ABSTRACT

PT. ABC is a company which focuses on logistic. One type of product stored by PT. ABC is dry food products. PT. ABC has an obstacle with their inventory such as shortage and overstock due to the absence of fixed quantity order for replenishment either in Gudang Cikarang or Gudang Jakarta.

To overcome this problem, a final project on inventory policy for dry food products is carried out with a continuous review (r, Q) with fixed life time model by considering the life time of the product in order to optimize the quantity order when replenish inventory so as to minimize shortage and overstock quantity with minimum costs. By calculating the Hadley-Within model in this final project, it is obtained the reorder point (r) and the optimum quantity ordering lots.

The results of this final project by using this model is the optimum quantity ordering lots and reorder point that can minimize amount of shortage from 2.091 to 1.611 also with total amount of average inventory held in Gudang Cikarang is 13.223. and Gudang Jakarta is 18.260 to 3.705. This final project is reduce the total inventory cost as much as 5% from previous total inventory cost.

It is conclude that this final prjocet can minimize amount of shortage and overstock also the total inventory cost from previous condition. It is recommended to study further about inventory policy with considering optimizing warehouse capacity or inventory policy for other product's category such as chiller food or frozen food.

Keywords – ***dry food, shortage, overstock, optimum ordering quantity, continuous review***