

ANALISIS PENGENDALIAN BAHAN BAKU MENGUNAKAN METODE *ECONOMIC ORDER QUANTITY* DAN METODE *PERIODIC ORDER QUANTITY*

STUDI KASUS CV ASTOETIK INDONESIA

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ABSTRAK

CV Astoetik Indonesia adalah perusahaan yang menghasilkan produk berupa kompor batik listrik dengan merk Astoetik/Astutik yang berlokasi di kabupaten Bantul, Daerah Istimewa Yogyakarta. Pada periode Januari-Desember 2022 perusahaan melakukan pembelian bahan baku alumunium dengan total sebanyak 140 unit dengan total 14 kali pemesanan. Pada bulan Juni perusahaan mengalami overstock dengan stock awal sebanyak 16 plat aluminium dengan pemakaian bahan baku sebanyak 9 plat aluminium kemudian perusahaan membeli 10 plat aluminium sehingga stock akhir menumpuk sebanyak 17 plat aluminium sehingga perusahaan mengalami kerugian sebesar Rp 4.675.000. Dalam pengendalian persediaan menggunakan metode economic order quantity (EOQ) dan periode pemesanan yang optimal dengan metode periodic order quantity (POQ). Setelah dilakukan pengolahan data didapatkan hasil pengendalian bahan baku menggunakan metode economic order quantity (EOQ) menghasilkan pengadaan bahan baku berdasarkan jumlah pemesanan yang optimal sebanyak 21 plat alumunium, frekuensi pemesanan sebanyak enam kali, dan total biaya pengadaan bahan baku sebesar Rp 3.634.064 Pengendalian bahan baku menggunakan metode periodic order quantity (POQ) menghasilkan pengadaan bahan baku berdasarkan frekuensi pemesanan yang optimal untuk bahan baku alumunium sebanyak satu kali, jumlah pemesanan sebanyak 130 plat alumunium, dan total biaya pengadaan bahan baku yang dikeluarkan sebesar Rp 11.299.995. Tetapi untuk metode POQ diperlukan gudang dengan kapasitas yang lebih besar dikarenakan pembelian bahan baku hanya dilakukan satu kali dalam satu periode dengan jumlah pemesanan yang cukup besar.

Kata kunci: Pengendalian Bahan Baku, EOQ, POQ

**RAW MATERIAL CONTROL ANALYSIS USING
ECONOMIC ORDER QUANTITY METHOD AND
PERIODIC ORDER QUANTITY METHOD
CASE STUDY CV ASTOETIK INDONESIA**

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ABSTRACT

CV Astoetik Indonesia is a company that produces products in the form of electric batik stoves with the Astoetik/Astutik brand located in Bantul district, Special Region of Yogyakarta. In the January-December 2022 period, the company purchased 140 aluminum raw materials with a total of 14 orders. In June the company experienced overstock with an initial stock of 16 aluminum plates and used 9 aluminum plates as raw material, then the company bought 10 aluminum plates so that the final stock accumulated as many as 17 aluminum plates so that the company experienced a loss of IDR 4,675,000. In inventory control using the economic order quantity (EOQ) method and optimal order periods using the periodic order quantity (POQ) method. After processing the data, the results of controlling raw materials using the economic order quantity (EOQ) method resulted in the procurement of raw materials based on the optimal number of orders of 21 aluminum plates, the frequency of ordering six times, and the total cost of procuring raw materials of IDR 3,634,064. Material control raw materials using the periodic order quantity (POQ) method resulted in the procurement of raw materials based on the optimal order frequency for aluminum raw materials once, the number of orders was 130 aluminum plates, and the total cost of procuring raw materials issued was IDR 11,299,995. But for the POQ method, a warehouse with a larger capacity is needed because the purchase of raw materials is only done once in a period with a large enough number of orders.

Keywords: Raw Material Control, EOQ, POQ

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