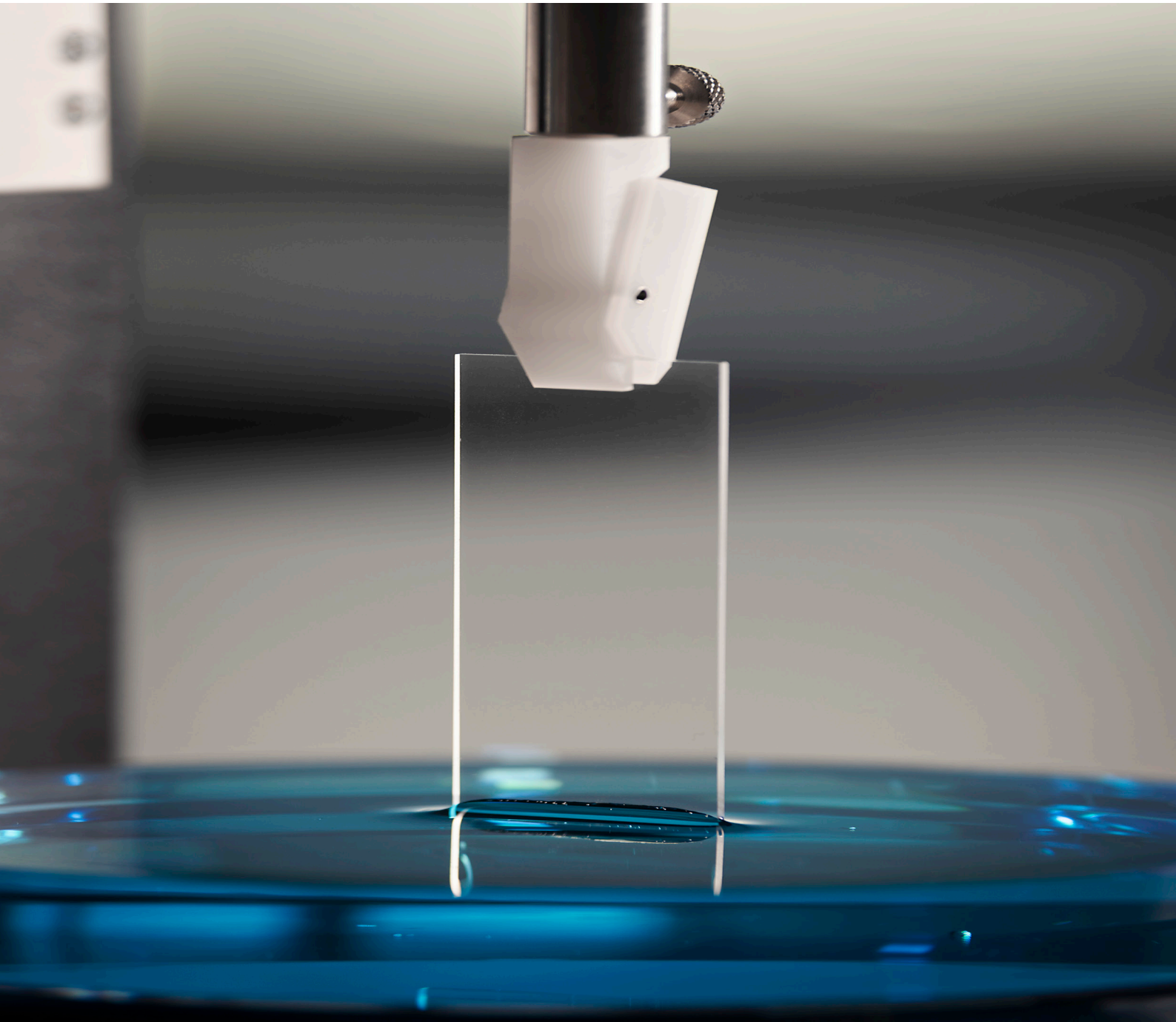


Dip Coaters

Precision Thin Film Deposition



Automatic Thin Film Deposition

Simple and versatile method

The dip coating technique is a simple yet versatile method for creating various coatings in fields such as biomaterials, electronics or sensors. Some of the benefits include:

- Dipping process can be fully automated.
- Versatility enabling use of substrates of various sizes, shapes and materials.
- Versatility enabling use of several different liquids in a single coating sequence.
- Upscalable technique all the way from laboratory to industrial high throughput.
- Coating quality and thickness can be adjusted with measurement parameters.

From nanoparticle deposition to sol-gel coatings

KSV NIMA Dip Coaters are high quality and extremely accurate coating solutions. The dip coaters are utilized for example in nanoparticle deposition. Some of the application areas include:

- Multilayer sensor coatings
- Implant functionalization
- Hydrogels
- Sol-gel coatings
- Self-assembled monolayers
- Layer-by-layer assemblies.

KSV NIMA Dip Coater features & benefits

- Computer-based, fully programmable dipping sequences save time and bring repeatable results.
- Thanks to high quality parts and robust design, the dipping is repeated exactly the same each time, independent of the user.
- Vibration free immersion and withdrawal for precise and uniform coatings.
- Flexibility to use different sample sizes and up to eight different liquids allow use of different particles and flushing fluids.
- Proven results as shown by hundreds of high quality academic publications and industrial customers.



