

efficiency.

Ultimate perfection in single wafer spin processing



amc
1000+

amc
2000+

amc
2500+

ams
pilot

design.



Economic, custom-made and comfortable solutions_

amcross single wafer spin coating, developing, lift-off and cleaning equipment is the perfect answer to the manifold challenges that will have to be faced in the microsystems and photolithography industry. Our **amc**-product-line does set new standards with regards to cost-benefit calculation in spin processing: our customers are able to optimize their production processes and so reach best process and product quality at highest cost savings and excellent return on investment.

Here our attractive cost calculation becomes evident. Sophisticated features contribute to a perceptible increase of output – which saves production time, lessens reject and considerably reduces quality related costs. Resist savings of up to 70% and avoidance of test-runs lead to extremely low material costs.

With their extraordinary design, perfected construction and self-explaining **ams** pilot software, **amcross** machines are configured for maximum user-friendliness and comfortable handling.

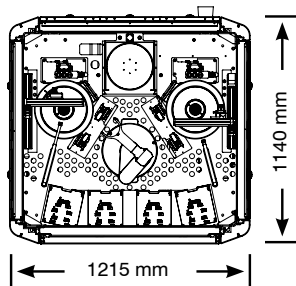
Due to the platform-concept and modular system of **amcross** spin processors our customers will be able to effortlessly realize very different process applications: different processing modules and carriers with various substrate types may be individually combined on the same platform.

BENEFIT

modules.

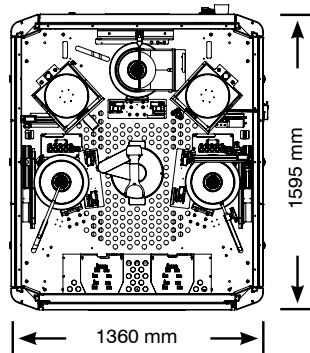
THINKING AHEAD!

With our **amc-series** we will be able to offer individual solutions for substrate coating, developing, lift-off and cleaning. In close cooperation with our customers, we will analyse their individual production and process related needs. Thereupon we will set up their unique amcross machine with the modules chosen by them on one of our three basis platforms. Any future modifications or conversions can be easily realized at any time. You cannot ask for more flexibility – or performance at an equally attractive price!



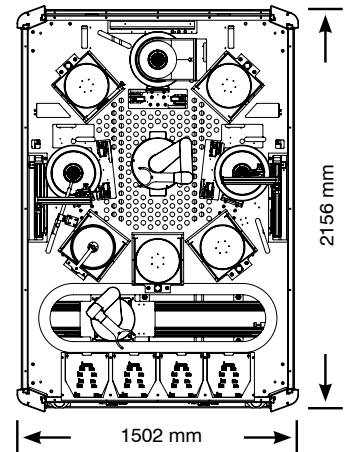
amc 1000+

Wafer diameters: 2" to 8"
Up to 4 I/O stations for 2" to 6" (max. 4 x open cassettes or 2 x SMIF) or
Up to 2 I/O stations for 8" (open cassettes or SMIF)
Max. 3 individual processing modules
1 two-link robot handler



amc 2000+

Wafer diameters: 2" to 8"
Up to 4 I/O stations for 2" to 8" (max. 4 x open cassettes or 2 x SMIF)
Max. 5 individual processing modules
1 two-link robot handler



amc 2500+

Wafer diameters: 2" to 8"
Up to 4 I/O stations (max. 4 x open cassettes or 3 x SMIF)
Max. 7 individual processing modules
2 two-link robot handlers

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 resist 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 very low 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°C)
- // High-temperature hotplate (60° - 450°C)
- // HMDS vapor priming hotplate (60° - 200°C)
- // Single or multi-zone hotplate
- // Coolplate (10° - 60°C), 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

key features.

Small
features,
enormous
value_



// **Servo-control:** All desired positions of the dispense and the edge bead removal nozzle are programmable on the X, Y and Z axes. This enables nozzle positioning above the wafer with absolute accuracy as well as dispense in a spiral or meandering movement. Benefit: no time-consuming calibration or test-runs, but extraordinary uniformity and resist savings.

