

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 74.5%
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	90.5%	1,930	3,776	99.4%	73.0%	Improvement Needed
Distribution Center B	Dallas, TX	62.6%	1,295	3,585	96.7%	61.4%	Improvement Needed
Distribution Center C	Atlanta, GA	71.0%	2,779	3,474	95.3%	79.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	84.1%	1,189	1,670	98.1%	75.6%	Improvement Needed
Distribution Center E	Newark, NJ	55.9%	1,812	1,910	98.8%	83.3%	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