

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 77.7%
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	76.3%	2,755	3,755	95.5%	77.7%	Improvement Needed
Distribution Center B	Dallas, TX	67.4%	2,550	3,787	98.0%	90.8%	Optimized
Distribution Center C	Atlanta, GA	89.0%	1,527	3,478	98.5%	83.2%	Optimized
Distribution Center D	Los Angeles, CA	68.5%	2,655	2,242	96.4%	69.9%	Improvement Needed
Distribution Center E	Newark, NJ	66.0%	2,169	3,189	99.4%	66.9%	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