

# CHEMIXX 1201

AUTOMATIC WET PROCESSING SYSTEM  
CLEANING, ETCHING  
OR DEVELOPING

## BENEFITS

- ÷ Automated system with one process chamber.
- ÷ Areas of application:  
Cleaning, Etching or Developing
- ÷ Up to three electric media arms
- ÷ Different types of nozzles
- ÷ One or double armed robotic substrate handling
- ÷ IO-Station with FOUP or Cassette
- ÷ Substrates sizes up to Ø300mm or up to 230 x 230 mm
- ÷ 22" Colour touch screen for easy operation
- ÷ All media flows programmable
- ÷ Vacuum or Low contact chucks



*CHEMIXX 1201 (300mm)  
IO-Station cassette*

*CHEMIXX 1201 (300mm)  
IO-Station FOUP*



**osiris**

AUTOMATIC LOADING AND UNLOADING SYSTEM  
**CLEANING, ETCHING & DEVELOPING**  
 PROCESSING OF NEGATIVE OR POSITIVE RESIST

**PROPERTIES**

**Automated system with one process chamber.**

- ÷ Areas of application: cleaning, etching or developing
- ÷ Substrates sizes up to Ø300mm or up to 230 x 230 mm
- ÷ Up to three electric media arms
- ÷ Different types of nozzles & BSR nozzle for DI-Water
- ÷ DI-Water chamber rinse
- ÷ Resistivity PH-Sensor control
- ÷ One or double armed robotic substrate handling
- ÷ IO-Station with FOUP or Cassette
- ÷ Vacuum or low contact chucks
- ÷ External media cabinet for different chemicals with 10 or 40 ltr. canister.



**SYSTEM DESIGN**

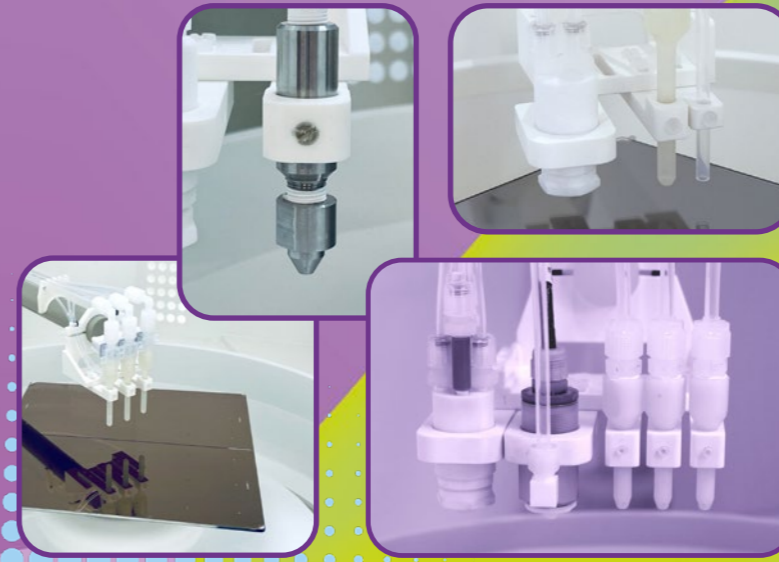
- ÷ System frame made of powder-coated stainless steel
- ÷ Lockable, transparent door for process area
- ÷ Process chamber made of PP white (optional ECTFE)
- ÷ Emergency Stop Button at systems front
- ÷ Two or more drain diverter (sensor controlled & programabel via recipe)
- ÷ Signal lamp with four light sections for visualization of the system status
- ÷ Adjustable leveling feet and transport wheels
- ÷ General design to meet clean room class 10 (ISO 4)

**CONTROL UNIT (cIS)**

**Osiris standard software cIS (cluster software) for automatic systems.**

- ÷ Computer with windows (commercial) as controller
- ÷ User-friendly operator interface GUI with 22" touch screen monitor
- ÷ Simple configuration settings of arm movements for different dispense lines.
- ÷ Programmable process parameters (nozzle motion, resist amount, speed and N2 flow)
- ÷ Recipe editor to write, manage and system configure.
- ÷ Recipe storage function on flash drive or memory stick.
- ÷ Library function for recipes and flows
- ÷ History function for log file and error tracking
- ÷ Automatic and engineering mode
- ÷ User management with password-protected service access
- ÷ Update & backup function via USB or intranet connection

Optional: SCES/Gem integration or to any other software management.



