CEC-ICMC 2015 - Timetable, Abstracts and Presentations



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Type: Poster Presentation

European XFEL-linac Feed and End cap dimensional tolerance validation

Monday 29 June 2015 09:00 (2 hours)

Feed and End caps are connection boxes between Helium transfer lines and Cryomodules of the European XFEL project at DESY.

Feed and End caps are characterised extreme narrow dimensional tolerances at the Cryomodule interface, in order to keep the XFEL linac beam pipe aligned perfectly during cryogenic operation.

The expected movements of the beam pipe and process pipes due to pressure loading and thermal contraction are of the same order of magnitude as the specified tolerances.

The purpose of the test was to validate if the dimensional tolerance specifications at the Cryomodule interface are fulfilled and the position of the beam pipe can be guaranteed.

The Demaco contribution will show the test method, some test results and the positive conclusions.

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