

ABSTRACT

Water distribution network is very crucial that is really needed by the community. Water distribution network is used to supply clean water for the basic human needs. Building a water distribution network can be profitable or inflict enormous losses both from the customer and the provider of water depends on rightness or optimal design of water distribution networks that are designed carefully by following the rules. Because of the reason above, it needs a good analysis of the water distribution networks design to channel water optimally.

Many methods have been developed by scientists to obtain the optimal of water distribution network design result . In 2001, Harmony Search algorithm emerged as algorithm that has been able to solve some optimal design of water distribution networks in several places. In this Final Project, Harmony Search also used to complete the process of water distribution network optimization. This Final Project will research the factors in the Harmony Search that is responsible for water distribution network to produce optimally.

Keyword : optimal, Harmony Search, water network distribution