

Warehouse Simulation - Validate Process Flow and Work Processes



Key Points

- Strategic decisions on Pick & Replenishment Cycles
- Decision on number of MHEs (Fork Lifts)

Client's Challenge

- Decision on number of ontime deliveries the warehouse can make for different strategies
- Calculate manpower and MHE requirement
- Analyze different strategies for picking and replenishment patterns to optimize manpower

PMI's Approach

- Analysis of data and verification of baseline model
- Analyzed capability of warehouse to deliver on schedule
- Analyzed Picking and replenishment cycle for various strategies
- Sensitivity Analysis on: 1. Pallet Size
2. Manpower and MHE

Findings & Recommendation

- Quantified capability of warehouse to deliver on schedule
- Optimized number of MHE and Workers were determined
- Recommended optimized Pallet Size
- Reorder point and replenishment quantity were quantified and suggested based on demand
- Optimized space requirement for different product type



*Data shown here has been modified to protect client confidentiality