



Cryogenics Operations 2018

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Cryogenic System for the SCLF Cryomodule Test Facility

The Shanghai Coherent Light Facility (SCLF), a quasi-continuous wave hard X-ray free electron laser facility, is currently under construction. The linear accelerator of SCLF project will consist of about 78 cryomodules. All superconducting components within the cryomodules, i.e., the cavities and magnets are supposed to be tested before the Cryomodule assembly. The assembled complete Cryomodules have also to be qualified afterwards. Moreover, the superconducting undulators (SCU), which are planned to be implemented in SCLF, also generates the similar test requirements before installation in the tunnel. In response to these demands, a cryogenic test facility (CTF) is being built within SCLF project. In this paper, the design specification, process analysis, system scope, conceptual layout, description of single compotes, and test schedule of the cryogenic system for the CTF will be introduced.

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