Tystar - Tube 7 (Oxidation)

Overview

Book this tool for wet oxidation processes. For dry oxidation, use *Tystar Oxidation (dry)*. This tube is currently restricted to virgin Si prime wafers, or processed Si/SOI wafers containing silicon oxide or nitride.

LMACS Name	Tystar Wet [Dry] Oxidation (Tube 7)
Process Area	DEPOSITION
Model	Tytan Mini Series
Vendor	Tystar
Team	Timothy Harrison Aaron Hryciw Glenn Elaschuk

Process Gases

Process Gases	Max Flow (MFC Range)
N2	10000 sccm
O2	5000 sccm
Liquid H20	10 mL/min

Temperature Range

Zone	Min	Max
1	550 C	1100 C
2	550 C	1100 C
3	550 C	1100 C

Oxidation Calculator

This calculator uses the Deal–Grove or Massoud models for thermal oxidation of silicon. Choose the oxidation process parameters (wet/dry, oxidation temperature, Si crystal orientation, etc.), and the calculator will return either the oxide thickness given oxidation time or the oxidation time given thickness, with a plot of results.

https://toolbox.nanofab.ualberta.ca/sithox/

Documents

Operating Procedure	Tystar Tube 7 (Oxidation) SOP
Hazard Assessment	Tystar Tubes 5, 6, and 7 HA

Related Documents

- Tystar - Tube 7 (Oxidation) (Equipment)
  - equipment
  - tystar
  - tube7
  - deposition
- Toolbox (software) (nanoFAB Knowledge Base)
  - application-note

- toolbox
- calculator
- vase
- tystar
- oxidation
- sputtering
- filmetrics-f50-uv
- tube7
- kjlc-cms18-sputter-bob
- kjlc-cms18-sputter-doug
- aja