

ABSTRAK

Penelitian ini bertujuan untuk mengoptimalkan persediaan bahan baku 30s dan 40s pada produk Kasa Hdrofil Steril 16x16 KH di PT. Kasa Husada Wira Jatim. PT. Kasa Husada Wira Jatim merupakan perusahaan manufaktur yang bergerak di bidang pembuatan kapas dan kasa untuk keperluan kesehatan maupun kosmetika serta produk untuk bersalin dan haid wanita. Departemen *purchasing* selama ini tidak menggunakan metode apapun untuk mengendalikan persediaan bahan baku, sehingga persediaan bahan baku sering tidak terkontrol. Pada penelitian menggunakan metode *markov chain* untuk mengontrol persediaan bahan baku supaya optimal sehingga meminimalisasi biaya. Penerapan metode *markov chain* dilakukan dengan bantuan *software LINGO*. Penelitian ini menghasilkan biaya yang optimal pada bahan baku benang 30s berturut-turut sebesar Rp30.965.727,93, Rp33.049.733,69, Rp35.133.797,60, Rp37.217.861,50, Rp39.301.925,41, Rp41.385.989,32 serta benang 40s sebesar Rp11.148.250,20, Rp13.249.814,11, Rp15.351.378,02, Rp17.452.941,92, Rp19.554.505,83, dan Rp21.656.069,74.

Kata Kunci : PT. Kasa Husada Wira Jatim, Persediaan, Markov Chain

ABSTRACT

This research aims to optimize the availability of raw materials 30s and 40s in sterile Hydrophilic 16x16 KH gauze products at PT. Kasa Husada Wira East Java. PT. Kasa Husada Wira East Java is a manufacturing company engaged in the manufacturing of cotton and gauze for health and cosmetics as well as products for maternity and women's menstruation. The purchasing department has not used any method to control the supply of raw materials, so raw material inventories are often not controlled. In research using the Markov chain method to control the supply of raw materials to be optimal so as to minimize costs. The application of the markov chain method is done with the help of LINGO software. This study resulted in optimal costs for 30s yarn raw material in a row of Rp30.965.727,93, Rp33.049.733,69, Rp35.133.797,60, Rp37.217.861,50, Rp39.301.925,41, Rp41.385.989,32, respectively and 40s yarn of Rp11.148.250,20, Rp13.249.814,11, Rp15.351.378,02, Rp17.452.941,92, Rp19.554.505,83, and Rp21.656.069,74.

Keywords : *PT. Kasa Husada Wira East Java, Inventory, Markov Chain*