

FABRICATION OF FOUR 9-CELL ICHIRO HIGH-GRADIENT CAVITIES FOR THE R&D OF ILC ACCELERATOR IN KEK

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Abstract

After the first ILC Workshop in KEK in November 2004, the Working-Group 5 (WG5) Asia made a plan to fabricate four 9-cell high-gradient cavities in LL-shape for Super-conductivity Test Facility (STF) in KEK, where these cavities will be installed in a cryostat and operated at 45 MV/m to accelerate real electron beams. These four cavities are designed as having the low $H_p=E_{acc}$ ratio of 36 Oe/(MV/m), and thus the high gradient of $E_{acc} \sim 51$ MV/m is expected in the best case. We named the cavity as ICHIRO after the famous baseball player: ICHIRO's back number 51.

This paper describes the status of the fabrication of these four 9-cell ICHIRO cavities as well as discusses about the dimensional deviations of fabricated cavities from the design values.

NO SUBMISSION RECIEVED