Solving the two-stage fixed-charge transportation problem with a hybrid genetic algorithm

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ABSTRACT.

This article considers the two-stage fixed-charge transportation problem which models an important transportation application in a supply chain, from manufacturers to customers through distribution centers. For solving this optimization problem we describe a hybrid algorithm that combines a steady-state genetic algorithm with a local search procedure. The computational results for an often used collection of benchmark instances show that our proposed hybrid method delivers results that are competitive to those of other state-of-the-art algorithms for solving the two-stage fixed-charge transportation problem.

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