

INTISARI

PT Jasa Peralatan Pelabuhan Indonesia dibuat untuk menjamin efisiensi dan *availability* alat bongkar muat yang ada di Pelabuhan Tanjung Priok. Manajemen perawatan melalui perencanaan pengendalian bertugas untuk menghitung jumlah persediaan khususnya *sparepart* agar persediaan tidak mengalami *over stock* dan *stock out* sehingga mengakibatkan terhentinya alur produksi yang merugikan bagi perusahaan. Penelitian ini dilakukan dengan membandingkan *Total Cost* antara sistem manajerial yang telah diterapkan oleh perusahaan dan sistem manajerial berbasis metode *Economic Order Quantity* dengan sampel berupa dua *sparepart filter* untuk unit *crane* dengan data penggunaan tahun 2022. Berdasarkan penelitian yang telah dilakukan, diketahui bahwa sistem manajerial yang dilakukan menggunakan metode *Economic Order Quantity* lebih efisien dan ekonomis, terbukti dari hasil penghematan sejumlah Rp1.722.651,16 untuk *sparepart engine oil filter* MQ4040 GLC Sakura C – 571 dan sejumlah Rp5.221.669 untuk *sparepart fuel filter/water separator* MQ4040 GLC Sakura SFC-5601-02 jika menerapkan sistem manajerial persediaan berbasis *Economic Order Quantity* (EOQ). Maka dari itu penulis mengajukan saran kepada PT Jasa Peralatan Pelabuhan Indonesia untuk menggunakan metode *Economic Order Quantity* (EOQ) sebagai sistem manajerial nya.

Kata kunci : *Crane, Spare Part, Sistem Manajerial Persediaan, Economic Order Quantity*

ABSTRACT

PT Jasa Peralatan Pelabuhan Indonesia was created to ensure the efficiency and availability of loading and unloading equipment at Tanjung Priok Port. Maintenance management through control planning is tasked with calculating the amount of inventory, especially spare parts so that inventory does not experience over stock and stock out resulting in the cessation of production flow which is detrimental to the company. This research was conducted by comparing the total cost between the managerial system that has been implemented by the company and the managerial system based on the Economic Order Quantity method with a sample of two filter spare parts for crane units with the data from 2022. Based on the research that has been done, it is known that the managerial system based on the Economic Order Quantity method can be said to be more efficient and economical, as evidenced by the savings in the amount of IDR1,722,651.16 for spare parts engine oil filter MQ4040 GLC Sakura C-571 and an amount of IDR5,221,669 for spare parts fuel filter/water separator MQ4040 GLC Sajura SFC-5601-02 if implementing an Economic Order Quantity based inventory system. Therefore the author submits a suggestion to PT Jasa Peralatan Pelabuhan Indonesia to use the Economic Order Quantity method as its managerial system.

Keywords : Crane, Spare parts, Managerial Inventory Systems, Economic Order Quantity