论文与报告

两级多品种生产调度的专家系统

戴学东,吕勇哉

浙江大学

摘要
本文以一类两级多品种加工过程的生产调度为背景, 提出了一种将人工智能的启发式搜索优化技术与专家经验规则相结合的专家系统. 研究了系统的知识表达、组成与结构, 该系统能方便地处理带有定性约束的问题, 并利用问题的知识背景显著地提高了系统的求解效率. 最后给出了在大型炼油厂润滑油系统生产调度中应用的实例.
关键词　　生产调度　专家系统　启发式搜索　知识表达　润滑油生产系统
分类号

A Production Scheduling Expert System for Tow-Stage Multi-Product Process

Dai Xuedong,Lu Yongzai

Zhejiang University

Abstract
Based on the combination of AI heuristic search optimization method and human expertise rules, this paper addresses the development of an expert system for production scheduling problem in a two-stage multi-product process. The knowledge representation scheme and the structure of the system are proposed. The system can readily deal with the qualitative factors involving in the problem, and speed up the system running by sufficiently using the background knowledge of the problem. An application of the proposed expert system to the lube oil system in a large oil refinery is presented as an example to illustrate the satistactory results.
Key words　　Production scheduling　expert system　heuristic search　knowledge representation　lube oil production system

DOI :

扩展功能

本文信息

▸ Supporting info
▸ PDF(540KB)
▸ [HTML全文](0KB)
▸ 参考文献[PDF]
▸ 参考文献

服务与反馈

▸ 把本文推荐给朋友
▸ 加入我的书架
▸ 加入引用管理器
▸ 复制索引
▸ Email Alert
▸ 文章反馈
▸ 浏览反馈信息

相关信息

▸ 本刊中 包含"生产调度"的 相关文章
▸本文作者相关文章
· 戴学东
· 吕勇哉