RESEARCH NOTES

蒸发系统的热集成个案研究

冯霄, Robin Smith

^a Department of Chemical Engineering, Xi'an Jiaotong University, Xi'an 710049, China

^b Department of Process Integration, UMIST, Manchester M60 1QD, UK

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摘要 In this paper, through two case studies, evaporation systems are considered in the context of overall process, and then are optimized to obtain energy-saving effect. The possible evaporation schemes are given when integrated with the background process and how to optimize the evaporator is shown. From the case studies, it can be seen that sometimes incomplete integration and heat pump evaporation are better than complete integration so should be considered as candidate retrofit schemes.

关键词 <u>evaporation</u> <u>heat integration</u> <u>grand composite curve</u> <u>multi-effect evaporation</u> <u>vapour</u> <u>recompression evaporator</u>

分类号

Case Studies of Heat Integration of Evaporation Systems

FENG Xiao, Robin Smith

^a Department of Chemical Engineering, Xi'an Jiaotong University, Xi'an 710049, China

^b Department of Process Integration, UMIST, Manchester M60 1QD, UK

Abstract

In this paper, through two case studies, evaporation systems are considered in the context of overall process, and then are optimized to obtain energy-saving effect. The possible evaporation schemes are given when integrated with the background process and how to optimize the evaporator is shown. From the case studies, it can be seen that sometimes incomplete integration and heat pump evaporation are better than complete integration so should be considered as candidate retrofit schemes.

Key words <u>evaporation heat integration grand composite curve multi-effect evaporation vapour</u> recompression evaporator

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通讯作者 冯霄