

ABSTRACT

CV Aruna Putra is one of the rubber industry companies that produce rubber products in the third and fourth processes. The issue arises when certain types of products face constraints in meeting the demand. The company's inability to meet the demand can decrease the level of customer confidence, resulting in an average service level percentage of the company in fulfilling requests, which remains below 85%. This indicates that the company has not been able to meet the existing demand. Based on these issues, this research is conducted to determine the appropriate inventory policy that can enhance the company's service level.

The research begins by performing a data distribution test, followed by classification analysis using ABC classification. The results of this classification are then used for calculating the optimal inventory policy using the Continuous Review (s, S) method for category A and Continuous Review (s, Q) for categories B and C. Additionally, the Periodic Review (R, s, S) method is used for categories A, B, and C. Based on the calculations using both methods, an average service level increase of 3.67% from the existing condition is achieved using the continuous review method, while the periodic review method results in a 13.1% average service level increase from the existing condition. Furthermore, sensitivity analysis is conducted on the results to determine the extent of the influence of parameter changes on the optimal solution.

Keywords: Processed rubber products, Continuous Review method, Periodic Review method, Service level