A Container Assignment Problem with Pickup and Delivery

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1 Abstract

We address the problem of allocating containers into predefined positions of a carrier, in this case aircraft, under several realistic structural and safety constraints. The originality of our approach is to allow multi-trips with pickup and delivery at some intermediate locations. The objective is to minimize the economic and environmental costs including the impact of the intermediate operations. We resort to an integer linear model. Numerical experiments have been performed using a standard B&C library. Heuristics are developed to speed up the process.

Références