Analysis of Inventory Control of Wheat Flour Raw Materials Using the EOQ (Economic Order Quantity) Method at Home Industry ''Nina Roti'' In Situbondo Regency

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ABSTRACT

This research is a type of quantitative research which aims to analyze the comparison of the conventional method of wheat flour raw material inventory control systems using the EOQ (Economic Order Quantity) method. Raw material inventory control which refers to product sales every day so that the assumption method is used in ordering raw materials every day. The company also does not implement safety stock and reorder points so that there is a risk of running out or shortage of raw materials. This study uses the EOQ (Economic Order Quantity) method with several analytical techniques including optimal raw material purchasing (EOQ), order frequency, safety stock, reorder point and total inventory cost (TIC). The data used is production data for 2022. The results show that the company purchases 18,420 kg of raw materials in 2022 with an order quantity of 60 kg and orders 307 times a year. The total cost of inventory issued by the company is Rp. 3,598,405,-. Whereas if using the EOQ method the order quantity is 865 kg with 21 orders a year. The safety stock that must be available by the company is 110 kg of wheat flour and the reorder point at the raw material point is 170 kg. The total cost of inventory using the EOO method is Rp. 497,091,-. This shows that the EOQ method is more efficient because the company can save Rp. 3.107.314,-.

Keywords: Wheat Flour, Inventory Control, EOQ, Nina Roti