CHAPTER V
CONCLUSION

This chapter presents the conclusions derived from the research findings and offers recommendations for future studies.

5.1 Conclusion

The main conclusions of this study are summarized as follows.

1. The preventive replacement age for the V-belt component of the vibrating feeder is 257 hours, obtained using the age replacement model. At this age, the downtime rate reaches its minimum value, ensuring the most efficient balance between preventive and corrective maintenance.
2. The implementation of preventive maintenance reduces total downtime from 7.0921 hours to 6.5262 hours in 1,000 hours operating time, resulting in 8 % reduction compared to the corrective maintenance strategy. In addition, the system availability reaches 99.347%.

5.2 Suggestion

Based on the findings of this study, the recommendations are as follows:

1. Future research could extend the analysis to other critical components within the system to develop a more integrated and comprehensive maintenance planning framework.
2. The company is recommended to improve the maintenance data recording system to ensure higher accuracy of the study results.