# **Spin Coaters**

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Spin coaters are ideal tools fot the preparation of thin and ultrathin films especially for spectroscopic applications (optical, IR, X-ray, dielectrical etc.). The common design of all spin coater models is a housing made of solid anodized aluminum, a stainless steel worktop and a detachable PTFE protection cover.

- Rotational speed up to 18.000 rpm
- Passive or active vacuum hold-down of substrate
- Programmable
- Easy-to-use and maintenance-free design
- High-quality/good value-product
- 2-year warranty

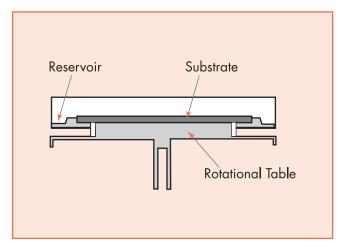
# Spin coater series SCI



Spin coater model SCI and rotational tables

The spin soaters of the SCI series are designed for routine applications and are available in four versions with maximum rotational speeds of 4.500, 9.000, 13.500 and 18.000 rpm. The speed can be adjusted by a helipot. The rotational speed is displayed on the built-in LCD. Due to the special design of the rotational tables a passive (no pump needed) vacuum hold-down of the substate is achieved at medium to high rotational speeds. For heavier substrates or at slower rotational speeds an additional fixing of the substrate may be required. Delivery includes a standard rotational table with a diameter of 10 mm. Custom-designed tables with diameters up to 71 mm are available. Furthermore we offer special tables with reservoir which allow the recovery of excess sample material (e.g. for very valuable sample material, or if only a limited amount of material is available).

The tables can easily be exchanged.



Functionality of a rotational table with reservoir

# Spin coater SCV



Spin coater model SCV

The spin coater model SCV allows active vacuum holddown of the substrate by using an external vacuum pump. Delivery includes a standard rotational table with a diameter of 30 mm. Custom tables with diameters up to 90 mm are available. The maximum rotational speed is 6.000 rpm.



### Spin coater SCE-150



Spin coater model SCE-150

The spin coater model SCE-150 is based on µ-controlled electronics incl. intuitive one-knob control. We offer rotational tables from 25 mm to 90 mm in diameter; its max. speed is 150 rps (9000 rpm). It features non-volatile storage of all plateau and speed settings (adjustable from 3 s to 600 s) so that work can continue as before even after voltage interruption. The quick-response, high-efficiency rotation speed control keeps the speed fixed at  $\pm 2$  rps and allows fast acceleration even when larger tables are used. All accessories can be used with all models of the spin coater family. Delivery includes the spin coater, a 30-mm-diameter rotational table, a vacuum hose with quick coupler, a power supply and manual.

## Spin coater SCC-200



Spin coater model SCC

The SCC-200 spin coater is the logical further development of the spin coater series that were introduced in 1999. The new models feature a programmable ramp function with the option to store up to 10 routines in a non-volatile memory. An intuitive one-button-control and an easy-to-read display keep routine lab applications as simple as possible.

The electronic core of the new series is a  $\mu$  control unit based on Z80. Rotational speeds of up to 200 rps (12000 rpm) permit the manufacturing of thin and ultra thin films (µm to nm). A variety of tables ranging from 30 to 90 mm in diameter allow for a variety of different substrates. For very small substrates of approx. 5 mm in length we offer a 25 mm table with a plane surface. Where technically feasible, we will also provide custom-made tables for special substrates. The substrates are gently held down by vacuum suction.

