Case Study

Client

A National School Supplies Distributor

Objective

- Reduce freight costs and improve service levels by eliminating multiple shipments to the same customer
- Retain legacy pick to light equipment and software no longer supported by the OEM
- Capture order selection statistics for DC associates
- Avoid production downtime during system modifications

Solution

Conveyor System Development

BoxWorks developed a plan for conveyor equipment and control system upgrades including automatic bar code scanning, automatic pick zone diverting, pack area workload balancing, and shipping sortation. Conveyor modifications link each of two, 2-level pick modules and provide diverts into each pick zone

New conveyor lines and diverts were installed and integrated during a planned holiday shutdown.

System Integration and Control

BoxWorks' BoxTracker Warehouse Control System provided interface to existing ERP, PLC, and Pick-to-Light sub-systems.

PLC I/O and logic enhancements incorporated into existing control panels to integrate new conveyor sections and diverts.

Results

BoxWorks' turnkey solution reduced the number of parcel shipments from the facility by 1/3. Multiple shipments to the same customer resulting from pick routings were eliminated. Automatic work flow tracking and control eliminated cartons arriving at pack stations with incomplete picks.

Minimal capital outlay required to achieve major operational benefits and work flow visibility. New ability to scan and track carton labels in light pick area extended the life of the existing system to avoid new equipment purchase in excess of $300K. Automatic bar code tracking and divert eliminated the need for manual operator carton divert.

BoxTracker WCS interface to client's Yantra WMS provides real-time order selection and operator labor transactions to facilitate DC visibility and labor management.

Integrated system of equipment and controls was installed and tested without requiring unplanned facility downtime.

BoxWorks ensures system health and productivity with ongoing software and operational support services.