Abstract

Cutting Stock Problem(CSP) is a hard-combinatorial problem. In one case there are some solutions with the same fitness value. The goal is to optimize the use of stock to complete all the request order.

Ant Colony Optimizaiton(ACO) is a searching algorithm that optimize the result with multy agent. The advantage of ACO is that the use of multy agent. All agent will find one solution in each generation/iteration, and this will imfluence the next generation to find the optimum solution, based on the result in the previous generation's results.

In this research ACO is implemented in solving the CSP. With the setting of some parameter in process, ACO can found the solution of CSP, even not the optimum solution.

Keywords: Cutting Stock Problem, Ant Colony Optimization, order, stock