The new SCC series features:

- housing made from anodised aluminum with stain-less steel worktop and PTFE cover
- modern, cost and energy efficient, user-friendly, intuitive design
- alphanumeric four-line display (20 characters/line)
- an extra large range of rotational speeds
- two rotational speed ramps (acceleration/deceleration)
- programmable ramp duration: 3 to 600 s
- two rotational speed target values
- programmable dwell time: 3 to 600 s
- 10 rotational speed sequences storable in non-vola-tile memory
- total process times: 12 s to 40 min
- display of the remaining process time
- highly efficient, quick-response speed regulation to ±1rps
- quick response time even with large tables
- wide range of accessories (tables, pumps, lines, power supplies)
- full compatibility with all SCV and SCE coaters
- EU conformity (CE, RoHS)
- a great price/performance ratio

Delivery includes a standard table model VT-30, power supply, vacuum line with quick couplers and a quick reference guide. All spin coaters are delivered in a foam packing that may be used as storage box for accessories.

# Vacuum pump MVP

The vacuum pump fits all spin coaters of the SCV, SCE, and SCC series. The vacuum is 675 mbar with a flow volume of 7 l/min. The noise level is 40 dB(A) max. The vacuum hose is connected by quick couplers.



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Ordering information Spin coater without vacuum port				
Part number	Description			
KL-SCI-10	Spin coater model SCI-10 Max. rotational speed 4.500 rpm Min. rotational speed 600 rpm Rotational table for 10 mm substrates			
KL-SCI-20	Spin coater model SCI-20 Max. rotational speed 9.000 rpm Min. rotational speed 1.200 rpm Rotational table for 10 mm substrates			
KL-SCI-30	Spin coater model SCI-30 Max. rotational speed 13.500 rpm Min. rotational speed 1.800 rpm Rotational table for 10 mm substrates			
KL-SCI-40	Spin coater model SCI-40 Max. rotational speed 18.000 rpm Min. rotational speed 2.400 rpm Rotational table for 10 mm substrates			

#### **Ordering information** Spin coater with external vacuum port (Vacuum pump needs to be ordered separately)

Part number	Description
KL-SCV-10	Spin coater model SCV-10 Max. rotational speed 6.000 rpm Rotational table diameter 30 mm
KL-SCE-150	Spin coater model SCE-150 Max. rotational speed 9.000 rpm Rotational table diameter 30 mm
KL-SCC-200	Spin coater model SCC-200 Max. rotational speed 12.000 rpm Rotational table diameter 30 mm

Ordering information Rotational tables for spin coaters ceries SCI Outer/inner diameter specified in mm				
Part number	Description			
KL-ST-18	Rotational table 18/10 mm, stainless steel, for all SCI models			
KL-ST-18QCM	Rotational table for QCM substrates (14,1 mm), stainless steel			
KL-ST-18K	Rotational table 18/10-17 mm, custom design			
KL-ST-40	Rotational table 40/20 mm, aluminum for all SCI models			
KL-ST-40K	Rotational table 40/20-38 mm, custom design, aluminum			
KL-ST-40R	Rotational table 40/20 mm, aluminum with reservoir, for all SCI models			
KL-ST-40RK	Rotational table 40/20-38 mm, custom design, aluminum, with reservoir, for all SCI models			
KL-ST-72	Rotational table 72/70,4 mm for 50 mm square substrates, aluminum, only for SCI-10 and SCI-20			
KL-ST-72K	Rotational table 72/50-71 mm, custom design, aluminum, only for SCI-10 and SCI-20			

#### **Ordering information** Rotational tables for spin coaters series SCV, SCE and SCC Part number Description KL-VT-25-PLAN Rotational table, 25 mm diameter, plane surface, aluminum **KL-VT-30** Rotational table, 30 mm diameter, aluminum **KL-VT-50** Rotational table, 50 mm diameter, aluminum **KL-VT-70** Rotational table, 70 mm diameter, aluminum KL-VT-90 Rotational table, 90 mm diameter, aluminum

Ordering information Vacuum pump				
Part number	Description			
KL-MVP-01	Vacuum pump			
KL-VSO-40	Vacuum line 0.4 m for models SCV, SCE and SCC to connect customer vacuum pumps			
KL-VSO-100	Vacuum line 1.0 m for models SCV, SCE and SCC to connect customer vacuum pumps			

