

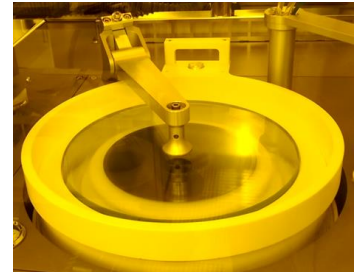
**Spin Module SM-300**  
Optimal choice for  
semi-automatic coatings





The **Spin Modules SM-300** are the optimal choice for 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 300mm (12 inches) or 200x200mm (8x8 inch) 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 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. 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 instruments are available both as mobile cabinet and bench-mounted units.

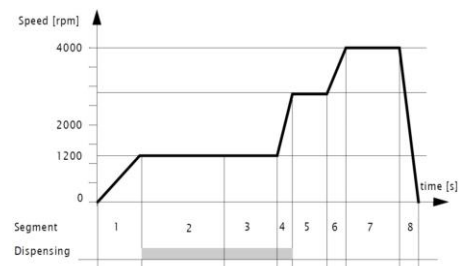
## FEATURES (BASIC CONFIGURATION)

- 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)
- RCCT system (Round-Closed-Chamber-Technology)
- Dynamic dispense arm prepared for up to 4 media lines
- 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 6'000rpm +/-1rpm (optional 10'000rpm for wafers smaller than 8")
- Difference from set rotation speed to actual value < +/-1%
- Speed acceleration: 0 – 6'000rpm in 0,6 sec.
- Delay: 6'000rpm – 0 in 0,6 sec.
- Process time up to 9'999 seconds with 0,1 sec. steps
- Dosing time 999 seconds/segment



## 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 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 300mm (12")
- Vacuum chuck 100x100mm (4"x4")
- Vacuum chuck 125x125mm (5"x5")
- Vacuum chuck 150x150mm (6"x6")
- Vacuum chuck 200x200 (8"x8")
- Further chucks on request



### ADDITIONAL FUNCTIONS (OPTIONS)

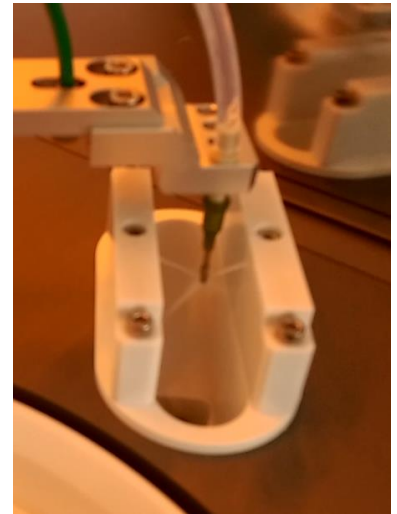
- Automatic cartridge dispensing system, 50ml glass syringe CDS-50
- Top side edge bead removal (EBR circular)
- Automatic nozzle cleaning including solvent pump FP-20
- Additional dispensing line including precision dosing pump GSP-98
- Start/stop foot switch for ease of operation (cable length 1.8m)
- Bowl protector made of aluminium
- Wafer alignment tool 2" – 12" (round)



Wafer alignment tool



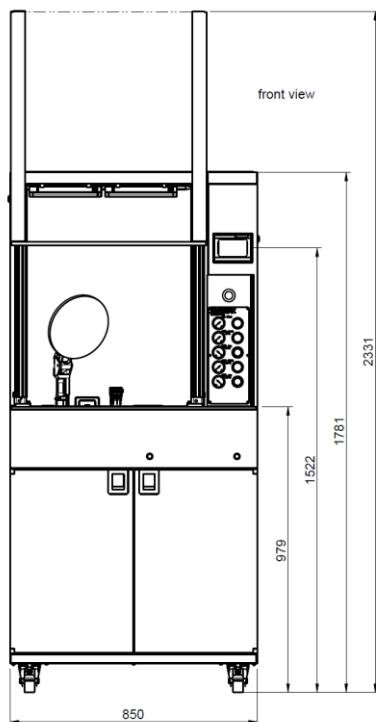
Additional dispensing line  
with dosing pump GSP-98



