

A SURVEY ON THE STACKER CRANE PROBLEM

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Abstract

Containers came into the market for international conveyance of sea freight almost five decades ago. Today over 60% of the world's deep-sea general cargo is transported in containers and some routes are even containerized up to 100%. Seaport container terminals face a high demand for advanced optimization methods. One of the key concerns in this respect refers to various types of equipment at container terminals devoted to the routing of containers to achieve high productivity. For instance, a variety of vehicles is used for the horizontal transport at the quayside and at the landside. This paper provides a comprehensive survey on stacker crane problem a single vehicle that must pick-up and delivers full loads at minimal cost, specifically Empirical studies performed on SCP instances and more generally, asymmetric traveling salesman problems.

Keywords : Stacker crane problem , Traveling Salesman Problem, Empirical Studies