

HOBBY LOBBY INTERNATIONAL

Executive Summary

Hobby Lobby International is an internet, catalog and counter sales distribution marketing company selling electric/remote control model airplanes, helicopters and boats. They are located in Nashville, TN and have been in business for fifty years. The problems they faced were inadequate inventory control, picking and shipping errors, slow productivity, cost of operation, out of space, increased overtime during the peak season and falling behind during the peak season.

The outcome of re-engineering included the introduction of warehouse management software. The results were we gained space back in the existing facility, solid inventory control, accuracy and timely shipping. All of this was accomplished and included reduction in personnel. Warehouse employees went from eighteen to nine, thereby decreasing cost with a return on investment of 1.5 years.

Detail

Distribution Consulting was asked to come into Hobby Lobby International and do a through analysis of existing operations. From the moment we first went into the facility, it was obviously overcrowded, congested and a lot of warehouse employees. In discussing the overall issues, the one issue that kept coming up repeatedly was errors. Errors in picking, lost inventory, errors in shipping and customer complaints within the shipping side.

After listening to the issues from Hobby Lobby, we started reviewing the overall processes that were in place within the warehouse. It became obvious that there were two things needed to attack the problems within the warehouse. The first was a re-engineering of the existing storage type units and a better layout to facilitate throughput. The second was the implementation of a Warehouse Management System (WMS). It was going to take both of these items to correct the overall issues within the warehouse.

Additional hindrances to the system included, not enough dock space to facilitate inbound receiving staging and outbound shipping staging and personnel located in very strategic areas within the warehouse that had to be relocated. Also, there was a sales counter located on one end of the warehouse that was taking up valuable floor space. The first thing we recommended was to remove the sales counter from its existing location and move it to a new location within their basement area. Under this scheme we gained needed concrete to start the warehouse turn.

The next thing we did was to design a modular drawer /shelving unit for all of the small items. This modular drawer/shelving unit was supplied and installed by BIPCO, Inc. (www.bipco.com) Bipco was also instrumental in the overall final design. The first drawer units were installed into the vacated counter area. Due to the cube gain within the modular drawer/shelving units we gained approximately 40% cube utilization. This allowed us to remove existing shelving units within the warehouse. Under this scheme, we gained the needed space to remove the office employees from the space they were in and made them more accessible to the office area. The last install of the modular drawer/shelving units was put in place of the removed shelving units. This freed up more space and allowed us to relocate racking into new aisles and gain more room within the rack area. Under this scenario we were able to locate pallets loads of fast moving product within the rack area. Not only did this happen but we increased the aisle size to have the ability to pick and pass within aisles.

Before we started the turn within the warehouse we installed WMS. Under this scheme we were able to put into place a bar coded locator scheme. All aisle, bays, levels and bins were located. Once we started moving product it was scanned into its new location using radio frequency units. WMS tracked the new locations and uploaded into the business system the new locations for the items. Picking still came out of the business system on pick sheets. We also started receiving in real time to eliminate the clerical and create bar code license plates/master unit labels. This allowed us to move the license plate/master unit label into the facility and scan them into a location.

This continued until we took a Friday to place license plates/master unit labels on the entire remaining product and count the inventory. Once this was complete over a weekend then the entire warehouse function was turned over to the WMS. We started picking with the radio frequency units and eliminated the paper pick sheets. Shortly after start up picking was done in batch to increase the picking efficiency. All replenishment was accomplished with the radio frequency units. To keep everything flowing with management, we set up a 100% quality control scan function after the pick. The warehouse management system that was used for this project was HAL Systems

<http://webserver.halsystems.comwarehousemanagementsystem.aspx>

The remaining items for manifesting stayed under their old business system; however, Hobby Lobby anticipates a change will be made to the business system in 2009.

The overall results of the re-engineering and the WMS system allowed us to eliminate all clerical functions within the warehouse. Receiving was on line and gave us instantaneous inventory updates. This allows us to use the inbound

receipts for today's shipments. Inventory accuracy went to 99.99%. Shipping errors dropped by 99.8%. The overall warehouse achievement for personnel went from 18 to 9. During shipping season they did not fall behind and overtime hours dropped by 98%.