

## ABSTRACT

PT PQR is company that stand as a single agent that hold Peugeot brand in Indonesia. It is selling cars and spare parts for Peugeot. Other than that, it also provides after sales service for Peugeot car. As a company that sells spare part, it is important to maintain stock of those spare parts well in order to face unpredictable demand. Generally problem that occurs in PT PQR is spare parts stock that occurs in company's inventory system run into pile up. It causes total inventory cost that expensed by company exceeds inventory cost allocation. Total inventory cost that exceeds inventory cost allocation is Rp167.766.171.

Based on that problem, spare parts classification and inventory policy is necessary important to minimize overstock that experienced by company. In this research, spare part classification is performed using ABC-XYZ analysis. ABC analysis for determine which group of spare part that contribute a lot to inventory cost. Then XYZ analysis used for grouped spare parts based on their demand variability. Inventory policy determined using periodic review (R,s,S) and (R,S) method. Because in current condition company has agreement with parent company to order spare parts following ordering batch or once a month. The objective of using those methods are determine optimal review or replenishment interval, re order point and maximum inventory level in order to minimize overstock.

The result of proposed inventory policy using periodic review (R,s,S) and periodic review (R,S) is reduction of total inventory cost by 37,78% due to reduction of total inventory cost component. This reduction, results total inventory cost Rp167.671.572 below total inventory cost allocation.

Keywords : Inventory policy, overstock, periodic review (R,s,S), periodic review (R,S)