

Analysis of Soybean Raw Material Control Using the Economic Order Quantity

(EOQ) Methode at Tofu Production Pabrik Gebang

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ABSTRACT

This research was conducted to assist companies in determining the optimal number of orders for soybean raw materials using the Economic Order Quantity (EOQ) method. The problem faced by the company is that the purchase or ordering of raw materials is carried out using an estimate method which can result in repeated purchases that cause ordering costs that are less than optimal. The company also does not have a safety stock and does not apply a reorder point which can cause the company to run out of raw materials during the production process. The method used is the Economic Order Quantity (EOQ) method using analytical techniques, namely economic order quantity (EOQ), purchase frequency, safety stock (safety stock), reorder point (reorder point), total inventory cost (total inventory cost). The data used is raw material inventory data in 2019-2020. The results showed that the company purchased 79,100 kg of raw materials (2019) and 78,800 kg (2020) with a purchase of 1,521 kg (2019) and 1,515 kg (2020) for one purchase with a purchase frequency of 52 times a year. The total cost of inventories issued by the company is Rp. 6,457,204 (2019) and Rp. 7,757,454 (2020). The results using the EOQ method of purchase quantity are 3,191 kg (2019) and 2,787 kg (2020) with a purchase frequency of 25 times (2019) and 28 times (2020). The total cost of inventories issued according to the EOQ method is Rp. 2,074,186 (2019) and Rp. 2,368,616 (2020).

Key word: Inventory Controll, Soybean, EOQ