

MECHANICAL STRUCTURE ANALYSIS FOR ICHIRO 9-CELL CAVITY

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Abstract

A high gradient superconducting cavity so called ICHIRO 9-cell cavity is being developed in KEK. In the mechanical design, several kinds of calculation are required: cavity deformation due to Lorentz stress, the resonant frequency shift, spring constant of cavity in the axial direction, stiffness of He base plates and so on. Another important issue is thermal stress in the cooling down to 2K. In this paper, analysis results of mechanical structure with ICHIRO 9-cell cavity are described.

NO SUBMISSION RECIEVED