shims and guides
- Seamlessly integrates with all FOM coating machines
- Easy assembly, disassembly, cleaning, and maintenance create a hassle-free user experience
- Adaptable design with or without a meniscus guide for versatile coating applications
- Facilitates precise FOM alignment design for reliable shim and meniscus guide positioning
- Includes light weight, high quality protective flight case for shipping and storage
- Can be used for double-sided coating applications on FOM moduloR2R machine

Technical specifications

FOM SD 25 TO FOM SD 200

- Flatness tolerance on inside planes of FOM SD: $\leq 5 \mu\text{m}$ achieved over the entire surface
- Material: stainless-steel 1.4404 chemically passivated for high corrosion resistance
- Coating width: 1-200 mm
- Viscosity range: from 1 cP to more than 100,000 cPs at 25 °C
- Standard single manifold
- Available in standard and high viscosity versions
- Standard viscosity: Thread for connecting tubes 1/2-20 UNF
- High viscosity: Thread for connecting tubes 1/4-28 UNF

APPLICATIONS

Due to its accuracy, it is used in research and development for a wide range of applications and in precision industries like electronics, fuel cells, batteries, photovoltaics as well as medical and pharmaceutical applications.

FOM SD 25

Coating width 1 to 25mm



FOM SD 50

Coating width 1 to 50mm



FOM SD 100

Coating width 1 to 100mm



FOM SD 200

Coating width 1 to 200mm



FOM SD OVERVIEW

Model	Coating width	Weight PEEK	Weight Stainless steel	Dimensions (L x W x H)	FOM nanoRC	FOM arcRC	FOM scalarSC	FOM vectorSC	FOM alphaSC	FOM alphaR2R	FOM sigmaR2R	FOM moduloR2R
FOM SD 25	25 mm	0,12 kg	0,78 kg	28 x 30 x 70 mm								
FOM SD 50	50 mm	0,2 kg	1,12 kg	90 x 30 x 70 mm								
FOM SD 100	100 mm	0,3 kg	1,74 kg	140 x 30 x 70 mm								
FOM SD 200	200 mm	0,72 kg	4,06 kg	240 x 40 x 70 mm								
FOM SD 300	300 mm		8,6 kg	328 x 55 x 86 mm								
FOM SD 500	500 mm		20 kg	550 x 80 x 65 mm								

OPTIONS

- Slot-die heating up to 80°C
- FOM SD tool kit - Stainless steel for SV and HV
- FOM Coating kit SV – Standard and Bundle
- FOM Coating kit HV – Standard and Bundle
- *FOM SV slot-die to HV by changing inlet adapter SV (1/4 in. -28 UNF) to HV (1/2 in. -20 UNF).
- Syringes in stainless steel, plastic, and glass variants: 20-300 mL
- FOM SD Cleaning Kit
- Compatible with FOM continuous pumping system
- Compatible with FOM syringe pump (syringe heating optional)



PEEK

FOM PEEK slot-dies are cutting-edge solutions designed for precision coating applications in harsh conditions. Crafted from Polyetheretherketone (PEEK), this advanced FOM slot die embodies exceptional thermal stability, chemical resistance, and mechanical durability. Engineered to withstand high temperatures and harsh chemical environments, it ensures consistent, high-quality coatings while offering longevity and reliability in diverse industrial settings.

KEY FEATURES

- Engineered for effortless disassembly, assembly and cleaning
- Custom shim and meniscus guide designs
- Lip protection on slot die supports self-standing feature, aiding manufacturing processes
- Adaptable design with or without a meniscus guide for versatile coating applications
- Facilitates precise FOM alignment design for reliable shim and meniscus guide positioning
- Includes light weight, high quality protective flight case for shipping and storage
- Integrated pressure gauge enhances functionality.
- It can be used for double-sided coating applications on FOM moduloR2R machine
- Exceptional thermal resistance allows the slot die to withstand high temperatures encountered during coating processes without significant degradation
- Highly resistant to a wide range of chemicals, making the slot die suitable for use with various coating materials
- Low friction characteristics reduce wear and frictional losses during coating processes, contributing to longer operational life and minimized maintenance requirements



