

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:29 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 78.0%
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	72.5%	1,222	3,350	97.9%	73.1%	Improvement Needed
Distribution Center B	Dallas, TX	94.3%	2,489	3,558	97.7%	90.9%	Optimized
Distribution Center C	Atlanta, GA	37.9%	1,452	3,929	96.8%	61.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	107.8%	1,210	2,606	96.8%	83.5%	Optimized
Distribution Center E	Newark, NJ	116.0%	2,240	2,565	96.9%	80.4%	Optimized

Optimization Opportunities

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

picking
system to
improve
accuracy to
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs