

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:37 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 70.2%
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	46.5%	1,210	3,328	95.4%	90.3%	Optimized
	Dallas, TX	76.1%	1,452	1,728	98.8%	61.9%	Improvement Needed
Distribution Center B	Atlanta, GA	103.2%	1,721	3,517	96.5%	61.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.1%	2,615	3,425	95.3%	76.9%	Improvement Needed
Distribution Center E	Newark, NJ	54.2%	1,196	3,407	98.5%	60.4%	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