

MJ Holding

New Facility Design & Layout Enables Trading Card Leader, MJ Holding, to Seamlessly Manage Growth



MJ Holding is the largest North American distributor of trading cards, related trading card supplies, collectibles, toys, and hot trend items. The company has been in the trading card distribution business since 1993 and over the years has leveraged their effective category management process to grow their retail distribution footprint across all of the United States and into Canada. Today they have partnerships with some of the strongest retail stores and biggest brands in the game, including Walmart and Target, and they distribute goods to over 7,000 retail store locations.

The Challenge

MJ Holding's continual growth meant it was time to combine multiple inventory locations and build a new warehouse to accommodate all on-hand inventory. The company partnered with Conveyor Solutions, Inc. (CSI) to develop a high-level cost estimate for a new facility and get the project approved. MJ Holding originally planned to copy their current facility layout and picking process with slight modifications to adapt to a larger space, but the company partnered with Alpine Supply Chain Solutions to fully analyze the best way forward.

"The combination of CSI's equipment and installation expertise and Alpine's data-centric approach powered by Optricity's OptiSlot, allowed us to learn important details about our business that we incorporated into the design and layout of our new facility."

-Mark Zabloudil, MJ Holding's COO.

The Process

Alpine began by analyzing MJ Holding's sales data and performing a Storage Type Analysis (STA) to produce an ideal layout for their picking operations. Alpine then analyzed MJ Holding's on-hand inventory to determine the right rack types for their reserve storage and the right location for all their SKUs. They shared the results of the STA and Slotting Optimization efforts with CSI so that several facility designs could be developed in AutoCAD with the goal of determining a layout that would maximize the throughput in the forward pick area and space utilization in the reserve area.

The Outcome



The results of the STA identified that 35% of MJ Holding's items move too slowly and 5% of them moved too quickly for case flow picking, which could result in significant replenishment issues. With this information in mind, Alpine performed a sensitivity analysis on the top 5% items to determine the right layout for the area, and ultimately developed a 3-tier picking solution. The STA for the reserve area identified that top items had several pallets in storage, so a new design was developed that included 6 and 3 deep pushback racks, along with a double deep pallet rack, and a single deep selective rack.

Key benefits include:

1 - Increased slotting and picking efficiency

2 - Reduced replenishment time & replenishment labor:

*Created the ability to pick the equivalent order volume in just 57% of the original time

*Achieved a 43% reduction in labor for peak 1-day order file

3 - Developed a layout that's flexible for future growth

*Carton flow can be added

*Pallet flow can be added

4 - Increased space utilization for reserve storage area