

求解带时间窗车辆路径问题的插入检测法

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Insertion detection method for vehicle routing problem with time windows

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- 摘要
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摘要 在求解带时间窗车辆路径问题各类算法的插入检测过程中, 针对已有检测时间窗口约束是否满足的方法存在效率不高的缺点, 引入时差的概念, 设计了基于时差的插入检测法, 并分析比较其与已有的插入检测法的计算性能; 应用标准测试算例测试显示, 时差插入检测法比已有的插入检测法具有更快的检测速度.

关键词: 车辆路径问题 时间窗 时差 时差插入检测法

Abstract: Many algorithms of solving vehicle routing problem with time windows have processes of customs insertion detection which hold weak efficiency. In this paper, the time difference concept is presented and then insertion detection method based time difference (TDIDM) is proposed. The computing performance of TDIDM is also compared with the existing insertion detection. Computational results on the benchmark problems show that the TDIDM is faster than the existing insertion detection.

Key words: vehicle routing problem time windows time difference time difference insertion detection method

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