Abstract

In this paper a new systematic method for optimal synthesis of heat integrated distillation column has been developed, the proposed method which is fuzzy analogical gates consists of three sequential steps to select the best separation sequence: estimation of the normalized variables parameters, Fuzzy analogical gates and selection of the best split. Two analogical gates (symmetric and asymmetric) are employed. The symmetric gate (AND gate) inputs are the normalized heat load, normalized column temperature difference. The asymmetric gate (Invoke gate) inputs are the output of the AND gate and the normalized \( Q \Delta T \). The method has been tested for three problems reported in the literature which have been solved previously using other approaches.

References


**Index Terms**

Computer Science  
Fuzzy Systems

**Keywords**
