

Hg System Design/Fabrication Update Feb 22, 2006

Syringe Fabrication Status

- Hydraulic cylinders were scheduled for shipment from Hanna on Feb 13. Cylinders have not yet been received by AHC.
- Hanna now informs concerning a problem with one of the cylinder rods
- New estimated ship date to AHC of Feb 28.
- AHC working on pump system, controls, should be ready for integration upon receipt of cylinders.

Proposed AHC change order

- Prefer that AHC fabricate and attach Hg sump tank and inlet/outlet piping to syringe system.
- Received cost estimate this morning of \$20.2K for this work.
- Will coordinate through BNL Procurement.
- Delay delivery of syringe until end of April.

Final Design Issues

- 4inch Hg return hose meeting requirements (smooth-bore, no magnetic materials, sanitary flanges) has not been located. Current design shows 3-inch hose.
- Hose diameter affects sump tank and primary jet containment chamber.
- Beam clearance: current clearance between center of beam and flow reducer is 4.5mm. Doubling the length of the reducer from 2" to 4" increases clearance to 7.9mm. Clearance between beam center and top of primary containment beam window unchanged at 4.8mm.

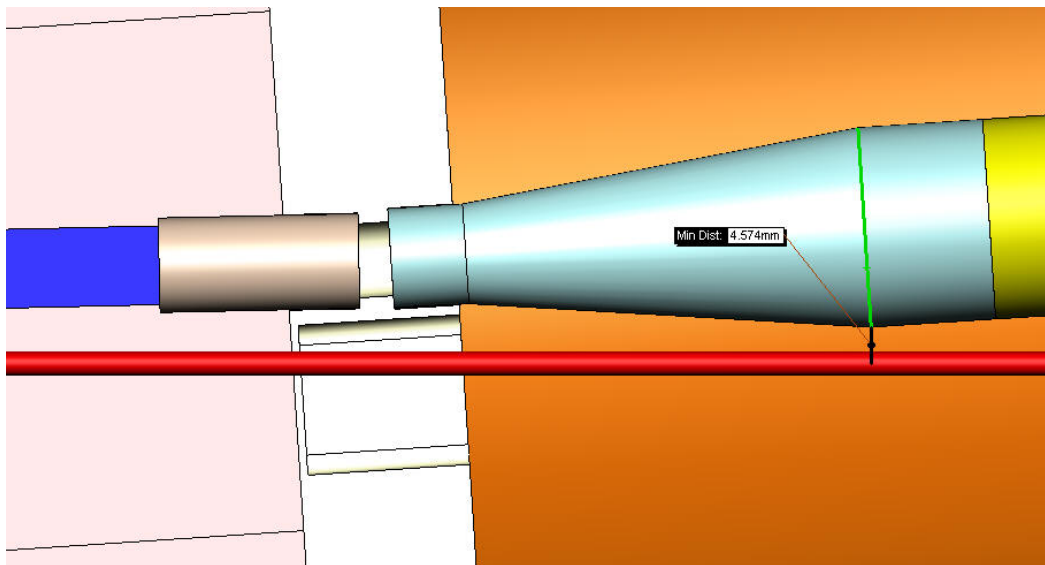


Fig1. Clearance with 2" butt-weld reducer

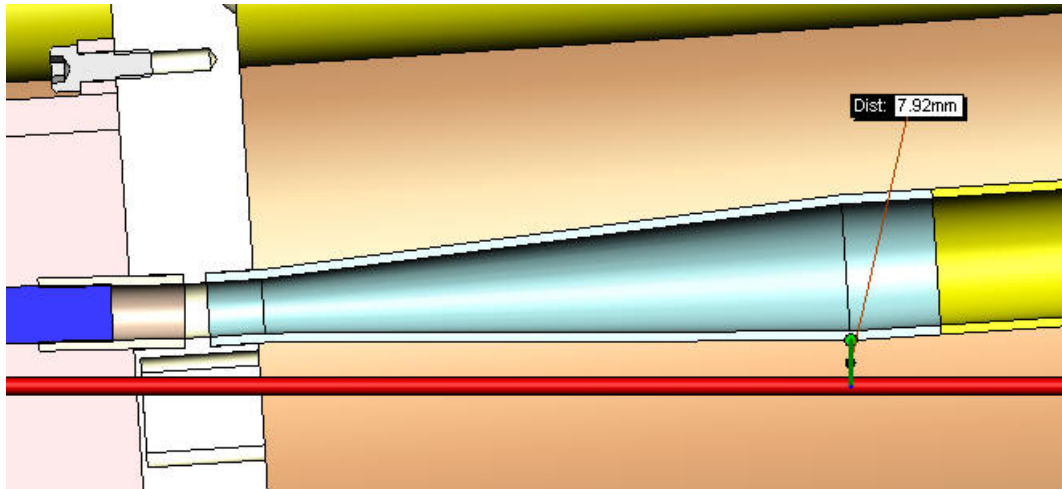


Fig2. Clearance with 4" butt-weld reducer

Titanium Fabrication Pkg

- Drawing package ready for bid, pending resolution of hose diameter issue.
- Preliminary dwg package reviewed by TiFab (NJ). Budgetary cost estimate very much out of budget. Expect to decrease substantially when actual bid request submitted.
- Two other potential vendors: Exelco (NY) and Alloy Fabrications (TN) have expressed interest and capabilities.
- Indications received that ORNL also has Ti fabrication capabilities, but no welders currently certified.