



To: HL-LHC AUP Shipping Post Final Design Review Committee Members
From: Sandor Feher, HL-LHC AUP L2 Project Manager
Subject: Final Design Review for the Shipping Post of Q1/Q3 CryoAssemblies

Dear Colleagues

The HiLumi Project at CERN and the HL-LHC Accelerator Upgrade Project (HL-LHC AUP) in the US are at an advanced state where most of the design elements have been finalized and we are in the production phase already. One element, the shipping post design that needs to be completed prior to shipping the CryoAssemblies to CERN has not been finalized yet. This component is a relatively small value but if it fails can have huge consequences. Due this fact the design requires a formal, very comprehensive review.

Final Design Review for the Shipping Post of Q1/Q3 CryoAssemblies

We are asking the review to assess the following items:

1. Is the Shipping Post design complete and does it meet the Functional Requirement Specifications.
2. Is there an appropriate validation test plan that demonstrates through prototype tests the soundness of the design?
3. Is the installation and removal of the shipping posts possible using the existing cryostat tooling?
4. Are the relevant Quality Assurance measures being taken to procure a sound product?
5. Risks associated with the design, if any.
6. Are the following documents properly finalized:
 - a. Functional Requirement Specifications, with all requirements traceable
 - b. Final Shipping Post Design Report
 - c. Final Design Drawings including all the relevant interface drawings are complete, released and without any errors.
 - d. Engineering Risk analysis completed.
7. We ask the committee to provide a written report within a week after the review is completed.