

ABSTRACT

PT. Central Mulya Citanitindo are an industry engaged in the repair yarn, in which companies do the finishing process by providing color to the fabric. The problems that arise in the initial layout placement company departments that are not planned in advance, causing the displacement distance of the material taken from one department to the well and cause the cost of other material handling (OMH) is large enough.

The purpose of this research is to be achieved is to draft the proposed layout of the PT. Central Mulya Citanitindo with material handling costs (OMH) and the range of material handling smaller.

By using CRAFT algorithm in WinQSB 2.0 software to perform repairs on the initial layout. CRAFT is the improvement program, the program is looking for the optimal design to improve the layout gradually. CRAFT evaluate the layout gradually. CRAFT evaluate the layout by way of exchange department location.

Layout early companies that have material movements within a distance of 5211.67 with OMH Rp. 1,372,931. Proposed layout selected from the results of the settlement issue in CRAFT program in exchange for two departments then followed by three departments of the total displacement distance of 2362.35 with OMH Rp. 622.319. Companies can save pengeularan for OMH per day Rp. 752.541, while per month could save Rp. 19,566,069, and in one year the company could save Rp. 234,792,828.

Keywords: layout, material movements distance, OMH, CRAFT