

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 Co₂ 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 lack 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 have been replaced several months ago .
- Considering having a control chart (limits upper and lower) for controlling the waste rate and include saving benefits which have already been done by the project team.
- Production continues.
- Making a general awareness session about the waste issue to the labor front line because the team noted the lack of awareness from them to the waste issue.
- Considering having posters versus a waste program to motivate the staff to save the resources.

5.4 Reference:

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