

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:09:05 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28
Average Utilization: 75.9%
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	41.0%	2,816	3,746	98.9%	63.2%	Improvement Needed
Distribution Center B	Dallas, TX	50.9%	1,050	2,623	97.7%	78.0%	Improvement Needed
Distribution Center C	Atlanta, GA	64.0%	2,796	3,781	96.2%	83.7%	Optimized
Distribution Center D	Los Angeles, CA	61.0%	2,873	3,754	95.3%	77.5%	Improvement Needed
Distribution Center E	Newark, NJ	113.8%	1,924	1,798	98.5%	77.1%	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