

Tool ID: 113  
Tool Location: 103

## Equipment Information Sheet

# Boron Doping - D1

**Manager:** Phil Infante  
**Backup:** Aaron Windsor

607-254-4926  
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 process temperature of 1100 C

### SCHEDULING/SIGN-UP RESTRICTIONS

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

*Minimum Tool Time: 90 minutes*

### 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 <sub>2</sub> 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 <sub>2</sub> , SiN, HfO <sub>2</sub> , 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

*Last Updated: 08/06/2019*