CEC-ICMC 2015 - Timetable, Abstracts and Presentations



Contribution ID: 460

Type: Poster Presentation

Numerical Simulation of Heat Transfer for Wall-type and Fin-type Heat Exchanger

Wednesday 1 July 2015 09:00 (2 hours)

Wall-type heat exchanger(WTHX) and Fin-type heat exchanger(FTHX) are attached to the first and second stage cold head of two G-M crycoolers respectively in the simulating experimental platform of the internal purifier(SEPEIP). WTHX and FTHX play a significant role in SEPEIP, WTHX is designed to remove heat from helium and freeze-out extremely few impurities, FTHX is for further cooling the helium. In this paper, numerical simulation and theoretical calculation for WTHX and FTHX are carried out. However, Numerical results are not so well consistent with the theoretical results. The cause of error is also investigated.

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Session Classification: C3PoC - Convective Heat Transfer

Track Classification: CEC-12 - Fluid Mechanics, Heat Transfer, and Cryogen Properties