

ABSTRACT

CV. Maemunah Majalaya is an industry that produces woven fabrics. Production system at CV. Maemunah Majalaya is carried out with a Make to Order system. There are problems that occur, namely the point of view of an inefficient truck which results in the need for additional operational costs, crosstracking which causes material transfer to be complicated and complex. Then there is an alternating flow which results in the distance and the process of moving material being large and long by distance material movement is 12.586,5 meters. This causes the material transfer process to be ineffective and inefficient, so it is necessary to improve the redesign of the facility layout using the BLOCPLAN algorithm. This is because the close distance of the layout produced by this algorithm can be directly seen from the R-Score, so it can be used to reduce the distance of material transfer. After the re-layout, the total distance of material transfer is 8,846 meters. So that backtracking is reduced by 50%, crosstracking is reduced by 64.3% and material transfer distance is 3,740.5 meters or decreased by 29.7% for the production of 1 batch of woven fabric for 6 days.

Keyword: Facility Layout, BLOCPLAN, Backtracking, Crosstracking, Flow Material Movement