

Tool ID: 114
Tool Location: 103

Equipment Information Sheet

D2 - Solid Source Phosphorus Doping

Manager: Phil Infante 607-254-4926
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

- The furnaces are run at elevated temperatures of 400-1200°C and use flammable, toxic, and corrosive gases.

USAGE RESTRICTIONS

- No changing of gas flows or process parameters without staff approval
- Max temperature of 1025 C

SCHEDULING/SIGN-UP RESTRICTIONS

Minimum Tool Time: 90 minutes

- Reservation blocks greater than 8 hrs must be cleared by a MOS staff person prior to reserving the time

MATERIALS COMPATIBILITY CATEGORY

Tool Category 1E: Silicon Based Materials and Select Dielectrics

Allowed	Not Allowed
Silicon Based Materials only	No Evaporated or Sputtered Films
Si, SiC, SiO ₂ substrates	No Metal or Organic Films
All Furnace grown or deposited films	No Glass Substrates
PECVD Films	No III/V Compound Semiconductors
Select ALD dielectrics (SiO ₂ , SiN, HfO ₂ , HFN)	No High Vapor pressure materials
Spin on Glass and Spin on Dopants	Organic/Biology Molecules prepared-with or without Salt buffers

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

- MOS CLEAN required prior to use
- Only use MOS designated holders, wands and tweezers

Last Updated: 04/10/2026