

ABSTRACT

PT. OPQ is a company engaged in the automotive manufacturing industry. The company produces bolts for the safety area, it is related to the lower body of the four-wheeled vehicle. PT. OPQ was established in 2014 and today has already been the supplier for several major automotive companies in Indonesia. The demand of PT OPQ that must be fulfilled is increasing as the amount of consumer is increasing too. Due to the high demand, so the raw material stockout occurs. This make the company's service level is below the standard.

This study involved 48 sku of material raw materials that have normal distributed demand. Inventory policy applied in this research is periodic review (R, s, S) with the aim to minimize total cost of inventory and improve service level of company.

The result of this research was found to decrease total inventory cost by 15% with the value of existing inventory cost Rp1.100.879.479,- to Rp 936.061.349,- . In addition, service level at PT. OPQ has increased with the value of existing conditions 85% to 99%.

Keywords: Raw Material, Periodic Review, Probabilistic, Service Level, Stockout