

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:00 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 77.8%
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	86.2%	2,589	2,058	96.4%	73.2%	Improvement Needed
Distribution Center B	Dallas, TX	101.4%	1,317	3,906	95.0%	68.9%	Improvement Needed
Distribution Center C	Atlanta, GA	53.3%	1,218	1,721	99.2%	77.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.9%	2,377	3,487	97.5%	75.2%	Improvement Needed
Distribution Center E	Newark, NJ	49.0%	2,557	2,466	95.8%	94.3%	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