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Hydrogen Delivery System – R&D Activities

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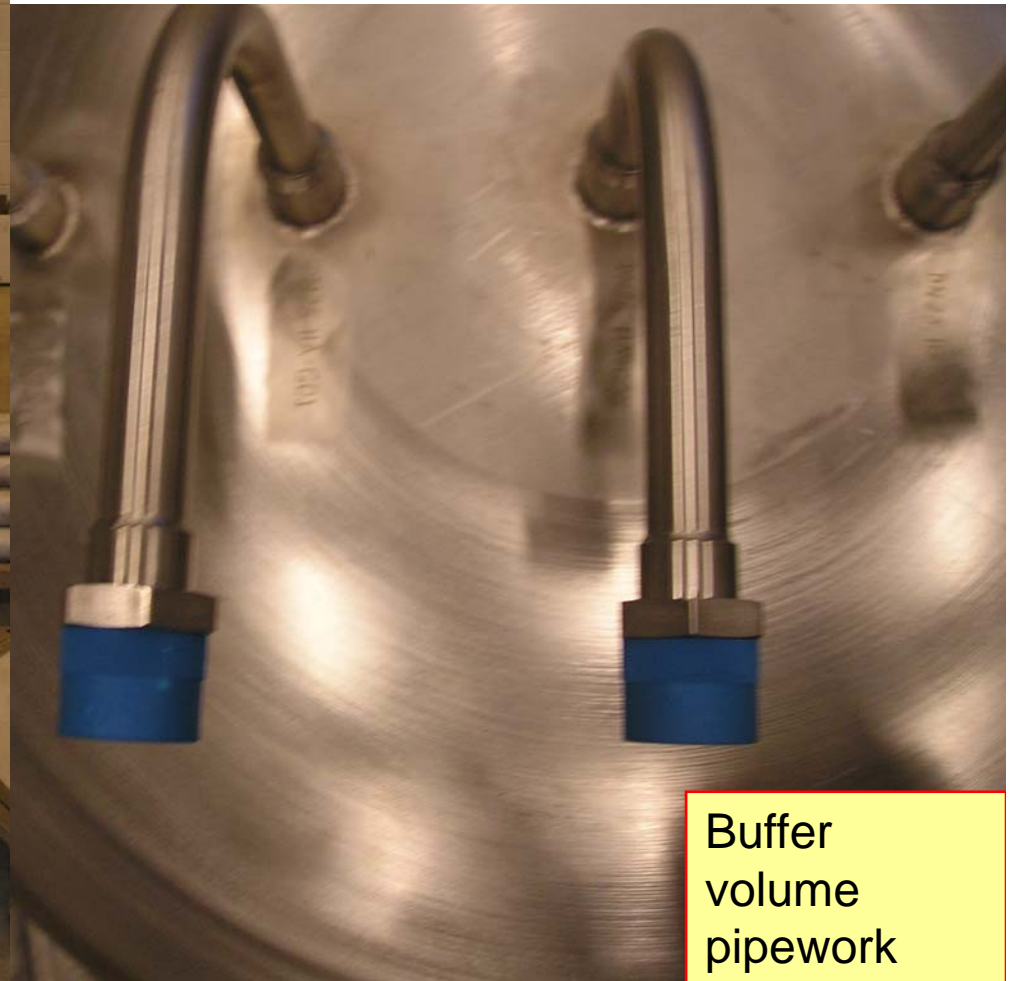
Daresbury Controls Group etc...



Status

Buffer Volume:

