

***Analysis of Wheat Flour Raw Material Inventory Control with EOQ Method at
UD MBO Bakery in Jember Regency
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ABSTRACT

This research is a type of quantitative descriptive research that aims to analyze the optimal amount of wheat flour raw material inventory, safety stock, reorder time (reorder point), total inventory cost and compare the company's conventional method of wheat flour raw material inventory control system with the Economic Order Quantity (EOQ) method. The analytical tools that will be used in this study are using the Economic Order Quantity (EOQ) method, order frequency, reorder point, safety stock, total inventory cost (TIC), and POM-QM software. Based on the results of the analysis, it shows that in 2022 the company purchased 139,575 kg of raw materials with an order quantity of 2,908 kg or 116 bags/order and an order frequency of 50 times/year with an average of 4 times/month and a total inventory cost of IDR 3,919,700.00. Calculations using the EOQ method obtained the optimal amount of raw material purchases in 2022 of 8,063 kg or 322 bags per order with a frequency of purchases of 17 times / year or orders every 18 days and the total cost of inventory using the EOQ method is IDR 2,419,040.81. This shows that calculations using the EOQ method can save total inventory costs of Rp1,500,659.19.

Key words: *Wheat Flour, Inventory Control, Raw Materials, EOQ*