// **Substrate and resist variety:** A great variety of substrate configurations within different carrier types can be handled in parallel during one single process without modification. Slot-scanning even includes the identification of the wafer size and thickness. Our **amc** equipment supports dispense of a broad range of resists with different viscosities.

// **Standard components:** The use of high-quality standard components guarantees an attractive price-performance ratio, manageable costs for spare parts, highest reliability and enables simple multi-vendor-capability sourcing.

// **Transparency and accessibility:** Large front windows as well as transparent and completely removable side doors allow good view into the working area and easy access to the machines' interior.



Modular, flexible and therefore alterable design of the processing surface on one of 3 basis platforms with customizable configurations and applications.



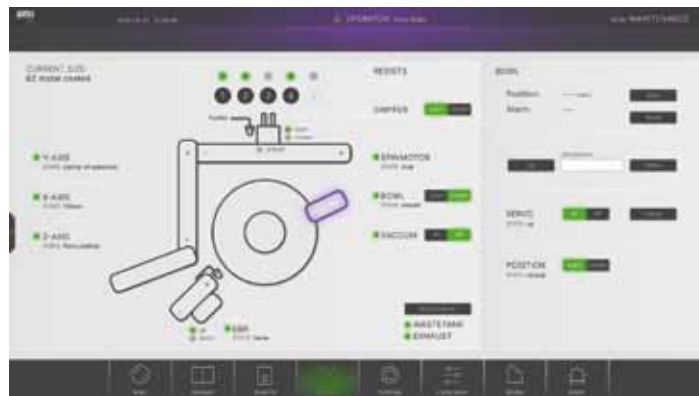
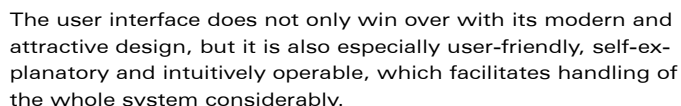
Solvent module for lift-off or resist-strip with innovative positioning arm with single-nozzle grip. Only one nozzle at the time is being carried, which holds two major advantages: on the one hand there is no particle build-up caused by friction because only one tube at the time is being moved. On the other hand, all nozzles not required for the moment remain within the drip pan which prevents the tip of the nozzle from drying out and impedes delayed dripping onto the substrate.

SOPHISTICATED

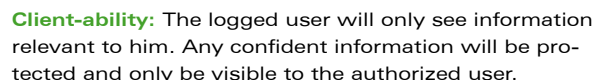
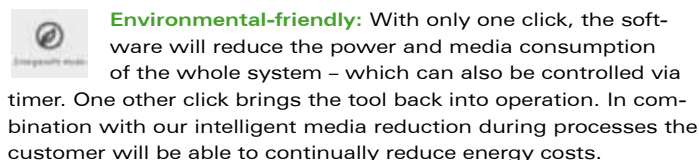
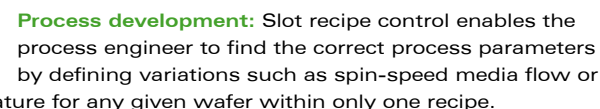
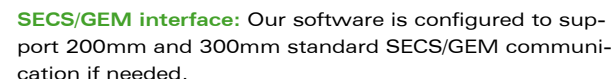
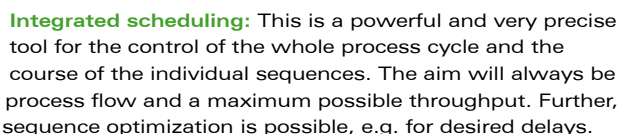
A software with an added value

ams

pilot



Easy recipe writing: No software programming knowledge is necessary for writing or rewriting individual recipes. It is possible to simply write recipes on your own and afterwards transfer them to the tool via network.





amcoss GmbH
Leusbundtweg 49a
6800 Feldkirch
Austria

phone +43 5522 209 50
telefax +43 5522 209 50-9

office@amcoss.com
www.amcossmaterials.com

www.amcoss.com

