PVA TePla

Single Wafer Asher GIGAfab A200/300

- High volume photoresist strip and descum
- Fully automated

Plasma Systems

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Single Wafer Asher with Planar Microwave Plasma Source

The **Automatic Single Wafer Asher GIGAfab A200/300** is designed to serve semiconductor device fabrication, wafer bumping and MEMS-manufacturing. The system is equipped with a unique planar microwave plasma source for high uniformity, providing high ash rates across a wide temperature range.
The modular platform can be configured for 200 or 300 mm wafers using open cassette as well as FOUP or SMIF load stations. The gravity wafer chuck with lift pins for loading is thermoelectrically controlled from RT to 280°C.
Wafers are loaded and unloaded by an atmospheric robot. A cooling plate allows cool down of the wafers prior to re-loading into the plastic cassette. The chamber lid is easy to open for maintenance access (clam shell opening).

System performance

Wafer throughput: varying from 35-80 wafer/hour, depending on process.
Temperature range for stripping: 100-280°C
Uniformity: +/- 5% across 300 mm for Descum

Applications

- Resist strip and Descum for wafer bumping and MEMS
- Sacrificial layer removal of photoresist, polyimide, PMMA etc.
- Fast resist ashing after high-dose Implant and RIE

Technical Data

Process Chamber	Aluminum
Process Gas Supply	2 gas channels included, 2 optional
Vacuum Gauge	MKS Baratron capacitance manometer
Pressure Control	Down stream control valve
Wafer Loading	Fully automatic wafer handling, 3-axis robot, single arm, vacuum end effector with wafer mapper
Maximum Wafer Size	300 mm
Plasma Generation	Planar microwave source (2.45 GHz), maximum power 2000 W
End Point Detection	Optical emission EPD, plasma verification
System Control	PC-based controller, 17" color touch screen, graphical user interface
Operating System	QNX real time platform
Program Features	Manual or automatic operation, user password, multiple recipe storage (1-10 steps each), self test routines, warning and error messaging
Process Tracking	Real time monitoring, on-screen display of graphic plots, data logging, export of process data
Interfaces	Ethernet, USB, RS232 interface
System State Signal	Light tower R/Y/G/buzzer

Supplies

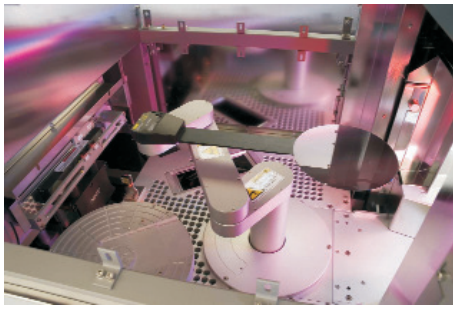
Electricity	230/400 V, 50/60 Hz, 3 phase, N, PE, 3 x 15 A installed power approx. 12 kW
Process Gas, Vent	1-2 bar (15–30 psi), 1/4" VCR female
Compressed Air	6 mm Festo QS, 4-6 bar, (60-90 psi)
Vacuum	4 mm Festo QS, <20kPa, 50 l/min
Cooling Water	20°C, flow 3-9 l/min, min. pressure 4 bar
Standards	CE-certified, Semi S2/S8 compliant

Dimensions

W/H/D	850 x 2000 x 2100 mm (34" x 79" x 83")
Weight	950 kg (2090 lbs)

Options

Wafer ID-reader and Wafer Pre-Aligner
Vacuum Pump
SMIF or FOUP load port
SECS GEM factory automation interface
Bridging Front Tool for 200/300 mm wafers



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