

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: **AC4 Throttle valve (main chamber)**

VAT Throttle valve (ISO chamber)

ESC: **No**

Bulkhead: ??

Monochromator Endpoint: **Yes**

Software: **Classic 7.31-42**

RF: **PDW2200 400Kc generator (main chamber)**

RFG1250 13.56MHz (ISO chamber)

Cart: **RF cart**

Iso module: **Yes**

AC box: **-001 (fuses)**

Gas and process configuration for

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

GAS 1	Ar	500 sccm
GAS 2	CF4	100 sccm
GAS 3	CHF3	50 sccm
GAS 4	He	1000 sccm
GAS 5	O2	20 sccm
GAS 6	N2	540 sccm
GAS 7	NF3	1150 sccm
GAS 8	He	480 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**

AC4 controller main chamber THV

Gas box:

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

SW Version:

Vintage: [rb2473](#)

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)