Abstract

Adaptive Genetic Algorithm is a Genetic Algorithm which combine with fuzzy government so that it gains adaptive characteristic. By added of its characteristic,can be help for prevention the weakness of Genetic Algorithm that is premature convergence.

This final essay implements Adaptive Genetic Algorithm for cutting material optimization. Where there is one big size of stock that will be cut in many sizes of orderlist. The goal of this system is to search for optimal solution of the cut.

Testing result from these study cases shows that optimal solution by applying Adaptive Genetic Algorithm is able to increase fitness value 7.286% for study cases.

Keywords: Adaptive Genetic Algorithm, Fuzzy Government, Cutting Material.