

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 75.0%
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	58.6%	1,443	2,806	95.6%	63.9%	Improvement Needed
Distribution Center B	Dallas, TX	75.4%	1,141	2,358	97.3%	62.3%	Improvement Needed
Distribution Center C	Atlanta, GA	50.8%	2,788	1,611	99.0%	91.7%	Optimized
Distribution Center D	Los Angeles, CA	47.4%	1,460	2,639	98.7%	91.9%	Optimized
Distribution Center E	Newark, NJ	78.6%	2,047	2,765	96.4%	65.1%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

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