



# Optimizing E-Commerce Returns

## With Automated Storage Systems

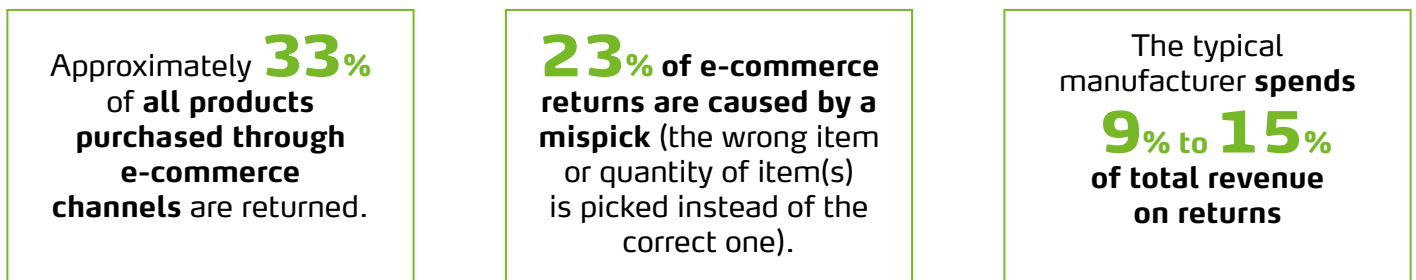
### Shopping Online has been Embraced in a big Way



### Reverse Logistics is often Overlooked



### The Returns Headache





## Creating an Efficient Returns Process

### Inspect & Assign Disposition Destination

**Restock** and return to inventory for immediate sale (95% of items are returned because of customer dissatisfaction)

**Repackage** for re-sale in a secondary channel, such as a discount retailer's online or brick-and-mortar stores

**Repair**, refurbish or remanufacture – particularly for electronics ie. mobile phones, tablets or computers

**Return** to supplier, vendor or manufacturer – most frequently seasonal items purchased with a sales agreement stipulating that the source will accept unsold inventory

**Recycle**, reclaim or dispose. High-tech devices utilize rare metals, such as gold, palladium, silver, copper, titanium and must be recycled or disposed of in compliance with government regulations

## Automated Storage & Retrieval Solutions Simplify Returns



### Horizontal Carousels

Bins mounted on an oval track that rotate horizontally to deliver storage locations to an operator. These automated storage and retrieval systems eliminate unproductive travel and search time by delivering the product to an operator.



### Vertical Carousels

Comprised of a series of shelves that rotate around a track – similar to a Ferris wheel – these automated storage and retrieval systems deliver stored items safely and quickly to an ergonomically positioned work counter at the operator's command, eliminating walk and item search time.



### Vertical Lift Modules (VLMs)

An enclosed automated storage and retrieval system that consists of two columns of trays with an inserter/extractor in the center. The inserter/extractor automatically locates and retrieves stored trays from both columns and presents them to the operator at a waist-high pick window, eliminating travel and SKU search time.



### Vertical Buffer Modules (VBMs)

A discrete bin handling system consisting of enclosed shelving with a movable mast in the center that stores and retrieves totes, delivering them to an ergonomic turntable picking station or automatically delivering them via outbound conveyor.



## Benefits of ASRS for Returns Management



Companies that implement a quick and efficient reverse logistics operation save roughly

**\$300,000**  
in costs annually

Cut **Inventory Costs** Reduce



Returns **Handling Time**



Decrease **Labor Required**



Minimize **Floor Space**



**Fast and Simple Sortation of Items** per their disposition destination



**Faster Crediting** of customers



**Quicker Return To Inventory For Resale**, including the ability to use the returns area as a forward pick zone