

WE ARE
THE
PARTNER
FOR CUSTOMIZED WET PROCESS
EQUIPMENT



VulCanio™

Fully automated electroless plating system

BENEFITS

- Wet process system for the UBM (Under Bumping Metallisation) of aluminum or copper pads (Ni, Pd, Au)
- Designed for substrates up to 300 mm
- Greater bath longevity due to specially developed software and hardware
- Maximum reliability and consistency
- Utilizes Fraunhofer Technology and actively supported by the Fraunhofer Society
- Highest throughput
- Lower processing costs



VulCanio™, a fully automated electroless plating system, is designed and built to deliver high-volume batch throughput of up to 300 mm wafers. Unique software and hardware features ensure exceptional bath longevity and unbeatable cost of ownership ratio. Analyzers and process-optimized dosage provide comprehensive process control.

FEATURES & BENEFITS

Application

Electroless UBM for Al and Cu pads (Ni, Pd, Au)

General Features

- Designed for 25 or 50 wafer batches of 100–200 mm wafers or 13 or 26 wafer batches of 300 mm wafers
- Standard high or low profile cassette
- Loading and unloading with cart specifically designed to transport the cassettes
- Contamination-preventative gripper rinsing
- Two different grippers, one for pre-treatment and one for the plating process
- Separate exhaust systems for safe, effective extraction of fumes created by bases, acids, pH-neutral compounds and cyanide
- Dry-in-dry-out processing
- Intelligent wafer rescue and emergency actions
- Scheduler
- Wafer agitation
- IPA dryer
- Cyanide detector and protection for operator safety
- Integral chemical supply tanks
- Automated system cleansing with adjustable temperature function for each process step
- Light impervious system
- Suitable for use in class 10,000 cleanrooms or cleaner
- Automated chemical dispensing:
 - As required for the respective process and batch
 - Manually adjustable according to the product
 - Timed release

Graphical User Interface

- Windows based
- Recipe editor
- Real time digital flow charts
- Automatic generation of diagnostic files (EOR, ERR, Log, ChemLog etc.)
- Multi-tiered password capability

Process Control Capabilities

- Lot tracking throughout the entire process
- Parameter tracking, including temperature, flow, resistivity
- Concentration regulating system

Available Training

Operator, maintenance and process

General Installation Data

Dimensions: variable x 2150 x 3050 mm (L x D x H)
 Nom. Voltage: 3 x 400 VAC
 Rated frequency: 50 Hz
 Nominal current: 3 x 100 A (etc.)

Built To Comply With

- FM 4910
- SEMI S2 and S8
- SECS/GEM
- CE

Available Options

- UPS unit
- Wafer ID reader

Reliability (figures based on actual tool performance)

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