

## **ABSTRACT**

One of the factors that can be determine a company life is material requirement planning. Problems that are often faced by companies such as miss of determining the raw materials precisely is still applied in the company. The lack of supply of raw materials or the lack of raw materials at the time required may result in the production activities of the road stopped, in other hand the excessive supply will result delayed of capital productive, so this is one of the loss factor for the company.

Optimal Planning is needed to do, so the best research that we have to do is using Dynamic Lot Sizing. The Material Requirement Planning is not constant so with this method will produce the amount of planning the optimal order and then booking fee and the cost of storage of the company can be minimal.

From the results of the calculation using the Dynamic Lot Sizing, there are several methods that are suitable to use in the planning of raw materials that nature is not constant. Lot Sizing Criteria method is good from some of the methods used is a method that gives the total cost (the cost of procurement and cost savings) is small. In the Kertas Lembaran method chosen is LUC, PPB and POQ. On raw materials Kertas Rol method selected is LFL, LUC, PPB, and POQ. On the raw material Tinta method selected is LFL. On the raw materials Plastik method chosen is LFL and LUC. On raw materials Strapping Band method selected is PPB and POQ. On the raw materials Lem can not be determined the best methods because product on hand is adequate supply for some period ahead and that there are no calculations performed, because there is no gross quantity and no orders quantity.

Keyword: Material Requirement Planning, Lot Sizing