

Analysis of Wheat Flour Raw Material Inventory Control Using the Economic Order Quantity (EOQ) Method on Brownie Products at Arie Cake Tart Decoration And Cookies

Ariesia Ayuning Gemaputri, S.Pi., M.P as a chief concelor

Siti Maisyarah Dwi Aprilia
Agroindustry Management Study Program
Department of Agribusiness Management

ABSTRACT

This research was carried out at Arie Cake Tart Decoration and Cookies, which is a business in the bakery sector. This business is located in Probolinggo Regency and produces various cakes such as tarts, brownies, wet cakes and cookies. This research is a quantitative descriptive study that compares raw material inventory control using a business approach with the Economic Order Quantity (EOQ) technique. This method includes five analysis techniques: optimal raw material purchasing (EOQ), order frequency, reorder point (ROP), safety stock, and overall inventory cost. The data used is Arie Cake Tart Decoration And Cookies production data in 2022 and 2023. This research also uses software tools in the form of POM-QM for Windows. The best research results for orders in 2022 are 48 kg with an order frequency of 17 times and a stock requirement of 30 kg. Reorders are made if the remaining inventory in the warehouse is 32.3 kg. In 2023, the best order will be 48 kg with a frequency of 17 times, with a safety stock requirement of 38 kg. Orders will be reordered if the remaining inventory in the warehouse is 40.3 kg. The cost of using the EOQ method is Rp. 41,850 in 2022 and in 2023 it will save Rp. 42,500 than the costs incurred by the company previously.

Keywords: Inventory Control, Wheat Flour, EOQ, Arie Cake Tart Decoration And Cookies