Tool ID: 323
Tool Location: 110

Equipment Information Sheet

Angstrom-Q

Manager: Chris Martin 607-254-4855
Backup: Shilling Du 607-254-4907

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
USAGE RESTRICTIONS
SCHEDULING/SIGN-UP RESTRICTIONS
MATERIALS COMPATIBILITY CATEGORY

Minimum Tool Time: 30 minutes

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

Allowed:

- **Substrate:** Sapphire, Silicon, Diamond only.
- **Prior-deposited material** (either in Angstrom-Q or other tools): Nb, Ti, Al, Ta, Pt.
- **Resist:** e-beam resist (MMA/PMMA) only.
    - Other e-beam resists can be discussed.

Prohibited, on the surface or buried:

- Any magnets
- Au, Ag, Cr, Ni
- Photoresist
    - only allowed if no ion milling or oxygen plasma

Last Updated: 09/08/2026