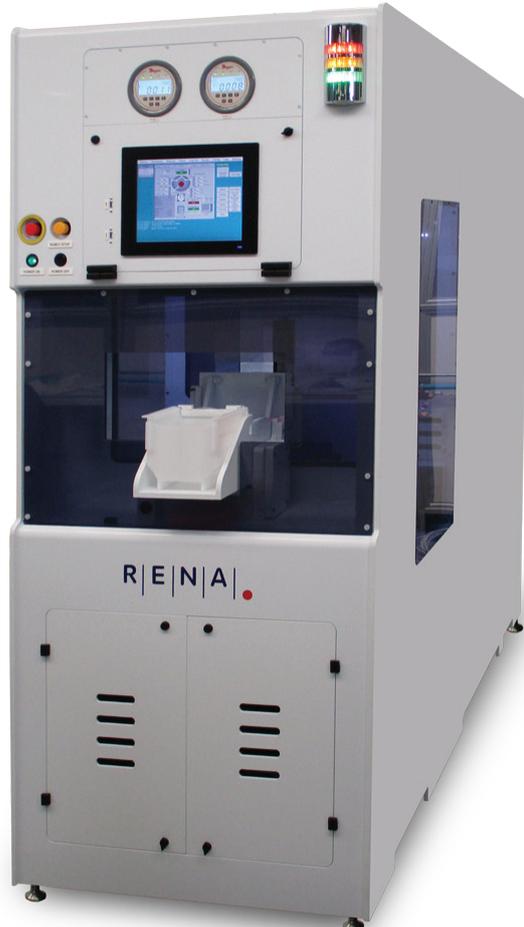


INCEPTION SINGLE WAFER PROCESSING



FOR COMPOUND SEMI CUSTOMERS

- Low cost of ownership
- Small Footprint
- For low throughput applications
- Acid and Solvent Processes
- Integrated wafer handling capabilities that table top spinners do not offer
- Process performance exceeds batch systems where etch uniformity is critical in low volume applications
- 2 to 4 Chemical process tanks
- Wafers up to 200mm and masks up to 7 x 7
- A single or dual moving spray arms with separate chem lines
- Stationary bottom spray nozzles for DI and N2
- Multiple chem feeds to the back of the unit from external sources
- Dedicated drains with software controlled diverter valve
- FEoL & BEoL processing applications



APPLICATIONS

- III V and II VI Materials
- HBT
- BiFET
- Mesa Etch

NO CONTAMINATION

- Particle neutral
- Ionic contamination < 1E10

ETCH STABILITY CONCENTRATION CONTROL

- Hyper accurate concentration controls (ABB, Horiba, CI Semi)
- Hyper accurate spiking capability (Chemical & DI)
- Automatic compensation for losses due to consumption and evaporation Mesa Etch

SUPERIOR ETCH UNIFORMITY

75mm–200mm EPI Materials

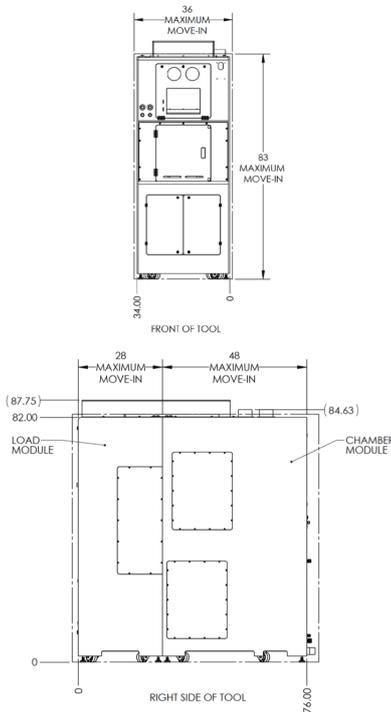
- Wafer to wafer < = 1%
- Within wafer < = 1%
- Lot to lot < = 1%



INCEPTION SINGLE WAFER TOOL



FOOTPRINT



INCEPTION – ENABLING THE TRANSITION FROM R&D TO PILOT PRODUCTION

- Provides process consistency to develop your POR
- Highly flexible software enables rapid process development
- Standard dual tank design provides multi-step processing
- Excellent etch uniformity even with etch rates > 100 A/sec
- Manual or automated wafer handling
- Rapid quenching etch with spin dry providing excellent particle performance

MEI PLATFORM ADVANTAGES

- High performance, shared control system, shared facilities, smaller footprint

Software Flexibility

- User programmable configuration
- Recipes, speeds, chem control

Automation

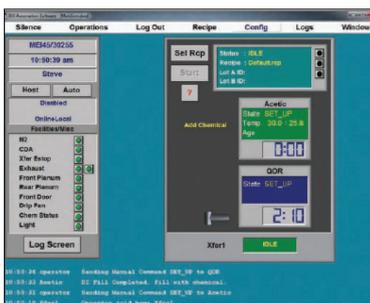
- Rapid transfer from etch to rinse

Reliability

- Field proven designs

INCREASED RELIABILITY

- MTBF > 1500 hr (Semi E10-94)
- Avg MTTR < 1 hr
- Higher uptime > 97%



Etch Control Through Advanced Hardware, Process Understanding and Software Execution

SUPERIOR PROCESS CONTROL

- Data logging by Lot ID
- Flexview APC monitoring
- SECS/GEM compliant
- Recipe editor
- Advanced process controls
- Unlimited user/permission levels
- Easy-to-use, touch-screen interface
- Error logging and data graphing
- User programmable configuration
- Unlimited recipes, speeds, chem control
- Barcode reader compatibility
- Remote access compatible
- I/O monitor displays status



ANALOG CONTROL

Analog sensing enables software to control:

- In-tank blending
- Precision ratio creation
- Precision DI water inject
- Tight temperature control
- Closed loop recirculation flow
- Hyper accurate chemical spiking controls