

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:11 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 84.7%
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	62.1%	1,724	2,255	97.3%	94.3%	Optimized
	Dallas, TX	38.6%	2,158	3,752	97.3%	71.4%	Improvement Needed
Distribution Center B	Atlanta, GA	114.5%	2,784	3,130	97.7%	80.1%	Optimized
Distribution Center C	Los Angeles, CA	62.0%	1,260	3,724	96.6%	82.5%	Optimized
Distribution Center D	Newark, NJ	44.9%	1,292	3,003	99.3%	95.0%	Optimized
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