Analysis of Inventory Control of Wheat Flour Raw Materials Using The Economic Order Quantity (EOQ) Method in Home Industry Arini Bakery

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ABSTRACK

This research is a descriptive quantitative type of research to analyze the comparison of inventory control systems for wheat flour raw materials using conventional company methods and the Econimic Order Quantity method. The company does not have safety stock and reorder points so this can result in running out or shortage of raw materials. The method used in this research is the EOQ method with 5 analysis techniques, namely optimal raw material purchasing, EOQ, order frequency, safety stock, reorder point and TIC. The data used is Arini Bakery production data in 2023. The results of the research show that in 2023 purchased 14,000 Kg of raw materials 481 Kg and 28 orders a year and the total inventory costs incurred were Rp. ,2,242,400. If you use the EOQ method, you get an order quantity of 847 kg with 16 orders during a year. The safety stock that must be available is 193 Kg with reorders made when the raw material is at the 236 Kg point. The total inventory costs incurred using the EOQ method are Rp. 1,016,734. This shows that the EOQ method is more efficient, namely it can save inventory costs of Rp. 1,225,666.

Keywords: Inventory Control, Wheat Flour, Economic Order Quantity