PLANNING AND CONTROLLING STOCK COMPONENT WITH EOQ METHOD AT C.V. SINAR BAJA ELECTRIC

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ABSTRACT
CV. Sinar Baja Electric is a leading manufacturer of loudspeaker in Surabaya and produces many types of loudspeaker. Currently, the production planning and inventory section does not have a structured inventory control system and accurate forecasting method. The components of loudspeakers are ordered based only on the on-hand inventory and management’s safety stock policy. Therefore, the production division has a difficulty in providing the right amount of loudspeaker’s components for the assembly lines. To solve the problem, the company should develop the right inventory control system in order to be able to provide the right amount of loudspeaker’s components with minimum cost.

The initial step in developing the right inventory control system is to determine the appropriate forecasting method for estimating the loudspeakers’ demand, and then proceed with determining the economic order quantity (EOQ), reorder point, safety stock and total cost.

Based on the developed inventory control system, the inventory total cost can be reduced from 682,818,705.6 IDR to 682,117,143.27 IDR or 0.10% from the total cost of current inventory control system. The safety stock cost can also be reduced as much as 4.33% from the current safety stock policy.

Key words: Forecasting, EOQ (economic order quantity), ROP (Reorder point), Safety Stock, Total Cost Inventory