

# LabSpin6/8

MANUAL SPIN COATER/DEVELOPER



YOUR NEEDS	LABSPIN SOLUTIONS
<b>Process Variety</b>	+ Spin coating + Puddle developing + Drying
<b>Flexibility</b>	+ Adjustable dispense position allows for center dispense and edge coating + Puddle develop supported by chuck oscillation reduces develop time + Edge bead removal possibility
<b>Easy Operation</b>	+ Touch panel software allows easy and comfortable operation + Removable bowl for quick changeover between different processes avoiding cross contamination
<b>Reliability and Safety</b>	+ Direct coupled hollow shaft motor with vacuum spill glass + Drain bottle in front panel for easy access and monitoring of filling level

## THE PERFECT SOLUTION FOR LAB COAT AND DEVELOP PROCESSES +

SUSS MicroTec's LabSpin platform represents the latest generation of manual coater/developer systems that have been developed specifically for laboratory and R&D. Designed for a variety of photolithography chemicals, the LabSpin process station provides uniform, precise and repeatable coating results on the wafer through its advanced process chamber design.

LabSpin systems are offered in two versions for up to 150mm or 200mm wafers, either as table-top (TT) unit or for integration into a wet bench (BM). They are characterized by a robust clear design allowing comfortable and stable use. The combination of many technical details like the glass cover for maximum chemical resistance, removable process bowl for easy cleaning and the spill free process chamber design makes the series unique.

The complete tool layout including the process chamber design and the resulting coating quality are based on SUSS MicroTec's field-proven coating technology knowledge.

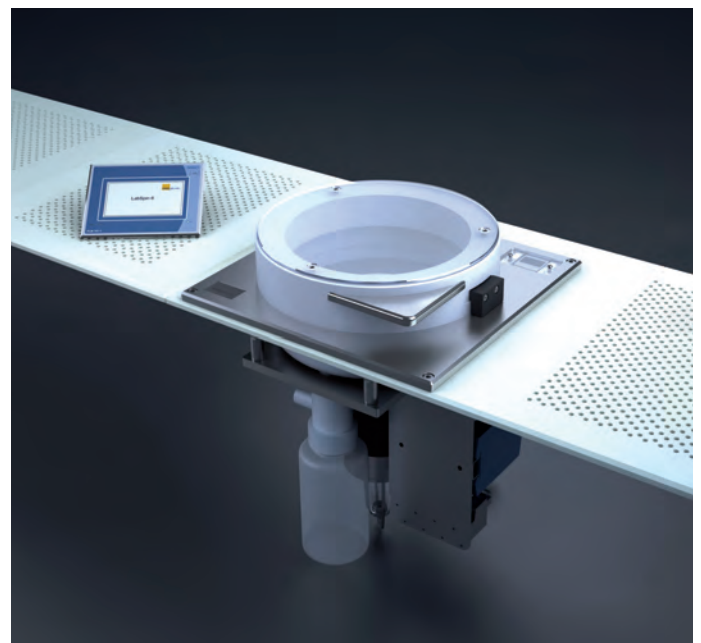
LabSpin coaters can process a wide range of substrates including rounds, squares and pieces through the available standard and customized chucks. The small footprint requires only minimum space.

The required vacuum for the chuck is produced internally by a Venturi nozzle and supplied compressed air, thus, no extra vacuum pump is needed (can be re-piped for external vacuum supply by operator).

Whichever configuration is selected, every LabSpin is based on world renowned SUSS process knowledge and quality.

Multiple options are available to meet the requirements of various applications like:

- + spin coating, optional with:
  - syringe or automatic dispense system
  - edge bead removal
  - edge coating
- + puddle developing.



LabSpin6 BM (BenchMounted system) for integration into a wet bench

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## AVAILABLE LabSpin OPTIONS

### COVER PLATE FOR OPTIONAL FUNCTIONS

LabSpin systems can be equipped with a cover plate for optional functions to variably position the resist dispense nozzle, thereby enabling center dispense, wafer edge coating and edge bead removal. For develop processes a developer dispense system and a nitrogen purge line for drying can also be adapted to the cover.

### SYRINGE DISPENSE SYSTEM

The pressurized syringe dispense option is a powerful tool for applications with only small resist quantities or for processes that require a frequent material change. Pressurized syringe dispense enables a more efficient use of costly R&D materials.

### FULLY AUTOMATIC DISPENSE SYSTEM

A fully automatic dispense system is the perfect solution for customers who strive to process multiple wafers on a manual tool. The fully automatic dispense system is mounted directly to the resist bottle. High dispense repeatability combined with optimized dispense volumes reduces the material consumption to a minimum and keeps the cost of ownership low.

### EDGE COATING

LabSpin enables superior edge coating for best protection of wafer edges for ensuing process steps. Edge coating is possible for wafers from 2" to 150mm on LabSpin6 and from 2" to 200mm on LabSpin8.

### EDGE BEAD REMOVAL (EBR)

The LabSpin series offers superior edge bead removal in the range of 2" up to 150mm or 200mm wafers with an adjustable EBR nozzle. The EBR dispense option includes a fully automatic dispense system for solvent supply.

### DEVELOPER DISPENSE SYSTEM

The LabSpin system can also be configured for puddle develop processes. The developer dispense option is linked to the cover plate for optional functions and employs a pressurized tank as developer dispense system. Supported by chuck oscillation the LabSpin platform is able to provide uniform process results at reduced process times.

### NITROGEN DRYING

The nitrogen drying option offers the possibility to dry the wafer after developing and rinsing with DI water. The digital display in front of the tool allows monitoring of the adjusted nitrogen flow.

### FOOT SWITCH

For a convenient start of the processes, a foot switch can be added to the configuration.

## TECHNICAL DATA

### TOOL CONFIGURATIONS

LabSpin6	up to 150mm round or 4" square substrates
LabSpin8	up to 200mm round or 6" square substrates

### VERSIONS

Stand-Alone System	Table-Top version (TT)
For Integration into Wet Bench	BenchMounted version (BM)

### CONTROLLER

Graphical User Interface (GUI)	Touch panel with color display
Max. Number of Recipes	200
Max. Number of Process Steps	40
Programmable Step Time	1 - 999s
Motor	Brushless EC-motor with hollow shaft and spill glass
Max. Spin Speed	8 000rpm +/- 1 rpm (with 200mm chuck)
Max. Acceleration	4 000 rpm/s

### SAFETY

Digital Vacuum Gauge	yes
Automatic Vacuum Control	yes
Closed Cover Control	yes

### REQUIREMENTS

Power	4.6A / 2.5A (115V / 230V)
Compressed Air	5 - 6bar
Vacuum	min. -0.7bar (optional)
Nitrogen	5 - 6bar (optional)

### DIMENSIONS\*

LabSpin6 BM (W x D x H)	320 x 310 x 415 mm <sup>3</sup>
LabSpin8 BM (W x D x H)	350 x 340 x 415 mm <sup>3</sup>
Controller (W x D x H)	160 x 120 x 67 mm <sup>3</sup>
LabSpin6 TT (W x D x H)	320 x 425 x 420 mm <sup>3</sup>
LabSpin8 TT (W x D x H)	350 x 455 x 420 mm <sup>3</sup>

\* without options

Data, design and specification depend on individual process conditions and can vary according to equipment configurations. Not all specifications may be valid simultaneously. Illustrations, photos and specifications in this brochure are not legally binding. SUSS MicroTec reserves the right to change machine specifications without prior notice.

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