

**ABSTRAK**

PT. ISE merupakan perusahaan yang memproduksi *sparepart* lampu kendaraan. Di departemen *mold and die factory* khususnya di seksi *finishing* terjadi masalah pada persediaan material *polishing* dimana sering terjadi kekurangan sehingga menyebabkan produk yang dihasilkan tidak sesuai dengan permintaan. Kondisi seperti ini harus dikontrol agar masalah seperti ini dapat diminimalisir. Penelitian ini bertujuan memberikan usulan perbaikan pengelolaan persediaan material kritis dengan metode peramalan dan menghitung pemesanan optimal dengan metode EOQ. Berdasarkan hasil perhitungan menggunakan klasifikasi ABC didapatkan *Paper Kovax #1200*, *Paper Kovax #800*, dan *Paper Kovax #600* sebagai material kritis. Berdasarkan pola data dan hasil peramalannya diperoleh metode terbaik adalah metode *Winter's*. Hasil peramalan *Paper Kovax #1200* periode Juli sampai Oktober 2023 secara berurutan adalah 44 unit, 34 unit, 57 unit, dan 86 unit. Material *Paper Kovax #800* periode Juli 2023 sebesar 16 unit, Agustus 2023 sebesar 63 unit, September 2023 sebesar 41 unit, dan Oktober 2023 sebesar 69 unit. Material *Paper Kovax #600* periode Juli 2023 sebesar 22 unit, Agustus 2023 sebesar 22 unit, September 2023 sebesar 23 unit, dan Oktober 2023 sebesar 18 unit. Pemesanan optimal EOQ *Paper Kovax #1200* sebesar 243 unit dengan penurunan biaya total sebesar 1,3% menjadi Rp. 1.739.515. *Paper Kovax #800* sebesar 223 unit dengan penurunan biaya total sebesar 1,6% menjadi Rp. 1.205.884. *Paper Kovax #600* sebesar 189 unit dengan penurunan biaya total sebesar 1,1% menjadi Rp. 875.127.

**Kata kunci:** Klasifikasi ABC, Peramalan, *Winter's*, EOQ, *Paper Kovax #1200*, *Paper Kovax #800*, *Paper Kovax #600*.

**ABSTRACT**

*PT. ISE is a company that produces spare parts for vehicle lights. In the department of the mold and die factory, especially in the finishing section, there is a problem with the supply of polishing materials where shortages often occur, causing the products produced to not match the demand. Conditions like this must be controlled so that problems like this can be minimized. This study aims to provide suggestions for improving critical material inventory management using the EOQ method. Based on the results of calculations using the ABC classification, Kovax Paper #1200, Kovax Paper #800, and Kovax Paper #600 were obtained as critical materials. Inventory forecasting is carried out using Winter's method for the next four periods. The forecasting results for Paper Kovax #1200 for the July 2023 period are 44 units, August 2023 34 units, September 2023 57 units, and October 2023 86 units. Material Paper Kovax #800 for the July 2023 period was 16 units, August 2023 was 63 units, September 2023 was 41 units, and October 2023 was 69 units. Material Paper Kovax #600 for the July 2023 period was 22 units, August 2023 was 22 units, September 2023 was 23 units, and October 2023 was 18 units. The optimal order for EOQ Paper Kovax #1200 is 243 units with a total cost reduction of 1,3% to Rp. 1.739.515. Kovax paper #800 of 223 units with a total cost reduction of 1,6% to Rp. 1.205.884. Kovax paper #600 of 189 units with a total cost reduction of 1,1% to Rp. 875.127.*

**Keywords:** *ABC Classification, Forecasting, Winter's, EOQ, Kovax Paper #1200, Kovax Paper #800, Kovax Paper #600.*