

## **ABSTRACT**

*PT BEP is a manufacturing company which produces lightweight concrete. Differences in the quality of products are divided into four grade categories. One cause of the difference in the quality of the product is the product shrinkage caused by the length of storage of the products in the warehouse. Operators have difficulties when identifying products during the initial inbound and outbound. So that the FIFO system can not be implemented on the finished product warehouse PT BEP. Products that have been store more than 3 months in warehouse will decrease the grade, and it will affected to the lower prices and the company will get the losses. This is caused by the storage of product doesn't fixed for each product. Items will be placed in random location in the warehouse and will be taken without concern to the production time.*

*To minimize these problems, the steps that must be done is to classify products using FSN analysis, design a slot of storage, calculate space requirements of products, calculate distances of slots and allocate the product in accordance with the priorities comparison with the distance of the storage slot. Product placement has to do with dedicated storage policy.*

*The draft policy proposed storage allocation is done based on the characteristics of the product by using a dedicated storage time resulted in a decrease in inbound and outbound process for 18.54% of the processing time , there is 1721.57 seconds with value added becomes 57.64%. While the cost of material handling is reduced by 80.86% of the existing total cost of Rp 3.168.000.*

*Keywords: Storage Allocation, Slot, Warehouse, Dedicated Storage, FSN Analysis*