AP&S
Customized Solutions

WE ARE THE PARTNER FOR CUSTOMIZED WET PROCESS EQUIPMENT

MultiStep™ GigaStep™

Wet process system for various applications, including cleaning, etching, stripping and developing

SEMI PARTS
An AP&S Business Unit

BENEFITS

- Wet process system for various applications, including cleaning, etching, stripping and developing
- Optimized footprint
- Superior reliability
- Unique modular construction
- Extremely maintenance-friendly

Low cost of ownership

- Maximum application versatility
- Separate exhaust on the modules
- Easy installation/upgrade of additional modules based on a modular robot system

FEATURES & BENEFITS

Application of different processes MultiStep™ & GigaStep™

Many different cleans, such as RCA, IMEC, Pre-Diffusion, Pre-Metal, etc.
Various etch processes, including oxide, nitride, poly crystalline, metals and silicides

General features MultiStep™

- Designed for substrates up to 200 mm
- Processes single 25-wafer batches of 200 mm wafers as well as double 25-wafer batches of 100 to 150 mm wafers

General features GigaStep™

- Designed for substrates up to 300 mm
- Processes 50-wafer batches of 300 mm
- Can also process 50 or 2 x 25-wafer batches of 150 or 200 mm wafers or masks

General features MultiStep™ & GigaStep™

- Standard high or low profile cassette
- Modular exhaust systems for effective extraction of acid, lye, pH-neutral and solvent produced fumes
- Dry-in-dry-out processing
- Intelligent wafer rescue and emergency actions
- Robust, simplified scheduler

Process control capabilities

- Lot tracking throughout the entire process
- Parameter tracking, including temperature, flow, resistivity, chemical dosing, etc.
- End of run filer, error files, chemistry log, user log

TECHNICAL DATA	MultiStep™	GigaStep™
Dimensions (LxDxH)	variable x 1640 x 1950 mm	variable x 1850 x 2320 mm
Nominal voltage	3 x 400 VAC	3 x 400 VAC
Rated frequency	50 Hz	50 Hz
Nominal current	3 x 33 A (etc.)	3 x 75 A (etc.)
SUPPORTED SUBSTRATE SIZES AND CARRIER TYPES		
1 x 4"/2 x 4"	x	
1 x 5"/2 x 5"	x	
1 x 6"/2 x 6"	x	
1 x 8"	x	
2 x 8"		x
1 x 12"/2 x 12"		x
Low mass	x	x

Graphical user interface

- Based on B&R CPU and IPC
  Windows based 17-inch touch screen
- Recipe editor
- Real time digital flowcharts
- Automatic generation of diagnostic files (EOR, ERR, ChemLog, etc.)
- Multi-tiered password levels
- Remote control via internet

Available Training

Operator, maintenance and process

Built To Comply With

FM 4910
SEMI S2 and S8
SECS/GEM
CE

Available Options

- Automated loading station wafer transfer
- Wafer ID reader
- Cassette buffer
- Dry-in-wet-out and wet-in-dry-out process capable (manual loading station Ozone system (DI-water or sulfuric acid)
- SMIF (150, 200 or 300 mm)
- Wastewater management system
- Locally installed chemical cabinets for the dilution, mixing and preheating of chemical solutions
- DI-water heating system
- Mini-environments
- Concentrate monitoring system
- POU filtration of DI-water
- Fire suppression system for solvent applications
- UPS units
- etc.

Reliability (figures based on actual tool performance)

MTBF ≥ 800 h
MTBA ≥ 300 h
Uptime ≥ 97 %

Can be delivered fully assembled