

ABSTRACT

PT. XYZ is a manufacturing company that produces wire and cable products for the electronics and automotive devices that are located in Bandung, West Java. One category of product produced by PT. XYZ is the enameled copper wire or copper wire.

During this time the product inventory category copper wire inside the warehouse PT. XYZ is not managed well, resulting in a shortage or stock out the subsequent impact on consumer demand cannot be met and lost sales occur. It also resulted in a shortage costs, bringing the total inventory cost becomes very high.

The purpose of this study is to determine the inventory policy proposals for the product categories of copper wire with ABC analysis that will result in 3 categories: class A, class B, and class C. Inventory policies for the product class A method using Continuous Review (s,S) method and Class B and C product using Continuous Review (s,Q) method. The application of this study using the Continuous Review (s, S) and Continuous Review (s,Q) because the demand for the product categories of copper wire are probabilistic.

The results of the model probabilistic methods Continuous review (s,S) and Continuous review (s,Q) can determine lot size inventory, safety stock, the optimal reorder point, and minimize the cost of the total inventory. The result of the calculation for class A inventory policies provide cost savings of 6,54% or Rp 39.720.472 with an average service level of 99.91%, while for class B and C provide cost savings of 3,58% or Rp 5.991.209 with an average service level of 99.84%.

Keywords: Inventory policy, ABC Analysis, Stock out, Service level, Continuous Review (s,S), Continuous Review (s,Q),