

## **ABSTRACT**

*The inventory control of goods in storage are very necessary for organizations, especially PT MPS for the meet a market demand. If the inventory is out will happen the lost sale. However, if the inventory is excess will increase the inventory total cost.*

*The overstock inventory of food product category in storage of PT MPS due to the ordering of large number quantities of product without based on good calculation. The effective of inventory management will decrease the inventory total cost of food product.*

*This paper will design an optimal inventory policy for food product category that classify with ABC classification, for A class use Continuous Review  $(s,S)$  and than for B and C class use Continuous Review  $(s,Q)$ . According to the result of those inventory policy, inventory total cost that decrease about 63% with Continuous Review  $(s,S)$  and decrease about 57% with Continuous Review  $(s,Q)$ . Both proposed inventory total cost are lower than the existing condition.*

**Keywords:** *Inventory, overstock, food product category, inventory policy, Continuous Review, inventory total cost.*