**TYPES OF NOZZLES**

**Aqueous based chemicals;  
 Chemical processing via:**

1. Puddle
2. Multi-Spray nozzle
3. 5-hole puddle nozzle
4. Atomizer nozzle
5. BSR (Back side rinse) nozzle

**Mechanical processing via:**

1. Brush system (single- or double-sided)
2. High pressure
3. Megasonic nozzle

**TECHNICAL DATA CHEMIXX 1201**

**GENERAL**

Substrate size:	up to Ø300 mm (Ø12 inch) or 230x230 mm (9x9 inch)
Motor spin speed:	max. 6.000 rpm*, programmable in 1 rpm steps
Motor acceleration:	max. 40.000 rpm/sec*, in 1 rpm/sec steps
Step time:	1 up to 999.9 sec, in 0.1 sec steps
System frame:	made of powder-coated stainless steel, 4 adjustable feet & transport wheels and transparent & lockable glass doors for the process area
Process chamber:	made of PP white (optional ECTFE)
Process bowl:	made of PP natural

*\*depending on chuck design, substrate weight and load*

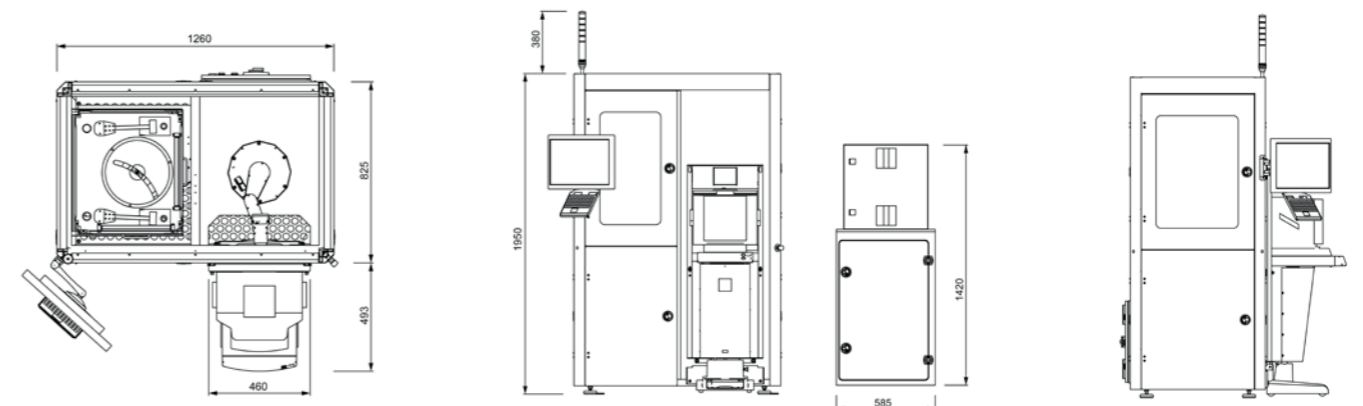
**REQUIREMENTS**

Power:	400(208) VAC / 3 Phase / N / PE / 50(60) Hz
Vacuum:	-0.8 bar, tube OD Ø8 mm
CDA:	8 bar, tube OD Ø10 mm
Nitrogen:	4.5 bar, tube OD Ø10 mm
DI-Water:	2-3 bar, OD Ø16.7 mm (3/8")
Exhaust process:	1x OD Ø110 mm, 50 - 120m <sup>3</sup> /h*
Exhaust cabinet:	1x OD Ø110 mm, 50 - 180m <sup>3</sup> /h*
Drain:	to waste canister with high level sensor or to the facility drain*

*\*chemical and process related*

**DIMENSIONS (WXDXH) approx.**

System housing:	1260 x 825/1.318 x 1.950/2.330 mm (49.6 x 32.5/51.9 x 76.8/91.7 inch)
Ext. Media cabinet:	740 x 650 x 920/1.420 mm (29.1 x 25.6 x 36.2/56 inch)



**PROVIDES AN EFFICIENT PROCESS OPERATION**



**CHEMIXX (CL-E OR D) 1201**

CLEANING (CL), ETCHING (E) OR DEVELOPING (D)

Single-processing wet system with integrated processing module and robot-handling are suitable for applications such as etching, cleaning or for developing process. The system with a programmable exhaust and a well-designed air-flow concept provides best uniformity cleanest surface on the wafer and substrate. The application modules equipped with BSR-nozzle and up to three programmable dispenses arms, offers many different nozzles type options.

I/O-station via Foup for wafers up to 300mm or substrates (mask) up to 9x9 inch, as option we offer also the I/O-station as open style cassette. The in-house user interface has all needed functions e.g., recipe programming, maintenance and a user administration. All necessary media supplies such as CDA, N2, Vacuum and DI-Water can be plugged in via plug-in connections and are controlled by software.



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Data, design and specification of custom built machines depend on individual process conditions and can vary according to equipment configurations. Not all specifications may be valid simultaneously. Illustrations in this brochure are not legally binding.

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