

CVD Equipment 1034

Tube 1 - OXIDE

Tool Owner: Zuzanna Lewicka 609-258-1134 zlewicka@princeton.edu
Backup: MNFL-Staff@princeton.edu

Process Summary

Thermal oxidation of silicon in dry oxygen or water vapor. Maximum allowed temperature is 1100 °C.

Process Preparation

All samples must be RCA cleaned (SC1 and SC2) before being placed in the CVD Equipment 1033 furnace. 4" whole wafers preferred, smaller sizes can be accommodated.

Only these Materials are Allowed	Known Forbidden Materials
Silicon	⊘ Metal

For any material not listed or if uncertain,
ASK the Tool Owner!

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Tube 2 – METAL ANNEAL

Tool Owner: Zuzanna Lewicka 609-258-1134 zlewicka@princeton.edu
Backup: MNFL-Staff@princeton.edu

Process Summary

The Metal Anneal Furnace is an atmospheric furnace capable of annealing silicon based materials and a limited set of approved metal films in Argon, Nitrogen and Forming Gas.

Process Preparation

4" whole wafers preferred, smaller sizes can be accommodated.

Approved Materials
Silicon
Quartz
Furnace grown/deposited films
Tantalum/Tungsten/Silicon – 400 °C in H ₂ /N ₂
Aluminum – 400 °C

For any material not listed or if uncertain,
ASK the Tool Owner!

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Tube 3 – CLEAN ANNEAL

Tool Owner: Zuzanna Lewicka 609-258-1134 zlewicka@princeton.edu
Backup: MNFL-Staff@princeton.edu

Process Summary

The Clean Anneal Furnace is an atmospheric furnace capable of annealing silicon based materials in Nitrogen. Maximum allowed temperature is 1100 °C.

Process Preparation

All samples must be RCA cleaned (SC1 and SC2) before being placed in the CVD Equipment 1033 furnace. 4" whole wafers preferred, smaller sizes can be accommodated.

Only these Materials are Allowed	Known Forbidden Materials
Silicon Quartz Furnace grown/deposited films	⊘ Metal

For any material not listed or if uncertain,
ASK the Tool Owner!