

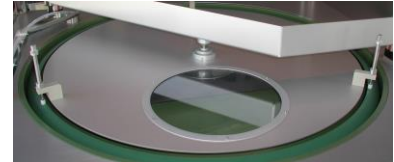
**Spin Module SM-900**  
Optimal choice for semi-automatic  
coatings of very large substrates





The **Spin Modules SM-900** are the optimal choice for semi-automatic coating of larger substrates. 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 **900mm or 600x600mm (24x24") substrates**.

The **RCCT system** (Round-Closed-Chamber-Technology) effectively reducing air turbulence over the rotating substrate and improve the coating uniformity as the atmosphere within the closed process chamber becomes more quickly saturated with solvents, so that the resist dries more slowly and results in a more homogeneous coating process with remarkably savings of the consumed medias.

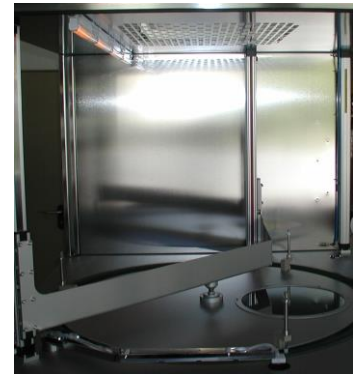


The SM series is convincing due to its high level of uniformity and repeatability, coupled with easy operation and comfortable handling. Due to the high-quality design, the maintenance effort is minimal. Therefore, the SAWATEC spin modules are preferentially used for laboratories, R&D, pilot projects and institutes.

The high-precision instruments are available as mobile cabinet units.

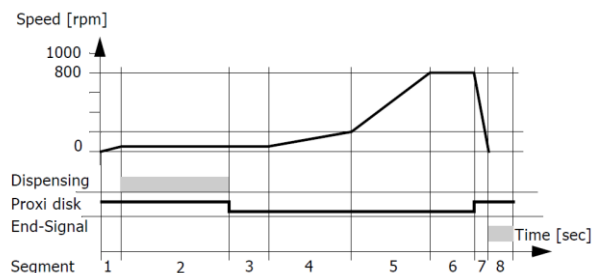
## FEATURES (BASIC CONFIGURATION)

- 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)
- RCCT system (Round-Closed-Chamber-Technology)
- Dynamic dispense arm prepared for up to 4 media lines
- Dispensing pump SP-50 for viscosities up to 800 cps including suck-back function
- Manual loading and unloading of the substrates
- Substrate fixation via vacuum and safety interlock protection
- Acoustic signal when the process has finished



## PERFORMANCE DATA

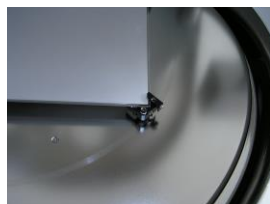
- Speed range: 1 to 2'000rpm +/-1rpm
- Difference from set rotation speed to actual value < +/-1%
- Speed acceleration: 0 – 5'000rpm in 0.5 sec. (unloaded)
- Delay: 5'000 rpm – 0 in 0.5 sec.
- Process time up to 2'376 seconds per segment with 0.1 sec. steps
- Dosing time 99 seconds/segment



## SPIN CHUCK RANGE

For perfect coating results, the spin chucks are supplied in different sizes, materials and designs. Depending on the application, an optimised round or square shaped spin chuck 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 round 900mm
- Vacuum chuck square 24"x24"
- Further chucks on request (see examples)



### ADDITIONAL FUNCTIONS (OPTIONS)

- Automatic cartridge dispensing system CDS-50, 50ml glass syringe
- Top side edge bead removal (EBR circular)
- Additional dispensing line including precision dosing pumps
- Start/stop foot switch for ease of operation (cable length 1.8m)
- PR tank heating system (2 ltr.)



