CHAPTER V
CONCLUSION AND SUGGESTION

5.1 Conclusion

The data collection, data processing, improvement solutions, and the proposed assisting document for control have been explained for production Line IV of the Bag Plant of PT Semen Padang. Therefore, the conclusions that can be obtained from this research are:

1. There are six types of defects found within the production process of cement bags. The first defect is blurred and faded ink. This defect has the potential to occur during the printing process in Tubing Machine. The second defect is uneven glue spreading. This defect has the potential to occur during the pasting process both in Tubing Machine and Bottomer Machine. The third defect is unseparated cement bags. This defect has the potential to occur during the cutting process, where the tube is not separated as to how it is supposed to be in the Tubing Machine. The fourth defect is wrinkled cement bags. This defect has the potential to occur from the very first process due to the material condition until the last process due to the other processes in both Tubing Machine and Bottomer Machine. The fifth defect is the inaccuracy of patch valve's cutting and positioning. This defect has the potential to occur during the valve inserting process in the Bottomer Machine. The sixth type of defect is poorly folded cement bag's top or bottom. This defect has the potential to occur during the processes in the Bottomer Machine. According to the discussion with the Field Supervisors, this defect is the most common one to be found.
2. There are numerous causes for each defect type found in the cement bag products. Generally, the defects occur because of machines problem, poor quality of raw materials, methods variations, the negligence of personnel, unideal environmental conditions, and managerial concerns.

3. Due to permission, time, and individual limitation, the proposed solutions can not be immediately implemented at the Bag Plant of PT Semen Padang. The proposed solutions are grouping and counting the defective cement bag products according to their defect type, making a control sheet for the definite defects when there is a sack kraft paper roll replacement and machines' setting changing, upgrading the daily production report document, upgrading the machines' weekly report document, and setting up thermometers as well as the humidity meters for the raw material storage and the finished good storage. For assisting the future implementations of the defect types' grouping and in addition to the current version of the daily production report, an upgraded version of the document has been developed.

5.2 Suggestion

As the addendum for completing this research, there are several suggestions that can be given for relevant future research such as follows:

1. The production line being observed can be extended to production Line III of the Bag Plant of PT Semen Padang. Hence, the quality improvement for cement bags produced by all the production lines is able to be determined.
2. Perform the implementation of proposed improvements in order to monitor whether the recommendations are running as expected or whether it needs to be revised.
3. Implementing the proposed control document will help to control the number of defects and reduce the machines' downtime.