ABSTRACT

The layout of the company is an important aspect of the company. At PT. Ahmadaris found to have lost time production problems due to rain so that it was not possible to transport the transfer of materials. The purpose of this study is to propose improvements to the layout of PT Ahmadaris' facilities on the gauze production floor in order to minimize the occurrence of lost time, minimize the distance of movement, and minimize material handling costs by knowing the course of production using flexsim software simulation. The methods used in the study were Activity Relationship Chart (ARC), Activity Relationship Diagram (ARD). Then flexsim software to analyze the performance of the system and processes in the layout created. There are 2 layout proposals made on the production floor of PT Ahmadaris. It can be concluded that the recommended layout is the proposed layout 2 where the total distance and moment of material handling per month is known to be the difference from the simulation of the initial model layout of 97 meters from the total initial distance and the difference in the moment of material handling in a month of 2,089 meters from the initial material handling moment with the addition of cover facilities for all material handling lines so that in any weather the material handling transportation process between departments is not disturbed. And the difference in material handling costs amounted to Rp 312.372,00 from the employee's salary budgeted by the company. With the difference in production output for 5 products, namely KDL78, KDL-C, KDLXD, KLDC7, and KPHDA of 5,061, 1,748, 1,486, 925, and 503.

Keywords : ARC, ARD, *lost time*, OMH, *software flexsim*