# **DC SIZING STUDY**

# Client is a leading manufacturer and supplier of luggage and travel accessories

## **The Challenge**

The current main eastern distribution center operation cannot effectively meet the long-term growth needs of the business. In addition, a formal network analysis has been done to determine more appropriate distribution center locations but the manufacturer needs to know what size of a distribution center and repair facility needs to be purchased or leased to meet the expected long term growth

### **The Solution**

The solution approach included the following steps:

- On-Site Review of existing Operations
- Analysis of data, summarize and provide feedback for agreement of 'as-is' state of east coast DC operations
- · Confirm assumptions with respect to growth factors and new facility 5 year horizon considerations
- Apply growth factors and critical assumptions (e.g. % nested) to develop future state estimated volumes; build models to accommodate performing sensitivity analysis for critical assumptions
- Based on agreed solution concepts develop facility block layout for purpose of demonstrating the overall process flow; establishing the footprint / square feet requirements by operational area; and establish the overall facility size for the new location, including dock door counts, maintenance, battery charging, rework / repair area, product staging, product storage, outbound processing, etc.

### **The Value**

A well received block layout was produced with a design year 5 years in the future with the percent of nested product in storage. The facility was optimized to have efficient labor with the fastest movers designed in the center of the flow-through facility. The number of doors for receiving and shipping was produced for peak in 5 years. There were productivity enhancements recommended with a pick module with conveyor, WMS voice picking and automation for unloading a floor loaded container. Included was an implementation roadmap with estimated timing base on our project management database of similar past projects.

Client is a well recognized manufacturer and supplier of luggage and travel accessories. They also repair and refurbish their products.

