

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 74.3%
Throughput Increase: 34.2%
Labor Cost Reduction: 28.5%
ROI Period: 2.3 years

Warehouse Performance

Warehouse Location		Capacity Used	Inbound/Day	Outbound/Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	35.8%	2,080	1,604	96.4%	74.8%	Improvement Needed
Distribution Center B	Dallas, TX	55.7%	1,785	2,880	99.1%	86.7%	Optimized
Distribution Center C	Atlanta, GA	69.9%	2,586	3,321	95.7%	60.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.1%	2,789	1,941	98.5%	83.9%	Optimized
Distribution Center E	Newark, NJ	43.0%	1,154	3,068	98.7%	66.1%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs