

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

Naikang Yu<sup>1</sup>

<sup>1</sup> Kunming University of Science and Technology

**Potential competing interests:** No potential competing interests to declare.

The authors describe a solving pallet loading problem with real-world constraints. They proposed a branch and bound algorithm for solving the pallet loading problem. My comments are as follows:

1. In the first paragraph of the Literature review, the author states that the research problem (pallet loading problem) belongs to the NP hard problem. There should be literature citations here or proof should be provided in the following text.

2. The experimental section of the paper is not sufficient and did not introduce the data sources and scale of your experiment. The proposed algorithm has not been compared with other algorithms or solvers (such as cplex or gurobi), making it difficult to visually evaluate the performance of your proposed algorithm.

3. In the first paragraph of the Method for solving pallet loading problem The meaning of subscript  $i$  in formula

$$\max \sum_{j \in K} u_j V_j, \sum_{i \in K} u_i V_i \leq V_p, u_j \in (0, 1)$$

has not been explained.

4. In the Method for solving pallet loading problem section, these constraints are all just language descriptions. Why not express these constraints in mathematical form through equations or inequalities? How to handle these constraints in branch and bound algorithms? In other words, the description of the proposed algorithm is unclear.

5. The process of loading needs to be further described in detail in the article, and the effectiveness of the proposed algorithm in solving the problem needs to be demonstrated based on relevant instances.