

Optimization of static heat loads of the PIP-II cryomodules based on prototype HB650 cryomodule test results

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During the first cool down of the prototype HB650 cryomodule (pHB650 CM), high static heat loads have been measured compared to the estimation. Several analysis and calculations have been performed to explain this difference which led to cool down this cryomodule two additional times. Before each cool down, repairs and upgrades have been done, and instrumentations were added to identify the issues and quantify their impact on the heat loads. Based on these findings, the production cryomodule design and assembly process have been updated to align the future heat loads measurements with the estimations.

Footnotes

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