Analysis of Soybean Raw Material Inventory Control with Economic Order Quantity(EOQ) Method for Kopti Karya Mulya in Sidoarjo City Dr.Ir.Ridwan Iskandar, S.T, M.T as a chief conelor

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ABSTRACT

.The research was conducted using descriptive quantitative research aimed at analyzing the results of a comparison between the raw material inventory control system implemented by Kopti Karya Mulya and the Economic Order Quantity (EOQ) method. The EOQ method used has five analytical techniques, namely analysis of raw material purchase point optimization, order frequency, safety stock, reorder point, and total inventory cost (TIC). The data used is raw material ordering data for January-December 2022. The results of data processing for ordering soybean raw materials in 2022 raw material purchases made by Kopti amounted to 1,388,091 with an order quantity of 6,136 each time an order was made. The frequency of orders made by kopti is 224 times a year and the total cost of supplies issued is IDR 116,318,032. While the implementation of the EOQ method shows the results of an order quantity of 6,664 each time an order is made. The frequency of orders made was 206 throughout 2022. The safety stock was at point 84,447 Kg and the reorder point was at point 88,796 Kg. The total cost that must be incurred is IDR 89,163,284. The application of the Economic Order Quantity method makes the total inventory cost efficient by IDR 27,154,748.

Key word: Soybean, Inventory Control, EOQ, Kopti Karya Mulya