

## **ABSTRACT**

*PT. XYZ is one of the automotive industry companies that produce auto parts for four-wheeled vehicles or more. Along with the development of the automotive industry, the demand for vehicles and vehicle supporting parts also increased. In order to remain competitive with similar industries and in order to meet consumer demand, the supply of its products must be considered by the company. So far the problem of PT. XYZ is the target fulfillment request not achieved which resulted in backorder, where the backorder products will get a discount.*

*Based on this case, inventory balancing is certainly necessary to minimize the unavailability of inventory that leads to decreased service level and increased cost due to backorder discount. In this research, optimum inventory policy will be determined using Continuous review ( $s, S$ ) method for products with normal demand distribution pattern. The objective variable specified in this research is the optimum order quantity, maximum inventory limit, and reorder point.*

*The results of the calculation of the optimum inventory policy proposal using continuous review method ( $s, S$ ) able to increase the average service level from 89.7% to 99.9% and reduce the total cost of inventory 53% from the actual situation where the decrease of inventory cost caused by decreasing of shortage cost.*

*Keywords: Inventory Policy, Stockout, Continuous Review System ( $s,S$ )*