

ABSTRAK

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Program Studi : Teknik Industri

Judul : Usulan Pengendalian Bahan Baku SAM Pada Produk PAC Tipe C
Menggunakan Metode *Economic Order Quantity* di PT PCI

PT PCI adalah perusahaan yang bergerak di bidang manufaktur bahan kimia pengolahan air khusus, yaitu PAC. Dalam menjalankan produksinya, PT PCI sering terjadi kondisi jumlah persediaan bahan baku SAM yang mendekati *stock out*. Hal ini dikarenakan titik pemesanan kembali yang tidak tepat sehingga terlalu mendekati kebutuhan stok selama *lead time* 14 hari. Akibat dari waktu tunggu kesediaan bahan baku, secara perhitungan kerugian yang ditanggung sebesar Rp. 146.977.667 dan *total cost* pengadaan SAM pertahun sebesar Rp. 20.571.275.204. Dengan menggunakan metode EOQ dapat mengatasi kasus *near stock out* yang ada sekaligus menurunkan biaya pengadaan bahan baku sebesar Rp. Rp. 1.323.185. Lalu dari usulan pada tahun 2020 dengan menerapkan metode EOQ terjadi penurunan total biaya pengadaan SAM sebesar Rp. 8.135.590. Usulan perbaikan kepada PT PCI yakni penerapan metode EOQ pada pengendalian bahan baku SAM, perekrutan supervisor dan *training* PPIC.

Kata Kunci : *Economic Order Quantity, Total Inventory Control, Fishbone Diagram*

ABSTRACT

Name : Fajar Aprilian

Study Program : Industrial Engineering

Title : *Analysis of raw material control for PAC Type C Products Using the Economic Order Quantity Method at PT PCI*

PT PCI is a company engaged in manufacturing special water treatment chemicals, namely PAC. In carrying out its production, PT PCI often occurs when the amount of SAM raw material inventory is close to stock out. This is because the reorder point is not right so it is too close to stock requirements during the 14 day lead time. As a result of the waiting time for the availability of raw materials, the calculation of losses borne by Rp. 146,977,667 and total annual SAM procurement costs of Rp. 20,571,275,204. By using EOQ method, it can overcome the case of near stock out while reducing the cost of procuring raw materials by Rp. Rp. 1,323,185. Then from the proposal in 2020 by applying the EOQ method there was a reduction in the total cost of SAM procurement by Rp. 8,135,590. The proposed improvement to PT PCI is the application of the EOQ method to SAM raw material control, recruitment of supervisors and PPIC training.

Keywords : *Economic Order Quantity, Total Inventory Control, Fishbone Diagram*