FIRST COLD TEST WITH THE TRIUMF ISAC-II PHASE II CRYOMODULE

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Abstract

An energy upgrade in the Radioactive Ion Beam (RIB) facility at ISAC-II will see the installation of 20MV of superconducting heavy ion linac. The addition includes twenty beta=11% bulk niobium quarter wave cavities housed in three cryomodules with six cavities in the first two and eight cavities in the last. Each cavity is specified to add 1MV in accelerating potential corresponding to peak surface fields of ~30MV/m. Transverse focusing is achieved with a 9T superconducting solenoid inside each cryomodule. The first module in the expansion has now been assembled and tested. Developments include a new ball screw tuner, locally produced cavities, modified coupler design and LN2 cryogenic circuits. The new developments are described and the results of the first cold tests are presented.

CONTRIBUTION NOT RECEIVED