TECHNICAL SPECIFICATIONS

- Flatness tolerance on inside planes of FOM SD: $\leq 5 \mu\text{m}$ achieved over the entire surface
- Material: Polyetheretherketone (PEEK)
- Coating width: 1-200 mm
- Standard single manifold
- Viscosity range: from 1 cPs to more than 100,000 cPs at 25 °C
- Thread for connecting tubes 1/2-20 UNF

FOM SD OVERVIEW

Model	Coating width	Weight PEEK	Weight Stainless steel	Dimensions (L x W x H)	FOM nanoRC	FOM arcRC	FOM scalarSC	FOM vectorSC	FOM alphaSC	FOM alphaR2R	FOM sigmaR2R	FOM moduloR2R
FOM SD 25	25 mm	0,12 kg	0,78 kg	28 x 30 x 70 mm								
FOM SD 50	50 mm	0,2 kg	1,12 kg	90 x 30 x 70 mm								
FOM SD 100	100 mm	0,3 kg	1,74 kg	140 x 30 x 70 mm								
FOM SD 200	200 mm	0,72 kg	4,06 kg	240 x 40 x 70 mm								
FOM SD 300	300 mm		8,6 kg	328 x 55 x 86 mm								
FOM SD 500	500 mm		20 kg	550 x 80 x 65 mm								

OPTIONS

- FOM Coating kit standard viscosity – Standard and Bundle
- Syringes in stainless steel, plastic, and glass variants: 20-300 mL
- FOM SD PEEK tool kit
- FOM SD Cleaning Kit
- FOM continuous pumping system
- FOM syringe pump (syringe heating optional)
- FOM coating kit standard viscosity



Shims and miniscus guides

FOM shims and meniscus guides feature diverse designs, patterns, thicknesses, and lip heights meticulously crafted for precise coating applications. Engineered with high-grade stainless steel, these versatile dies offer tailored solutions for achieving consistent and high-quality coatings across various substrates, providing flexibility and reliability for diverse production needs.

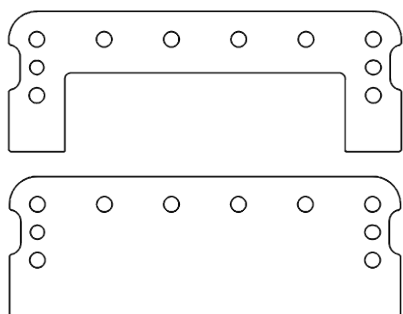
TECHNICAL SPECIFICATIONS

- Material: AISI302 stainless steel for corrosion resistance
- Coating width: 1-500 mm
- Available thicknesses (µm): 50, 60, 70, 80, 90, 100, 110, 120, 130, 150, 180, 200, 250, 300, 400, 500.
- Default thicknesses: Shim (100µm)/ Meniscus guide (200µm).
- Default lip height: 0,50 mm
- Coating pattern: standard, custom, or bespoke design
- Customization: custom lip height, thickness, patterns, coating width

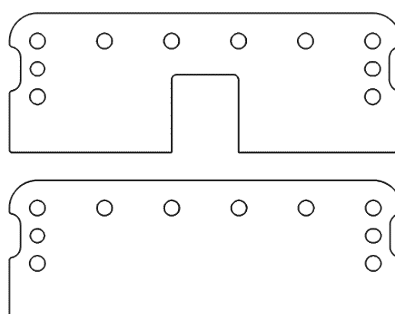
Model	Shims and meniscus guide outer dimensions	
	Width	Height
FOM SD 25	65 mm	50,5 mm
FOM SD 50	90 mm	50,5 mm
FOM SD 100	140 mm	50,5 mm
FOM SD 200	240 mm	50,5 mm
FOM SD 300	328 mm	59,5 mm
FOM SD 500	549 mm	66,05 mm

OPTION EXAMPLES

Standard design



Custom design



Bespoke design

