Lorex pharmaceuticals

Finance, Investment

The Case: Lorex

Pharmaceuticals has come up with a new product, Litanol. This medicine seems to have a high potential which is developed for the treatment of high blood pressure. The company has come up with a manufacturing line and production is supposed to begin next Monday.

Following points are considered while analyzing the case:

1. The marketing team has decided to sell Litanol in sealed 10-ounce bottles, packaged in cases of 12 bottles each with a wholesale price of $186 per case.

2. The production capacity is 1000 bottles per case but due to certain unavoidable reasons, Lorex is producing Litanol at an average of 500 cases over an eight-hour shift.

3. The entire line was operated by two employees who are paid $12. 80 per hour.

4. Other charges include $89. 50 per hour for overhead and filling $1. 10 per bottle.

5. Bottles filled with less than 10 ounces are rejected and sold for 80% of the normal price.

6. Attendants for secondary packaging are paid $8. 50 per hour.

7. A sample of the filling process and test results are given in exhibit 2, with a target of 10. fluid ounces.

8. The cost details from exhibit 1 are used to guesstimate for the cost of other predicted samples.

9. The issue: Recently, there was a case of clogging of the storage area for underfilled bottles due to unexpected under filling. This was

apparently because of one standard deviation allowed above the required amount of 10 ounces.

Alternatives:

1. We can revise the filling target from 10.
2. To reduce the no of underfilled bottles without compromising on the gross margins. Various filling targets have been worked out on the next page 2. We can speculate the no of underfilled bottles by studying the probability of occurrence of underfilling for a period. Accordingly, the storage area evacuation may be scheduled to avoid clogging.

Analysis: let us assume the standard deviation to be the same (0. 16) for all filling targets. This is justified because Std Dev measures the inaccuracy level of the filling machine which will remain the same regardless of the filling targets. Below are the analysis and calculations showing different gross margins for different filling targets.