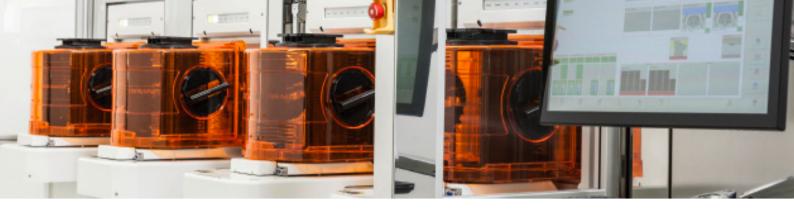


AUTOMATED COATING/DEVELOPING PLATFORM

SUSS ACS300 Gen3 Powerful solution for advanced packaging





FULLY AUTOMATED COAT AND DEVELOP SYSTEM

SUSS ACS300 Gen3

Powerful solution for high-volume production

The modular system ACS300 Gen3 is specifically designed for demanding high-volume production environments. It provides sophisticated coating, developing and baking functionalities that can be easily adapted to various processes. Maximum process control effectively supports the wide field of application. This, together with the smallest footprint on the market for a system with eight spinner modules, makes the tool indispensable for any challenging advanced packaging application, such as wafer-level chip-scale packaging, fan-out wafer-level packaging, copper pillar flip-chip packaging and 3D packaging.

ATTRACTIVE COST OF OWNERSHIP

The ACS300 Gen3 allows for efficient module stacking, thus saving costly space in the cleanroom. Up to twelve modules can be conveniently arranged on top of one another in a three-level modular system while the tool's multiple chemicalsaving features achieve further savings. Whether SUSS MicroTec's proprietary GYRSET technology, a state-of-theart dispense system or a chemical recirculation system, the ACS300 Gen3 uses chemicals economically and works in line with even the most rigid sustainability standards.





HIGHLIGHTS

- + Reduced footprint by means of module stacking
- + Flexible process configuration
- + Advanced process monitoring and control
- + Efficient chemical handling



ONE TOOL FOR ALL ADVANCED PACKAGING APPLICATIONS

By offering multiple process technologies such as photo resist, polyimide and PBO coating within one system, the ACS300 Gen3 delivers high efficiency. It also provides capabilities for up to five resist or four develop chemistries per module for optimal process flexibility. The universal hotplate design eliminates the need for specific hotplates for different resist or PI types. The ACS300 Gen3 allows for simultaneous 200 and 300 mm wafer processing without mechanical changeover. It also provides the option to handle warped wafers.

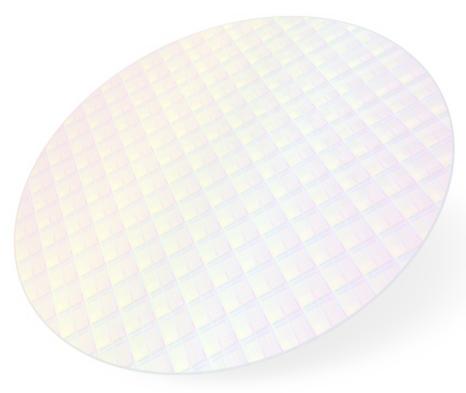
WHERE THROUGHPUT COUNTS

The ACS300 Gen3 excels at throughput. When using the optional second robot system it processes up to 240 wph in a three-step process. An advanced process control

system helps to optimize processing time: scheduling algorithms can be selectively swapped to ensure that time slots of bottleneck steps are fully utilized. Furthermore, developer chemicals at elevated temperatures and flow modes reduce process times.

FROM CONSISTENT PROCESS MONITORING TO HIGH YIELD

What makes the ACS300 Gen3 stand out is its high degree of process control. Process data for all relevant parameters such as temperature, flow, pressure, volume, purge rates, etc. are continuously logged. Data logging allows for precisely tuned process parameters, repeatable results and quick identification of potential weak points. Processes become more stable and repeatable, and yield can be significantly increased.





SUSS ACS300 Gen3 **Technical data**

GENERAL FEATURES

Substrate Size	200 mm and 300 mm
	Option: Warped wafer handling up to 10 mm
System Throughput	120 wph / option 240 wph, for 3-step process
User Interface	Windows 7 operating system with SUSS MMC software
Max. # Spin Modules	≤8 (scalable system)
Max. # HP/CP	≤30 (scalable system)
Max. # Load Ports	≤4 (scalable system)
SPINNER MODULES	
COATER	
Bowl Design	Open Bowl or GYRSET
Resist Systems	Up to 5 temperature controlled resist dispense modules Viscosity Ranges: 1 to 10.000 cps Repeatability: Controls dispense volume ±1%
Features	Edge bead removal and back side rinse Closed-loop flow controllers Programmable exhaust
DEVELOPER	
Module Design	Aqueous and solvent based developing
Developer Dispense	Up to 4 temperature controlled developer dispense nozzles Nozzle Types: Puddle, double puddle, binary spray and fan spray Repeatability: Dispense flow rate control within ±1%
Features	Chemical recirculation Chemical heating up to 35°C

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

OVEN STACK MODULES	
HOT PLATE	
Hot Plate Temperature	Up to 250 °C
Temperature Uniformity	≤ 0.8 °C up to 100 °C ≤1% above 100 °C
Bake Method	Programmable proximity with fixed minimum proximity
COOL PLATE	
Cool Plate Temperature	15 to 30 °C
Temperature Control	±0.2°C
Cool Method	Programmable proximity with fixed minimum proximity
VAPOR PRIME	
Vapor Prime Temperature	Up to 250 °C
Priming Method	HMDS vapor prime
DIMENSIONS	
Height (8 module / 12 module)	2.0 m/3.0 m
Length including min. clearance	3.5 m



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