![amcoss systems logo]

# 300mm wafer processing.

## Fully automated equipment ready for robot FOUP loading

Our modular amcoss amc 3000 spinner is the perfect completion of our amc series of fully automatic single-wafer process tools. With its substrate-size-range between 150 and 300 mm (9" square) amc 3000 offers very flexible applications in coating, lift-off, developing, cleaning, vapor priming and heating of wafers and masks. As always, we focus on our customers´ needs and therefore, every tool may be optimized for either flexible single processes or high throughput. The possibility of FOUP loading via robot or rail system in the cleanroom or plant is just as self-evident as the integration of an optional 300 mm SECS.

amc 3000

## Beneficial highlights_

// **300mm SECS/GEM interface:** our ams PILOT software is configured to support 300 mm standard SECS/GEM communication or other customized protocols if needed.

// **Proven amc key features:** amc 3000 stands out due to all proven technical features of the other amc models, as well as the unique user-friendly machine design. A genuine through-the-wall installation is possible, just as are flexible machine adjustments and easy maintenance.

// **Safe:** the equipment is designed accordingly to the newest safety rules.

// **Full process control:** each selected process is managed by the relevant module of our comfortable amcoss ams PILOT software complying with Semi-standard E95-1101. All necessary parameters can be adjusted and will be logged into the software.

// **Unique single-nozzle grip:** The innovative positioning arm with single-nozzle grip carries only one nozzle at the time. This avoids particle build-up caused by friction of rubbing tubes. All nozzles momentarily not required, remain within the nozzle storage with rinse and drip pan, which prevent the tip of the nozzle from drying out and impede delayed dripping onto the substrate.
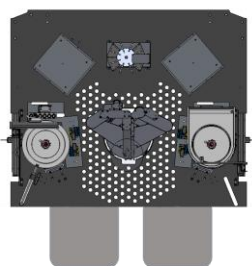
Wafer diameters: 150 mm up to 300 mm or 7 x 7" up to 9 x 9"

Up to 2 I/O stations for 150 mm to 200 mm open cassettes or 300 mm FOUP

Max. 5 individual processing modules

1 two-link robot handler with single or double end effector

Outer dimensions: 1596 mm x 2082 mm

Ø 150 TO 300 MM

# Modular system for customer-specific equipment_

### amc coater module
// Unique bowl design for optimal process results (e.g. no cotton candy when processing high viscosity resists)
// Servo-controlled nozzle positioning, programmable with absolute distance values
// Programmable wafer backside and bowl rinse
// EBR (Edge Bead Removal) system programmable with absolute distance values, also for rectangular substrates
// Dispense system for up to 5 different media per bowl with single-nozzle positioning arm and automatic nozzle change
// Different resists dispense pumps (e.g. syringe, trap tank, etc.) available

### amc developer module
// Spray-, puddle or megasonic development
// Various developer media per bowl possible
// Servo-controlled nozzle positioning programmable with absolute distance values
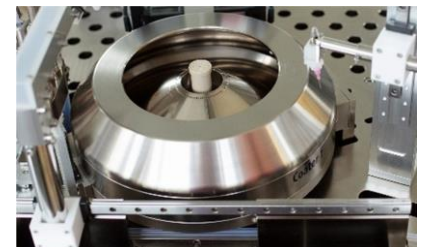// Programmable wafer backside, topside and bowl rinse

### amc lift-off module
// Unique lift-off process with large area megasonic
// High- or middle-pressure cleaning with DIW or solvents
// Special reclaim solution for minimal media consumption
// Easy recycling of lifted metals
// Programmable wafer backside, topside and bowl rinse

### amc cleaning module
// Cleaning of wafer frontside, backside and edge bevel
// Various cleaning methods as standard solutions available
// Large area megasonic

### amc temperature module
// Up to 5 (optional 6) hot- or coolplates per module
// Standard hotplate (60° - 200℃)
// High-temperature hotplate (60° - 450℃)
// HMDS vapor priming hotplate (60° - 200℃)
// Single or multi-zone hotplate
// Coolplate (10° - 60℃), with either water or peltier cooling
// Curing by UV light or supported by UV light
// Options for proximity control: Fixed proximity, programmable proximity, vacuum contact

### amc wafer-handling module
// „Pick & place" robot
// Contactless wafer centring „on-the-move"
// Slot-scanning including identification of carrier type and wafer size
// OCR, bar- and matrix-code support
// Wafer vacuum or edge gripping

### Optional configurations
// Thin wafer processing
// Backside coating with automatic flip station
// Perforated wafer processing
// Mini environment with temperature and humidity control
// Resist and developer temperature control
// Media tempering device to the point of use



// Coater module with servo-controlled single-nozzle positioning arm, EBR, and exhaust



// Developer module with high splash ring for spray and puddle developing.



// Solvent module for lift-off or resist strip for standard solvents and various lift-off techniques