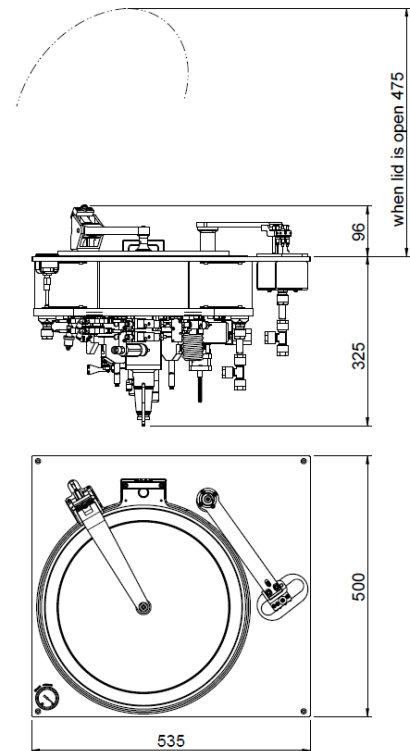
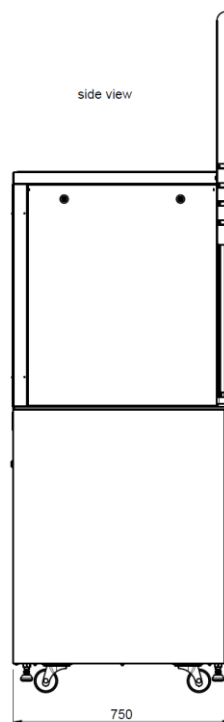
Automatic nozzle cleaning

### DESIGN AND DIMENSIONS

- Mobile cabinet made of electro polished stainless steel
- Process bowl made of PETP for high degree of material compatibility
- No photoresist discharge due to integrated splash collar made of PETP
- Glass front door to observe the process
- High-precision, highly dynamic AC servomotor
- Cabinet size: 850 x 750 x 2331mm (L x W x H)
- Bench mounted size: 430 x 400 x 669mm (L x W x H)
- Weight: approx. 250kg



Cabinet

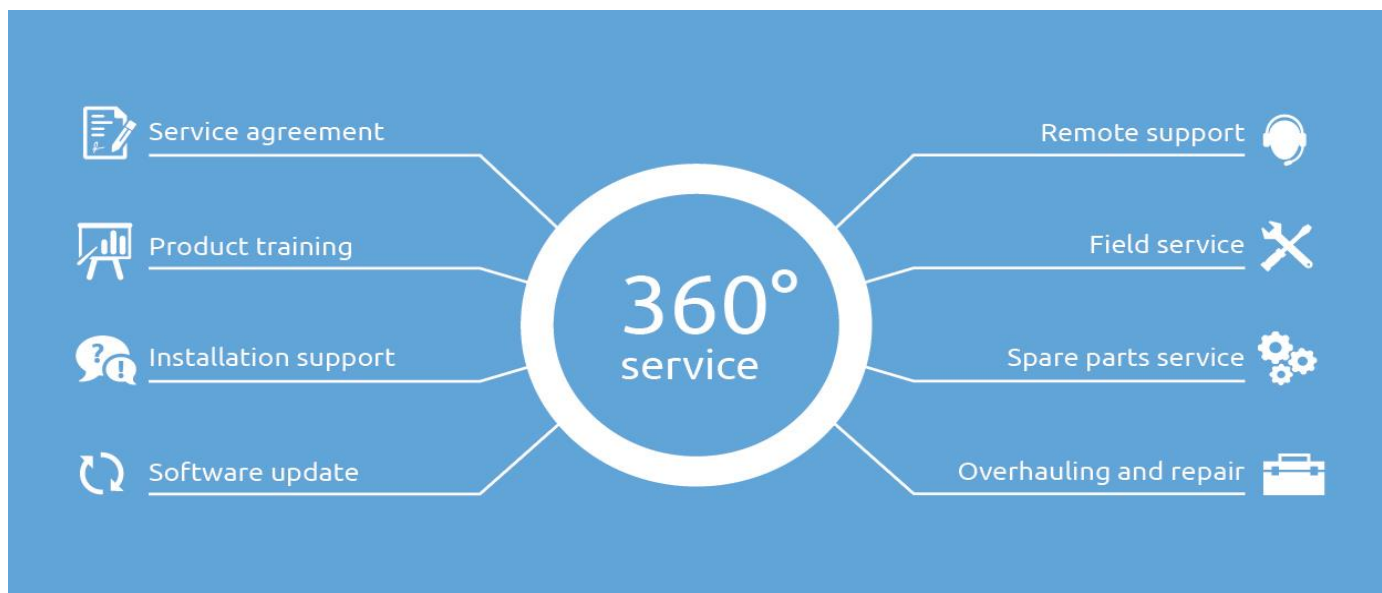


Bench Mounted (BM)



## REQUIRED MEDIA

- 230 VAC 50/60Hz 15A
- Plug connector for foot switch
- Technical vacuum, tube Ø6/4mm (-0.8bar)
- Compressed air or N2 tube Ø6/4mm (6bar)
- Exhaust connector Ø76mm (40–60m3/h)
- BM version: drain 2 x Ø 12mm



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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