

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:40 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
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 Status	
Distribution Center A	Chicago, IL	59.4%	2,479	1,953	96.4%	92.1%	Optimized
	Dallas, TX	55.3%	2,476	2,398	98.4%	68.2%	Improvement Needed
Distribution Center B	Atlanta, GA	94.6%	1,957	2,070	98.1%	70.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	55.6%	1,825	2,276	97.9%	76.1%	Improvement Needed
Distribution Center E	Newark, NJ	51.4%	1,136	2,782	98.4%	72.1%	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