

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:53 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 77
Average Utilization: 76.8%
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	53.2%	2,855	3,786	98.2%	73.1%	Improvement Needed
Distribution Center B	Dallas, TX	82.3%	1,013	3,651	98.7%	76.4%	Improvement Needed
Distribution Center C	Atlanta, GA	75.2%	1,747	3,151	95.2%	72.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	83.8%	1,342	3,556	98.0%	74.1%	Improvement Needed
Distribution Center E	Newark, NJ	53.3%	2,909	3,070	99.5%	88.2%	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