CHAPTER VI
CONCLUSION AND SUGGESTION

This chapter contains conclusions and suggestions regarding the final project research that has been done.

6.1 Conclusion

The conclusions from the results of processing the data and analysis that have been carried out are as follows:

1. Consumable items processed are class A and B, which consist of 20 items (60.61% types of consumable items) with a usage value contribution of 94.62%.
2. The Monte Carlo simulation can predict intermittent demand and justify company's inventory control policy with a total inventory cost of Rp18,950,782.87.
3. The ordering cost and shortage cost of the proposed policy (Q backorder and Joint Replenishment) are lower than the Monte Carlo simulation of company's policy. However, in terms of holding cost, the company's policy cost is lower than the proposed policy.
4. Using the joint replenishment method, the proposed inventory control policy has a potential savings of 58.32% from the company's Monte Carlo simulation and greater than the Q backorder of 50.26%. Thus, Gudang Bahan Penolong Division can implement this policy in which items from the same supplier will be ordered every T interval time with the order quantity reaches the maximum inventory level (R).

6.2 Suggestion

Suggestions to help better inventory control or for further research are:

1. Gudang Bahan Penolong Division of PT Batanghari Barisan should implement a joint replenishment policy to improve and plan a more economical inventory system of consumable items.
2. Collect more lead time data so that the proposed inventory policy can better represent the actual system.
3. Forecasting demand of spare parts using machine failure information because spare parts are related to maintenance activities.