

## ABSTRAK

*Kegiatan pengawasan persediaan adalah hal yang sangat penting yang harus dilakukan karena membantu perusahaan untuk mencapai tingkat efisiensi penggunaan dalam persediaan sehingga mengurangi biaya persediaan seoptimal mungkin. PT Aneka Dharma Persada merupakan perusahaan kontraktor pembuatan beton dan hot mix dengan unit-unit mesin dan peralatan produksi yang memadai. Sistem persediaan di perusahaan untuk suku cadang seperti filter oli, filter solar, filter solar bawah, filter solar atas, filter udara, filter udara luar dan filter udara dalam masih menimbulkan beberapa permasalahan terkait dengan kebutuhan konsumen seperti terjadinya kekurangan persediaan (stock out) dan terlalu besarnya persediaan (over stock).*

*Penelitian ini bertujuan untuk melakukan pengendalian persediaan filter oli, filter solar, filter solar bawah, filter solar atas, filter udara, filter udara luar dan filter udara dalam serta mengetahui total biaya persediaan yang diperlukan.. Perhitungan dilakukan dengan menggunakan metode Economic Order Quantity (EOQ). Penelitian dilakukan dengan tahap-tahap pengolahan sebagai berikut : (1) mengetahui pemakaian filter filter oli, filter solar, filter solar bawah, filter solar atas, filter udara, filter udara luar dan filter udara dalam, (2) penentuan item kritis berdasarkan klasifikasi ABC, (3) penentuan jumlah pemesanan ekonomis, (4) perhitungan total biaya persediaan.*

*Berdasarkan klasifikasi ABC diperoleh 17 item suku cadang kritis dengan pengendalian kuantitas pemesanan menggunakan metode EOQ sebagai berikut: Filter udara luar 17801-3380 L 10 unit, Filter Solar Canter ME 016823 38 unit, Filter Oli PS Canter ME 013307 30 unit, Filter solar CAT IR-0751 10 unit, Filter Udara PC 200 Jimco J 85-3243-1 5 unit, Filter udara CAT 131-8821 4 unit, Filter Udara Donaldson P 781039 3 unit, Filter solar bawah Hino Lohan 23401-1440 L 15 unit, Filter Oli CAT 336 IR-1808 4 unit, Filter Udara Luar Fuso Sakura A 1026 11 unit, Filter Oli CAT 179-9806 4 unit, Filter Udara CAT 131-8822 3 unit, Filter solar atas Fuso FC 1005 31 unit, Filter Oli Hino Lohan 15607-2190L 14 unit, Filter Udara Canter ME 017246 12 unit, Filter solar atas PS 120 ME 035829 23 unit, Filter Oli Donaldson P 558615 24 unit. Total biaya persediaan yang diperoleh dengan menggunakan metode EOQ adalah Rp.4.492.030/tahun. Sedangkan total biaya persediaan dengan menggunakan metode metode Min-Max adalah Rp8.266.179/tahun.*

**Kata Kunci : Persediaan, Filter Oli, Filter Solar, Filter Udara, Analisis Klasifikasi ABC, Metode EOQ**

## ABSTRACT

*Inventory control activities are a very important thing to do because it helps the company to achieve the level of efficiency in inventory, thereby reducing inventory costs as optimal as possible. PT Aneka Dharma Persada is a contracting the manufacture of concrete and hot mix company with units of machinery and production equipment was adequate. The company supplies systems for parts such as oil filter, fuel filter, lower fuel filter, upper fuel filter, air filter, inner air filter, and outer air filter still poses some problems related to the needs of consumers such as the shortage of inventory (stock out) and too the amount of inventory (over stock).*

*This study aims to perform inventory control oil filter, fuel filter, lower fuel filter, upper fuel filter, air filter, inner air filter, and outer air filters as well as knowing the total cost of inventory are needed. The calculation is performed using Economic Order Quantity (EOQ). Research carried out by stages of processing as follows: (1) determine the use of oil filter, fuel filter, lower fuel filter, upper fuel filter, air filter, inner air filter, and outer air filter, (2) the determination of the critical items based on ABC classification, (3) determination of the economic order quantity, (4) the calculation of the total cost of inventory.*

*Based on the ABC classification obtained 17 items of spare parts critical to the control order quantity EOQ method as follows: Outer air filter 17801-3380 L 10 units, fuel filter Canter ME 016823 38 units, oil filter PS Canter ME 013307 30 units, fuel filter CAT IR-0751 10 units, air filter PC 200 Jimco J 85-3243-1 5 units, air filter CAT 131-8821 4 units, air filter Donaldson P 781039 3 units, lower fuel filter Hino Lohan 23401-1440 L 15 units, oil filter CAT 336 IR-1808 4 units, outer air filter Fuso Sakura A 1026 11 units, oil filter CAT 179-9806 4 units, air filter CAT 131-8822 3 units, upper fuel filter Fuso FC 1005 31 units, oil filter Hino Lohan 15607-2190L 14 units, air filter Canter ME 017246 12 units, upper fuel filter PS 120 ME 035829 23 units, oil filter Donaldson P 558615 24 units. The total cost of inventories obtained using EOQ method is Rp.4.492.030/year. While the total cost of inventory using the Min-Max method is Rp8.266.179/year.*

**Keywords:** *Inventory, Oil Filter, Fuel Filter, Air Filter, ABC Classification Analysis, EOQ Method.*