Abstract

A systematic method for synthesis of heat exchanger networks by using fuzzy approach is presented in this paper, the proposed method consists of three sequential steps to select the optimal approach temperature: i) estimation of minimum approach temperature, minimum hot utility and minimum cold utility. ii) Fuzzy approach. iii) Selection of the best weight index. The proposed method has been applied for two problems well-known in published literature. The results of these case studies show that the present strategy is simple and accurate in finding out global optimum in comparison with previous works, characterized by its simplicity and can be implemented by hand calculations.

References


**Index Terms**

Computer Science

Fuzzy Systems

**Keywords**