ABSTRACT

CV. MKS is a company that has problems in its warehouse. In January 2014, CV. MKS rented a building (Warehouse II CV. MKS) that used to store glass and aluminium inventory, and do cutting process of glass which will be sent to the customer. One of the problems is the maximum inventory level of glass material exceeds the storage capacity, due to the movement of facility from Warehouse I CV. MKS is done in stages and has not held the entire transfer facility. In addtion, the company plans to add some facilities and work stations.

Based on some of issues that have been presented, it is necessary to design the facility layout of this warehouse to minimize material handling costs by maximizing the utility of warehouse space and minimizing the movement moment of flow materual using BLOCPLAN algorithm. BLOCPLAN algorithm is used as construction algorithm and improvement algorithm.

The layout design using BLOCPLAN algorithm resulted in increased warehouse space utility of 40,23% and decreased moment movement of 17,95% with decreased material handling cost of 10,87%.

Keywords: Warehouse, Utilities, Inventory Level, Layout, BLOCPLAN