Oxford 100 Etcher

Manager: Vince Genova
Backups: Meredith Metzler, Jerry Drumheller

Safety
- No unusual hazards during normal operation
- No buddy system restrictions for normal operations

Process Restrictions

Material Restrictions
- No high vapor pressure materials (lead, indium, ITO, etc.)
- Limited metals allowed - please discuss with tool manager
- If you want to etch Pyrex (or any glasses containing impurities), you must discuss it with the tool manager in advance.
- If using photoresist mask - remove 5 mm ring at edge (edge bead)
- Whole 4 inch wafers only
- Pieces must be mounted to a 4" handle wafer

Parameter Restrictions
- No changes to the recipes without staff approval
- DO NOT alter electrode / table temperatures in the recipes

Scheduling / Sign-up Restrictions
- None currently
- See note above concerning Pyrex etching

Requirements (Do Every Time)
- Check wafer orientation
- Position the wafer flat to the left
- Remove the photoresist edge bead
- Long etches, greater than 30 minutes, require an oxygen plasma clean at 30 min intervals, of at least a 10 min duration.
- You must remain in the laboratory near the instrument or have an authorized user designated to do so

Prohibitions (Never Do)
- No resist on backside of wafer
- No developer residue on backside of wafer - Run wafers through Spin Rinse Dryer (SRD) in photolith to ensure cleanliness
- Never attempt to remove a wafer stuck in the main chamber. Contact staff for assistance.

Common Problems

Problem: Root Cause: Solution:

Other Comments or Cautions

Gases Available
- CH1 CF4
- CH2 C4F8/C2F6
- CH3 N2/CO2
- CH4 CHF3
- CH5 Ar
- CH6 O2

Printed: 3/3/2010