

ABSTRACT

CV Artana Engineering is a company engaged in manufacturing and services that process raw materials of steel plate into various types of tanks. CV Artana Engineering production process based on orders (job order). One of the strategies in order to complete the orders in time, namely CV Artana Engineering should be able to increase production volumes, as well as reduce the cost of production itself, by optimizing the material displacement distance between production processes that are directly related to the plant layout.

In the last three years was recorded in the company's production decreased by 10-20 percent. Seen on the existing conditions of production floor layout, there are still companies that have not been efficient facilities and also the presence of backtracking. It certainly had an effect on the total cost of the increased displacement moment and caused delays in production

The algorithm used is the CRAFT algorithm as facility layout algorithm improvement. Based on research that has been done, the proposed layout can reduce the total movement moment of material until 17.8% and the results of the calculation unit load selected by 5 tanks.

Keywords: *Layout, CRAFT algorithm, Movement moment*