

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:01 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 71
Average Utilization: 80.8%
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	134.8%	2,433	1,742	95.1%	71.9%	Improvement Needed
Distribution Center B	Dallas, TX	118.7%	1,281	3,135	97.2%	94.7%	Optimized
Distribution Center C	Atlanta, GA	46.6%	2,901	3,691	95.8%	64.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	92.9%	2,439	3,334	97.3%	89.8%	Optimized
Distribution Center E	Newark, NJ	73.4%	2,562	3,682	98.3%	83.1%	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