*3 sample holders
as an option

Single Vessel Small



Single Vessel Medium/Large



Single Vessel Extra Large

KSV NIMA Dip Coaters

KSV NIMA Dip Coaters are high-end coating systems with full computer control and programmability. They are offered both in single liquid versions and multi-liquid versions, capable of dip coating the substrate automatically into several liquids in a single coating process. Single liquid dip coaters are ideal when only one coating solution is needed without rinsing steps, while Multi-liquid dip coaters enable using multiple different coating solutions as well as rinsing liquids automatically. Both single liquid and multi-liquid versions are available in different sizes to match specific application needs.

KSV NIMA Dip Coater Single Vessel Small

KSV NIMA Dip Coater Single Vessel Small is a compact Dip Coater enabling extremely precise coatings of small samples up to 150 g. Commonly used in research and development for depositing nanoparticles or other experimental coatings, it can be equipped with up to 3 sample holders simultaneously for versatility.

KSV NIMA Dip Coater Single Vessel Medium / Large

KSV NIMA Dip Coater Single Vessel Medium and Large are intended for coating large samples up to 500 mm. Common applications include for example biomedical coatings on implants and sol-gel coatings on larger surfaces. Up to 10 samples can be coated simultaneously.

KSV NIMA Dip Coater Single Vessel Extra Large

The KSV NIMA Dip Coater Single Vessel Extra Large (XL) is built for precise coating of very large and/or heavy samples up to 1000 mm and 2.5 kg. Typical samples include large metal and ceramic parts. Up to 10 samples can be coated simultaneously.

KSV NIMA Dip Coater Multi Vessel Small

KSV NIMA Dip Coater Multi Vessel Small is a unique instrument for coating small samples up to 150 g. The system uses automatically up to 8 different liquids for coating and rinsing. An integrated magnetic stirrer mixes the liquid to be deposited. Typical applications include for example the research and development of nanoparticle layer-by-layer deposition and sophisticated sol-gel coatings. Multi-liquid dip coaters enable using multiple different coating solutions as well as rinsing liquids automatically.

KSV NIMA Dip Coater Multi Vessel Medium and Large

KSV NIMA Dip Coater Multi Vessel Medium and Large are designed for coating large samples up to 500 mm. The liquids can be placed freely under the dip coater for wide versatility, and up to 10 samples can be coated simultaneously. Typical applications include biomedical multilayer coatings and layer-by-layer coatings.



Multi Vessel Medium/Large



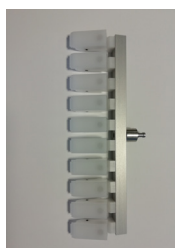
Multi Vessel Small

Accessories

Accessories are available to add further capabilities to your KSV NIMA. Dip Coaters, including temperature-controlled vessels, vacuum pump based horizontal deposition clamp, single and multiple sample clips, temperature probe, pH probe, magnetic stirrer and cabinets. For complete accessory descriptions, please visit the KSV NIMA Dip Coater product page: biolinscientific.com/ksvnima/deposition-of-thin-films/dip-coaters.



Standard single sample clip provided with all the KSV NIMA Dip Coaters (except the Single Vessel Small and the Multi Vessel Small).



Example of multiple sample clip available as an accessory for all Dip Coaters except the Multi Vessel Small. The multiple sample clip comes with 6 (picture) or 10 clips. Each clip can hold up to 150 g.

SINGLE VESSEL SYSTEMS SPECIFICATIONS

	Small	Medium	Large	Extra Large
SAMPLE SPECIFICATIONS				
Weight (g)	0...150	0...500	0...500	0...2500
Height (mm)	15...140	25...300	25...500	25...1000
Width (mm)	5...150	5...400	5...400	5...600
Thickness (mm)	0.15...3	0.15...15	0.15...15	0.15...15
Number of samples	1, 2*, 3* (*as an option)	1, 6*, 10* (*as an option)	1, 6*, 10* (*as an option)	1, 6*, 10* (*as an option)
OTHER INSTRUMENT SPECIFICATIONS				
Dipping speed (mm/min)	0.1...100 (0.2...200 as an option)	1...1000	1...1000	1...1500
Dimensions (L x W x H mm)	275 x 154 x 420	490 x 410 x 1200	490 x 410 x 1800	690 x 606 x 2650

MULTIVESSEL SYSTEMS SPECIFICATIONS

	Small	Medium	Large
SAMPLE SPECIFICATIONS			
Weight (g)	0...150	0...500	0...500
Height (mm)	10...70	25...300	25...500
Width (mm)	5...45	5...950	5...950
Thickness (mm)	0.15...3	0.15...15	0.15...15
Number of samples	1	1, 6*, 10* (*as an option)	1, 6*, 10* (*as an option)
OTHER INSTRUMENT SPECIFICATIONS			
Dipping speed (mm/min)	0.1...108	1...1000	1...1000
Horizontal motion type	rotating dipper (max. 8 vessels)	linear (0...800 mm)	linear (0...800 mm)
Horizontal speed (mm/min)	fixed rotational speed	1...1500	1...1500
Dimensions (L x W x H mm)	330 x 330 x 341	1210 x 510 x 1200	1210 x 510 x 1800



Biolin Scientific

[Progress Together]

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About Us

Biolin Scientific is a leading Nordic instrumentation company with roots in Sweden and Finland. Our customers include companies working with life science, energy, chemicals, and advanced materials development, as well as academic and governmental research institutes. Our precision instruments help develop better solutions for energy and materials, and perform research at the frontiers of science and technology.