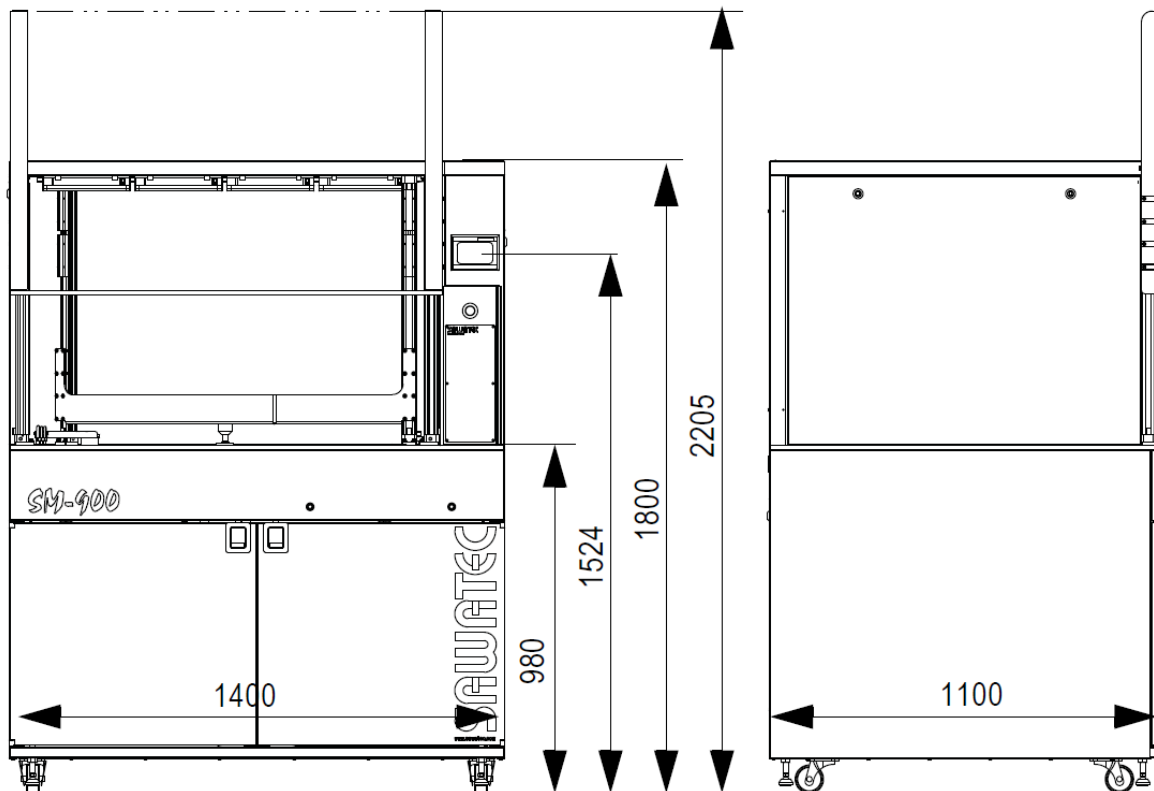
Additional dispensing line with dosing pumps



Start / Stop foot switch

### DESIGN AND DIMENSIONS

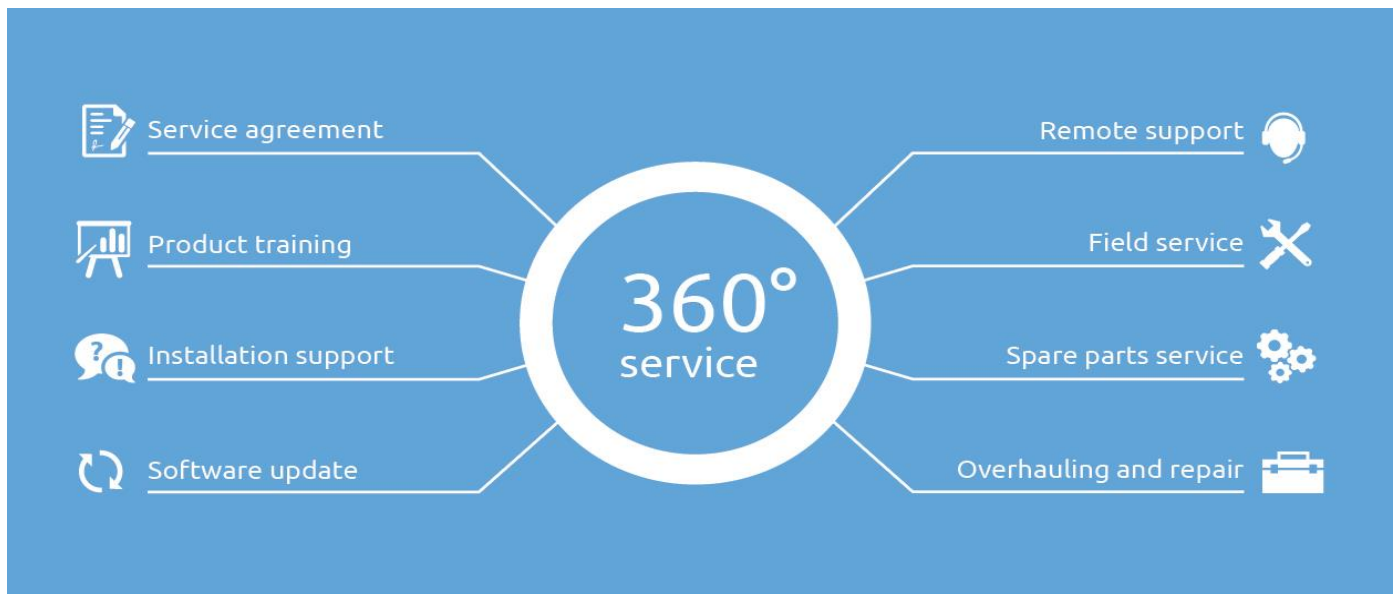
- Mobile cabinet made of electro polished stainless steel
- Process bowl made of stainless steel for high degree of material compatibility
- Lid cover made of stainless steel with adjustable distance between cover and substrate
- No photoresist discharge due to integrated splash collar made of stainless steel
- Glass front door to observe the process
- High-precision, highly dynamic AC servomotor
- Cabinet size: 1400 x 1100 x 2205mm (L x W x H)
- Weight: approx. 300kg





#### REQUIRED MEDIA

- 400 VAC 50/60Hz 16A
- Plug connector for foot switch
- Technical vacuum, tube Ø6/4mm (-0.8bar)
- Compressed air or N2 tube Ø6/4mm (6bar/4bar)
- Exhaust connector Ø76mm (40–60m3/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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