

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:15 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 17
Average Utilization: 82.1%
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	75.2%	1,236	3,557	97.1%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	95.1%	2,012	1,839	96.4%	64.5%	Improvement Needed
Distribution Center C	Atlanta, GA	65.6%	2,765	3,470	95.3%	86.2%	Optimized
Distribution Center D	Los Angeles, CA	47.3%	1,811	2,174	98.5%	94.8%	Optimized
Distribution Center E	Newark, NJ	49.7%	1,029	3,700	96.4%	90.6%	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