

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:32 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 72.8%
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	54.7%	2,573	3,189	98.5%	83.6%	Optimized
	Dallas, TX	36.2%	2,145	3,025	95.2%	72.4%	Improvement Needed
Distribution Center B	Atlanta, GA	33.8%	1,172	2,418	97.3%	73.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	70.2%	2,538	3,774	97.9%	63.3%	Improvement Needed
Distribution Center E	Newark, NJ	65.3%	2,386	1,781	95.4%	71.2%	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