Tool ID: 215
Tool Location: 111

Equipment Information Sheet

Oxford 100 ICP Dielectric Etcher

Manager: Jeremy Clark 607-254-6487
Backup: Tom Pennell 607-254-4309
Backup: Philip Schneider 607-254-4931

Calls to staff phones will be automatically forwarded to their cell phones during accessible hours. At other times leave a message or send them an email.

SAFETY

- No unusual hazards during normal operation
- Users must stay in lab while plasma is running

USAGE RESTRICTIONS

- Ensure that wafer is placed against the two pins with the primary flat straight between them
- 100mm wafers only
    - If using 100mm wafers and a photoresist mask - remove >5 mm ring at edge (edge bead)
    - Pieces may be mounted to 100mm Sapphire wafer with CoolGrease
- No changes to the recipes without staff approval
- User must run "Oxygen Plasma Clean" recipe for total etch time after etching their samples
- Do not log out of tool before this final clean is completed and wafer is returned to the loadlock

SCHEDULING/SIGN-UP RESTRICTIONS

Minimum Tool Time: 15 minutes

- Limited to 3 hour reservation blocks
- No back-to-back reservations
- No group or company can have back-to-back reservations
- Minimum of 3 hours between any two reservations

MATERIALS COMPATIBILITY CATEGORY

Tool Category 2: Silicon Based Substrates and Select Refractory Metals

Allowed	Not Allowed
Tool category 1/1E materials	No Glass Substrates
Silicon Based Materials only	No CNF Class A or Class B metals and oxides/compounds of (exposed or buried) (ie Magnesium, Zinc, Barium, Calcium)
Si, SiC, SiO_2 substrates	
All Furnace grown or deposited films	
PECVD Films	No Gold, Silver or Copper (Exposed or buried)
ALD dieletric films	No High Vapor pressure materials
CNF Refractory Metals (ie Al, Ti,Ta,W,Pt,Mo,Cr,Ni)	No III/V Compound Semiconductors
Nitrides and Oxides of above metals	No Organic/Biology Molecules prepared-with or without Salt buffers
Cured organics and baked Photoresist	

High Vapor Pressure Metals and Compounds are materials that have a vapor pressure above 1e-6 Torr at 400 C.

Additional Material Restrictions and Exceptions

- No high vapor pressure materials (lead, indium, ITO, etc.)
- No Pyrex or Borofloat etching
- Limited metals allowed - please discuss with tool manager (Ni not allowed as an etch mask)

Last Updated: 04/07/2026