ABSTRACT

The thesis consists of 96 p., 25 fig., 8 tabl., 2 append., 18 sources.

TWO-DIMENSIONAL PACKING, HEURISTIC ALGORITHMS, LOCAL SEARCH, HEURISTICS, ORIENTED TREES, LOCAL DESCENT, SIMULATED ANNEALING.

Algorithmization and comparative analysis of rectangular two-dimensional packaging is given in the work.

Heuristic algorithms and algorithms of local search are chosen as the main methods of solving the set tasks.

Local search algorithms build a solution by improving the already existing solution. Heuristic algorithms sort items for packaging according to certain rules.

The expansion of the class of tasks is considered, by changing the restrictions on objects for packaging. Own modifications of existing heuristic algorithms for a new class of tasks have been developed.