

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 73.9%
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	73.6%	1,964	3,808	98.4%	62.6%	Improvement Needed
Distribution Center B	Dallas, TX	33.9%	1,425	1,998	98.0%	65.0%	Improvement Needed
Distribution Center C	Atlanta, GA	53.8%	1,638	2,462	96.8%	92.5%	Optimized
Distribution Center D	Los Angeles, CA	47.7%	2,973	1,892	96.8%	70.3%	Improvement Needed
Distribution Center E	Newark, NJ	110.6%	1,793	3,272	99.4%	78.9%	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