

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 83.8%
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	57.3%	1,503	3,493	99.1%	88.6%	Optimized
	Dallas, TX	48.2%	1,227	2,655	96.5%	65.9%	Improvement Needed
Distribution Center B	Atlanta, GA	55.3%	1,846	3,808	95.7%	82.8%	Optimized
Distribution Center C	Los Angeles, CA	96.4%	2,217	2,817	97.3%	88.2%	Optimized
Distribution Center D	Newark, NJ	65.0%	1,385	3,857	98.7%	93.3%	Optimized
Distribution Center E							

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