

26th National Symposium on Cryogenics and Superconductivity

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Analysis on the effect of ullage space of Liquid helium chamber with Wall Heat Flux for K500 SCC

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Content :

An analysis was carried out with the partially filled helium cryostat of SCC and the processes of insulation vacuum failure to cryostat. In this work the helium vessel was assumed to be filled up with different liquid level for different cases as initial condition. Specific interest is calculation of the pressure-time and void fraction-time history of the container under this condition. Maximum required mass expulsion rate from the cryostat were determined for cases typical for the operation with this helium cryostat.

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