
Open-End Bin Packing Problem with Conflicts

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Abstract

In this paper, we study the Open-End Bin Packing Problem with Conflicts (OEBPPC) which is a combination of two variants of the famous bin packing problem: Open-End Bin Packing Problem and Bin Packing Problem with Conflicts. In OEBPPC, the aim is to pack all of the items into minimum number of bins where the bin capacity is allowed to be exceeded only by the last item placed and there exist conflicts between some item pairs. We introduce a mathematical formulation for the problem and adapted some known heuristics and a metaheuristic algorithm to this new problem.

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