

Tool ID: 207  
Tool Location: 107

Equipment Information Sheet

# Plasma-Therm Deep Silicon Etcher

**Manager: Jeremy Clark 607-254-6487**    Calls to staff phones will be automatically forwarded to their cell phones during accessible hours. At other times  
**Backup: Tom Pennell 607-254-4309**    leave a message or send them an email.

**SAFETY**

- No unusual hazards under normal use
- User must remain in the lab while tool is in operation.

**USAGE RESTRICTIONS**

- No metals exposed to the plasma
- Other than standard photoresist, no polymers or adhesives

**SCHEDULING/SIGN-UP RESTRICTIONS**

*Minimum Tool Time: 30 minutes*

- Limit 2 hour block reservations from 8AM - 6PM

**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 <sub>2</sub> substrates	
All Furnace grown or deposited films	
PECVD Films	No Gold, Silver or Copper (Exposed or buried)
ALD dielectric 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**

- Whole 4 wafers only
- Thermal / PECVD SiO2, photoresist, Al2O3 etch masks ONLY
- If mask is resist, 5mm of the edge must be removed
- See tool manager about bonding wafer pieces to carrier

*Last Updated: 12/20/2022*