

Chapter 6

CONCLUSION

6.1 CONCLUSION

All 4 objectives of this study are achieved:

- ◆ The percentage of loss of material per hour is decreased from 32.76 percent to 12.44 percent. Therefore the weekly production is increased. The problems (such as environmental problems, forming of soil, machines breakdown, low performance of equipment and deterioration of quality of the products) induced by the loss of material are reduced.
- ◆ The monthly output is increased from 6628.16 tons to 8731.48 tons. The production capacity of the plant is increased. The probability of late delivery time to customer is reduced.
- ◆ The OEE of the machines is increased from 32.44 percent to 69.01 percent. The utilization of machines, profit or earning capacity of the plant is increased. The total losses or wastes of the plant are reduced.
- ◆ The quantity of reworked material is reduced from 153.12 tons to 77.89 tons. The inventory level and quality loss are reduced. The chance of late delivery time to customer is reduced.

6.2 RECOMMENDATION

This study is focused on the key machine of the plant, and the OEE of that machine is obtained. Future work can be done to investigate the performance and effectiveness of other supporting machines as well. The results of the future work can be integrated into this study, forming Overall Plant Effectiveness (OPE).