CHEMIXX-SERIES

CHEMIXX CMP

SEMI-AUTOMATIC WET PROCESSING SYSTEM

BENEFITS

- For 200 or 300mm wafers
- One scrubber module
- One electric media arm for 4 media lines
- Double side chuck
- BSR nozzle for DI-Water
- Controller unit via 10inch touch screen
- Integrated media supply system
- Manually operated & safety interlocked process chamber door
- Manual DI water gun
- Small footprint
- Designed for Institutes and R&D

CHEMIXX CMP 30pm semi-automated wet processing system

osiris

WET PROCESSING SYSTEM FOR
CLEANING CMP WAFERS

HIGH-EFFICIENT PARTICLE REMOVAL

WAFERS UP TO 300MM

PROPERTIES

System for cleaning of dry and wet wafers after CMP.

- Wafer sizes up to 300mm

1x Mechanical cleaning (double-side); scrubber module (brush made of PVA)

- For DI-water, diluted ammonia and SC1 dispensing.
- Double side cleaning chucks (4 or 8 inch); with wheel drive assembly for low speed rotation (50-100 rpm)

1x Chemical cleaning (top-side); media arm

- Electric media arm for 4 lines/nozzles.
- Puddle nozzles for DI-Water and diluted ammonia dispensing
- Optional; Heated media lines up to 60°C (85°C depending on media)

- BSR (Back Side Rinse) nozzle for DI-Water
- Manually operated & safety interlocked process chamber door
- Process chamber cover with flow holes.
- Three integrated media supply systems for three different chemicals.
- Manual DI-water gun outside of the process chamber.
- Signal lamp with four light sections for visualization of the system status
- Emergency stop button at systems front

Optional; external media supply cabinet with 10 or 20 ltr. canister.

CONTROL UNIT (uiS)

UNIXX-Software (uiS) Osiris user interface

- 10" color touch screen as user terminal
- Language: German, English, French or Spanish
- 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

INTEGRATED WAFER ROTATION SYSTEMS

CHEMIXX CMP 30PM 200/300MM

The CHEMIXX CMP 30pm was designed as a stand-alone system with a small footprint it is ideal for limited space.
It provides a process station including one scrubber module and one electric media arm up to 4 media lines/nozzles. A specially developed chuck allows simultaneous cleaning of the wafer from above and below.
A BSR nozzle for DI water completes the cleaning process so that together with the scrubber module and a diluted ammonia nozzle, most of the particles can be removed.
The system has an easy-to-use interface with all the necessary functions, such as recipe programming, service, maintenance and user management.

PROCESS STATION FOR CMP WAFERS

- Multi-level process chamber with vertical movable concentric inner ring.
- Two separate motor drive units with servo motors for chuck rotation and for wafer support wheels rotation.

Scrubber module

- Double side wafer cleaning (pre- & final-cleaning)
- Simultaneous cleaning of top- and backside
- Oscillating movement of brushes
- Dispensing suitable with DI-water, diluted ammonia or SC1
- Automatic rinsing of the brushes from the spray bar
- Programmable pressure control
- Brushes made of PVA

TECHNICAL DATA (CHEMIXX CMP 30pm)

GENERAL

Wafer Size:	Ø200 mm (Ø8 inch) or Ø300 mm (Ø12 inch)
Motor speed:	up to 3.000 rpm, programmable in 1 rpm 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 4 adjustable feets
Process bowl:	made of PP natural
Process chamber:	made of PP white (optional PVDF)

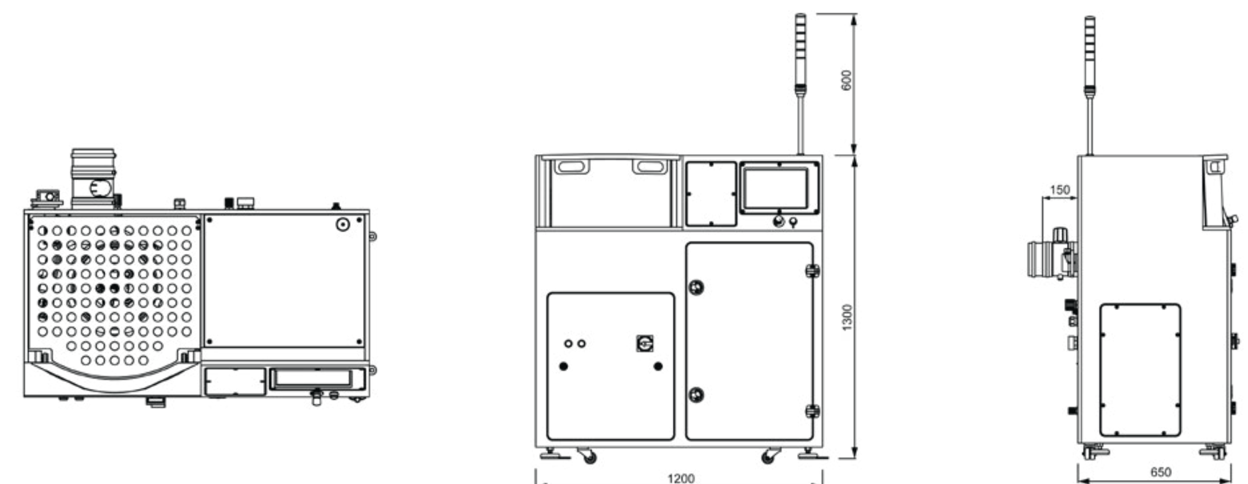
**depending on chuck design, substrate weight and load*

REQUIREMENTS

Voltage:	400(208) VAC / 3 Phase / N / PE / 50(60) Hz
CDA:	8 bar, tube OD Ø10 mm
Vacuum:	-0.8 bar / -600 Torr, tube OD Ø10 mm
DI-Water:	4 bar, OD Ø16.7 mm (3/8”)
Nitrogen (otional):	4.5 bar, PFA tube OD Ø10 mm
Drain:	Gravity OD Ø38mm
Exhaust-process:	1x OD Ø110mm, 50-180 m^3/h

DIMENSIONS (WXDXH) approx.

Housing:	1200 x 650/850 x 1300/1900 mm (47.2 x 25.6/33.5 x 51.2/74.8 inch)
Height (lid open):	2000 mm (78.7 inch)



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Version: CHEMIXX CMP 30pm-datasheet-osiris-210830

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