

Tool ID: 223  
Tool Location: 110

Equipment Information Sheet

# Plasma-Therm Takachi ALE

**Manager: Jeremy Clark 607-254-6487**

**Backup: Aaron Windsor 607-254-4831**

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**

- HBr, Cl2, and BCl3 gases are used

**USAGE RESTRICTIONS**

- DO NOT modify recipes without staff permission
- Must remain in cleanroom during plasma processing

**SCHEDULING/SIGN-UP RESTRICTIONS**

*Minimum Tool Time: 15 minutes*

**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
<b>CNF Refractory Metals (ie Al, Ti, Ta, W, Pt, Mo, Cr, Ni)</b>	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**

Select III/V materials allowed- ask staff before proceeding!

*Last Updated: 08/05/2024*