

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:34 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 84.1%
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	64.6%	1,915	2,279	96.6%	89.8%	Optimized
	Dallas, TX	67.8%	2,087	3,727	98.9%	83.4%	Optimized
Distribution Center B	Atlanta, GA	94.7%	1,219	3,450	98.0%	71.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	47.5%	1,986	2,581	98.5%	82.8%	Optimized
Distribution Center D	Newark, NJ	68.1%	1,699	3,968	96.4%	93.1%	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