

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:59 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 73.1%
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	112.6%	2,056	3,114	97.8%	67.5%	Improvement Needed
Distribution Center B	Dallas, TX	52.7%	1,336	2,663	95.6%	78.7%	Improvement Needed
Distribution Center C	Atlanta, GA	63.4%	1,771	3,962	95.8%	78.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	89.0%	1,918	3,509	98.6%	72.6%	Improvement Needed
Distribution Center E	Newark, NJ	80.3%	2,024	2,932	95.9%	68.5%	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