

Spin Module SM-150 Ideal for manual coatings



Wafer Clean	Photoresist	Mask Alignmen	t Post Bake	Etch &	Stripping	Clean &
& Primer	& Soft Bake	& Exposure	& Develop	Hard Bake		Inspection
Spin Rinser Dryer Hotplates (Dehumidifier)	Spin Modules Spray Coater Hotplates		Hotplates Developer	Developer Developer-Etch Hotplates	Developer-Etch	Spin Rinser Dryer

The **Spin Modules SM-150** are the optimal choice for manual and semi-automatic coating of thin layers. They are used for substrates with no or very low surface structures. All commercial photoresists and coating materials can be coated homogeneously on wafers up to 150mm (6 inches) or 127x127mm (5x5 inch) substrates. The process chamber is designed for a diameter of up to 176mm.



The SM series is convincing due to its high level of uniformity and repeatability, coupled with easy operation and comfortable handling. In order to keep the cleaning effort for the process chamber to a minimum, SAWATEC has developed a comprehensive and good value bowl protector. This bowl protector is easy to remove and dispose of once the process has been completed. Due to the high-quality design, the maintenance effort is minimal. Therefore, the SAWATEC spin modules are preferentially used for laboratories, R&D, pilot projects and institutes.

The high-precision, good value instruments are available both as portable bench-top and bench-mounted units.



FEATURES (BASIC CONFIGURATION)

- ▶ Up to 50 programmes with 24 segments each can be programmed
- Quick start function for repeat processes
- User-friendly process configuration with touch screen panel
- Process parameters: speed, acceleration, time
- Rotational direction can be selected (CW, CCW)
- Manual loading and unloading of the substrates
- Substrate fixation via vacuum and safety interlock protection
- Manual cover with air flow inlet and sensor lock control
- Acoustic signal when the process has finished

PERFORMANCE DATA

- Speed range: 0 to 10'000rpm +/-1rpm
- Speed acceleration: 0 8'000rpm in 0,8 sec. / 0 10'000rpm in 1 sec.¹⁾
- Delay: 10'000rpm 0 in 2,5 sec. / 8'000 rpm 0 in 0,8 sec. ¹⁾
- Process time up to 2376 seconds
- Dosing time 99 seconds/segment

1) Depending on the substrate size and spin chuck type



ADDITIONAL FUNCTIONS (OPTIONS)

- Semi-automatic cartridge dispensing system, 50ml glass syringe with manual dispensing arm and recirculation function
- Manual nitrogen (N2) purge of the process chamber
- Start/stop foot switch for ease of operation (cable length 1.8m)
- Bowl assembly made of anodised aluminium
- Bowl protector made of aluminium or PE
- Vacuum pump for SM-150 module
- ▶ Wafer alignment tool 2" 6" (round)

SPIN CHUCK RANGE

For perfect coating results, the spin chucks are supplied in different sizes, materials and designs. Depending on the application, one-piece or two-piece spin chuck sets with optical centring aid are used. To ensure that the reverse side of the substrate does not become contaminated, it is the crucial to select the optimal spin chuck size and specific chuck design. Replacing the spin chucks is very easy and does not require any tools.

- Vacuum chuck specimen
- Vacuum chuck 1" to 3" round
- Vacuum chuck 100mm (4") to 150mm (6")
- Vacuum chuck 100x100mm (4"x4")
- Vacuum chuck 125x125mm (5"x5")
- Further chucks on request

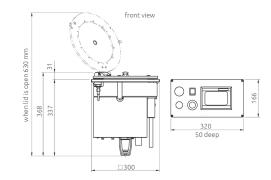


Bench-mounted unit SM -150-BM

Bench-top unit SM -150-BTCompact, space-saving design

DESIGN AND DIMENSIONS

- Bowl assembly made of POM for high degree of material compatibility
- ▶ No photoresist discharge due to integrated splash collar made of POM
- Transparent lid made of glass
- > 3.5" colour display touch screen panel
- ▶ High-precision, highly dynamic AC servomotor
- Electropolished stainless steel housing
- Housing: 350 x 510 x 403mm (L x W x H)
- Mounting module: 300 x 300 x 368mm (L x W x H)
 Mounting panel: 320 x 166 x 50mm (L x W x H)
- Mounting panet: 320 x 166 x Summ (L x w
 Weight: approx. 20kg
- Weight: approx. 29kg



Bench Top (BT)

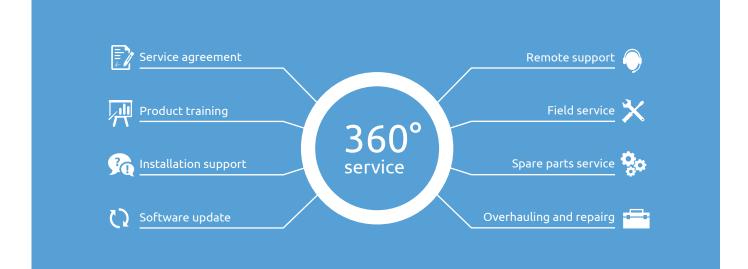
Bench Mounted (BM)

REQUIRED MEDIA

- > 230 VAC 50/60Hz 10A
- Plug connector for foot switch
- Technical vacuum, tube Ø6/4mm (-0.8bar)
- Compressed air or N2 tube Ø6/4mm (3bar) (only needed together with a dosing system)
- Drain connector Ø12mm
- BT exhaust connector Ø38mm (20–50m3/h)
 BM exhaust connector Ø25mm (20–50m3/h)







If you would like a personal consultation or have a specific request, please do not hesitate to call us. Our technical experts will be pleased to help you.

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