

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:03 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 77.3%
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	43.7%	2,744	2,146	96.7%	76.5%	Improvement Needed
Distribution Center B	Dallas, TX	72.4%	2,842	2,068	95.7%	80.5%	Optimized
Distribution Center C	Atlanta, GA	70.5%	2,996	3,306	97.5%	72.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	67.9%	2,041	3,869	95.2%	92.7%	Optimized
Distribution Center E	Newark, NJ	68.3%	2,143	3,339	95.1%	64.6%	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