

ABSTRACT

PT. Foximas Mandiri is a manufacturing company which produces various kinds of shoes. An increasing number of demand on the kind of shoe PDH and PDL occurred in the last 3 years to reach the proportion of 80-85% of the shoes are produced. In meeting these demand, PT. Foximas Mandiri has several problems namely the presence of currents backtracking on the production floor. In addition, in order to accelerate the production of shoes PDH and PDL PT. Foximas Mandiri plans to add a number of existing facilities on the production floor.

Based on the issues, the research conducted to improve the layout of PT. Mandiri Foximas using BLOCPLAN algorithm. BLOCPLAN algorithm works by building and change the layout to look for a minimum total mileage by exchanging between work stations / facilities. Analysis of the study by comparing the initial layout of the alternative layouts generated from BLOCPLAN algorithm.

The results in this study proposed a more optimal layout using the BLOCPLAN algorithm as evidenced by the R-Score of 0.97 and a total moment of movement is 1120.94 meters / day. Reduction moment of movement is 20.04% when compared to the existing layout. It can be concluded that by using the BLOCPLAN algorithm to minimize the total moment of movement is on the production floor PT. Foximas Mandiri.

Keywords: *Layout, Algorithms BLOCPLAN, Moment of Movement, R-Score*