

SURFACE PREPARATION SOLUTIONS



EFFICIENCY IN ACTION:

- Front End of Line Clean (controlled concentrations from POR high to ultra-dilute)
- Back End of Line (BEOL) Clean Side Wall Polymer Removal
- Etching & stripping applications
- Space saving multi-process tools
- Metal and Combination Wafer Reclaim
- 200 and 300mm Processing
- Small footprint, modular upgradability preserves your investment
- Lowest Annual Consumable Parts Cost

Batch-Immersion Processing Efficiency with NAURA Akrion Reliability

> pre-diffusion clean pre-gate clean resist strip nitride etch BeOL Clean wafer reclaim photomask clean...

NAURA Akrion Inc, is a NAURA company

applications solutions *developed for you*

ROBUST, POWERFUL CONTROL SOFTWARE

- NAURA Akrion control software (AKS v6) allows bi-directional processing
- Manual loading and SECS/GEM compliant factory automation support (e.g. SMIF, FOUP)
- Remote monitoring/editing support

Advanced Technology

LOW EXHAUST CLASS M1 MINI-ENVIRONMENT INSURES LOW PARTICLES

- High temperature and low temperature (Patent Pending) pre-epitaxial cleaning for silicon and Si:Ge wafers
- Precise concentration control
- Proprietary megasonics

FEOL CLEAN

- Particle Removal Efficiency > 97%
- Metal contamination < 7E9 atoms/cm² per element

BEOL CLEAN

- Systems for HDA- and Fluorine-based chemistries
- Proprietary in-line concentration control extends bath life and saves you money
- Proprietary (dualSWEEP™) ultrasonic technology

NITRIDE AND OXIDE ETCHING

• Footprint saving combination clean and etch stations for lower COO

RESIST STRIPPING

- Traditional sulfuric acid (piranha) configurations
- DIO3TM (ozonated DI water) for environmental concerns and lower COO with reduced chemical and disposal costs associated with $\rm H_2SO_4$



NAURA AKRION RELIABILITY:

GAMA Systems in the hundreds are in place worldwide and overall relibaility for the system exceeds 1500 hours mean time between failures (SEMI E10-96 MTBF). Coupled with the high yields associated with superior process results, GAMA saves you money.

CONTINUOUS IMPROVEMENT THE NAURA AKRION WAY:

NAURA Akrion engineers respond to the needs of our customers with enhancements and upgrades to the GAMA system on a continual basis.

You can be assured that your GAMA will be able to run a new process if new needs arise. The modularity of the GAMA Series allows easy change-outs of modules in the field to preserve the useful lifetime of your purchase.

GAMA INNOVATION: The GAMA*plus* Advantage

GAMAplus in-situ modules are the latest in a long line of GAMA platform enhancements

- Replace dedicated rinse tanks for HF, SC1 and SC2 applications to minimize footprint & lower initial capital expense
- Minimize air interface for better particle performance
- Fresh, clean chemicals improve your process



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