ABSTRACT

Our team has been given the task of designing the process and facility design of how products and orders will flow in the warehouse to better fulfill customers orders.

INTRODUCTION

Bagnet Company is a subsidiary company of Saddleback Leather Company in Fort Worth, TX. Bagnet has forecasted to double in sales and triple in available products. The problem is reducing cost and mis-shipped products while efficiently using the allocated space for the process.

METHODOLOGY

Define
- Problem Statement: Design the facility layout and process flow for how Bagnet Company will handle its order.
- Goal: Minimizing operating cost by 15%, reduce mis-shipped orders by 20%, and allocated space for future growth

Measure
- Mis-ships and defect costs
- Uline vs Shorr box cost
- Products from Suppliers

Analyze
- Process Flow
- Cost Comparison
- Fishbone diagram
- Verify root causes

Improve
- Facility design based on future growth
- Reducing operating cost
  - Cheaper boxes
  - More efficient packing method
  - Utilization of tape

Control
- Proper documentation of the entire process
- Periodic monitoring and testing
- Continuous training and Improvement

RESULTS

1. Facility Design

2. Recommendations
- Switched material providers
- Allocated resources; space, time, and money
- Assume future growth and prepare process accordingly

CONCLUSION

With the facility design and recommendations that we proposed, Bagnet Company will be better suited for future growth (sales and products), save at least 15% in operating costs, and will have a dip in mis-ships by 20% or more.

FUTURE WORK

As Bagnet Company continues to grow, the facility layout will need to be adjusted and expanded to accommodate new products. New Products can cause an increase in mis-ships. Following the documented process and keeping up-to-date training will help reduce/eliminate mis-ships and defects.

REFERENCES

Material from Class: Economics for Engineers, Metrics & Measurements, Production & Inventory Control, Facilities Planning & Design, Human Factors Engineering