

**OPTIMIZATION PARTS OVERHAUL LEAD TIME PREPARATION
TO ACHIEVE OVERHAUL EXECUTION AND OPTIMUM
WORKING CAPITAL**

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

Optimization Parts Overhaul Lead Time Preparation To Achieve Overhaul Execution And Optimum Working Capital

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Increased use of heavy equipment in PT. United Tractor encourages the company to maintain the optimization of the number of overhaul spare parts by using the economic order quantity (EOQ) method, the results of the optimal number of orders for overhaul spare parts include Bushings as many as 79 items, Pins as many as 193 items, Boot as many as 101 items, Hose Brake Cooling Hansei as many as 115 items, Engine Hd785-7 as many as 14 items and Coolant Afnac 200 L Plastic as many as 109 items that must be ordered in one order.

Total inventory cost or total inventory cost Comparison of costs for total inventory costs for brushing-p with EOQ Rp. 1,996,123 difference Rp. 4,015,015. Boot with EOQ Rp. 5,588,789 difference Rp. 18,236,992. Pin with EOQ Rp. 2.764.654 difference Rp. 6.424.111. Hose Brake colling hansei with EOQ Rp. 987.710 difference Rp. 2.347.068. Engine Hd785-7 with EOQ Rp. 127.100.044 difference Rp. 318.820.351. Coolant Afnac 200 L with EOQ Rp. 5,145,498 difference Rp. 12,768,725.

Keywords: Inventory, Economic Order Quantity

ABSTRAK

MENGOPTIMALKAN PERSIAPAN PARTS OVERHOUL UNTUK KETEPATAN PELAKSANAAN OVERHOUL DAN KETERSEDIAAN PARTS YANG TEPAT

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Peningkatan pemakaian alat berat di PT.United Tractor mendorong perusahaan untuk menjaga optimalisasi jumlah sparepart overhaul dengan menggunakan *metode economic order quantity* (EOQ) diperoleh hasil jumlah pemesanan yang optimal untuk sparepart overhaul antara lain Bushing sebanyak 79 item, Pin sebanyak 193 item, Boot sebanyak 101 item, Hose Brake Cooling Hansei sebanyak 115 item, Engine Hd785-7 sebanyak 14 item dan Coolant Afnac 200 L Plastic sebanyak 109 item yang harus dipesan dalam satu kali pemesanan.

Total biaya persediaan atau total inventory cost Perbandingan biaya untuk biaya total persediaan untuk brushing-p dengan EOQ Rp. 1.996.123 selisih Rp. 4.015.015. Boot dengan EOQ Rp. 5.588.789 selisih Rp. 18.236.992. Pin dengan EOQ Rp. 2.764.654 selisih Rp. 6.424.111. Hose Brake colling hansei dengan EOQ Rp. 987.710 selisih Rp. 2.347.068. Engine Hd785-7 dengan EOQ Rp. 127.100.044 selisih Rp. 318.820.351. Coolant Afnac 200 L dengan EOQ Rp. 5.145.498 selisih Rp. 12.768.725.

Keywords: Persediaan, Economi Order Quantity

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I dedicate this works for my beloved family ,friends and Company who have supported me through my ups and downs.

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