ANALYSIS OF WHEAT FLOUR RAW MATERIAL INVENTORY CONTROL USING THE ECONOMIC ORDER QUANTITY (EOQ) METHOD AT HOME INDUSTRY BAKPIA ALMAHIRA JEMBER

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ABSTRACT

This study aims to analyze the control of wheat flour raw materials in the company, analyze optimal raw material control using the Economic Order Quantity (EOQ) method, and analyze the comparison of raw material inventory costs conventionally in the company and after using the EOQ method. The method used in this study is the EOQ method with 5 analysis techniques, namely optimal raw material purchases, EOQ, ordering frequency, safety stock, reorder point and TIC. The data used is the production data of Home Industry Bakpia Almahira in 2024. The results of the study show that in 2024 Home Industry Bakpia Almahira purchased 254 kg of raw materials with 49 orders in a year and the total inventory cost incurred was IDR 3,792,400. If using the EOQ method, the order quantity is 1,038 kg with 12 orders during the year. The safety stock that must be available is 203 kg with a reorder when the raw material is at 303 kg. The total inventory cost incurred using the EOQ method is IDR 1,244,096. This shows that the EOQ method is more efficient, namely it can save inventory costs of IDR 2,548.304.

Keywords: Inventory Control, Wheat Flour, Economic Order Quantity (EOQ) Method