Complete – awaiting certification



Buffer
volume
pipework



Status



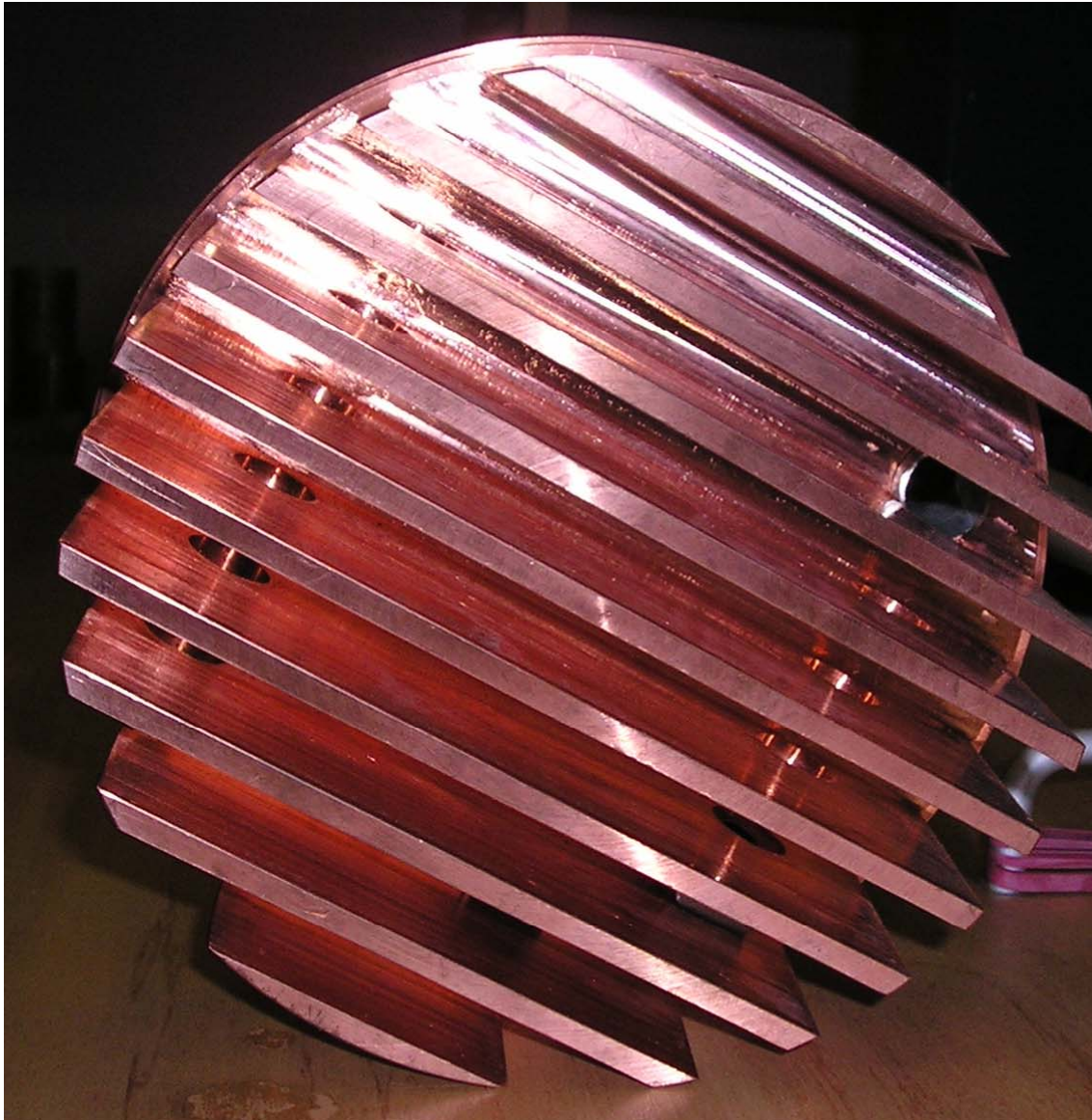
Cryostat: Body
and top plate
completed





