

Experiment on stable operating conditions of a dual-effect desalination system

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ABSTRACT

In this paper, the stable operating conditions of a dual-effect desalination system were examined by varying the temperatures of the hot water and the feed water. The dual-effect desalination system was made by rearranging a single-stage fresh water generator applied in the ship. Pressures and temperatures were maintained at a steady state. The effect of the temperatures of the feed water and the hot water on fresh water generation rates and the stable operating conditions were explained. The overall heat transfer rates of heat exchangers were obtained from the raw data, and the effect of inlet conditions on the overall heat transfer rates and stable operating condition were described.

Keywords: Dual-effect desalination; Operating condition

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