

TECHNICAL SPEC FOR Etch tool

System Model: LAM RAINBOW

LAM Rainbow 45xx series

Specific model: 4506i

Process: Oxide Etch

Wafer size: 150 mm

Wafer type: Jeida flat

Valve type: AC2 Throttle valve (main chamber)

VAT Throttle valve (ISO chamber)

ESC: No

Bulkhead: ??

Monochromator Endpoint: Yes

Software: Envision 1.6.1-005

RF: PDW2200 400Kc generator (main chamber)

RFG1250 13.56MHz (ISO chamber)

Cart: RF cart

Iso module: Yes

AC box: -002 (breakers)

Gas and process configuration for

- Gas1-6 Main chamber
- Gas7-8 ISO chamber

GAS 1	Ar	1000 sccm
GAS 2	CF4	100 sccm
GAS 3	CHF3	50 sccm
GAS 4	He	1000 sccm
GAS 5	N2	100 sccm
GAS 6	O2	20 sccm
GAS 7	NF3	500 sccm
GAS 8	He	500 sccm
GAS11	O2	100 sccm

Robot type: **Harmonic Drive**

Loader type: **Hine indexers 38A**

Loadlock: **Entrance (ISO chmbr) and Exit LL**

Turbo pumps: **No**

Controllers: **VAT controller ISO THV**

AC2 controller main chamber THV

Gas box:

AC Rack: **Yes (Local power box) in basement**

SW Version:

Vintage: [rb3458](#)

Missing/defective parts: [None](#)

Photos to Collect

- All 4 sides
- Robot
- Loader
- Gas lines
- Gas box
- Close up from chamber
- Turbos and Pumps on each process module
- Controllers
- Electrical cabinets
- AC Rack
- Gas in/outlets
- Electrical in/outlets
- Chiller
- Serial plates of all chambers
- Serial plate of Mainframe
- Serial plate of each pump
- Spare parts, manuals (if any)