

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: 57
Average Utilization: 77.8%
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	70.2%	2,370	3,346	95.6%	68.2%	Improvement Needed
Distribution Center B	Dallas, TX	47.4%	1,605	2,038	99.0%	91.5%	Optimized
Distribution Center C	Atlanta, GA	65.3%	2,170	2,510	95.0%	76.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	68.4%	1,488	2,352	97.0%	73.4%	Improvement Needed
Distribution Center E	Newark, NJ	47.4%	1,403	1,891	95.9%	79.6%	Improvement Needed

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