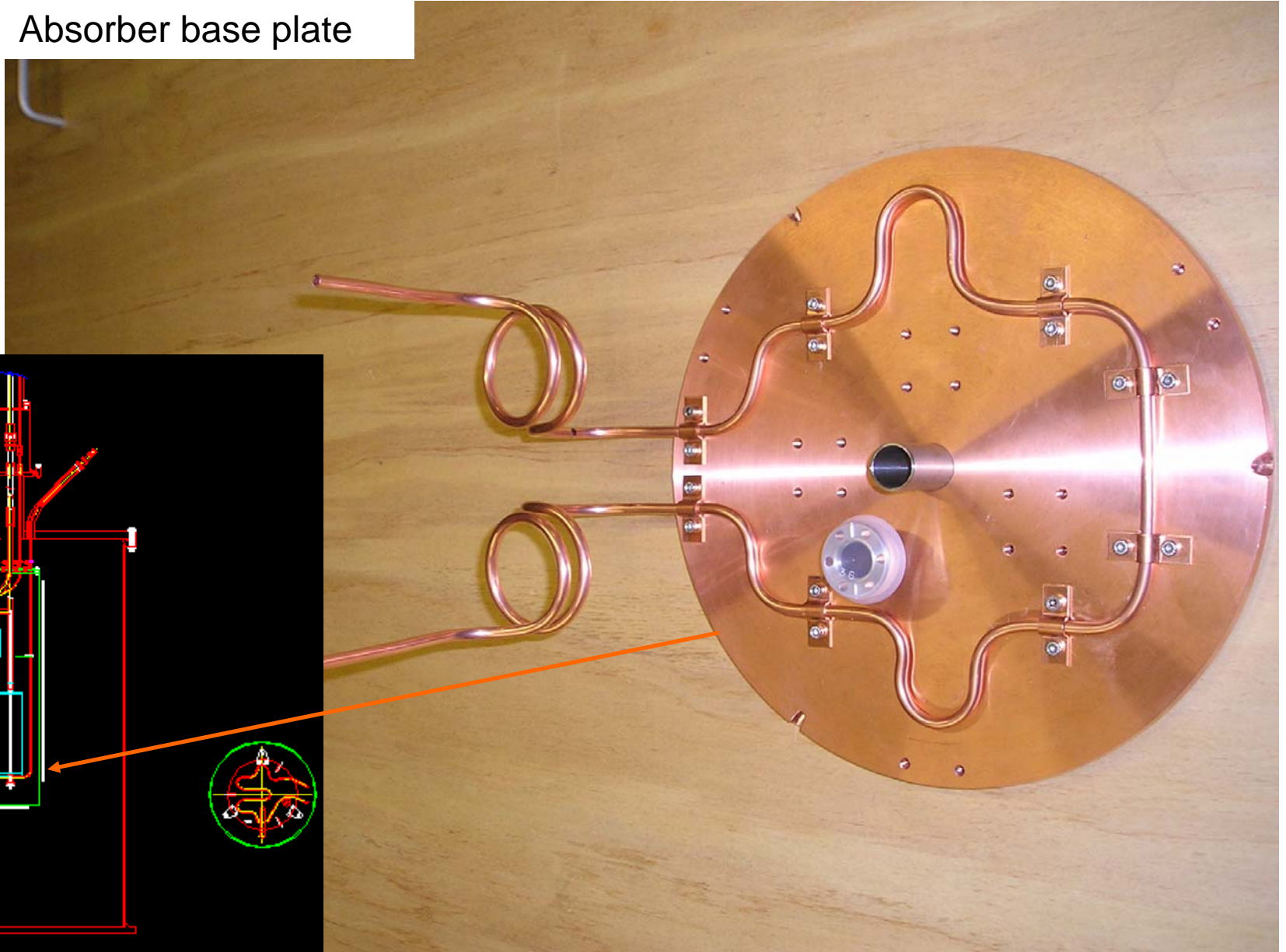
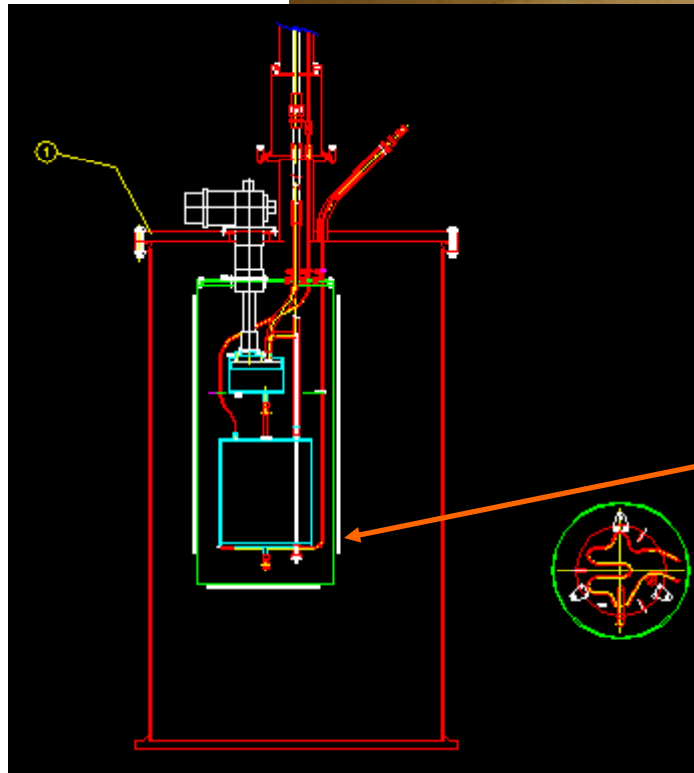
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Cryostat: Condenser
and condensing pot
in manufacture





