



PROCESS SPECIFICATION

TITLE **Viewports Cleaning and Baking Procedure**

APPROVALS:	DATE	REV	DCN NO	BY	CHK	DCC	DATE
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CHECKED:							
APPROVED:							
DCC RELEASE:							

Materials:

- Large stainless steel pan
- DI water
- Liquinox solution - (Standard solution is:1 tablespoon of Liquinox per gallon of water)
- Ligo approved clean room wipes to wipe metal and Lenx 90 lens tissue to wipe glass.
- Methanol (Reagent grade)
- Squirt bottle with methanol
- Dry, filtered nitrogen

Handle parts with Ligo approved gloves.
 Dispose of methanol properly and use methanol bath under a fume hood.

Procedure:

1. Visually inspect viewports for defects, in particular check seals for workmanship and particulate shedding; check the optic for inclusions, defects or scratches under good light with unaided eye.
2. Rinse the entire viewport surface with DI water.
3. Submerge the viewport in the Liquinox solution, agitate, thoroughly wipe metal surfaces. Clean holes with a bottle brush. With a wet Lenx 90 wipe, lightly wash the glass surface.
4. Thoroughly rinse in running DI water wiping the surfaces to ensure that all detergent has been removed.
5. Submerge in methanol for 5 minutes, agitating regularly. Remove from methanol
6. Squirt fresh methanol over the entire surface.
7. Blow dry, starting at the top and working towards the bottom.
8. Inspect for drip marks, (metal and optics), if any are found, remove with a wipe wetted with methanol.
9. Bake in vacuum oven at 200 degrees C for 48 hrs., with a maximum rise time of 3 hours.
10. After the parts come out of the bake, wipe the glass once again with a clean room wipe wetted with methanol.
11. Cover the glass surfaces with Lenx 90 lens tissue and wrap the part with UHV quality aluminum foil.
12. For storage follow LIGO-E960022-06, page 10 "Handling and Storage Procedures"