

Review of: "Solving Pallet loading Problem with Real-World Constraints"

Giacomo Lanza¹

¹ University of Pisa

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The authors tackle a problem referred to in the literature as the pallet loading problem. This problem revolves around the challenge of efficiently loading transport units onto pallets. In the context explored by the authors, they account for real-world constraints, particularly the need to maintain the stability of transport units under the influence of both inertial forces and gravity. Due to its NP-hard complexity, the authors propose a branch-and-bound-based algorithm to find solutions for instances of this problem. This algorithm, in turn, relies on a heuristic procedure to generate potential positions for the transport units on the pallet.

This problem presents significant practical relevance and interest.

However, the literature review presented by the authors is rather limited, primarily concentrating on resolution methods. A comprehensive review of the pallet loading problem itself is absent. It would be enlightening to position this work in relation to other pallet loading problems explored in existing literature. Additionally, it is unclear whether adhering to a predetermined loading order for transport units is a common practice within this context. To facilitate a deeper understanding, additional details regarding the method used to solve the pallet loading problem are recommended. The inclusion of graphic examples would greatly enhance the clarity of the description.

In the problem description of the "METHOD FOR SOLVING THE PALLET LOADING PROBLEM" section, the meaning of the index "i" should be explained. Furthermore, I would like to suggest that the authors number all mathematical expressions throughout the text. The experimental section is notably brief, offering limited insights into the performance of the proposed algorithm. Additionally, there is no discussion regarding the instances employed in the experiments. Expanding this section and providing greater detail about the experimental methodology and results would significantly enhance the overall quality and utility of the paper.