Absorber base plate



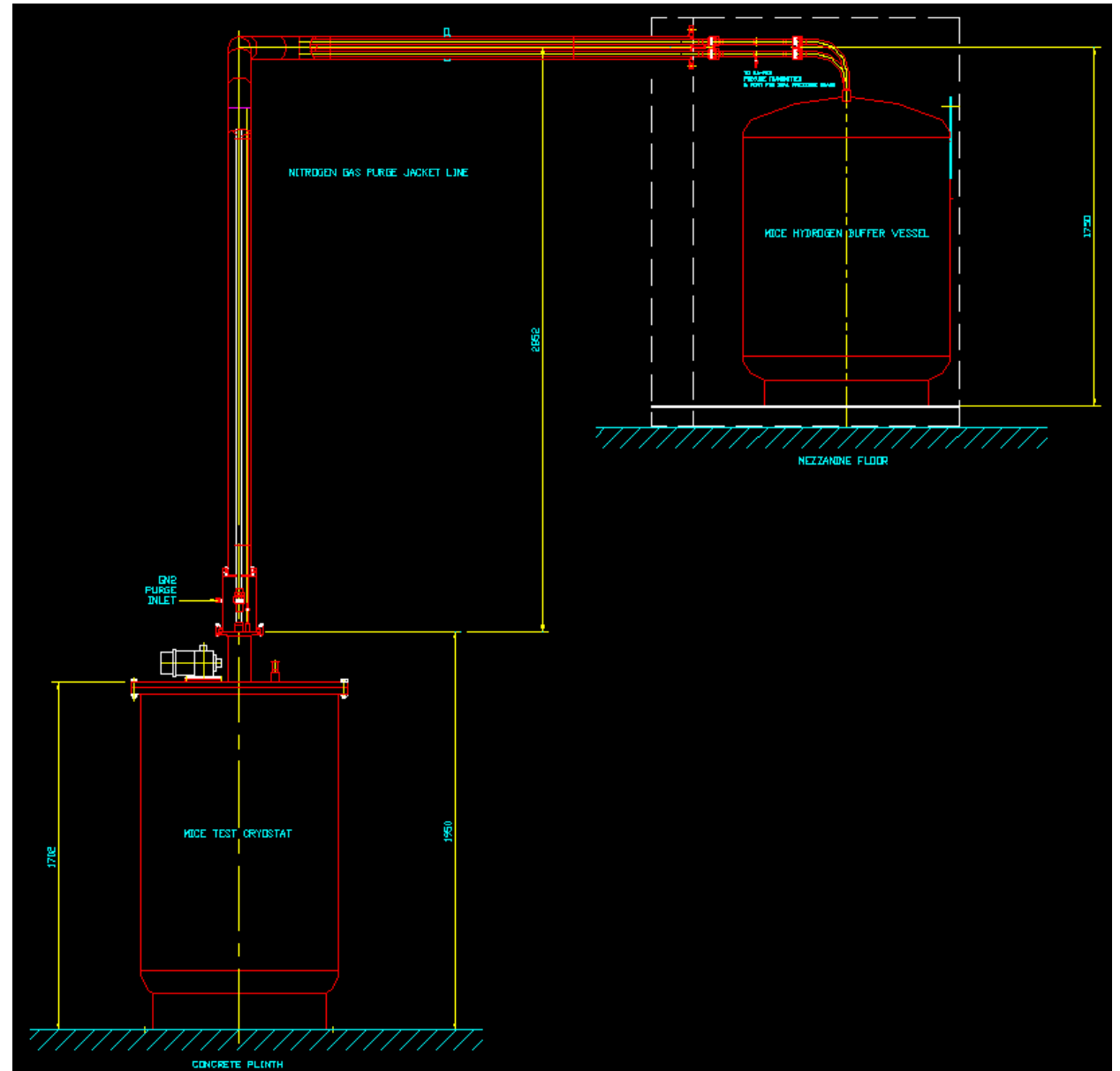


Status

Gas panel: Layouts agreed, fabrication to start.

Delivery of relief valves on critical path

Transfer Line: Designed





Schedule

Clear that the work on the solenoid and Linde refrigerator installation (and other work..) has taken effort off this project but the work at the suppliers is going well.

Had several review meetings

- Should have the gas panel complete latest June
- Will conduct initial tests with Helium in the Cryogenics Laboratory
 - (Otherwise this will interfere with installation of the ventilation system)
- We are reviewing schedule but it looks as though the ventilation system in the hall will not be installed before September



Helium Tests

Check instrumentation

Pump and purge

Check relief valve settings

Check cryocooler operation at LH2 and LHe temperatures

Liquify helium in the cryostat

Test emptying sequence

Thermal cycling to check for leaks from thermal stresses

Hydrogen Tests

Liquify hydrogen in the cryostat

Check empty and purge sequence

Tests to determine effects of using Helium top-up gas

Check alarms and interlocks

Measure H₂ desorption rate

Measure H₂ absorption rate



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END