

Abstract:

An integrated delivery scheduling system for trucking has already been developed and in practical use. The scheduling system has been extended to marine transport in Tokyo Bay for more efficient product transfer. The marine transport scheduling was formulated as an optimization problem to obtain the most efficient routing and assignment of barges. The optimization problem was solved by using Mixed Integer Linear Programming (MILP).

1. Introduction

At East Japan Works, JFE Steel, direct delivery of products to domestic customers accounts for approximately half of the direct delivery ratio. Because trucks are mainly used in product deliveries, JFE Steel developed the Vehicle Routing Scheduler for Steel Products Delivery, which integrated the product delivery operations of three distribution bases of East Japan Works (Chiba and Keel Pr E s

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