Installation procedures for phase I detectors & related topics

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Procedure established for GDL tests: assembly and cooling down

- Xtal storage in vacuum (transportation) container
- Final etch of copper holder and contacts in chemical hood
- Cleaning and drying of holder in clean bench (class 10)
- Transfer of xtal container, holder in Rn-reduced clean bench (class 10) flushed with N2 gas
- Optionally: methanol bath of xtal prior to mounting

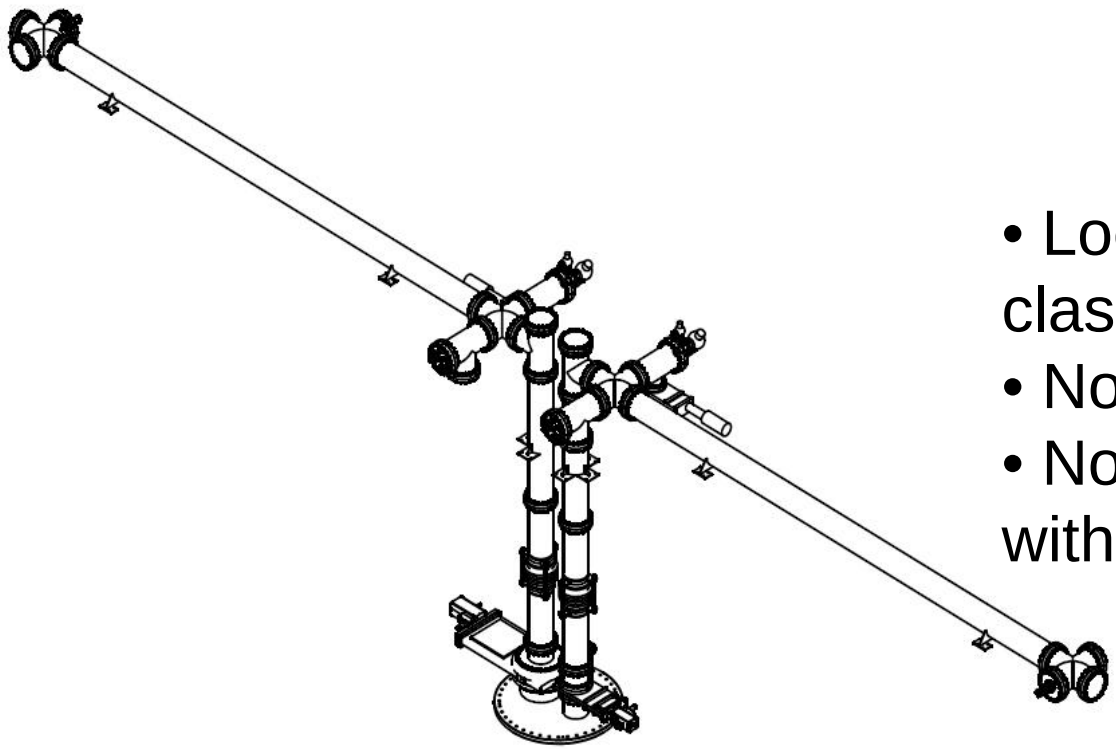
Procedure established for GDL tests: assembly and cooling down

- Assembly of xtal and holder in Rn-reduced clean bench
  - Remove oxide layer at HV contact with diamant abrasive paper
  - Remove debris with iso-propanol
  - Measure warm resistivity (quality of HV/signal contacts)
- Attach assembly to pully
- Connection to FE /HV via pin connector
- Submerging of detector assembly in LAr
- Measure cold resistivity (quality of HV/signal contacts)

Procedure established for GDL tests: warming up

- Lift xtal from LAr
- Disconnect xtal assembly from FE (pin connector!)
- Disconnect assembly from pully (bayonet)
- Warm xtal assembly in methanol baths
- Dry with nitrogen flow
- Mount xtal assembly in transport/storage container
- Remove container from Rn-reduced test bench
- Pump container and store under vacuum

Commissioning lock and impact on procedures



- Lock in clean room class 10,000
- Normal air atmosphere
- No glove box flushed with (filtered) N2 or Ar

<u>Main difference to GDL tests:</u>
warming up in methanol requires
- sufficient large glove box to handle methanol
- transfer unit: translation + vertical

<u>Proposed strategy:</u>
Design/install large glove box which allows both
- vacuum warm up
- methanol warm up