

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:57 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 84.0%
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	113.0%	2,102	3,276	96.2%	92.2%	Optimized
	Dallas, TX	95.0%	2,769	1,615	96.4%	93.3%	Optimized
Distribution Center B	Atlanta, GA	63.8%	2,110	2,168	99.0%	73.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	40.6%	1,181	2,637	99.4%	79.3%	Improvement Needed
Distribution Center D	Newark, NJ	49.3%	2,629	2,636	96.8%	82.4%	Optimized

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