Chapter 5
5.1 Limitation:
- Poor of spear parts.
- Some spear parts is replace and other stored.
- Delay:
  Spear parts not demand on the right time.
- Spear parts were expensive.

5.2 Conclusion:
As a result of this project problem 0.5 bottles waste problem reduced from 0.5 % to 0.3% (the target was 0.1%) also the consumption of Co$_2$ was eliminate due to eliminate the under filling.

5.3 Recommendations:
- changing the following parts to fix the immediate problem:
  1. O ring
  2. Diaphragms
  3. Springs
  4. Rubber seal
  5. Spreaders
  6. Filling sensors
  7. replacing all timing belt with pulley
  8. replacing bearing gear
• The filler operators and maintenance technicians should have a training which has been recommended by KRONUES technicians as a recognition of leek of experience of handling the filler.

• The preventive maintenance should be more planned as the project team found some parts where and when investigated it appeared that it should been replaced several month ago.

• Considering having control chart (limits upper and lower) for controlling the waste rate and include saving benefits which already done by project team.

• Production continues.

• Making a general awareness session about the waste issue to the labors front line because the team noted the lack of awareness from them to the waste issue.

• Considering having pones verses waste program to motivate the stuff to save the resources.
5.4 Reference:


5. American society for quality > over view.

6. www.isixsigma.com