

# CHEMIXX E 30

## PHOTOMASK OR WAFER ETCHING & CLEANING

### BENEFITS

- ÷ Semi-automated system with manual loading and unloading
- ÷ Masks size (square substrates) up to 230 x 230 mm / 9 x 9 inch
- ÷ Wafer size up to 300 mm (Ø12 inch)
- ÷ Up to two electric media arms
- ÷ Media arm for 6 media lines
- ÷ Wide range of nozzles available
- ÷ Low contact or customized chucks
- ÷ Heated media lines: 20 - 80°C
- ÷ Chamber rinse nozzle system
- ÷ Manual DI-water gun
- ÷ Integrated media cabinet



*CHEMIXX E30 MASK  
semi-automated photomask  
cleaning system*

# PHOTOMASKS OR WAFERS ETCHING & CLEANING SYSTEM

PROCESSING OF PIRANHA (SPM) AND SC1.

## PROPERTIES

**Semi-automatic high performance etching & cleaning system for single substrate wet processing.**

- ÷ Semi-automated system with manual loading and unloading
- ÷ Masks size (square substrates) up to 230x230 mm / 9x9 inch
- ÷ Wafer size up to 300 mm (Ø12 inch)
- ÷ One process chamber for etching and cleaning application
- ÷ Up to two electric media arms for chemical- and mechanical processing
- ÷ Media arm for max. 6 media lines / nozzles
- ÷ Wide range of nozzles available
- ÷ Low contact or customized chucks
- ÷ Heated media lines: 20 - 80°C *\*depending on media*
- ÷ Chamber rinse nozzle system
- ÷ BSR (Back Side Rinse) nozzle for DI-Water
- ÷ Manual DI-water gun outside the process chamber
- ÷ Integrated media cabinet for max. 3 canisters (each 10ltr.)  
OPTIONAL: External media cabinet for different chemicals  
e.g.(H2SO4, H2O2, NH4OH, HF, BOE)
- ÷ Filling manual or via bulk fill system
- ÷ Sensor controlled 3-Way drain system programmable via recipe
- ÷ Drain to waste canister with high level sensor or to the facility drain

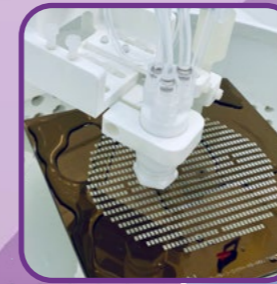
### System design:

- ÷ System housing made of PP white (optional FM 4910)
- ÷ Process chamber made of PP white (optional PVDF)
- ÷ Lockable, transparent door for process area
- ÷ Emergency Stop Button at systems front
- ÷ Signal lamp with three light sections for visualization of the system status
- ÷ Adjustable leveling feet and transport wheels
- ÷ General design to meet clean room class 10 (ISO 4)

### Semi-automatic controller unit:

- ÷ 10" color touch screen as user terminal
- ÷ Recipe editor to write, manage and system configure.
- ÷ Recipe storage function on flash drive or memory stick.
- ÷ Library function for recipes, flows, log file (e.g. error tracking history).
- ÷ 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;  
Equipped for chemical processing via:**

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

**Equipped for mechanical processing via:**

1. Brush system
2. High pressure
3. Megasonic nozzle

## TECHNICAL DATA (CHEMIXX E 30)

### GENERAL

Substrate size:	up to 230 x 230 mm (9"x 9") or Ø 300mm (Ø12")
Motor speed:	up to 4.000 rpm, programmable in 1 rpm steps*
Motor acceleration:	up to 5.000 rpm/sec, in 1 rpm/sec steps*
Step time:	1 up to 999.9sec, programmable in 0.1 sec steps
System frame:	made of powder-coated stainless steel
System housing:	made of PP white (optional FM 4910) and adjustable leveling feets & transport wheels.
Process bowl:	made of PP natural (optional PVDF)
Process chamber:	made of PP white (optional PVDF)

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

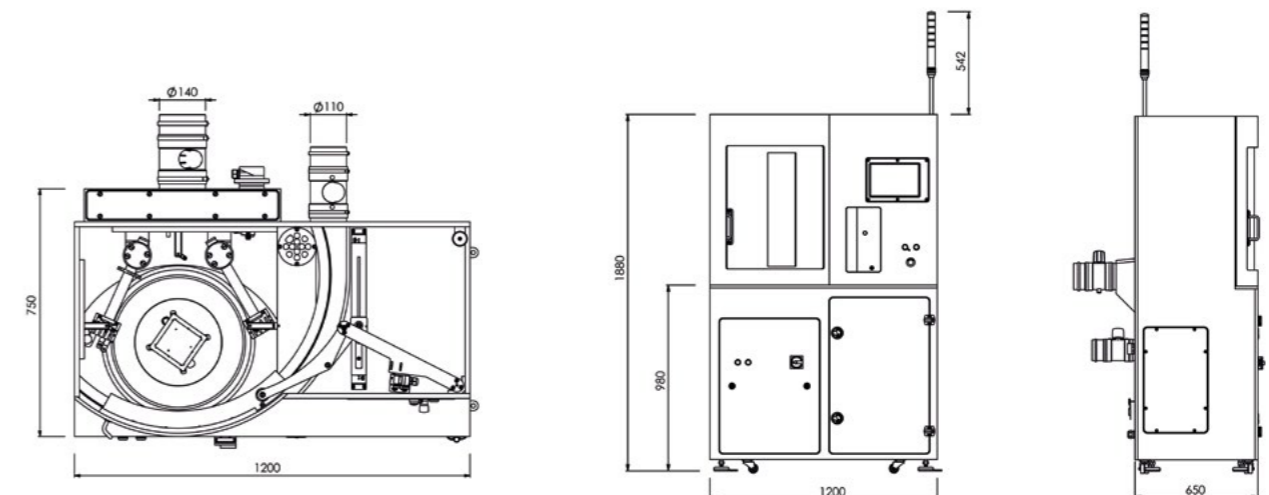
### REQUIREMENTS

Power:	400(208) VAC / 3 Phase / N / PE / 50(60) Hz
Vacuum:	-0.8 bar, tube OD Ø8 mm
CDA:	8 bar, tube OD Ø6 mm
Nitrogen:	4 ± 0.2 bar, tube OD Ø6 mm
DI-Water:	2.5 +1.0 bar, tube 3/8" flare
Exhaust - process:	1x OD Ø140 mm, 50 - 180m <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:	1200 x 650/750 x 1880/2422 mm (47.2 x 25.6/29.5 x 74/95.4 inch)
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**ETCH WITH  
H2SO4, H2O2,  
NH4OH, HF, BOE**

## CHEMIXX E 30 (MASK)

### PHOTOMASKS OR WAFERS ETCHING (E) SYSTEM

This etching & cleaning system designed to provide users in industry with a productive and safe system. Also, the low life cycle cost (LCC) is a good reason why we recommend this equipment.

The tool has an easy to operate user interface with all needed functions like, recipe programming, service, maintenance and user administration.

In the design and construction of this system, great value was attached to safety and user friendliness.



## LOCATIONS

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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. Osiris International GmbH reserves the right to change machine specifications without prior notice.*