

DESIGN PLAN AND REQUIREMENTS OF TEST MODULES AND TESTING ITEMS IN IFMIF

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Under Broader Approach (BA) Agreement between EURATOM and Japan, IFMIF/EVEDA (International Fusion Materials Irradiation Facility/Engineering Validation and Engineering Design Activities) has been performing from a middle of 2007. The IFMIF has three main facilities such as the accelerator Facility, Li Target Facility and Test Facilities. A previous design report of IFMIF was summarized in IFMIF comprehensive design report [1]. The present EVEDA phase aims at producing a detailed, complete and fully integrated engineering design of IFMIF. The main function of the International Fusion Materials Irradiation Facility (IFMIF) is to give the demanded design database for the licensing of DEMO reactors and further reactors from the materials data set obtained from evaluation test pieces of small and adequate size specimens, for the tests such as fracture toughness, fatigue, tensile, Charpy impact, creep, crack growth rate, and the others, irradiated in the High, Medium, and Low Flux Test Modules (HFTM, MFTM and LFTM) of IFMIF. This paper is summarized about the design plan and requirements of these test modules and testing items in IFMIF.

- [1] IFMIF Comprehensive Design Report, by the international Team, an Activity of the international Energy Agency, Implementing Agreement for a program of Research and Development on Fusion Materials, January 2004.