PRELIMINARY DEFINITION OF THE REMOTE HANDLING SYSTEM FOR THE CURRENT IFMIF TEST FACILITIES

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A coherent design of the remote handling system with the design of the components to be manipulated is vital for reliable, safe and quick maintenance, having a decisive impact on availability, occupational exposures and operational cost of the facility.

Highly activated components in the IFMIF facility are found at the Test Cell, a shielded pit where the samples are accurately located. The remote handling system for the Test Cell reference design was outlined in some past IFMIF studies. Currently a new preliminary design of the Test Cell in the IFMIF facility is being developed, introducing important modifications with respect to the reference one. This recent design separates the previous Vertical Test Assemblies in three functional components: Test Modules, shielding plugs and conduits. Therefore, it is necessary to adapt the previous design of the remote handling system to the new maintenance procedures and requirements.

This paper summarises such modifications of the remote handling system, in particular the assessment of the feasibility of a modified commercial multirope crane for the handling of the weighty shielding plugs for the new Test Cell and a quasi-commercial grapple for the handling of the new Test Modules.

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