Analysis of Raw Material Inventory Control for Wheat Flour Using the Economic Order Quantity Method at Enaqween Dimsum Home Industry in Jember Regency

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ABSTRACT

Enaqueen Dimsum Home Industry is an agroindustrial business focused on dimsum production, located at Letjen Sutoyo Road, Erlangga 1, Kebonsari Distrik, Sumbersari, Jember Regency, Jawa Timur. This research aims to analyze the control of wheat flour raw material inventory by comparing the company's conventional method with the Economic Order Quantity (EOQ) method. The study employs a quantitative approach with descriptive statistical data analysis techniques. The EOQ method is applied through five analysis techniques: determining the optimal raw material order quantity, order frequency, safety stock, reorder point, and total inventory cost. The data used in this study includes wheat flour inventory and production data for the year 2024. The research findings show that Enaqueen Dimsum Home Industry orders a total of 15.300 kg of wheat flour with an order frequency of 102 times, incurring a total inventory cost of Rp 2.819.451. Meanwhile, the implementation of the EOQ method results in an optimal order quantity of 674 kg per order, with an order frequency of 23 times per year. The safety stock provided is 282 kg, and the reorder point is set at 331 kg. The total inventory cost using the EOQ method is Rp 681.310. A comparison of both methods reveals that the EOQ method is more efficient, allowing for a total inventory cost savings of Rp 2.138.141 or 75,84%.

Keywords: Inventory Control, Economic Order Quantity, Wheat Flour, Dimsum, Enaqween Dimsum Home Industry