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Vineed Narayanan, G. Venkatarathnam

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PERFORMANCE OF TWO MIXED REFRIGERANT PROCESSES FOR PROVIDING REFRIGERATION AT 70 K

Vineed Narayanan and G. Venkatarathnam

Refrigeration and Air Conditioning Laboratory
Department of Mechanical Engineering
Indian Institute of Technology Madras
Chennai 600036, India

ABSTRACT

Mixed refrigerant process refrigerators are ideal for use in superconducting transformers, fault current limiters etc. placed in a liquid nitrogen bath. Traditional mixed refrigerant processes used above 70 K cannot be used in these applications. The performance of two mixed refrigerant processes suitable for the above applications has been studied, the results of which are presented in this paper.

Keywords: Mixed refrigerant processes, high temperature superconductors, J-T cryocoolers.

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